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**COMPREHENSIVE  
ANNUAL  
FINANCIAL  
REPORT**

Kentucky Retirement Systems  
A component of the Commonwealth of Kentucky  
Kentucky Employees Retirement System (KERS)  
County Employees Retirement System (CERS)  
State Police Retirement System (SPRS)



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2015 Comprehensive Annual  
Financial Report  
For The Fiscal Year Ended  
June 30, 2015  
Document Prepared By KRS  
Communications Division

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INTRO



## **INTRODUCTION**

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# INTRODUCTION



# Management's Responsibility for Financial Reporting

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*Management has prepared the combining financial statements of Kentucky Retirement Systems and is **responsible for the integrity and fairness** of the information presented.*

**December 3, 2015** Management has prepared the combining financial statements of Kentucky Retirement Systems and is responsible for the integrity and fairness of the information presented. Some amounts included in the combining financial statements may be based upon estimates and judgments. These estimates and judgments were made utilizing the best business practices available. The accounting policies followed in the preparation of these combining financial statements conform to US Generally Accepted Accounting Principles. Financial information presented throughout the annual report is consistent with the combining financial statements.

**Responsibility** Ultimate responsibility for the combining financial statements and annual report rests with the Board of Trustees. The Executive Director and KRS' staff assist the Board in its responsibilities. Systems of internal control and supporting procedures are maintained to provide assurance that transactions are authorized, assets safeguarded, and proper records maintained. These controls include standards in hiring and training employees, the establishment of an organizational structure, and the communications of policies and guidelines throughout the organization. The cost of a control should not exceed the benefits to be derived; the objective is to provide reasonable, rather than absolute assurance, that the combining financial statements are free of any material misstatements. These internal controls are reviewed by internal audit programs. All internal audit reports are submitted to the Audit Committee and Board of Trustees.

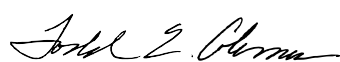
Kentucky Retirement Systems' external auditors, Dean Dorton Allen Ford, PLLC, have conducted an independent audit of the combining financial statements in accordance with US Generally Accepted Government Auditing Standards. This audit is described in their Independent Auditors' Report on page two of the Financial Section. Management has provided the external auditors with full and unrestricted access to KRS' staff to discuss their audit and related findings as to the integrity of the plan's financial reporting and the adequacy of internal controls for the preparation of combining financial statements.



**William A. Thielen, Esq.** // Executive Director



**Karen D. Roggenkamp** // Chief Operations Officer



**Todd E. Coleman, CPA** // Controller





# To the Trustees & Membership

It is my pleasure to present the Comprehensive Annual Financial Report (CAFR) of the Kentucky Employees Retirement System (KERS), County Employees Retirement System (CERS), and State Police Retirement System (SPRS) for the fiscal year that ended June 30, 2015. Responsibility for the accuracy of the data, as well as the completeness and fairness of the presentation, rests with the management of the Kentucky Retirement Systems. We present this information to assist the Board of Trustees, members of KERS, CERS and SPRS (collectively referred to as KRS), State executive and legislative branch officials, and the general public in understanding KRS' financial and actuarial status. This CAFR conforms to the principles of governmental accounting and reporting set forth by the Governmental Accounting Standards Board. KRS' financial transactions are reported on the accrual basis of accounting. Additionally, internal accounting controls provide reasonable assurance regarding the safekeeping of assets and fair presentation of the financial statements and supporting schedules. Please refer to Management's Discussion and Analysis in the Financial Section.

## Major Issues and Initiatives

The 2015 General Assembly session once again generated a significant work effort on the part of KRS staff during the latter part of the 2015 fiscal year (FY2015). House Bill 62, which created an avenue for certain types of participating employers to exit the KERS or CERS systems, was enacted during the 2015 session. Efforts began at KRS as early as April 2015 to begin the process of working through complex issues and drafting regulations to implement HB 62. This process is continuing during the current 2016 fiscal year.

Kentucky Retirement Systems continued in FY 2015 to deal with a number of ongoing lawsuits involving member agency attempts to terminate participation in KERS and CERS. The most significant of these suits involves a Chapter 11 Federal bankruptcy action filed by Seven Counties Services, the Commonwealth's designated mental health services provider for Jefferson County and its six contiguous counties, in an attempt to remove its self from KERS. On May 30, 2014, the United States Bankruptcy Court issued a decision that Seven Counties is not a "governmental unit", as that term is defined in the Bankruptcy Code, and it is, therefore, eligible to proceed under Chapter 11 of the Bankruptcy Code. The Bankruptcy Court also held that the relationship between Seven Counties and Kentucky Employees Retirement System ("KERS") is an "executory contract" and Seven Counties may reject that contract in accordance with the provisions of the Bankruptcy Code. Kentucky Retirement Systems appealed the adverse bankruptcy ruling. This appeal was ongoing

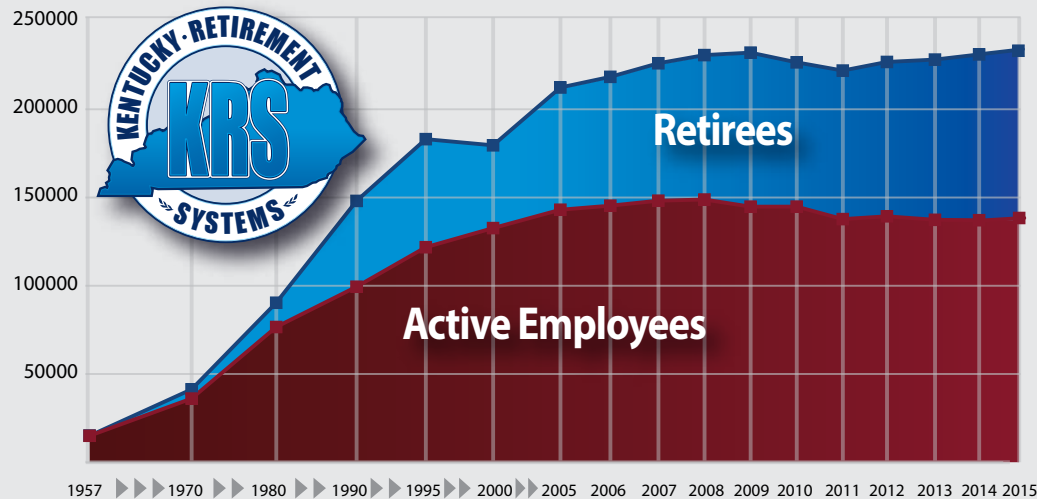


throughout FY 2015. If Seven Counties Services is ultimately successful in obtaining a legal ruling that allows it to withdraw from KERS without paying its proportionate share of the unfunded liability of the system, then all other participating employers would be adversely affected through the payment of higher employer contribution rates. Also, Kentucky Retirement Systems continued during FY 2015 to defend a lawsuit filed in June 2014 by the City of Fort Wright, Kentucky, alleging improprieties in the investment decisions made by the KRS Investment Committee and Board of Trustees.

The severe underfunding in the KERS nonhazardous pension plan continued as a very significant issue for KRS. The 2014 valuation, which was received by the Board of Trustees in December 2014, showed that the KERS nonhazardous pension plan funding level had dropped to 21.1%. KRS continued during FY 2015 in a variety of forums to educate its members, participating employers, legislators, executive branch officials and the general public about the funded status of all its retirement plans, including, most importantly the KERS nonhazardous pension plan. You can find the funding level of all plans as of June 30, 2015 on page 156 in the actuarial section of this CAFR. We also focused during the year on the critical importance of the General Assembly's commitment to fully fund the actuarially required contribution (ARC) and we encouraged the General Assembly to find additional funds over and above the ARC when and if feasible.

During 2014, the KRS actuary conducted an experience study for the years 2008-2013. Based on the results of that experience study, at its December 2014 meeting, the KRS Board of Trustees made changes in the actuarial assumptions used to produce the annual valuation and to develop recommended employer contribution rates for each plan. The most important changes were to reduce the assumed rate of return on investments from 7.75% to 7.50% and to make changes in the mortality table to account for the fact that retirees are living longer.

Our educational efforts during the 2015 fiscal year involved monthly appearances before the Public Pension Oversight Board (PPOB) where we provided investment and operational performance information, as requested. During FY 2015, the KRS Board of Trustees authorized two independent studies of importance. In February 2015, the Board approved the



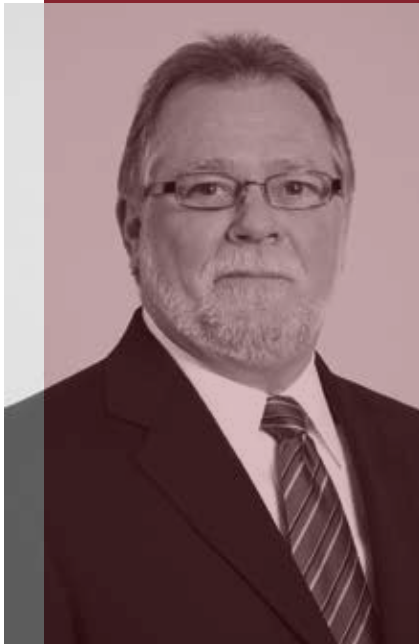
issuance of a Request for Proposals for an independent actuarial audit to be conducted on work performed by KRS' consulting actuary – Cavanaugh Macdonald Consulting. KRS later selected Segal Consulting to conduct the actuarial audit. The KRS Board of Trustees also authorized KRS to enter into a sole source contract with CEM Benchmarking, Inc., an international consulting firm, to conduct an investment cost effectiveness analysis. Both the Segal audit and the CEM study were presented to the KRS Board and the legislature's PPOB early in the current 2016 fiscal year.

### Senate Bill 2 (SB2) - Tier 3 Benefit Structure

As required by the passage of SB2, which was enacted by the 2013 legislative session, Tier 3 pension members who began participating in January 2014, received interest on contribution payments for the first time at the conclusion of the 2015 fiscal year. The Tier 3 account is guaranteed 4% interest credit on the member's account balance as of June 30, 2014. The member's account may be credited with additional interest if the System's five-year average investment returns exceed 4%. If the member was actively employed and participating in the fiscal year, and if the System's average geometric investment return for the previous five years exceeds 4%, then the member's account is credited with 75% of the amount of the returns over 4% on the account balance as of June 30 of the previous year. It is possible that one system in KRS will get an upside sharing percentage, while another may not.

For the Fiscal Year ended June 30, 2015, the rates (including the 4% and upside sharing) were as follows:

- KERS Non-Hazardous: 7.78%**
- KERS Hazardous: 7.83 %**
- CERS Non-Hazardous: 7.77%**
- CERS Hazardous: 7.84%**
- SPRS: No qualifying participants in 2015**



## Health Insurance

KRS administered approximately 75,000 health insurance contracts for benefit recipients through the end of fiscal year 2015. The positive impacts on both funding status and benefits resulting from the Board of Trustees August 2012 decision to move to a Medicare Advantage plan continued during the 2015 plan year. The Medicare Advantage Plans are fully insured health insurance plans provided by Humana. Premium costs to KRS members were significantly below the rates projected in 2013 for the self-insured Employer Group Waiver Plans (EGWP). The actual savings for plan year 2013 was \$30,598,162. The cost savings is shared on roughly a 50-50 basis by retirees who pay all or a portion of their health insurance premiums and the underfunded health insurance trust.

The Board also continued to offer a Medical Only plan to the Medicare eligible retirees. This plan allows retirees who do not have Medicare Part B, or who are covered under another drug plan, to participate in coverage with the retirement systems. The Medical Only plan is self-insured and provides coverage after original Medicare. Humana is the claims administrator for this plan.

## Benefits Services

KRS processed over 7,000 retirement applications, an increase of approximately 7.5% over fiscal year ending 6/30/2014. Staff also performed post retirement audits on approximately 6,000 benefit accounts to ensure paid benefits comply with state and federal statutory and regulatory requirements. The Benefits Services team implemented a plan to reduce the backlog of members' requests for benefit estimates and service purchase cost calculations that had developed as a result of our efforts to implement the requirements of Senate Bill 2, which was enacted during the 2013 General Assembly session. The number of service purchases calculated increased 36% from the previous year resulting in approximately \$5 million of voluntary employee contributions added to the pension funds.

During the fiscal year, KRS received over 253,000 calls from active members, retirees, and others, touching on a variety of retirement subjects such as retirement eligibility, member self-service features, health insurance open enrollment, scheduling office appointments, and coordinating refund and retirement paperwork submission.

KRS implemented a new Callback Assist feature for those members who need to call but prefer not to wait on the phone to speak to a representative. When this option is selected, it allows the caller to retain his or her place in queue without having to remain on the phone.

## Governmental Accounting Standards Board (GASB) 68

During FY 2015, our accounting team has worked with our actuary, external auditor, and others to assist our reporting agencies with the implementation of GASB 68. This accounting standard replaced Statement 27 Accounting for Pension by State and Local Governments. The new standard affects the financial statements of employers. Employers need to recognize and report on their financial statements a proportionate share of their plan's net pension liability less the market value of their plan's net assets, as well as the annual actuarially determined pension expense. The KRS staff has provided educational materials, conducted webinars, attended agency meetings, responded quickly to questions, and provided audited schedules by agency.

## Technology, Employer Reporting, and Communications

KRS' Information Technology business area continues to be challenged with legislative mandates while keeping abreast of Technology advancements, and proactively adopting improved data security standards. During the year, we have completed disaster recovery equipment deployment and process replication, and worked closely with Kizan Technologies to complete a multiyear technology needs assessment. This assessment along with the results from the CEM Administrative study will help us continue to improve membership services in a data secure environment.

Employer Reporting, Compliance, and Education (ERCE) staff continued to work with reporting employers through on-site visits and correspondence. As a result, reporting errors and outstanding invoices have decreased. The team worked closely with our technology group to complete billing for sick leave contributions. Of the \$24.5 million billed in June 2015, 65 percent of the balance has been paid.

As both our membership and eligible retirees grow, KRS communications staff continues to expand our website (<https://kyret.ky.gov>) content to meet membership information needs. During the past 12 months, we had over 1.2 million website views. Our frequently viewed web site areas are the home page News, Tier 1 and 2 benefit publications, and insurance updates. Our video offerings increase awareness and education on pension and insurance benefits. Beginning in August, we reactivated our Pre-Retirement Education Program (PREP) across the Commonwealth. These all day sessions cover pension benefits, insurance eligibility, Social Security benefits, and deferred compensation plans offered by the State.

## Investments

The KRS Pension fund returned 2.01% (net of fees) trailing its benchmark return of 3.13%. The KRS Insurance fund returned 1.89% versus its benchmark return of 3.79% (net of fees). The fiscal year was a tale of two halves. Anything energy or commodity related, or negatively affected by a strong dollar did poorly in the first half. These poor performers reversed in the second half, but not enough so to erase first half losses. U.S equity performed well in the first half of the fiscal year, and then stalled in the second half of the fiscal year, as geopolitical concerns and an anticipated U.S. rate hike weighed on the markets. For the entire fiscal year U.S. private equity led the way followed by real estate and U.S. public equities. Non-U.S. Equities, Emerging Market Equities, and anything inflation sensitive like real return were negative performers. As a whole, fixed income performed well during the fiscal year, with interest rate fixed income securities driving performance, while credit sensitive fixed income investments struggled. Absolute Return was also a positive contributor.

The performance of the capital markets for the fiscal year made it difficult for most public pensions across the country to reach their expected returns. Allocation decisions at the total portfolio level drove performance. The greater role private equity, real estate, and U.S. public equities (particularly large cap growth equity) played in the total portfolio, the better a pension plan's return. The less credit sensitive fixed income, non-U.S. equities, emerging market equities, and real return strategies within a plan's portfolio mix, the better a public plan performed.

Every five years KRS works with its general investment consultant RVK, Inc (formally R.V. Kuhns and Associates, Inc)

to conduct an asset liability study that leads into an asset allocation study. KRS did engage RVK, Inc in that process during the fiscal year and the results of the asset liability study were presented in May 2015. The results of the asset allocation study will be known in fiscal year 2016 and changes are expected to be adopted and implemented in the 2016 calendar year.

During the fiscal year significant progress was made in building out the real return asset allocation as KRS added exposure that included timber, drug royalties, mining finance, and a manager that allocates tactically to MLPs, REITs, and listed infrastructure. Staff also started a structure study of the U.S. public equity allocation and staff continued to build out its direct hedge fund program as it moves away from fund of hedge funds model.

KRS is continuously working on investment transparency and communication with its constituents. KRS staff added a report to the investment section of the KRS website that shows a list of every external investment manager KRS utilizes and the standard fee rate charged by that manager. KRS also made changes to its investment accounting methodology that better captures the detail surrounding fees associated with certain types of investments. Transparency is an ongoing effort and KRS staff looks forward to bringing even greater level of detail in the future.

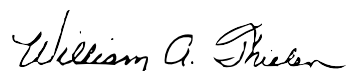
## Professional Services

KRS continues to engage a number of professional consultants to assist trustees and staff in key business areas such as investments, taxes, auditing services and legal representation. A list of the Board's contract consultants can be found in the organizational chart on page 13. A list of external investment managers can be found in the investment section of this report.

## Conclusion

A summary version of the 2015 CAFR will be provided to the Governor, the State Auditor of Public Accounts, all 138 state legislators, key Legislative Research Commission staff, and the State Budget Director. A complete copy of the report will be posted on the KRS website.

I would like to take this opportunity to thank the KRS Board of Trustees, the staff, and our advisors and service providers who worked tirelessly during FY 2015 to make this a successful year for KRS. We look forward to continuing success during FY 2016 and endeavor to provide information and services of the highest quality to our members.



William A. Thielen, Esq. // Executive Director

## Certificate of Achievement

The Government Finance Officers Association (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Kentucky Retirement Systems for its Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2014. The Certificate of Achievement is a prestigious national award recognizing excellence in the preparation of state and local government financial reports and is valid for a period of one year. This was the sixteenth consecutive award earned by KRS. In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized document. The report must satisfy both generally accepted accounting principles and applicable legal requirements. We believe our 2015 CAFR will continue to meet the Certificate of Achievement Program's requirements, and we will be submitting it to the GFOA for their consideration.



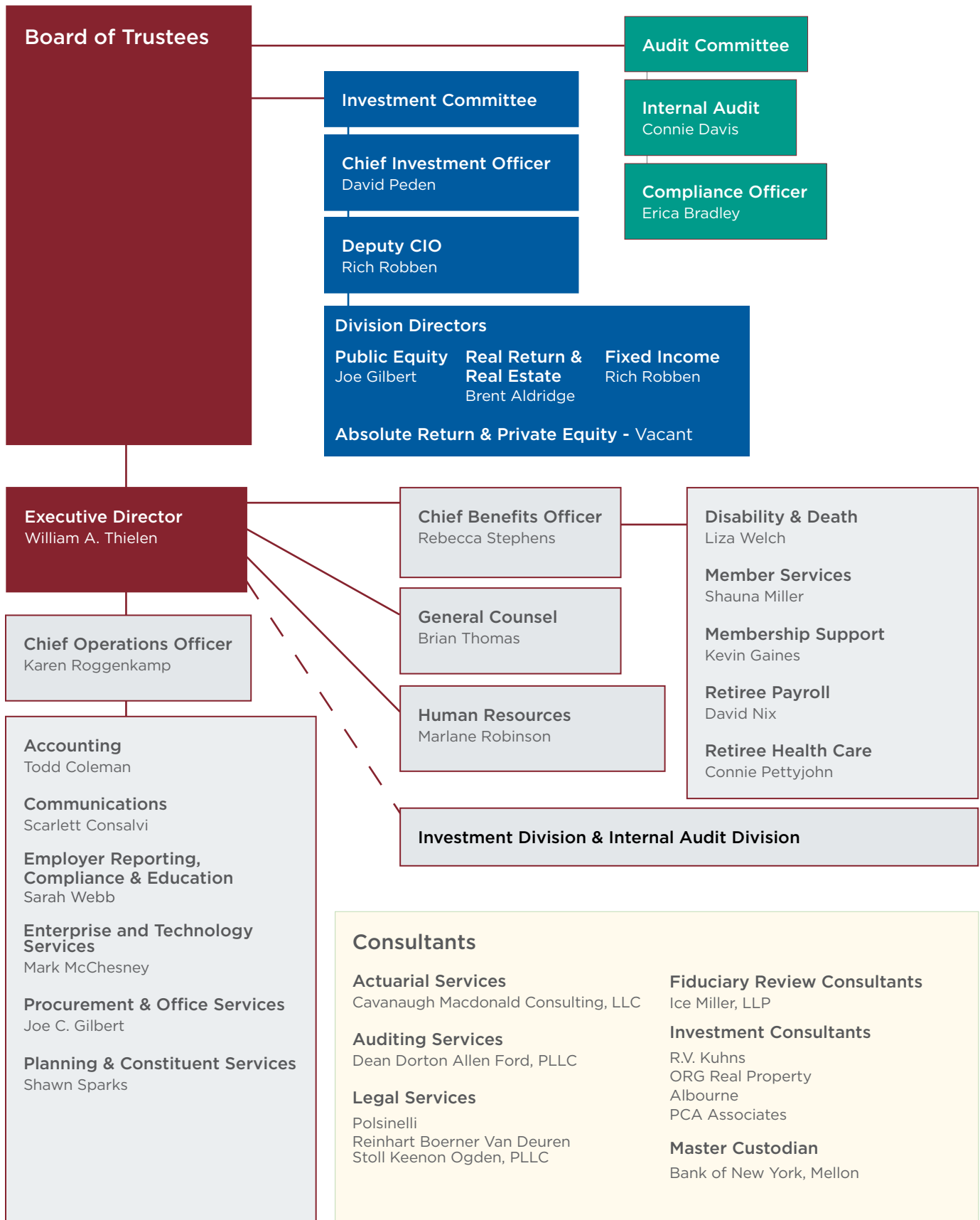
# Board of Trustees as of December 1, 2015

The Board of Trustees is comprised of thirteen members: two elected by KERS members, three elected by CERS members, one elected by SPRS members, the Secretary of the State Personnel Cabinet serves ex officio, and six are appointed by Governor Steve Beshear. Three of the six appointees are selected from lists of nominees provided by the Kentucky Association of Counties, the Kentucky League of Cities, and the Kentucky School Board Association, so that each organization has a representative.



# 2015

# Agency Structure as of December 1, 2015



# BENEFIT TIERS

KRS currently administers three different pension benefit tiers within our defined benefit plans. The Hybrid Cash Balance plan was established as a part of Senate Bill 2, which enacted by the Kentucky General Assembly during 2013 Regular Session.



Members participating before September 1, 2008



Members participating on or after September 1, 2008 through December 31, 2013



Members participating on or after January 1, 2014

## Total Systems

See comparative totals and more detailed information on page 179.



**RETIRED** MEMBERS

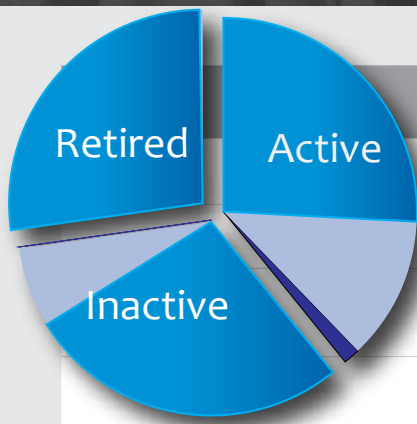
**97,630**

**ACTIVE** MEMBERS

**136,318**

**INACTIVE** MEMBERS

**121,604**

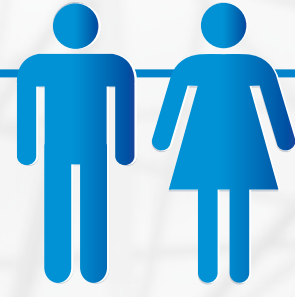


	ACTIVE	INACTIVE	RETIRED	TOTAL
Tier 1	83,502	92,379	97,608	273,489
Tier 2	35,891	25,821	22	61,734
Tier 3	16,925	3,404	0	20,329
<b>TOTAL</b>	<b>136,318</b>	<b>121,604</b>	<b>97,630</b>	<b>355,552</b>

Plan Net Position (in Thousands)						
Fund	2010	2011	2012	2013	2014	2015
<b>Pension</b>	\$10,540,440	\$11,680,563	\$10,758,706	\$11,153,182	\$12,015,897	\$11,646,481
<b>Insurance</b>	\$2,425,987	\$3,096,788	\$3,089,313	\$3,521,894	\$4,154,401	\$4,246,892
<b>Total</b>	<b>\$12,966,427</b>	<b>\$14,777,351</b>	<b>\$13,848,019</b>	<b>\$14,675,076</b>	<b>\$16,170,298</b>	<b>\$15,893,373</b>



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**ACTIVE** MEMBERSHIP

AVERAGE AGE

**45.0**

AVERAGE SALARY

**\$39,539**

**RETIRED** MEMBERSHIP

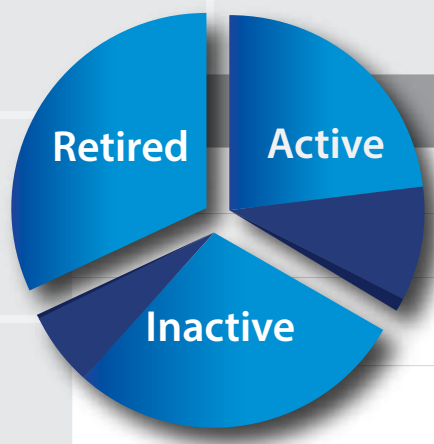
AVERAGE AGE

**68.0**

AVERAGE ANNUAL  
BENEFIT PAYMENT

**\$22,215**

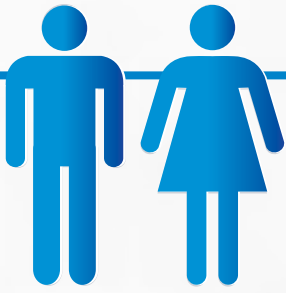
**Kentucky Employees Retirement System (KERS)**  
*was established July 1, 1956 by the state legislature.*



	ACTIVE	INACTIVE	RETIRED	TOTAL
<b>Tier 1</b>	25,560	33,700	38,821	98,081
<b>Tier 2</b>	9,525	7,831	6	17,362
<b>Tier 3</b>	4,204	948	0	5,152
<b>TOTAL</b>	39,289	42,479	38,827	120,595

<b>Plan Net Position (in Thousands)</b>						
Fund	2010	2011	2012	2013	2014	2015
<b>Pension</b>	\$3,504,501	\$3,544,242	\$2,977,069	\$2,760,753	\$2,578,291	\$2,327,782
<b>Insurance</b>	\$368,799	\$428,659	\$418,490	\$496,040	\$646,904	665,639
<b>Total</b>	\$3,873,300	\$3,972,901	\$3,395,559	\$3,256,793	\$3,225,195	\$2,993,421





**ACTIVE** MEMBERSHIP

AVERAGE AGE

**40.7**

AVERAGE SALARY

**\$33,114**

**RETIRED** MEMBERSHIP

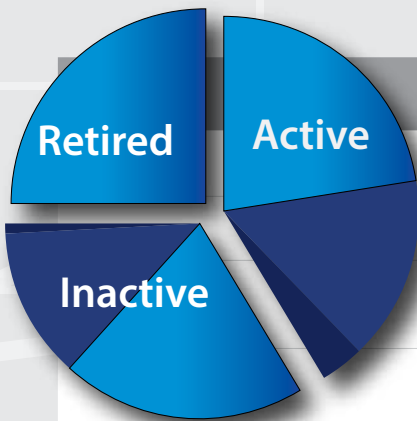
AVERAGE AGE

**63.5**

AVERAGE ANNUAL  
BENEFIT PAYMENT

**\$15,943**

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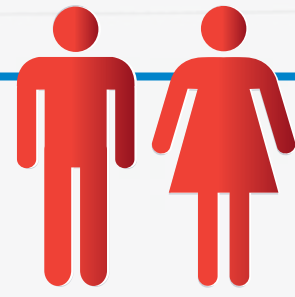
	ACTIVE	INACTIVE	RETIRED	TOTAL
<b>Tier 1</b>	2,019	1,977	2,573	6,569
<b>Tier 2</b>	1,175	1,299	2	2,476
<b>Tier 3</b>	738	485	0	1,223
<b>TOTAL</b>	<b>3,932</b>	<b>3,761</b>	<b>2,575</b>	<b>10,268</b>

**Plan Net Position (in Thousands)**

Fund	2010	2011	2012	2013	2014	2015
<b>Pension</b>	\$443,606	\$511,085	\$476,589	\$514,592	\$561,484	\$552,468
<b>Insurance</b>	\$271,239	\$320,673	\$330,730	\$372,883	\$433,525	\$439,113
<b>Total</b>	<b>\$714,845</b>	<b>\$831,758</b>	<b>\$807,319</b>	<b>\$887,475</b>	<b>\$995,009</b>	<b>\$991,581</b>



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**ACTIVE** MEMBERSHIP

AVERAGE AGE

**48.0**

AVERAGE SALARY

**\$28,406**

**RETIRED** MEMBERSHIP

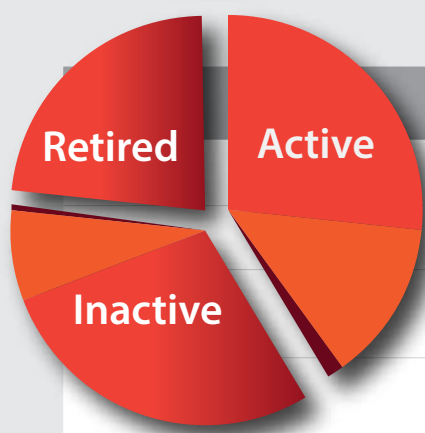
AVERAGE AGE

**69.7**

AVERAGE ANNUAL  
BENEFIT PAYMENT

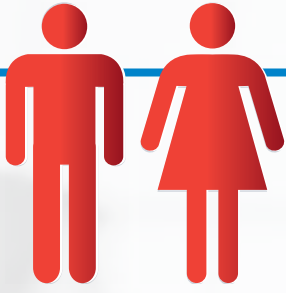
**\$11,611**

**County Employees Retirement System (CERS)**  
*was established July 1, 1958 by the state legislature.*



	ACTIVE	INACTIVE	RETIRED	TOTAL
Tier 1	48,985	54,921	48,503	152,409
Tier 2	22,844	16,151	12	39,007
Tier 3	11,140	1,893	0	13,033
<b>TOTAL</b>	<b>82,969</b>	<b>72,965</b>	<b>48,515</b>	<b>204,449</b>

Plan Net Position (in Thousands)						
Fund	2010	2011	2012	2013	2014	2015
<b>Pension</b>	\$4,820,490	\$5,583,451	\$5,381,602	\$5,795,568	\$6,528,146	\$6,440,800
<b>Insurance</b>	\$1,094,821	\$1,446,998	\$1,428,821	\$1,618,960	\$1,878,711	\$1,920,946
<b>Total</b>	<b>\$5,915,311</b>	<b>\$7,030,449</b>	<b>\$6,810,423</b>	<b>\$7,414,528</b>	<b>\$8,406,857</b>	<b>\$8,361,746</b>



**ACTIVE** MEMBERSHIP

AVERAGE AGE

**39.1**

AVERAGE SALARY

**\$52,730**

**RETIRED** MEMBERSHIP

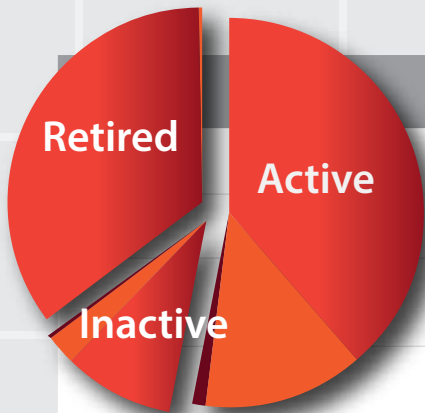
AVERAGE AGE

**61.2**

AVERAGE ANNUAL  
BENEFIT PAYMENT

**\$27,259**

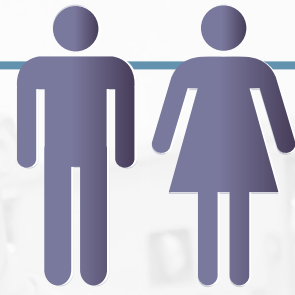
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	ACTIVE	INACTIVE	RETIRED	TOTAL
Tier 1	6,280	1,601	6,388	14,269
Tier 2	2,167	485	1	2,653
Tier 3	741	56	0	797
<b>TOTAL</b>	<b>9,188</b>	<b>2,142</b>	<b>6,389</b>	<b>17,719</b>

**Plan Net Position (in Thousands)**

Fund	2010	2011	2012	2013	2014	2015
<b>Pension</b>	\$1,506,894	\$1,761,858	\$1,672,970	\$1,833,571	\$2,087,002	\$2,078,202
<b>Insurance</b>	\$586,617	\$773,139	\$785,874	\$891,320	\$1,030,303	\$1,056,480
<b>Total</b>	<b>\$2,093,511</b>	<b>\$2,534,997</b>	<b>\$2,458,844</b>	<b>\$2,724,891</b>	<b>\$3,117,305</b>	<b>\$3,134,682</b>



**ACTIVE** MEMBERSHIP

AVERAGE AGE

**36.8**

AVERAGE SALARY

**\$48,842**

**RETIRED** MEMBERSHIP

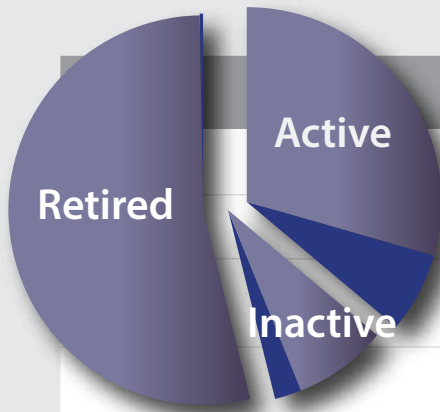
AVERAGE AGE

**61.9**

AVERAGE ANNUAL BENEFIT PAYMENT

**\$40,121**

*State Police Retirement System (SPRS) was established July 1, 1958 by the state legislature.*

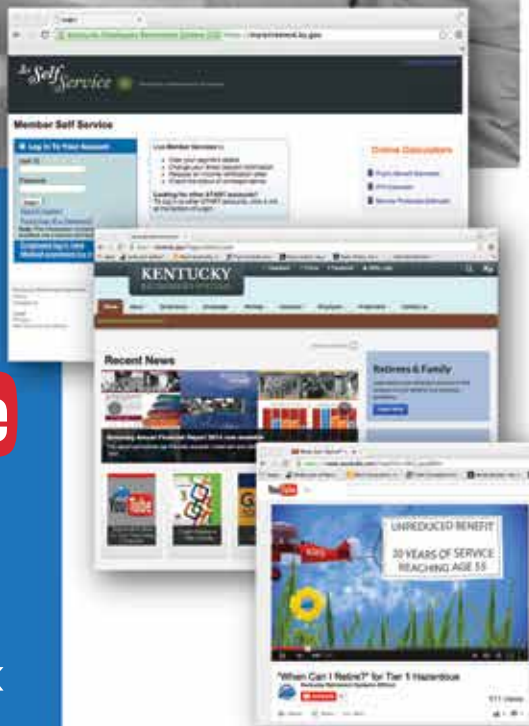


	ACTIVE	INACTIVE	RETIRED	TOTAL
Tier 1	658	180	1,323	2,161
Tier 2	180	55	1	236
Tier 3	102	22	0	124
<b>TOTAL</b>	<b>940</b>	<b>257</b>	<b>1,324</b>	<b>2,521</b>

**Plan Net Position (in Thousands)**

Fund	2010	2011	2012	2013	2014	2015
<b>Pension</b>	\$264,949	\$279,927	\$250,476	\$248,698	\$260,974	\$247,229
<b>Insurance</b>	\$104,511	\$127,319	\$125,398	\$142,691	\$164,958	\$164,714
<b>Total</b>	<b>\$369,460</b>	<b>\$407,246</b>	<b>\$375,874</b>	<b>\$391,389</b>	<b>\$425,932</b>	<b>\$411,943</b>

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- Links to Member Education Videos
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- Calculate your benefits
- Get your retirement information

## Member Education

Videos located at [youtube.com/user/KentuckyRetire](https://youtube.com/user/KentuckyRetire)

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How-to Videos

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*...and more!*

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*(interact and ask questions)*

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*(the latest information and what it means to you)*

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## Retirement Counselors

### • Call Center

*Monday - Friday 8:00am - 4:30pm*

*1-502-696-8800 or 1-800-928-4646*

### • On-site Counselors

*Perimeter Park West*

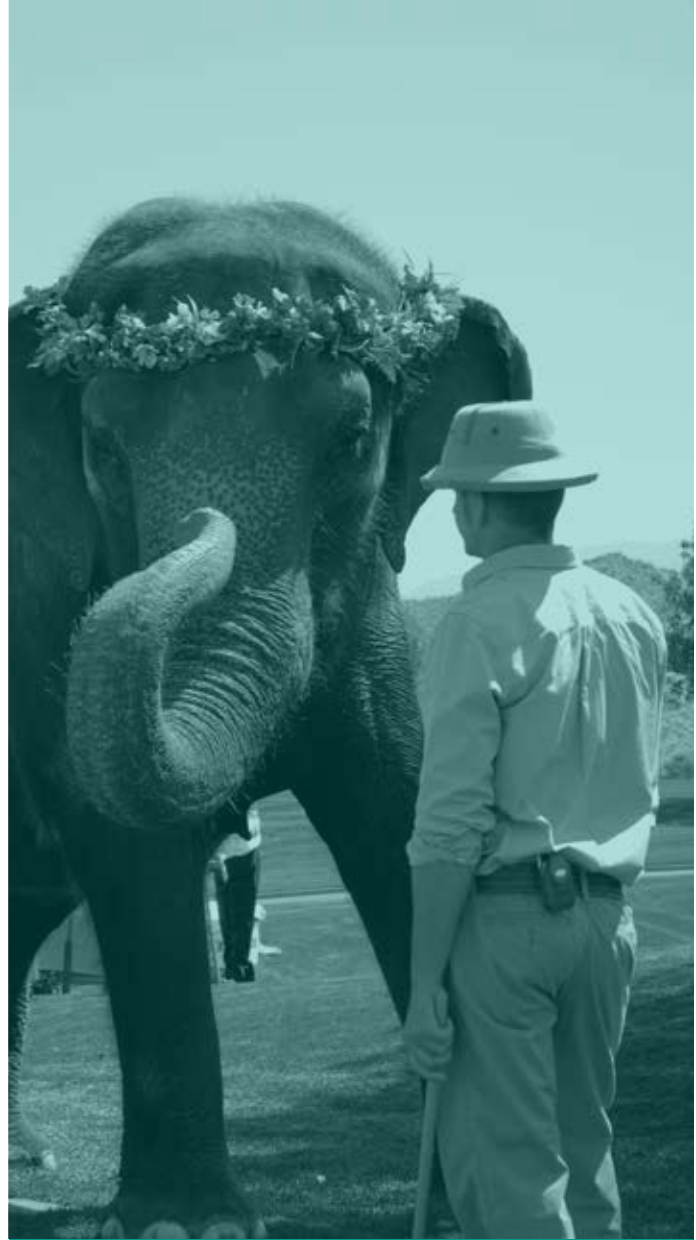
*1260 Louisville Road*

*Frankfort, KY 40601*

### • Email

[krs.mail@kyret.ky.gov](mailto:krs.mail@kyret.ky.gov)

*General Questions only (unsecure)*



**FINA**



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# NCIAL



## Report of Independent Auditors

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Board of Trustees  
Kentucky Retirement Systems  
Frankfort, Kentucky

### **Report on the Financial Statements**

We have audited the accompanying combining financial statements of the Pension Funds and Insurance Fund of the Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of and for the fiscal year ended June 30, 2015, and the related notes to the combining financial statements, which collectively comprise the Kentucky Retirement Systems' basic combining financial statements as listed in the table of contents.

### **Management's Responsibility for the Financial Statements**

Management is responsible for the preparation and fair presentation of these combining financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of combining financial statements that are free from material misstatement, whether due to fraud or error.

### **Auditor's Responsibility**

Our responsibility is to express an opinion on these combining financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to the financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the combining financial statements are free from material misstatement.



An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the combining financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatements of the combining financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the combining financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the combining financial statements.

We believe the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### **Opinion**

In our opinion, the combining financial statements referred to above present fairly, in all material respects, the respective combining plan net position of the Pension Funds and Insurance Fund of the Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of June 30, 2015, and the respective combining changes in plan net position for the fiscal year then ended, in accordance with accounting principles generally accepted in the United States of America.

### **Report on Summarized Comparative Information**

We have previously audited Kentucky Retirement Systems 2014 combining financial statements of the pension funds and Insurance fund and we expressed an unmodified audit opinion on those audited Combining Financial Statement in our report dated December 4, 2014. In our opinion the summarize comparative information presented herein as of and for fiscal year ended June 30, 2014, is consistent, in all material respects with the audited combining financial statements from which it has been derived.

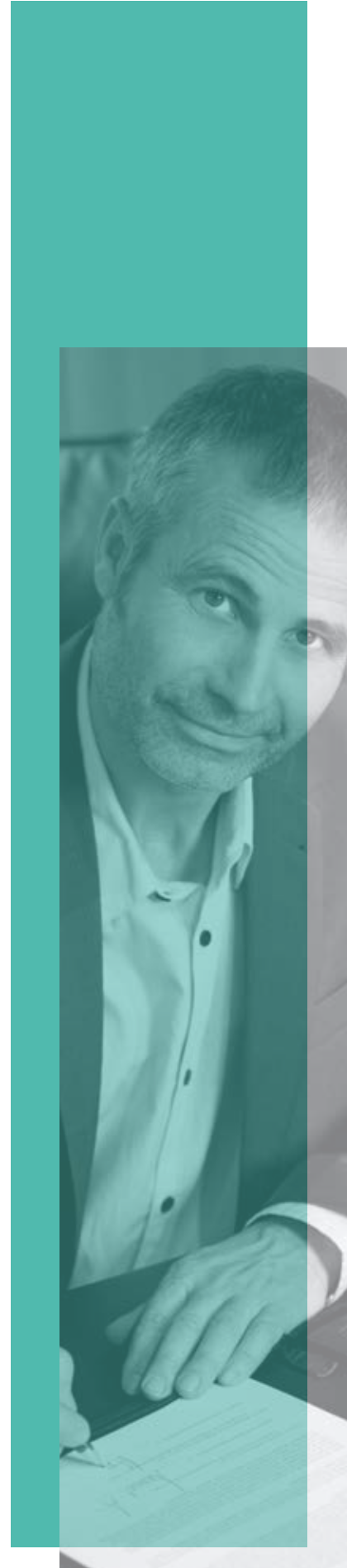
### **Emphasis of Matter**

As discussed in Note W to the combining financial statement, Kentucky Retirement Systems has elected to change its method of accounting for investment fees in the fiscal year ended June 30, 2015. Our opinion is not modified with respect to this matter.

### **Other Matters**

#### **Required Supplementary Information**

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis (pages 27 through 28) and the Schedules of Changes in the Net Pension Liability, Schedules of the Net Pension Liability, Schedules of Employer Contributions, Schedules of Funding Progress, and Schedules of Contributions from Employers and Other Contributing Entities (pages 75 through 86) be presented to supplement the basic combining financial statements. Such information, although not a part of the basic combining financial statements, is required by the Governmental Accounting Standards





Board who considers it to be an essential part of the financial reporting for placing the basic combining financial statements in an appropriate operational, economical, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic combining financial statements, and other knowledge we obtained during our audit of the basic combining financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures did not provide us with sufficient evidence to express an opinion or provide any assurance.

### **Additional Supporting Schedules**

Our audit was conducted for the purpose of forming an opinion on the combining financial statements that collectively comprise the Kentucky Retirement Systems' basic combining financial statements. The additional supporting schedules (pages 85 through 88) are presented for purposes of additional analysis and are not a required part of the basic combining financial statements. The additional supporting schedules are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic combining financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic combining financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic combining financial statements or to the basic combining financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the supporting schedules are fairly stated, in all material respects, in relation to the basic combining financial statements as a whole. The Introductory, Actuarial, Investment, and Statistical sections are presented for purposes for additional analysis and are not a required part of the combining financial statements. These sections have not been subjected to the auditing procedures applied in the audit of the combining financial statements and accordingly, we offer no opinion on them.

### **Other Reporting Required by Government Auditing Standards**

In accordance with Government Auditing Standards, we have also issued our report dated December 03, 2015 on our consideration of the Kentucky Retirement Systems' internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards in considering the Kentucky Retirement Systems' internal control over financial reporting and compliance.

*Dean Dalton Allen Ford, PLLC*

December 3, 2015  
Lexington, Kentucky

# Management's DISCUSSION & ANALYSIS (Unaudited)

*This discussion and analysis of Kentucky Retirement Systems' financial performance provides an overview of the pension and insurance fund financial activities for the fiscal year ended June 30, 2015. Please read it in conjunction with the combining financial statements, which begin on page 34.*

## Pension Funds

The following highlights are explained in more detail later in this discussion.

- » The combined net position of all pension funds administered by Kentucky Retirement Systems (KRS) decreased by \$369.4 million during fiscal 2015. While all systems ended with a net decrease in net position, the Kentucky Employees Retirement System (KERS) Nonhazardous plan had the largest decline of \$250.5 million. Although net investment returns were 2.38% for KERS Nonhazardous, they only partially offset the net benefits outflow of \$291.3 million.
- » Total contributions reported for fiscal 2015, totaled \$1,322.9 million compared to \$1,055.7 million in fiscal 2014. This increase is due to a rise in the employer contribution rates, the collection of additional health insurance contributions, and the proceeds of the Bank of America settlement of \$23.0 million. KERS Nonhazardous, KERS Hazardous and the State Police Retirement System (SPRS) experienced an increase of \$267.3 million in contributions over the prior year as a result of increased employer contribution rates and an \$8 million increase in service purchases of refunded service related to Senate Bill 2 which no longer allowed a retroactive participation date when refunded service is purchased.
- » The member health insurance contribution totaled \$12.6 million, for the fiscal year ended June 30, 2015, compared to \$12.4 million in the prior fiscal year.
- » The investment portfolio reported a net of expense return of 2.01% for the fiscal year, trailing fiscal 2014 net of expense returns of 15.55%. KRS faced a difficult challenge in meeting the 7.75% benchmark for the fiscal year due to the downturn in the market for equities and real return asset classes. Earnings in the fiscal year were found in real estate, private equity and large cap public equity asset classes which KRS holds a small allocation, representing less than 30% of total investments.
- » The net depreciation in the fair value of investments was \$14.8 million for the fiscal year ended June 30, 2015 compared to net appreciation of \$1,361.9 million for the prior fiscal year. This \$1.4 billion decrease was due to unfavorable market conditions. Unrealized losses were the primary cause of the decrease, as KRS moved from an unrealized gain in fiscal 2014 of \$489 million to an unrealized loss in fiscal 2015 of \$557 million. Realized gains decreased to \$542 million, slightly below prior year's realized gains of \$873 million.
- » Interest, dividend and net securities lending income for fiscal 2015 was \$300.7 million compared to \$327.5 million in fiscal 2014. The decrease was related to less private equity dividend capitalization and a reduced asset base.
- » On August 11, 2014, and May 1, 2015, KRS issued a promissory note to CM Growth Capital Partners, LLP. The amount of the promissory note applicable to the pension funds totaled \$1.3 million. The total accrued interest as of June 30, 2015, totaled \$253,927. See Note E for further detail.
- » Investment expenses appear to be higher than prior year due to an accounting reporting change regarding fees associated primarily with private equity investments. KRS adopted a new reporting method in an effort to provide more transparency with investment fees incurred which provides a greater level of transparency. It is important to note that fees have not suddenly and significantly increased, and that net investment performance has not been affected by the reporting change. See Note W for further detail.
- » Pension benefits paid to retirees and beneficiaries for fiscal 2015 totaled \$1,832.8 million compared to \$1,769.8 million in fiscal 2014. Refund of contributions paid to former members upon termination of employment for fiscal 2015 totaled \$32.9 million compared to \$33.6 million in fiscal 2014.
- » 2015 administrative expense totaled \$33.2 million (Pension \$31.0 million; Insurance \$2.2 million) compared to \$34.2 million (Pension \$32.6 million; Insurance \$1.6 million) for the prior year.

## Insurance Fund

The following highlights are explained in more detail later in this discussion.

- » The combined net position of the insurance fund administered by KRS increased by \$92.5 million during fiscal 2015. Total combined net position for the fiscal year was \$4.25 billion. All but one system ended with a net increase in net position. SPRS ended the fiscal year with a net decrease of \$244,000.
- » The investment portfolio reported a net expense return of 1.86% for the fiscal year, trailing fiscal 2014 net of expense returns of 14.89%, and was less than the 7.75% benchmark for the fiscal year.
- » The self-funded plan was one in which KRS assumed the financial risk for providing healthcare benefits to its retirees. The funded-plan paid for claims out-of-pocket as they were presented instead of paying a pre-determined premium to an insurance carrier for a fully-insured plan. Premiums received from retirees who participated in the Medicare eligible self-funded plan totaled \$0.9 million, compared to \$2.4 million in fiscal 2014. The decrease is a result of Centers for Medicare and Medicaid Services (CMS) paying a portion of the retiree's premium. In addition, the decrease is attributable to the cessation of the self-funded plan.
- » Employer contributions of \$343.6 million were received in fiscal 2015 compared to \$397.4 million in fiscal 2014. Total contributions declined 12.9% primarily due to a decrease in employer contribution rates across all systems. A decrease in insurance premiums and the Medicare drug reimbursement added to the decline as well, which is a result of less retirees covered under the self-insured program.
- » The reimbursement of retired-reemployed health insurance for fiscal 2015 totaled \$8.8 million compared to \$5.6 million in the prior fiscal year. This is due to an upward trend of retirees returning to the workforce.
- » The Employer Group Waiver Plan receipts from CMS subsidies for fiscal 2015 totaled \$0 compared to \$14,295 in fiscal 2014. This decrease is due to the cessation of the self-funded plan.
- » Interest, dividend and net securities lending income for fiscal 2015 was \$100.5 million compared to \$97.1 million in fiscal 2014.
- » The net appreciation in the fair value of investments for fiscal 2015 was \$3.9 million compared to net appreciation of \$445.7 million for the prior fiscal year, due to unfavorable market conditions. Overall investment income decreased by \$450.7 million. Unrealized losses were the primary cause of the decrease as KRS moved from an unrealized gain in the prior fiscal year of \$288 million to an unrealized loss in fiscal 2015 of \$126 million. Realized gains decreased to \$130 million, slightly below prior fiscal year's realized gains of \$158 million.
- » Investment expenses appear to be higher than prior year due to an accounting reporting change regarding fees associated primarily with private equity investments. KRS adopted a new reporting method in an effort to provide more transparency with investment fees incurred which provides a greater level of transparency. It is important to note that fees have not suddenly and significantly increased, and that net investment performance has not been affected by the reporting change. See Note W for further detail.
- » On August 11, 2014, and May 1, 2015, KRS issued a promissory note to CM Growth Capital Partners, LLP. The amount of the promissory note applicable to the insurance fund totaled \$105,208. The total accrued interest as of June 30, 2015, totaled \$28,215. See Note E for further details.
- » The total of insurance premiums paid plus self-funded reimbursements was \$335 million for fiscal 2015. Premiums paid by the fund for hospital and medical insurance coverage (under age 65) totaled \$328.9 million. Payments for the self-funded healthcare reimbursements (over age 65) totaled \$6.1 million. Insurance premiums paid plus self-funded healthcare reimbursements for the prior fiscal year totaled \$298.4 million.

## Using This Financial Report

Because of the long-term nature of a defined benefit pension plan and post-employment healthcare benefit plan, the combining financial statements alone cannot provide sufficient information to properly reflect the plans' ongoing plan perspective. This financial report consists of two combining financial statements and two required schedules of historical trend information. All plans within KRS are included in the aforementioned combining financial statements. The Combining Statement of Plan Net Position for the Pension Funds on page 34, and the Combining Statement of Plan Net Position for the Insurance Fund on page 36, provides a snapshot of the financial position of each of the three systems at June 30, 2015. The Combining Statement of Changes in Plan Net Position for the Pension Funds and the Combining Statement of Changes in Plan Net Position for the Insurance Fund summarizes the additions and deductions that occurred for each of the three systems during fiscal 2015.

The Schedules of the Net Pension Liability, the Schedules of Changes in the Net Pension Liability, and the Schedules of Funding Progress beginning on pages 76 include current and historical trend information about the actuarially funded status of each plan from a long-term, ongoing plan perspective and the progress made in accumulating sufficient assets to pay benefits and insurance premiums when due. The Schedules of Employer Contributions and the Schedules of Contributions from Employers and Other Contributing Entities, present current and historical trend information about the annual required contributions and the contributions made in relation to the requirement. These schedules provide information that contributes to understanding the changes over time in the funded status of the plans.

## Kentucky Retirement Systems Combined

KRS' combined net position decreased \$276.9 million, during the fiscal year ended June 30, 2015. Net position for the prior fiscal year increased by \$1,495.3 million. The decrease in net position for the plan year ended June 30, 2015 is primarily attributable to a decrease in net investment income. The analysis below focuses on net position (Table 1) and changes in net position (Table 2) of KRS' Pension and Insurance Funds.





Financial data presented in this report is abbreviated *"in thousands"* or *"in millions."*

## FUND ACTIVITIES

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### **Pension Fund Activities**

Net position of the pension funds decreased by \$369.4 million (\$11,646.5 million compared to \$12,015.9 million). All of these assets are restricted in use to provide monthly retirement allowances to members who contributed to the pension funds as employees and their beneficiaries. Net position of the insurance fund increased by \$92.5 million (\$4,246.9 million compared to \$4,154.4 million). All of these assets are restricted in use to provide hospital and medical insurance benefits to members of the pension funds who receive a monthly retirement allowance.

**Table 1. Plan Net Position (in Millions)**

Assets	Pension Funds			Insurance Fund			Total		
	2015	2014	2013	2015	2014	2013	2015	2014	2013
Cash & Investments	\$12,217.5	\$12,758.2	\$12,431.7	\$4,451.2	\$4,392.4	\$3,992.1	\$16,668.7	\$17,150.6	\$16,423.8
Receivables	459.2	750.2	136.1	148.1	289.3	49.1	607.3	1,039.5	185.2
Equip/Int Assets, net of dep/amort.	9.9	10.5	16.1	-	-	-	9.9	10.5	16.1
<b>Total Assets</b>	<b>12,686.6</b>	<b>13,518.9</b>	<b>12,583.9</b>	<b>4,599.3</b>	<b>4,681.7</b>	<b>4,041.2</b>	<b>17,285.9</b>	<b>18,200.6</b>	<b>16,625.1</b>
<b>Total Liabilities</b>	<b>(1,040.1)</b>	<b>(1,503.0)</b>	<b>(1,430.8)</b>	<b>(352.4)</b>	<b>(527.3)</b>	<b>(519.3)</b>	<b>(1,392.5)</b>	<b>(2,030.3)</b>	<b>(1,950.1)</b>
<b>Plan Net Position</b>	<b>\$11,646.5</b>	<b>\$12,015.9</b>	<b>\$11,153.1</b>	<b>\$4,246.9</b>	<b>\$4,154.4</b>	<b>\$3,521.9</b>	<b>\$15,893.4</b>	<b>\$16,170.3</b>	<b>\$14,675.0</b>

**Table 2. Changes in Plan Net Position (in Millions)**

Additions	Pension Funds			Insurance Fund			Total		
	2015	2014	2013	2015	2014	2013	2015	2014	2013
Member Cont.	\$298.5	\$275.0	\$276.3	-	-	-	\$298.5	\$275.0	\$276.3
Employer Cont.	985.9	768.3	741.8	\$343.6	\$397.4	\$447.3	1,329.5	1,165.7	1,189.1
Health Ins. Cont.	12.6	12.4	9.1	-	-	-	12.6	12.4	9.1
Pension Spiking Cont.	2.9	-	-	-	-	-	2.9	-	-
BOA Settlement	23.0	-	-	-	-	-	23.0	-	-
Premiums Rec'd	-	-	-	0.9	2.4	26.3	0.9	2.4	26.3
Retired Remp Ins.	-	-	-	8.8	5.6	5.8	8.8	5.6	5.8
Medicare Subsidy	-	-	-	-	-	11.2	-	-	11.2
Invest. Inc. (net)	204.4	1,643.0	1,140.8	76.4	527.1	313.6	280.8	2,170.1	1,454.4
<b>Total Additions</b>	<b>1,527.3</b>	<b>2,698.7</b>	<b>2,168.0</b>	<b>429.7</b>	<b>932.5</b>	<b>804.2</b>	<b>1,957.0</b>	<b>3,631.2</b>	<b>2,972.2</b>
<b>Deductions</b>									
Benefit Payments	1,832.8	1,769.7	1,706.2	-	-	-	1,832.8	1,769.7	1,706.2
Refunds	32.9	33.6	32.2	-	-	-	32.9	33.6	32.2
Administrative Ex.	31.0	32.6	30.5	2.2	1.6	9.8	33.2	34.2	40.3
Healthcare Costs	-	-	-	335.0	298.4	361.9	335.0	298.4	361.9
<b>Total Deductions</b>	<b>1,896.7</b>	<b>1,835.9</b>	<b>1,768.9</b>	<b>337.2</b>	<b>300</b>	<b>371.7</b>	<b>2,233.9</b>	<b>2,135.9</b>	<b>2,140.6</b>
<b>Increase (Decrease) in Plan Net Position</b>	<b>(\$369.4)</b>	<b>\$862.8</b>	<b>\$399.1</b>	<b>\$92.5</b>	<b>\$632.5</b>	<b>\$432.5</b>	<b>(\$276.9)</b>	<b>\$1,495.3</b>	<b>\$831.6</b>

## Pension Fund Activities

Member contributions increased by \$23.5 million. This is partially due to an increase in service purchases due to the passage of Senate Bill 2. Retirement contributions are calculated by applying a percentage factor to salary and are remitted by each employer on behalf of the member. Nonhazardous members pay pension contributions of 5% of creditable compensation and hazardous members contribute 8% of creditable compensation. Employer contributions increased by \$217.6 million due to the rise in employer contribution rate applied to covered payroll.

Total pension fund deductions increased by \$60.8 million caused by an increase in benefit payments which were \$63.1 million higher than fiscal year 2014.

Net investment income decreased by \$1,439 million. This is illustrated in Table 3. The pension funds experienced a decrease in income due to the decrease in the fair value of investments.

**Table 3. Investment Income (Loss) for Pension Funds (in Millions)**

Asset	2015	2014	2013
Increase (Decrease) in fair value of investments	(557)	\$489	\$426
Investment income net of investment expense	219	281	250
Gain on sale of investments	542	873	465
<b>Net Investment Income</b>	<b>\$204</b>	<b>\$1,643</b>	<b>\$1,141</b>

## Insurance Fund Activities

Employer contributions paid into the insurance fund decreased by \$53.8 million over the prior fiscal year. This decrease is a result of the reduction in the employer contribution rate applied to CERS Non-hazardous and Hazardous covered payrolls.

Insurance fund deductions increased by \$37.2 million, as compared to prior year, due to an increase in healthcare costs.

Net investment income decreased \$451 million. This decrease in net investment income is due primarily to the decrease in the fair value of investments. This is illustrated in Table 4 as follows:

**Table 4. Investment Income (Loss) for Insurance Fund (in Millions)**

Asset	2015	2014	2013
Increase (Decrease) in fair value of investments	(126)	\$288	\$125
Investment income net of investment expense	72	81	81
Gain on sale of investments	130	158	108
<b>Net Investment Income</b>	<b>\$76</b>	<b>\$527</b>	<b>\$314</b>





## Historical Trends

Accounting standards require that the Statement of Net Position state asset value at fair value and include only benefits and refunds due plan members and beneficiaries and accrued investment and administrative expense as of the reporting date. Information regarding the actuarial funding status of the Pension and Insurance Funds is provided in the Schedules of Net Pension Liability (page 84) and the Schedules of Funding Progress on page 76. The asset value stated in the Schedules of Funding Progress is the actuarial value of assets. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the investment return assumption. The amount recognized each year is 20% of the difference between market value and expected market value. The actuarial accrued liability is calculated using the entry age normal cost funding method. This actuarial accrued liability is the measure of the cost of benefits that have been earned to date by KRS' members, but not yet paid. The difference in value between the actuarial accrued liability and the actuarial value of assets is defined as the unfunded actuarial accrued liability.

The unfunded actuarial accrued liability in the pension plans increased by \$1,785.1 million for a total unfunded amount of \$16,615.2 million as of June 30, 2015, compared to an unfunded amount of \$14,830.1 million as of June 30, 2014. In recent years, funding levels for the pension funds have fallen significantly due to investment returns less than the actuarially assumed rate and higher than anticipated retirement rates. In addition, KERS Nonhazardous, KERS Hazardous, and SPRS were funded less than the actuarially determined rate in prior years.

The insurance plan's unfunded actuarial accrued liability as of June 30, 2015, increased to \$3,055.8 million from \$2,943.6 million as of June 30, 2014. This is a increase in the unfunded actuarial accrued liability of \$112.2 million.

Annual required contributions of the employers as actuarially determined and actual contributions made by employers and other contributing entities in relation to the required contributions are provided in the Schedules of Employer Contributions and in the Schedules of Contributions from Employers (pages 82-83) and Other Contributing Entities (pages 79-81). The difference in the annual required contributions and actual contributions made by employers and other contributing entities in the KERS and SPRS funds is attributable to the fact that the employer contribution rate set by the Kentucky General Assembly was less than the rate recommended by the KRS Actuary in prior years and adopted by the KRS Board of Trustees.

**Combining Statement of Plan Net Position for Pension Funds (in Thousands)**  
as of June 30, 2015 with Comparative Totals as of June 30, 2014

Assets						2015	2014
	KERS Haz	KERS Non Haz	CERS Haz	CERS Non Haz	SPRS	KRS Total	KRS Total
<b>Cash &amp; Short-Term Investments</b>							
Cash	\$162	\$1,739	\$583	\$1,556	\$215	\$4,255	\$3,744
Short-Term Investments	21,560	97,852	71,675	196,485	7,796	395,368	440,983
<b>Total Cash and Short-Term Investments</b>	<b>21,722</b>	<b>99,591</b>	<b>72,258</b>	<b>198,041</b>	<b>8,011</b>	<b>399,623</b>	<b>444,727</b>
<b>Receivables</b>							
Contributions	5,198	67,084	14,634	52,928	9,785	149,629	108,050
Investment Income	14,378	61,259	54,591	171,855	6,219	308,302	642,101
Note Receivable	58	458	170	549	30	1,265	-
<b>Total Receivables</b>	<b>19,634</b>	<b>128,801</b>	<b>69,395</b>	<b>225,332</b>	<b>16,034</b>	<b>459,196</b>	<b>750,151</b>
<b>Investments at Fair Value</b>							
Corporate & Government Bonds	124,249	548,573	477,677	1,478,774	51,150	2,680,423	3,051,302
Absolute Return	59,463	266,392	223,749	705,647	26,915	1,282,166	1,303,197
Private Equities	62,498	343,612	212,363	640,199	26,900	1,285,572	1,287,466
Derivatives	286	1,241	1,095	3,406	128	6,156	4,051
Corporate Stocks	248,062	881,432	961,710	2,999,507	110,381	5,201,092	5,358,280
Real Estate	31,745	113,324	112,134	348,220	13,754	619,177	427,106
<b>Total Investments at Fair Value</b>	<b>526,303</b>	<b>2,154,574</b>	<b>1,988,728</b>	<b>6,175,753</b>	<b>229,228</b>	<b>11,074,586</b>	<b>11,431,402</b>
Securities Lending Collateral Invested	35,156	145,667	133,570	413,476	15,392	743,261	882,097
Equipment (net of accumulated depreciation)	6	58	10	110	1	185	221
Intangible Assets (net of accumulated amortization)	286	3,305	465	5,634	49	9,739	10,318
<b>Total Assets</b>	<b>603,107</b>	<b>2,531,996</b>	<b>2,264,426</b>	<b>7,018,346</b>	<b>268,715</b>	<b>12,686,590</b>	<b>13,518,916</b>
<b>Liabilities</b>							
Accounts Payable	2,129	2,846	1,346	5,403	315	12,039	8,936
Investment Accounts Payable	13,354	55,701	51,308	158,667	5,779	284,809	611,986
Securities Lending Collateral Obligations	35,156	145,667	133,570	413,476	15,392	743,261	882,097
<b>Total Liabilities</b>	<b>50,639</b>	<b>204,214</b>	<b>186,224</b>	<b>577,546</b>	<b>21,486</b>	<b>1,040,109</b>	<b>1,503,019</b>
<b>Total Net Position for Pension Benefits</b>	<b>\$552,468</b>	<b>\$2,327,782</b>	<b>\$2,078,202</b>	<b>\$6,440,800</b>	<b>\$247,229</b>	<b>\$11,646,481</b>	<b>\$12,015,987</b>

See accompanying notes to the combining financial statements.

**Combining Statement of Changes in Plan Net Position for Pension Funds (in Thousands)**  
*for the fiscal year ended June 30, 2015 with Comparative Totals for the fiscal year ended June 30, 2014*

Additions						2015	2014
	KERS Haz	KERS Non Haz	CERS Haz	CERS Non Haz	SPRS	KRS Total	KRS Total
Members' Contributions	\$12,670	\$100,424	\$46,609	\$133,637	\$5,150	\$298,490	\$275,032
Employers' Contributions	28,374	520,949	107,515	297,714	31,444	985,996	768,257
Pension Spiking Contributions	162	743	557	850	546	2,858	-
Health Insurance Contributions (HBI)	537	4,181	1,084	6,674	94	12,570	12,367
Bank of America Settlement	767	8,442	2,865	10,280	646	23,000	-
<b>Total Contributions</b>	<b>42,510</b>	<b>634,739</b>	<b>158,630</b>	<b>449,155</b>	<b>37,880</b>	<b>1,322,914</b>	<b>1,055,656</b>
<b>Investment Income</b>							
From Investing Activities							
↘ Net Appreciation in FV (depreciation)	(1,263)	(4,791)	(256)	(7,218)	(1,303)	(14,831)	1,361,940
↘ Interest/Dividends	13,898	65,596	51,237	160,824	6,380	297,935	323,627
↘ Total Investing Activities Income	12,635	60,805	50,981	153,606	5,077	283,104	1,685,567
↘ Investment Expense	4,063	16,711	14,387	44,636	1,708	81,505	46,350
Net Income from Investing Activities	8,572	44,094	36,594	108,970	3,369	201,599	1,639,217
From Securities Lending Activities							
↘ Securities Lending Income	140	592	550	1,713	61	3,056	4,066
From Securities Lending Expense							
↘ Security Borrower (Income) Rebates	(10)	41	(42)	(143)	(5)	(159)	(433)
↘ Security Lending Agent Fees	21	76	82	257	8	444	675
Net Income from Securities Lending Activities	129	475	510	1,599	58	2,771	3,824
<b>Total Net Investment Income</b>	<b>8,701</b>	<b>44,569</b>	<b>37,104</b>	<b>110,569</b>	<b>3,427</b>	<b>204,370</b>	<b>1,643,041</b>
<b>Total Additions</b>	<b>51,211</b>	<b>679,308</b>	<b>195,734</b>	<b>559,724</b>	<b>41,307</b>	<b>1,527,284</b>	<b>2,698,697</b>
<b>Deductions</b>							
Benefit Payments	56,774	905,790	200,134	615,335	54,766	1,832,799	1,769,768
Refunds	2,609	13,552	3,111	13,524	85	32,881	33,621
Administrative Expenses	844	10,474	1,289	18,212	201	31,020	32,593
<b>Total Deductions</b>	<b>60,227</b>	<b>929,816</b>	<b>204,534</b>	<b>647,071</b>	<b>55,052</b>	<b>1,896,700</b>	<b>1,835,982</b>
Net (Decrease) Increase in Plan Net Position	(9,016)	(250,508)	(8,800)	(87,347)	(13,745)	(369,416)	862,715
<b>Total Net Position for Pension Benefits</b>							
Beginning of Year	561,484	2,578,290	2,087,002	6,528,147	260,974	12,015,897	11,153,182
<b>End of Year</b>	<b>\$552,468</b>	<b>\$2,327,782</b>	<b>\$2,078,202</b>	<b>\$6,440,800</b>	<b>\$247,229</b>	<b>\$11,646,481</b>	<b>\$12,015,897</b>

See accompanying notes to the combining financial statements.

## Combining Statement of Plan Net Position for Insurance Fund (in Thousands)

as of June 30, 2015 with Comparative Totals as of June 30, 2014

Assets						2015	2014
	KERS Haz	KERS Non Haz	CERS Haz	CERS Non Haz	SPRS	KRS Total	KRS Total
<b>Cash and Short-Term Investments</b>							
Cash	\$30	\$286	\$25	\$541	\$12	\$894	\$354
Short-Term Investments	9,936	20,560	24,256	39,657	4,743	99,152	138,689
Medicare Drug Deposit	-	-	-	-	-	-	100
<b>Total Cash and Short Term Investments</b>	<b>9,966</b>	<b>20,846</b>	<b>24,281</b>	<b>40,198</b>	<b>4,755</b>	<b>100,046</b>	<b>139,143</b>
<b>Receivables</b>							
Contributions	1,352	12,310	5,754	14,342	909	34,667	36,668
Investment Income	11,808	17,621	28,223	51,257	4,401	113,310	252,677
Note Receivable	15	32	30	57	7	141	
<b>Total Receivables</b>	<b>13,175</b>	<b>29,963</b>	<b>34,007</b>	<b>65,656</b>	<b>5,317</b>	<b>148,118</b>	<b>289,345</b>
<b>Investments at Fair Value</b>							
Corporate & Government Bonds	140,537	208,527	340,965	616,376	52,090	1,358,495	1,445,430
Derivatives	239	352	566	1,033	89	2,279	868
Private Equities	33,597	40,462	92,946	166,834	15,076	348,915	270,841
Absolute Return	48,446	71,872	116,561	208,349	18,258	463,486	430,009
Corporate Stocks	179,954	276,927	417,493	768,440	64,168	1,706,982	1,661,739
Real Estate	25,554	36,346	58,404	106,604	9,535	236,443	151,005
<b>Total Investments at Fair Value</b>	<b>428,327</b>	<b>634,486</b>	<b>1,026,935</b>	<b>1,867,636</b>	<b>159,216</b>	<b>4,116,600</b>	<b>3,959,892</b>
Securities Lending Collateral Invested	24,376	36,359	58,472	106,186	9,116	234,509	293,370
<b>Total Assets</b>	<b>475,844</b>	<b>721,654</b>	<b>1,143,695</b>	<b>2,079,676</b>	<b>178,404</b>	<b>4,599,273</b>	<b>4,681,750</b>
<b>Liabilities</b>							
Accounts Payable	101	900	342	801	64	2,208	47
Investment Accounts Payable	12,254	18,756	28,401	51,743	4,510	115,664	233,931
Securities Lending Collateral Obligations	24,376	36,359	58,472	106,186	9,116	234,509	293,370
<b>Total Liabilities</b>	<b>36,731</b>	<b>56,015</b>	<b>87,215</b>	<b>158,730</b>	<b>13,690</b>	<b>352,381</b>	<b>527,348</b>
<b>Total Plan Net Position for Insurance Benefits</b>	<b>\$439,113</b>	<b>\$665,639</b>	<b>\$1,056,480</b>	<b>\$1,920,946</b>	<b>\$164,714</b>	<b>\$4,246,892</b>	<b>\$4,154,402</b>

See accompanying notes to the combining financial statements.

*“The displayed market values include investable assets held by each System, and its associated contributions, payables, and equipment and intangible assets; unlike those found in the Investment Section (pages 105-107), which include only those investable assets held by each System.”*

**Combining Statement of Changes in Plan Net Position for Insurance Fund (in Thousands)**  
*for the fiscal year ended June 30, 2015 with Comparative Totals for the fiscal year ended June 30, 2014*

Additions						2015	2014
	KERS Haz	KERS Non Haz	CERS Haz	CERS Non Haz	SPRS	KRS Total	KRS Total
Employers' Contributions	\$14,173	\$132,208	\$71,008	\$115,836	\$10,379	\$343,604	\$397,435
Employer Group Waiver Plan	-	-	-	-	-	-	14
Premiums Received from Retirees	14	272	10	582	1	879	2,447
Retired Reemployed Healthcare (HBI)	709	3,732	770	3,608	3	8,822	5,611
<b>Total Contributions</b>	<b>14,896</b>	<b>136,212</b>	<b>71,788</b>	<b>120,026</b>	<b>10,383</b>	<b>353,305</b>	<b>405,507</b>
<b>Investment Income</b>							
From Investing Activities							
↘ Net Appreciation in FV (depreciation)	(24)	(3,723)	2,828	4,701	108	3,890	445,660
↘ Interest/Dividends	10,473	15,914	24,364	44,627	3,960	99,338	95,813
↘ Total Investing Activities Income	10,449	12,191	27,192	49,328	4,068	103,228	541,473
↘ Investment Expense	2,778	3,682	7,202	13,131	1,191	27,984	15,661
Net Income from Investing Activities	7,671	8,509	19,990	36,197	2,877	75,244	525,812
From Securities Lending Activities							
↘ Securities Lending Income	103	152	250	451	37	993	1,365
From Securities Lending Expense							
↘ Security Borrower Income	(35)	(53)	(82)	(153)	(13)	(336)	(112)
↘ Security Lending Agent Fees	16	24	39	70	6	155	222
Net Income from Securities Lending Activities	122	181	293	534	44	1,174	1,255
<b>Total Net Investment Income</b>	<b>7,793</b>	<b>8,690</b>	<b>20,283</b>	<b>36,731</b>	<b>2,921</b>	<b>76,418</b>	<b>527,067</b>
<b>Total Additions</b>	<b>22,689</b>	<b>144,902</b>	<b>92,071</b>	<b>156,757</b>	<b>13,304</b>	<b>429,723</b>	<b>932,574</b>
<b>Deductions</b>							
Healthcare Premiums Subsidies	16,900	123,127	65,403	110,032	13,461	328,923	292,242
Administrative Fees	101	893	339	782	65	2,180	1,614
Excise Tax	-	3	-	6	-	9	40
Self Funding Insurance Costs	100	2,145	152	3,702	22	6,121	6,170
<b>Total Deductions</b>	<b>17,101</b>	<b>126,168</b>	<b>65,894</b>	<b>114,522</b>	<b>13,548</b>	<b>337,233</b>	<b>300,066</b>
Net Increase (Decrease) in Plan Net Position	5,588	18,734	26,177	42,235	(244)	92,490	632,508
<b>Total Plan Net Position for Insurance Benefits</b>							
Beginning of Year	433,525	646,905	1,030,303	1,878,711	164,958	4,154,402	3,521,894
<b>End of Year</b>	<b>\$439,113</b>	<b>\$665,639</b>	<b>\$1,056,480</b>	<b>\$1,920,946</b>	<b>\$164,714</b>	<b>\$4,246,892</b>	<b>\$4,154,402</b>

See accompanying notes to the combining financial statements.

# NOTE A. Summary of Significant Accounting Policies

This summary of significant accounting policies of the Kentucky Retirement Systems (KRS) is presented to assist in understanding KRS' combining financial statements. The combining financial statements and notes are representations of KRS' management, which is responsible for their integrity and objectivity. These accounting policies conform to accounting principles generally accepted in the United States of America and have been consistently applied in the preparation of the combining financial statements.

This summary of significant accounting policies of the Kentucky Retirement Systems (KRS) is presented to assist in understanding KRS' combining financial statements. The combining financial statements and notes are representations of KRS' management, which is responsible for their integrity and objectivity. These accounting policies conform to accounting principles generally accepted in the United States of America (GAAP) and have been consistently applied in the preparation of the combining financial statements.

## Organization

Under the provisions of Kentucky Revised Statute Section 61.645, the Board of Trustees (the Board) of KRS administers the Kentucky Employees Retirement System (KERS), County Employees Retirement System (CERS), and State Police Retirement System (SPRS). Although the assets of the systems are invested as a whole, each system's assets are used only for the payment of benefits to the members of that plan, and a pro rata share of administrative costs, in accordance with the provisions of Kentucky Revised Statute Sections 16.555, 61.570, and 78.630.

The Board consists of: Thomas K. Elliott, Chair, Governor Appointee; Daniel Bauer, PhD, Vice Chair, Governor Appointee; Mike Cherry, Governor Appointee; Edwin Davis, elected by CERS; J.T. Fulkerson, Governor Appointee; Joseph Hardesty, Governor Appointee; Vince Lang, elected by KERS; Dinah Bevington, Personnel Secretary; Keith Peercy, elected by SPRS; Mary Helen Peter, elected by KERS; David Rich, elected by CERS; Randy K. Stevens, Governor Appointee; and William Summers, elected by CERS.

Under the provisions of Kentucky Revised Statute Section 61.701, the Board of KRS administers the Kentucky Retirement Systems Insurance Fund. The statutes provide for a single insurance fund to provide group hospital and medical benefits to retirees drawing a benefit from the three pension funds administered by KRS: (1) KERS; (2) CERS; and (3) SPRS. The assets of the insurance fund are invested as a whole. The following notes apply to the various funds administered by KRS.

## Basis of Accounting

KRS' combining financial statements are prepared using the accrual basis of accounting. Plan member contributions are recognized in the period in which contributions are due. Employer contributions to the plan are recognized when due and the employer has made a formal commitment to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with terms of the plan. Premium payments are recognized when due and payable in accordance with terms of the plan. Administrative and investment expenses are recognized when incurred.



## Method Used to Value Investments

Investments are reported at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Short-term investments are reported at cost, which approximates fair value. See Note D for further discussion of fair value measurements. Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the accrual basis as of the ex-dividend date. Gain (loss) on investments includes KRS' gains and losses on investments bought and sold as well held during the fiscal year.

## Estimates

The preparation of financial statements in accordance with GAAP requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

## Equipment

Equipment is valued at historical cost and depreciation is computed utilizing the straight-line method over the estimated useful lives of the assets ranging from three to ten years. Improvements, which increase the useful life of the equipment, are capitalized. Maintenance and repairs are charged to expense as incurred. The capitalization threshold used in fiscal years 2015 and 2014 was \$3,000 (see Note K for further information).

## Intangible Assets

Intangible assets, currently computer software, are valued at historical cost and amortization is computed utilizing the straight-line method over the estimated useful lives of the assets which is ten years. The capitalization threshold used in fiscal years 2015 and 2014 was \$3,000 (see Note L for further information).

## Contributions Receivable

Contributions receivable consist of amounts due from employers. The management of KRS considers contributions receivable to be fully collectible; accordingly, no allowance for doubtful accounts is considered necessary. If amounts become uncollectible, they will be charged to operations when that determination is made. If amounts previously written off are collected, they will be credited to income when received.



## Investment Income/Receivable/Payable

Due to the timing of receiving partnership financial information, the fair values of the investments in certain limited partnerships have been estimated using the net asset value of the ownership interest in partners' capital as of March 31 of each fiscal year. KRS management will monitor differences in the fair values of these investments between March 31 and June 30, of each fiscal year, and will disclose any and all material differences.

The Investment Receivable and Payable accounts consist of all buys and sells of securities, as well as all investment related accruals.

KRS changed the reporting of private equity investment fees from a net basis to a gross basis. KRS made this decision to enhance transparency of the investment fees. Prior to 2015, the majority of KRS' private equity investment fees were netted against investment activity which is the standard used within the private equity sector. KRS' net investment income has always included these fees regardless of the reporting method used. See Note W for further detail.

## Payment of Benefits

Benefits are recorded when paid.

## Expense Allocation

Administrative expenses of KRS are allocated in proportion to the number of total members participating in each plan and direct investment manager expenses are allocated in proportion to the percentage of investment assets held by each plan.



## Component Unit

KRS is a component unit of the Commonwealth of Kentucky (the Commonwealth) for financial reporting purposes.

KERS was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 61.515. CERS was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 78.520. SPRS was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 16.510. The Kentucky Retirement Systems Insurance Fund was created by the Kentucky General Assembly pursuant to the provisions of Kentucky Revised Statute 61.701. KRS' administrative budget is subject to approval by the Kentucky General Assembly. Employer contribution rates for KERS and SPRS are also subject to legislative approval. Employer contribution rates for CERS are determined by the Board of KRS without further legislative review. The methods used to determine the employer rates for KRS are specified in Kentucky Revised Statute 61.565. Employee contribution rates are set by statute and may be changed only by the Kentucky General Assembly.

## Recent Accounting Pronouncements

In February 2015, the Governmental Accounting Standards Board (GASB) issued Statement No. 72, *Fair Value Measurement and Application*. The objective of this Statement is to enhance comparability of financial statements among governments by requiring measurement of certain assets and liabilities at fair value using a consistent and more detailed definition of fair value and accepted valuation techniques. This Statement will also enhance fair value application guidance and related disclosures in order to provide information to financial statement users about the impact of fair value measurements on a government's financial position. The Statement becomes effective for the fiscal year beginning July 1, 2015. KRS is evaluating the requirements of this Statement.

In June 2015, the GASB issued Statement No. 73, *Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statement 68, and Amendments to Certain Provisions of GASB Statements 67 and 68*. The objective of this Statement is to extend the approach to accounting and financial reporting established in Statement 68 to all pensions, with modifications as necessary to reflect that for accounting and financial reporting purposes, any assets accumulated for pensions that are provided through pension plans that are not administered through trusts that meet the criteria



specified in Statement 68 should not be considered pension plan assets. It also requires that information similar to that required by Statement 68 be included in notes to financial statements and required supplementary information by all similarly situated employers and nonemployer contributing entities. This Statement becomes effective for the fiscal year beginning July 1, 2015. KRS is evaluating the requirements of this Statement.

In June 2015, the GASB issued Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*. The objective of this Statement is to improve the usefulness of information about postemployment benefits other than pensions (other postemployment benefits or OPEB) included in the general purpose external financial reports of state and local governmental OPEB plans for making decisions and assessing accountability. This Statement replaces Statements No. 43, *Financial Reporting for Postemployment Benefit Plans other than Pension Plans*, as amended, and No. 57, *OPEB Measurements by Agent Employers and Agent Multiple-Employer Plans*. It also includes requirements for defined contribution OPEB plans that replace the requirements for those OPEB plans in Statement No. 25, *Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans*, as amended, Statement 43, and Statement No. 50, *Pension Disclosures*. This Statement becomes effective for the fiscal year beginning July 1, 2016. KRS is evaluating the requirements of this Statement.

In June 2015, the GASB issued Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*. The objective of this Statement is to address accounting and financial reporting for OPEB that is provided to the employees of state and local governmental employers. This Statement establishes standards for recognizing and measuring liabilities, deferred outflows of resources, deferred inflows of resources, and expense/expenditures. For defined benefit OPEB, this Statement identifies the methods and assumptions that are required to be used to project benefit payments, discount projected benefit payments to their actuarial present value, and attribute that present value to periods of employee service. Note disclosure and required supplementary information requirements about defined benefit OPEB also are addressed. This Statement becomes effective for the fiscal year beginning July 1, 2017. KRS is evaluating the requirements of this Statement.

In June 2015, the GASB issued Statement No. 76, *The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments*. The objective of this Statement is to identify (in the context of the current governmental financial reporting environment) the hierarchy of GAAP. The GAAP hierarchy consists of the sources of accounting principles used to prepare financial statements of state and local governmental entities in conformity with GAAP and the framework for selecting those principles. This Statement reduces the GAAP hierarchy to two categories of authoritative GAAP and addresses the use of authoritative and nonauthoritative literature in the event that the accounting treatment for a transaction or other event is not specified within a source of authoritative GAAP. This Statement becomes effective for the fiscal year beginning July 1, 2015. KRS is evaluating the requirements of this Statement.



## Note B. Plan Descriptions & Contribution Information

### Membership Information \*

KERS Employees						
Members	2015			2014		
	Non-Haz	Haz	Total	Non-Haz	Haz	Total
Retirees and Beneficiaries Receiving Benefits	38,827	2,575	41,402	38,022	2,467	40,489
Inactive Memberships	42,479	3,761	46,240	41,213	3,318	44,531
Active Plan Members	39,289	3,932	43,221	40,500	4,094	44,594
<b>Total</b>	<b>120,595</b>	<b>10,268</b>	<b>130,863</b>	<b>119,735</b>	<b>9,879</b>	<b>129,614</b>
Number of Participating Employers			354			354

CERS Employees						
Members	2015			2014		
	Non-Haz	Haz	Total	Non-Haz	Haz	Total
Retirees and Beneficiaries Receiving Benefits	48,515	6,389	54,904	46,112	6,066	52,178
Inactive Memberships	72,965	2,142	75,107	70,231	2,038	72,269
Active Plan Members	82,969	9,188	92,157	82,494	9,189	91,683
<b>Total</b>	<b>204,449</b>	<b>17,719</b>	<b>222,168</b>	<b>198,837</b>	<b>17,293</b>	<b>216,130</b>
Number of Participating Employers			1,136			1,137

SPRS Employees		
Members	2015	2014
Retirees and Beneficiaries Receiving Benefits	1,324	1,279
Inactive Memberships	257	239
Active Plan Members	940	861
<b>Total</b>	<b>2,521</b>	<b>2,379</b>
Number of Participating Employers	1	1

\* Each person is only counted once in the Membership by System report. A member who has both a membership account and a retired account is included in retired count. Members who have multiple membership accounts are included under the system where they most recently contributed. Members who have more than one retirement account are included in the system with the greatest service credit. If the retired accounts have equal service credit, they are counted first in SPRS, CERS Hazardous, KERS Hazardous, CERS Nonhazardous, then KERS Nonhazardous.



### 2015 Hospital & Medical Contracts Insurance Fund

System	Single	Couple/ Family	Parent	Medicare Without Prescription	Medicare With Prescription
KERS Non Haz	9,251	714	452	1,303	18,577
KERS Haz	656	448	110	62	1,177
CERS Non Haz	8,098	473	242	2,531	21,520
CERS Haz	1,500	2,255	456	107	2,697
SPRS	265	441	81	16	777
<b>Total</b>	<b>19,770</b>	<b>4,331</b>	<b>1,341</b>	<b>4,019</b>	<b>44,748</b>

### 2014 Hospital & Medical Contracts Insurance Fund

System	Single	Couple/ Family	Parent	Medicare Without Prescription	Medicare With Prescription
KERS Non Haz	9,491	797	506	1,370	17,738
KERS Haz	647	448	110	56	1,104
CERS Non Haz	7,843	546	278	2,583	20,200
CERS Haz	1,447	2,184	432	89	2,510
SPRS	263	444	78	20	712
<b>Total</b>	<b>19,691</b>	<b>4,419</b>	<b>1,404</b>	<b>4,118</b>	<b>42,264</b>

## Pension Plan Descriptions

### **KERS - (Kentucky Employees Retirement System)**

This system consists of two plans - **Nonhazardous and Hazardous**. Each plan is a cost-sharing multiple-employer defined benefit pension plan that covers all regular full-time members employed positions of any state department, board, or agency directed by Executive Order to participate in KERS.

### **CERS - (County Employees Retirement System)**

This system consists of two plans - **Nonhazardous and Hazardous**. Each plan is a cost-sharing multiple-employer defined benefit pension plan that covers all regular full-time members employed in nonhazardous positions of each participating county, city, and school board, and any additional eligible local agencies electing to participate in CERS.

**SPRS - (State Police Retirement System)** This system is a single-employer defined benefit pension plan that covers all full-time state troopers employed position by the Kentucky State Police.

These systems provide for retirement, disability, and death benefits to system members. Retirement benefits may be extended to beneficiaries of members under certain circumstances. Prior to July 1, 2009, cost-of-living adjustments (COLA) were provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed 5% in any plan year.

### **Cost of Living Adjustment (COLA)**

Effective July 1, 2009, and on July 1 of each year thereafter through June 30, 2014, the COLA is limited to 1.5% provided the recipient has been receiving a benefit for at least 12 months prior to the effective

date of the COLA. If the recipient has been receiving a benefit for less than 12 months prior to the effective date of the COLA, the increase shall be reduced on a pro-rata basis for each month the recipient has not been receiving benefits in the 12 months preceding the effective date of the COLA. The Kentucky General Assembly reserves the right to suspend or reduce the COLA if, in its judgment, the welfare of the Commonwealth so demands. No COLA has been granted since July 1, 2011.

**Contributions** For the fiscal years ended June 30, 2015 and 2014, plan members who began participating prior to September 1, 2008, were required to contribute 5% nonhazardous and 8% hazardous of their annual creditable compensation. These members were classified in the Tier 1 structure of benefits. The Commonwealth was required to contribute at an actuarially determined rate for KERS and SPRS pensions. Participating employers were required to contribute at an actuarially determined rate for CERS pensions. Per Kentucky Revised Statute Sections {KERS 61.565(3); CERS 78.545(33); SPRS 16.645(18)}, normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget for KERS and SPRS.

For the fiscal year ended June 30, 2015 participating employers contributed a percentage of each employee's creditable compensation. The actuarially determined rates set by the Board for the fiscal years was a percentage of each employee's creditable compensation. Administrative costs of KRS are financed through employer contributions



and investment earnings. See Chart below for the 2015 and 2014 fiscal year percentages.

Plan members who began participating on, or after, September 1, 2008, were required to contribute a total of 6% for nonhazardous and 9% for hazardous of their annual creditable compensation. While the 1% was deposited to an account created for the payment of health insurance benefits under 26 USC Section 401(h) in the Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420E). These members were classified in the Tier 2 structure of benefits. Interest is paid each June 30 on members' accounts at a rate of 2.5%. If a member terminates employment and applies to take a refund, the member is entitled to a full refund of contributions and interest; however, the 1% contribution to the 401(h) account is non-refundable and is forfeited. For plan members who began participating prior to September 1, 2008, their contributions remain at 5% for nonhazardous and 8% for hazardous of their annual creditable compensation.

Plan members who began participating on, or after, January 1, 2014, were required to contribute to the Cash Balance Plan. These members were classified in the Tier 3 structure of benefits. The Cash Balance Plan is known as a hybrid plan because it has characteristics of both a defined benefit plan and a defined contribution plan. Members in the plan contribute a set percentage of their salary each month to their own account. Members contribute 5% (nonhazardous) and 8% (hazardous) of their annual creditable compensation and 1% to the health insurance fund which is not credited to the member's account and is not refundable. The employer contribution rate is set annually by the Board based on an actuarial valuation. The employer contributes a set percentage of the member's salary. Each month, when employer contributions are received, an employer pay credit is deposited to the member's account. A member's account is credited with a 4% (nonhazardous) and 7.5% (hazardous) employer pay credit. The employer pay credit represents a portion of the employer contribution.

	PENSION				INSURANCE				COMBINED TOTAL			
	Employer Contribution Rates		Actuarially Recommended Rates		Employer Contribution Rates		Actuarially Recommended Rates		Employer Contribution Rates		Actuarially Recommended Rates	
	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014
<b>KERS Nonhazardous</b>	30.84%	17.29%	30.84%	32.57%	7.93%	9.50%	7.93%	12.71%	38.77%	26.79%	38.77%	45.28%
<b>KERS Hazardous</b>	16.37%	14.89%	16.37%	17.00%	9.97%	17.32%	9.97%	11.84%	26.34%	32.21%	26.34%	28.84%
<b>CERS Nonhazardous</b>	12.75%	13.74%	12.75%	13.74%	4.92%	5.15%	4.92%	5.84%	17.67%	18.89%	17.67%	18.89%
<b>CERS Hazardous</b>	20.73%	21.77%	20.73%	21.77%	13.58%	13.93%	13.58%	16.02%	34.31%	35.7%	34.31%	35.7%
<b>SPRS</b>	53.90%	39.50%	53.90%	53.35%	21.86%	31.65%	21.86%	43.17%	75.76%	71.15%	75.76%	96.52%



## Insurance Plan Description

The Kentucky Retirement Systems Insurance Fund (Insurance Fund) was established to provide hospital and medical insurance for members receiving benefits from KERS, CERS, and SPRS. The Insurance Fund pays a prescribed contribution for whole or partial payment of required premiums to purchase hospital and medical insurance. For the fiscal year ended June 30, 2015, insurance premiums withheld from benefit payments for members of the systems were \$21.2 million and \$1.1 million for KERS non-hazardous and hazardous, respectively; \$22.6 million and \$1.7 million for CERS non-hazardous and hazardous, respectively; and, \$135,018 for SPRS. For fiscal year 2014, insurance premiums withheld from benefit payments for members of KERS were \$24.0 million and \$1.1 million for KERS non-hazardous and KERS hazardous, respectively; \$24.2 million and \$1.9 million for CERS non-hazardous and CERS hazardous, respectively; and, \$177,804 for SPRS. The Insurance Fund pays the same proportion of hospital and medical insurance premiums for the spouse and dependents of retired hazardous members killed in the line of duty. As of June 30, 2015, the Insurance Fund had 108,952 retirees and beneficiaries for whom benefits were available.

The amount of contribution paid by the Insurance Fund is based on years of service. For members participating prior to July 1, 2003, years of service and respective percentages of the maximum contribution are shown in the chart on the previous page.

As a result of House Bill 290 (2004 Kentucky General Assembly), medical insurance benefits are calculated differently for members who began participating on, or after, July 1, 2003. Once members reach a minimum vesting period of ten years, non-hazardous employees whose participation began on, or after, July 1, 2003 earn \$10 per month for insurance benefits at retirement for every year of earned service without regard to a maximum dollar amount. Hazardous employees whose participation began on, or after, July 1, 2003 earn \$15 per month for insurance benefits at retirement for every year of earned service without regard to a

maximum dollar amount. Upon death of a hazardous employee, the employee's spouse receives \$10 per month for insurance benefits for each year of the deceased employee's earned hazardous service. This dollar amount is subject to adjustment annually based on the retiree COLA, which is updated annually due to changes in the Consumer Price Index for all urban consumers. This benefit is not protected under the inviolable contract provisions of Kentucky Revised Statute 16.652, 61.692 and 78.852. The Kentucky General Assembly reserves the right to suspend or reduce this benefit if, in its judgment, the welfare of the Commonwealth so demands.

In prior years, the employers' required medical insurance contribution rate was being increased annually by a percentage that would result in advance-funding the medical liability on an actuarially determined basis using the entry age normal cost method within a 20-year period measured from 1987. In November 1992, the Board adopted a fixed percentage contribution rate and suspended future increases under the current medical premium funding policy until the next experience study could be performed. In May 1996, the Board adopted a policy to increase the insurance contribution rate by the amount needed to achieve the target rate for full entry age normal funding within 20 years.

On August 6, 2012, the Board voted to cease self-funding of healthcare benefits for most KRS Medicare eligible retirees. The Board elected to contract with Humana Insurance Company to provide healthcare benefits to KRS' retirees through a fully-insured Medicare Advantage Plan. The Humana Medicare Advantage Plan became effective January 1, 2013.

### Portion Paid by Insurance Fund

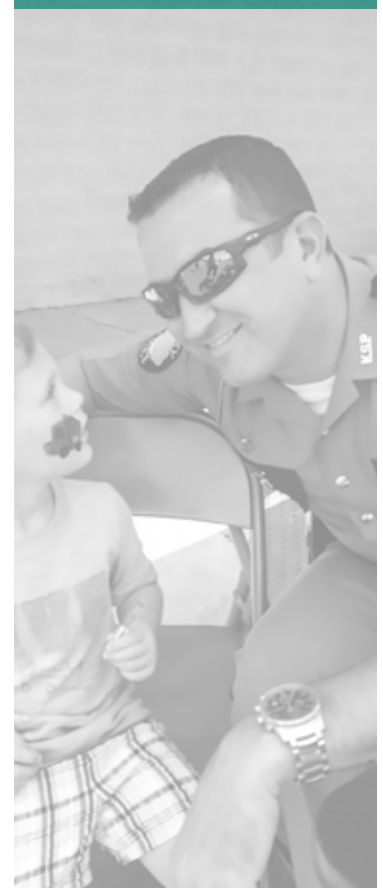
Years of Service	Paid by Insurance Fund (%)
20+ years	100%
15-19 years	75%
10-14 years	50%
4-9 years	25%
Less than 4 years	0%

# Note C. Cash, Short-Term Investments & Securities Lending Collateral

The provisions of GASB Statement No. 28, Accounting and Financial Reporting for Securities Lending Transactions require that cash received as collateral on securities lending transactions, and investments made with that cash, be reported as assets on the financial statements. In accordance with GASB No. 28, KRS classifies certain other investments, not related to the securities lending program, as short-term. Cash and short-term investments consist of the following at June 30:

Cash, Short-Term Investments, & Securities Lending Collateral		
<b>KERS</b>		
<b>Assets</b>	<b>2015</b>	<b>2014</b>
Cash	\$1,900,500	\$1,525,039
Short-Term Investments	119,412,200	131,130,977
Securities Lending Collateral Invested	180,822,466	225,552,963
<b>KERS Total</b>	<b>\$302,135,166</b>	<b>\$358,208,979</b>
<b>CERS</b>		
<b>Assets</b>	<b>2015</b>	<b>2014</b>
Cash	\$2,138,933	\$1,945,877
Short-Term Investments	268,159,676	298,872,570
Securities Lending Collateral Invested	547,046,264	637,584,374
<b>CERS Total</b>	<b>\$817,344,873</b>	<b>\$938,402,821</b>
<b>SPRS</b>		
<b>Assets</b>	<b>2015</b>	<b>2014</b>
Cash	\$215,325	\$273,391
Short-Term Investments	7,795,849	10,979,712
Securities Lending Collateral Invested	15,392,066	18,959,641
<b>SPRS Total</b>	<b>\$23,403,240</b>	<b>\$30,212,744</b>
<b>KRS Insurance Fund</b>		
<b>Assets</b>	<b>2015</b>	<b>2014</b>
Cash	\$894,438	\$354,145
Short-Term Investments	99,151,683	138,688,699
Medicare Drug Deposit	-	100,039
Securities Lending Collateral Invested	234,509,400	293,369,587
<b>Insurance Fund Total</b>	<b>\$334,555,251</b>	<b>\$432,512,470</b>

Each plan's assets are used only for the payment of benefits to the members of that plan and pro rata share of administrative cost in accordance with the provisions of Kentucky Revised Statute sections 16.555, 61.570, and 78.630.



## PRUDENT PERSON RULE -

A legal maxim restricting the discretion in a client's account to investments that a prudent person seeking reasonable income and preservation of capital might buy for his or her own portfolio.

# Note D. Investments

Kentucky Revised Statute 61.650 grants the responsibility for the investment of plan assets to the Board of KRS. The Board has established an Investment Committee which is specifically charged with the oversight and investment of plan assets. The Investment Committee recognizes their duty to invest the funds in accordance with the "Prudent Person Rule" (set forth in Kentucky Revised Statute 61.650) and manage those funds consistent with the long-term nature of the systems. The Investment Committee has adopted a Statement of Investment Policy that contains guidelines and restrictions for deposits and investments. By statute, all investments are to be registered and held in the name of KRS. The Statement of Investment Policy contains the specific guidelines for the investment of pension and insurance assets. Additionally, the Investment Committee establishes specific investment guidelines that are summarized below and are included in the Investment Management Agreement for each investment management firm.

## Equity Investments

Investments may be made in common stock, securities convertible into common stock, preferred stock of publicly traded companies on stock markets, asset class relevant Exchange Traded Funds' (ETF's) or any other type of security contained in a manager's benchmark. Each individual equity account has a comprehensive set of investment guidelines prepared, which contains a listing of permissible investments, portfolio restrictions and standards of performance.

## Fixed Income Investments

The fixed income accounts may include, but are not limited to, the following fixed income securities: US Government and Agency bonds; investment grade US corporate credit; investment grade non-US corporate credit; non-investment grade US corporate credit including both bonds and bank loans; non-investment grade non-US corporate credit including bonds and bank loans; municipal bonds; non-US sovereign debt; mortgages, including residential mortgage backed securities; commercial mortgage backed securities, and whole loans; asset-backed securities and emerging market debt (EMD), including both sovereign EMD and corporate EMD; and, asset class relevant ETF's.

## Mortgages

Investment may be made in real estate mortgages on a direct basis or in the form of mortgage pool instruments.

Private Equity/Equity Real Estate/Real Return/Absolute Return Investments - Subject to the specific approval of the Investment Committee of the Board, investments may be made for the purpose of creating a diversified portfolio of alternative investments. The Board may invest in real estate or alternative investments including, but not limited to and without limitation, venture capital, private equity, private placements, real assets and absolute return investments which the Investment Committee believes has excellent potential to generate income and which may have a higher degree of risk.



In accordance with GASB Statement No. 53, Accounting and Financial Reporting for Derivative Instruments, KRS provides this additional disclosure regarding its derivatives. As of June 30, 2015, KRS has the following derivative instruments outstanding:

Derivative Instruments							
Item	Type	Objective	Cost	Notional Cost	Market Value	Terms	Notional Market Value
<b>PENSION:</b>							
A	Foreign Exchange Contracts	Hedge against swings in foreign currencies	\$93,564	-	\$4,809,999	Various	-
B	US Equity Index Futures	Hedge against drop in the equity markets or to equitize cash	-	\$3,279,048	(28,008)	Various	\$3,251,040
C	Fixed Income Securities	Hedge against sudden or dramatic shifts in interest rates	19,143,338	-	19,151,344	Various	-
D	Treasury Notes	Hedge against sudden or dramatic shifts in interest rates	-	(5,007,676)	(1,152)	Various	(5,008,828)
<b>INSURANCE:</b>							
E	US Equity Index Futures	Hedge against risk that interest rates will move in an adverse direction	-	1,891,947	(16,347)	Various	1,875,600
F	Foreign Exchange Contracts	Hedge against swings in foreign currencies	36,935	-	1,867,191	Various	-
G	Fixed Income Securities	Hedge against sudden or dramatic shifts in interest rates	3,630,134	-	3,631,622	Various	-
H	Treasury Notes	Hedge against sudden or dramatic shifts in interest rates	-	(2,146,098)	(543)	Various	(2,146,641)

## Cash Equivalent Securities

The following short-term investment vehicles are considered acceptable:

Publicly traded investment grade corporate bonds, variable rate demand notes, government and agency bonds, mortgages, municipal bonds, and collective Short Term Investment Fund's (STIF), money market funds or instruments (including, but not limited to, certificates of deposit, bank notes, deposit notes, bankers' acceptances and commercial paper) and repurchase agreements, relating to the above instruments. Instruments may be selected from among those having an investment grade rating at the time of purchase by at least one recognized bond rating service. In cases where the instrument has a split rating, the lower of the two ratings shall prevail.

All instruments shall have a maturity at the time of purchase that does not exceed two years. Repurchase agreements shall be deemed to have a maturity equal to the period remaining until the date on which the repurchase of the underlying securities is scheduled to occur. Variable rate securities shall be deemed to have a maturity equal to the time left until the next interest rate reset occurs, but in no case will any security have a stated final maturity of more than three years.

KRS' fixed income managers, who utilize cash equivalent securities as an integral part of their investment strategy, are exempt from the permissible investments contained in the preceding paragraph. Permissible short-term investments for fixed income managers shall be included in the investment manager's investment guidelines.



For accounting and financial reporting purposes, all derivative instruments are considered investment derivative instruments. The derivatives have been segregated on the Combining Statement of Plan Net Position for both Pension and Insurance funds.

### Investment Expenses

In accordance with GASB Statement No. 25, *Financial Reporting for Defined Pension Benefit Plans and Note Disclosures for Defined Contribution Plans*, KRS has exercised professional judgment to report investment expenses. It is not cost-beneficial to separate certain investment expenses from either the related investment income or the general administrative expenses.

### Derivatives

Derivative instruments are financial contracts whose values depend on the values of one or more underlying assets, reference rates, or financial indices. Investments may be made in derivative securities, or strategies which make use of derivative instruments, only if such investments do not cause the portfolio to be in any way leveraged beyond a 100% invested position.

All derivative instruments have various effective dates and maturity dates.

It is the policy of KRS that investment managers may invest in derivative securities, or strategies which make use of derivative investments, only if such investments do not cause the portfolio to be in any way leveraged beyond a 100% invested position. Examples of such derivatives include, but are not limited to, foreign currency forward contracts, collateralized mortgage obligations, treasury inflation protected securities, futures, options and swaps.

Investments in derivative securities which are subject to large or unanticipated changes in duration or cash flows, such as interest only, principal only, inverse floater, or structured note securities are permitted only to the extent authorized in a contract or an alternative investment offering memorandum or agreement.

Investments in securities such as collateralized mortgage obligations and planned amortization class issues are allowed if, in the judgment of the investment manager, they are not expected to be subject to large or unanticipated changes in duration or cash flows. Investment managers may make use of derivative securities for defensive or hedging purposes. Any derivative security shall be sufficiently liquid that it can be expected to be sold at, or near, its most recently quoted market price.

For accounting and financial reporting purposes, all derivative instruments are considered investment derivative instruments. The derivatives have been segregated on the Combining Statement of Plan Net Position for both Pension and Insurance Funds.





## RISKS

### Basis Risk:

Derivative instruments B and E expose KRS to basis risk in that the value of the underlying equity index future may decrease in fair value relative to the cash market.

### Interest Rate Risk:

Derivative instruments A, C, D, F, G, and H expose KRS to interest rate risk in that changes in interest rates will adversely affect the fair values of KRS' financial instruments.

In June 2011, the GASB issued Statement No. 64, *Derivative Instruments: Application of Hedge Accounting Termination Provisions, an Amendment of GASB Statement No. 53*. The objective of this Statement is to clarify whether an effective hedging relationship continues and hedge accounting should continue to be applied. Upon the termination of a hedging derivative instrument, hedge accounting should cease and investment income should immediately recognize deferred outflows of resources or deferred inflows of resources. KRS maintains its derivative instruments as investment derivative instruments for all accounting and financial reporting purposes. Therefore, hedge accounting and the related effectiveness testing is not performed.

### Custodial Credit Risk for Deposits

Custodial credit risk for deposits is the risk that in the event of a financial institution failure, KRS' deposits may not be returned. All non-investment related bank balances are held by JP Morgan Chase. All non-investment related bank balances are held in KRS' name and each individual account is insured by the Federal Deposit Insurance Corporation (FDIC). In 2010, the US Congress passed the Financial Crisis Bill and permanently increased the FDIC deposit insurance coverage to \$250,000. These cash balances are invested daily by the local institution in overnight repurchase agreements which are required by Kentucky Administrative Regulations (200 KAR 14:081) to be collateralized at 102% of the principal amount.

As of June 30, 2015 and 2014, deposits for KRS pension funds were \$7.9 million and \$4 million, respectively. None of these balances were exposed to custodial credit risk as they were either insured or collateralized at required levels.

As of June 30, 2015 and 2014, deposits for KRS insurance fund were \$892,995 and \$1.4 million, respectively. None of these balances were exposed to custodial credit risk as they were either insured or collateralized at required levels.

### Custodial Credit Risk for Investments

Custodial credit risk for investments is the risk that in the event of the failure of the counterparty to a transaction, KRS will not be able to recover the value of investments or collateral securities that are in the possession of an outside third party. KRS does not have an explicit policy with regards to Custodial Credit Risk for investments. As of June 30, 2015 and 2014, the following currencies were uninsured and unregistered, with securities held by the counterparty or by its trust department or agent but not in KRS' name. These funds are cash held by KRS' Global Managers and consist of various currencies.

#### Custodial Credit Risk

Pension Fund	2015	2014
Foreign Currency	\$8,137,762	\$9,692,881
Insurance Fund		
Foreign Currency	\$2,248,967	\$3,145,400



### Pension Funds Investment Summary As of June 30

Type	2015	2014
Fixed Income Securities	\$2,680,423,440	\$3,051,301,974
Short-Term Investments	395,367,724	440,983,259
Equity Securities	5,201,092,389	5,358,280,375
Private Equity Limited Partnerships	1,285,572,446	1,287,466,227
Real Estate	619,177,193	427,105,738
Derivatives	6,156,232	4,050,284
Absolute Return	1,282,165,506	1,303,197,181
<b>Total</b>	<b>\$11,469,954,930</b>	<b>\$11,872,385,038</b>

### Insurance Fund Investment Summary As of June 30

Type	2015	2014
Fixed Income Securities	\$1,358,494,646	\$1,445,430,202
Short-Term Investments	99,151,683	138,688,699
Equity Securities	1,706,981,715	1,661,738,753
Private Equity Limited Partnerships	348,915,161	270,841,221
Real Estate	236,443,112	151,004,974
Derivatives	2,278,887	868,135
Absolute Return	463,486,065	430,008,984
<b>Total</b>	<b>\$4,215,751,269</b>	<b>\$4,098,580,968</b>

The following tables present the KRS's pension funds and insurance fund debt ratings as of June 30, 2015 and 2014:

Pension Funds Debt Securities at Fair Value as of June 30		
Quality Rating	2015	2014
AAA	\$32,799,444	\$40,306,583
AA+	220,525,397	62,002,369
AA	19,544,218	21,388,493
AA-	29,318,050	27,797,954
A-1+	546,266	-
A+	16,624,270	34,695,288
A	30,690,688	99,344,507
A-	54,108,960	117,151,936
BBB+	65,256,861	84,269,097
BBB	69,164,919	64,675,676
BBB-	125,695,004	89,120,107
BB+	147,737,994	87,235,873
BB	124,243,472	93,648,993
BB-	101,087,356	83,840,452
B+	147,998,684	75,094,584
B	120,008,446	84,811,455
B-	91,895,479	61,972,436
CCC+	45,867,312	42,517,725
CCC	10,687,090	11,865,038
CCC-	3,151,024	4,487,098
CC	2,560,088	1,925,471
D	3,881,933	6,999,911
NR	778,261,251	659,751,771
<b>Total Credit Risk Debt Securities</b>	<b>\$2,241,654,206</b>	<b>\$1,854,902,817</b>
Government Agencies	2,310,824	5,222,397
Government Mortgage-Backed Securities (GNMA)	234,372,835	179,134,299
Government Issued Commercial Mortgage Backed	4,504,823	4,479,667
Government Bonds	146,629,121	385,836,479
Indexed Linked Bonds	50,951,631	621,726,315
<b>Total Debt Securities</b>	<b>\$2,680,423,440</b>	<b>\$3,051,301,974</b>

Insurance Fund Debt Securities at Fair Value as of June 30		
Quality Rating	2015	2014
AAA	\$36,199,356	\$12,231,453
AA+	30,949,483	18,736,341
AA	5,594,558	6,724,487
AA-	9,538,154	7,319,989
A+	15,158,170	16,055,561
A-1+	202,350	-
A	30,746,413	29,080,777
A-	30,022,792	38,388,115
BBB+	32,416,543	28,031,588
BBB	27,473,957	24,786,892
BBB-	34,131,541	28,672,541
BB+	34,246,856	29,313,139
BB	27,533,223	30,971,226
BB-	26,031,520	28,542,731
B+	30,210,910	27,461,463
B	28,480,371	30,109,234
B-	15,454,963	20,447,164
CC	572,136	623,198
CCC	941,558	2,695,453
CCC+	10,077,032	12,603,007
CCC-	221,552	1,145,250
D	753,803	2,556,978
NR	570,268,422	586,985,099
<b>Total Credit Risk Debt Securities</b>	<b>\$997,225,663</b>	<b>\$983,481,686</b>
Government Agencies	3,248,856	1,511,319
Government Mortgage-Backed Securities (GNMA)	113,157,827	65,071,852
Government Issued Commercial Mortgage Backed	2,633,272	1,497,608
Government Bonds	121,740,145	142,080,994
Indexed Linked Bonds	120,488,883	251,786,743
<b>Total Debt Securities</b>	<b>\$1,358,494,646</b>	<b>\$1,445,430,202</b>

The government agencies in which KRS is invested are Fannie Mae and the Federal Home Loan Bank.

**Pension Fund Securities** At both June 30, 2015 and 2014, the weighted average quality rating of the pension fund debt securities portfolio was AA+. As of June 30, 2015 and 2014, the KRS pension portfolio had \$1,577,380,129 and \$1,214,150,807, respectively, in debt securities rated below BBB-.

**Insurance Fund Securities** As a result of the most recently approved Asset/Liability Modeling Study, the investment staff began to diversify the insurance fixed income allocation to mirror that of the pension funds. As part of this process, the TIPS allocation (previously the only fixed income expense within the insurance portfolio) was moved to the newly created Real Return Asset Class.



Kentucky Revised Statute 61.650 grants the responsibility for the investment of plan assets to the board of KRS. The Board has established an investment committee which is specifically charged with the oversight and investment of plan assets.

### Concentration of Credit Risk Debt Securities

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The debt security portfolios are managed by the Investment Division staff and by external investment management firms. All portfolio managers are required by the Statement of Investment Policy to maintain diversified portfolios. Each portfolio is also required to be in compliance with risk management guidelines that are assigned to them based upon the portfolio's specific mandate. In total, the pension and insurance funds debt securities portfolios are managed using the following guidelines adopted by the Board of KRS:

- Bonds, notes or other obligations issued or guaranteed by the US Government, its agencies or instrumentalities are permissible investments and may be held without restrictions.
- Fixed income investments will be similar in type to those securities found in the KRS fixed income benchmarks and the characteristics of the KRS fixed income portfolio will be similar to the KRS fixed income benchmarks.
- The duration of the total fixed income portfolio shall not deviate from the KRS Fixed Income by more than 25%.
- The duration of the Treasury Inflation Protected Securities (TIPS) portfolio shall not deviate from the KRS Fixed Income Index by more than 10%.
- The amount invested in the debt of a single corporation shall not exceed 5% of the total market value of KRS' assets.
- No public fixed income manager shall invest more than 5% of the market value of assets held in any single issue short-term instrument, with the exception of US Government issued, guaranteed or agency obligations.
- The amount invested in SEC Rule 144a securities shall not exceed 7.5% of the market value of the aggregate market value of KRS' core fixed income investments.

### Concentration of Credit Risk Debt Securities

Concentration of credit risk is the risk of loss attributed to the magnitude of an entity's exposure in a single issuer.

The total debt securities portfolio is managed using the following general guidelines adopted by the Board of KRS:

- Bonds, notes or other obligations issued or guaranteed by the US Government, its agencies or instrumentalities are permissible investments and may be held without restrictions.
- Debt obligations of any single US Corporation shall be limited to a maximum of 5% of the total portfolio at market value.

## Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Duration measures the sensitivity of the market prices of fixed income securities to changes in the yield curve. Duration is measured using two methodologies: effective and modified duration. Effective duration uses the present value of cash flows, weighted for those cash flows as a percentage of the investment's full price and makes adjustments for any bond features that would retire the bonds prior to maturity. The modified duration, similar to effective duration, measures the sensitivity of the market prices to changes in the yield curve, but does not assume the securities will be called prior to maturity.

The KRS pension fund benchmarks its fixed income securities portfolio to the Barclays US Universal Index. As of June 30, 2015 and 2014, the modified duration of the KRS pension fund fixed income benchmark was 5.75 and 5.37, respectively. At the same points in time, the modified duration of the KRS pension fund fixed income securities portfolio was 4.26 and 5.37, respectively.

The KRS insurance fund benchmarks its fixed income securities portfolio to the Barclays US Universal Index. As of June 30, 2015 and 2014, the modified duration of the KRS insurance fund fixed income benchmark was 5.74 and 5.37, respectively. At the same points in time, the modified duration of the KRS insurance fund fixed income securities portfolio was 3.38 and 3.99, respectively.



### KRS Pension Funds Interest Rate Risk As of June 30, 2015 and 2014:

Pension Funds Interest Rate Risk				
Type	2015	Weighted Average Modified Duration	2014	Weighted Average Modified Duration
Asset Backed Securities	\$80,682,959	6.00	\$86,379,081	9.12
Bank Loans	333,921,080	5.39	327,431,127	4.19
Collateralized Bonds	23,939,151	4.33	23,113,753	3.62
Commercial Mortgage Backed Securities	51,075,672	2.77	77,841,331	2.10
Corporate Bonds - Industrial	577,639,674	6.23	390,494,755	5.67
Corporate Bonds - Utilities	135,127,865	6.94	40,955,705	6.27
Government Agencies	71,507,431	6.32	65,501,546	4.75
Government Bonds	87,724,008	6.90	125,600,774	6.10
Government Mortgage Backed Securities	387,421,860	3.63	178,480,106	5.21
Covered Bonds	-	-	878,873	1.80
Municipal Bonds	20,440,231	8.63	79,048,655	10.31
Supranational Bonds	2,125,860	1.77	6,341,105	1.82
Treasuries	524,545,015	3.26	1,207,419,080	7.04
Swaps	37,213,933	0.01	4,298,025	0.58
Mutual Funds	329,645,324	-	396,848,860	-
Other	17,413,377	0.27	40,669,198	3.96
<b>Total</b>	<b>\$2,680,423,440</b>	<b>4.26</b>	<b>\$3,051,301,974</b>	<b>5.37</b>

## KRS Insurance Fund Interest Rate Risk As of June 30, 2015 and 2014

Insurance Fund Interest Rate Risk				
Type	2015	Weighted Average Modified Duration	2014	Weighted Average Modified Duration
Asset Backed Securities	\$46,009,988	5.33	\$32,726,218	8.67
Bank Loans	122,994,721	5.33	125,099,366	4.38
Collateralized Bonds	8,661,856	2.86	3,750,470	3.99
Commercial Mortgage Backed Securities	23,913,669	1.82	24,807,988	2.16
Corporate Bonds - Industrial	165,550,838	6.10	140,705,415	5.56
Corporate Bonds - Utilities	33,246,797	7.45	16,095,997	6.26
Government Agencies	15,280,118	6.50	15,681,837	4.90
Government Bonds	7,042,551	10.18	16,254,026	4.00
Government Mortgage Backed Securities	113,157,827	5.20	65,071,852	5.52
Covered Bonds	-	-	1,171,830	1.80
Municipal/Provincial Bonds	15,864,191	5.65	17,791,073	9.00
Supranational Bonds	5,272,325	3.38	2,166,067	2.04
Treasuries	276,548,407	5.32	464,396,484	7.01
Swaps	407,197,975	0.01	391,233,379	-
Mutual Funds	107,920,082	-	121,882,992	-
Other	9,833,301	2.79	6,595,211	6.98
<b>Total</b>	<b>\$1,358,494,646</b>	<b>3.38</b>	<b>\$1,445,430,202</b>	<b>3.99</b>

**Foreign currency risk is the risk that changes in exchange rates will adversely affect the value of a non-US dollar based investment or deposit with the KRS portfolio.**



**Foreign Currency Risk** Foreign currency risk is the risk that changes in exchange rates will adversely affect the value of a non-US dollar based investment or deposit within the KRS portfolio. KRS' currency risk exposure, or exchange rate risk, primarily resides with KRS' international equity holdings, but also affects other asset classes. KRS does not have a formal policy to limit foreign currency risk; however, some individual managers are given the latitude to hedge some currency exposures.

All foreign currency transactions are classified as Short-Term Investments.

All gains and losses associated with these transactions are recorded in the *Net Appreciation (Depreciation) in the Fair Value of Investments* on the combining financial statements.



The following tables present KRS' exposure to foreign currency risk as of June 30, 2015 and 2014:

### Pension Funds Investments at Fair Value as of June 30, 2015 & 2014

Foreign Equities	2015	2014
Australian Dollar	\$45,524,360	\$63,542,348
Brazilian Real	10,038,834	28,173,468
British Pound Sterling	230,990,599	225,259,654
Canadian Dollar	31,007,486	41,437,776
Chilean Peso	1,615,419	4,818,876
Chinese Yuan	-	4,109,501
Columbian Peso	70,063	4,865,113
Czech Koruna	-	1,662,246
Danish Krone	30,880,488	27,618,618
Egyptian Pound	1,265,953	-
Euro	276,713,338	325,339,051
German Mark	209,275	-
Hong Kong Dollar	50,442,004	45,368,576
Hungarian Forint	2,043,077	730,125
Indian Rupee	4,715,132	23,379,225
Indonesian Rupiah	20,221,999	12,326,348
Israeli Shekel	5,856,040	4,250,242
Japanese Yen	165,124,397	186,247,197
Malaysian Ringgit	-	6,116,803
Mexican Peso	13,703,693	27,518,975
New Zealand Dollar	8,083,459	13,863,381
Norwegian Krone	22,454,960	14,222,852
Peruvian Nuevo Sol	-	469,626
Philippine Peso	11,219,442	6,423,771
Polish Zloty	12,073	4,131,804
Russian Ruble	-	13,292,845
Singapore Dollar	21,281,454	15,472,920
South African Rand	3,784,217	9,392,321
South Korean Won	20,624,933	36,562,132
Swedish Krona	30,324,551	36,459,940
Swiss Franc	75,604,802	73,390,790
Taiwan Dollar	5,988,056	24,529,304
Thai Bhat	14,259,536	8,824,588
Turkish Lira	3,517,813	6,681,457
<b>Total Securities Subject to Foreign Currency Risk</b>	<b>\$1,107,577,453</b>	<b>\$1,266,367,170</b>
US Dollars	10,362,377,477	10,606,017,868
<b>Total Investment Securities</b>	<b>\$11,469,954,930</b>	<b>\$11,872,385,038</b>

## Insurance Fund Investments at Fair Value as of June 30, 2015 & 2014

Foreign Equities	2015	2014
Australian Dollar	\$16,529,875	\$21,159,098
Brazilian Real	3,478,125	9,868,083
British Pound Sterling	85,519,211	78,588,743
Canadian Dollar	11,027,509	15,048,631
Chilean Peso	562,254	1,575,128
Chinese Yuan	-	1,636,081
Columbian Peso	-	807,218
Czech Koruna	-	588,014
Danish Krone	11,219,733	9,378,996
Egyptian Pound	438,824	-
Euro	101,969,846	99,813,747
Hong Kong Dollar	18,617,003	15,678,888
Hungarian Forint	690,197	286,753
Indian Rupee	1,767,719	8,677,608
Indonesian Rupiah	7,140,659	3,629,915
Israeli Shekel	2,247,542	1,372,593
Japanese Yen	59,941,785	67,029,052
Malaysian Ringgit	-	2,079,289
Mexican Peso	4,647,950	8,877,951
New Taiwan Dollar	2,323,811	8,240,119
New Zealand Dollar	3,039,386	5,220,476
Norwegian Krone	8,182,370	4,809,239
Philippine Peso	4,068,766	2,341,661
Polish Zloty	5,570	1,674,073
Russian Ruble	-	5,374,587
Singapore Dollar	7,674,464	5,421,756
South African Rand	1,380,066	3,143,309
South Korean Won	7,532,005	13,915,662
Swedish Krona	11,203,658	12,354,751
Swiss Franc	27,719,374	24,820,751
Thai Bhat	5,246,060	3,288,977
Turkish Lira	1,216,790	2,494,686
<b>Total Securities Subject to Foreign Currency Risk</b>	<b>\$405,390,552</b>	<b>\$439,185,835</b>
US Dollars	3,810,360,717	3,659,395,133
<b>Total Investment Securities</b>	<b>\$4,215,751,269</b>	<b>\$4,098,580,968</b>

In accordance with GASB Statement No. 67, *Financial Reporting for Pension Plans*, KRS provides this additional disclosure regarding its money-weighted rate of return for the pension funds. The money-weighted rate of return is a method of calculating period-by-period returns on pension plan investments that adjusts for the changing amounts actually invested. For purposes of this Statement, money-weighted rate of return is calculated as the internal rate of return on pension plan investments, net of pension plan investment expense, adjusted for the changing amounts actually invested.

See below for the money-weighted rates of return as of June 30, 2015 and 2014, as calculated by the custodial bank, BNY-Mellon:

Pension Funds					
	KERS	KHAZ	CERZ	CHAZ	SPRS
2015	1.89	1.69	1.65	1.88	1.71
2014	15.50	15.65	15.56	15.50	15.66

Insurance Fund					
	KERS	KHAZ	CERZ	CHAZ	SPRS
2015	1.44	1.82	1.96	1.97	1.89
2014	14.28	15.14	15.02	15.00	15.03

The money-weighted rate of return declined due to unfavorable conditions in the capital market.

## Note E.

### CM Growth Capital Partners, LLP

On August 11, 2014, and May 1, 2015, KRS issued two promissory notes to CM Growth Capital Partners, LLP, (CM) in the amounts of \$1,300,000 and \$105,208, respectively. These transactions were approved by the Investment Committee. These notes were issued to provide working capital to CM (formally Camelot). The interest rate assigned to the notes was 17.5%, compounded quarterly. The maturity date of the two notes was January 24, 2016; on August 17, 2015, the two notes were paid in full along with accrued interest. The principal amount at June 30, 2015, was \$1,405,208 and the accrued interest due was \$282,142, which totaled \$1,687,350. The note receivable and accrued interest has been allocated among the plans.

The money weighted rate of return is a method of calculating period-by-period returns on pension plan investments that adjusts for the changing amounts actually invested. For purposes of this Statement, money-weighted rate of return is calculated as the internal rate of return on pension plan investments, net of pension plan investment expense.





## Note F. Securities Lending Transactions

Kentucky Revised Statutes Sections 61.650 and 386.020(2) permit the Pension and Insurance Funds to lend their securities to broker-dealers and other entities. The borrowers of the securities agree to transfer to the Funds' custodial banks either cash collateral or other securities with an initial fair value of 102% or 105% of the value of the borrowed securities. The borrowers of the securities simultaneously agree to return the borrowed securities in exchange for the collateral at a later date. Securities lent for cash collateral are presented as unclassified above in the schedule of custodial credit risk; securities lent for securities collateral are classified according to the category for the securities loaned. The types of securities lent include US Treasuries, US Agencies, US Corporate Bonds, US Equities, Global Fixed Income Securities, and Global Equities Securities. The Statement of Investment Policy does not address any restrictions on the amount of loans that can be made. At June 30, 2015, KRS had no credit risk exposure to borrowers because the collateral amounts received exceeded the amounts out on loan. The contracts with the custodial banks require them to indemnify KRS if the borrowers fail to return the securities and one or both of the custodial banks have failed to live up to their contractual responsibilities relating to the lending of securities.

All securities loans can be terminated on demand by either party to the transaction. Deutsche Bank invests cash collateral as permitted by state statute and Board policy. The agent of the Funds cannot pledge or sell collateral securities received unless the borrower defaults. KRS maintains a conservative approach to investing the cash collateral with Deutsche Bank, emphasizing capital preservation, liquidity, and credit quality.

## Note G. Risk of Loss

KRS is exposed to various risks of loss related to torts; thefts of, damage to, and destruction of assets; errors and omissions; injuries to employees; and, natural disasters. Under the provisions of the Kentucky Revised Statutes, the Kentucky Board of Claims is vested with full power and authority to investigate, hear proof, and to compensate persons for damages sustained to either person or property as a result of negligence of the agency or any of its employees. Awards are limited to \$200,000 for a single claim and \$350,000 in aggregate per occurrence. Awards and a pro rata share of the operating cost of the Board of Claims are paid from the fund of the agency having a claim or claims before the Board of Claims.

Claims against the Board of KRS, or any of its staff as a result of an actual or alleged breach of fiduciary duty, are insured with a commercial insurance policy. Coverage provided is limited to \$5,000,000 with a self-insured retention of \$250,000 for each claim. Defense costs incurred in defending such claims will be paid by the insurance company. However, the total defense cost and claims paid shall not exceed the total aggregate coverage of the policy. The aggregate limit for all loss is \$5,000,000 and the HYPPA and PPACA fines and penalties a sub-limit is \$1,500,000.

Claims for job-related illnesses or injuries to employees are insured by the state's self-insured workers' compensation program. Payments approved by the program are not subject to maximum limitations. A claimant may receive reimbursement for

### TORT-

The area of law that covers the majority of all civil lawsuits. Essentially, every claim that arises in civil court with the exception of contractual disputes falls under tort law. The concept of tort law is to redress a wrong done to a person, usually by awarding them monetary damages as compensation.

all medical expenses related to the illness or injury and up to 66.67% of wages for temporary disability. Each agency pays premiums based on fund reserves and payroll. Settlements did not exceed insurance coverage in any of the past three fiscal years. Thus, no secondary insurance had to be utilized. There were no claims which were appealed to the Kentucky Workers' Compensation Board.

## Note H. Contingencies

In the normal course of business, KRS is involved in litigation concerning the right of participants, or their beneficiaries, to receive benefits. KRS does not anticipate any material losses as a result of the contingent liabilities.

## Note I. Income Tax Status

The Internal Revenue Service has ruled that KRS qualifies under Section 401(a) of the Internal Revenue Code and is, generally, not subject to tax. KRS is subject to income tax on any unrelated business income; however, KRS had no unrelated business income in fiscal years 2015 and 2014.

## Note J. Defined Benefit Pension Plan

All eligible employees of KRS participate in KERS (non-hazardous), a cost-sharing, multiple-employer defined pension plan that covers all regular full-time employees in non-hazardous positions of any Kentucky State Department, Board or Agency directed by Executive Order to participate in the system. The plan provides for retirement, disability and death benefits to plan members. Plan benefits are extended to beneficiaries of plan members under certain circumstances. Plan members who began participating prior to September 1, 2008, contributed 5% of creditable compensation for the periods ended June 30, 2015, 2014, and 2013. Plan members who began participating on, or after, September 1, 2008, contributed 6% of creditable compensation for the periods ended June 30, 2015, 2014, and 2013. Plan members who began participating on, or after, January 1, 2014, contributed 6% of creditable compensation for the periods ended June 30, 2015 and 2014. KRS contributed 38.77%, 26.79%, and 23.61%, of covered payroll for the periods ended June 30, 2015, 2014, and 2013, respectively.

The chart below includes the covered payroll and contribution amounts for KRS for the three periods ended June 30 included in this discussion.

Payroll & Contributions			
	2015	2014	2013
Covered Payroll	\$14,137,788	\$ 13,916,055	\$ 13,925,712
Required Employer Contributions	\$5,481,221	\$3,722,937	\$3,271,165
Employer Percentage Contributed	100%	100%	100%

### COVERED PAYROLL-

The employee payroll that is subject to Pension Contributions Withholding.





## INTANGIBLE ASSET-

An asset that is not physical in nature. Corporate intellectual property (items such as patents, trademarks, copyrights, business methodologies), goodwill and brand recognition are all common intangible assets in today's marketplace.

## Note K. Equipment

### Equipment Expenses (as of June 30)

Expense	2015	2014
Equipment At-Cost	2,577,051	\$ 2,569,251
Less Accumulated Depreciation	(2,391,644)	(2,348,055)
<b>Total</b>	<b>\$185,407</b>	<b>\$221,196</b>

Depreciation expense for the fiscal years ended June 30, 2015 and 2014 amounted to \$43,589 and \$44,714, respectively.

## Note L. Intangible Assets

The provisions of GASB Statement No. 51, *Accounting and Financial Reporting for Intangible Assets* require that intangible assets be recognized in the Combining Statement of Plan Net Position only if they are considered identifiable. In accordance with GASB No. 51, KRS has capitalized software costs as indicated below for the Strategic Technology Advancements for the Retirement of Tomorrow (START) project.

### Software Expenses (as of June 30)

Expense	2015	2014
Software At-Cost	17,300,826	\$16,254,290
Less Accumulated Amortization	(7,561,348)	(5,935,919)
<b>Total</b>	<b>\$9,739,478</b>	<b>\$10,318,371</b>

Amortization expense for the fiscal years ended June 30, 2015 and 2014 amounted to \$1.6 million and \$1.9 million, respectively.



## Note M. Actuarial Valuation

The following details significant actuarial information and assumptions utilized in determining the unfunded actuarial accrued liabilities for the Insurance Funds:

Insurance Fund Valuation <sup>1</sup>	(Valuation Date June 30, 2015)	
	Non-Haz	Haz
Actuarial Cost Method	Entry Age	Entry Age
Amortization Method	Level Percent Closed	Level Percent Closed
Remaining Amortization Period	28 Years	28 Years
Asset Valuation Method	Five-year Smoothed Market	Five-year Smoothed Market
Medical Trend Assumption (Pre-Medicare)	7.5-5.0%	7.5-5.0%
Medical Trend Assumption (Post-Medicare)	5.5-5.0%	5.5-5.0%
Year of Ultimate Trend	2020	2020
Dollar Contribution Trend	1.5%	1.5%
<b>Actuarial Assumptions</b>		
Investment Rate of Return	7.5%	7.5%
↳ Includes Price Inflation at	3.25%	3.25%

<sup>1</sup>The actuarial valuation for the Insurance Fund involves estimates of the value of reported amounts and assumptions about the probability of future events. Actuarially determined amounts are subject to continual revision as results are compared to past expectations and new estimates are made about the future. Calculations are based on the benefits provided under the terms of the insurance plan in effect at the time of each valuation and on the pattern of sharing costs between the employer and plan members as of the valuation date. Actuarial calculations of the insurance plan reflect a long-term perspective.

**ACTUARIAL VALUATION -**  
A type of appraisal which requires making economic and demographic assumptions in order to estimate future liabilities. The assumptions are typically based on a mix of statistical studies and experienced judgment.

## Unfunded Actuarial Accrued Liability

KRS Pension and Insurance Funds had the following Unfunded Actuarial Accrued Liabilities as of June 30:

Pension Funds - Unfunded Actuarial Accrued Liabilities as of June 30		
System	2015	2014
KERS Non Haz	\$10,008,682,909	\$9,126,153,508
KERS Haz	338,745,630	288,952,802
CERS Non Haz	4,265,476,908	3,655,388,924
CERS Haz	1,516,524,591	1,321,185,726
SPRS	485,768,500	438,376,677
<b>Total Pension Funds</b>	<b>\$16,615,198,538</b>	<b>\$14,830,057,627</b>

Insurance Fund - Unfunded Actuarial Accrued Liabilities as of June 30		
System	2015	2014
KERS Non Haz	\$1,718,686,990	\$1,605,523,279
KERS Haz	(76,609,957)	(22,409,047)
CERS Non Haz	910,370,977	785,715,135
CERS Haz	416,308,115	496,131,142
SPRS	87,063,770	78,676,367
<b>Total Insurance Fund</b>	<b>\$3,055,819,895</b>	<b>\$2,943,636,876</b>
<b>Total Unfunded Actuarial Accrued Liability</b>	<b>\$19,671,018,433</b>	<b>\$17,773,694,503</b>

### Pension Funds Schedule of Funding Progress

System	Actuarial Value of Assets	AAL Entry Age Normal	Funded	Covered Payroll	Unfunded as a % of Covered Payroll
KERS Non Haz	\$2,350,989,940	12,359,672,849	19%	\$1,544,234,409	648.1%
KERS Haz	556,687,757	895,433,387	62.2%	126,680,130	263.2%
CERS Non Haz	6,474,848,513	10,740,325,421	60.3%	2,296,715,957	185.7%
CERS Haz	2,096,782,956	3,613,307,547	58%	483,640,601	313.6%
SPRS	248,387,946	734,156,446	33.8%	45,764,515	1,061.5%
<b>Total Pension Funds</b>	<b>11,727,697,112</b>	<b>28,342,895,650</b>	<b>41.4%</b>	<b>\$4,497,035,612</b>	<b>369.5%</b>

### Insurance Fund Schedule of Funding Progress

System	Actuarial Value of Assets	AAL Entry Age Normal	Funded	Covered Payroll	Unfunded as a % of Covered Payroll
KERS Non Haz	\$695,018,262	\$2,413,705,252	28.8%	\$1,544,234,409	111.3%
KERS Haz	451,514,191	374,904,234	120.4%	126,680,130	(59.5%)
CERS Non Haz	1,997,456,463	2,907,827,440	68.7%	2,296,715,957	39.6%
CERS Haz	1,087,707,118	1,504,015,233	72.3%	483,640,601	86.1%
SPRS	167,774,940	254,838,710	65.8%	45,764,515	190.2%
<b>Total Insurance Fund</b>	<b>\$4,399,470,974</b>	<b>\$7,455,290,869</b>	<b>59%</b>	<b>\$4,499,035,612</b>	<b>67.9%</b>
<b>Totals</b>	<b>\$16,127,168,086</b>	<b>\$35,798,186,519</b>	<b>45.1%</b>	<b>\$8,996,071,224</b>	<b>218.7%</b>



The provisions of GASB Statement No. 67, *Financial Reporting for Pension Plans*, were issued in June 2012. This Statement replaces the requirements of Statements No. 25, *Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans*, and No. 50, *Pension Disclosures*, as they relate to pension plans that are administered through trusts or equivalent arrangements that meet that criteria.

The total pension liability was determined by an actuarial valuation as of June 30, 2015, using the following actuarial assumptions, applied to all periods included in the measurement:

- *Inflation 3.25 percent*
- *Salary increases 4.0 percent, average, including inflation;*
- *Investment rate of return 7.5 percent, net of pension plan investment expense, including inflation.*

The Mortality Table used for active members is RP-200 Combined Mortality Table projected with Scale BB to 2013 (multiplied by 50% for males and 30% for females). For healthy retired members and beneficiaries, the mortality table used is the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (setback one year for females). For disabled members, the RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013 (setback four years for males) is used for the period after disability retirement. There is some margin in the current mortality tables for possible future improvement in mortality rates and that margin will be reviewed again when the next experience investigation is conducted.

The actuarial assumptions used in the June 30, 2015 valuation were based on the results of an actuarial experience study for the period July 1, 2008 – June 30, 2013. The discount rate used to measure the total pension liability was 7.5%.

Table Note A: Net Pension Liability					
	KERS		CERS		SPRS
	Non Haz	HAZ	Non Haz	HAZ	HAZ
Total Pension Liability	\$12,359,673	\$895,433	\$10,740,325	\$3,613,308	\$734,157
Fiduciary Net Position	2,327,782	552,468	6,440,800	2,078,202	247,229
Net Pension Liability	10,031,891	342,965	4,299,525	1,535,106	486,928
Ratio of Fiduciary Net Position to Total Pension Liability	18.83%	61.70%	59.97%	57.52%	33.68%
Inflation	3.25%	3.25%	3.25%	3.25%	3.25%
Salary Increases (average including inflation)	4.0%	4.0%	4.0%	4.0%	4.0%
Investment Rate of Return (Net of Pension Plan Investment Expense including Inflation)	7.5%	7.5%	7.5%	7.5%	7.5%

*The Total Pension Liability was determined by an actuarial valuation as of June 30, 2015, using the following actuarial assumptions, applied to all periods included in the measurement.*

*The Net Pension Liability is equal to the Total Pension Liability minus the Fiduciary Net Position. That result as of June 30, 2015, for the plan is presented in the table above (\$ thousands). The Total Pension Liability was determined by an actuarial valuation as of June 30, 2015, using the following actuarial assumptions, applied to all periods included in the measurement.*



The objective of GASB 67 was to improve financial reporting by state and local governmental pension plans. The statement required defined benefit pension plans to present two financial statements, a statement of fiduciary net position and a statement of changes in fiduciary net position. In addition, the statement required that notes to the financial statements include descriptive information, such as the types of benefits provided, the classes of plan members covered, and the composition of the pension plans board, among other detailed requirements.

The projection of cash flows used to determine the discount rate assumed that local employers would contribute the actuarially determined contribution rate of projected compensation over the remaining 28 year amortization period of the unfunded actuarial accrued liability.

The long-term expected return on plan assets is reviewed as part of the regular experience studies prepared every five years for the Systems. The most recent analysis, performed for the period covering fiscal years 2008 through 2013, is outlined in a report dated April 30, 2014. Several factors are considered in evaluating the long-term rate of return assumption including long-term historical data, estimates inherent in current market data, and a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected return, net of investment expense and inflation) were developed by the investment consultant for each major asset class. These ranges were combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and then adding expected inflation. The capital market assumptions developed by the investment consultant are intended for use over a 10-year horizon and may not be useful in setting the long-term rate of return for funding pension plans which covers a longer timeframe. The assumption is intended to be a long-term assumption and is not

Table Note B: Target Asset Allocation		
Asset Class	Target Allocation	Long Term Expected Real Rate of Return
Combined Equity	44%	5.4%
Combined Fixed Income	19%	1.5%
Real Return (Diversified Inflation Strategies)	10%	3.5%
Real Estate	5%	4.5%
Absolute Return (Diversified Hedge Funds)	10%	4.25%
Private Equity	10%	8.5%
Cash Equivalent	2%	-0.25%
<b>Total</b>	<b>100%</b>	

expected to change absent a significant change in the asset allocation, a change in the inflation assumption, or a fundamental change in the market that alters expected returns in future years.

The discount rate determination does not use a municipal bond rate. Projected future benefit payments for all current plan members were projected through 2117. The target asset allocation and best estimates of arithmetic nominal rates of return for each major asset class are summarized in Table Note B.

\*\*\*The actuarial valuation for the Insurance Fund involves estimates of the value of reported amounts and assumptions about the probability of future events. Actuarially determined amounts are subject to continual revision as results are compared to past expectations and new estimates are made about the future. Calculations are based on the benefits provided under the terms of the insurance plan in effect at the time of each valuation and on the pattern of sharing costs between the employer and plan members as of the valuation date. Actuarial calculations of the insurance plan reflect a long-term perspective.

Net Pension Liability - Decrease/Increase			
KERS	1% Decrease	Current Discount Rate	1% Increase
Nonhazardous	(6.5%)	(7.5%)	(8.5%)
	\$11,300,073	\$10,031,891	\$8,959,055
Hazardous	(6.5%)	(7.5%)	(8.5%)
	441,198	342,965	260,552
CERS			
Nonhazardous	(6.5%)	(7.5%)	(8.5%)
	\$5,488,878	\$4,299,525	\$3,280,950
Hazardous	(6.5%)	(7.5%)	(8.5%)
	1,964,987	1,535,106	1,178,939
SPRS			
Hazardous	(6.5%)	(7.5%)	(8.5%)
	\$563,792	\$486,928	\$422,248

## Note N. Pension Reform

Employee contributions for non-hazardous employees who began participating with KRS on, or after, September 1, 2008, contributed a total of 6% of all their creditable compensation to KRS. These members were classified in the Tier 2 structure of benefits. Five percent of this contribution was deposited to the individual employee's account, while the other 1% was deposited to an account created under 26 USC Section 401(h) in the KRS Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420E) for the payment of health insurance benefits. Hazardous employees who began participating with KRS on, or after, September 1, 2008, contributed a total of 9% of all their creditable compensation, with 8% credited to the member's account, and 1% deposited to the KRS Pension Fund 401(h) account for the payment of health insurance benefits. Interest paid each June on these members' accounts is set at a rate of 2.5%. If a member terminates his/her employment and applies to take a refund, the member is entitled to a full refund of contributions and interest in his/her account; however, the 1% contributed to the 401(h) account in the KRS Pension Fund is non-refundable and is forfeited.

The Employer contribution rates were established as follows (effective July 1, 2014) for fiscal year 2015:

Employer Contribution Rates	
KERS Nonhazardous	38.77%
KERS Hazardous	26.34%
CERS Nonhazardous	17.67%
CERS Hazardous	34.31%
SPRS	75.76%

Although the majority of changes enacted in House Bill 1 only impacted new hires on, or after, September 1, 2008, there were some changes that affected all members and retirees of KRS:

**Cost of Living Adjustment (COLA):** Beginning July 1, 2009, COLA for retirees are set by statute at 1.5% each July 1. The Kentucky General Assembly may increase this percentage at any time, but only if appropriate funding is allocated. The General Assembly may also reduce or suspend the annual COLA.

**Service Purchase Costs:** The actuarial factors used to determine the cost to purchase service must assume the earliest date a member can retire with an unreduced benefit, and must also assume a 1.5% COLA will be enacted. This change results in an increased service purchase cost for any purchase calculated on, or after, September 1, 2008. This change also affects the cost billed to employers for sick leave when an employee retires.

**Payment Options:** The Partial Lump Sum Payment Option was made available only to those employees who retired on, or before, January 1, 2009.

Kentucky Revised Statute 61.637 was modified significantly by House Bill 1. A retired member who was reemployed on, or after, September 1, 2008, cannot accrue additional service credit in KRS, even if employed in a position that would otherwise be required to participate in KRS. However, if a retiree is reemployed in a regular full time position, his/her employer is required to pay contributions on all creditable compensation earned during the period of reemployment. These contributions are used to reduce the unfunded actuarial liability.



the fiscal year, there may be an additional interest credit added to the member's account depending on KRS' investment returns. All interest is paid on the preceding year's balance.

When a member is eligible to retire, the benefit is calculated based on the member's accumulated account balance. A member earns service credit for each month he contributes to the plan. Once a member obtains 60 months of service credit, they are considered vested. Vesting may change the level of benefits to which the member is entitled.

Members in the hybrid cash balance plan contribute a set percentage of their salary each month to their own account as required by Kentucky law:

- » non-hazardous members – 5% of creditable compensation
- » hazardous members – 8% of creditable compensation
- » all members – 1% to the health insurance fund which is not credited to the member's account and is not refundable

The employer contribution rate is based on an actuarial valuation. The employer contributes a set percentage of the member's salary. Each month, when employer contributions are received, an employer pay credit is deposited to the member's account. A non-hazardous member account is credited with a 4% employer pay credit. A hazardous member account is credited with a 7.5% employer pay credit. The employer pay credit represents a portion of the employer contribution.

In addition, Senate Bill 2 implemented provisions requiring employers to pay the actuarial cost of increases in an employee's salary in the last five years prior to retirement, which result in increases to the employee's pension, commonly known as pension spiking. All salary increases greater than 10% from one fiscal year to the next are presumed pension spikes. The law specifically excludes three situations from being considered a pension spike: 1. bona fide promotions; 2. career advancements; and 3. lump sum compensatory time paid at termination. For all members who retire on, or after, January 1, 2014, KRS will analyze the last five years of wages used in the retirement calculation to determine if a pension spike has occurred. If a pension spike has occurred, KRS will notify the last employer. Regardless of when the pension spike occurred, the last participating employer shall be required to pay for any additional actuarial costs resulting from annual increases in employee

### House Bill 300

House Bill 300 was signed by the Governor on April 11, 2012. The Bill makes changes/additions to information and definitions regarding placement agents, audits to be performed on KRS by the Kentucky Auditor of Public Accounts, terms of service of Trustees of the Board, terms of service of Board officers (Chair and Vice Chair), among other changes.

### Senate Bill 2

Senate Bill 2 was signed by the Governor on April 4, 2013. It contained a number of changes to the pension system that KRS implemented, effective January 1, 2014. The Bill created the hybrid cash balance plan for members who began participation on, or after, January 1, 2014. These members were classified in the Tier 3 structure of benefits. The Cash Balance Plan is known as a hybrid plan because it has characteristics of both a defined benefit plan and a defined contribution plan.

The plan resembles a defined contribution plan because it determines the value of benefits for each participant based on individual accounts. However, the assets of the plan remain in a single investment pool like a traditional defined benefit plan. The plan is a defined benefit plan since it uses a specific formula to determine benefits.

All regular full time employees who began participation with KRS on, or after, January 1, 2014 contribute to the hybrid cash balance plan. Participation in the plan is mandatory unless the employee is employed in a non-participating position. Employment classifications that are non-participating include part-time, seasonal, temporary, probationary (CERS only), interim, emergency, and independent contractors.

Members and employers contribute a specified amount into the member's account. The account earns a guaranteed amount of interest at the end of each fiscal year. If the member has participated in the plan during



### Tier 3 Plan

interest is paid into the member's account. The account is guaranteed 4% interest credit on the member's account balance as of June 30 of the previous year. The member's account may be credited with additional interest if the System's five-year average investment returns exceed 4%. If the member was actively employed and participating in the fiscal year, and if the System's average geometric investment return for the previous five years exceeds 4%, then the member's account will be credited with 75% of the amount of the returns over 4% on the account balance as of June 30 of the previous year. It is possible that one system in KRS may get an upside sharing percentage, while one may not.

salary greater than ten percent (10%), which do not qualify under one of the three exceptions.

If there were multiple last employers, the cost is divided equally among them. The employer is permitted a 12 month period to remit the amount due.

As part of the Cash Balance Plan group of benefits, an additional interest credit may be applied which is referred to as upside sharing interest. The upside sharing interest is not guaranteed, and the following conditions must be met before it is credited to a member's account:

- » The System's geometric average net investment return (GANIR) for the last five years must exceed 4%.
- » The member must have been active and participating in the fiscal year.

If a system's GANIR for the previous five years exceeds 4%, then the member's account will be credited with 75% of the amount over 4%. This credit will be applied to the account balance as of June 30 of the previous year.

### Upside Sharing Interest

Upside sharing interest is credited to both the member contribution balance and Employer Pay Credit balance. Upside sharing interest is an additional interest credit. Member accounts automatically earn 4% interest annually. The GANIR is calculated on an individual system basis. It is possible that one system may get an upside sharing percentage, and another system would not.

The chart below shows the interest calculated on the members' balances as of June 30,2014, and credited to each member account on June 30, 2015.

<b>(A-B) X 75% = C then C+B=D</b>					
System	A 5 Year Geometric Average Return	B Guarantee Rate	C Upside Sharing Interest	D Interest Rate Earned	Total Interest Credited To Members' Accounts
KERS Nonhazardous	9.04%	4.00%	3.78%	7.78%	\$60,343
KERS Hazardous	9.10%	4.00%	3.83%	7.83%	19,655
CERS Nonhazardous	9.03%	4.00%	3.77%	7.77%	101,587
CERS Hazardous	9.12%	4.00%	3.84%	7.84%	19,870
SPRS	9.12%	4.00%	3.84%	7.84%	*

\* No members in the SPRS received interest as of June 30,2015 due to the timing of Tier 3 members participation dates.

### House Bill 62

Enacted during the 2015 session of the Kentucky General Assembly, creates a path for certain participating agencies to voluntarily cease their participation in KERS or CERS by paying their portion of the unfunded liability. Additionally, it authorizes KRS to involuntarily remove certain participating agencies from KERS or CERS. KRS is currently in the process of creating an administrative regulation to further define the pension withdrawal process.



## Note O. Medicare Prescription Drug Plan

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In fiscal year 2009, KRS submitted an application to the Centers for Medicare & Medicaid Services, of the Department of Health & Human Services, to enter into a contract to offer a Medicare Prescription Drug Plan (PDP), as described in the Medicare Prescription Drug Benefit Final Rule published in the Federal Register on January 28, 2005 (70 Fed. Reg. 4194). As part of the application process, KRS was required to establish a segregated Insolvency Account in the amount of \$100,000; this account must retain a minimum balance of \$100,000. The account consists of cash and/or cash equivalents and is invested on a daily basis. On February 19, 2009, KRS established the KRS Insurance Prescription Drug Fund. As of June 30, 2015 and 2014, the Insolvency Account amounted to \$0 and \$100,039, respectively. As of June 30, 2015, this account was closed due to the cessation of the self-funding plan.

## Note P. Reimbursement Of Retired-Reemployed Health Insurance

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As a result of the passage of House Bill 1 on September 1, 2008, if a retiree is reemployed in a regular full time position and has chosen health insurance coverage through KRS, the employer is required to reimburse KRS for the health insurance premium paid on the retiree's behalf, not to exceed the cost of the single premium rate. As of June 30, 2015 and 2014, the reimbursement totaled \$12.6 million and \$12.4 million, respectively.



Medical Insurance coverage is provided based on the member's initial participation date and length of service. Members receive either a percentage or dollar amount for insurance coverage.

## Note Q. Reciprocity Agreement

KRS has a reciprocity agreement with Kentucky Teachers' Retirement System (KTRS) for the payment of insurance benefits for those members who have creditable service in both systems.

## Note R. Custodial Bank

As a result of a thorough Request for Proposal (RFP) process, and effective July 1, 2013, Bank of New York-Mellon became responsible for providing KRS all required global custodial services. Bank of New York-Mellon took these duties over from Northern Trust, the former custodial bank.

## Note S. Related Party

Perimeter Park West, Inc. (PPW) is a legally separate, tax-exempt Kentucky corporation established in 1998 to own the land and buildings on which KRS is located. PPW leases the buildings to KRS (the lease is renewed periodically) and provides maintenance for the buildings and land. PPW is considered a related party to KRS and has its own separate financial audit. The following presents the amounts recorded between KRS and PPW for the fiscal year ended June 30, 2015:

Lease payments to PPW from KRS:	\$686,270
Dividends to KRS from PPW:	-

## Note T. City Of Fort Wright

In June 2014, the City of Fort Wright (the City), a participating employer in CERS, filed a lawsuit against KRS alleging that the Board invested CERS funds in investments that were prohibited by both statutory and common law. In addition, the City alleged that the Board paid substantial asset management fees, which the suit alleges were improper. Although the exact nature and source of the relief sought is unclear, it appears that the City is seeking a declaration of rights, an injunction barring the placement of CERS assets in certain types of investments, an accounting of CERS assets, restitution of management fees to CERS, and attorney fees. As noted above, the exact nature and scope of the relief sought in this suit is unclear; therefore, no provision has been made in the combining financial statements.

### RE-EMPLOYED-

A retired member who was reemployed on, or after, September 1, 2008, cannot accrue additional service credit in KRS, even if employed in a position that would otherwise be required to participate in KRS. However, if a retiree is reemployed in a regular full time position, his/her employer is required to pay contributions on all creditable compensation earned during the period of reemployment. These contributions are used to reduce the unfunded actuarial liability.



All regular full-time employees who began participation with KRS on, or after, January 1, 2014 contribute to the hybrid cash balance plan. Participation in the plan is mandatory unless the employee is employed in a non-participating position.

## **Note U.** Seven Counties Services, Inc.

Seven Counties Services, Inc., a participating employer in KERS, filed for Chapter 11 Bankruptcy on April 4, 2013, in part to terminate its employees' continued participation in KERS and its obligation to remit monthly contributions to KRS. Following the filing of the bankruptcy petition, Seven Counties Services ceased making retirement contributions on approximately 900 of its approximately 1,200 employees. On May 30, 2014, the United States Bankruptcy Court for the Western District of Kentucky issued a Memorandum Opinion that held that Seven Counties Services was entitled to seek Chapter 11 relief and reject what the Court considered to be an executory contract with KERS. Following the May 30, 2014 Opinion, Seven Counties Services ceased making contributions on behalf of all its employees.

## **Note V.** City of Hillview

The City of Hillview, a participating employer in the CERS, filed a petition for Chapter 9 Bankruptcy on August 20, 2015, following a multi-million dollar civil judgment. Although KRS is listed as a debtor in this action, the impact, if any, on CERS is unclear. Consequently, no provision has been made in the combining financial statements as a result of this litigation.



## Note W. Investment Fees

In fiscal year 2015, KRS changed from the Equity Method to the Proportionate Share Method for reporting of private equity investment fees. KRS made this decision in order to provide more transparency with regards to the investment fees incurred. In prior years, private equity investment fees were netted against investment activity. This means that each expense was not recorded as a line item in and of itself, but rather was part of a net cash flow. However, net investment income has always included these fees regardless of the reporting method used. Under the new method, the majority of these fees were reported as investment expenses as opposed to being netted against investment activity; fees have not suddenly and significantly increased. Fees have remained relatively stable. The only difference is that KRS has changed the method utilized to capture and report those fees. This change does not affect the net investment performance of the program.

The expense detail illustrated below is related to the accounting reporting changes. Fiscal 2015 total fees have been adjusted for performance fees, those management fees previously netted against market value, and consulting fees to produce a more comparability of fees incurred. Fees incurred under the Equity Method (previously used accounting) are favorable in comparison to current year.

	FYE 2015	FYE 2014
<b>PENSION FUNDS:</b>		
Investment Expense (excludes Security Lending)	\$81,505,195	\$46,349,967
<b>Adjustment for Accounting Methodology Change</b>		
Performance Fees *	25,626,953	-
Investment Fees **	16,317,561	-
Consulting ***	1,258,360	-
<b>Total Adjustments</b>	43,202,874	-
Fee Comparison Under Previous Accounting Methodology	\$ 38,302,321	\$ 46,349,967
<b>INSURANCE FUND:</b>		
Investment Expense (excludes Security Lending)	\$27,984,259	\$15,660,653
<b>Adjustment for Accounting Methodology Change</b>		
Performance Fees *	8,200,379	-
Investment Fees **	6,332,965	-
Consulting ***	447,901	-
<b>Total Adjustments</b>	14,981,245	-
Fee Comparison Under Previous Accounting Methodology	\$13,003,014	\$15,660,653

\*Prior to FYE 2015, performance fees were not reported to KRS.

\*\*Amount represents fees captured in FYE 2015, previously "netted" against market value.

\*\*\* These fees are paid by the Trust instead of the Administrative Budget to calculate Tier 3 GANIR benefits as required under Senate Bill 2.



## Note X. Write Off Of Receivable

With the implementation of START, employers reported June wages earned in the following month of July (next fiscal year) and the new Annual Required Contribution (ARC) rate was applied. The Commonwealth approved budget guidelines that paid contributions at the fiscal year ARC rate in effect when wages were earned. It is unlikely that KRS will receive payments at the new ARC rate for that period; therefore, contribution receivables have been reduced as follows as of June 30, 2015 and 2014:

	2015	2014
<b>KERS</b> Hazardous	\$5,981,880	\$5,216,615
<b>CERS</b>	-	102,823
<b>CERS H</b>	-	91,305
<b>SPRS</b>	91,618	571,336
<b>Total</b>	<b>\$6,073,498</b>	<b>\$5,982,079</b>

## Note Y. Bank of America Settlement

In August 2014, Bank of America reached a \$16.65 billion settlement with US regulators to settle charges that it misled investors into buying troubled mortgage-backed securities. The settlement called for the bank to pay a \$9.65 billion cash penalty and provide \$7 billion of consumer relief to homeowners and communities. Bank of America admitted having sold billions of dollars of risky mortgage-backed securities while concealing key facts about the quality of the underlying loans. It also admitted to having made misrepresentations to Fannie Mae and Freddie Mac about the quality of loans sold to those government-controlled mortgage companies. KRS' share of this settlement amounted to \$23,000,000, and was received on October 24, 2014. The amount was allocated among the plans as follows:

<b>KERS</b>	\$8,442,347
<b>KERS H</b>	767,141
<b>CERS</b>	10,280,391
<b>CERS H</b>	2,865,365
<b>SPRS</b>	644,756
<b>Total</b>	<b>\$23,000,000</b>

## Note Z. Subsequent Events

Management has evaluated the period June 30, 2015, to December 3, 2015, (the date the combining financial statements were available to be issued) for items requiring recognition or disclosure in the combining financial statements. Except as described in Notes E and V, there were no events occurring during the evaluation provided that require recognition or disclosure in the accompanying financial statements.



**REQUIRED**  
SUPPLEMENTARY INFORMATION

## Schedules of Funding Progress for KERS Insurance Fund

Year Ended	Actuarial Value of Assets (a)	AAL Entry Age Normal (b)	UAAL (b-a)	Funded (a/b)	Covered Payroll** (c)	UAAL as % of Covered Payroll [(b-a)/c]
<b>Nonhazardous</b>						
June 30, 2006	\$611,350,765	\$7,815,480,774	\$7,204,130,009	7.8%	\$1,702,230,777	423.2%
June 30, 2007	621,171,658	5,201,355,055	4,580,183,397	11.9	1,780,223,493	257.3
June 30, 2008	603,197,761	5,431,499,285	4,828,301,524	11.1	1,837,873,488	262.7
June 30, 2009	534,172,580	4,507,325,571	3,973,152,991	11.9	1,754,412,912	226.5
June 30, 2010	471,341,628	4,466,136,041	3,994,794,413	10.6	1,815,146,388	220.1
June 30, 2011	451,620,442	4,280,089,633	3,828,469,191	10.6	1,731,632,748	221.1
June 30, 2012	446,080,511	3,125,330,157	2,679,249,646	14.3	1,644,896,681	162.9
June 30, 2013	497,584,327	2,128,754,134	1,631,169,807	23.4	1,644,408,698	99.2
June 30, 2014	621,236,646	2,226,759,925	1,605,523,279	27.9	1,577,496,447	101.8
June 30, 2015	695,018,262	2,413,705,252	1,718,686,990	28.8	1,544,234,409	111.3
<b>Hazardous</b>						
June 30, 2006	\$212,833,318	\$621,237,856	\$408,404,538	34.3%	\$138,747,320	294.4%
June 30, 2007	251,536,756	504,842,981	253,306,225	49.8	144,838,020	174.9
June 30, 2008	288,161,759	541,657,214	253,495,455	53.2	148,710,060	170.5
June 30, 2009	301,634,592	491,132,170	189,497,578	61.4	146,043,576	129.8
June 30, 2010	314,427,296	493,297,529	178,870,233	63.7	143,557,944	124.6
June 30, 2011	329,961,615	507,058,767	177,097,152	65.1	133,053,792	133.1
June 30, 2012	345,573,948	384,592,406	39,018,458	89.9	131,976,754	29.6
June 30, 2013	370,774,403	385,517,675	14,743,272	96.2	132,015,368	11.2
June 30, 2014	419,395,867	396,986,820	(22,409,047)	105.6	129,076,038	(17.4)
June 30, 2015	451,514,191	374,904,234	(76,609,957)	120.4	128,680,130	(59.5)
<b>Total</b>						
June 30, 2006	\$824,184,083	\$8,436,718,630	\$7,612,534,547	9.8%	\$1,840,978,097	413.5%
June 30, 2007	872,708,414	5,706,198,036	4,833,489,622	15.3	1,925,061,513	251.1
June 30, 2008	891,359,520	5,973,156,499	5,081,796,979	14.9	1,986,583,548	255.8
June 30, 2009	835,807,172	4,998,457,741	4,162,650,569	16.7	1,900,456,488	219.0
June 30, 2010	785,768,924	4,959,433,570	4,173,664,646	15.8	1,958,704,332	213.1
June 30, 2011	781,582,057	4,787,148,400	4,005,566,343	16.3	1,864,686,540	214.8
June 30, 2012	791,654,459	3,509,922,563	2,718,268,104	22.6	1,776,873,435	153.0
June 30, 2013	868,358,730	2,514,271,809	1,645,913,079	34.5	1,776,424,066	92.7
June 30, 2014	1,040,632,513	2,623,746,745	1,583,114,232	39.7	1,706,572,485	92.8
June 30, 2015	1,146,532,453	2,788,609,486	1,642,077,033	41.1	1,672,914,539	98.2

See Independent Auditors' Report. \*\* Covered payroll was actuarially computed

## Schedules of Funding Progress for CERS Insurance Fund

Year Ended	Actuarial Value of Assets (a)	AAL Entry Age Normal (b)	UAAL (b-a)	Funded (a/b)	Covered Payroll** (c)	UAAL as % of Covered Payroll [(b-a)/c]
<b>Nonhazardous</b>						
June 30, 2006	\$777,726,590	\$4,607,223,639	\$3,829,497,049	16.9%	\$1,982,437,473	193.2%
June 30, 2007	960,285,900	3,333,966,070	2,373,680,170	28.8	2,076,848,328	114.3
June 30, 2008	1,168,883,170	3,583,193,466	2,414,310,296	32.6	2,166,612,648	111.4
June 30, 2009	1,216,631,769	3,070,386,018	1,853,754,249	39.6	2,183,611,848	84.9
June 30, 2010	1,293,038,593	3,158,340,174	1,865,301,581	40.9	2,236,855,380	83.4
June 30, 2011	1,433,450,793	3,073,973,205	1,640,522,412	46.6	2,276,595,948	72.1
June 30, 2012	1,512,853,851	2,370,771,288	857,917,437	63.8	2,236,546,345	38.4
June 30, 2013	1,628,244,197	2,443,894,100	815,649,903	66.6	2,236,277,489	36.5
June 30, 2014	1,831,199,465	2,616,914,600	785,715,135	70.0	2,272,270,287	34.6
June 30, 2015	1,997,456,463	2,907,827,440	910,370,977	68.7	2,296,715,957	39.6
<b>Hazardous</b>						
June 30, 2006	\$422,785,042	\$1,928,481,371	\$1,505,696,329	21.9%	\$426,927,550	352.7%
June 30, 2007	512,926,549	1,646,460,011	1,133,533,462	31.2	458,998,956	247.0
June 30, 2008	613,526,319	1,769,782,957	1,156,256,638	34.7	474,241,332	243.8
June 30, 2009	651,130,782	1,593,548,263	942,417,481	40.9	469,315,464	200.8
June 30, 2010	692,769,770	1,674,703,216	981,933,446	41.4	466,548,660	210.5
June 30, 2011	770,790,274	1,647,702,755	876,912,481	46.8	466,963,860	187.8
June 30, 2012	829,040,842	1,364,843,057	535,802,215	60.7	464,228,923	115.4
June 30, 2013	892,774,391	1,437,332,817	544,558,426	62.1	461,672,567	118.0
June 30, 2014	997,733,237	1,493,864,379	496,131,142	66.8	479,164,016	103.5
June 30, 2015	1,087,707,118	1,504,015,233	416,308,115	72.3	483,640,601	86.1
<b>Total</b>						
June 30, 2006	\$1,200,511,632	\$6,535,705,010	\$5,335,193,378	18.4%	\$2,409,365,023	221.4%
June 30, 2007	1,473,212,449	4,980,426,081	3,507,213,632	29.6	2,535,847,284	138.3
June 30, 2008	1,782,409,489	5,352,976,423	3,570,566,934	33.3	2,640,853,980	135.2
June 30, 2009	1,867,762,551	4,663,934,281	2,796,171,730	40.0	2,652,927,312	105.4
June 30, 2010	1,985,808,363	4,833,043,390	2,847,235,027	41.1	2,703,404,040	105.3
June 30, 2011	2,204,241,067	4,721,675,960	2,517,434,893	46.7	2,743,559,808	91.8
June 30, 2012	2,341,894,693	3,735,614,345	1,393,719,652	62.7	2,700,775,268	51.6
June 30, 2013	2,521,018,588	3,881,226,917	1,360,208,329	65.0	2,697,950,056	50.4
June 30, 2014	2,828,932,702	4,110,778,979	1,281,846,277	68.8	2,751,434,303	46.6
June 30, 2015	3,085,163,581	4,411,842,673	1,326,679,092	69.9	2,780,356,558	47.7

See Independent Auditors' Report. \*\* Covered payroll was actuarially computed

## Schedules of Funding Progress for SPRS Insurance Fund

Year Ended	Actuarial Value of Assets (a)	AAL Entry Age Normal (b)	UAAL (b-a)	Funded (a/b)	Covered Payroll** (c)	UAAL as % of Covered Payroll [(b-a)/c]
June 30, 2006	\$105,580,269	\$582,580,867	\$477,000,598	18.1%	\$47,743,865	999.1%
June 30, 2007	115,215,912	432,763,229	317,547,317	26.6	49,247,580	644.8
June 30, 2008	123,961,197	445,107,468	321,146,271	27.8	53,269,080	602.9
June 30, 2009	123,526,647	364,031,141	240,504,494	33.9	51,660,396	465.5
June 30, 2010	121,175,083	434,960,495	313,785,412	27.9	51,506,712	609.2
June 30, 2011	123,687,289	438,427,763	314,740,474	28.2	48,692,616	646.4
June 30, 2012	124,372,072	333,903,782	209,531,710	37.2	48,372,506	433.2
June 30, 2013	136,321,060	222,326,743	86,005,683	61.3	45,256,202	190.0
June 30, 2014	155,594,760	234,271,127	78,676,367	66.4	44,615,885	176.3
June 30, 2015	167,774,940	254,838,710	87,063,770	65.8	45,764,515	190.2

See Independent Auditors' Report. \*\* Covered payroll was actuarially computed



## Schedules of Contributions from Employers & Other Contributing Entities

### KERS Nonhazardous - Insurance Fund

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
June 30, 2006	\$202,498,302	\$47,634,639	-	23.5%
June 30, 2007	219,768,964	64,014,332	\$10,744,049	34.0
June 30, 2008	558,745,820	56,744,942	6,633,538	11.3
June 30, 2009	362,707,378	74,542,932	8,167,982	22.8
June 30, 2010	376,556,187	93,976,917	8,550,914	27.2
June 30, 2011	294,897,813	129,335,552	-	43.9
June 30, 2012	297,904,224	156,057,216	-	52.4
June 30, 2013	286,143,134	165,330,557	-	57.8
June 30, 2014	208,880,813	166,609,592	-	79.8
June 30, 2015	130,455,026	135,940,337	-	104.2

See Independent Auditors' Report.

### KERS Hazardous - Insurance Fund

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
June 30, 2006	\$28,517,563	\$17,011,745	-	59.7%
June 30, 2007	31,304,778	19,534,819	\$104,669	62.7
June 30, 2008	51,214,929	21,997,341	73,891	43.1
June 30, 2009	34,670,467	20,807,204	186,081	60.6
June 30, 2010	35,045,278	21,921,535	319,059	63.5
June 30, 2011	29,585,257	19,952,580	-	67.4
June 30, 2012	28,326,206	24,538,087	-	86.6
June 30, 2013	26,252,911	25,682,403	-	97.8
June 30, 2014	15,627,018	23,873,967	-	152.8
June 30, 2015	13,151,938	14,882,343	-	113.2

See Independent Auditors' Report.

## Schedules of Contributions from Employers & Other Contributing Entities

### CERS Nonhazardous - Insurance Fund

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
June 30, 2006	\$272,942,757	\$128,867,817	-	47.2%
June 30, 2007	285,600,490	147,608,801	\$9,623,431	55.1
June 30, 2008	406,541,729	196,110,111	6,003,181	49.7
June 30, 2009	264,733,532	123,852,611	7,623,628	49.7
June 30, 2010	266,331,326	166,607,097	9,156,991	66.0
June 30, 2011	213,429,424	186,885,576	-	87.6
June 30, 2012	214,421,008	171,924,836	-	80.2
June 30, 2013	195,560,870	159,992,643	-	81.8
June 30, 2014	130,651,800	123,278,028	-	94.4
June 30, 2015	119,510,589	119,443,608	-	99.9

See Independent Auditors' Report.

### CERS Hazardous - Insurance Fund

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
June 30, 2006	\$98,297,535	\$64,853,778	-	66.0%
June 30, 2007	115,938,899	70,072,785	\$656,523	61.0
June 30, 2008	168,723,639	90,113,200	419,774	53.7
June 30, 2009	126,757,348	70,785,241	627,938	56.3
June 30, 2010	129,227,449	83,042,875	1,493,440	65.4
June 30, 2011	109,226,667	98,592,286	-	90.3
June 30, 2012	110,762,577	92,563,664	-	83.6
June 30, 2013	102,010,672	85,319,393	-	83.6
June 30, 2014	74,360,438	74,791,619	-	100.6
June 30, 2015	69,102,811	71,778,130	-	103.9

See Independent Auditors' Report.



## Schedules of Contributions from Employers & Other Contributing Entities

### SPRS - Insurance Fund

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
June 30, 2006	\$12,554,648	\$6,880,517	-	54.8%
June 30, 2007	15,233,320	6,488,600	\$361,942	45.0
June 30, 2008	43,469,735	7,329,229	183,564	17.3
June 30, 2009	29,324,666	7,413,552	229,240	26.1
June 30, 2010	30,302,151	8,369,428	273,684	28.5
June 30, 2011	25,772,574	11,050,964	-	42.9
June 30, 2012	28,246,786	11,960,468	-	42.3
June 30, 2013	27,234,229	16,828,681	-	61.8
June 30, 2014	20,879,022	14,493,242	-	69.4
June 30, 2015	9,889,797	10,381,881	-	105.0

See Independent Auditors' Report.

## Actuary Assumption Changes

There were no changes of benefit terms. However, the following changes in assumptions were adopted by the Board of Trustees and reflected in the valuation performed as of June 30, 2015:

- » The assumed investment rate of return was decreased from 7.75% to 7.5%.
- » The assumed rate of inflation was reduced from 3.5% to 3.25%.
- » The assumed rate of wage inflation was reduced from 1% to .75%.
- » Payroll growth assumption was reduced from 4.5% to 4%.
- » The mortality table used for active members is RP-2000 Combined Mortality Table projected with Scale BB to 2013 (multiplied by 50% for males and 30% for females).
- » For healthy retired members and beneficiaries, the mortality table used is the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (setback one year for females). For disabled members, the RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013 (set back four years for males) is used for the period after disability retirement. There is some margin in the current mortality tables for possible future improvement in mortality rates and that margin will be reviewed again when the next experience investigation is conducted.
- » Assumed rates of retirement, withdrawal, and disability were updated to more accurately reflect experience.

The actuarially determined contribution rates are determined on a biennial basis beginning with the fiscal years ended 2016 and 2017, determined as of June 30, 2015. The amortization period of the unfunded liability has been reset as of July 1, 2013 to a closed 30-year period. The following actuarial methods and assumptions were used to determine contribution rates reported for all systems:

<b>Actuarial Cost Method</b>	Entry Age
<b>Amortization Method</b>	Level of Percentage of Payroll, closed
<b>Remaining Amortization Period</b>	28 years
<b>Asset Valuation Method</b>	5 year Smoothed Market
<b>Inflation</b>	3.25%
<b>Salary Increase</b>	4.0%, average, including Inflation
<b>Investment Rate of Return</b>	7.5%, for both Non Hazardous and Hazardous, Net of Pension Plan Investment Expense, including Inflation

### Schedule of Employer Contributions - Pension Funds

<b>KERS Nonhazardous</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>	<b>2010</b>	<b>2009</b>	<b>2008</b>	<b>2007</b>	<b>2006</b>
Actuarially Determined Employer Contribution	\$520,948	\$520,765	\$485,396	\$441,094	\$381,915	\$348,495	\$294,495	\$264,743	\$176,774	\$129,126
Actual Employer Contributions	521,691	296,836	280,874	214,786	193,754	144,051	112,383	104,655	88,249	60,681
Annual Contribution Deficiency (Excess)	(743)	223,929	204,522	226,308	188,161	204,444	182,112	160,088	88,525	68,445
Covered Employee Payroll	1,544,234	1,577,496	1,644,409	1,644,897	1,731,633	1,815,146	1,754,413	1,837,873	1,780,223	1,702,231
Actual Contributions as a Percentage of Covered Employee Payroll	33.78%	18.82%	17.08%	13.06%	11.19%	7.94%	6.41%	5.69%	4.96%	3.56%

### Schedule of Employer Contributions- Pension Funds

<b>KERS Hazardous</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>	<b>2010</b>	<b>2009</b>	<b>2008</b>	<b>2007</b>	<b>2006</b>
Actuarially Determined Employer Contribution	\$28,374	\$13,570	\$21,502	\$20,265	\$20,605	\$17,815	\$15,708	\$14,147	\$12,220	\$10,787
Actual Employer Contributions	28,536	11,670	27,334	20,809	19,141	17,658	15,843	15,257	13,237	10,803
Annual Contribution Deficiency (Excess)	(162)	1,900	(5,832)	(544)	1,464	157	(135)	(1,110)	(1,017)	(16)
Covered Employee Payroll	128,680	129,076	132,015	131,977	133,054	143,558	146,044	148,710	144,838	138,747
Actual Contributions as a Percentage of Covered Employee Payroll	22.18%	9.04%	20.7%	15.77%	14.39%	12.3%	10.85%	10.26%	9.14%	7.79%

## Schedule of Employer Contributions- Pension Funds

<b>CERS Nonhazardous</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>	<b>2010</b>	<b>2009</b>	<b>2008</b>	<b>2007</b>	<b>2006</b>
Actuarially Determined Employer Contribution	\$297,715	\$324,231	\$294,914	\$261,764	\$218,985	\$186,724	\$161,097	\$138,311	\$112,508	\$83,124
Actual Employer Contributions	298,566	324,231	294,914	275,736	248,519	207,076	179,285	150,925	124,261	90,834
Annual Contribution Deficiency (Excess)	(851)	-	-	(13,972)	(29,534)	(20,352)	(18,188)	12,614	(11,753)	(7,710)
Covered Employee Payroll	2,296,716	2,272,270	2,236,277	2,236,546	2,276,596	2,236,855	2,183,612	2,166,613	2,076,848	1,982,437
Actual Contributions as a Percentage of Covered Employee Payroll	13%	14.27%	13.19%	12.33%	10.92%	9.26%	8.21%	6.97%	5.98%	4.58%

## Schedule of Employer Contributions- Pension Funds

<b>CERS Hazardous</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>	<b>2010</b>	<b>2009</b>	<b>2008</b>	<b>2007</b>	<b>2006</b>
Actuarially Determined Employer Contribution	\$107,514	\$115,240	\$120,140	\$83,589	\$78,796	\$76,391	\$69,056	\$64,082	\$53,890	\$44,059
Actual Employer Contributions	108,071	115,240	120,140	89,329	85,078	82,887	78,152	72,155	61,553	49,979
Annual Contribution Deficiency (Excess)	(557)	-	-	(5,740)	(6,282)	(6,496)	(9,096)	(8,073)	(7,663)	(5,917)
Covered Employee Payroll	483,641	479,164	461,673	464,229	466,964	466,549	469,315	474,241	458,999	429,928
Actual Contributions as a Percentage of Covered Employee Payroll	22.35%	24.05%	26.02%	19.24%	18.22%	17.77%	16.65%	15.21%	13.41%	11.71%

## Schedule of Employer Contributions- Pension Funds

<b>SPRS</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>	<b>2010</b>	<b>2009</b>	<b>2008</b>	<b>2007</b>	<b>2006</b>
Actuarially Determined Employer Contribution	\$31,444	\$25,808	\$23,117	\$20,498	\$18,463	\$18,765	\$15,952	\$13,823	\$9,024	\$6,353
Actual Employer Contributions	31,990	20,279	18,501	15,362	12,657	9,489	8,186	7,443	6,142	4,244
Annual Contribution Deficiency (Excess)	(546)	5,529	4,616	5,136	5,806	9,276	7,766	6,380	2,882	2,109
Covered Employee Payroll	45,765	44,616	45,256	48,373	48,693	51,507	51,660	53,269	49,248	47,744
Actual Contributions as a Percentage of Covered Employee Payroll	69.9%	45.45%	40.88%	31.76%	25.99%	18.42%	15.85%	13.97%	12.47%	8.89%

## Schedule of Changes in the Net Pension Liability *(in Thousands)*

	KERS Nonhazardous		KERS Hazardous		CERS Nonhazardous		CERS Hazardous		SPRS Hazardous	
	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014
<b>Total Pension Liability (TPL)</b>										
Service Cost	\$143,847	\$133,361	\$18,729	\$16,880	\$207,399	\$192,482	\$71,935	\$66,762	\$7,696	\$7,142
Interest	859,509	853,652	61,005	59,594	733,003	710,527	247,008	238,665	50,660	50,391
Benefit Changes	-	-	-	-	-	-	-	-	-	-
Difference between Expected and Actual Experience	30,958	-	6,066	-	49,966	-	41,935	-	9,331	-
Changes of Assumptions	694,591	-	52,166	-	606,293	-	166,849	-	40,202	-
Benefit Payments	(905,790)	(889,936)	(56,774)	(54,321)	(615,335)	(582,850)	(200,134)	(189,635)	(54,766)	(53,026)
Refunds of Contributions	(13,552)	(13,627)	(2,609)	(2,830)	(13,524)	(14,286)	(3,111)	(2,664)	(85)	(213)
Net Change in TPL	809,563	83,450	78,583	19,323	967,802	305,873	324,482	113,127	53,038	4,294
TPL - Beginning	11,550,110	11,466,660	816,850	797,527	9,772,523	9,466,650	3,288,826	3,175,699	681,119	676,825
<b>TPL - Ending (a)</b>	<b>\$12,359,673</b>	<b>\$11,550,110</b>	<b>\$895,433</b>	<b>\$816,850</b>	<b>\$10,740,325</b>	<b>\$9,772,523</b>	<b>\$3,613,308</b>	<b>\$3,288,826</b>	<b>\$734,157</b>	<b>\$681,119</b>
<b>Plan Net Position</b>										
Contributions - Employers	\$521,692	\$296,836	\$28,536	\$11,671	\$298,565	\$324,231	\$108,072	\$115,240	31,990	\$20,279
Contributions - Members	104,605	97,487	13,207	12,546	140,311	128,568	47,693	43,722	5,244	5,076
Net Investment Income	44,569	337,922	8,701	80,724	110,569	895,531	37,104	288,490	3,427	40,374
Benefit Payments	(905,790)	(889,936)	(56,774)	(54,321)	(615,335)	(582,850)	(200,134)	(189,635)	(54,766)	(53,026)
Administrative Expense	(10,474)	(11,145)	(844)	(898)	(18,212)	(18,615)	(1,289)	(1,721)	(201)	(215)
Refunds of Contributions	(13,552)	(13,627)	(2,609)	(2,830)	(13,524)	(14,286)	(3,111)	(2,665)	(85)	(213)
Other	8,442	-	767	-	10,280	-	2,865	-	646	-
Net Change in Plan Position	(250,508)	(182,463)	(9,016)	46,892	(87,346)	732,579	(8,800)	253,431	(13,745)	12,276
Plan Net Position - Beginning	2,578,290	2,760,753	561,484	514,592	6,528,146	5,795,568	2,087,002	1,833,571	260,974	248,698
<b>Plan Net Position - Ending (b)</b>	<b>\$2,327,782</b>	<b>\$2,578,290</b>	<b>\$552,468</b>	<b>\$561,484</b>	<b>\$6,440,800</b>	<b>\$6,528,147</b>	<b>\$2,078,202</b>	<b>\$2,087,002</b>	<b>\$247,229</b>	<b>\$260,974</b>
<b>Net Pension Liability - Ending (a-b)</b>	<b>\$10,031,891</b>	<b>\$8,971,820</b>	<b>\$342,965</b>	<b>\$255,366</b>	<b>\$4,299,525</b>	<b>\$3,244,376</b>	<b>\$1,535,106</b>	<b>\$1,201,824</b>	<b>\$486,928</b>	<b>\$420,145</b>
Ratio of Plan Net Position to TPL	18.83%	22.32%	61.7%	68.74%	59.97%	66.80%	57.52%	63.46%	33.68%	38.32%
Covered Employee Payroll	\$1,544,234	\$1,577,496	\$128,680	\$129,076	\$2,296,716	\$2,272,270	\$483,641	\$479,164	\$45,765	\$44,616
Net Pension Liability as a percentage of Covered Employee Payroll	649.64%	568.74%	266.53%	197.84%	187.2%	142.78%	317.41%	250.82%	1,063.97%	941.69%

# Additional Supporting Schedules

## Schedule of Administrative Expenses (in Thousands) for the fiscal years ended June 30

Expense	2015	2014
<b>Personnel</b>		
Salaries and Per Diem	\$14,292	\$13,869
Fringe Benefits	8,687	6,899
Tuition Assistance	34	33
<b>Total Personnel</b>	<b>\$23,013</b>	<b>\$20,801</b>
<b>Contractual Services</b>		
Actuarial	337	521
Audit	108	76
Healthcare	3	257
Legal Counsel	722	1,787
Medical	315	258
Miscellaneous	269	312
<b>Total Contractual Services</b>	<b>\$1,754</b>	<b>\$3,211</b>
<b>Communication</b>		
Printing	81	359
Telephone	105	123
Postage	300	545
Travel	116	159
<b>Total Communication</b>	<b>\$602</b>	<b>\$1,186</b>
<b>Rentals</b>		
Office Space	718	706
Equipment	76	84
<b>Total Rentals</b>	<b>\$794</b>	<b>\$790</b>
<b>Internal Audit</b>		
Travel/Conferences	\$4	\$4
Dues/Subscriptions	1	1
Miscellaneous	1	-
<b>Total Internal Audit</b>	<b>\$6</b>	<b>\$5</b>

Expense	2015	2014
<b>Investments - Pension Fund</b>		
Travel/Conferences	37	61
Dues/Subscriptions	8	34
Computer	21	169
Contractual*	225	1,490
Miscellaneous	7	7
Legal	126	449
<b>Total Investments</b>	<b>\$424</b>	<b>\$2,210</b>
<b>Miscellaneous</b>		
Utilities	223	225
Software	1,746	2,268
Supplies	116	122
Insurance	82	67
Dues & Subscriptions	47	47
Maintenance	4	6
Other	20	21
<b>Total Miscellaneous</b>	<b>\$2,238</b>	<b>\$2,756</b>
Depreciation/Amortization	2,189	1,634
<b>Total Pension Fund Administrative Expenses</b>	<b>\$31,020</b>	<b>\$32,593</b>
Healthcare Fees	2,180	1,614
<b>Total Insurance Fund Administrative Expenses</b>	<b>\$2,180</b>	<b>\$1,614</b>
<b>Total Administrative Expenses</b>	<b>\$33,200</b>	<b>\$34,207</b>

\* These fees are paid by the Trust instead of the Administrative Budget to calculate Tier 3 GANIR benefits as required under Senate Bill 2.



## Schedule of Direct Investment Expenses *(in Thousands)* for the fiscal years ended June 30

Pension Funds	2015	2014
<b>Security Lending Fees</b>		
↘ Broker (Income) Rebates	\$(159)	\$(433)
↘ Lending Agent Fees	444	675
<b>Total Security Lending</b>	<b>285</b>	<b>242</b>
<b>Contractual Services</b>		
↘ Investment Management	53,411	42,867
↘ Security Custody	1,010	2,763
↘ Investment Consultant	1,258	-
↘ Private Equity Performance Fees	25,627	-
↘ Investment Related Travel	34	54
↘ Software	21	169
↘ Dues & Subscriptions	8	34
↘ Conferences	3	7
↘ Miscellaneous	7	7
↘ Legal Counsel	126	449
<b>Total Contractual Services</b>	<b>\$81,505</b>	<b>\$46,350</b>
<b>Insurance Funds</b>		
<b>Security Lending Fees</b>		
↘ Broker (income) Rebates	(336)	(112)
↘ Lending Agent Fees	155	222
<b>Total Security Lending</b>	<b>(181)</b>	<b>110</b>
<b>Contractual Services</b>		
↘ Investment Management	18,661	14,896
↘ Security Custody	675	765
↘ Investment Consultant	448	-
↘ Private Equity Performance Fees	8,200	-
<b>Total Contractual Services</b>	<b>27,984</b>	<b>15,661</b>
<b>Total Investment Expenses</b>	<b>\$109,593</b>	<b>\$62,363</b>

## Schedule of Professional Consultant Fees *(in Thousands)* for the fiscal years ended June 30

Fees	2015	2014
Actuarial Services	\$337	\$521
Medical Review Services	315	258
Audit Services	108	76
Legal Counsel	722	1,787
Healthcare	3	257
Miscellaneous	269	312
<b>Total</b>	<b>\$1,754</b>	<b>\$3,211</b>



## REPORT ON INTERNAL CONTROL

*over financial reporting and on compliance and other matters based  
on an audit of financial statements performed in accordance with  
government auditing standards*



## REPORT OF INDEPENDENT AUDITORS

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Board of Trustees  
Kentucky Retirement Systems  
Frankfort, Kentucky

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards issued by the Comptroller General of the United States, the combining financial statements of the Pension Funds and Insurance Fund of the Kentucky Retirement Systems (KRS) as of and for the fiscal year ended June 30, 2015, and the related notes to the combining financial statements, which collectively comprise KRS' basic combining financial statements, and have issued our report thereon dated **December 3, 2015**.

### Internal Control Over Financial Reporting

In planning and performing our audit of the combining financial statements, we considered KRS' internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the combining financial statements, but not for the purpose of expressing an opinion on the effectiveness of KRS' internal control. Accordingly, we do not express an opinion on the effectiveness of KRS' internal control.

*A deficiency in internal control* exists when the design or operation of a control does not allow management or employees in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.





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Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that were not identified. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

### **Compliance and Other Matters**

As part of obtaining reasonable assurance about whether KRS' combining financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of combining financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

### **Purpose of this Report**

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the result of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Governmental Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

*Dean Dotson Allen Ford, PLLC*

December 3, 2015  
Lexington, Kentucky



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## INVESTMENT

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# STMENT

Fed  
Federal Reserve

MBS  
Mortgage  
Backed  
Securities

GDP  
Gross Domestic  
Product

# U.S. Economy Getting Stronger

## ...will it be dragged down by economic weakness worldwide?

***In a world starved for economic growth, the United States continues to be one of the few bright spots.*** As such, investors continue to look favorably upon U.S. private and public equity markets as well as real estate. The U.S. stock market provided a solid return for the fiscal year, evidenced by the Russell 3000 Index return of 7.29%; however, this was a drop off from the prior two fiscal years. For the second year in a row, a colder and snowier than normal winter took its toll on economic growth as GDP growth for the first quarter of 2015 was measured at a modest 0.80% annualized pace. The other three quarters of the fiscal year fared much better providing annualized growth rates ranging from 2.02% to 4.47%. Job creation during the fiscal year was promising with all but two months adding over 200,000 jobs to the no-farm payrolls; March and April were the dissenters, perhaps influenced by winter. Along with an improved economy comes an improved U.S. housing market to match an already performing commercial real estate segment. Private equity investors continue to take advantage of the liquidity in the capital markets and the strong U.S. public equity markets to exit deals and harvest gains.

During the fiscal year, several geopolitical and macro events occurred pointing to a struggling global economy. One of the few bright spots outside of the U.S. was found in the European economy which is no longer shrinking, but experiencing modest growth (2.0%). Stock prices in Europe have improved on the backs of an improving economy and continued support in the form of quantitative easing by the EU Central Bank; however, a decreasing Euro versus the USD has offset any local gains for U.S. investors, a phenomenon that has echoed across the global landscape. Greece continued to affect the world stock markets as it worked through its debt problems and fears of contagion persisted. In an attempt to fight its way out of a twenty-five year deflationary environment, Japan's central bank pumped an unprecedented amount of liquidity into its economy. There is some hope that this act will be successful as some early signs that it is working emerge. The first and last quarters of the fiscal year had slightly negative GDP growth; however, the quarter ending March 2015, was extremely robust evidence by an annualized GDP growth rate of 4.47%. Japan continues to have other problems to overcome such as an aging population, and the effects of such on the economy.

During the fiscal year, China reported strong positive annualized GDP growth that fell from 7.5% during the first quarter of FY15 to 5.0% for the quarter ending March 2015. While this is still fantastic growth, world markets has become accustomed to China growing at 7% to 10% instead of 5% to 7%. Some debate exists as to whether China is experiencing a property bubble, and if so, to what extent and affects, if any, it may have on the overall economy. Additionally, as it relates to property values in China; there is some speculation that their banking system, specifically those like the U.S. community and regional banks, may be under stress associated with overbuilding. Last year China's A-shares (stocks traded on the Shanghai Stock Exchange versus H-shares traded on the Hong Kong exchange) dropped by 50% in value after the stock market had been

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artificially pushed up by day traders and extreme levels of leverage, not too different than an environment best describe as the U.S. stock market pre-1929 and pre dot-com bust rolled into one. China has an extremely difficult task of stimulating growth without further fueling these bubbles that have developed.

As China's economy transitions from one of an infrastructure build-out to one more consumer driven, its consumption (ie. demand) for commodities of all types has slowed, and as a major consumer of such has led to a significant decline in commodity values. Further pressuring commodity prices, the Federal Reserve completed the quantitative easing program, which led to a drop in inflation expectations and a drop in inflation sensitive assets. This added pressure to the already strengthening U.S. Dollar, which when combined with falling commodity prices, has really stressed emerging market economies; as a result, emerging market equities were the worst performing asset class in the 2015 fiscal year, followed by real return strategies (i.e. inflation sensitive assets). Because many emerging economies are so dependent on the commodity and agricultural markets continued headwinds are forecasted until global demand recovers. While the emerging nations are expected to struggle in the near-term, developed nations are showing signs of recovery and modest growth.

Global Fixed Income was not a meaningful contributor to performance this year. The fiscal year started poorly for credit sensitive fixed income due to the sell-off in oil, which led to a decrease in the price of bonds issued by any energy related company. Energy companies made up approximately 20% of high yield indices, heavily influencing their performance for the year. Credit sensitive fixed income recovered in the second half of the fiscal year, but not enough so to push the sector into positive territory for the year. U.S. interest rate sensitive fixed income securities started the year strong as interest rates decreased during the first half of the fiscal year, but as rates began to increase during the second part of the year, the environment became more challenging and ultimately dampening the return of the Barclays Aggregate (1.86%). As other developed nations pursue efforts to recover, quantitative easing has the effect of lowering local interest rates (Eurozone / Japan), which is positive for prices, but decreases the value of currencies. As foreign currencies decline in value versus the USD, it becomes less attractive for U.S. investors outside of their home country, as investments lose "real" value due to currency translation. After factoring in a stronger dollar versus other currencies it was not positive to be invested outside the U.S. for the year. Finally, Emerging Market Debt had another tough year, making this the third year in a row, for all the same reasons mentioned above for Emerging Market Equities.

To sum up, the U.S. has been in recovery for some time now. Europe continues to struggle to get a foothold witnessed by modest growth, while emerging countries are left wanting. A global economy starved for growth is turning to the U.S. as its safe haven to pull the rest of the world along. It remains to be seen who will influence whom.





## INVESTMENT SUMMARY

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The Board of Trustees is charged with the responsibility of investing the Systems' assets to provide for the benefits of the members of the Systems. To achieve that goal, the Board follows a policy of thoughtfully growing our asset base while protecting against undue risk and losses in any particular investment area. The Board recognizes its fiduciary duty not only to invest the funds in compliance with the Prudent Person Rule, but also to manage the funds in continued recognition of the basic long term nature of the Systems. In carrying out their fiduciary duties, the Trustees have set forth clearly defined investment policies, objectives and strategies for both the pension and insurance portfolios.

**Investment Policy** The KRS Board of Trustees approved a new target asset allocation beginning July 1, 2011. As of June 30, 2015, the KRS Pension fund's policy allocation invests 20.5% of the assets in U.S. equities, 20.0% in broad market international equities, 2.9% in emerging market equities, 9.6% in core fixed income, 4.8% in high yield fixed income, 4.9% in global fixed income, 10.0% in private equity, 10.0% in real return strategies, 10.0% in absolute return strategies, 4.5% in real estate, and 2.8% in cash or short-term securities. As of June 30, 2015, the KRS Insurance fund's policy allocation invests 20.0% of the assets in U.S. equities, 20.0% in broad market international equities, 4.0% in emerging market equities, 10.0% in core fixed income, 5.0% in high yield fixed income, 5.0% in global fixed income, 10.0% in private equity, 10.0% in real return strategies, 10.0% in absolute return strategies, 5.0% in real estate, and 1.0% in cash or short-term securities.

## INVESTMENT STRATEGIES

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### Diversification

KRS portfolios are diversified on several levels. Portfolios are diversified through the use of multiple asset classes. Asset allocations are revisited on a periodic basis and represent an efficient allocation to achieve overall return and risk characteristics. The individual asset classes are diversified through the use of multiple portfolios that are managed both by the Investment Division Staff and by external investment advisors. Finally, portfolios within each of the asset classes are diversified through both investment styles and the selection of individual securities. Each portfolio advisor is afforded discretion to diversify its portfolio(s) within the parameters established by the Board of Trustees.

### Rebalancing

Proper implementation of the investment policy requires that a periodic adjustment, or rebalancing, of assets be made to ensure conformance with KRS' Statement of Investment Policy target levels. Such rebalancing is necessary to reflect sizeable cash flows and performance imbalances among asset classes and investment advisors. KRS' rebalancing policies call for an immediate rebalancing to within its allocation ranges, if an asset class exceeds or falls below its target allocation by an appropriate percentage defined in the investment Policy Statement. As the following charts depict, the Pension and Insurance portfolios were operating within the ranges established by the investment policies.

### Investments Performance Review Procedures

At least once each quarter, the Investment Committee, on behalf of the Board of Trustees, reviews the performance of the portfolio for determination of compliance with the Statement of Investment Policy. The Investment Committee also reviews a report created and presented by the KRS Compliance Officer, who is part of the independent Internal Audit Department. The Compliance Officer performs tests daily, monthly, and quarterly to assure compliance with the restrictions imposed by the Investment Policy.

### Investment Consulting

The Board employs industry leading external consultants to assist in determining and reviewing the asset allocation guidelines and the performance of both the internally managed and externally managed assets. A letter from each consulting firm utilized follows this introduction and discusses current allocations, performance, and significant changes during the fiscal year.

### Investment Policies

Visit <https://kyret.ky.gov/investments>

to read our Statement of Investment policy. Other policies include Brokerage, Securities Trading, Placement Agents, Proxy Voting and more.



## Investing in Kentucky

In keeping with the Board of Trustees' fiduciary responsibility, where all else equal, the Board encourages the investment of the Systems' assets in securities of corporations that provide a positive contribution to the economy of the Commonwealth of Kentucky.



## INVESTMENT OBJECTIVES

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The investment objectives of the portfolios are to produce results that exceed the stated goals over both short-term and long-term periods.

**Shorter-Term** (*5 years and less*): The returns of the particular asset classes of the managed funds of the Systems, measured on a year-to-year basis, should exceed the returns achieved by a policy benchmark portfolio composed of comparable unmanaged market indices.

**Medium-Term** (*5 to 30 years*): The returns of the particular asset classes of the managed funds of the Systems, measured on a rolling year basis, should exceed the returns achieved by a policy benchmark portfolio composed of comparable unmanaged market indices and perform above median in an appropriate peer universe, if there is one.

**Longer-Term**: The total assets of the Systems should achieve a return measured over 30 to 40 years which exceeds the actuarially required rate of return of 7.75% while also exceeding the return achieved by its total fund benchmark. (Note: The actuarially required rate of return has been lowered to 7.5% effective July 1, 2015.)

In keeping with the Board of Trustees' fiduciary responsibility, where all else equal, the Board encourages the investment of the Systems' assets in securities of corporations that provide a positive contribution to the economy of the Commonwealth of Kentucky.



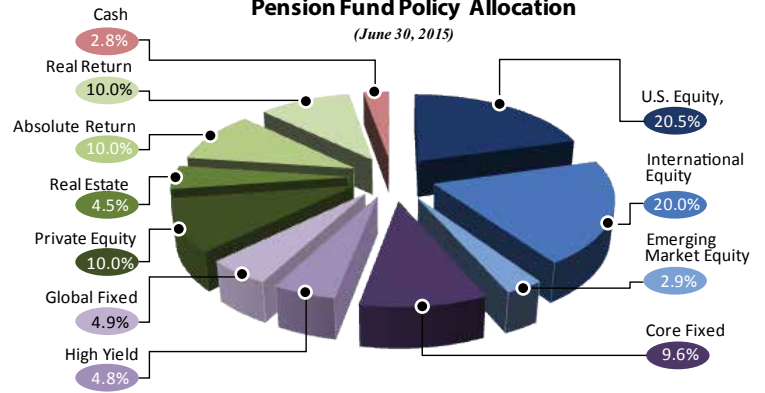


## Asset Allocation Board Policy vs. Actual (Rebalanced)

Asset	Policy's Pension Asset Allocation	Actual Pension Asset Allocation
U.S. Equity	20.5%	20.7%
International Equity	20.0%	20.0%
Emerging Market Equity	2.9%	3.1%
Core Fixed	9.6%	8.6%
High Yield	4.8%	5.0%
Global Fixed	4.9%	5.0%
Private Equity	10.0%	9.6%
Real Estate	4.5%	5.3%
Absolute Return	10.0%	10.7%
Real Return	10.0%	9.7%
Cash	2.8%	2.3%

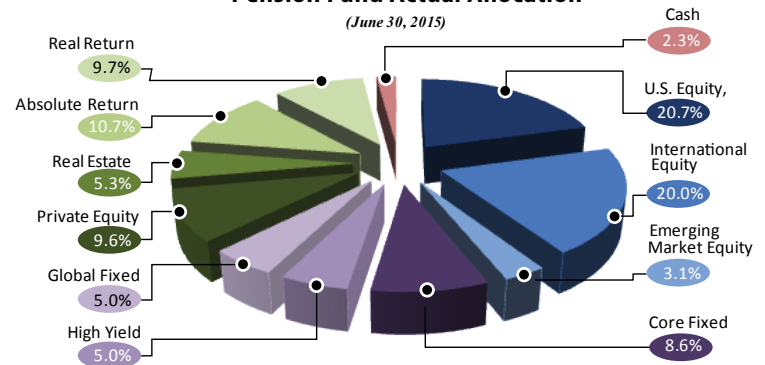
### Pension Fund Policy Allocation

(June 30, 2015)



### Pension Fund Actual Allocation

(June 30, 2015)

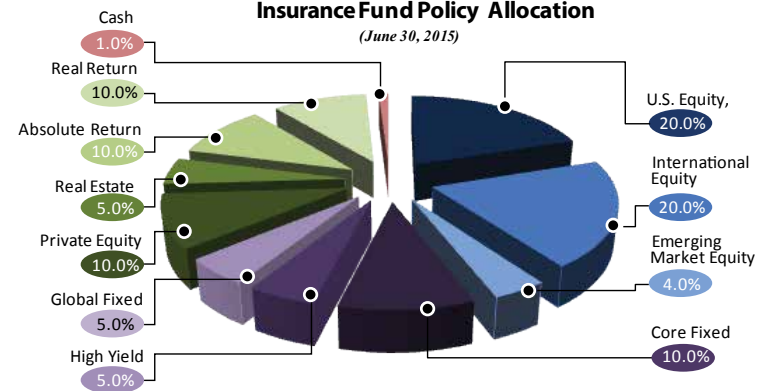


## Asset Allocation Board Policy vs. Actual (Rebalanced)

Asset	Policy's Insurance Asset Allocation	Actual Insurance Asset Allocation
U.S. Equity	20.0%	23.5%
International Equity	20.0%	20.0%
Emerging Market Equity	4.0%	3.9%
Core Fixed	10.0%	9.6%
High Yield	5.0%	4.9%
Global Fixed	5.0%	5.0%
Private Equity	10.0%	6.6%
Real Estate	5.0%	5.4%
Absolute Return	10.0%	10.6%
Real Return	10.0%	9.3%
Cash	1.0%	1.2%

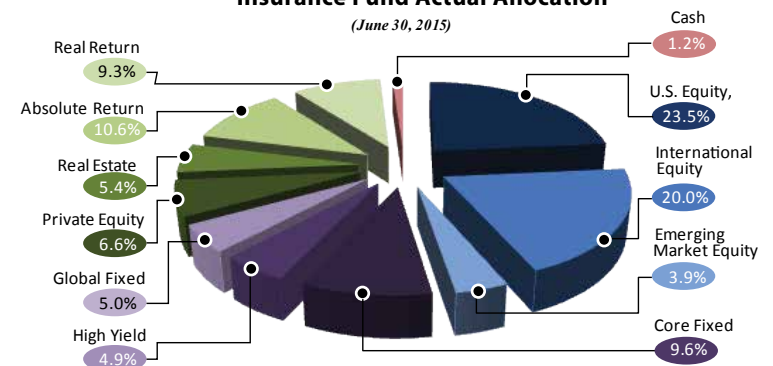
### Insurance Fund Policy Allocation

(June 30, 2015)



### Insurance Fund Actual Allocation

(June 30, 2015)



# Investment Results

Returns reported by KRS are “net”. For the purposes of this report, total fund return information is net of fees and expenses, with audited data beginning in July 2011. At the manager or individual account level, returns are net of fees beginning with July 2011, and gross of fees for prior historical data.

**Fiscal Year 2015 Results** For the fiscal year ended June 30, 2015, the KRS pension fund produced a net return of 2.01%, underperforming its benchmark return of 3.13%, as well as the actuarially required rate of return of 7.75%. It should be noted that the actuarially required rate is an annualized return that may not be met, or possibly greatly surpassed in any given year; this objective has been met over the long-term.

The underperformance of the pension fund can primarily be attributed to relative weak performance in the U.S. and Emerging Market spaces, combined with relative underperformance within several asset classes. Both the overweight to credit versus interest rate sensitive securities within the Fixed Income portfolio and overweight to debt within the Real Estate portfolio hampered performance. The solid absolute returns provided by the Private Equity allocation, combined with the downside protection offered by the Non-US Equity portfolio bolstered returns for the period.

The KRS insurance fund gained 1.86% net of expenses for the fiscal year ending June 30, 2015, compared to the benchmark’s 3.79% return and the actuarially required rate of 7.75%. The insurance fund suffered from the same root causes of underperformance as the pension fund. The slight relative underperformance of the insurance fund versus the pension fund was due primarily to a greater allocation to emerging market equities, a weaker performing asset class, and a lower allocation to private equity, one of the better performing asset classes during the period.

## INVESTMENT RESULTS TABLE

### Pension Fund Total Return<sup>1</sup>

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Total Pension Fund	Apr-84	2.01%	9.32%	9.18%	6.05%	9.35%
Performance Benchmark <sup>2</sup>	-	3.13%	9.64%	9.85%	6.30%	9.49%

### Insurance Fund Total Return<sup>1</sup>

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Total Insurance Fund	Apr-87	1.86%	8.82%	9.33%	5.52%	7.47%
Performance Benchmark <sup>3</sup>	-	3.79%	9.86%	11.09%	6.02%	7.91%

<sup>1</sup>The Performance Calculations presented above were prepared by the Systems’ custodial bank using a time-weighted rate of return methodology based upon the market value of assets.

<sup>2</sup>Current Policy Benchmark is comprised of 20.5% Russell 3000, 20.0% MSCI ACWI ex-US GD, 2.9% MSCI EM GD, 19.3% BC Universal, 10.0% Russell 3000 Quarter Lagged + 400bps, 10.0% HFR FOF: Diversified Lagged, 10.0% CPI + 300bps, 4.5% NCREIF Open-End Diversified Core GR, and 2.8% CG 3-Month US Treasury Bill.

<sup>3</sup>Current Policy Benchmark is comprised of 20.0% Russell 3000, 20.0% MSCI ACWI ex-US GD, 4.0% MSCI EM GD, 20.0% BC Universal, 10.0% Russell 3000 Quarter Lagged + 400bps, 10.0% HFR FOF: Diversified Lagged, 10.0% CPI + 300bps, 5.0% NCREIF Open-End Diversified Core GR, and 1.0% CG 3-Month US Treasury Bill.



**Note:** KRS uses the Modified Dietz Method as its basis for calculations, which is used to determine the performance of an investment portfolio based on a time-weighted cash flow.

## BENCHMARKS

Benchmarks utilized to measure The Kentucky Retirement Systems' Pension and Insurance Funds are a weighted average composite of the various asset class indexes consisting within each KRS' investment portfolio. The Total Fund Benchmarks are shown below:

Total Fund Benchmarks		
Index	Pension Fund	Insurance Fund
Russell 3000	20.5%	20.0%
MSCI ACWI ex US GD	20.0%	20.0%
MSCI Emerging Markets GD	2.9%	4.0%
Barclays Capital US Universal	19.3%	20.0%
Russell 3000 Quarter Lagged + 400 bps	10.0%	10.0%
HFR FOF: Diversified Lagged	10.0%	10.0%
CPI + 300 bps	10.0%	10.0%
NCREIF Open-End Diversified Core GR	4.5%	5.0%
CG 3-Mo U.S. Treasury Bill	2.8%	1.0%

These benchmarks are intended to be objective, measurable, investable, replicable, and representative of the investment mandates. The benchmarks are developed from publicly available information, and accepted by the investment advisor and KRS as the neutral position consistent with the investment mandate and status. KRS' Investment Staff and Consultant recommend the indexes and benchmarks, which are reviewed and approved by the Investment Committee and ratified by the Board of Trustees. It is anticipated that as KRS continues to diversify through other markets and asset classes, both the Pension and Insurance Fund Total Benchmarks will evolve to reflect these exposures.



## LONG-TERM RESULTS

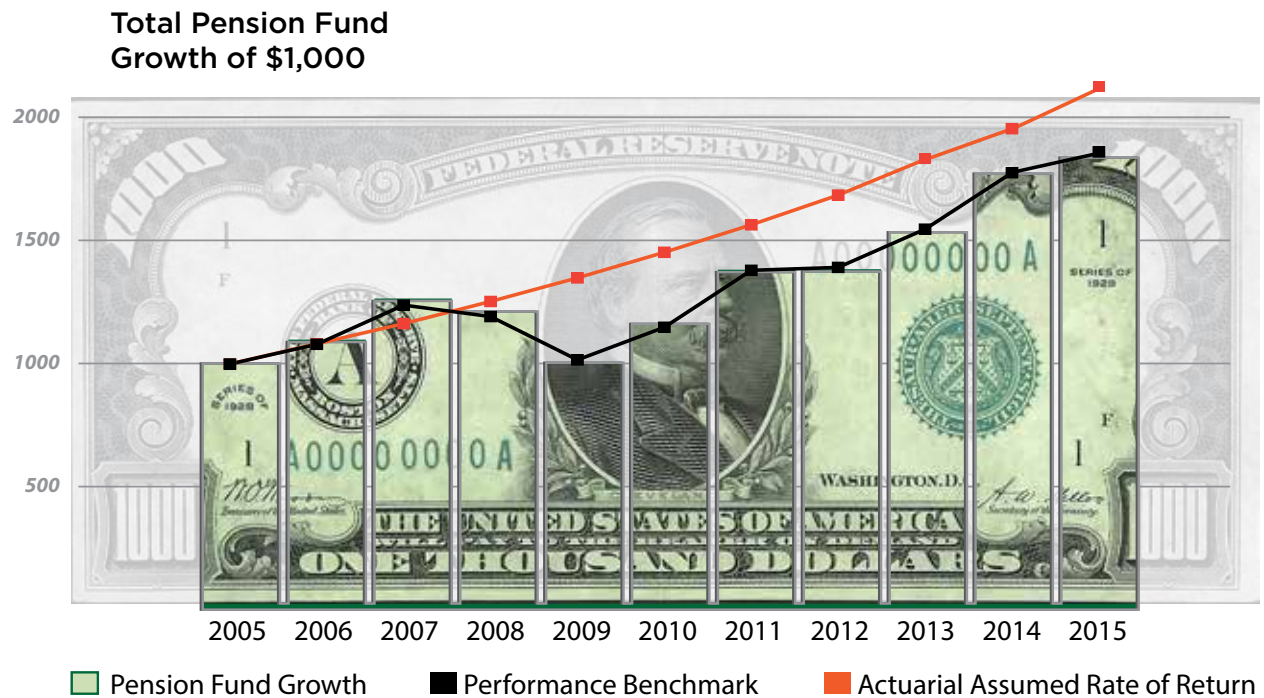
### Long-Term Results:

For the 10-years ending June 30, 2015, the KRS pension fund portfolio earned an annualized total net return of 6.05% versus the benchmark annualized return of 6.30%. Performance is illustrated below in a growth of dollars chart. The graph demonstrates the performance of \$1,000 invested in the KRS pension portfolio, its policy benchmark portfolio, and its actuarial objective over the past 10 years.

As of June 30, 2015, the chart indicates that \$1,000 would have grown to \$1,807, while the same \$1,000 invested in the benchmark or in the actuarial objective would have grown to \$1,842 and \$2,119, respectively.

### Total Pension Fund Growth of \$1,000

Portfolio	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Pension Fund Growth	\$1,000	\$1,097	\$1,264	\$1,211	\$1,003	\$1,161	\$1,381	\$1,383	\$1,533	\$1,771	\$1,807
Performance Benchmark	1,000	1,081	1,242	1,195	1,017	1,151	1,385	1,397	1,554	1,786	1,842
Actuarial Assumed Rate of Return	1,000	1,083	1,166	1,257	1,354	1,459	1,572	1,694	1,825	1,967	2,119





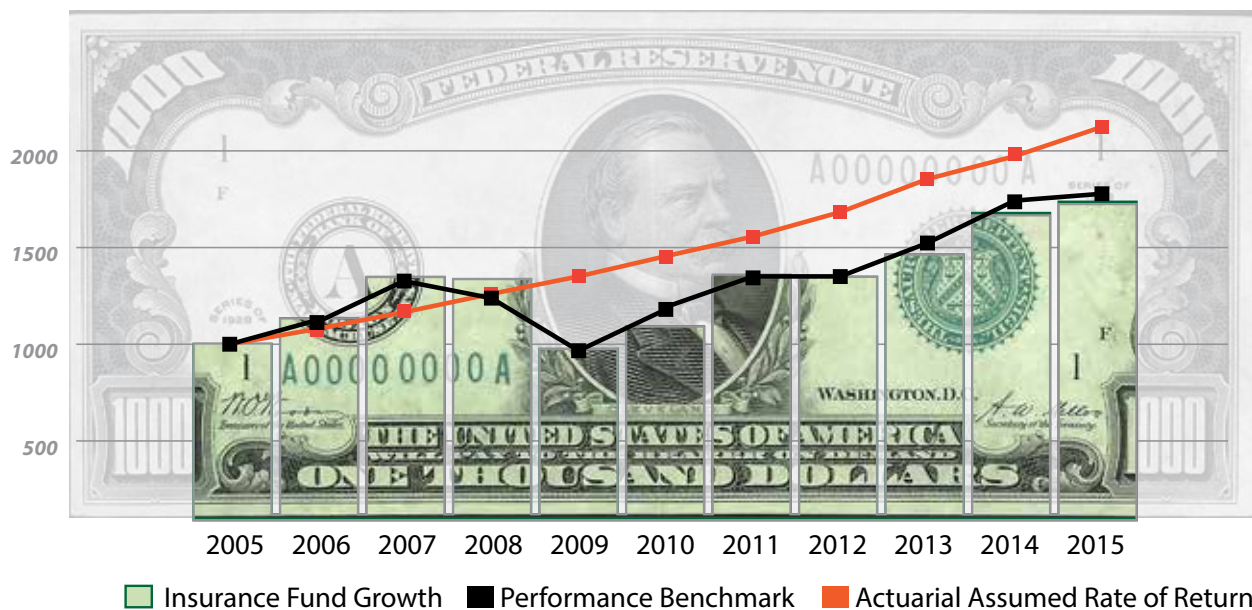
The KRS insurance fund has underperformed its benchmark for the 10-year period ending June 30, 2015, earning 5.52% versus 6.02%. Performance is illustrated by the growth of dollars chart below. The graph highlights the performance of \$1,000 invested in the KRS insurance portfolio (\$1,714), benchmark (\$1,793), and actuarial objective (\$2,119) over the past 10 years.

As the results show in the accompanying insurance charts and table above, the KRS insurance fund has struggled during all measured standard return ranges.

### Total Insurance Fund Growth of \$1,000

Portfolio	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Insurance Fund Growth	\$1,000	\$1,124	\$1,341	\$1,236	\$949	\$1,096	\$1,353	\$1,330	\$1,464	\$1,682	\$1,714
Performance Benchmark	1,000	1,112	1,325	1,219	937	1,060	1,345	1,353	1,502	1,728	1,793
Actuarial Assumed Rate of Return	1,000	1,083	1,166	1,257	1,354	1,459	1,572	1,694	1,825	1,967	2,119

### Total Insurance Fund Growth of \$1,000



# U.S. Equity

For the fiscal year ended June 30, 2015, the KRS pension fund's U.S. equity portfolio posted a return of 6.04%, versus the benchmark return of 7.29%. The KRS insurance U.S. equity portfolio posted a return of 6.28%, compared to the benchmark return of 7.29%.

Since inception performance remains sound; the pension's equity portfolio has generated an annualized return of 11.39% throughout its duration, while the benchmark posted an annualized annual return of 11.37%. The insurance fund has returned 9.53% since inception, while the benchmark returned 9.36%.

The relative performance is best illustrated again by the growth of a dollar chart on page 103. For the 10-year period ending June 30, 2015, the pension fund's chart indicates that \$1,000 would have resulted in \$2,197 while the same \$1,000 invested in the benchmark would result in \$2,187. For the KRS insurance fund, ending June 30, 2015, a \$1,000 investment would be valued at \$2,129, compared to \$2,180 in the benchmark.

**Note:** Returns reported by KRS are "net". For the purposes of this report, total fund return information is net of fees and expenses, with audited data beginning in July 2011. At the manager or individual account level, returns are net of fees beginning with July 2011, and gross of fees for prior historical data.

## Return on U.S. Equity

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Apr-84	6.04%	17.15%	16.90%	8.18%	11.39%
↘ Performance Benchmark <sup>1</sup>	-	7.29%	17.73%	17.52%	8.27%	11.37%
Insurance Fund	Jul-92	6.28%	17.07%	16.72%	7.84%	9.53%
↘ Performance Benchmark <sup>1</sup>	-	7.29%	17.73%	17.42%	8.11%	9.36%
<b>Market Indices</b>						
Russell 1000 (Large Cap)	-	7.37%	17.73%	17.58%	8.13%	-
Russell 2000 (Small Cap)	-	6.49%	17.87%	17.08%	8.40%	-
Russell 3000 (Total Equity)	-	7.29%	17.73%	17.54%	8.15%	-

<sup>1</sup> Pension and Insurance benchmark is the Russell 3000; effective July 1, 2011.

## Top 10 U.S. Equity Holdings Pension Fund

Company	Shares	Market Value
APPLE INC COM STK	528,667	\$66,308,058
MICROSOFT CORP COM	728,616	32,168,396
JP MORGAN CHASE & CO.	386,103	26,162,339
EXXON MOBIL CORP COM	293,517	24,420,614
JOHNSON & JOHNSON	217,109	21,159,443
WELLS FARGO & CO	363,661	20,452,295
PFIZER INC COM	596,584	20,003,462
COMCAST	326,729	19,649,482
BERKSHIRE HATHAWAY INC	143,057	19,471,488
CITIGROUP	351,406	19,411,667

**Total** 3,935,449 \$269,207,244

## Top 10 U.S. Equity Holdings Insurance Fund

Company	Shares	Market Value
APPLE INC COM STK	214,619	\$26,918,588
MICROSOFT CORP COM	272,446	12,028,491
EXXON MOBIL CORP COM	136,391	11,347,731
JOHNSON & JOHNSON	102,559	9,995,400
WELLS FARGO & CO	172,889	9,723,277
JPMORGAN CHASE & CO	140,409	9,514,114
GENERAL ELECTRIC CO	328,685	8,733,160
BERKSHIRE HATHAWAY INC	59,493	8,097,592
FACEBOOK INC	80,915	6,939,675
PROCTOR & GAMBLE CO/THE	88,500	6,924,240

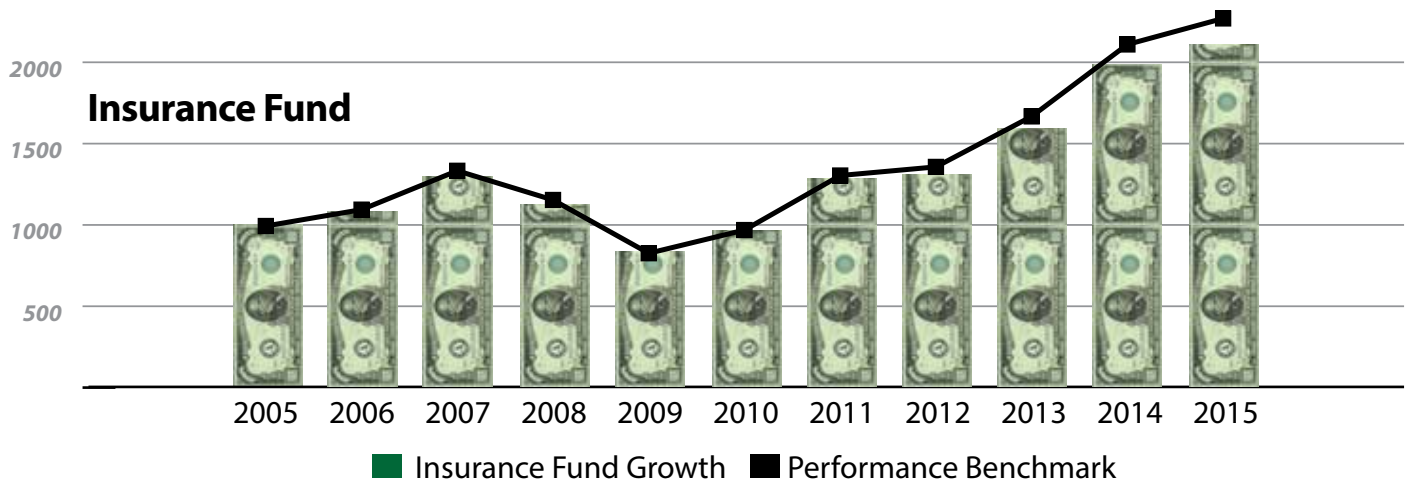
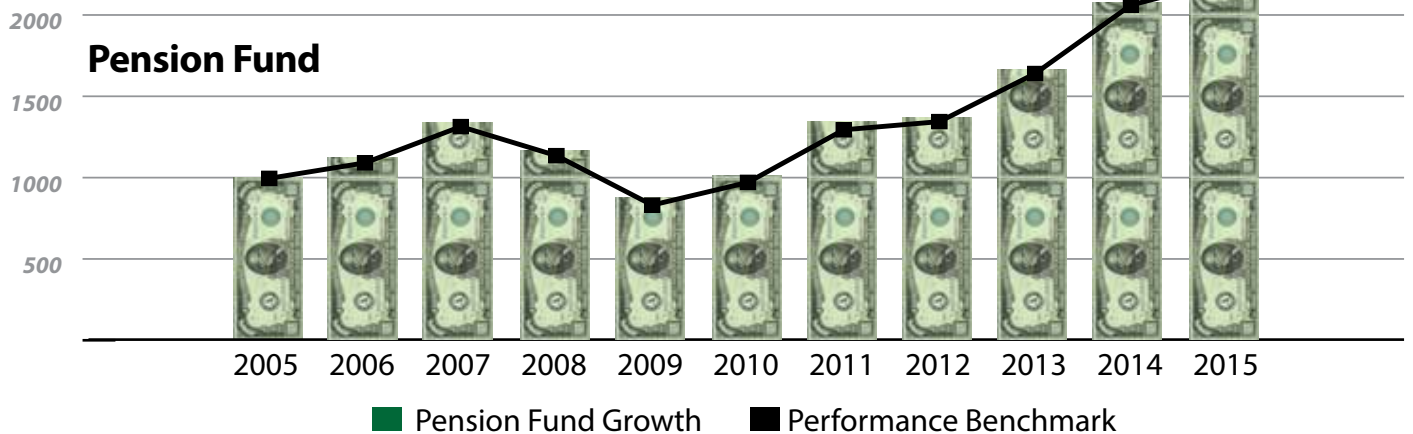
**Total** 1,596,906 \$110,222,268



## GROWTH OF \$1,000 - U.S. Equity

### U.S. Equity Portfolio Growth of \$1,000

Portfolio	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Pension Fund Growth	\$1,000	\$1,119	\$1,335	\$1,163	\$875	\$1,006	\$1,338	\$1,367	\$1,660	\$2,072	\$2,197
↘ Performance Benchmark	1,000	1,093	1,310	1,136	840	976	1,291	1,340	1,628	2,038	2,187
Insurance Fund Growth	1,000	1,098	1,315	1,144	857	982	1,301	1,327	1,610	2,003	2,129
↘ Performance Benchmark	1,000	1,093	1,314	1,148	845	977	1,287	1,336	1,623	2,032	2,180



# International Equity

For the fiscal year ended June 30, 2015, the KRS pension fund's international equity portfolio fell -3.99%, compared to its benchmark of -4.85%, providing 86 basis points of downside protection. The KRS insurance international equity portfolio returned -4.17% versus its benchmark of -4.85% during the same twelve month period. As the accompanying table indicates, though international equities experienced negative absolute returns during the fiscal year, both funds experience positive relative outperformance.

International equity investors have experienced a volatile period of returns over the past several years, resulting in a chart that resembles a roller coaster (below). Over the past five years both funds have underperformed their respective benchmarks. The KRS Pension and Insurance funds have posted annualized returns for the period of 6.85% and 6.32% respectively, compared to respective benchmark returns of 8.35% and 8.29%. The Systems began their international equity program in 2000. Since inception, the pension international equity portfolio has underperformed the benchmark, while the insurance international equity portfolio has outperformed the benchmark.

## Return on International Equity

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Jul-00	-3.99%	10.62%	6.85%	5.35%	2.56%
↘ Performance Benchmark <sup>1</sup>	-	-4.85%	9.92%	8.35%	5.46%	3.13%
Insurance Fund	Apr-00	-4.17%	10.38%	6.32%	5.40%	2.57%
↘ Performance Benchmark <sup>1</sup>	-	-4.85%	9.92%	8.29%	5.10%	2.12%
<b>Market Indices</b>						
MSCI ACWI Ex US	-	-4.85%	9.92%	8.23%	6.01%	-
MSCI Emerging Markets	-	-4.77%	4.08%	4.03%	8.46%	-

<sup>1</sup>Pension and Insurance benchmark is the MSCI ACWI ex-US; effective July 1, 2011.

## Top 10 International Equity Holdings Pension Fund

Company	Shares	Market Value
ROCHE HLDGS AG	84,599	\$23,717,231
SYMRISE AG	300,671	18,649,875
SHIRE PLC	203,823	16,332,146
RECKITT BENCKISER	181,064	15,627,593
WHITEBREAD PLC	190,394	14,809,939
ADECCO S/A	168,213	13,661,513
VALEO SA	80,221	12,634,179
KEYENCE CORP	23,300	12,578,743
TOTAL SA	256,011	12,428,232
PANDORA A/S	114,788	12,326,942
<b>Total</b>	<b>1,603,084</b>	<b>\$152,766,393</b>

## Top 10 International Equity Holdings Insurance Fund

Company	Shares	Market Value
ROCHE HLDGS AG	32,400	\$9,083,302
SYMRISE AG NPV	110,913	6,879,658
SHIRE PLC	75,733	6,068,414
RECKITT BENCKISER	67,284	5,807,267
WHITEBREAD PLC	69,001	5,367,293
ADECCO S/A	63,205	5,133,2299
KEYENCE CORP	8,700	4,696,784
VALEO SA	29,704	4,678,147
ACCOR SA	92,203	4,650,704
PANDORA A/S	42,964	4,613,851
<b>Total</b>	<b>592,107</b>	<b>\$56,978,649</b>



## GROWTH OF \$1,000 - Non U.S. Equity

The following chart depicts the growth of \$1,000 invested in the KRS international equity portfolios and the blended benchmarks since the beginning of the 2005 fiscal year. For the KRS pension fund, ending June 30, 2015, \$1,000 would have resulted in \$1,705, while the same amount invested in the benchmark would have resulted in \$1,702. For the KRS insurance fund, ending June 30, 2015, \$1,000 would have grown to \$1,711, while an investment in the index would have been valued at \$1,674.

### International Equity Portfolio Growth of \$1,000

Portfolio	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Pension Fund Growth	\$1,000	\$1,265	\$1,574	\$1,423	\$1,052	\$1,179	\$1,522	\$1,259	\$1,467	\$1,776	\$1,705
▾ Performance Benchmark	1,000	1,271	1,621	1,454	1,027	1,140	1,493	1,282	1,463	1,789	1,702
Insurance Fund Growth	1,000	1,275	1,583	1,484	1,087	1,205	1,546	1,273	1,476	1,786	1,711
▾ Performance Benchmark	1,000	1,271	1,621	1,454	1,027	1,124	1,468	1,260	1,439	1,759	1,674

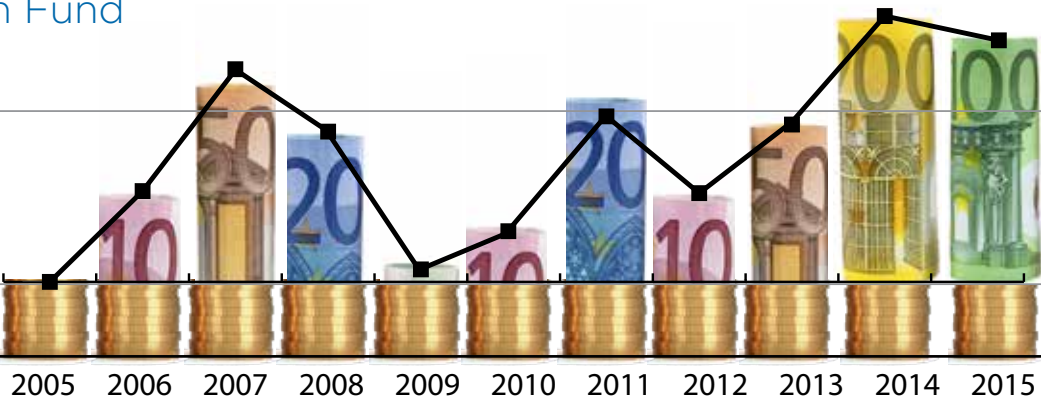
*a The non-U.S. equity portfolio included emerging market equity exposure from 03/31/08 through 06/30/11.*

*In addition, the non-U.S. equity portfolio growth chart includes the currency overlay for the 2012 fiscal year; in prior years the currency overlay program was only included at the total fund level. The Systems no longer employ a currency overlay mandate.*

2000

### Pension Fund

1500  
1000

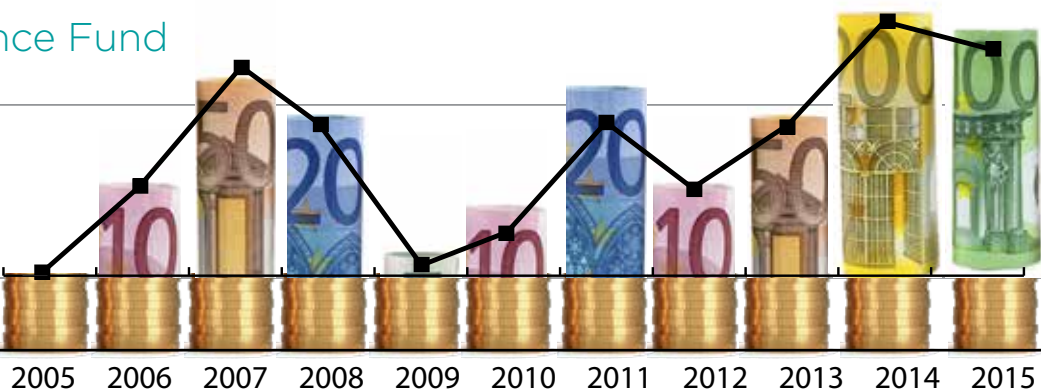


■ Pension Fund Growth ■ Performance Benchmark

2000

### Insurance Fund

1500  
1000



■ Insurance Fund Growth ■ Performance Benchmark



# Fixed Income

For the fiscal year ended June 30, 2015, the KRS pension fund's fixed income portfolio returned 1.44%, opposed to the benchmark return of 1.61%. As the accompanying table indicates, both of the broad market indices, the Barclays Aggregate Index and the Barclays US Universal Index, posted moderate returns for the twelve month period ending June 30, 2015, while the Barclays High Yield Index provided slightly negative returns. The KRS insurance fixed income portfolio posted a 0.16% rate of return, which underperformed the index by 145 basis points.

Over the five year period, the pension fund has outpaced the benchmark by 117 basis points, while the insurance fund has added 35 basis points annually over its index. Over the ten year period, the pension fund has edged the benchmark by 28 basis points, while the insurance fund has outperformed its benchmark by 27 basis points.

The chart on the following page shows the growth of \$1,000 invested in KRS fixed income portfolio over the past ten years. For the KRS pension fund, ending June 30, 2015, \$1,000 would have grown to \$1,606, while the same \$1,000 invested in the benchmark would have grown to \$1,569. For the KRS insurance fund, ending June 30, 2015, \$1,000 would have grown to \$1,701, more than the \$1,653 of the benchmark.

## Return on Fixed Income

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Apr-84	1.44%	3.70%	5.02%	4.88%	7.82%
↘ Performance Benchmark <sup>1</sup>	-	1.61%	2.33%	3.85%	4.60%	7.54%
Insurance Fund	Jul-92	0.16%	3.01%	4.65%	4.91%	6.62%
↘ Performance Benchmark <sup>1</sup>	-	1.61%	2.33%	4.30%	4.64%	6.46%
<b>Market Indices</b>						
BC Aggregate	-	1.86%	1.83%	3.35%	4.44%	-
BC Corporate High Yield	-	-0.40%	6.81%	8.61%	7.89%	-
BC U.S. Universal	-	1.61%	2.33%	3.81%	4.68%	-

<sup>1</sup>Pension and Insurance benchmark is the Barclays US Universal; effective July 1, 2011.

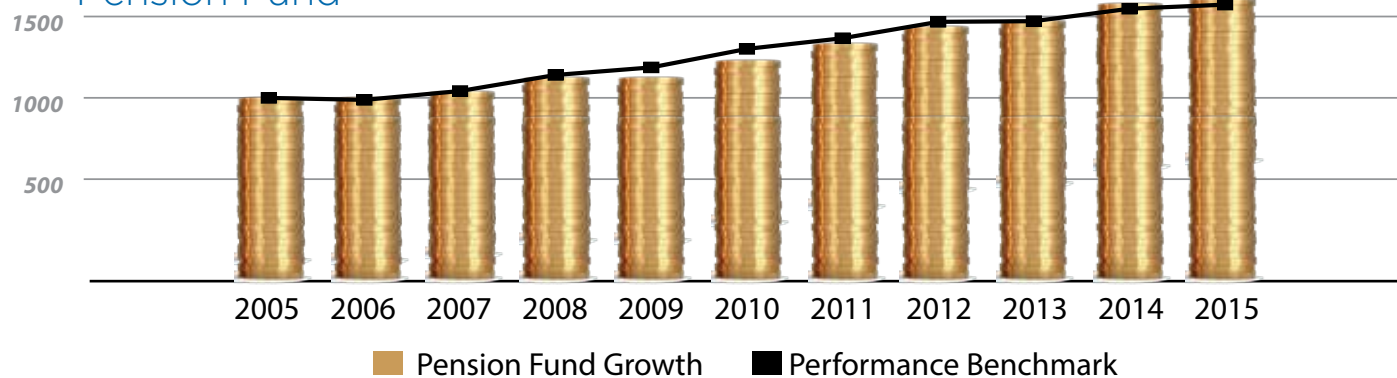
## GROWTH OF \$1,000 - Fixed Income

### Fixed Income Portfolio Growth of \$1,000

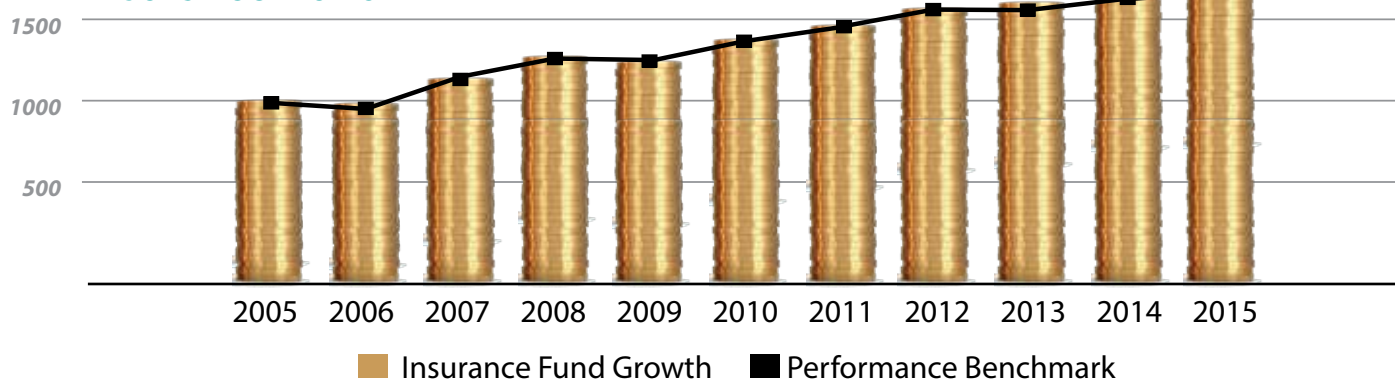
Portfolio	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Pension Fund Growth	\$1,000	\$988	\$1,045	\$1,129	\$1,123	1,256\$	\$1,333	\$1,441	\$1,479	\$1,584	\$1,606
↘ Performance Benchmark	1,000	988	1,042	1,140	1,186	1,299	1,364	1,464	1,468	1,544	1,569
Insurance Fund Growth	1,000	985	1,136	1,245	1,232	1,349	1,439	1,556	1,595	1,698	1,701
↘ Performance Benchmark	1,000	984	1,132	1,240	1,226	1,343	1,437	1,543	1,546	1,627	1,653

*a The fixed income portfolio included US TIPS exposure prior to the 2012 fiscal year; the exposure was moved to the real return asset class as part of the new asset allocation rebalance that took place effective 07/01/12. A separate growth of a dollar chart for the real return asset class will be produced once the Systems have experienced a sufficient history (5 years) within the space.*

## Pension Fund



## Insurance Fund



### Top 10 Fixed Income Holdings Pension Fund

Company	Par Value	Market Value
EB TEMP IVN FD VAR RT 12/31/49 FEE CL 12	\$46,772,039	\$79,201,891
CERBERUS KRS LEVERED LOAN OPP	66,949,843	66,949,843
U S TREASURY NOTE 3.250% 12/31/2016 DD 12/31/09	19,150,000	19,941,431
U S TREASURY NOTE 1.500% 10/31/2019 DD 10/31/14	18,490,000	18,500,114
U S TREASURY NOTE 1.625% 12/31/2019 DD 12/31/14	15,330,000	15,393,482
U S TREASURY NOTE 0.875% 12/31/2016 DD 12/31/11	15,040,000	15,128,119
LOOMIS SAYLES FULL DISCRETION INSTITUTIONAL SECURITIZED FUND	1,279,044	14,581,098
U S TREASURY NOTE 1.500% 01/31/2022 DD 01/31/15	14,300,000	13,844,188
FHLMC POOL #G0-8620 3.500% 12/01/2044 DD 12/01/14	13,265,561	13,662,334
U S TREASURY NOTE 1.250% 10/31/2019 DD 10/31/12	12,590,000	12,476,891
<b>Total</b>	<b>\$223,166,487</b>	<b>\$269,679,391</b>

### Top 10 Fixed Income Holdings Insurance Fund

Company	Par Value	Market Value
STONE HARBOR EM MKT DEBT- INS	\$4,280,481	\$44,003,345
CERBERUS KRS LEVERED LOAN OPP	28,692,790	28,692,790
EB TEMP IVN FD VAR RT 12/31/49 FEE CL 12	6,952,792	22,660,392
U S TREASURY NOTE 0.875% 12/31/2016 DD 12/31/11	9,445,000	9,510,397
U S TREASURY NOTE 1.625% 12/31/2019 DD 12/31/14	8,375,000	8,409,681
U S TREASURY NOTE 0.500% 02/28/2017 DD 02/28/15	7,835,000	7,830,103
U S TREASURY NOTE 1.500% 01/31/2022 DD 01/31/15	6,915,000	6,694,584
FHLMC POOL #G0-8620 3.500% 12/01/2044 DD 12/01/14	6,417,920	6,609,880
U S TREASURY NOTE 1.375% 03/31/2020 DD 03/31/15	6,215,000	6,153,820
U S TREASURY NOTE 1.500% 10/31/2019 DD 10/31/14	6,060,000	6,063,315
<b>Total</b>	<b>\$91,188,983</b>	<b>\$146,628,307</b>

# Equity Emerging Markets

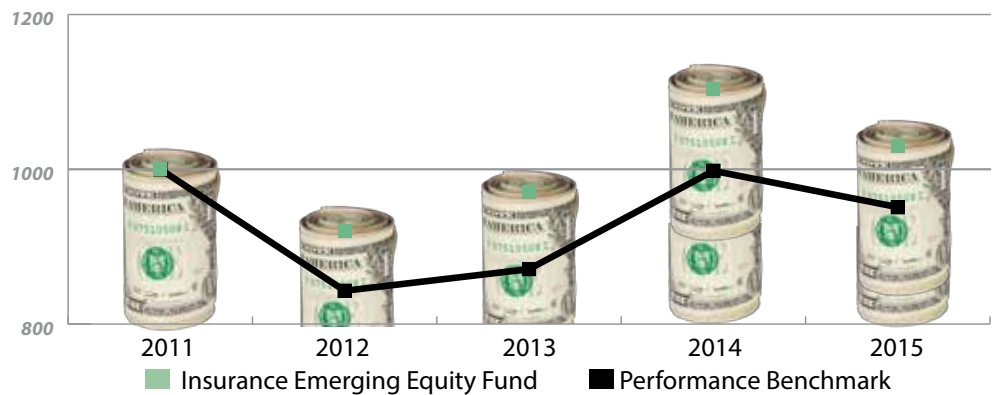
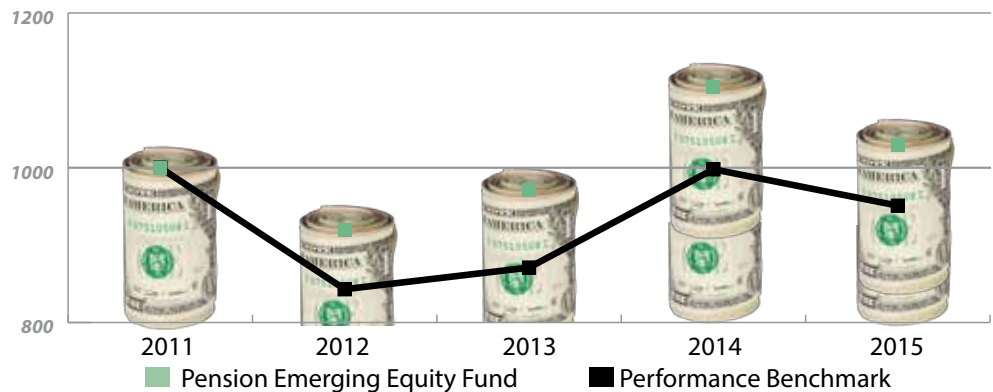
For the fiscal year ended June 30, 2015, the KRS pension fund's equity emerging market portfolio had a return of -6.66%, versus the benchmark return of -4.77%. The KRS insurance equity emerging market portfolio posted a -6.74% rate of return, while the benchmark rate of return was -4.77%.

Since inception performance has been strong; the pension and insurance funds' emerging market equity portfolios have generated respective annualized returns of 0.37% and 0.39%, while the benchmark fell -1.26%.

## Emerging Markets Equity

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Jul-11	-6.66%	3.58%	-	-	0.37%
↘ Performance Benchmark <sup>1</sup>	-	-4.77%	4.08%	-	-	-1.26%
Insurance Fund	Jul-11	-6.74%	3.59%	-	-	0.39%
↘ Performance Benchmark <sup>1</sup>	-	-4.77%	4.08%	-	-	-1.26%

<sup>1</sup>Pension and Insurance benchmark is the MSCI Emerging Markets; effective July 1, 2011.



## Equity Emerging Markets Portfolio Growth of \$1,000

Portfolio	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Pension Fund Growth							\$1,000	\$919	\$970	\$1,103	\$1,029
↘ Performance Benchmark							1,000	843	871	998	951
Insurance Fund Growth							1,000	920	971	1,104	1,030
↘ Performance Benchmark							1,000	843	871	998	951



## Private Equity

For the fiscal year ended June 30, 2015, the KRS pension fund's private equity portfolio posted a return of 9.61%; the portfolio consists primarily of investments within private equity limited partnerships. The insurance private equity portfolio returned 14.56%. During the prior fiscal year it was decided that the short-term benchmark (1-, 3-, & 5-year) would match the actual performance experienced by the portfolios; due to the difficulty in assessing short term returns. Performance is typically based on appraisals of a business' value, and managers are often slow to mark valuations up or down, which can distort relative performance against a public market benchmark when that index moves dramatically. A better indication of the health of the program would be the mid- to longer-term time periods. This is because businesses have likely been sold and transacted at a true price (rather than estimate of value), thus providing a better performance measurement.

For the five years ending June 30, 2015, the pension and insurance funds' private equity portfolios returned 13.83% and 15.66%, respectively. For the ten year period, the pension fund trailed its benchmark by -1.99%, while the insurance fund also underperformed by -1.03%. Since its inception in October 1990, the pension portfolio has outpaced its benchmark by an annualized 38 basis points per year, while the insurance portfolio has underperformed its benchmark by an annualized 72 basis points since its July 2001 inception.

### Return on Private Equity

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Oct-90	9.61%	14.33%	13.83%	8.74%	11.25%
↘ Performance Benchmark <sup>1</sup>		9.61%	14.33%	13.83%	10.73%	10.87%
Insurance Fund	Jul-01	14.56%	15.85%	15.66%	9.14%	9.44%
↘ Performance Benchmark <sup>1</sup>		14.56%	15.85%	15.66%	10.17%	10.16%

<sup>1</sup>Pension and Insurance benchmark 5 years and beyond is the Russell 3000 Quarter Lagged + 400bps. For shorter-term periods, the benchmark matches actual performance experienced.



## Real Estate

For the fiscal year ended June 30, 2015, the KRS pension fund's real estate portfolio gained 7.85%, trailing its benchmark return of 12.40%. The KRS insurance real estate portfolio also fell short of the benchmark, returning 7.79% compared to 12.40%. For the five years ending June 30, 2015, both the pension and insurance fund portfolios underperformed the benchmark's return by 202 basis points and 168 basis points, respectively.

### Return on Real Estate<sup>1</sup>

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Jul-84	7.85%	9.30%	11.42%	6.03%	5.73%
↘ Performance Benchmark <sup>1</sup>		12.40%	11.60%	13.44%	6.00%	6.21%
Insurance Fund	May-09	7.79%	8.42%	11.76%	--	8.64%
↘ Performance Benchmark <sup>1</sup>		12.40%	11.60%	13.44%	--	4.53%

<sup>1</sup>Pension and Insurance benchmark is the NCREIF Open-End Diversified Core Gross Non Lagged.

## Absolute Return

For the fiscal year, ending June 30, 2015, the KRS pension fund's absolute return portfolio gained 5.49% versus its benchmark which earned 6.08%. The KRS insurance absolute return portfolio returned 5.55%, while the benchmark gained 6.08% for the period. For the five years ending June 30, 2015 the pension and insurance portfolios outperformed their respective benchmarks each by an annualized 2.39%. Since inception, the portfolio has provided steady returns; the pension portfolio has returned 5.75%, and the insurance portfolio has provided 5.64%. The portfolio is comprised of three fund of funds, and eight direct relationships.

### Return on Absolute Return

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Apr-10	5.49%	8.71%	6.59%	--	5.75%
↘ Performance Benchmark <sup>1</sup>		6.07%	6.43%	4.15%	--	3.96%
Insurance Fund	Apr-10	5.55%	8.67%	6.59%	--	5.64%
↘ Performance Benchmark <sup>1</sup>		6.08%	6.43%	4.15%	--	3.97%

<sup>1</sup>Pension and Insurance benchmark is the HFR FOF: Diversified Lagged.

# Real Return

For the fiscal year ended June 30, 2015, the KRS pension fund's real return portfolio returned -3.98% versus its benchmark return of -2.86%. The KRS insurance real return portfolio posted a return of -3.90%, while the benchmark returned -2.77% for the period. Over the past three years, the pension and insurance real return portfolios have underperformed their respective benchmarks by 103 and 150 basis points.

## Return on Real Return

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Jul-11	-3.98%	1.29%	--	--	3.86%
↘ Performance Benchmark <sup>1</sup>		-2.86%	2.32%	--	--	2.91%
Insurance Fund	Jul-11	-3.90%	0.85%	--	--	3.51%
↘ Performance Benchmark <sup>1</sup>		-2.77%	2.35%	--	--	2.93%

<sup>1</sup>Pension and Insurance benchmark is CPI + 300bps

## Top 10 Alternatives Asset Holdings Pension Fund

Company	SUB ASSET	Market Value
BLACKSTONE ALTERNATIVE ASSET MANAGEMENT	ABS RET	\$375,660,992
PRISMA CAPITAL	ABS RET	368,994,340
PACIFIC ALTERNATIVE ASSET MANAGEMENT COMPANY	ABS RET	363,619,117
INTERNAL TIPS	REAL RET	333,786,923
PACIFIC INVESTMENT MANAGEMENT COMPANY ALL ASSET	REAL RET	329,645,324
NUVEEN REAL ASSET	REAL RET	213,293,350
HARRISON STREET	REAL RET	102,922,877
H/2 CREDIT PARTNERS	REAL RET	102,132,538
DAG VENTURES	PRIVATE EQ	94,656,364
TORTOISE CAPITAL	REAL EST	87,524,208
<b>Total</b>		<b>\$2,372,236,034</b>

## Top 10 Alternatives Asset Holdings Insurance Fund

Company	Par Value	Market Value
BLACKSTONE ALTERNATIVE ASSET MANAGEMENT	ABS RET	\$139,376,896
PRISMA CAPITAL	ABS RET	139,009,282
PACIFIC ALTERNATIVE ASSET MANAGEMENT COMPANY	ABS RET	127,570,292
INTERNAL TIPS	REAL RET	122,705,175
PACIFIC INVESTMENT MANAGEMENT COMPANY ALL ASSET	REAL RET	107,920,082
NUVEEN REAL ASSET	REAL RET	87,217,787
HARRISON STREET	REAL EST	36,963,852
H/2 CREDIT PARTNERS	REAL RET	29,064,969
STOCKBRIDGE	REAL EST	28,217,307
MESA WEST CORE LEND	REAL EST	27,888,718
<b>Total</b>		<b>\$845,934,360</b>



## Cash

For the fiscal year ended June 30, 2015, the KRS pension fund's cash portfolio returned 0.16%, outpacing its benchmark, the Citi Group 3-month Treasury by 0.14%. The KRS insurance cash portfolio also outperformed the index, posting a return of 0.21% during the same twelve month period.

As the accompanying table indicates, the longer term results from the cash portfolios have also been excellent with comparison to their benchmark. For the five years ending June 30, 2015, the pension fund portfolio has outperformed its custom benchmark by 0.29% on an annualized basis. Since its inception, the portfolio has exceeded its benchmark by 0.45% per year. The insurance portfolio has also done very well, exceeding its benchmark return over the five-year and since inception periods by 0.22% and 0.13%, respectively.

### Return on Cash

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Jan-88	0.16%	0.36%	0.35%	1.91%	3.87%
↘ Performance Benchmark <sup>1</sup>		0.02%	0.05%	0.06%	1.34%	3.42%
Insurance Fund	Jul-92	0.21%	0.31%	0.28%	1.74%	2.88%
↘ Performance Benchmark <sup>1</sup>		0.02%	0.05%	0.06%	1.34%	2.75%

<sup>1</sup>Pension and Insurance Cash benchmark is the Citi Group 3-month Treasury.

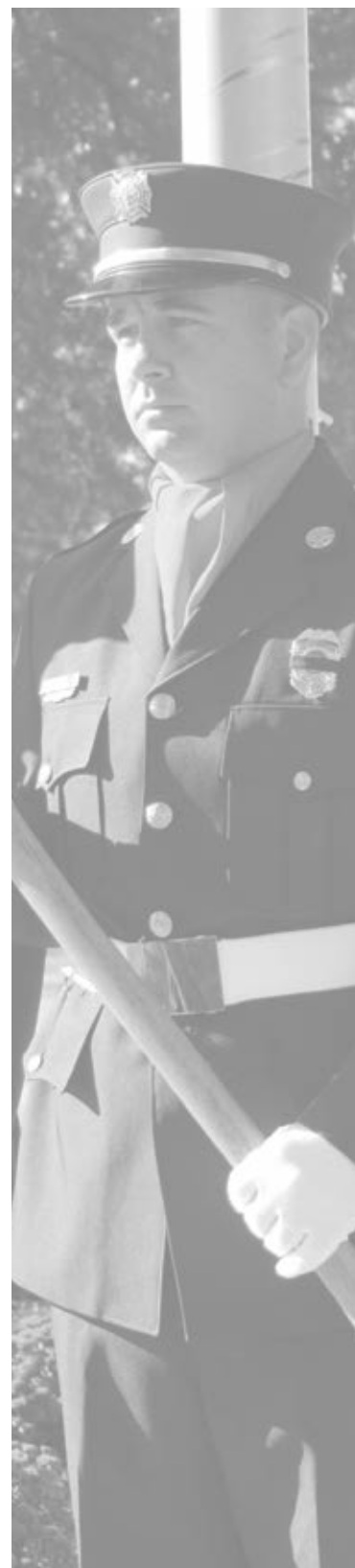


# Additional Schedules & Required Supplemental Information

Following are additional schedules which indicate the Investment Advisors employed along with the assets each of the firms manages for the Systems, external investment-related expenses incurred, portfolio summaries for each of the five pension and insurance plans, and commissions paid by the Systems as of year ended June 30, 2015.

## External Investment Advisors & Assets Under Management *(in Thousands)*

Advisor	Assets Under Management
Aberdeen Asset Management, Aberdeen, Scotland	\$169,832
American Century Investments, Kansas City, Kansas	468,946
AMERRA AG Fund II, New York, New York	52,872
Arbor Investments II, Chicago, Illinois	4,565
Arcano Capital, New York, New York	23,656
ARES SSF IV	9,918
Avenue Capital V, New York, New York	33
Bay Hills Emerging Partners I, II, III, San Francisco, California	142,390
BDCM Oppt. Fund IV	4,499
BlackRock Global Investors, San Francisco, California	1,539,908
Blackstone Alternative Asset Management, New York, New York	515,038
Blackstone Capital Partners V & VI, New York, New York	113,030
BTG Pactual	6,896
Cerberus KRS LP	95,643
CM Growth I	14,962
Coatue Qual Ptrns	20,000
Columbia Asset Management, Minneapolis, Minnesota	633,295
Columbia Capital IV, Alexandria, Virginia	34,966
Crestview Partners II, III, New York, New York	70,031
CVC Capital Partners VI, London, England	2,552
DAG Ventures II, III, IV, V QP	167,978
DB Private Equity	12,212
DCM VI LP	17,717
DivcoWest IV, San Francisco, California	45,571
Essex Woodland VIII, Palo Alto, California	26,012
FHA MORTGAGES	1,393
Franklin Templeton, New York, New York	409,223
Greenfield Acquisition Partners VI, Westport, Connecticut	535,038
GTCR Golder Rauner IX, Chicago, Illinois	27,401
H/2 Core Real Estate Debt, Stamford, Connecticut	21,428
Harrison Street, Chicago, Illinois	20,489
Harvest Partners V & VI, New York, New York	51,429
HBK II, Dallas, Texas	131,198
Hellman & Friedman VI, New York, New York	8,747



## External Investment Advisors & Assets Under Management *(continued)*

Advisor	Assets Under Management
H.I.G BIO Venture II, Miami, Florida	\$7,002
H.I.G. Capital Partners V, Miami, Florida	3,211
H.I.G. Venture Partners II, Miami, Florida	7,722
Horsley Bridge International V LLC, San Fransico, California	38,697
Institutional Venture Partners XI & XII, Menlo Park, California	14,101
Invesco, Atlanta, Georgia	305,362
Jana Partners	20,488
JW Childs Equity III, Boston, Massachusetts	53
Keyhaven Capital Partners, London, England	11,128
Knighthead Capital, New York, New York	20,489
Lazard Asset Management, New York, New York	409,223
Leonard Green & Partners, L.P.,IV & VI, Los Angeles, California	142,722
Levine Leichtman V, Los Angeles, California	23,382
LibreMax Capital	21,042
Loomis, Sayles & Company, Boston, Massachusetts	180,852
LSV Asset Management, Chicago, Illinois	200,592
LUBERT-ADLER VII	11,540
Luxor Capital, New York, New York	18,579
Magnetar Capital MTP, Evanston, Illinois	107,763
Manulife Financial, Boston, Massachusetts	633,295
Matlin Patterson Global Opportunities I, II, III, New York, New York	36,573
Merit Capital Partners IV, Chicago, Illinois	12,184
Mesa West, Los Angeles, California	12,634
Mesa West Core Lending, Los Angeles, California	84,824
MHR Insituional Advisors III, New York, New York	2,449
Mill Road Capital, Greenwich, Connecticut	25,141
New Mountain Partners II & III, New York, New York	38,620
NISA Investment Advisors, St. Louis, Missouri	1,398,442
Northern Trust Global Investors, Chicago, Illinois	473,886
Nuveen Real Asset	300,511
Oak Hill Partners II & III, New York, New York	43,450
Oberland Capital	3,780
OCM OPPS FD VIIB	951
Pacific Alternative Asset Management Company, Irvine, California	491,189
PIMCO, New Port Beach, California	393
PIMCO ALL-ASSET	437,565
Pine River Capital, Minntonka, MN	21,569
Prima Mortgage, New York, New York	77,779
Prisma Capital Partners, New York, New York	508,004
PROLOGIS TUSL	71,231



## External Investment Advisors & Assets Under Management *(continued)*

Advisor	Assets Under Management
Pyramis Global Advisors, Boston, Massachusetts*	\$3,954
River Road Asset Management, Louisville, Kentucky	38,768
Riverside Capital VI, New York, New York	19,223
Rubenstein PF II, Oakland, California	7,529
Sasco Capital, Fairfield, Connecticut	64,044
Scopia PX LLC	21,296
Shenkman Capital, Stamford, Connecticut	150,003
Stockbridge, San Francisco, California	100,636
Stone Harbor Investments, New York, New York	152,880
Sun Capital Partners IV, Boca Raton, Florida	1,433
Systematic Financial Management, Teaneck, New Jersey	280,659
Taurus Mine Finance	13,787
Technology Crossover Ventures VI, Palo Alto, California	719
Tenaska Power Fund II, Omaha, Nebraska	10,303
The Boston Company, Boston, Massachusetts	200,795
Tortoise Capital, Leawood, Kansas	113,970
Triton Fund IV, Frankfurt, Germany	17,193
Vantagepoint Venture IV, San Bruno, California	21,067
Vista Equity Partners III & IV, San Francisco, California	70,570
Walton Street Real Estate Fund VI & VII, Chicago, Illinois	73,749
Warburg Pincus IX & X, New York, New York	48,272
Waterfall Investment, New York, New York	172,048
Wayzata Investment Partners I, II, III, Wayzata, Minnesota	52,284
Weaver Barksdale & Associates, Brentwood, Tennessee	-
Wellington Management Company, Boston, Massachusetts	178,772
Westfield Capital, Boston, Massachusetts	159,299
Westwood Management, Dallas, Texas	134,643
<b>Total</b>	<b>\$13,725,182</b>





## CONSULTANTS

### Master Custodian & Performance Measurement

Bank of New York Mellon, New York, New York

### Investment Consultants

ORG Real Property, Cleveland, Ohio

R.V. Kuhns & Associates, Portland, Oregon

Pension Consulting Alliance, Portland, Oregon

Albourne America, LLC, San Francisco, California

### Schedule of Commissions Paid

Asset	Total Shares	Commissions Paid	Price per Share
U.S. Equities	61,537,088	\$1,725,089	\$0.028
	Total Value of Trades	Commissions Paid	As a % of Trade
Non-U.S. Equities	\$1,631,272,032	\$1,692,477	0.104%
<b>Total Commissions Paid</b>		<b>\$3,417,566</b>	

### External Investment Expenses *(in Thousands)*

Pension Fund	Fees Paid	Share of Assets
Portfolio Management Expense	\$80,733	0.7024%
Custody Expense	772	0.0067%
Consultant	-	-
<b>Total Pension Expense</b>	<b>81,505</b>	<b>0.7092%</b>
Insurance Fund		
Portfolio Management Expense	27,432	0.6507%
Custody Expense	552	0.0131%
<b>Total Insurance Expense</b>	<b>27,984</b>	<b>0.6638%</b>
<b>Total Expenses</b>	<b>\$109,489</b>	<b>0.6970%</b>

## External Investment Expense - Asset Class/Type Breakdown

### Pension Fund

	U.S. Public	Non U.S. Equity	Emerging Market	Fixed Income	Real Return	Private Equity	Real estate	Absolute Return	Cash	Total
Fee for Long Balance	-	1,000	--	1,016	--	--	--	--	--	2,016
Lending Fee Rebate	(466,790)	(318,545)	--	10,139	422,786	--	--	--	--	(352,410)
Investment Advisory Fees	2,932,485	5,251,890	2,147,466	8,293,179	3,907,941	38,500,875	4,100,787	5,581,543	-	70,716,166
TMPG Charges	--	--	--	277	--	--	--	--	--	277
TMPG Fails Charge	--	--	--	(2,775)	1,710	--	--	--	--	(1,065)
Stock Loan Fees	194,243	73,521	--	93,534	133,831	--	--	--	--	495,129
Miscellaneous	-	--	--	16	--	--	7,265	--	--	7,281
Taxes & Insurance	--	864,377	--	--	--	--	--	--	--	864,377
Interest Expense	--	--	--	--	--	--	--	--	--	--
Other	1,323	30,308	-	-	645,416	4,207,556	2,731,072	-	-	7,615,674
Commission on Future Contracts	1,197	--	--	27,612	325	--	--	--	--	29,134
Commission on Swaps Contracts	--	--	--	5,910	--	--	--	--	--	5,910
Miscellaneous Tax	--	--	--	--	--	--	--	--	--	--
Consultant Fees	--	--	--	--	--	--	--	--	1,258,000	1,258,000
Custodial Fees	--	--	--	--	--	--	--	--	722,000	722,000
	<b>\$2,662,458</b>	<b>\$5,902,551</b>	<b>\$2,147,466</b>	<b>\$8,428,908</b>	<b>\$5,112,010</b>	<b>\$42,708,431</b>	<b>\$6,839,124</b>	<b>\$5,581,543</b>	<b>\$2,030,000</b>	<b>\$81,412,489</b>
										Financial Statement Reported Expenses \$81,505,195
										Difference (\$92,706)





## Insurance Fund

	U.S. Public	Non U.S. Equity	Emerging Market	Fixed Income	Real Return	Private Equity	Real estate	Absolute Return	Cash	Total
Fee for Long Balance	--	75	--	475	--	--	--	--	--	<b>550</b>
Lending Fee Rebate	(180,832)	(207,299)	--	13,920	168,599	--	--	--	--	<b>(205,612)</b>
Investment Advisory Fees	914,810	1,704,205	949,049	2,716,616	1,559,151	12,302,670	1,696,759	1,944,631	--	<b>21,842,260</b>
TMPG Charges	--	--	--	(692)	--	--	--	--	--	<b>(692)</b>
TMPG Failed Charge	--	--	--	--	541	--	--	--	--	<b>541</b>
Stock Loan Fees	62,457	40,888	--	24,791	47,781	--	--	--	--	<b>175,917</b>
Miscellaneous	--	--	--	--	--	--	--	--	--	<b>--</b>
Taxes & Insurance	--	334,798	--	--	--	--	--	--	--	<b>334,798</b>
Interest Expense	--	--	--	(1,612)	--	--	--	--	--	<b>(1,612)</b>
Other	431.65	11,483	-	-	271,267.99	1,208,735.43	1,154,242	1,944,631	-	<b>4,590,790</b>
Commission on Future Contracts	501	--	--	10,944	130	--	--	--	--	<b>11,575</b>
Commission on Swaps Contracts	--	--	--	2,822	--	--	--	--	--	<b>2,822</b>
Consultant Fees	--	--	--	--	--	--	--	--	448,000	<b>448,000</b>
Custodial Fees	--	--	--	--	--	--	--	--	552,000	<b>552,000</b>
	<b>\$796,367</b>	<b>\$1,884,150</b>	<b>\$949,049</b>	<b>\$2,767,264</b>	<b>\$2,047,470</b>	<b>\$13,511,405</b>	<b>\$2,851,000</b>	<b>\$1,944,631</b>	<b>\$1,000,000</b>	<b>\$27,751,337</b>
										Financial Statement Reported Expenses 27,984,259
										Difference 232,922

The Governmental Accounting Standards Board recognizes that it may not be possible or cost-beneficial to separate certain investments expenses from either the related investment income or the general administrative expenses of the plan. KRS has displayed all investment related fees and expenses identifiable and captured by our custodial bank, BNY Mellon and KRS staff.

Market values vary from those reported in the financial section due to pending transactions, accrual adjustments, and classification of investments (e.g. derivatives) as required by GAAP.

## MARKET VALUES BY PLAN

### Pension

Category	KERS Nonhazardous		KERS Hazardous	
	Market Value	%	Market Value	%
<b>Public Equity</b>	\$845,065,661	37.4%	\$240,242,104	43.8%
US Equity	386,143,193	17.1%	111,976,501	20.4%
Non-US Equity	458,922,468	20.3%	106,832,248	19.5%
Emerging Markets	-	-	21,433,355	3.9%
<b>Fixed Income</b>	436,782,804	19.3%	99,501,855	18.0%
Core	207,819,396	9.2%	45,195,541	8.2%
Global	113,442,922	5.0%	27,149,307	4.9%
High Yield	115,520,486	5.1%	27,157,007	4.9%
<b>Real Return</b>	223,053,975	9.9%	52,231,779	9.5%
<b>Private Equity</b>	321,942,952	14.3%	52,911,672	9.6%
<b>Real Estate</b>	104,330,163	4.6%	30,807,147	5.6%
<b>Absolute Return</b>	254,933,428	11.3%	56,978,709	10.4%
<b>Cash</b>	67,720,838	3.0%	14,444,150	2.6%
<b>Miscellaneous</b>	4,045,981	0.2%	1,708,589	0.5%
<b>TOTAL PORTFOLIO</b>	<b>\$2,257,875,802</b>		<b>\$548,826,005</b>	

### Insurance

<b>Public Equity</b>	\$322,748,706	49.4%	\$210,334,878	48.0%
US Equity	165,884,879	25.4%	104,931,512	24.0%
Non-US Equity	131,089,504	20.1%	88,140,589	20.1%
Emerging Markets	25,774,323	3.9%	17,262,777	3.9%
<b>Fixed Income</b>	126,549,977	19.3%	85,398,671	19.5%
Core	62,373,746	9.5%	42,177,891	9.6%
Global	32,661,659	5.0%	21,917,323	5.0%
High Yield	31,514,572	4.8%	21,303,457	4.9%
<b>Real Return</b>	57,589,189	8.8%	39,835,384	9.1%
<b>Private Equity</b>	29,848,332	4.6%	26,017,540	5.9%
<b>Real Estate</b>	34,007,633	5.2%	24,790,137	5.7%
<b>Absolute Return</b>	70,527,011	10.8%	46,801,787	10.7%
<b>Cash</b>	12,430,749	1.8%	4,494,824	1.0%
<b>Miscellaneous</b>	(28,498)	0.1%	(19,099)	0.1%
<b>TOTAL PORTFOLIO</b>	<b>\$653,673,099</b>		<b>\$437,654,122</b>	



Market values vary from those reported in the financial section due to pending transactions, accrual adjustments, and classification of investments (e.g. derivatives) as required by GAAP.



## MARKET VALUES BY PLAN

### Pension

Category	CERS Nonhazardous		CERS Hazardous	
	Market Value	%	Market Value	%
<b>Public Equity</b>	\$2,907,533,961	45.5%	\$932,303,685	45.2%
US Equity	1,387,073,961	21.7%	443,038,212	21.5%
Non-US Equity	1,271,260,853	19.9%	409,400,310	19.8%
Emerging Markets	249,199,147	3.9%	79,865,163	3.9%
<b>Fixed Income</b>	1,183,934,459	18.5%	383,801,231	18.6%
Core	545,718,798	8.5%	177,775,024	8.6%
Global	319,550,331	5.0%	103,226,523	5.0%
High Yield	318,665,330	5.0%	102,799,684	5.0%
<b>Real Return</b>	615,683,945	9.6%	194,441,160	9.4%
<b>Private Equity</b>	529,815,482	8.3%	177,250,275	8.6%
<b>Real Estate</b>	352,720,105	5.5%	114,271,411	5.5%
<b>Absolute Return</b>	679,127,210	10.6%	215,202,271	10.4%
<b>Cash</b>	110,537,291	1.7%	44,035,876	2.1%
<b>Miscellaneous</b>	5,216,194	0.3%	2,099,279	0.2%
<b>TOTAL PORTFOLIO</b>	<b>\$6,384,568,647</b>		<b>\$2,063,405,188</b>	

### Insurance

<b>Public Equity</b>	\$899,069,195	47.2%	\$488,667,596	46.6%
US Equity	442,793,318	23.2%	241,126,487	23.0%
Non-US Equity	380,685,194	20.0%	207,892,781	19.8%
Emerging Markets	75,590,683	4.0%	39,648,328	3.8%
<b>Fixed Income</b>	374,448,597	19.6%	206,223,316	19.7%
Core	183,829,170	9.6%	101,441,428	9.7%
Global	95,226,934	5.0%	52,424,625	5.0%
High Yield	95,392,493	5.0%	52,357,263	5.0%
<b>Real Return</b>	179,622,845	9.4%	101,159,421	9.6%
<b>Private Equity</b>	133,687,742	7.0%	74,726,222	7.1%
<b>Real Estate</b>	103,262,879	5.4%	56,497,364	5.4%
<b>Absolute Return</b>	200,178,823	10.5%	112,123,336	10.5%
<b>Cash</b>	15,914,876	0.8%	11,275,550	1.1%
<b>Miscellaneous</b>	(83,080)	0.1%	(45,742)	0.0%
<b>TOTAL PORTFOLIO</b>	<b>\$1,906,101,877</b>		<b>\$1,050,627,063</b>	



## MARKET VALUES BY PLAN

### Pension

Category	SPRS Hazardous	
	Market Value	%
<b>Public Equity</b>	\$107,072,576	45.1%
US Equity	48,544,848	20.4%
Non-US Equity	48,422,710	20.4%
Emerging Markets	10,105,018	4.3%
<b>Fixed Income</b>	40,655,806	17.1%
Core	16,549,790	7.0%
Global	11,924,879	5.0%
High Yield	12,181,137	5.1%
<b>Real Return</b>	22,657,641	9.5%
<b>Private Equity</b>	22,661,726	9.5%
<b>Real Estate</b>	13,470,942	5.7%
<b>Absolute Return</b>	25,701,594	10.8%
<b>Cash</b>	4,807,970	2.0%
<b>Miscellaneous</b>	411,203	0.3%
<b>TOTAL PORTFOLIO</b>	<b>\$237,439,458</b>	

### Insurance

<b>Public Equity</b>	\$75,601,628	46.2%
US Equity	36,622,721	22.4%
Non-US Equity	32,972,005	20.1%
Emerging Markets	6,006,902	3.7%
<b>Fixed Income</b>	31,530,049	19.2%
Core	15,617,241	9.5%
Global	8,213,165	5.0%
High Yield	7,699,643	4.7%
<b>Real Return</b>	14,850,345	9.1%
<b>Private Equity</b>	12,265,440	7.5%
<b>Real Estate</b>	9,204,299	5.6%
<b>Absolute Return</b>	17,548,434	10.7%
<b>Cash</b>	2,799,206	1.7%
<b>Miscellaneous</b>	(7,150)	0.0%
<b>TOTAL PORTFOLIO</b>	<b>\$163,792,251</b>	

Market values vary from those reported in the financial section due to pending transactions, accrual adjustments, and classification of investments (e.g. derivatives) as required by GAAP.



## Letters from Investment Consultants



NEW YORK OFFICE • 1 Penn Plaza, Suite 2128, New York, New York 10119 • 646.805.7075 • rvkuhns.com

Dear Board of Trustees,

### **Economic Review**

The fiscal year began July 1 with most U.S. economic data indicating the U.S. would experience continued economic expansion at a moderate rate. The International Monetary Fund (IMF) increased its U.S. Gross Domestic Product (GDP) growth forecast to 2.2% from a prior forecast of 1.7%, and projected 3.1% growth for 2015. The Federal Reserve (the Fed) maintained its commitment to end quantitative easing, while also signaling a slight bias toward maintaining an accommodative interest rate policy for the near-term. The unemployment rate fell to 5.9% in September with monthly job growth on pace to be the fastest annual job growth rate since 1999.

In the Eurozone, the economic data indicated continued challenges for the member countries, which led the European Central Bank (ECB) to announce additional measures to stimulate the economy. In Japan, investors blamed a devalued Yen and new consumption tax for weaker than expected industrial and retail sales. During this time, developed nations imposed sanctions on Russia's role in the Crimea crisis. Russia responded with import bans and a fifty-point interest rate increase in an effort to stabilize the currency and stem capital flight.

During the second fiscal quarter (CY4Q14), the U.S. economy continued to show stable growth compared to foreign regions. Economic data released during the quarter suggested that the recovery was unfettered by the Fed's reduction of quantitative easing, as proven by strong expansion in the manufacturing sector and continued decline of the unemployment rate to a calendar year-ending 5.6%. Despite the progress on the employment front, the Fed remained keenly aware of other indicators, including muted wage growth, which suggested pockets of weakness in economy. Core inflation, excluding food and energy prices, remained close to the Fed's stated 2% target, triggering views the Fed would raise interest rate by mid-2015 unless there were signs of disinflation.

Economic developments in Europe and emerging economies were less impressive. European monetary policy proven successful in recapitalizing the banking system, but weak loan demand from the private sector muted the flow of capital in the economy. In an effort to spur growth and make lending more attractive, the ECB announced quantitative easing plans, which included the purchase of up to €500 billion of investment grade securities. Within emerging economies, falling oil prices (caused by an oversupply in the market) and a rising U.S. dollar led to renewed concerns over possible balance of payments issues and capital flight. Russia's prospects deteriorated as the ruble declined 32% against the dollar, even as the Russian Central Bank increased rates from 6.5% to 17%.

In a reversal from the first half of the fiscal year, the U.S. experienced slower economic growth in the third fiscal quarter (CY1Q15), as the release of several key indicators were below expectations. While the unemployment rate remained steady at 5.5% in March, additional nonfarm payroll jobs came in well below expectations followed by downward revisions of the January and February figures. In the manufacturing sector, which showed growth through the first six months, fell throughout the third fiscal quarter. Despite softer-than-expected economic data, minutes from the March Federal Open Market Committee meeting indicated that while some members favored a potential June 2015 rate hike, Fed Chair Janet Yellen and others seemed more willing to wait for stronger wage inflation before considering an increase in the Federal Funds rate.

Globally, much attention was focused on oil prices, as OPEC producers refused to yield to pressure to cut production. Generally, non-OPEC producers also declined to curtail production despite lower prices due to the need to generate sufficient cash flow to service existing debt. In addition to price pressure from oversupply, weaker-than-expected global demand magnified downward pressure on oil prices. In Europe, Greece's Syriza leadership reached an agreement with the Troika to maintain the country's funding for several months while working toward an acceptable package of reforms. The second half of the fiscal year also saw the continued efforts of the European Central Bank and Bank of Japan to maintain their aggressive monetary easing policies. The impact of these policies on current and expected interest rates led to a strengthening of the U.S. dollar, which raised concerns regarding U.S. exports and the dollar value of earnings generated in foreign currencies. Several events occurred during fourth quarter of the fiscal year (CY2Q15) that keep markets in turmoil. First, the U.S. dollar strength dissipated to a degree. Second, developed market interest rates, which had been trending lower and were negative in some markets, reversed sharply.

Lastly, oil prices, in part helped by weakness in the U.S. dollar, bounced off the early 2015 lows and finished the fiscal year higher. Relatively benign equity volatility in April and May gave way to heightened volatility in the second half of June, with investors fixated on Greece's debt situation and government intervention in China.

In the U.S., the Fed took no action having observed economic data that showed below target inflation, softer GDP growth, and lower labor productivity. In Europe, Greece's problems deteriorated significantly after bailout talks failed, and the Syriza-led government missed a \$1.7 billion payment due to the IMF in June. In China, the government's desire to rotate investment from its real estate sector to the equity markets hit a snag, as the Shanghai Composite fell 20% in the final 10 trading days of June. In response, the People's Bank of China cut its benchmark interest rate by 0.25% before the end of June.

The following page displays key domestic economic indicators as of June 30, 2015.

**Domestic Economic Indicators**  
As of June 30, 2015

	June 2015	June 2014	Yr/ Yr	10 Year	20 Year
Capacity Utilization	77.82	78.17	▼	76.82	78.42
Unemployment Rate	5.30%	6.10%	▼	7.00%	6.00%
PMI - Manufacturing	53.50	55.70	▼	52.40	52.00
Baltic Dry Index - Shipping	800	934	▼	2,847	2,357
Real GDP YoY	2.30%	2.60%	▼	1.60%	2.40%
Consumer Confidence (Conf. Bd.)	99.76	86.37	▲	75.28	93.34
Breakeven Inflation - 10 Year*	1.89	2.24	▼	2.14	N/A
CPI YoY (Headline)**	0.10%	2.10%	▼	2.10%	2.30%
CPI YoY (Core)**	1.80%	1.90%	▼	1.90%	2.10%
PPI YoY	-2.60%	2.80%	▼	2.70%	2.30%
M2 YoY	5.80%	6.50%	▼	6.20%	6.20%
Federal Funds Rate (%)	0.08%	0.09%	▼	1.46%	2.74%
US Dollar Total Weighted Index	89.94	75.73	▲	77.43	86.43
WTI Crude Oil per Barrel	\$59	\$105	▼	\$82	\$54
Gold Spot per Oz***	\$1,172	\$1,327	▼	\$1,112	\$723

\*Breakeven Inflation does not have 20 years of history; therefore, its 20-year average is shown as N/A.

\*\*CPI figures are cyclically adjusted. \*\*\*10- and 20-year average Gold spot prices are adjusted for inflation.

## Capital Markets Review

### Global Equity

U.S. equity markets outperformed international markets for the fiscal year, as evidenced by the Russell 3000 returning 7.3%, compared to -3.8% for the MSCI EAFE and -4.8% for the MSCI Emerging Market Index (in U.S. dollar terms).

The U.S. stock market began the fiscal year relatively flat, but rallied significantly during the second fiscal quarter (CY4Q14) on a strengthening U.S. dollar, rapidly falling oil prices, and a positive revision to CYQ314 GDP growth. Investor risk appetite remained low due to geopolitical concerns and looming interest rate increases; however, consumer spending and M&A activity supported U.S. equity returns. During a volatile third fiscal quarter (CY1Q15), the Russell 3000 Index generating negative returns in January and March, but a positive 1.8% return for the quarter due to a strong February rally. The U.S. equity markets ended the fiscal year relatively flat as market turmoil overseas impacted domestic markets and erased otherwise positive April and May performance. A strong U.S. dollar served as a hindrance to companies that derive significant earnings from non-U.S. regions.

International markets performed the inverse to U.S. markets, with sharp negative performance the first half of the fiscal year, and a partial recovery the second half. Developed international markets experienced a strong downturn during the start of the fiscal year (CY3Q14), led by Europe, which was the worst performing region in the MSCI EAFE Index. Emerging economies with greater dependency on commodity exports were hurt by deflationary headwinds resulting from an oversupply of oil and weaker than expected demand in developed economies.

Throughout most of the second half of the fiscal year (CY2H15), developed international markets significantly outperformed the U.S. market. Although deflation concerns regarding the potential exit of Greece from the EU continued to weigh on European markets, performance remained positive despite these concerns. Greece's debt crisis dominated the headlines yet its equity markets actually saw positive performance for the quarter. China had a strong positive quarter, partially fueled by government intervention. However, volatility followed by a sharp downturn in local markets resulted from an increased use of margin debt that was called as the stock market fell.

### *Global Fixed Income*

For the fiscal year, the Barclay US Aggregate Index returned 1.9%, significantly outperforming the Barclays Global Aggregate Index which fell -7.1% because of an overall strengthening of the U.S. dollar.

U.S. fixed income performed modestly well as the treasury yield curve flattened over the first half of the fiscal year. Fixed income markets were volatile entering 2015, but treasury yields and credit spreads were only slightly changed by the end the March compared to the previous quarter-end. As rates fell in January, the Barclays Aggregate returned 2.1% for the month, the strongest one-month return since December 2008. However, a rebound in rates in February detracted from performance. This extended into the last fiscal quarter (CY2Q15) as rates continued to rise and credit spreads widened, resulting in the quarter being the first 3-month negative run since 2008. Reduced liquidity in fixed income markets led to higher market price volatility and increased trading costs.

As the U.S. dollar strengthened, exposure to foreign currency impacted returns. Excluding currency effects, the government bonds of other developed countries performed similarly to U.S. Treasuries. However, emerging markets debt (EMD) underperformed due to the recent market bias toward quality.

### *Alternatives*

Hedge funds contributed to performance, primarily from strong performance the second half of the fiscal year. In general, most hedge funds were flat to slightly negative during in the first fiscal quarter, with the exception of macro strategies which were characterized by improved performance. Event-oriented and credit hedge funds struggled in FY2Q14, but long/short equity funds and systematic macro funds mitigated the losses.

During the second half of the fiscal year, multi-strategy funds and Funds of Hedge Funds outperformed both global 60/40 portfolios as well as the S&P 500 Index for the first time since the fourth quarter of 2012. Most hedge fund strategies generated positive returns in the second half of the fiscal year.

### *Real Return*

The performance for real return strategies were mixed during the fiscal year. Although REITs were a positive performing sector, US TIPS declined slightly and Commodities declined significantly, creating a challenging environment for broadly diversified real return strategies.

Given the low inflationary market environment, assets typically most sensitive to changes in inflation, including Commodities and natural resource equities, yielded some of the worst results compared to other asset classes.

While the first half of the fiscal year was particularly challenging, inflation indicators and performance among managers both varied widely during the second half of the year. Managers that allocated heavily to REITs, TIPS, and floating rate bonds outperformed those that favored natural resource equities. Further, market expectations for short-term inflation decreased while longer-term expectations increased, as measured by a steepening of the TIPS breakeven curve, resulting in performance dispersion among active managers.

## Real Estate

Core U.S. Real Estate experienced strong returns during the fiscal year. The U.S. commercial real estate market experienced favorable drops in vacancy rates in the office, industrial, and retail sectors. Transaction activity in the U.S. commercial real estate market remained robust as evidenced by the 34% year-over-year increase in transaction volume, as of CY4Q14.

As property values rose, cap rates in certain property sectors approached pre-recession lows and in some cases surpassed it in sectors such as central business districts and apartments.

While real estate deal activity remained strong in the U.S., transaction volumes were down 8% and 7% in the Asia-Pacific and Euro regions, respectively. On a global level, transaction volume for FY4Q15 totaled \$161 billion, resulting in nearly the same level of activity on a year-over-year basis.

The following table summarizes the returns earned by the major markets for the trailing one-year period ending June 30, 2015.

**One-Year Trailing Asset Class Performance**  
As of June 30, 2015

Index	Description	Return
S&P 500	Large Cap U.S. Equity	7.42
R Mid Cap	Mid Cap U.S. Equity	6.63
R 2000	Small Cap U.S. Equity	6.49
MSCI EAFE (Gross)	Large Cap Intl Equity	-3.82
MSCI EAFE SC (Gross)	Small Cap Intl Equity	-0.45
MSCI Emg Mkts (Gross)	Emerging Mkts Equity	-4.77
Barclays US Agg Bond	U.S. Invmt Grade Bonds	1.86
Barclays US Trsy	U.S. Treasury Bonds	2.31
Barclays US Trsy: US TIPS	U.S. TIPS	-1.73
Barclays US Corp: Hi Yld	U.S. High Yield Bonds	-0.40
Wilshire US REIT	U.S. Real Estate Inv Trusts	5.21
NCREIF ODCE (Gross)	U.S. Open End Core Real Estate	14.43
HFRI FOF Diversified	Absolute Return	3.85
BofA ML 3 Mo US T-Bill	U.S. Cash Equivalents	0.02

## Asset Allocation Review

As is customary, the Board reviewed the asset allocation for each of the pension and insurance plans and concluded that any consideration for changes should originate from an asset liability study. As such, an asset liability study was presented to the Board during the last quarter of the fiscal year. Subsequent to the asset liability study, further discussions regarding any needed changes to asset allocation are anticipated to occur during fiscal year 2015-2016.

## Pension Plan Review

The combined market value of the Kentucky Retirement System ("System") Pension Plan assets (collectively called hereafter, "the Pension Fund") decreased from \$11.9 billion on June 30, 2014 to \$11.5 billion on June 30, 2015. The Pension Fund's investments collectively returned 2.0%, net of fees<sup>1</sup>, for the fiscal year. Compared to the 3.1% return earned by its target allocation benchmark, the Pension Fund underperformed by 1.1%. The Pension Fund's three and five-year annualized returns of 9.3% and 9.2%, respectively, closely matched the target allocation benchmark returns of 9.6% and 9.9%, respectively, over the same time periods. The Board adopted an actuarial assumed rate of return is 7.5% during the fiscal year, revised down from the previous long-term target of 7.75%. Over the longer term, the Pension Fund has exceeded the blended funding target.

<sup>1</sup> All plan returns are net of fees as provided by the custodian bank, BNYMellon.

The System's current Pension Fund investments are diversified across all segments of the U.S. and international equity markets (both developed and emerging markets). The fixed income portfolio is a diversified mix of U.S. investment grade, high yield, global fixed income, and emerging market debt securities. The System also invests in real return strategies, real estate, absolute return strategies, and private equity. The Board aggressively negotiates fees on all investments. The table below shows aggregate actual and individual pension plan target allocations as of June 30, 2015.

**Kentucky Retirement Systems  
Pension Plan  
Asset Allocation vs. Target Allocation**

	Market Value (\$)	Allocation (%)	KERS Target (%)	KERS - H Target (%)	CERS Target (%)	CERS - H Target (%)	SPRS Target (%)
U.S. Equity	2,376,879,958	20.7	22.0	20.0	20.0	20.0	20.0
Non-U.S. Equity	2,296,206,066	20.0	20.0	20.0	20.0	20.0	20.0
Emerging Markets Equity	360,473,633	3.1	0.0	4.0	4.0	4.0	4.0
Fixed Income	2,145,359,836	18.7	20.0	19.0	19.0	19.0	18.0
Real Return	1,110,466,815	9.7	10.0	10.0	10.0	10.0	10.0
Real Estate	613,519,285	5.3	3.0	5.0	5.0	5.0	5.0
Absolute Return	1,231,943,209	10.7	10.0	10.0	10.0	10.0	10.0
Private Equity	1,104,582,104	9.6	10.0	10.0	10.0	10.0	10.0
Cash Equivalent	241,546,125	2.1	5.0	2.0	2.0	2.0	3.0
Other	7,029,197	0.1	-	-	-	-	-
<b>Total</b>	<b>11,488,006,228</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

The current deviations of each plan are within an allowable and acceptable range. The allocations across plans differ based on plan-specific liquidity requirements.

### Insurance Plan Review

The combined market value of the Kentucky Retirement System Insurance Plan assets (collectively called hereafter, "the Insurance Fund") increased from \$4.1 billion on June 30, 2014 to \$4.2 billion on June 30, 2015. The Insurance Fund's investments returned 1.9% for the fiscal year, underperforming the target allocation benchmark of 3.8% by 1.9%. The Insurance Fund's three-year annualized return of 8.8% trailed the target allocation benchmark of 9.9%, and the five-year annualized return of 9.3% fell short of its benchmark's return of 11.1% by -1.8%. The Insurance Fund also currently targets an actuarial assumed rate of return is 7.5%, which the Board revised down from 7.75% during the fiscal year. Over the longer term, the Insurance Fund has exceeded this important funding target.

The System's current insurance plan investments are diversified across all segments of the U.S. and international equity markets (both developed and emerging markets). The fixed income portfolio is a diversified mix of U.S. investment grade, high yield, global fixed income, and emerging market debt securities. The System also invests in real return strategies, real estate, absolute return strategies, and private equity. The Board aggressively negotiates fees on all investments. The table below shows aggregate actual and target allocations as of June 30, 2015.

**Kentucky Retirement Systems  
Insurance Plan  
Asset Allocation vs. Target Allocation**

	Market Value (\$)	Allocation (%)	Insurance Target (%)
U.S. Equity	991,843,452	23.5	20.0
Non-U.S. Equity	841,612,520	20.0	20.0
Emerging Markets Equity	164,200,235	3.9	4.0
Fixed Income	824,479,859	19.6	20.0
Real Return	393,471,657	9.3	10.0
Real Estate	227,444,903	5.4	5.0
Absolute Return	447,179,389	10.6	10.0
Private Equity	276,545,277	6.6	10.0
Cash Equivalent	46,915,205	1.1	1.0
<b>Total</b>	<b>4,213,508,928</b>	<b>100.0</b>	<b>100.0</b>

The current deviations of the actual allocation from the target allocation are within an allowable and acceptable range. For less liquid asset classes (private equity), it may take years before the current allocation is in line with the target allocation.

## Investment Portfolio Review

### Pension Plan

The U.S. equity composite returned 6.0%, underperforming the Russell 3000 Index by 1.25%. Active management was most challenged in mid cap equity, while manager selection in small cap equity mitigated a portion of the losses. Geneva Capital Management was removed from the portfolio during the fiscal year. Additional analysis will be conducted in the next fiscal year to enhance the domestic equity portfolio, which will consider reducing the number of manager holdings as well as resizing existing mandates.

The non-U.S. composite was restructured at the end of last fiscal year to include diversified "core" strategies and concentrated "satellite" strategies to complement core exposures. During this fiscal year, Pyramis International Growth was removed from the portfolio based on organizational changes and ongoing performance concerns. The next fiscal year will begin the analysis to consider combining the non-U.S. and dedicated emerging market

<sup>1</sup>All plan returns are net of fees as provided by the custodian bank, BNYMellon



composite into a single international composite, potentially reducing the number of manager holdings and focusing on flexible, global mandates. For the fiscal year, the non-U.S. equity composite declined approximately 4.0%, but outperformed the MSCI ACWI Ex U.S. Index by 86 basis points based on favorable positioning by fundamental managers.

The dedicated emerging market portfolio trailed the benchmark return of the MSCI Emerging Markets Index by 1.9% (-6.7% versus -4.8%). There were no changes to the portfolio during the fiscal year, but analysis will be conducted during the next fiscal year the current structure of the portfolio as noted above.

The fixed income portfolio slightly underperformed the Barclays Universal Bond Index, returning 1.4% versus 1.6%. The majority of managers outperformed their respective benchmarks, but exposures to emerging market debt and high yield negatively impacted returns. During the fiscal year, PIMCO Core Fixed Income was removed from the portfolio and Cerebrus Levered Loan Opportunities was added. During the next fiscal year, there are plans to potentially further diversify the fixed income portfolio by introducing global credit exposure.

The real return portfolio consisted of a reduction to Treasury Inflation Protected Securities (TIPS), and a greater emphasis on a diversified real return fund that includes agricultural and timberland funds and energy-related investments. Having hired a dedicated consultant focused on real assets, the plan is to continue building a portfolio diversified across several strategies that, when combined, offers inflation protection and capital appreciation. As such, a diversified real asset income fund and a mining fund were both added over the last twelve months. During the fiscal year, the real return portfolio declined approximately 4.0%, which underperformed its custom benchmark that incorporates the various strategies by 1.1%.

The real estate portfolio continually evolves as new deals are sourced and funded in a prudent manner. While the real estate portfolio's fiscal year return lagged the benchmark, the NCREIF ODCE Index (7.9% versus 12.4%), because many of the real estate funds are closed-end funds with the ability to exit after several years, it is more appropriate to measure the returns over periods longer than a 12-month period.

The absolute return portfolio was originally developed with fund-of-hedge funds to gain immediate exposure to the space. During the fiscal year, the fund-of-hedge funds have served as sources of capital to continue funding prudently selected and well negotiated direct hedge fund investments. The migration to direct strategies should continue into the future as opportunities best suited for the Fund become available. During the fiscal year, the absolute return portfolio earned a 5.5% return, which slightly lagged the HFRI Fund of Funds Diversified Index return of 6.1%.

The private equity portfolio continually evolves as new deals are sourced and funded in a prudent manner. Because the private equity funds are closed-end funds with the ability to exit after several years, it is more appropriate to measure the returns over periods longer than a 12-month period. There are two benchmarks used to measure the success of the private equity portfolio. The first is a shorter-term custom benchmark, which matches the return of private equity portfolio (9.6%) over the fiscal year. Over a five-year period, the private equity portfolio earned a strong absolute return of 13.8%, but lagged its second benchmark, the Russell 3000 Index + 4%, by 5.6%.

The cash and equivalents held in the portfolio is not expected to add significant value to the portfolio. Rather, it is expected to maintain the market value of the assets held in cash with a return that keeps pace with 3-month Treasury Bills. For the fiscal year, the cash equivalents portfolio earned 0.2% relative to the "cash" benchmark of 3-month Treasury Bills Index's return of 0.0%.

## Insurance Plan

The Insurance Plan invests in all of the same portfolios as the Pension Plan with the exception of a few certain investments across the portfolio. Although the insurance plan returns slightly differ from the returns earned in the pension plan because of investment restrictions, the relative under/outperformance was similar for the fiscal year.

## Board Initiatives

As previously mentioned, the Board continues to review the effectiveness of the currently approved asset allocation to meet the assumed rates of returns for the pension and insurance plans. To better align the liabilities and net cash flows of the pension and insurance plans with the investment asset allocation, the Board requested that the general consultant RVK, Inc. complete an asset liability study for all plans. RVK reviewed the study with the Board at the end of the fiscal year, and as such, the Board is considering any needed changes to the asset allocation based on the cash flow demands of each portfolio within each plan. Particular attention will be paid to the projected payout ratios of certain plans that are severely underfunded, which severely challenges their ability to invest in the illiquid assets needed to structure a portfolio targeting a return of 7.5%.

Within each asset class, the Board continues to review underlying structure and investments. There is consideration to restructure the U.S. equity portfolio by introducing an alternative indexing mandate in an effort to reduce the level of portfolio volatility tied to the equity markets at a cost less than active management. Within non-U.S. equities, the Board is focusing on global mandates and reducing fees where possible. Lastly, within global fixed income, the Board is considering adding global credit exposure to further diversify the portfolio.

## Oversight

The System's investment policies, goals, and objectives, as well as the performance of its assets are regularly monitored by KRS staff, the Board, and RVK, Inc. These evaluations include reviews of the investment management firms and the custodial bank that serve the System.

Market values and investment performance returns referenced above are based upon financial statements prepared by Bank of New York Mellon (previously prepared by Northern Trust) in their capacity as the custodian bank. We rely on their data and have not independently audited those statements. However, their financial statements are, to the best of our knowledge, believed to be reliable.

## Summary

Global equity markets have experienced tremendous gains and moderated volatility since the financial crisis in 2008. Recent uncertainty in capital markets and the unpredictability of future markets demands careful attention and thoughtful treatment of the assets entrusted to the Board's care by the System's employees and retirees. Patient, rational investors with long-term discipline and a commitment to rebalancing when necessary to maintain their long-term strategy have been rewarded in the past and may benefit from opportunities created by market turmoil.

We expect the Board's continued high standard of care for these assets and commitment to diversification to allow the System to meet its long-term goals and objectives.

Sincerely,



Rebecca Gratsinger  
Chief Executive Officer, Principal  
RVK, Inc.



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## Real Return - Fiscal Year Market Commentary

Global economic conditions took a step backwards as a number of political and macro events postponed the improving conditions for real assets from 2013. The lack of meaningful growth outside of the US has failed to stabilize commodity markets and continues to weigh heavily on a majority of indices; particularly the metals and energy subsectors. Metals and energy are dependent on global growth as opposed to the regional influences that impact timber, agriculture, and infrastructure. Continued instability in the Ukraine and the Middle East has placed additional pressure on the European economy which is still struggling to stabilize from the impact of the Greek crisis. Energy prices continue to trend downward, largely driven by increased US production and the continued maintenance of production by OPEC producers. With additional production potentially coming online from Iran and the opening of the Mexican energy market, inventories are likely to remain high for the foreseeable future. The mining sector continues to see pressure with excess capacity and high inventories persisting while low economic growth continues in China, one of the world's largest consumers of most materials. The global influence of monetary inflation continues to be negligible over the short term due to low growth rates in economic activity and global instability, as mentioned above. Most indicators report a prolonged low interest rate environment with relatively low upward pressure on both asset and monetary inflation over the medium-term. Agricultural assets are showing signs of moderate valuation adjustments in regions such as the US Midwest and other locations that had previously witnessed strong valuation increases. Timber assets have experienced performance profiles in line with a combination of biological and local inflationary influences. Infrastructure assets continue to improve as strategic and institutional investors bid aggressively for assets, particularly in core infrastructure, driving down yields to moderate levels. The strengthening US dollar has had a dramatic impact on commodity valuations and also on non-domestic lower volatility real asset strategies in emerging economies. Typically, the high volatility impact of foreign exchange reverts over longer cycles. Thus international assets have performed well in local dollar terms but have been overwhelmed by the currency effect.

## Real Return - Discussion

The KRS Real Return portfolio has historically focused on more conservative, income oriented strategies balanced with opportunistic funds designed to take advantage of inflation participation during periods of economic growth. This has resulted in a low volatility portfolio that has not witnessed the draw downs associated with broader generic indices. The process of portfolio construction has involved in depth analysis by staff, in conjunction with Albourne, and extensive due diligence including onsite visits with a wide array of managers. By focusing on income generating strategies, the portfolio has successfully navigated the most recent prolonged downward pressure on two of the primary real asset sectors mentioned above. Reallocation to existing successful strategies has been the primary theme of the previous year. Strategies that can enhance diversification or take advantage of currency dislocations have been and should continue to be added, if appropriate. Liquidity considerations will continue to be emphasized over the short term and we will continue to source opportunities that focus on inflation linked income characteristics and inflation protection through participation. Reallocation strategies will be considered based on their relative attractiveness to other opportunities.

## Absolute Return – Fiscal Year Market Commentary

The fiscal year started off on a choppy note in July 2014, triggered by increased geopolitical tensions in Russia/Ukraine and the Middle East. Quantitative strategies navigated these difficult events better than most other strategies, materially outperforming discretionary equity long/short strategies. This trend reversed in August when US and European equity markets made significant gains. CTA performance was particularly strong during the month, making gains in a number of asset classes including bonds, equities, and FX (particularly USD strength, and Euro weakness).

September saw the majority of risk assets suffer after an initial rally. Both equity and credit markets sold off while the dollar continued to strengthen. Macro and CTA strategies continued to perform well, capitalizing on many of the same themes from the prior month.

The AbbVie / Shire deal break occurred in October 2014 which, combined with a surprising court ruling on GSE preferred securities, set a negative tone for the month. Many hedge funds were hurt by both trades. Equity volatility rose and credit spreads widened out. Markets in October did rebound however, but some hedge funds that were unable or unwilling to hold onto trades did not participate in the rally and therefore showed poorer results. Quantitative and volatility-oriented strategies led in October.

While volatility was more subdued in November, it returned in December with oil prices declining sharply. Greek Eurozone exit risk remained at the forefront of investor's minds and high yielding credit suffered significantly. Distressed credit declined on the back of this volatility, while CTAs turned in strong results.

The Swiss National Bank surprised markets in January 2015 by abandoning the CHF-EUR peg, however only a small number of hedge funds were adversely impacted. Trends that emerged early on in the year included USD strength, falling bond yields in the US, UK, and Germany, and oil continuing to decline. Due to these trends, CTA's performed strongly during January as did European L/S.

It was a good month for risk assets broadly in February as fears of a Greek exit from the Eurozone were eased as the new government reached a deal with international lenders. Additionally, geopolitical tensions fell slightly as Russia and Ukraine agreed a tentative ceasefire. Oil recovered slightly and the USD strengthened into month end while gold fell. Hedge funds also performed well during the month, led by the higher beta strategies.

It was a mixed month for risk assets in March, with strong European performance on the back of the €60bn a month QE program but concerns over Greek reforms continuing to weigh locally. Equity markets were split with Europe, Japan and China gaining while the US, the UK and MSCI EM suffered. Higher yielding credit suffered as spreads widened out. Oil prices also fell on the back of increased IEA storage estimates while the USD continued to strengthen despite the Fed meeting carrying a dovish tone. Hedge funds had a good month led by global macro while relative value lagged marginally.

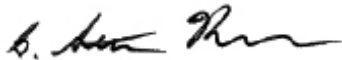
Early in the spring of 2015 a number of price reversals occurred, most notably a reversal of USD strength, gains in crude pricing, and a back up in rates across developed markets. April was a challenging month for US L/S managers with quite a degree of dispersion. Underperformance in health care and a rise in energy

hurt a lot of portfolios. Quantitative strategies struggled due to the aforementioned reversals during the month. After a relatively strong month of May, escalating concerns regarding Greece's bailout negotiations resulted in a defaulted €1.6bn payment to the IMF and drove volatility in equities and bonds through June. Chinese markets, especially, corrected severely during the month after previously strong performance YTD. Quantitative strategies were hurt the most during the month of June; however most hedge fund strategies ended the month negative as well.

### **Absolute Return - Discussion**

During the fiscal year, KRS investment staff have presented several managers for the Investment Committee's consideration and approval for implementation in the Absolute Return Portfolio. This process involved in-depth analysis by staff, research and analysis by Albourne, site visits, triangulating the research with the portfolio's existing fund-of-funds managers, general consultants, and other professional resources. A broad and diverse field of fund candidates was evaluated before narrowing the group to the final presentations.

We will continue to steadily grow the portfolio's number of direct manager strategies and, consequently, its diversification and return potential.



G. Stephen Kennedy  
Portfolio Analyst  
Albourne



Andrew McCulloch  
Portfolio Analyst  
Albourne

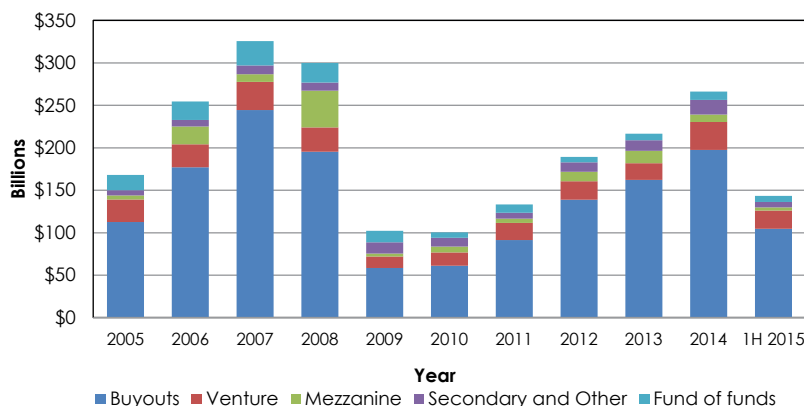
September 25, 2015

Pension Consulting Alliance, LLC. (PCA) was hired in April 2014 to advise the KRS Board of Trustees and Staff in its private equity investment activities. This is PCA's second annual review of the KRS private equity investment Program.

### Private Equity Industry Trends:

- Fundraising activities continue to exhibit increases from lows seen early in the financial crisis. Approximately \$143 billion of commitments were raised domestically in the first half of 2015, with buyouts continuing to represent the largest proportion of capital raised. This pace is on track to exceed the full calendar year 2014 commitment amount of \$266 billion and continue the year-over-year increases since 2010.

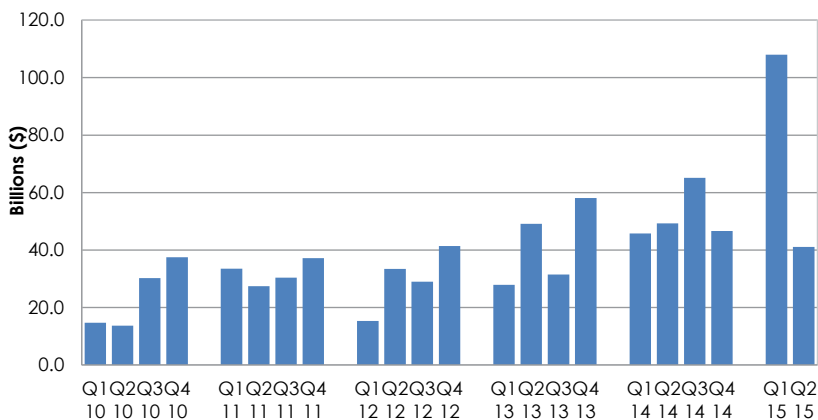
**Commitments to U.S. Private Equity Partnerships**



Source: Private Equity Analyst through June 2015

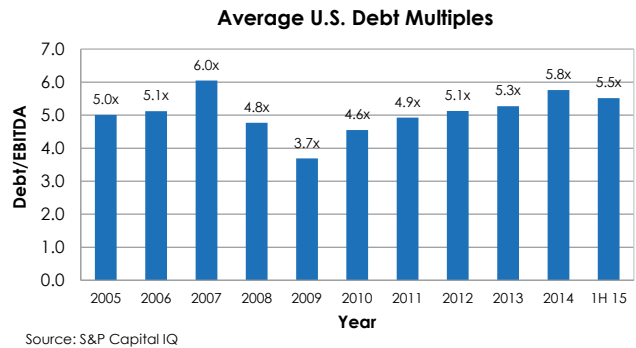
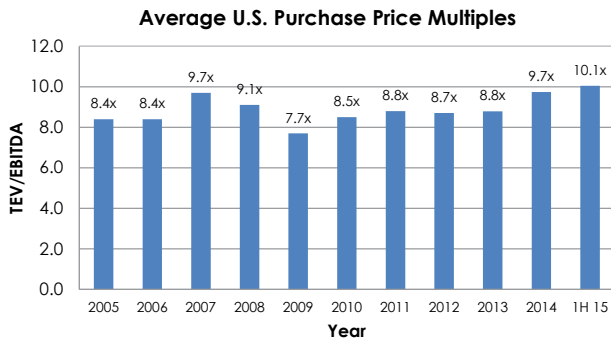
Announced U.S. buyout deal volume exhibited volatility in the first half of 2015 with volume on pace to exceed 2014 levels. Total announced U.S. buyout deal volume was \$149.1 billion in 1H 2015, up from \$95.1 billion in 1H 2014 and \$206.83 billion for the full 2014 calendar year (the highest annual level over the past seven years).

**Announced and Disclosed U.S. Quarterly LBO Deal Value\***

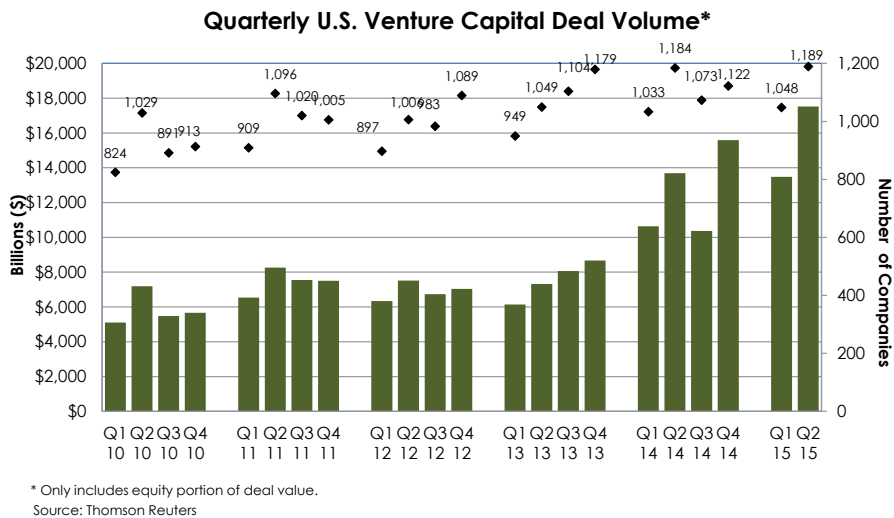


\* Total deal size (both equity and debt).  
Source: Thomson Reuters Buyouts

• Risk metrics in the leveraged buyout market were mixed during the first half of 2015 as purchase price multiples increased while debt multiples decreased. The average purchase price multiple in the first half of 2015, at 10.1x, increased from 9.7x in 2014 and was well above the ten-year average of 8.8x. Debt multiples for the first half of 2015 were at 5.5x, below the 5.8x level for the 2014 calendar year but still above the ten-year average of 5.0x.



• Venture capital investment activity continued to increase in the first half of 2015. Approximately \$31.0 billion was invested across 2,237 companies during the first half of 2015 which exceeded the \$24.3 billion invested across 2,217 companies in the first half of 2014. In the 2014 calendar year, \$50.3 billion was invested across approximately 4,400 companies.



• Exit activity for venture capital investments declined in the first half of 2015. The number of merger and acquisition (M&A) transactions decreased in the first half of 2015 from one-year prior, and annualized, is on pace to trail 2014 levels. The initial public offering (IPO) market also exhibited decreases in the first half of 2015 and is also on pace to slightly trail 2014 levels.

### Performance:

Performance of the broader private equity industry has been strong over the past several years, but has lagged the very strong performance posted by the domestic public equity markets. Over longer time-periods (i.e. ten-years or greater), the private equity markets have outperformed the public equity markets.

**Public Market Performance Comparison, as of March 31, 2015**

Index	1 Yr	3 Yr	5 Yr	10 Yr	20 Yr
All Private Equity*	9.3%	12.7%	13.5%	10.9%	12.9%
Russell 3000	12.4%	16.4%	14.7%	8.4%	9.6%
MSCI EAFE	-0.5%	9.5%	6.6%	5.4%	5.6%

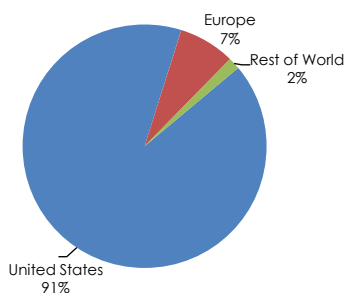
\*Thomson ONE, Cambridge Associates all Asset Class/Strategies

### KRS Private Equity Portfolio:

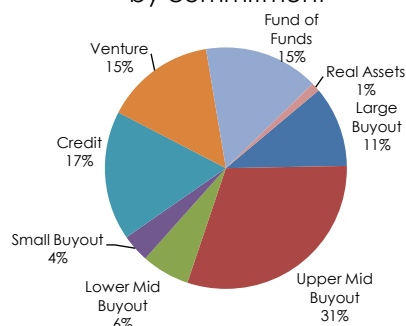
As of June 30, 2015, KRS had \$3.0 billion of commitments across 41 managers (64 partnerships) gaining exposure across the spectrum of private equity strategies including buyout, venture/growth, and credit-oriented strategies. Approximately \$2.7 billion has been drawn down while \$2.5 billion of capital has been returned. During the first six months of 2015, \$105.9 million has been drawn down to fund investments and \$211.7 million of distributions have been returned.

The Pension Plan had \$2.28 billion of active commitments and the Insurance Plan had \$676 million of active commitments as of mid-year 2015. The portfolio is well diversified across target investment strategies.

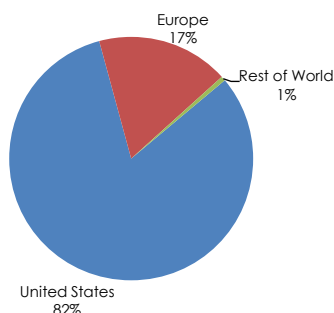
Pension Geographic Exposure:  
by commitment



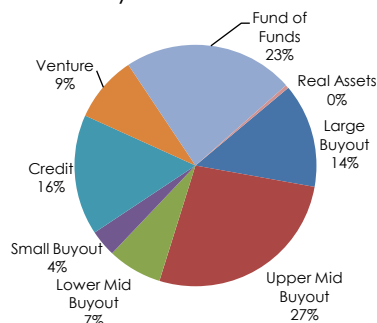
Pension Sector Exposure:  
by commitment



Insurance Geographic Exposure:  
by commitment



Insurance Sector Exposure:  
by commitment





## KRS Commitments:

Over the past twelve months ending June 30, 2015, KRS has committed approximately \$300.0 million across five partnerships.

KRS Commitment Activity, last twelve months

Fund Investment	Approval Date	Commitment Amount (M)
Crestview Partners III	Aug -2014	\$60.0
Secondary Opportunities III	Aug -2014	\$100.0
Ares Special Situations Fund IV	Nov -2014	\$40.0
Black Diamond Capital Management Opportunity Fund IV	Nov -2014	\$60.0
Keyhaven Capital Partners IV	May -2015	€40.0

As of 6/30/2015

## Program Development:

In dialogue with KRS Staff, PCA has identified the following areas of focus for further development of the portfolio:

- » Continue a disciplined approach to annual commitment pacing and partnership commitment sizing, making larger commitments to fewer managers in order to maintain a manageable number of relationships while progressing towards target allocations.
- » Consider additional global exposure, committing to direct partnerships where appropriate while utilizing fund of funds where access to a unique segment of the market warrants.
- » Explore cost-effective approaches to deploying capital, such as co-investing, to maximize returns while minimizing expenses.

Please feel free to contact me regarding any of the information above.

Sincerely,



Tad Fergusson, CFA  
 Managing Director  
 Pension Consulting Alliance, Inc.

September 30, 2015

ORG Portfolio Management LLC (“ORG”) serves as the Real Estate Investment Consultant for Kentucky Retirement Systems (“KRS”). It is ORG’s responsibility to present potential investment opportunities to the Investment Staff and Board and to make recommendations related to KRS’ real estate portfolio. It is ORG’s commitment to assist KRS in building a successful long term real estate investment portfolio for the KRS pension fund members.

## U.S. Market Overview

The U.S. economy has continued to increase at a persistent pace. The growth estimate for second quarter 2015 was 2.6% compared to 0.2% for the first quarter 2015. The stronger dollar has led to an increase in domestic consumption and a possible increase in interest rates in the near future. Business borrowing as well as optimism has helped to push the labor market to add over 220,000 new jobs in the second quarter 2015 and reducing the unemployment rate to 5.1%. The improved job growth started a cycle of wage growth, allowed increased spending, leading to rising business revenues and additional job opportunities.

The U.S. commercial real estate market continued to see improvement in 2015. The capitalization rates as of June 30, 2015 for all sectors have declined from the prior year ending June 30, 2014.

Capitalization Rates	2nd Qtr. 2014	2nd Qtr. 2013	Basis Point Change
Total	4.81%	5.18%	-0.37
Apartments	4.67%	4.84%	-0.18
Retail	4.97%	5.42%	-0.45
Office	4.69%	5.11%	-0.42
Industrial/Warehouse	5.20%	5.60%	-0.40

**Source: NCREIF – Current Value Weighted Capitalization Rates as of 6/30/2015.**

**Industrial Sector:** The Industrial sector remains a stand out as vacancies continue to fall and are lower than any point during the entire previous economic cycle. The second quarter 2015 was the third strongest since the beginning of the recovery in late 2009. While supply is slow to be delivered, the industrial pipeline is expanding quickly with Chicago, California’s Inland Empire, Dallas, Kansas City, Phoenix and Atlanta leading the way. Larger spaces, usually super-regional distribution markets, are in demand in Dallas, Chicago, California’s Inland Empire and Atlanta. Rent growth continues to be strong. The last four quarters ending June 30, 2015 annualized growth was 6.1%.

**Apartment Sector:** Despite the growing supply of new apartment buildings across most markets, the vacancy rate declined to 3.7% from 4.1% during the second quarter 2015. The increase in demand for apartments has allowed the rental rate growth to remain strong at 3.9% with another increase possible. Between 2012 and 2014 over 400,000 new units became available in the 54 largest U.S. markets with an expected delivery of an additional 400,000 new units in 2015 and 2016. The net absorption over the last four quarters ending June 30, 2015 was approximately 214,000 units compared to approximately 204,000 units of new supply. The future of rental growth changes from market to market. West Coast metro markets such as San Francisco, San Jose and the East Bay should continue to see strong results while Austin and Denver should slow down as new buildings are being delivered to the market.

**Office Sector:** Office fundamentals continue to improve as the absorption level increases due to the improved U.S. job growth rate over the past 5 years. During the first half of 2014, the employment rate moved over the pre-crisis peaks driven by energy, high tech and health care industries. Over the last 4 quarters ending June 30, 2015, national rents rose 4% and net absorption grew by 26%. The quarterly vacancy rate also decreased for the second quarter 2015 to 11.2% from 11.8% the previous quarter. This trend is spreading from the Central Business Districts to the suburbs. Office completions were 25% higher during the second quarter 2015 than they were for the same time period in 2014. Active supply pipelines in Houston and New York City have reached 13 million square feet each. The Houston market oversupply may become a concern as energy prices continue to fall causing employment growth to slow. The vacancy rate in Houston has grown to 12.6% over the past year ending June 30, 2015.

**Retail Sector:** The Retail sector produced twelve consecutive quarters of declining vacancies. The vacancy rate of 6.1% is only 0.1% above the best performance of the last economic cycle. Almost every market has seen positive demand despite new supply as a result of the Sears and Kmart closures. Boston, New York, and Denver have already reached pre-recession lows. Tenants are not following the lower rents in the new suburban centers as in past cycles; rather they are paying higher rent for more exposure in the urban areas where there is greater competition. Notwithstanding, there does seem to be some increase in demand in the existing strip and neighborhood centers where vacancies have fallen below 10% for the first time since 2009.

## ORG's View

Real estate markets in the U.S. have largely recovered from the 2008 financial crisis and the investment returns continue to increase. The real estate returns increased over the 2014 levels based upon the National Council of Real Estate Investment Fiduciaries ("NCREIF") Property Index ("NPI") which had a 13.0% return for the period ending June 30, 2015 vs. the 11.2% return for the one year period ending June 30, 2014.

ORG has noted that the one-year income return as of June 30, 2015 for core open end funds gross of fees as reported by the NCREIF Open-End Diversified Core Equity ("ODCE") Index is 4.9%. This low income return will require substantial rental rate growth or appreciation growth in order for the funds to generate the projected 8-9% rate of return expected for core. The long-term Since Inception appreciation return for the ODCE is 1.2%. ORG is concerned that the strategies targeting gateway core markets will underperform expectations for core real estate. These core gateway markets (San Francisco, New York) are 'priced to perfection' with the income returns at an all-time low.

In Europe, outside a few gateway cities (London and Paris), the real estate fundamentals and capital markets have not recovered as fast as in the U.S.

As an alternative, ORG continues to recommend that investors focus on investment strategies where going in income returns are higher in certain overlooked strategies. The supply/demand fundamentals are favorable for the office market, although there are a few markets with cause for concern (Houston, Austin, Seattle). Millennials (27% of the U.S. population) preference to living in apartments and working in creative office space will continue to drive demand in these sectors.

ORG recommends that a focus should be on sustainable and defensive cash flows by making investments with managers that target investments with existing cash flows or the creation of cash flows through value added investments. In addition, opportunities in real estate can be found in Western Europe, especially the United Kingdom in non-prime assets.

ORG also recommends strategies in opportunistic funds where investors can capitalize on the continual de-leveraging of real estate that continues as debt originated during 2005-2007 continues to mature over the next several years. These opportunities to recapitalize high quality properties that have often been neglected could generate attractive risk adjusted returns over the next several years.

## Kentucky Retirement Systems Real Estate Investments

All data below reflects activity through September 2015.

**2008-2010 Investment Activity:** In December 2008, Kentucky Retirement Systems made \$40 million commitments each to 1) Mesa West Real Estate Income Fund II, L.P., 2) PRIMA Mortgage Investment Trust and 3) Walton Street Real Estate Fund VI, L.P. In July 2013, an additional \$48.0 million was committed to PRIMA Mortgage Investment Trust increasing the total KRS commitment to \$82.0 million. In April 2015, \$15.5 million was withdrawn from PRIMA bring the total commitment down to \$66.5 million.

- » Mesa West Real Estate Income Fund II – YTD through September 2015, Mesa West II made no capital calls and returned \$6.8 million in capital and preferred return distributions. Since inception, \$33.4 million has been funded. Mesa West has indicated that they currently do not plan to call the additional \$6.6 million.
- » • PRIMA Mortgage Investment Trust – YTD through September 2015, PRIMA distributed \$2.3 million in income distributions and paid a \$15.5 million withdrawal. The investment is fully funded. Since inception, PRIMA has distributed \$19.9 million in income distributions and returned capital of \$15.5 million.
- » • Walton Street Real Estate Fund VI – YTD through September 2015 made no capital calls and returned \$10.7 million in capital and gain distributions. Since inception, \$31.9 million has been funded with \$8.1 million remaining capital to be called.

**2011 Investment Activity:** Kentucky Retirement Systems made 1) a \$100 million commitment to H/2 Credit Partners, L.P. in April with an additional \$3 million commitment in October 2012. In 2013, \$3.3 million was withdrawn from the fund for a total commitment of \$99.7 million; and 2) a \$101.9 million commitment to Harrison Street Core Property Fund, L.P. in December with an additional \$3.8 million commitment in October 2012 and \$17.9 million commitment in June 2013 for a total commitment of \$123.6 million.

- » H/2 Credit Partners – YTD through September 2015, H/2 Credit Partners made no distributions. This investment is fully funded.
- » Harrison Street Core Property Fund – YTD through September 2015, Harrison Street returned \$5.7 million of income distributions and of that \$1.6 million was reinvested for the Insurance Fund. This investment is fully funded.

**2012 Investment Activity:** Kentucky Retirement Systems made 1) a \$52.5 million commitment to Walton Street Real Estate Fund VII, L.P. in August with an additional \$2.4 million commitment in October for a total commitment of \$54.9 million; 2) a \$54.9 million commitment to Greenfield Acquisition Partners VI, L.P. in December; and 3) an \$83 million commitment to Mesa West Core Lending Fund, L.P. in December 2012.

- » Walton Street Real Estate Fund VII – YTD through September 2015, Walton VI made four capital calls totaling \$16.0 million and returned \$2,606 of income distributions. Since inception, \$40.3 million has been funded with \$14.6 million remaining capital to be called.
- » Greenfield Acquisition Partners VI – YTD through September 2015, Greenfield VI made no capital calls and returned \$22.3 million of capital, income and gain distributions. Since inception, \$52.7 million has been funded with \$2.2 million remaining capital to be called.
- » Mesa West Core Lending Fund – YTD though September 2015, Mesa West Core made one capital call totaling \$0.6 million and returned \$4.1 million of income distributions of which \$1.5 million was reinvested into the Insurance Fund. This investment is fully funded.

**2013 Investment Activity:** Kentucky Retirement Systems made 1) a \$30 million commitment to Rubenstein Properties II, L.P. in July; 2) a \$30 million to H/2 Core Debt Fund, L.P. in August; 3) a \$70 million commitment to Prologis Targeted U.S. Logistics Holdings, L.P. in October; and 4) a \$95 million commitment in Stockbridge Smart Markets, L.P. in December.

- » Rubenstein Properties II – YTD through September 2015, Rubenstein II made two capital calls totaling \$8.1 million and returned \$5.3 million of capital and income distributions. Since inception, \$12.5 million has been funded with \$17.5 million remaining capital to be called.
- » H/2 Core Debt Fund – YTD through September 2015, H/2 Core returned \$1.1 million of income distributions. This investment is fully funded.
- » Prologis Targeted U.S. Logistics Holdings – YTD through September 2015, Prologis made one capital call for \$51.8 million and distributed \$1.4 million of which \$0.4 was reinvested into the Insurance Fund. This investment is fully funded.
- » Stockbridge Smart Markets – YTD through September, Stockbridge Smart Markets distributed \$2.9 million of which \$0.5 million was reinvested into the Insurance Fund. This investment is fully funded.


**2014 Investment Activity:** Kentucky Retirement Systems made 1) a \$40 million commitment to Lubert-Adler Real Estate Fund VII, L.P. in March with an additional commitment of \$10 million in November; 2) a \$30 million commitment to Divco West IV, L.P. in April; and 3) \$40 million commitment to Greenfield Acquisition Partners VII, L.P. in July.

- » Lubert-Adler Real Estate Fund VII – YTD through September 2015, Lubert-Adler VII made two capital calls totaling \$10.0 million and returned \$0.1 million of fee rebate distributions. Since inception, \$15.0 million has been funded with \$35.0 million remaining to be called.
- » Divco West IV – YTD through September 2015, Divco West IV made five capital calls totaling \$9.7 million and returned \$3.7 in capital, income and gain distributions. Since inception, \$22.5 million has been funded with \$7.5 million remaining to be called.
- » Greenfield Acquisition Partners VII – YTD through September 2015, Greenfield VII made one capital call totaling \$1.6 million and returned \$5.7 million in capital, income and gain distributions. Since inception, \$21.1 million has been funded with \$18.9 million remaining capital to be called.

**2015 Investment Activity:** Kentucky Retirement Systems made no additional commitments to the Real Estate Portfolio through September 30, 2015. Withdrawal requests were sent to the managers for the following investments: PRIMA – complete withdrawal of \$66.5 million; Harrison Street Core Property Fund – withdrawal of \$23.550 million; and H/2 Capital - \$29.7 million. Payment of these withdrawal requests are expected to begin in during the fourth quarter 2015 and continue into 2016.

Please feel free to contact me regarding any of the information above.

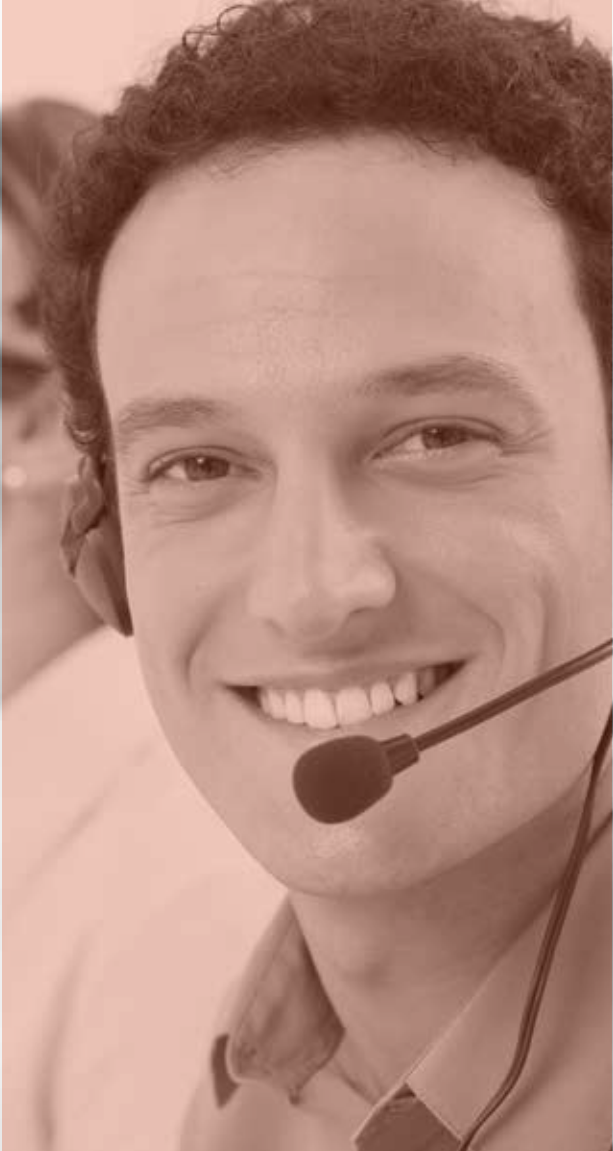
Very truly yours,



Jonathan Berns



**ACT**



## ACTUARIAL TABLE OF CONTENTS

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# UARIAL

The fifty-seventh annual actuarial valuation of the Kentucky Employees Retirement System (KERS), the fifty-fourth annual actuarial valuation of the County Employees Retirement System (CERS), and the fifty-fifth annual actuarial valuation of the State Police Retirement System (SPRS) have been completed and the reports prepared.

## Certification of Actuarial Results

The fifty-ninth annual actuarial valuation of the Kentucky Employees Retirement System (KERS), the fifty-sixth annual actuarial valuation of the County Employees Retirement System (CERS), and the fifty-seventh annual actuarial valuation of the State Police Retirement System (SPRS) have been completed and the reports prepared. These reports describe the current actuarial condition of the Kentucky Retirement Systems (KRS), determine the calculated employer contribution rates, and analyze fluctuations in these contribution rates.

Under state statute, the Board of Trustees must approve the employer contribution rates. These rates are determined actuarially based upon current membership data, plan provisions, and the assumptions and funding policies adopted by the KRS Board. The June 30, 2015 actuarial valuation will be used by the Board of Trustees to certify the CERS employer contribution rates for the fiscal year beginning July 1, 2016 and ending June 30, 2017. The June 30, 2015 actuarial valuation will be used by the Board of Trustees to certify the KERS and SPRS employer contribution rates for the fiscal years beginning July 1, 2016 and ending June 30, 2018.

### Funding Objectives & Policies

For each retirement system, KRS administers both a pension and insurance fund to provide for monthly retirement allowances and retiree insurance benefits respectively. The total employer contribution rate is comprised of a contribution to each respective fund.

Relative to the pension fund, a contribution rate has been established which consists of the normal cost and an amortization payment on the unfunded accrued liability (UAL). The amortization of any UAL is made over 30 years from the establishment of the amortization base using a level percent of payroll amortization method. In accordance with the changes to statute made by SB2, the amortization period was reestablished as a closed 30-year period beginning with the June 30, 2013 actuarial valuation. The amortization period will decrease by one each year in the future.

Overall, the total contribution for the pension fund is expected to remain stable as a percentage of payroll over future years in the absence of benefit improvements and material experience gains or losses.

Relative to the insurance fund, the Board's funding objective is to establish a contribution rate which consists of the normal cost and an amortization payment on the UAL. The assumptions and methods meet the requirements of GASB Statement No. 43. The UAL is amortized over a closed 30-year period beginning June 30, 2013.





The progress towards achieving the intended funding objectives, both relative to the pension and insurance funds, can be measured by the relationship of actuarial assets of each fund to the actuarial accrued liabilities.

Administrative expenses of the plans are also included as part of the total pension fund contribution. This portion of the funding is expected to remain relatively stable as a percentage of payroll over future years.

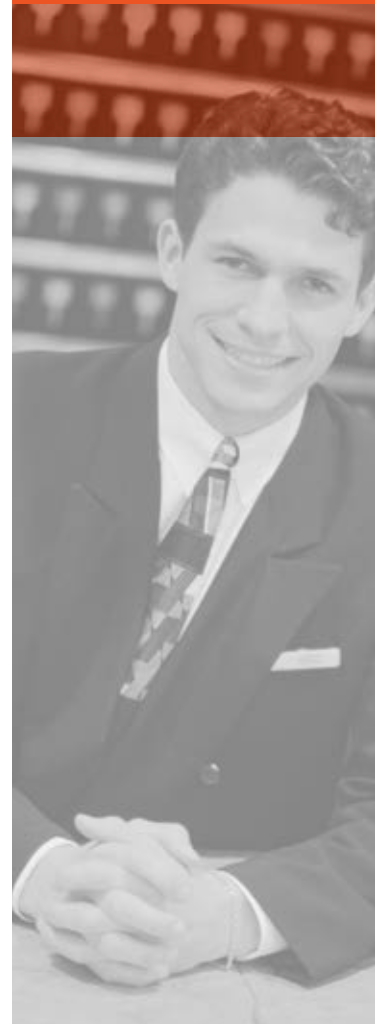
KERS, CERS and SPRS have three benefit tiers. Members hired prior to or on August 31, 2008 are in Tier 1. HB1 passed into law in 2008 which introduced Tier 2 for members hired after August 31, 2008 and prior to January 1, 2014. Tier 2 reduced the contribution rates in relationship to Tier 1. SB2 was passed into law in 2013 which introduced Tier 3 for those hired on or after January 1, 2014. Tier 3 is a Cash Balance Plan for pension benefits. The cash balance plan limits the employers' exposure to increased contribution rates due to less than anticipated investment experience.

### Progress towards Realization of Funding Objectives

The progress towards achieving the intended funding objectives, relative to both the pension and insurance funds, can be measured by the relationship of actuarial assets of each fund to the actuarial accrued liabilities. This relationship is known as the funding level and in the absence of benefit improvements, should increase over time until it reaches 100%.

In recent years, funding levels for the pension funds have fallen dramatically in response to investment returns less than the actuarially assumed rate, higher than anticipated retirement rates, assumption changes and increasing expenditures for retiree Cost of Living Adjustments (COLA). Within the KERS and SPRS plans, prior employer contribution rate reductions enacted by the State Legislature severely limited the plans ability to correct the declining funding levels. SB2 requires the state to contribute the full actuarially determined employer contribution rates compared to the HB1 phase-in rates which would not have required the full actuarially determined employer contribution rate for many years. As of June 30, 2015 the funding levels for the pension funds are as follows:

Funding Level of Pension Fund		
System	Pension Fund	Insurance Fund
KERS Nonhazardous	19.0%	28.8%
KERS Hazardous	62.2%	120.4%
CERS Nonhazardous	60.3%	68.7%
CERS Hazardous	58.0%	72.3%
SPRS	33.8%	65.8%





### **Data**

In completing the valuation of these systems, we have relied on data and financial information provided by the Kentucky Retirement Systems. We have reviewed this data for reasonableness, and made some general edit checks to impute certain information that may not have been provided with the original employee data. However, we have not audited this data. Any schedules of trend data over the past ten years or less contained in the Actuarial Section, as well as the Schedule of Funding Progress and Schedule of Employer Contributions in the Financial Section, have been based on valuation reports fully prepared by the actuary for the plan at the time of each valuation.

### **Assumptions & Methods**

The Board of Trustees, in consultation with the actuary, sets the actuarial assumptions and methods used in the valuation. At least once every five years the actuary conducts a thorough review of plan experience for the preceding five years, and then makes recommendations to the Board. The actuarial assumptions and methods used for the funding calculations of the valuation, as adopted by the Board on December 4, 2014 and based on the experience investigation report dated April 30, 2014, meet the parameters set for disclosure under GASB Statement 43 and by Actuarial Standards of Practice. These assumptions have been adopted by the Board of Trustees of the Kentucky Retirement Systems in accordance with the recommendation of the actuary. The next experience study is scheduled to be completed in early 2019 and any adjustments are expected to be reflected in the June 30, 2019 actuarial valuation.

### **Closing**

The long-term financial health of the three retirement Systems, like all retirement systems, is heavily dependent on two key items: (1) future investment returns and (2) contributions to the System. The System has recently been strengthened due to two reasons. They are: recent legislative action that provides 100% funding of the actuarially determined contribution and the elimination of unfunded ad hoc cost-of-living adjustments for retirees. The cost for providing cost-of-living adjustments for retirees must be prefunded in advance.



The information presented in this letter describes the pertinent issues relative to the valuation. There are no other specific issues that need to be raised beyond these items in order to fairly assess the funded position of the plan as presented in the current valuation.

The funding of the Kentucky Employees Retirement System, the County Employees Retirement System, and the State Police Retirement System has been determined based on the requirements of the Kentucky Revised Statutes and the current funding policies of the Board on the basis that all the actuarial assumptions are met. The funding rates established by the Board are appropriate for this purpose. However, it is up to the state legislature to follow through with the required funding. As noted above, SB2 calls for KERS and SPRS contributions at the actuarially determined rates beginning with fiscal year 2015. It should also be noted that the Retirement Fund of the KERS Non-Hazardous Retirement System and the SPRS Pension Fund are both in critical condition.

**Todd B. Green** ASA, FCA, MAAA  
*Principal and Consulting Actuary*

**Alisa Bennett**, FSA, EA, FCA, MAAA  
*Principal and Consulting Actuary*



# Summary of Actuarial Assumptions

The results of the actuarial valuation are based upon the assumptions and funding policies adopted by the Board and statutory funding requirements. Assumptions and funding policies are reviewed against actual plan experience at least once every five years through the completion of the Actuarial Experience Study.

The results of the actuarial valuation are based upon the assumptions and funding policies adopted by the Board and statutory funding requirements. Assumptions and funding policies are reviewed against actual plan experience at least once every five years through the completion of the Actuarial Experience Study. The most recent study was completed in April 2014 and reviewed plan experience for the period from July 1, 2008 through June 30, 2013. All assumptions, with the exception of health care trend rates, used in the June 30, 2015 actuarial valuation were based on the most recent experience study performed in 2014 and in accordance with the actuary's recommendations. The most recent experience study was adopted by the Board on December 4, 2014.

**1. Actuarial Cost Method:** The actuarial valuation was prepared using the entry age normal cost (EANC) method as required by state statute. Under this method, the present value of future benefits is determined for each member and allocated equitably as a level percentage of payroll from the member's entry age into the plan to the assumed age of exit from the plan. The portion of the present value of future benefits allocated to the current valuation year is called the normal cost. The portion of the present value of future benefits allocated to prior years of service that has accrued to date is called the actuarial liability. The unfunded actuarial liability (UAL) represents the difference between the actuarial liability and the actuarial value of assets as of the valuation date. Relative to the pension fund and the insurance fund, an employer contribution rate has been established to be equal to the sum of the normal cost and the amount needed to amortize the unfunded actuarial liability (UAL).

**2. UAL Amortization Method:** The amortization of any UAL is made over 30 years from the establishment of the amortization base using a level percent of payroll amortization method. In accordance with the changes to statute made by SB2, the amortization period was reestablished as a closed 30 year period beginning with the June 30, 2013 actuarial valuation. The amortization period will decrease by one each year in the future.

**3. Asset Valuation Method:** The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the investment return assumption. The amount recognized each year is 20% of the difference between market value and expected market value.

**4. Retiree Insurance Funding Policy:** The assumptions, methods, and funding requirements used in the valuation are to meet the requirements of GASB Statement No. 43. As with the pension Fund, the amortization period was reestablished as a closed 30-year period beginning with the June 30, 2013 actuarial valuation.

**5. Investment Return Assumption:** The future investment earnings of plan assets are assumed to accumulate at a rate of 7.50% per annum. This rate consists of a 3.25% inflationary component and a 4.25% real rate of return component.

**6. Salary Increase Assumptions:** Active member salaries are assumed to increase at the rates provided in Table 1 on the following page. The rates include a 4.0% percent inflationary component and an additional increase due to promotion based upon plan experience. These assumptions were adopted in 2014.





**Table 1. Salary Increase Assumptions**

Service	KERS NonHaz	KERS Haz	CERS NonHaz	CERS Haz	SPRS
0-1	16.50%	20.50%	12.50%	19.50%	16.50%
1-2	8.50%	8.50%	9.00%	10.00%	11.50%
2-3	6.00%	6.50%	5.50%	6.00%	9.50%
3-4	5.50%	6.00%	5.50%	5.25%	8.50%
4-5	5.50%	5.50%	5.00%	5.00%	7.50%
5-6	5.50%	5.00%	5.00%	4.50%	6.50%
6-7	5.00%	4.50%	4.75%	4.00%	6.00%
7-8	5.00%	4.50%	4.75%	4.00%	6.00%
8-9	5.00%	4.50%	4.50%	4.00%	5.00%
9-10	4.50%	4.50%	4.50%	4.00%	4.50%
10+	4.50%	4.50%	4.25%	4.00%	4.00%

**7. Payroll Growth Assumption:** Active member payroll is assumed to increase at a rate of 4.0% per annum. This assumption was adopted in 2014.

**8. Retiree Cost of Living Adjustments (COLA):** SB2 only allows the Cost of Living Adjustments (COLAs) to be awarded on a biennial basis if the State Legislature so authorizes and either (i) the system is over 100% funded or (ii) the Legislature appropriates sufficient funds to pay the increased liability for the COLA.

**9. Medical Inflation Rate Assumption:** The costs for retiree medical premiums are assumed to increase each according to the assumptions provided in Table 2 below:

**Table 2. Cost of Retiree Medical Premiums**

Fiscal Year Ended	Trend		Dollar Contribution
	Under Age 65	Age 65 and Over	
2016	7.50%	5.50%	1.50%
2017	6.75%	5.25%	1.50%
2018	6.25%	5.00%	1.50%
2019	5.75%	5.00%	1.50%
2020	5.25%	5.00%	1.50%
2021 and beyond	5.00%	5.00%	1.50%

*\* Applies to members participating on or after July 1, 2003*

**10. Retirement Rate Assumptions:** The probability, or the likelihood, that a member will retire at a specified age or level of service is provided in Table 3. These assumptions were adopted in 2014.

**Table 3.** Retirement Rate Assumptions

Age	Non-Hazardous			Service	Hazardous					
	KERS <sup>1</sup>	KERS <sup>2</sup>	CERS <sup>3</sup>		KERS <sup>4</sup>	KERS <sup>5</sup>	CERS <sup>6</sup>	CERS <sup>7</sup>	SPRS <sup>8</sup>	SPRS <sup>9</sup>
55	8.0%		5.0%	20	40.0%		22.5%		22.0%	
56	8.0%		6.0%	21	40.0%		22.5%		22.0%	
57	8.0%		7.0%	22	40.0%		22.5%		22.0%	
58	8.0%		8.0%	23	40.0%		22.5%		28.0%	
59	8.0%		8.0%	24	40.0%		30.0%		28.0%	
60	10.0%	10.0%	9.0%	25	47.0%	40.0%	33.0%	22.5%	28.0%	22.0%
61	20.0%	20.0%	15.0%	26	47.0%	40.0%	33.0%	22.5%	28.0%	22.0%
62	20.0%	20.0%	18.0%	27	47.0%	40.0%	36.0%	22.5%	28.0%	22.0%
63	20.0%	20.0%	18.0%	28	47.0%	40.0%	39.0%	22.5%	44.0%	28.0%
64	20.0%	20.0%	18.0%	29	47.0%	40.0%	55.0%	30.0%	44.0%	28.0%
65	20.0%	25.0%	18.0%	30	47.0%	47.0%	33.0%	33.0%	44.0%	28.0%
66	20.0%	25.0%	18.0%	31	47.0%	47.0%	33.0%	33.0%	58.0%	28.0%
67	20.0%	25.0%	18.0%	32	50.0%	47.0%	50.0%	36.0%	58.0%	28.0%
68	20.0%	25.0%	18.0%	33	50.0%	47.0%	40.0%	39.0%	58.0%	44.0%
69	20.0%	25.0%	18.0%	34	50.0%	47.0%	40.0%	55.0%	58.0%	44.0%
70	20.0%	25.0%	18.0%	35	60.0%	47.0%	40.0%	33.0%	58.0%	44.0%
71	20.0%	25.0%	18.0%	36	60.0%	47.0%	40.0%	33.0%	58.0%	58.0%
72	20.0%	25.0%	18.0%	37	60.0%	50.0%	40.0%	50.0%	58.0%	58.0%
73	20.0%	25.0%	18.0%	38	60.0%	50.0%	40.0%	40.0%	58.0%	58.0%
74	20.0%	25.0%	18.0%	39	60.0%	50.0%	40.0%	40.0%	58.0%	58.0%
75+	100.0%	100.0%	100.0%	40+	60.0%	60.0%	40.0%	40.0%	58.0%	58.0%

1 For members participating before 9/1/2008. If service is at least 27 years, the rate is 35%.  
 2 For members participating on or after 9/1/2008. If age plus service is at least 87, the rate is 35%.  
 3 If service is at least 27 years, the rate is 30% for members participating before 9/1/2008. If age plus service is at least 87, the rate is 30% for members participating on or after 9/1/2008.  
 4 For members participating before 9/1/2008. The annual rate of service retirement is 100% at age 65.  
 5 For members participating on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.  
 6 For members participating before 9/1/2008. The annual rate of service retirement is 100% at age 62.  
 7 For members participating on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.  
 8 For members whose participation began before 9/1/2008. The annual rate of service retirement is 100% at age 55.  
 9 For members whose participation began on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.

**Mortality Assumptions:** The mortality table used for active members is RP-2000 Combined Mortality Table projected with Scale BB to 2013 (multiplied by 50% for males and 30% for females). For healthy retired members and beneficiaries, the mortality table used is the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (set back 1 year for females). For disabled members, the RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013 (set back 4 years for males) is used for the period after disability retirement. There is some margin in the current mortality tables for possible future improvement in mortality rates and that margin will be reviewed again when the next experience investigation is conducted.

**Table 4.** Sample Annual Rates of Mortality

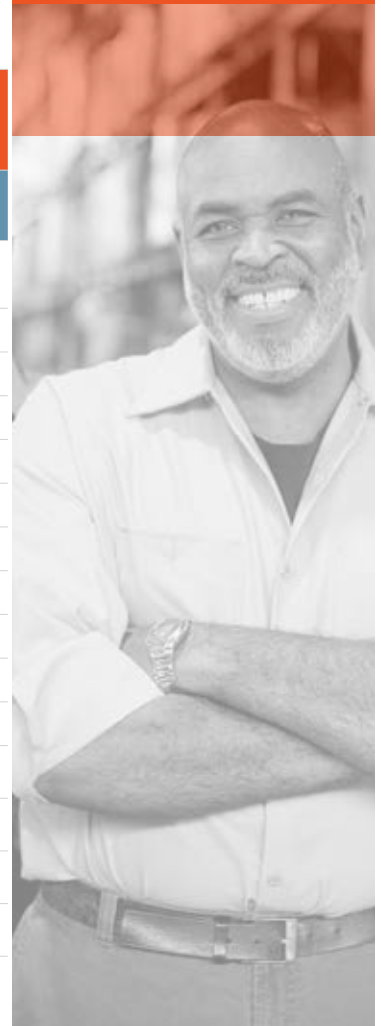
Age	Active Member Mortality		Retired Member Mortality*		Disabled Member Mortality*	
	Males	Females	Males	Females	Males	Females
Under 20	0.02%	0.01%	0.03%	0.02%	-	-
22	0.02%	0.01%	0.04%	0.02%	-	-
32	0.03%	0.01%	0.05%	0.03%	-	-
42	0.06%	0.02%	0.12%	0.07%	2.17%	0.72%
52	0.13%	0.06%	0.26%	0.18%	2.54%	1.29%
62	0.39%	0.17%	0.78%	0.50%	3.50%	2.06%
72	1.12%	0.53%	2.24%	1.59%	4.68%	3.66%

\* For members retiring on or after July 1, 2006.

**Withdrawal Rates** The probability, or likelihood, of active members terminating employment prior to retirement is provided in Table 5 on the following page. The withdrawal rate is a function of service. These assumptions were adopted in 2014.

**Table 5.** Selected Rates of Termination Prior to Retirement

Years of Service	KERS Non-Hazardous	KERS Hazardous	Years of Service	CERS Hazardous	CERS Hazardous	Years of Service	SPRS
	0-1	22.50%		25.00%	0-1		28.00%
1-2	15.50%	10.50%	1-2	16.00%	13.00%	1-2	7.00%
2-3	12.50%	7.50%	2-3	12.00%	10.50%	2-9	3.00%
3-4	10.50%	6.50%	3-4	10.00%	9.00%	9 & Over	2.50%
4-5	9.00%	5.50%	4-5	8.00%	8.00%		
5-6	6.50%	4.50%	5-6	6.00%	7.00%		
6-7	5.50%	3.00%	6-7	5.00%	7.00%		
7-8	5.00%	3.00%	7-8	5.00%	6.00%		
8-9	4.50%	3.00%	8-13	4.00%	6.00%		
9-10	4.50%	2.50%	13 & Over	3.00%	6.00%		
10-11	4.00%	2.50%					
11-13	4.00%	2.00%					
13-15	3.50%	2.00%					
15 & Over	3.00%	2.00%					





**Rates of Disablement:** KRS provides disability benefits for those individuals meeting specific qualifications established by state law. This assumption provides the probability, or likelihood, that a member will become disabled during the course of employment for various age levels. These assumptions were adopted in 2014.

This assumption provides the probability, or likelihood, that a member will become disabled during the course of employment for various age levels.

### Rate of Disablement

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
Nearest Age	Probability	Probability	Probability	Probability	Probability
20	0.02%	0.03%	0.02%	0.05%	0.05%
30	0.03%	0.05%	0.03%	0.09%	0.09%
40	0.07%	0.10%	0.07%	0.20%	0.20%
50	0.19%	0.28%	0.19%	0.56%	0.56%
60	0.49%	0.73%	0.49%	1.46%	1.46%



## Summary of Actuarial Valuation Results

	KERS Non-Haz	KERS Haz	CERS Non-Haz	CERS Haz	SPRS
<b>Recommended Rate Fiscal 2015-2016</b>					
Pension Fund Contribution	38.93%	21.08%	13.95%	21.71%	66.47%
Insurance Fund Contribution	8.35%	2.74%	4.93%	9.79%	18.87%
Recommended Employer Contribution	47.28%	23.82%	18.88%	31.50%	85.34%
<b>Funded Status as of Valuation Date</b>					
<b>PENSION FUND</b>					
Actuarial Liability	\$12,359,672,849	\$895,433,387	\$10,740,325,421	\$3,613,307,547	\$734,156,446
Actuarial Value of Assets	\$2,350,989,940	\$556,687,757	\$6,474,848,513	\$2,096,782,956	\$248,387,946
Unfunded Liability on Actuarial Value of Assets	\$10,008,682,909	\$338,745,630	\$4,265,476,908	\$1,516,524,591	\$485,768,500
Funding Ratio on Actuarial Value of Assets	19.02%	62.17%	60.29%	58.03%	33.83%
Market Value of Assets	\$2,307,858,072	\$550,120,310	\$6,416,853,506	\$2,073,397,045	\$246,968,144
Unfunded Liability on Market Value of Assets	\$10,051,814,777	\$345,313,077	\$4,323,471,915	\$1,539,910,502	\$487,188,302
Funding Ratio on Market Value of Assets	18.67%	61.44%	59.75%	57.38%	33.64%
<b>INSURANCE FUND</b>					
Actuarial Liability	\$2,413,705,252	\$374,904,234	\$2,907,827,440	\$1,504,015,233	\$254,838,710
Actuarial Value of Assets	\$695,018,262	\$451,514,191	\$1,997,456,463	\$1,087,707,118	\$167,774,940
Unfunded Liability on Actuarial Value of Assets	\$1,718,686,990	(\$76,609,957)	\$910,370,977	\$416,308,115	\$87,063,770
Funding Ratio on Actuarial Value of Assets	28.79%	120.43%	68.69%	72.32%	65.84%
Market Value of Assets	\$687,684,080	\$441,626,285	\$1,948,454,097	\$1,061,560,788	\$165,018,209
Unfunded Liability on Market Value of Assets	\$1,726,021,172	(\$66,722,051)	\$959,373,343	\$442,454,445	\$89,820,501
Funding Ratio on Market Value of Assets	28.49%	117.80%	67.01%	70.58%	64.75%
<b>MEMBER DATA</b>					
Number of Active Members	30,056	3,886	80,852	9,172	937
Total Annual Payroll (Active Members) <sup>1</sup>	\$1,544,234,409	\$128,680,130	\$2,296,715,957	\$483,640,601	\$45,764,515
Average Annual Pay (Active Members)	\$39,539	\$33,114	\$28,406	\$52,730	\$48,842
Number of Retired Members & Beneficiaries	42,269	3,758	52,651	8,034	1,460
Average Annual Retirement Allowance	\$20,904	\$15,016	\$11,306	\$25,162	\$37,624
Number of Vested Inactive Members	9,806	460	13,649	708	63
Number of Inactive Members Due a Refund	38,454	4,094	66,530	1,948	362

<sup>1</sup> Annual payroll included in the Summary of Actuarial Valuation Results is based upon the annualized monthly payroll for active members as of the valuation date. The annual payroll recorded in the financial section is based upon the sum of the monthly payroll for active members recorded for each month of fiscal year ending June 30, 2015.

## Recommended Employer Contribution Rates as of June 30, 2015

### KERS Nonhazardous

Valuation Date	Fiscal Year	Pension Fund Normal Cost	Pension Fund Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Rate
6/30/10	2011-2012	4.23%	20.07%	24.30%	16.41%	40.71%
6/30/11	2012-2013	4.38%	23.65%	28.03%	16.52%	44.55%
6/30/12	2013-2014	4.26%	28.31%	32.57%	12.71%	45.28%
6/30/13	2014-2015	4.13%	26.71%	30.84%	7.93%	38.77%
6/30/14	2015-2016	4.10%	29.47%	33.57%	7.74%	41.31%
6/30/15	2016-2017	3.60%	35.33%	38.93%	8.35%	47.28%

### KERS Hazardous

Valuation Date	Fiscal Year	Pension Fund: Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Rate
6/30/10	2011-2012	7.19%	6.92%	14.11%	19.73%	33.84%
6/30/11	2012-2013	7.47%	8.69%	16.16%	19.73%	35.89%
6/30/12	2013-2014	6.09%	10.91%	17.00%	11.84%	28.84%
6/30/13	2014-2015	5.79%	10.58%	16.37%	9.97%	26.34%
6/30/14	2015-2016	5.69%	11.40%	17.09%	7.12%	24.21%
6/30/15	2016-2017	6.93%	14.15%	21.08%	2.74%	23.82%

*The contribution rates for KERS Non-Hazardous and KERS Hazardous shown in the above tables are the full funding rates presented by the actuary in the 2010 through 2015 annual valuations. However, the actual employer contribution rates have been less than those shown above. As a result of HB 1 passed in 2008 the statute called for an employer contribution rate at an increasing percentage of the full funding rates until 100% was achieved in 2025 for KERS Non-Hazardous and 2019 for KERS Hazardous. SB2 eliminated this phase-in beginning with the June 30, 2013 actuarial valuation.*

### KERS Funds

The contribution rates for KERS Non-Hazardous and KERS Hazardous shown in the tables above are the full funding rates presented by the actuary in the 2010 through 2015 annual valuations. However, the actual employer contribution rates have been less than those shown above for the years prior to 2014-2015. As a result of HB 1 passed in 2008 the statute called for an employer contribution rate at an increasing percentage of the full funding rates until 100% was achieved in 2025 for KERS Non-Hazardous and 2019 for KERS Hazardous. SB2 eliminated this phase-in beginning with the June 30, 2013 actuarial valuation and employers began contributing the full funding rate rate in the 2014-2015 fiscal year.

### CERS Funds

The insurance fund contribution rates and the employer contribution rates for CERS Non-Hazardous and CERS Hazardous shown in the tables above are the full funding rates presented by the actuary in the 2010 through 2015 annual valuations. However, in the case of CERS Non-Hazardous and CERS Hazardous, in 2006 the actuary recommended a five-year phase-in of the rate which requires the payment of the insurance benefit normal cost with a five-year phase-in of the unfunded accrued liability (UAL) associated with the insurance funds. In 2008 this recommendation was changed to a ten-year phase-in from the initial starting date as a result of the passage of HB 1 by the Kentucky General Assembly. As a result, the CERS Non-Hazardous insurance fund contribution rate actually recommended by the actuary and adopted by the Board for 2014-2015 is 4.92% and the employer contribution rate is 17.67%. The CERS Hazardous insurance fund contribution rate actually recommended by the actuary and adopted by the Board for 2014-2015 is 13.58% and the employer contribution rate is 34.31%.



## Recommended Employer Contribution Rates as of June 30, 2015

### CERS Nonhazardous

Valuation Date	Fiscal Year	Pension Fund: Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Rate
6/30/10	2011-2012	4.72%	6.98%	11.70%	9.59%	21.29%
6/30/11	2012-2013	4.68%	7.94%	12.62%	8.59%	21.21%
6/30/12	2013-2014	4.68%	9.06%	13.74%	5.84%	19.58%
6/30/13	2014-2015	4.35%	8.40%	12.75%	5.35%	18.10%
6/30/14	2015-2016	4.23%	8.19%	12.42%	4.88%	17.30%
6/30/15	2016-2017	3.80%	10.15%	13.95%	4.93%	18.88%

### CERS Hazardous

Valuation Date	Fiscal Year	Pension Fund: Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Rate
6/30/10	2011-2012	7.31%	10.60%	17.91%	23.74%	41.65%
6/30/11	2012-2013	7.40%	12.70%	20.10%	21.84%	41.94%
6/30/12	2013-2014	6.44%	15.33%	21.77%	16.02%	37.79%
6/30/13	2014-2015	6.35%	14.38%	20.73%	14.97%	35.70%
6/30/14	2015-2016	6.21%	14.05%	20.26%	13.42%	33.68%
6/30/15	2016-2017	4.52%	17.19%	21.71%	9.79%	31.50%

The insurance fund contribution rates and the employer contribution rates for CERS Non-Hazardous and CERS Hazardous shown in the above tables are the full funding rates presented by the actuary in the 2010 through 2015 annual valuations. However, in the case of CERS Non-Hazardous and CERS Hazardous, in 2006 the actuary recommended a five-year phase-in of the rate which requires the payment of the insurance benefit normal cost with a five-year phase-in of the unfunded accrued liability (UAL) associated with the insurance funds. In 2008 this recommendation was changed to a ten-year phase-in from the initial starting date. As a result, the CERS Non-Hazardous insurance fund contribution rate actually recommended by the actuary and adopted by the Board for 2016-2017 is 4.73% and the employer contribution rate is 18.68%. The CERS Hazardous insurance fund contribution rate actually recommended by the actuary and adopted by the Board for 2016-2017 is 9.35% and the employer contribution rate is 31.06%.

## Recommended Employer Contribution Rates as of June 30, 2015

### SPRS

Valuation Date	Fiscal Year	Pension Fund Normal Cost	Pension Fund Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Rate
6/30/10	2011-2012	7.75%	32.05%	39.80%	54.83%	94.63%
6/30/11	2012-2013	8.12%	39.36%	47.48%	55.93%	103.41%
6/30/12	2013-2014	8.14%	45.21%	53.35%	43.17%	96.52%
6/30/13	2014-2015	8.46%	45.44%	53.90%	21.86%	75.76%
6/30/14	2015-2016	8.39%	50.05%	58.44%	19.17%	77.61%
6/30/15	2016-2017	8.77%	57.70%	66.47%	18.87%	85.34%

The contribution rates for SPRS shown in the above tables are the full funding rates presented by the actuary in the 2010 through 2015 annual valuations. However, the actual employer contribution rates have been less than those shown above. As a result of HB 1 passed in 2008 the statute called for an employer contribution rate at an increasing percentage of the full funding rates until 100% was achieved in 2025 for KERS Non-Hazardous and 2019 for KERS Hazardous. SB2 eliminated this phase-in beginning with the June 30, 2013 actuarial valuation.

### SPRS Funds

The contribution rates for SPRS shown in the tables above are the full funding rates presented by the actuary in the 2010 through 2015 annual valuations. However, the actual employer contribution rates have been less than those shown above for the years prior to 2014-2015. As a result of HB 1 passed in 2008 the statute called for an employer contribution rate at an increasing percentage of the full funding rates until 100% was achieved in 2018 for SPRS. SB2 eliminated this phase-in beginning with the June 30, 2013 actuarial valuation.

## Summary of Actuarially Unfunded Liabilities as of June 30, 2015

### KERS Non-Haz Pension Fund

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/10	\$11,004,795,089	\$4,210,215,585	\$3,503,007,035	\$6,794,579,504	\$7,501,788,054	38.3%	31.8%
6/30/11	\$11,182,142,032	\$3,276,986,087	\$3,538,878,093	\$7,455,155,945	\$7,643,263,939	33.3%	31.7%
6/30/12	\$11,361,048,136	\$3,101,316,738	\$2,980,401,603	\$8,259,731,398	\$8,380,646,533	27.3%	26.2%
6/30/13	\$11,386,602,159	\$2,636,122,852	\$2,747,428,086	\$8,750,479,307	\$8,639,174,073	23.2%	24.1%
6/30/14	\$11,550,110,224	\$2,423,956,716	\$2,560,419,519	\$9,126,153,508	\$8,989,690,705	21.0%	22.2%
6/30/15	\$12,359,672,849	\$2,350,989,940	\$2,307,858,072	\$10,008,682,909	\$10,051,814,777	19.0%	18.7%

### KERS Non-Haz Insurance Fund

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/10	\$4,466,136,041	\$471,341,628	\$371,002,484	\$3,994,794,413	\$4,095,133,557	10.6%	8.3%
6/30/11	\$4,280,089,633	\$451,620,442	\$433,305,243	\$3,828,469,191	\$3,846,784,390	10.6%	10.1%
6/30/12	\$3,125,330,157	\$446,080,511	\$430,805,726	\$2,679,249,646	\$2,694,524,431	14.3%	13.8%
6/30/13	\$2,128,754,134	\$497,584,327	\$509,364,080	\$1,631,169,807	\$1,619,390,054	23.4%	23.9%
6/30/14	\$2,226,759,925	\$621,236,646	\$664,775,708	\$1,605,523,279	\$1,561,984,217	27.9%	29.9%
6/30/15	\$2,413,705,252	\$695,018,262	\$687,684,080	\$1,718,686,990	\$1,726,051,172	28.8%	28.5%

### KERS Haz Pension Fund

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/10	\$688,149,451	\$502,729,009	\$443,511,663	\$185,420,442	\$244,637,788	73.1%	64.5%
6/30/11	\$721,293,444	\$510,748,505	\$510,628,492	\$210,544,939	\$210,664,952	70.8%	70.8%
6/30/12	\$752,699,457	\$497,226,296	\$478,103,794	\$255,473,161	\$274,595,663	66.1%	63.5%
6/30/13	\$783,980,594	\$505,656,808	\$513,162,166	\$278,323,786	\$270,818,428	64.5%	65.5%
6/30/14	\$816,850,063	\$527,897,261	\$559,504,340	\$288,952,802	\$257,345,723	64.6%	68.5%
6/30/15	\$895,433,387	\$556,687,757	\$550,120,310	\$338,745,630	\$345,313,077	62.2%	61.4%

### KERS Haz Insurance Fund

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/10	\$493,297,529	\$314,427,296	\$271,395,843	\$178,870,233	\$221,901,686	63.7%	55.0%
6/30/11	\$507,058,767	\$329,961,615	\$321,071,515	\$177,097,152	\$185,987,252	65.1%	63.3%
6/30/12	\$384,592,406	\$345,573,948	\$333,298,119	\$39,018,458	\$51,294,287	89.9%	86.7%
6/30/13	\$385,517,675	\$370,774,403	\$374,309,576	\$14,743,272	\$11,208,099	96.2%	97.1%
6/30/14	\$396,986,820	\$419,395,867	\$435,503,976	(\$22,409,047)	(\$38,517,156)	105.6%	109.7%
6/30/15	\$374,904,234	\$451,514,191	\$441,626,285	(\$76,609,957)	(\$66,72,051)	120.4%	117.8%

**Continued. Summary of Actuarially Unfunded Liabilities as of June 30, 2015**

**CERS Non-Haz Pension Fund**

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/10	\$8,459,022,280	\$5,546,857,291	\$4,819,933,717	\$2,912,164,989	\$3,639,088,563	65.6%	57.0%
6/30/11	\$8,918,085,025	\$5,629,611,183	\$5,577,252,295	\$3,288,473,842	\$3,340,832,730	63.1%	62.5%
6/30/12	\$9,139,567,695	\$5,547,235,599	\$5,372,769,813	\$3,592,332,096	\$3,766,797,882	60.7%	58.8%
6/30/13	\$9,378,876,114	\$5,637,094,483	\$5,780,830,355	\$3,741,781,631	\$3,598,045,759	60.1%	61.6%
6/30/14	\$9,772,522,616	\$6,117,133,692	\$6,507,300,157	\$3,655,388,924	\$3,265,222,459	62.6%	66.6%
6/30/15	\$10,740,325,421	\$6,474,848,513	\$6,416,853,506	\$4,265,476,908	\$4,323,471,915	60.3%	59.8%

**CERS Non-Haz Insurance Fund**

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/10	\$3,158,340,174	\$1,293,038,593	\$1,096,581,872	\$1,865,301,581	\$2,061,758,302	40.9%	34.7%
6/30/11	\$3,073,973,205	\$1,433,450,793	\$1,451,984,026	\$1,640,522,412	\$1,621,989,179	46.6%	47.2%
6/30/12	\$2,370,771,288	\$1,512,853,851	\$1,439,226,170	\$857,917,437	\$931,545,118	63.8%	60.7%
6/30/13	\$2,443,894,100	\$1,628,244,197	\$1,633,696,661	\$815,649,903	\$810,197,439	66.6%	66.9%
6/30/14	\$2,616,914,600	\$1,831,199,465	\$1,899,557,376	\$785,715,135	\$717,357,224	70.0%	72.6%
6/30/15	\$2,907,827,440	\$1,997,456,463	\$1,948,454,097	\$910,370,977	\$959,373,343	68.7%	67.0%

**CERS Haz Pension Fund**

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/10	\$2,672,151,907	\$1,749,464,388	\$1,506,787,429	\$922,687,519	\$1,165,364,478	65.5%	56.4%
6/30/11	\$2,859,041,052	\$1,779,545,393	\$1,760,602,934	\$1,079,495,659	\$1,098,438,118	62.2%	61.6%
6/30/12	\$3,009,992,047	\$1,747,379,297	\$1,677,940,479	\$1,262,612,750	\$1,332,051,568	58.1%	55.8%
6/30/13	\$3,124,205,593	\$1,801,691,410	\$1,830,657,969	\$1,322,514,183	\$1,293,547,624	56.7%	58.6%
6/30/14	\$3,288,825,753	\$1,967,640,027	\$2,082,998,414	\$1,321,185,726	\$1,205,827,339	59.8%	63.3%
6/30/15	\$3,613,307,547	\$2,096,782,956	\$2,073,397,045	\$1,516,524,591	\$1,539,910,502	58.0%	57.4%

**CERS Haz Insurance Fund**

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/10	\$1,674,703,216	\$692,769,770	\$586,826,965	\$981,933,446	\$1,087,876,251	41.4%	35.0%
6/30/11	\$1,647,702,755	\$770,790,274	\$774,509,101	\$876,912,481	\$873,193,654	46.8%	47.0%
6/30/12	\$1,364,843,057	\$829,040,842	\$788,070,813	\$535,802,215	\$576,772,244	60.7%	57.7%
6/30/13	\$1,437,332,817	\$892,774,391	\$894,232,297	\$544,558,426	\$543,100,520	62.1%	62.2%
6/30/14	\$1,493,864,379	\$997,733,237	\$1,034,307,636	\$496,131,142	\$459,556,743	66.8%	69.2%
6/30/15	1,504,015,233	\$1,087,707,118	\$1,061,560,788	\$416,308,115	\$442,454,445	72.3%	70.6%



*Continued. Summary of Actuarially Unfunded Liabilities as of June 30, 2015*

**SPRS Pension Fund**

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/10	\$612,444,806	\$304,577,292	\$264,944,089	\$307,867,514	\$347,500,717	49.7%	43.3%
6/30/11	\$634,379,401	\$285,580,631	\$279,934,443	\$348,798,770	\$354,444,958	45.0%	44.1%
6/30/12	\$647,688,665	\$259,791,575	\$252,896,868	\$387,897,090	\$394,791,797	40.1%	39.1%
6/30/13	\$651,580,654	\$241,800,328	\$248,559,040	\$409,780,326	\$403,021,614	37.1%	38.2%
6/30/14	\$681,118,402	\$242,741,735	\$260,763,486	\$438,376,667	\$420,354,916	35.6%	38.3%
6/30/15	\$734,156,446	\$248,387,946	\$246,968,144	\$485,768,500	\$487,188,302	33.8%	33.6%

**SPRS Insurance Fund**

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/10	\$434,960,495	\$121,175,083	\$104,526,550	\$313,785,412	\$330,433,945	27.9%	24.0%
6/30/11	\$438,427,763	\$123,687,289	\$127,367,947	\$314,740,474	\$311,059,816	28.2%	29.1%
6/30/12	\$333,903,782	\$124,372,072	\$125,567,846	\$209,531,710	\$208,335,936	37.3%	37.6%
6/30/13	\$222,326,743	\$136,321,060	\$142,830,916	\$86,005,683	\$79,495,827	61.3%	64.2%
6/30/14	\$234,271,127	\$155,594,760	\$165,167,805	\$78,676,367	\$69,103,322	66.4%	70.5%
6/30/15	\$254,838,710	\$167,774,940	\$165,018,209	\$87,063,770	\$89,820,501	65.8%	64.8%

Valuation Balance Sheets give the basis for determining the percentage rates for contributions to be made by employers.

# Analysis of Financial Experience

## Gains or Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience (in Millions) as of June 30, 2015

Type of Activity	Retirement Gain	Insurance Gain
<b>KERS Non-Hazardous</b>		
Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.	(115.6)	(35.8)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(9.3)	0.9
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(0.4)	(1.6)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	62.8	(5.7)
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	51.2	112.3
New Members. Additional unfunded accrued liability will produce a loss.	(7.6)	(3.7)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	56.5	10.9
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	(8.5)	19.1
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	(23.3)	6.0
<b>Gain (or Loss) During Year From Financial Experience</b>	<b>5.9</b>	<b>102.4</b>
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	(694.6)	(179.9)
<b>Composite Gain (or Loss) During Year</b>	<b>(688.7)</b>	<b>(77.5)</b>
<b>KERS Hazardous</b>		
Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.	(16.9)	(8.4)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(0.7)	0.4
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.1	0.0
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	15.8	2.8
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	2.0	19.8
New Members. Additional unfunded accrued liability will produce a loss.	(3.1)	(2.5)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	7.4	1.3
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	1.9	5.1
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	(6.8)	5.2
<b>Gain (or Loss) During Year From Financial Experience</b>	<b>(0.3)</b>	<b>23.7</b>
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	(52.1)	29.9
<b>Composite Gain (or Loss) During Year</b>	<b>(52.4)</b>	<b>5.36</b>

**Continued. Gains or Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience (in Millions) as of June 30, 2015**

Type of Activity	Retirement Gain	Insurance Gain
<b>CERS Non-Hazardous</b>		
Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.	(86.6)	(20.6)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(17.1)	2.6
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(1.1)	(2.5)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	43.5	(15.3)
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	46.5	133.8
New Members. Additional unfunded accrued liability will produce a loss.	(16.9)	(5.7)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	103.0	11.7
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	(6.2)	26.1
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	(41.8)	(50.0)
<b>Gain (or Loss) During Year From Financial Experience</b>	<b>23.4</b>	<b>80.1</b>
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	(606.3)	(187.3)
<b>Composite Gain (or Loss) During Year</b>	<b>(582.9)</b>	<b>(107.2)</b>
<b>CERS Hazardous</b>		
Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.	(70.9)	(8.9)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(2.7)	0.6
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.1	(0.7)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	32.1	3.2
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	12.8	72.3
New Members. Additional unfunded accrued liability will produce a loss.	(23.8)	(4.9)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	28.1	5.4
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	28.9	11.5
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	(22.7)	(10.2)
<b>Gain (or Loss) During Year From Financial Experience</b>	<b>(18.1)</b>	<b>68.3</b>
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	(166.8)	22.6
<b>Composite Gain (or Loss) During Year</b>	<b>(184.9)</b>	<b>90.9</b>





**Continued. Gains or Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience (in Millions) as of June 30, 2015**

Type of Activity	Retirement Gain	Insurance Gain
<b>SPRS</b>		
Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.	(6.5)	(13.0)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	0.0	0.1
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.0	(0.1)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	(0.7)	(0.2)
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.	2.2	12.1
New Members. Additional unfunded accrued liability will produce a loss.	(0.4)	(0.1)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	5.2	3.3
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	(1.7)	1.5
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	(2.9)	(1.6)
<b>Gain (or Loss) During Year From Financial Experience</b>	<b>(4.8)</b>	<b>2.0</b>
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	(40.2)	(8.6)
<b>Composite Gain (or Loss) During Year</b>	<b>(45.0)</b>	<b>(6.6)</b>

# Solvency Test *per Funds* as of June 30, 2015

## KERS Non-Hazardous Pension Fund

Valuation Date	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/10	\$869,484,042	\$8,329,757,802	\$1,805,553,245	\$4,210,215,585	100.0%	40.1%	--
6/30/11	\$916,568,932	\$8,482,714,356	\$1,782,858,744	\$3,726,986,087	100.0%	33.1%	--
6/30/12	\$885,137,183	\$8,708,536,338	\$1,767,374,615	\$3,101,316,738	100.0%	25.4%	--
6/30/13	\$922,928,027	\$8,709,323,622	\$1,754,350,510	\$2,636,122,852	100.0%	19.7%	--
6/30/14	\$928,557,540	\$8,870,692,596	\$1,750,860,088	\$2,423,956,716	100.0%	16.9%	--
6/30/15	\$925,933,970	\$9,437,467,771	\$1,996,271,108	\$2,350,989,940	100.0%	15.1%	--

## KERS Non-Hazardous Insurance Fund

Valuation Date	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/10	-	\$2,744,534,054	\$1,721,601,987	\$471,341,628	100.0%	17.2%	--
6/30/11	-	\$2,568,002,978	\$1,712,086,655	\$451,620,442	100.0%	17.6%	--
6/30/12	-	\$1,924,068,623	\$1,201,261,534	\$446,080,511	100.0%	23.2%	--
6/30/13	-	\$1,338,772,860	\$789,981,274	\$497,584,327	100.0%	37.2%	--
6/30/14	-	\$1,425,604,569	\$801,155,356	\$621,236,646	100.0%	43.6%	--
6/30/15	-	\$1,428,349,857	\$985,355,395	\$695,018,262	100.0%	48.7%	--

## KERS Hazardous Pension Fund

Valuation Date	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/10	\$88,511,283	\$441,657,241	\$157,980,927	\$502,729,009	100.0%	93.8%	--
6/30/11	\$86,614,205	\$490,395,078	\$144,284,161	\$510,748,505	100.0%	86.5%	--
6/30/12	\$82,100,877	\$521,688,803	\$148,909,777	\$497,226,296	100.0%	79.6%	--
6/30/13	\$82,145,602	\$545,596,534	\$156,238,458	\$505,656,808	100.0%	77.6%	--
6/30/14	\$83,663,535	\$581,231,300	\$151,955,228	\$527,897,261	100.0%	76.4%	--
6/30/15	\$83,606,204	\$633,189,198	\$178,637,885	\$556,687,757	100.0%	74.7%	--

## KERS Hazardous Insurance Fund

Valuation Date	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/10	-	\$268,510,709	\$224,786,820	\$314,427,296	100.0%	100.0%	20.4%
6/30/11	-	\$285,539,861	\$221,518,906	\$329,961,615	100.0%	100.0%	20.1%
6/30/12	-	\$196,578,935	\$188,013,471	\$345,573,948	100.0%	100.0%	79.2%
6/30/13	-	\$202,031,515	\$183,486,160	\$370,774,403	100.0%	100.0%	92.0%
6/30/14	-	\$206,477,405	\$190,509,415	\$419,395,867	100.0%	100.0%	100%
6/30/15	-	\$221,114,995	\$153,789,239	\$451,514,191	100.0%	100.0%	100.0%

Continued. Solvency Test as of June 30, 2015

**CERS Non-Hazardous Pension Fund**

Actuarial Liabilities					Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/10	\$1,063,746,826	\$4,890,659,077	\$2,504,616,377	\$5,546,857,291	100.0%	91.7%	--
6/30/11	\$1,110,967,160	\$5,209,783,924	\$2,597,333,941	\$5,629,611,183	100.0%	86.7%	--
6/30/12	\$1,117,549,337	\$5,416,932,995	\$2,605,085,363	\$5,547,235,599	100.0%	81.8%	--
6/30/13	\$1,149,610,832	\$5,638,370,836	\$2,590,894,446	\$5,637,094,483	100.0%	79.6%	--
6/30/14	\$1,204,383,085	\$5,873,279,494	\$2,694,860,037	\$6,117,133,692	100.0%	83.6%	--
6/30/15	\$1,216,584,592	\$6,489,862,734	\$3,033,878,095	\$6,474,848,513	100.0%	81.0%	--

**CERS Non-Hazardous Insurance Fund**

Actuarial Liabilities					Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/10	-	\$1,526,533,372	\$1,631,806,802	\$1,293,038,593	100.0%	84.7%	--
6/30/11	-	\$1,460,808,255	\$1,613,164,950	\$1,433,450,793	100.0%	98.1%	--
6/30/12	-	\$1,146,907,750	\$1,223,863,538	\$1,512,853,851	100.0%	100.0%	29.9%
6/30/13	-	\$1,205,599,287	\$1,238,294,813	\$1,628,244,197	100.0%	100.0%	34.1%
6/30/14	-	\$1,318,182,882	\$1,298,731,718	\$1,831,199,465	100.0%	100.0%	39.5%
6/30/15	-	\$1,372,596,636	\$1,535,230,804	\$1,997,456,463	100.0%	100.0%	40.7%

**CERS Hazardous Pension Fund**

Actuarial Liabilities					Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/10	\$369,612,720	\$1,622,684,455	\$679,854,732	\$1,749,464,388	100.0%	85.0%	--
6/30/11	\$382,072,055	\$1,768,511,545	\$708,457,452	\$1,779,545,393	100.0%	79.0%	--
6/30/12	\$381,672,428	\$1,889,884,303	\$738,435,316	\$1,747,379,297	100.0%	72.3%	--
6/30/13	\$390,471,059	\$1,988,029,963	\$745,704,571	\$1,801,691,410	100.0%	71.0%	--
6/30/14	\$415,069,629	\$2,077,516,709	\$796,239,415	\$1,967,640,027	100.0%	74.7%	--
6/30/15	\$422,358,688	\$2,297,703,167	\$893,245,692	\$2,096,782,956	100.0%	72.9%	--

**CERS Hazardous Insurance Fund**

Actuarial Liabilities					Liabilities Covered by Actuarial Assets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/10	-	\$814,300,256	\$860,402,960	\$692,769,770	100.0%	85.1%	--
6/30/11	-	\$771,631,287	\$876,071,468	\$770,790,274	100.0%	99.9%	--
6/30/12	-	\$575,099,089	\$789,743,968	\$829,040,842	100.0%	100.0%	32.2%
6/30/13	-	\$660,955,331	\$776,377,486	\$892,774,391	100.0%	100.0%	29.9%
6/30/14	-	\$700,311,599	\$793,552,780	\$997,733,237	100.0%	100.0%	37.5%
6/30/15	-	\$790,713,766	\$713,301,467	\$1,087,707,118	100.0%	100.0%	41.6%

**Continued.** Solvency Test as of June 30, 2015

**SPRS Pension Fund**

Valuation Date	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/10	\$42,011,523	\$475,892,659	\$94,540,624	\$304,577,292	100.0%	55.2%	--
6/30/11	\$43,574,097	\$499,194,229	\$91,611,075	\$285,580,631	100.0%	48.5%	--
6/30/12	\$41,139,306	\$523,016,647	\$83,532,712	\$259,791,575	100.0%	41.8%	--
6/30/13	\$39,788,421	\$535,720,195	\$76,072,038	\$241,800,328	100.0%	37.7%	--
6/30/14	\$41,831,465	\$563,011,026	\$76,275,911	\$242,741,735	100.0%	35.7%	--
6/30/15	\$41,567,127	\$605,854,905	\$86,734,414	\$248,387,946	100.0%	34.1%	--

**SPRS Insurance Fund**

Valuation Date	Actuarial Liabilities				Liabilities Covered by Actuarial Assets		
	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/10	-	\$253,580,827	\$181,379,668	\$121,175,083	100.0%	47.8%	--
6/30/11	-	\$252,439,726	\$185,988,037	\$123,687,289	100.0%	49.0%	--
6/30/12	-	\$190,258,729	\$143,645,053	\$124,372,072	100.0%	65.4%	--
6/30/13	-	\$139,508,590	\$82,818,153	\$136,321,060	100.0%	97.7%	--
6/30/14	-	\$143,402,126	\$90,869,001	\$155,594,760	100.0%	100.0%	13.4%
6/30/15	-	\$170,447,207	\$84,391,503	\$167,774,940	100.0%	98.4%	--

## Active Member Valuation

**Methodology** The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the investment return assumption. The amount recognized each year is 20% of the difference between market value and expected market value. The Asset Valuation Method was adopted in 2006.

**Summary of Active Member Valuation Data**

**KERS Non-Haz**

Valuation Date	Number of Employers	Total Active Members	Annual Payroll <sup>1</sup>	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/10	334	47,090	\$1,815,146,388	\$38,546	1.2%	43.4	9.0
6/30/11	427	46,617	\$1,731,632,748	\$37,146	(3.6)%	43.8	9.4
6/30/12	286	42,196	\$1,644,896,681	\$38,982	4.9%	44.3	9.8
6/30/13	285	42,226	\$1,644,408,698	\$38,943	(0.1)%	44.5	10.1
6/30/14	353	40,365	\$1,577,496,447	\$39,081	0.4%	44.8	10.5
6/30/15	348	39,056	\$1,544,234,409	\$39,539	1.2%	45.0	10.6

<sup>1</sup>Annual payroll included in the Schedule of Active Member Valuation Data is based upon the annualized monthly payroll for active members as of the valuation date. The annual payroll recorded in the financial section is based upon the sum of the monthly payroll for active members recorded for each month of fiscal year ending June 30, 2015.

## KERS Haz

Valuation Date	Number of Employers	Total Active Members	Annual Payroll <sup>1</sup>	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/10	18	4,291	\$143,557,944	\$33,456	(0.7)%	41.4	7.0
6/30/11	16	4,291	\$133,053,792	\$31,008	(7.3)%	41.3	6.9
6/30/12	14	4,086	\$131,976,754	\$32,300	4.2%	41.1	7.3
6/30/13	14	4,127	\$132,015,368	\$31,988	(1.0)%	40.6	7.2
6/30/14	18	4,024	\$129,076,038	\$32,077	0.3%	40.6	7.4
6/30/15	17	3,886	\$128,680,160	\$33,114	3.2%	40.7	7.5

## CERS Non-Haz

Valuation Date	Number of Employers	Total Active Members	Annual Payroll <sup>1</sup>	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/10	1,102	84,681	\$2,236,855,380	\$26,415	1.3%	46.6	8.8
6/30/11	1,102	85,285	\$2,276,595,948	\$26,694	1.1%	46.8	9.0
6/30/12	1,080	83,052	\$2,236,546,345	\$26,929	0.9%	47.5	9.1
6/30/13	1,081	81,815	\$2,236,277,489	\$27,333	1.5%	47.8	9.3
6/30/14	1,101	81,115	\$2,272,270,287	\$28,013	2.5%	48.1	9.6
6/30/15	1,092	80,852	\$2,296,715,957	\$28,406	1.4%	48.0	9.5

## CERS Haz

Valuation Date	Number of Employers	Total Active Members	Annual Payroll <sup>1</sup>	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/10	282	9,562	\$466,548,660	\$48,792	1.4%	38.8	9.2
6/30/11	281	9,407	\$466,963,860	\$49,640	1.7%	39.1	9.5
6/30/12	254	9,130	\$464,228,923	\$50,847	2.4%	39.3	10.3
6/30/13	248	9,123	\$461,672,567	\$50,605	(0.5)%	39.1	10.3
6/30/14	254	9,194	\$479,164,016	\$52,117	3.0%	39.2	10.6
6/30/15	246	9,172	\$483,640,601	\$52,730	1.2%	39.1	10.6

## SPRS

Valuation Date	Number of Employers	Total Active Members	Annual Payroll <sup>1</sup>	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/10	1	961	\$51,506,712	\$53,597	(1.9)%	37.2	10.6
6/30/11	1	965	\$48,692,616	\$50,459	(5.9)%	37.7	10.6
6/30/12	1	907	\$48,372,506	\$53,332	5.7%	37.3	10.4
6/30/13	1	902	\$45,256,202	\$50,173	(5.9)%	37.0	10.0
6/30/14	1	855	\$44,615,885	\$52,182	4.0%	37.8	10.9
6/30/15	1	937	\$45,764,515	\$48,842	(6.4)%	36.8	9.8

<sup>1</sup>Annual payroll included in the Schedule of Active Member Valuation Data is based upon the annualized monthly payroll for active members as of the valuation date. The annual payroll recorded in the financial section is based upon the sum of the monthly payroll for active members recorded for each month of fiscal year ending June 30, 2015.

# Retired Member Valuation

## Summary of Retired Member Valuation Data

### KERS Non-Haz

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances	% Increase in Allowances	Average Annual Allowance
6/30/10	1,162	1,100	37,945	\$801,881,911	(1.31%)	\$21,133
6/30/11	1,592	940	38,597	\$821,197,278	2.41%	\$21,276
6/30/12	1,707	1,078	39,226	\$844,880,945	2.88%	\$21,539
6/30/13	1,982	1,014	40,194	\$872,139,782	3.23%	\$21,698
6/30/14	2,067	1,038	41,223	\$888,430,310	1.87%	\$21,552
6/30/15	2,140	1,094	42,269	\$905,961,226	1.97%	\$21,433

### KERS Haz

Valuation Date	Number of Employers	Total Active Members	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/10	282	95	2,835	\$41,114,800	6.25%	\$14,503
6/30/11	288	59	3,064	\$45,609,229	10.93%	\$14,886
6/30/12	243	54	3,253	\$49,231,205	7.94%	\$15,134
6/30/13	229	52	3,430	\$51,122,456	3.84%	\$14,905
6/30/14	256	66	3,620	\$54,271,718	6.16%	\$14,992
6/30/15	203	65	3,758	\$56,431,099	3.98%	\$15,016

### CERS Non-Haz

Valuation Date	Number of Employers	Total Active Members	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/10	2,565	1,283	41,038	\$452,613,550	2.85%	\$11,029
6/30/11	3,250	1,077	43,211	\$483,594,068	6.84%	\$11,191
6/30/12	3,300	1,207	45,304	\$515,008,362	6.50%	\$11,368
6/30/13	3,570	1,198	47,676	\$557,979,192	8.34%	\$11,704
6/30/14	3,480	1,221	49,935	\$582,957,825	4.48%	\$11,674
6/30/15	4,020	1,304	52,651	\$617,550,928	5.93%	\$11,729

### CERS Haz

Valuation Date	Number of Employers	Total Active Members	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/10	423	163	6,068	\$146,916,812	5.03%	\$24,212
6/30/11	502	102	6,468	\$160,259,395	9.08%	\$24,777
6/30/12	483	73	6,878	\$173,221,483	8.09%	\$25,185
6/30/13	519	104	7,293	\$182,634,895	5.43%	\$25,042
6/30/14	469	116	7,646	\$191,007,832	4.58%	\$24,981
6/30/15	526	138	8,034	\$202,153,338	5.84%	\$25,162

The Annualized Retirement Allowance is the annualized value of the monthly retirement allowance for retired members and beneficiaries as of the valuation date. Consequently, the values will not match the fiscal year total benefit payments recorded in the financial section

## SPRS

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances	% Increase in Allowances	Average Annual Allowance
6/30/10	54	15	1,223	\$45,515,797	2.80%	\$37,217
6/30/11	52	12	1,263	\$47,467,404	4.29%	\$37,583
6/30/12	52	16	1,299	\$49,887,093	5.10%	\$38,404
6/30/13	63	16	1,346	\$50,905,789	2.04%	\$37,820
6/30/14	95	28	1,413	\$53,432,446	4.96%	\$37,815
6/30/15	62	15	1,460	\$54,930,421	2.80%	\$37,624

*The Annualized Retirement Allowance is the annualized value of the monthly retirement allowance for retired members and beneficiaries as of the valuation date. Consequently, the values will not match the fiscal year total benefit payments recorded in the financial section*

# Summary of Benefit Provisions

## KERS & CERS Non-Hazardous Plans

### Plan Funding

State statute requires active members to contribute 5% of creditable compensation. For members participating on or after September 1, 2008 an additional 1% of creditable compensation is required. This amount is credited to the Insurance Fund and is non-refundable to the member. Employers contribute at the rate determined by the Board to be necessary for the actuarial soundness of the systems, as required by KRS 61.565 and KRS 61.752. KERS rates are subject to state budget approval.

### Membership Eligibility

For non-school board employers, all regular full-time positions that average 100 or more hours of work per month over a fiscal or calendar year. For school board employers, all regular full-time positions that average 80 hours of work per month over the actual days worked during the school year.

#### Retirement Eligibility for Members Whose Participation Began Before 9/1/08

Age	Years of Service	Allowance Reduction
65	4	None
Any	27	None
55	5	6.5% per year for first five years, and 4.5% for next five years before age 65 or 27 years of service.
Any	25	6.5% per year for first five years, and 4.5% for next five years before age 65 or 27 years of service.

#### Retirement Eligibility for Members Whose Participation Began On or After 9/1/08 but before 1/1/2014

Age	Years of Service	Allowance Reduction
65	5	None
57	Rule of 87	None
60	10	6.5% per year for first five years, and 4.5% for next five years before age 65 or Rule of 87 (age plus years of service).

#### Retirement Eligibility for Members Whose Participation Began On or After 1/1/2014

Age	Years of Service	Allowance Reduction
65	5	None
57	Rule of 87	None



## Benefit Formula for Tiers 1 & 2

Final Compensation <b>X</b>	Benefit Factor <b>X</b>	Years of Service
Average of the five highest if participation began before 9/1/2008.	KERS 1.97% if:	Member does not have 13 months credit for 1/1/1998-1/1/1999.
	KERS 2.00% if:	Member has 13 months credit from 1/1/1998-1/1/1999.
	KERS 2.20% if:	Member has 20 or more years of service, including 13 months from 1/1/1998-1/1/1999 and retires by 1/1/2009.
	CERS 2.20% if:	Member begins participating prior to 8/1/2004.
	CERS 2.00% if:	Member begins participating on or after 8/1/2004 and before 9/1/2008.
Average of the last complete five if participation began on or after 9/1/2008 but before 1/1/2014.	KERS & CERS increasing percent based on service at retirement* plus 2.00% for each year of service over 30 if:	Member begins participating on or after 8/1/2004 but before 1/1/2014.

Includes earned service, purchased service, prior service, and sick leave service (if the member's employer participates in an approved sick leave program).

\* **Service** (and **Benefit Factor**): **10 years or less** (1.10%); **10 - 20 years** (1.30%); **20 - 26 years** (1.50%); **26 - 30 years** (1.75%)

## Tier 3 Benefit Information

Tier 3 member begins participating on or after 1/1/2014: Each year that a member is an active contributing member to the System, the member and the member's employer will contribute 5.00% and 4.00% of creditable compensation respectively into a hypothetical account. This hypothetical account will earn interest annually on both the member's and employer's contribution at a minimum rate of 4%. If the System's geometric average net investment return for the previous five years exceeds 4%, then the hypothetical account will be credited with an additional amount of interest equal to 75% of the amount of the return which exceeds 4%. All interest credits will be applied to the hypothetical account balance on June 30 based on the account balance as of June 30 of the previous year. Upon retirement the hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or annuitized into a single life annuity option.



# Summary of Benefit Provisions

## KERS & CERS Non Hazardous Plans

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### Post-Retirement Death Benefits

If the member is receiving a monthly benefit based on at least four (4) years of creditable service, the retirement system will pay a \$5,000 death benefit payment to the beneficiary named by the member specifically for this benefit.

### Disability Benefits

Members participating before 8/1/2004 may retire on account of disability provided the member has at least 60 months of service credit and is not eligible for an unreduced benefit. Additional service credit may be added for computation of benefits under the benefit formula.

Members participating on or after 8/1/2004 but before 1/1/2014 may retire on account of disability provided the member has at least 60 months of service credit. Benefits are computed as the higher of 20% of Final Rate of Pay or the amount calculated under the Benefit Formula based upon actual service.

Members participating on or after 1/1/2014 may retire on account of disability provided the member has at least 60 months of service credit. The hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or an annuity equal to the larger of 20% of the member's monthly final rate of pay or the annuitized hypothetical account into a single life annuity option.

Members disabled as a result of a single duty-related injury or act of violence related to their job may be eligible for special benefits.

### Pre-Retirement Death Benefits

The beneficiary of a deceased active member will be eligible for a monthly benefit if the member was: (1) eligible for retirement at the time of death or, (2) under the age of 55 with at least 60 months of service credit and currently working for a participating agency at the time of death or (3) no longer working for a participating agency but at the time of death had at least 144 months of service credit. If the beneficiary of a deceased active member is not eligible for a monthly benefit, the beneficiary will receive a lump sum payment of the member's contributions and any accumulated interest.

### Cost of Living Adjustment

Monthly retirement allowances are increased July 1 each year by one and one-half percent (1.5%). The Kentucky General Assembly has the authority to increase, suspend or reduce Cost of Living Adjustments. HB 265 of 2012 eliminated the July 1, 2012 and July 1, 2013 COLAs for all retirees. SB2 of 2013 eliminated all future COLAs unless the State Legislature so authorizes on a biennial basis and either (i) the system is over 100% funded or (ii) the Legislature appropriates sufficient funds to pay the increased liability for the COLA.

### Insurance Benefits

For members participating prior to July 1, 2003, KRS pays a percentage of the monthly premium for single coverage based upon the service credit accrued at



retirement. Members participating on or after July 1, 2003 and before September 1, 2008 are required to earn at least 10 years of service credit in order to be eligible for insurance benefits at retirement. Members participating on or after September 1, 2008 are required to earn at least 15 years of service credit in order to be eligible for insurance benefits at retirement. The monthly health insurance contribution will be \$10 for each year of earned service increased by the CPI prior to July 1, 2009, and by 1.5% annually from July 1, 2009.

### **Refunds**

Upon termination of employment, a refund of member contributions and accumulated interest is available to the member.

### **Interest on Accounts**

Active member accounts have been credited with interest on July 1 of each year at 3% compounded annually through June 30, 1981 (per Mary Satterly); 6% thereafter through June 30, 1986; 4% thereafter through June 30, 2003, and 2.5% thereafter. For employees participating prior to September 1, 2008, the interest paid is set by the Board of Trustees and will not be less than 2.0%, for employees participating on or after September 1, 2008 but before January 1, 2014, interest will be credited at a rate of 2.5%. For employees participating on or after January 1, 2014, interest will be credited at a minimum rate of 4.0%.

# Summary of Benefit Provisions

## KERS Hazardous, CERS Hazardous & SPRS Systems

### Plan Funding

State statute requires active members to contribute 8% of creditable compensation. For members participating on or after September 1, 2008 an additional 1% of creditable compensation is required. This amount is credited to the Insurance Fund and is non-refundable to the member. Employers contribute at the rate determined by the Board to be necessary for the actuarial soundness of the systems, as required by KRS 61.565 and KRS 61.752. KERS & SPRS rates are subject to state budget approval.

### Membership Eligibility

All regular full-time hazardous duty positions approved by the Board that average 100 or more hours of work per month over a fiscal or calendar year.

State statute requires active members to contribute 5% of creditable compensation.

For members participating on or after September 1, 2008 an additional 1% of creditable compensation is required for health insurance.

#### Retirement Eligibility - Participation Began Before 9/1/08

Age	Years of Service	Allowance Reduction
55	5	None
Any	20	None
50	15	6.5% per year for first five years, and 4.5% for next five years before age 55 or 20 years of service.

#### Retirement Eligibility - Participation began on/after 9/1/2008 & before 1/1/2014

Age	Years of Service	Allowance Reduction
60	5	None
Any	25	None
50	15	6.5% per year for first five years, and 4.5% for next five years before age 60 or 25 years of service.

#### Retirement Eligibility - Participation began on/after 1/1/2014

Age	Years of Service	Allowance Reduction
60	5	
Any	25	

*\*Service (with Benefit Factor): 10 years or less (1.30%); 10 - 20 years (1.50%); 20 - 25 years (2.25%) 25 + years (2.50%)*

### Benefit Formula

Final Compensation	X	Benefit Factor	X	Years of Service
Average of the three highest if participation began before 9/1/2008.		KERS 2.49%, CERS 2.50%, SPRS 2.50%, if:		Includes earned service, purchased service, prior service, and sick leave service (if the member's employer participates in an approved sick leave program).
Average of the three highest complete years if participation began on or after 9/1/2008.		KERS, CERS and SPRS increasing percent based on service at retirement* if:		
		Member begins participating before 9/1/2008.		
		Member begins participating on or after 9/1/2008 but before 1/1/2014.		

*\* Service (with Benefit Factor): 10 years or less (1.30%); 10 - 20 years (1.50%); 20 - 25 years (2.25%) 25 + years (2.50%)*





Member begins participating on or after 1/1/2014: Each year that a member is an active contributing member to the System, the member and the member's employer will contribute 8.00% and 7.50% of creditable compensation respectively into a hypothetical account. This hypothetical account will earn interest annually on both the member's and employer's contribution at a minimum rate of 4%. If the System's geometric average net investment return for the previous five years exceeds 4%, then the hypothetical account will be credited with an additional amount of interest equal to 75% of the amount of the return which exceeds 4%. All interest credits will be applied to the hypothetical account balance on June 30 based on the account balance as of June 30 of the previous year. Upon retirement the hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or annuitized into a single life annuity option.

### **Disability Benefits**

Members hired before 8/1/2004 may retire on account of disability provided the member has at least 60 months of service credit and is not eligible for an unreduced benefit. Additional service credit may be added for computation of benefits under the formula noted above.

Members hired on or after 8/1/2004 but before 1/1/2014 may retire on account of disability provided the member has at least 60 months of service credit. Benefits are computed as the higher of 25% of Final Rate of Pay or the amount calculated under the Benefit Formula based upon actual service.

Members participating on or after 1/1/2014 may retire on account of disability provided the member has at least 60 months of service credit. The hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from the System as a lump sum or an annuity equal to the larger of 25% of the member's monthly final rate of pay or the annuitized hypothetical account into a single life annuity option.

Members disabled as a result of a single duty-related injury or act of violence related to their job may be eligible for special benefits.

### **Pre-Retirement Death Benefits**

The beneficiary of a deceased active member will be eligible for a monthly benefit if the member was: (1) eligible for retirement at the time of death or, (2) under the age of 55 with at least 60 months of service credit and currently working for a participating agency at the time of death or (3) no longer working for a participating agency but at the time of death had at least 144 months of service credit. If the beneficiary of a deceased active member is not eligible for a monthly benefit, the beneficiary will receive a lump sum payment of the member's contributions and any accumulated interest.

### **Post-Retirement Death Benefits**

If the member is receiving a monthly benefit based on at least four (4) years of creditable service, the retirement system will pay a \$5,000 death benefit payment to the beneficiary named by the member specifically for this benefit.

### **Cost of Living Adjustment**

Monthly retirement allowances are increased July 1 each year by one and one-half percent (1.5%). The Kentucky General Assembly has the authority to increase, suspend or reduce Cost of Living Adjustments. HB 265 of 2012 eliminated the July 1, 2012 and July 1, 2013 COLAs for all retirees. SB2 of 2013 eliminated all future COLAs unless the State Legislature so authorizes on a biennial basis and either (i) the system is over 100% funded or (ii) the Legislature appropriates sufficient funds to pay the increased liability for the COLA.

### **Insurance Benefits**

For members participating prior to July 1, 2003, KRS pays a percentage of the monthly premium for single coverage based upon the service credit accrued at retirement. Hazardous duty members are also eligible for an additional contribution for dependents based upon hazardous service only. Members participating on or after July 1, 2003 and before September 1, 2008 are required to earn at least 10 years of service credit in order to be eligible for insurance benefits at retirement. Members participating on or after September 1, 2008 are required to earn at least 15 years of service credit in order to be eligible for insurance benefits at retirement. The monthly health insurance contribution will be \$15 for each year of earned service increased by the CPI prior to July 1, 2009, and by 1.5% annually from July 1, 2009.

### **Refunds**

Upon termination of employment, a refund of member contributions and accumulated interest is available to the member.

### **Interest on Accounts**

Active member accounts have been credited with interest on July 1 of each year at 3% compounded annually through June 30, 1981 (per Mary Satterly); 6% thereafter through June 30, 1986; 4% thereafter through June 30, 2003, and 2.5% thereafter. For employees participating prior to September 1, 2008, the interest paid is set by the Board of Trustees and will not be less than 2.0%, for employees participating on or after September 1, 2008 but before January 1, 2014, interest will be credited at a rate of 2.5%. For employees participating on or after January 1, 2014, interest will be credited at a minimum rate of 4.0%.





STAT



## **STATISTICAL**

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# STATISTICAL



## FUND Statistics

### Definitions

Active members are those members who are currently employed by a participating agency and contributing to the Systems as a condition of employment. Inactive members are those members who are no longer employed with a participating agency but have not yet retired or taken a refund of contributions. Retired members include both members and beneficiaries who are receiving a monthly benefit from the Systems.

The data reflects the number of accounts in each system. A single member may have multiple accounts, which contribute to one pension. Each person is only counted once in the Membership

by System report. A member who has both a membership account and a retired account is included in the retired count. Members who have multiple membership accounts are included under the system where they most recently contributed. Members who have more than one retirement account are included in the system with the greatest service credit. If the retired accounts have equal service credit, they are counted first in SPRS, CERS Hazardous, KERS Hazardous, CERS Non-Hazardous, then KERS Non-Hazardous. This table does not include individuals receiving payments under dependent child accounts, Qualified Domestic Relations Orders or multiple beneficiary accounts.





## Kentucky Retirement Systems Membership Totals

Fiscal Year	Active	Inactive	Retired	Total
2010	144,837	92,379	81,765	318,981
2011	144,894	95,025	84,680	324,599
2012	139,352	107,353	87,472	334,177
2013	137,368	112,462	90,796	340,626
2014	137,138	117,039	93,946	348,123
<b>2015</b>	<b>136,318</b>	<b>121,604</b>	<b>97,630</b>	<b>355,552</b>

## KERS Non-Haz Membership

Fiscal Year	Active	Inactive	Retired	Total
2010	46,710	32,461	35,733	114,904
2011	46,044	33,350	36,239	115,633
2012	41,743	39,338	36,508	117,589
2013	40,710	40,375	37,240	118,325
2014	40,500	41,213	38,022	119,735
2015	39,289	42,479	38,827	120,595

## KERS Haz Membership

Fiscal Year	Active	Inactive	Retired	Total
2010	4,049	2,285	1,900	8,234
2011	4,045	2,351	2,090	8,486
2012	4,007	2,597	2,180	8,784
2013	4,057	2,882	2,312	9,251
2014	4,094	3,318	2,467	9,879
2015	3,932	3,761	2,575	10,268

## CERS Non-Haz Membership

Fiscal Year	Active	Inactive	Retired	Total
2010	84,010	55,423	38,261	177,694
2011	84,837	57,073	40,174	182,084
2012	83,658	63,280	42,068	189,006
2013	82,631	67,013	44,164	193,808
2014	82,494	70,231	46,112	198,837
2015	82,969	72,965	48,515	204,449

## CERS Haz Membership

Fiscal Year	Active	Inactive	Retired	Total
2010	9,120	2,009	4,867	15,996
2011	9,019	2,047	5,158	16,224
2012	9,040	1,914	5,513	16,467
2013	9,069	1,956	5,840	16,865
2014	9,189	2,038	6,066	17,293
2015	9,188	2,142	6,389	17,719

## SPRS

Fiscal Year	Active	Inactive	Retired	Total
2010	948	201	1,004	2,153
2011	949	204	1,019	2,172
2012	904	224	1,203	2,331
2013	901	236	1,240	2,377
2014	861	239	1,279	2,379
2015	940	257	1,324	2,521



## Principal Participating Employers in KERS

Participating Employer	Rank	Covered Employees	% of Total System
Department For Community Based Services	1	4,427	10.01%
Department Of Highways	2	3,965	8.96%
Department Of Corrections	3	3,787	8.56%
Judicial Department Administrative Office Of The Courts	4	1,371	3.10%
Department Of Juvenile Justice	5	1,308	2.96%
Bluegrass ORG	6	1,044	2.36%
Department for Behavioral Health Developmental Intellectual Disabilities	7	950	2.15%
Eastern Kentucky University	8	938	2.12%
Kentucky State Police	9	938	2.12%
Department Of Revenue	10	903	2.04%
All Others		24,601	55.62%
<b>Total</b>		<b>44,232</b>	<b>100%</b>

## Schedule of Participating Employers in KERS

Agency Classification	Number of Agencies	Number of Employees
County Attorneys	62	329
Health Departments	60	2,727
Master Commissioner	33	78
Non-P1 State Agencies	39	1,356
Other Retirement Systems	2	290
P1 State Agencies	139	31,972
Regional Mental Health Units	12	3,087
Universities	7	4,393
<b>Total</b>	<b>354</b>	<b>44,232</b>
<b>By Tier Levels:</b>		
<b>Tier 1</b>		<b>28,455</b>
<b>Tier 2</b>		<b>10,803</b>
<b>Tier 3</b>		<b>4,974</b>

## Principal Participating Employers in CERS

Participating Employer	Rank	Covered Employees	% of Total System
Jefferson County Board Of Education	1	6,614	7.08%
Louisville Jefferson County Metro Government	2	5,217	5.59%
Fayette County Board Of Education	3	1,916	2.05%
Judicial Department Administrative Office Of The Courts	4	1,637	1.75%
Lexington Fayette Urban County Government	5	1,582	1.69%
Pike County Board Of Education	6	1,144	1.23%
Boone County Board Of Education	7	1,134	1.21%
Hardin County Board Of Education	8	1,022	1.09%
Bullitt County Board Of Education	9	981	1.05%
Warren County Board Of Education	10	896	0.96%
All Others		71,235	76.29%
<b>Total</b>		<b>93,378</b>	<b>100%</b>

## Schedule of Participating Employers in CERS

Agency Classification	Number of Agencies	Number of Employees
Airport Boards	5	526
Ambulance Services	20	416
Area Development Districts	14	723
Boards of Education	173	48,385
Cities	220	10,072
Community Action Agencies	21	2,675
Conservation Districts	47	58
County Attorneys	75	626
County Clerks	16	596
Development Authorities	6	11
Fire Departments	38	783
Fiscal Courts	118	11,049
Health Departments	1	318
Housing Authorities	42	434
Jailers	2	31
Libraries	86	1,230
Other Retirement Systems	2	3
P1 State Agencies	4	1,637
Parks and Recreation	7	66
Planning Commissions	16	222
Police Departments	2	16
Riverport Authorities	5	73
Sanitation Districts	9	351
Sheriff Departments	12	778
Special Districts & Boards	50	1,424
Tourist Commissions	23	171
Urban Government Agencies	2	6,799
Utility Boards	120	3,886
<b>Total</b>	<b>1,136</b>	<b>93,359</b>
<b>By Tier Levels:</b>		
<b>Tier 1</b>		<b>56,416</b>
<b>Tier 2</b>		<b>25,049</b>
<b>Tier 3</b>		<b>11,894</b>

## Schedule of Participating Employers in SPRS

Kentucky State Police - Uniformed Officers	1	948
<b>By Tier Levels:</b>		
<b>Tier 1</b>		<b>660</b>
<b>Tier 2</b>		<b>183</b>
<b>Tier 3</b>		<b>105</b>



## Average Monthly Benefit by Length of Service in KERS

Service Credit Range	KERS Non-Hazardous		KERS Hazardous	
	Number of Accounts	Average Monthly Benefit	Number of Accounts	Average Monthly Benefit
Under 5 Years	5,212	\$172	691	\$198
5 or more but less than 10	5,525	\$416	751	\$569
10 or more but less than 15	4,895	\$696	662	\$1,019
15 or more but less than 20	4,176	\$1,022	596	\$1,536
20 or more but less than 25	4,595	\$1,368	843	\$2,011
25 or more but less than 30	11,337	\$2,294	152	\$2,778
30 or more but less than 35	6,263	\$3,238	58	\$3,607
35 or more	2,512	\$4,573	8	\$4,087
<b>Total</b>	<b>44,515</b>	<b>\$1,683</b>	<b>3,761</b>	<b>\$1,200</b>

## Average Monthly Benefit by Length of Service in CERS

Service Credit Range	CERS Non-Hazardous		CERS Hazardous	
	Number of Accounts	Average Monthly Benefit	Number of Accounts	Average Monthly Benefit
Under 5 Years	6,967	\$158	920	\$347
5 or more but less than 10	10,181	\$333	964	\$667
10 or more but less than 15	9,621	\$522	793	\$1,208
15 or more but less than 20	7,703	\$774	712	\$1,736
20 or more but less than 25	8,160	\$991	2,970	\$2,434
25 or more but less than 30	9,812	\$1,902	1,216	\$3,404
30 or more but less than 35	2,428	\$2,684	385	\$4,179
35 or more	638	\$3,665	91	\$5,063
<b>Total</b>	<b>55,510</b>	<b>\$920</b>	<b>8,051</b>	<b>\$2,061</b>

## Average Monthly Benefit by Length of Service in SPRS

Service Credit Range	Number of Accounts	Average Monthly Benefit
Under 5 Years	112	\$537
5 or more but less than 10	47	\$905
10 or more but less than 15	51	\$1,340
15 or more but less than 20	85	\$2,008
20 or more but less than 25	437	\$2,640
25 or more but less than 30	442	\$3,664
30 or more but less than 35	226	\$4,801
35 or more	61	\$5,818
<b>Total</b>	<b>1,461</b>	<b>\$3,118</b>

*This table reflects the Average Monthly Pension Benefit. A single member may have multiple accounts, which contribute to one pension. This table does not reflect dependent child accounts, Qualified Domestic Relations Order (QDRO) accounts or multiple beneficiary accounts.*



## Plan Net Position (*in Thousands*)

### KERS

Fiscal Year	Non-Hazardous			Hazardous		
	Pension	Insurance	Total	Pension	Insurance	Total
June 30 2010	\$3,504,501	\$368,799	\$3,873,300	\$443,606	\$271,240	\$714,846
June 30, 2011	3,544,242	428,659	3,972,901	511,085	320,673	831,758
June 30, 2012	2,977,935	418,490	3,396,425	476,589	330,730	807,319
June 30, 2013	2,760,753	496,040	3,256,793	514,592	372,883	887,475
June 30, 2014	2,578,290	646,905	3,225,195	561,484	433,525	995,009
June 30, 2015	2,327,782	665,639	2,993,421	552,468	439,113	991,581

### CERS

June 30 2010	\$4,820,490	\$1,094,821	\$5,915,311	\$1,506,894	\$586,614	\$2,093,508
June 30, 2011	5,583,451	1,446,998	7,030,449	1,761,858	773,139	2,534,997
June 30, 2012	5,381,602	1,428,821	6,810,423	1,672,970	785,874	2,458,844
June 30, 2013	5,795,568	1,618,960	7,414,528	1,833,571	891,320	2,724,891
June 30, 2014	6,528,147	1,878,711	8,406,858	2,087,002	1,030,303	3,117,305
June 30, 2015	6,440,800	1,920,946	8,361,746	2,078,202	1,056,480	3,134,682

### SPRS

Fiscal Year	Pension	Insurance	Total
June 30 2010	\$264,949	\$104,511	\$369,460
June 30, 2011	279,927	127,319	407,246
June 30, 2012	250,476	125,398	375,874
June 30, 2013	248,698	142,691	391,389
June 30, 2014	260,974	164,958	425,932
June 30, 2015	247,229	164,714	411,943

### Kentucky Retirement Systems Total

Fiscal Year	Pension	Insurance	Total
June 30 2010	\$10,540,440	\$2,425,987	\$12,966,427
June 30, 2011	11,680,563	3,096,788	14,777,351
June 30, 2012	10,758,706	3,089,313	13,848,019
June 30, 2013	11,153,182	3,521,894	14,675,076
June 30, 2014	12,015,897	4,154,402	16,170,299
June 30, 2015	11,646,481	4,246,892	15,893,373



## Changes in Plan Net Position *(in Thousands)*

### KERS Non-Haz Pension Fund

<b>Additions</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Members' Contributions	\$90,780	\$109,879	\$96,418	\$96,744	\$92,941	\$100,424
Employers' Contributions	144,051	185,558	211,071	280,874	296,836	520,949
Health Insurance Contributions (HB1)	1,799	2,441	5,337	3,344	4,546	4,181
Net Investment Income	526,209	599,790	9,789	303,011	337,174	44,094
Bank of America Settlement	-	-	-	-	-	8,442
Pension Spiking	-	-	-	-	-	743
<b>Total Additions</b>	<b>762,839</b>	<b>\$897,668</b>	<b>322,615</b>	<b>683,973</b>	<b>732,246</b>	<b>679,308</b>
<b>Deductions</b>						
Benefit Payments	825,627	838,372	858,151	873,906	889,937	905,790
Refunds	8,887	10,931	12,004	12,907	13,627	13,552
Administrative Expenses	8,424	8,558	8,776	10,719	11,145	10,474
Capital Project Expenses	-	67	8	-	-	-
<b>Total Deductions</b>	<b>842,938</b>	<b>857,928</b>	<b>878,939</b>	<b>897,532</b>	<b>914,709</b>	<b>929,816</b>
<b>Net Increase (Decrease) in Plan Net Position</b>	<b>(\$80,099)</b>	<b>\$39,740</b>	<b>(\$556,324)</b>	<b>(\$213,559)</b>	<b>(\$182,463)</b>	<b>(\$250,508)</b>

### KERS Non-Haz Insurance Fund

<b>Additions</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Employers' Contributions	\$92,679	\$123,256	\$146,844	\$162,191	\$164,176	\$132,208
Net Investment Income	50,765	77,225	(4,803)	40,661	96,578	8,690
Retired Re-employed (HB1)	-	-	-	-	-	3,732
Member Drug Reimbursement	8,551	10,025	7,865	4,846	8	-
Premiums Rec'd from Retirees	13,588	15,826	15,666	14,294	918	272
<b>Total Additions</b>	<b>165,583</b>	<b>\$226,332</b>	<b>\$165,563</b>	<b>221,992</b>	<b>264,273</b>	<b>144,902</b>
<b>Deductions</b>						
Benefit Payments	157,819	161,804	163,841	140,157	112,671	125,272
Administrative Expenses	4,333	4,667	5,203	4,285	736	893
<b>Total Deductions</b>	<b>162,152</b>	<b>166,471</b>	<b>169,044</b>	<b>144,442</b>	<b>113,407</b>	<b>126,168</b>
<b>Net Increase (Decrease) in Plan Net Position</b>	<b>\$3,431</b>	<b>\$59,861</b>	<b>\$169,044</b>	<b>\$77,550</b>	<b>\$150,865</b>	<b>\$18,734</b>



## Changes in Plan Net Position *(in Thousands)*

### KERS Haz Pension Fund

<b>Additions</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Member Contributions	\$11,110	\$12,959	\$11,602	\$11,467	\$11,995	\$12,670
Employer Contributions	17,658	18,085	17,367	27,334	11,670	28,374
Health Insurance Contribution (HB1)	118	241	629	402	551	537
Net Investment Income	65,588	83,492	(10,286)	51,497	80,549	8,572
Bank of America Settlement	-	-	-	-	-	767
Pension Spiking	-	-	-	-	-	162
<b>Total Additions</b>	<b>94,474</b>	<b>\$114,777</b>	<b>19,312</b>	<b>90,700</b>	<b>104,941</b>	<b>51,211</b>
<b>Deductions</b>						
Benefit Payments	37,796	44,509	48,424	48,855	54,320	56,774
Refunds	1,286	2,062	2,543	2,762	2,830	2,609
Administrative Expenses	737	721	877	733	897	844
Capital Project Expenses	-	6	-	-	-	-
<b>Total Deductions</b>	<b>39,819</b>	<b>47,298</b>	<b>51,844</b>	<b>52,350</b>	<b>58,048</b>	<b>60,277</b>
<b>Net Increase (Decrease) in Plan Net Position</b>	<b>\$54,655</b>	<b>\$67,479</b>	<b>\$(32,532)</b>	<b>\$38,350</b>	<b>\$46,892</b>	<b>\$(9,016)</b>

### KERS Haz Insurance Fund

<b>Additions</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Employers' Contributions	\$21,835	\$18,826	\$23,984	\$25,144	\$23,336	\$14,173
Net Investment Income	42,406	45,205	60	32,887	52,082	7,793
Retired Re-employed (HB1)	-	-	-	-	-	709
Member Drug Reimbursement	319	365	351	243	-	-
Premiums Rec'd from Retirees	835	588	876	895	37	14
<b>Total Additions</b>	<b>65,395</b>	<b>64,984</b>	<b>25,271</b>	<b>59,169</b>	<b>76,126</b>	<b>22,689</b>
<b>Deductions</b>						
Benefit Payments	13,456	15,327	13,941	16,837	15,405	17,000
Administrative Expenses	200	223	335	179	78	101
<b>Total Deductions</b>	<b>13,656</b>	<b>15,550</b>	<b>14,276</b>	<b>17,016</b>	<b>15,482</b>	<b>17,101</b>
<b>Net Increase (Decrease) in Plan Net Position</b>	<b>\$51,739</b>	<b>\$49,434</b>	<b>\$10,995</b>	<b>\$42,153</b>	<b>\$60,642</b>	<b>\$5,588</b>



## Changes in Plan Net Position *(in Thousands)*

### CERS Non-Haz Pension Fund

<b>Additions</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Members' Contributions	\$106,558	\$144,861	\$119,123	\$120,777	\$122,459	\$133,637
Employers' Contributions	207,076	247,968	270,664	294,914	324,231	297,714
Health Insurance Contribution (HB1)	1,345	3,216	5,101	4,659	6,109	6,674
Net Investment Income	669,072	887,514	(3,349)	579,161	893,386	110,569
Bank of America Settlement	-	-	-	-	-	10,280
Pension Spiking	-	-	-	-	-	850
<b>Total Additions</b>	<b>984,051</b>	<b>\$1,283,559</b>	<b>\$391,539</b>	<b>\$999,511</b>	<b>1,348,330</b>	<b>559,724</b>
<b>Deductions</b>						
Benefit Payments	470,249	494,344	524,385	553,204	582,850	615,335
Refunds	10,001	11,816	12,765	13,306	14,286	13,524
Administrative Expenses	14,323	14,324	16,740	17,743	18,615	18,212
Capital Project Expenses	-	112	9	-	-	-
<b>Total Deductions</b>	<b>494,571</b>	<b>520,596</b>	<b>553,899</b>	<b>584,253</b>	<b>615,751</b>	<b>647,071</b>
<b>Net Increase (Decrease) in Plan Net Position</b>	<b>\$489,478</b>	<b>\$762,963</b>	<b>\$(162,360)</b>	<b>\$415,258</b>	<b>\$732,579</b>	<b>(\$87,347)</b>

### CERS Non-Haz Insurance Fund

<b>Additions</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Employer Contributions	\$166,032	\$185,639	\$164,297	\$158,212	\$121,161	\$115,836
Net Investment Income	136,528	274,743	(32,992)	147,194	231,743	36,731
Retired Re-employed (HB1)	-	-	-	-	-	3,608
Member Drug Reimbursement	9,157	10,449	8,443	5,360	6	-
Premiums Rec'd from Retirees	16,216	18,053	17,493	16,293	1,449	582
<b>Total Additions</b>	<b>327,933</b>	<b>\$488,884</b>	<b>\$157,241</b>	<b>327,059</b>	<b>357,064</b>	<b>156,757</b>
<b>Deductions</b>						
Benefit Payments	123,133	131,945	141,694	132,489	96,804	113,734
Administrative Expenses	4,469	4,763	5,545	4,431	508	782
<b>Total Deductions</b>	<b>127,602</b>	<b>136,708</b>	<b>147,239</b>	<b>136,920</b>	<b>97,312</b>	<b>114,522</b>
<b>Net Increase (Decrease) in Plan Net Position</b>	<b>\$200,331</b>	<b>\$352,176</b>	<b>\$10,002</b>	<b>\$190,139</b>	<b>\$259,751</b>	<b>\$42,235</b>





## Changes in Plan Net Position (*in Thousands*)

### CERS Haz Pension Fund

<b>Additions</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Members' Contributions	\$37,200	\$53,918	\$41,797	\$42,863	\$42,631	\$46,609
Employers' Contributions	82,887	84,595	77,311	120,140	115,240	107,515
Health Insurance Contribution (HBI)	174	1,157	811	734	1,091	1,084
Net Investment Income	206,073	286,688	(24,724)	181,171	287,816	37,104
Bank of America Settlement	-	-	-	-	-	2,865
Pension Spiking	-	-	-	-	-	557
<b>Total Additions</b>	<b>326,334</b>	<b>\$426,358</b>	<b>95,195</b>	<b>344,908</b>	<b>447,452</b>	<b>195,734</b>
<b>Deductions</b>						
Benefit Payments	136,810	167,540	169,352	179,696	189,635	200,134
Refunds	1,956	2,654	3,516	3,158	2,664	3,111
Administrative Expenses	1,234	1,191	1,319	1,202	1,721	1,289
Capital Project Expenses	-	9	-	-	-	-
<b>Total Deductions</b>	<b>140,000</b>	<b>171,394</b>	<b>174,187</b>	<b>184,056</b>	<b>194,020</b>	<b>204,534</b>
<b>Net Increase (Decrease) in Plan Net Position</b>	<b>\$186,334</b>	<b>\$254,964</b>	<b>(\$79,992)</b>	<b>\$160,852</b>	<b>\$253,431</b>	<b>(\$8,800)</b>

### CERS Haz Insurance Fund

<b>Additions</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Employers' Contributions	\$82,970	\$98,203	\$90,204	\$84,962	\$74,265	\$71,008
Net Investment Income	67,288	139,242	(16,127)	79,885	124,952	20,283
Retired Re-employed (HBI)	-	-	-	-	-	770
Member Drug Reimbursement	1,493	972	871	562	-	-
Premiums Rec'd from Retirees	508	516	695	657	32	10
<b>Total Additions</b>	<b>152,259</b>	<b>\$238,933</b>	<b>\$75,643</b>	<b>\$166,066</b>	<b>200,101</b>	<b>92,071</b>
<b>Deductions</b>						
Benefit Payments	48,321	51,831	50,155	59,941	60,843	65,553
Administrative Expenses	554	580	688	679	275	339
<b>Total Deductions</b>	<b>48,875</b>	<b>52,411</b>	<b>50,843</b>	<b>60,620</b>	<b>61,117</b>	<b>65,894</b>
<b>Net Increase (Decrease) in Plan Net Position</b>	<b>\$103,384</b>	<b>\$186,522</b>	<b>\$24,800</b>	<b>\$105,446</b>	<b>\$138,983</b>	<b>\$26,177</b>



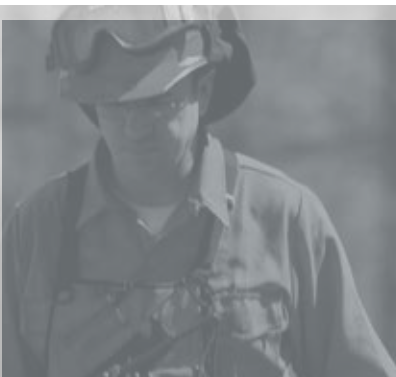
## Changes in Plan Net Position *(in Thousands)*

### SPRS Pension Fund

<b>Additions</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Members' Contributions	\$4,127	\$5,225	\$5,154	\$4,495	\$5,005	\$5,150
Employers' Contributions	9,489	11,920	15,040	18,501	20,279	31,444
Health Insurance Contribution (HB1)	12	31	46	48	70	94
Net Investment Income	40,602	44,739	43	25,954	40,291	3,427
Bank of America Settlement	-	-	-	-	-	646
Pension Spiking	-	-	-	-	-	546
<b>Total Additions</b>	<b>54,230</b>	<b>61,915</b>	<b>20,283</b>	<b>48,998</b>	<b>65,729</b>	<b>41,307</b>
<b>Deductions</b>						
Benefit Payments	45,582	46,754	48,867	50,559	53,026	54,766
Refunds	144	58	149	31	214	85
Administrative Expenses	130	124	73	184	215	201
Capital Project Expenses	-	1	-	-	-	-
<b>Total Deductions</b>	<b>45,856</b>	<b>46,937</b>	<b>49,089</b>	<b>50,774</b>	<b>53,454</b>	<b>55,052</b>
<b>Net Increase (Decrease) in Plan Net Position</b>	<b>\$8,374</b>	<b>\$14,978</b>	<b>(\$28,806)</b>	<b>(\$1,776)</b>	<b>\$12,276</b>	<b>(\$13,745)</b>

### SPRS Insurance Fund

<b>Additions</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Employer Contributions	\$8,369	\$10,051	\$10,810	\$16,829	\$14,498	\$10,379
Net Investment Income	13,085	24,773	(1,458)	12,993	20,458	2,921
Retired Re-employed (HB1)	-	-	-	-	-	3
Member Drug Reimbursement	274	318	279	178	-	-
Premiums Rec'd from Retirees	16	18	20	23	11	1
<b>Total Additions</b>	<b>\$21,744</b>	<b>\$35,160</b>	<b>\$9,651</b>	<b>\$30,023</b>	<b>\$35,012</b>	<b>\$13,304</b>
<b>Deductions</b>						
Benefit Payments	10,769	12,172	10,791	12,546	12,688	13,483
Administrative Expenses	147	179	201	184	58	65
<b>Total Deductions</b>	<b>10,916</b>	<b>12,351</b>	<b>10,992</b>	<b>12,730</b>	<b>12,745</b>	<b>13,548</b>
<b>Net Increase (Decrease) in Plan Net Position</b>	<b>\$10,828</b>	<b>\$22,809</b>	<b>(\$1,341)</b>	<b>\$17,293</b>	<b>\$22,267</b>	<b>(\$244)</b>



## Schedule of Benefit Expenses

### KERS Non-Haz

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments
<b>FY 2009-10</b>				
Average Benefit	\$1,009	\$1,912	\$936	\$963
Number of Accounts	5,991	30,303	2,625	813
Total Monthly Benefits	\$6,046,047	\$57,939,304	\$2,457,461	\$782,980
% of Total Monthly Benefits	9.00%	86.20%	3.60%	1.20%
<b>FY 2010-11</b>				
Average Benefit	\$1,008	\$1,920	\$974	\$1,071
Number of Accounts	6,118	30,900	2,629	835
Total Monthly Benefits	\$6,166,372	\$59,318,561	\$2,561,377	\$894,077
% of Total Monthly Benefits	8.94%	86.04%	3.72%	1.30%
<b>FY 2011-12</b>				
Average Benefit	\$1,008	\$1,927	\$1,029	\$925
Number of Accounts	6,218	31,580	2,626	959
Total Monthly Benefits	\$6,269,576	\$60,879,802	\$2,702,410	\$887,236
% of Total Monthly Benefits	8.86%	86.06%	3.82%	1.25%
<b>FY 2012-13</b>				
Average Benefit	\$1,003	\$1,915	\$1,020	\$889
Number of Accounts	6,441	32,310	2,687	962
Total Monthly Benefits	\$6,459,840	\$61,882,399	\$2,740,491	\$855,033
% of Total Monthly Benefits	8.98%	86.02%	3.81%	1.19%
<b>FY 2013-14</b>				
Average Benefit	\$992	\$1,911	\$987	\$886
Number of Accounts	6,678	33,106	2,706	954
Total Monthly Benefits	\$6,624,472	\$63,255,779	\$2,671,749	\$845,468
% of Total Monthly Benefits	9.03%	86.18%	3.64%	1.15%
<b>FY 2014-15</b>				
Average Benefit	\$992	\$1,901	\$996	\$909
Number of Accounts	6,896	33,940	2,696	983
Total Monthly Benefits	\$6,843,193	\$64,503,048	\$2,684,720	\$893,407
% of Total Monthly Benefits	9.13%	86.09%	3.58%	1.19%

*These tables include individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. A single member may have multiple accounts which contribute to one pension. This table represents all individuals receiving a benefit including dependent children, Qualified Domestic Relations Order(QDRO) accounts and multiple beneficiary accounts. If a member has died or a disability decision is pending, the monthly benefit amount is reflected as zero until the account status changes.*



## Schedule of Benefit Expenses

### KERS Haz

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments
<b>FY 2009-10</b>				
Average Benefit	\$933	\$1,489	\$593	\$843
Number of Accounts	1,446	1,146	157	75
Total Monthly Benefits	\$1,348,511	\$1,706,876	\$93,064	\$63,194
% of Total Monthly Benefits	42.00%	53.10%	2.90%	2.00%
<b>FY 2010-11</b>				
Average Benefit	\$957	\$1,526	\$600	\$814
Number of Accounts	1,571	1,240	158	79
Total Monthly Benefits	\$1,503,160	\$1,892,300	\$94,766	\$64,299
% of Total Monthly Benefits	42.29%	53.24%	2.66%	1.81%
<b>FY 2011-12</b>				
Average Benefit	\$976.67	\$1,541.49	\$581	\$721
Number of Accounts	1,657	1,339	180	92
Total Monthly Benefits	\$1,618,343	\$2,064,050	\$104,644	\$66,409
% of Total Monthly Benefits	42.00%	53.56%	2.72%	1.72%
<b>FY 2012-13</b>				
Average Benefit	\$961	\$1,543	\$662	\$725
Number of Accounts	1,751	1,417	190	93
Total Monthly Benefits	\$1,682,541	\$2,186,334	\$125,704	\$67,440
% of Total Monthly Benefits	41.42%	53.82%	3.10%	1.66%
<b>FY 2013-14</b>				
Average Benefit	\$971	\$1,560	\$649	\$749
Number of Accounts	1,851	1,497	191	89
Total Monthly Benefits	\$1,797,900	\$2,335,190	\$123,867	\$66,679
% of Total Monthly Benefits	41.58%	54.01%	2.86%	1.54%
<b>FY 2014-15</b>				
Average Benefit	\$986	\$1,556	\$661	\$714
Number of Accounts	1,912	1,566	193	90
Total Monthly Benefits	\$1,884,477	\$2,436,923	\$127,477	\$64,250
% of Total Monthly Benefits				

*These tables include individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. A single member may have multiple accounts which contribute to one pension. This table represents all individuals receiving a benefit including dependent children, Qualified Domestic Relations Order (QDRO) accounts and multiple beneficiary accounts. If a member has died or a disability decision is pending, the monthly benefit amount is reflected as zero until the account status changes.*

## Schedule of Benefit Expenses

### CERS Non-Haz

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments
<b>FY 2009-10</b>				
Average Benefit	\$570	\$1,022	\$835	\$623
Number of Accounts	9,418	28,747	3,951	836
Total Monthly Benefits	\$5,372,501	\$29,377,417	\$3,298,478	\$520,995
% of Total Monthly Benefits	13.90%	76.20%	8.60%	1.30%
<b>FY 2010-11</b>				
Average Benefit	\$577	\$1,031	\$847	\$651
Number of Accounts	10,054	30,224	4,095	873
Total Monthly Benefits	\$5,802,568	\$31,149,398	\$3,469,974	\$568,188
% of Total Monthly Benefits	14.16%	75.99%	8.47%	1.38%
<b>FY 2011-12</b>				
Average Benefit	\$587	\$1,039	\$870	\$636
Number of Accounts	10,620	31,797	4,280	1,052
Total Monthly Benefits	\$6,237,369	\$33,041,035	\$3,724,859	\$669,377
% of Total Monthly Benefits	14.28%	75.66%	8.53%	1.53%
<b>FY 2012-13</b>				
Average Benefit	\$591	\$1,042	\$878	\$625
Number of Accounts	11,266	33,393	4,537	1,075
Total Monthly Benefits	\$6,661,524	\$34,797,169	\$3,982,213	\$672,310
% of Total Monthly Benefits	14.45%	75.46%	8.64%	1.45%
<b>FY 2012-13</b>				
Average Benefit	\$596	\$1,042	\$856	\$613
Number of Accounts	11,885	34,911	4,729	1,110
Total Monthly Benefits	\$7,081,048	\$36,375,607	\$4,047,035	\$680,784
% of Total Monthly Benefits	14.70%	75.49%	8.40%	1.41%
<b>FY 2014-15</b>				
Average Benefit	\$612	\$1,044	\$862	\$616
Number of Accounts	12,749	36,746	4,854	1,161
Total Monthly Benefits	\$7,801,662	\$38,375,001	\$4,186,130	\$715,032
% of Total Monthly Benefits	15.27%	75.13%	8.20%	1.40%

*These tables include individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. A single member may have multiple accounts which contribute to one pension. This table represents all individuals receiving a benefit including dependent children, Qualified Domestic Relations Order (QDRO) accounts and multiple beneficiary accounts. If a member has died or a disability decision is pending, the monthly benefit amount is reflected as zero until the account status changes.*



## Schedule of Benefit Expenses

### CERS Haz

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments
<b>FY 2009-10</b>				
Average Benefit	\$1,427	\$2,362	\$1,261	\$1,130
Number of Accounts	1,495	3,856	468	89
Total Monthly Benefits	\$2,133,697	\$9,106,888	\$590,020	\$100,562
% of Total Monthly Benefits	17.90%	76.30%	5.00%	0.80%
<b>FY 2010-11</b>				
Average Benefit	\$1,432	\$2,410	\$1,362	\$1,153
Number of Accounts	1,643	4,082	487	90
Total Monthly Benefits	\$2,352,710	\$9,838,311	\$663,455	\$103,808
% of Total Monthly Benefits	18.16%	75.92%	5.12%	0.80%
<b>FY 2011-12</b>				
Average Benefit	\$1,430	\$2,422	\$1,300	\$1,046
Number of Accounts	1,766	4,407	662	110
Total Monthly Benefits	\$2,526,722	\$10,673,928	\$861,223	\$115,107
% of Total Monthly Benefits	17.82%	75.29%	6.07%	0.81%
<b>FY 2012-13</b>				
Average Benefit	\$1,433	\$2,429	\$1,121	\$1,073
Number of Accounts	1,883	4,683	681	119
Total Monthly Benefits	\$2,699,176	\$11,374,811	\$763,700	\$127,689
% of Total Monthly Benefits	18.04%	76.01%	5.10%	0.85%
<b>FY 2013-14</b>				
Average Benefit	\$1,467	\$2,437	\$1,125	\$1,008
Number of Accounts	1,974	4,873	695	119
Total Monthly Benefits	\$2,895,353	\$11,876,578	\$781,685	\$119,935
% of Total Monthly Benefits	18.47%	75.77%	4.99%	0.77%
<b>FY 2014-15</b>				
Average Benefit	\$1,480	\$2,448	\$1,145	\$954
Number of Accounts	2,097	5,139	688	127
Total Monthly Benefits	\$3,103,613	\$12,581,191	\$787,549	\$121,103
% of Total Monthly Benefits	18.70%	75.82%	4.75%	0.73%

*These tables include individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. A single member may have multiple accounts which contribute to one pension. This table represents all individuals receiving a benefit including dependent children, Qualified Domestic Relations Order(QDRO) accounts and multiple beneficiary accounts. If a member has died or a disability decision is pending, the monthly benefit amount is reflected as zero until the account status changes.*

## Schedule of Benefit Expenses

### SPRS

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments
<b>FY 2009-10</b>				
Average Benefit	\$3,492	\$3,066	\$1,467	\$2,130
Number of Accounts	147	1,004	50	26
Total Monthly Benefits	\$513,322	\$3,078,221	\$73,354	\$55,379
% of Total Monthly Benefits	13.80%	82.70%	2.00%	1.50%
<b>FY 2010-11</b>				
Average Benefit	\$3,529	\$3,112	\$1,494	\$2,162
Number of Accounts	146	1,037	55	26
Total Monthly Benefits	\$515,270	\$3,226,744	\$82,184	\$56,210
% of Total Monthly Benefits	13.28%	83.15%	2.12%	1.45%
<b>FY 2011-12</b>				
Average Benefit	\$3,560	\$3,135	\$1,372	\$2,136
Number of Accounts	150	1,083	66	25
Total Monthly Benefits	\$534,132	\$3,396,203	\$90,562	\$53,404
% of Total Monthly Benefits	13.11%	83.36%	2.22%	1.31%
<b>FY 2012-13</b>				
Average Benefit	\$3,601	\$3,130	\$1,320	\$2,198
Number of Accounts	149	1,126	74	23
Total Monthly Benefits	\$536,481	\$3,524,248	\$97,681	\$50,563
% of Total Monthly Benefits	12.75%	83.73%	2.32%	1.20%
<b>FY 2013-14</b>				
Average Benefit	\$3,621	\$3,197	\$1,346	\$2,196
Number of Accounts	146	1,172	75	23
Total Monthly Benefits	\$528,611	\$3,747,012	\$100,974	\$49,197
% of Total Monthly Benefits	11.94%	84.66%	2.28%	1.11%
<b>FY 2014-15</b>				
Average Benefit	\$3,578	\$3,189	\$1,347	\$2,153
Number of Accounts	150	1,213	75	23
Total Monthly Benefits	\$536,649	\$3,867,971	\$101,018	\$49,524
% of Total Monthly Benefits	11.78%	84.91%	2.22%	1.09%

*These tables include individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. A single member may have multiple accounts which contribute to one pension. This table represents all individuals receiving a benefit including dependent children, Qualified Domestic Relations Order (QDRO) accounts and multiple beneficiary accounts. If a member has died or a disability decision is pending, the monthly benefit amount is reflected as zero until the account status changes.*



## Analysis of Initial Retirees

	KERS Non-Haz	KERS Haz	CERS Non-Haz	CERS Haz	SPRS
<b>FY 2009-10</b>					
Number of Accounts	1,007	212	2,252	329	54
Average Service Credit (months)	153	194	186	224	276
Average Final Compensation	\$41,811	\$45,499	\$30,203	\$56,408	\$70,704
Average Monthly Benefit	\$802	\$1,494	\$760	\$2,127	\$3,323
Average System Payment for Health Insurance	\$202	\$572	\$239	\$766	\$894
<b>FY 2010-11</b>					
Number of Accounts	1,486	247	3,045	415	46
Average Service Credit (months)	174	184	182	204	260
Average Final Compensation	\$44,341	\$44,821	\$32,359	\$58,814	\$71,501
Average Monthly Benefit	\$1,047	\$1,379	\$824	\$2,114	\$3,296
Average System Payment for Health Insurance	\$264	\$516	\$284	\$777	\$874
<b>FY 2011-12</b>					
Number of Accounts	1,641	206	3,160	410	47
Average Service Credit (months)	190	169	185	210	276
Average Final Compensation	\$45,528	\$45,815	\$32,709	\$57,756	\$71,298
Average Monthly Benefit	\$1,162	\$1,312	\$872	\$2,149	\$3,556
Average System Payment for Health Insurance	\$291	\$496	\$271	\$826	\$981
<b>FY 2012-13</b>					
Number of Accounts	1,810	205	3,303	443	59
Average Service Credit (months)	199	157	189	202	234
Average Final Compensation	\$47,168	\$46,456	\$34,292	\$58,516	\$69,325
Average Monthly Benefit	\$1,275	\$1,250	\$938	\$2,196	\$2,893
Average System Payment for Health Insurance	\$303	\$433	\$259	\$853	\$994
<b>FY 2013-14</b>					
Number of Accounts	2,037	245	3,529	430	77
Average Service Credit (months)	202	165	182	194	260
Average Final Compensation	\$46,480	\$46,595	\$33,816	\$57,718	\$70,009
Average Monthly Benefit	\$1,278	\$1,296	\$879	\$2,021	\$3,322
Average System Payment for Health Insurance	\$534	\$937	\$486	\$1,279	\$1,378
<b>FY 2014-15</b>					
Number of Accounts	2,078	191	4,084	496	55
Average Service Credit (months)	204	164	188	204	251
Average Final Compensation	\$47,187	\$47,148	\$34,561	\$59,589	\$67,862
Average Monthly Benefit	\$1,308	\$1,280	\$913	\$2,178	\$3,009
Average System Payment for Health Insurance	\$549	\$906	\$489	\$1,254	\$1,376

*This table represents all individuals who had an initial retirement date within the fiscal year.*



## Payment Options Selected by Retired Members

	Basic	Lump Sum	Other	Period Certain	Pop Up	Social Security Adjustment	Survivorship
<b>KERS Non-Haz</b>							
Number of Accounts	15,019	2,174	14	5,626	8,528	3,285	9,869
Monthly Benefits	\$23,118,838	\$2,521,815	\$12,770	\$8,818,120	\$17,864,054	\$5,726,160	\$16,863,609
<b>KERS Haz</b>							
Number of Accounts	968	254	4	410	1,031	279	815
Monthly Benefits	\$1,067,984	\$258,738	\$2,414	\$458,466	\$1,450,112	\$334,312	\$941,101
<b>CERS Non-Haz</b>							
Number of Accounts	22,391	3,301	17	7,925	8,783	1,997	11,096
Monthly Benefits	\$17,636,032	\$2,207,160	\$7,441	\$6,657,493	\$10,777,346	\$2,620,079	\$11,172,274
<b>CERS Haz</b>							
Number of Accounts	1,325	474	23	670	3,155	522	1,882
Monthly Benefits	\$2,473,018	\$753,458	\$12,108	\$1,186,588	\$7,584,234	\$828,502	\$3,755,547
<b>SPRS</b>							
Number of Accounts	153	22	1	107	582	199	397
Monthly Benefits	\$450,930	\$51,466	\$893	\$316,014	\$2,049,126	\$410,471	\$1,276,261
<b>KRS Total</b>							
Number of Accounts	39,856	6,225	59	14,738	22,079	6,282	24,059
Monthly Benefits	\$44,746,802	\$5,792,637	\$34,626	\$17,436,681	\$39,724,872	\$9,919,524	\$34,008,792

*The information in this table represents accounts administered by KRS.  
A single member may have multiple accounts, which contribute to one pension.*



# EMPLOYER Contribution Rates

*In KERS, CERS, and SPRS both the employee and the employer contribute a percentage of creditable compensation to the Systems.*

The employee contribution rate is set by state statute. Non-hazardous employees contribute 5% while hazardous duty members contribute 8%. Employees hired on or after September 1, 2008 contribute an additional 1% to health insurance.

Under Kentucky Revised Statutes 61.565, KERS and SPRS employer contribution rates are set by the KRS Board of Trustees based on an annual actuarial valuation. However, KERS and SPRS employer rates are subject to approval by the Kentucky General Assembly through the adoption of the biennial Executive Branch Budget. In recent years, the Kentucky General Assembly has routinely suspended Kentucky Revised Statutes 61.565 in the budget in order to provide an employer contribution rate that is less than the amount recommended by the Board's consulting actuary. The table in the Actuarial Section shows the KERS and SPRS employer contribution rates that were actuarially recommended in the annual valuation without any adjustments (Recommended Rate) and the rate specified by the Executive Branch budget bill for each fiscal year (Budgeted Rate).

The CERS employer contribution rates are also set by the Systems' Board under Kentucky Revised Statutes 61.565 based on an annual actuarial valuation, unless altered by legislation enacted by the Kentucky General Assembly. The CERS employer contribution rates for fiscal year 2008-2009 were reduced from the actuarially recommended rate as a result of the passage of House Bill (HB) 1 during the 2008 Extraordinary Session of the Kentucky General Assembly. Also, during its 2009 Regular Session, the Kentucky General Assembly enacted HB 117, which mandated an extension of the phase-in of insurance contribution rates that had been previously approved by the KRS Board in 2006 from five years to ten years to further mitigate the impact of the application of Governmental Accounting Standards Board Statements 43 and 45 on CERS employer contribution rates for health insurance. The "Recommended Rate" shown for CERS non-hazardous and hazardous plans are the actuarially recommended rates as set forth in the annual valuation. The "Budgeted Rate" shown for the two plans is the rate required by the ten year phase-in mandated in KRS 61.565(6).

Employer Contribution Rates						
	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
<b>KERS Non-Haz</b>						
Budgeted Rate	11.61	16.98	19.82	23.61	26.79	38.77
Recommended Rate	39.45	38.58	40.71	44.55	45.28	38.77
<b>KERS Haz</b>						
Budgeted Rate	24.69	26.12	28.98	29.79	32.21	26.34
Recommended Rate	35.54	34.37	33.84	35.89	28.84	26.34
<b>CERS Non-Haz</b>						
Budgeted Rate	16.16	16.93	18.96	19.55	18.89	17.67
Recommended Rate	20.91	19.81	21.29	21.21	19.58	17.67
<b>CERS Haz</b>						
Budgeted Rate	32.97	33.25	35.76	37.60	35.70	34.31
Recommended Rate	43.36	40.06	41.65	41.94	37.79	34.31
<b>SPRS</b>						
Budgeted Rate	33.08	45.54	52.13	63.67	71.15	75.76
Recommended Rate	92.12	85.63	94.63	103.41	96.52	75.76

# Retired REEMPLOYED

From August 1, 1998 through August 31, 2008, state law allowed retired members to return to work in the same system from which they retired and contribute to a new account provided the appropriate separation of service was observed. The following table provides information on the number of retired members currently drawing a monthly benefit who have subsequently returned to work and are contributing to a new account in the same retirement system.

## Reemployed Retirees in Full-Time Positions Covered by Same System & Contributing to a New Account

	KERS			CERS			SPRS
	Non-Haz	Haz	Total	Non-Haz	Haz	Total	Total
<b>Reemployed Retirees in KRS</b>							
Total Active Employees	39,289	3,932	43,221	82,969	9,188	92,157	940
Total Retirees	38,827	2,575	41,402	48,515	6,389	54,904	1,324
Reemployed Retirees	451	34	485	521	429	950	85
% of Reemployed Retirees to Total Actives	1.15%	0.86%	1.12%	0.63%	4.67%	1.03%	9.04%
% of Reemployed Retirees to Total Retirees	1.18%	1.32%	1.17%	1.07%	6.71%	1.73%	6.42%
Average Age at Initial Retirement	49	48	49	51	46	49	46
Months of Service Credit at Initial Retirement	351	299	347	318	286	303.55	329
Final Compensation At Initial Retirement	\$44,437	\$37,269	\$43,935	\$43,233	\$53,083	\$47,681	\$52,207
Reemployed Retirees Avg. Annualized Salary Earned in Fiscal Year 2014-2015 (Second Retirement Account)	\$44,583	\$36,448	\$81,031	\$43,185	\$53,048	\$96,233	\$52,360
Retirees Returning to Work for the Same Employer	137	6	143	329	46	375	1

*Analysis of age at retirement, service credit, final compensation, etc. only includes those retirees who have returned to work with a participating agency.*



# INSURANCE Contracts

The Systems provides medical insurance and other managed care coverage for eligible retired members.

Participation in the insurance program is optional and requires the completion of the proper forms at the time of retirement in order to obtain the insurance coverage. The Systems provides access to health insurance coverage through the Kentucky Employees Group Health Plan (KEHP) for recipients until they reach age 65 and/or become Medicare eligible. After a retired member becomes eligible for Medicare, coverage is available through a Medicare eligible plan offered by the Systems. A retired member's spouse and/or dependents may also be covered on health insurance through the Systems.

## Insurance Benefits Paid to Retirees & Beneficiaries Participating in a KRS Health Insurance Plan

	KERS Non-Haz	KERS Haz	CERS Non-Haz	CERS Haz	SPRS
Number	30,297	2,453	32,864	7,015	1,580
Average Service Credit (Months)	311	266	259	281	326
Avg Monthly System Payment for Health Insurance	\$378	\$713	\$321	\$972	\$924
Avg Monthly Member Payment for Health Insurance	\$64	\$45	\$66	\$24	\$9
Total Monthly Payment for Health Insurance	\$12,441,180	\$1,541,375	\$11,820,512	\$5,752,110	\$1,147,990

## Insurance Contracts by Type

KERS Non-Haz	2010	2011	2012	2013	2014	2015
KEHP Parent Plus	722	732	734	618	506	452
KEHP Couple/Family	1,971	2,155	1,917	1,276	797	714
KEHP Single	10,420	10,321	9,764	9,364	9,491	9,251
Medicare without Prescription	1,831	1,821	1,721	1,474	1,370	1,303
Medicare with Prescription	13,765	13,988	15,015	16,834	17,738	18,577
KERS Haz						
KEHP Parent Plus	66	75	93	106	110	110
KEHP Couple/Family	453	521	517	451	448	448
KEHP Single	599	615	645	625	647	656
Medicare without Prescription	63	60	67	60	56	62
Medicare with Prescription	525	570	751	985	1,104	1,177



## Insurance Contracts by Type

### CERS Non-Haz

	2010	2011	2012	2013	2014	2015
KEHP Parent Plus	342	351	383	340	278	242
KEHP Couple/Family	1,369	1,552	1,317	857	546	473
KEHP Single	7,692	8,013	7,972	7,652	7,843	8,098
Medicare without Prescription	3,106	3,167	3,119	2,707	2,583	2,531
Medicare with Prescription	14,477	15,100	16,355	18,824	20,200	21,520

### CERS Haz

KEHP Parent Plus	239	253	310	400	432	456
KEHP Couple/Family	2,062	2,156	2,237	2,155	2,184	2,255
KEHP Single	1,274	1,310	1,385	1,425	1,447	1,500
Medicare without Prescription	58	58	73	79	89	107
Medicare with Prescription	1,438	1,527	1,853	2,324	2,510	2,697

### SPRS

KEHP Parent Plus	47	52	62	76	78	81
KEHP Couple/Family	462	474	444	421	444	441
KEHP Single	264	278	291	283	263	265
Medicare without Prescription	12	14	15	20	20	16
Medicare with Prescription	467	499	581	682	712	777

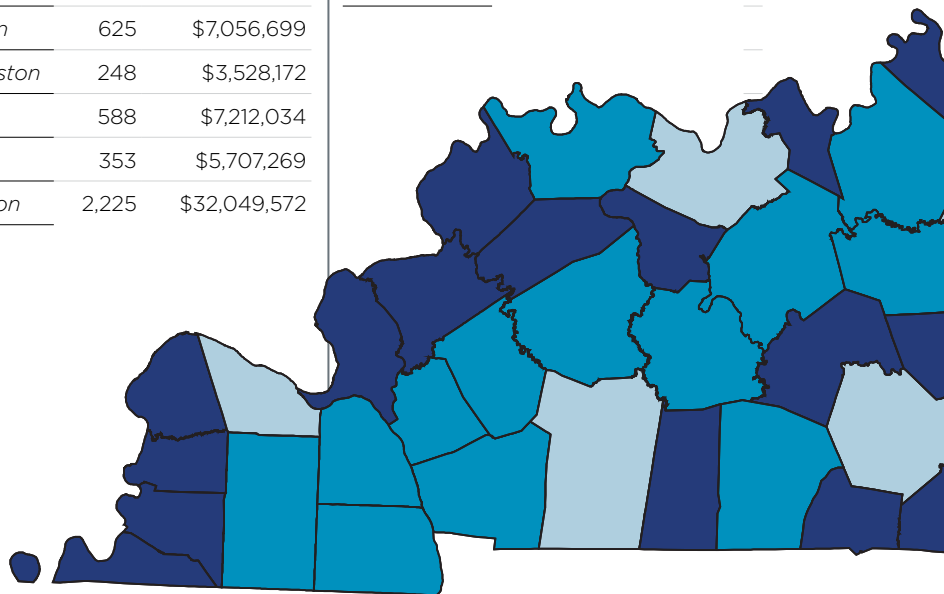
### KRS Total

KEHP Parent Plus	1,416	1,463	1,582	1,540	1,404	1,341
KEHP Couple/Family	6,317	6,858	6,432	5,160	4,419	4,331
KEHP Single	20,249	20,537	20,057	19,349	19,691	19,770
Medicare without Prescription	5,070	5,120	4,995	4,340	4,118	4,019
Medicare with Prescription	30,672	31,684	34,555	39,649	42,264	44,748



## 2015 Total Fiscal Year Pension Benefits by County

County	Payees	Total	County	Payees	Total	County	Payees	Total
Adair	453	\$6,818,083	Grant	585	\$9,529,135	Magoffin	338	\$4,260,996
Allen	376	\$4,233,210	Graves	815	\$11,286,977	Marion	527	\$6,440,781
Anderson	1,341	\$28,904,473	Grayson	668	\$8,741,993	Marshall	819	\$10,583,945
Ballard	218	\$2,733,932	Green	258	\$3,419,585	Martin	247	\$2,366,236
Barren	978	\$13,715,527	Greenup	578	\$7,101,949	Mason	382	\$5,700,535
Bath	358	\$4,709,768	Hancock	217	\$2,563,065	Mccracken	1,498	\$24,636,317
Bell	678	\$9,275,416	Hardin	1,924	\$28,048,716	Mccreary	372	\$3,575,215
Boone	1,548	\$27,442,725	Harlan	577	\$8,206,856	Mclean	296	\$3,649,843
Bourbon	525	\$7,455,532	Harrison	442	\$5,694,874	Meade	395	\$4,936,187
Boyd	954	\$14,462,362	Hart	308	\$4,020,863	Menifee	223	\$2,730,494
Boyle	864	\$13,729,020	Henderson	981	\$14,898,060	Mercer	720	\$11,482,694
Bracken	209	\$2,390,361	Henry	923	\$17,746,278	Metcalfe	308	\$3,260,128
Breathitt	456	\$6,200,032	Hickman	117	\$1,676,036	Monroe	234	\$2,447,822
Breckinridge	417	\$5,387,553	Hopkins	1,141	\$15,452,670	Montgomery	598	\$8,108,931
Bullitt	1,301	\$20,514,875	Jackson	292	\$3,554,513	Morgan	579	\$8,622,037
Butler	324	\$3,784,399	Jefferson	16,022	\$301,842,155	Muhlenberg	649	\$6,921,478
Caldwell	527	\$6,856,190	Jessamine	930	\$14,618,467	Nelson	919	\$14,124,267
Calloway	1,030	\$12,554,359	Johnson	587	\$8,283,949	Nicholas	204	\$2,381,781
Campbell	1,382	\$23,327,970	Kenton	2,117	\$38,921,692	Ohio	597	\$5,723,139
Carlisle	120	\$1,447,274	Knott	406	\$5,573,354	Oldham	1,270	\$22,808,005
Carroll	326	\$4,366,567	Knox	548	\$7,643,196	Owen	758	\$10,905,196
Carter	768	\$8,671,213	Larue	338	\$4,668,322	Owsley	214	\$2,731,635
Casey	350	\$4,037,577	Laurel	1,177	\$17,307,170	Pendleton	325	\$4,856,724
Christian	1,552	\$23,745,309	Lawrence	311	\$3,498,761	Perry	720	\$9,675,774
Clark	772	\$11,617,466	Lee	235	\$3,005,469	Pike	1,157	\$15,706,890
Clay	556	\$6,906,647	Leslie	232	\$2,999,267	Powell	363	\$4,180,458
Clinton	244	\$2,638,704	Letcher	565	\$6,819,724	Pulaski	2,102	\$32,376,756
Crittenden	215	\$2,445,240	Lewis	308	\$3,262,626	Robertson	146	\$967,683
Cumberland	184	\$2,357,988	Lincoln	625	\$7,056,699			
Daviess	2,389	\$37,641,584	Livingston	248	\$3,528,172			
Edmonson	208	\$2,641,356	Logan	588	\$7,212,034			
Elliott	179	\$2,075,741	Lyon	353	\$5,707,269			
Estill	369	\$4,529,742	Madison	2,225	\$32,049,572			
Fayette	5,253	\$102,784,270						
Fleming	438	\$6,917,015						
Floyd	840	\$12,129,904						
Franklin	6,901	\$184,449,385						
Fulton	170	\$1,690,280						
Gallatin	117	\$1,856,356						
Garrard	416	\$5,648,687						



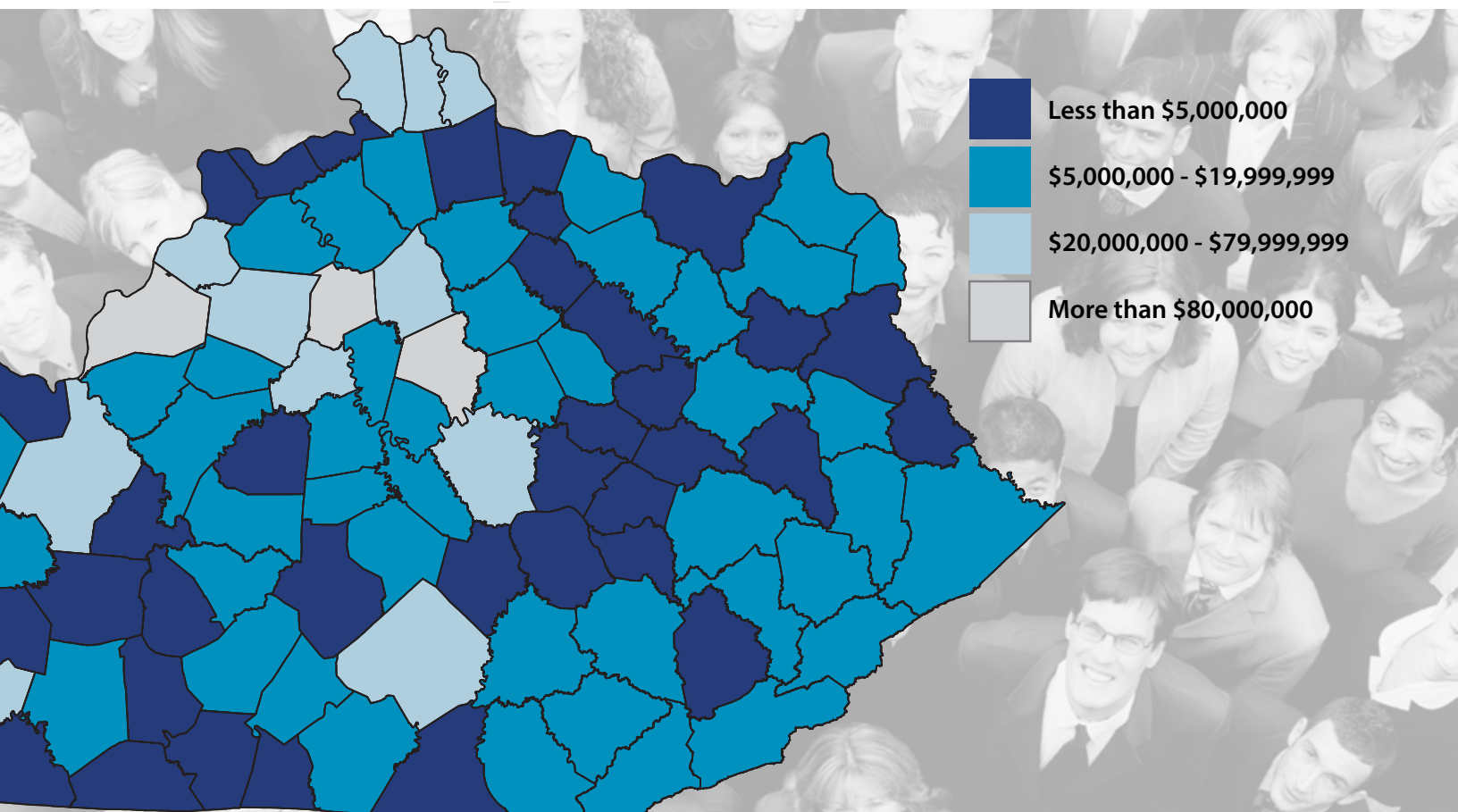
County	Payees	Total
Rockcastle	366	\$4,492,577
Rowan	889	\$13,049,379
Russell	549	\$6,680,470
Scott	1,122	\$20,117,069
Shelby	1,619	\$34,358,575
Simpson	297	\$2,662,275
Spencer	445	\$7,991,484
Taylor	600	\$7,692,621
Todd	261	\$3,082,913
Trigg	508	\$7,140,935
Trimble	269	\$3,404,528
Union	332	\$3,416,218
Warren	2,635	\$40,914,197
Washington	365	\$4,498,264
Wayne	503	\$6,342,507
Webster	330	\$3,737,181
Whitley	965	\$12,825,801
Wolfe	340	\$4,493,958
Woodford	947	\$20,631,450

Pension Benefits paid to retirees and beneficiaries of Kentucky Retirement Systems have a wide ranging impact on the state's economic health. In fiscal year 2015, KRS paid **more than \$1.8 billion** to its recipients. More than 94 percent of these recipients live in Kentucky. Not only do these dollars impact those receiving a benefit, but according to the National Institute of Retirement Security (NIRS), **each \$1.00 paid out in pension benefits supported \$1.67 in total economic activity in Kentucky**. As you can see in the chart, each county in the Commonwealth is impacted by pension benefits, and in an unsteady economy, the consistent addition of pension funds into the economy is a stabilizing element.

### Total Fiscal Year Retirement Payments

	Payees	%	Payments
Kentucky Total	104,249	94.25%	\$1,704,727,909
Out of State	7,035	5.75%	\$104,309,612
<b>Grand Total</b>	<b>111,284</b>	<b>100.00%</b>	<b>\$1,809,037,521</b>

\* This table represents all payees receiving a monthly payment during the fiscal year.



## Our Mission

*The mission of Kentucky Retirement Systems (KRS) is to build the strength of the trust funds to ensure that adequate resources are available to meet all obligations, while helping members and beneficiaries achieve financial security in retirement. KRS is committed to efficiently and effectively administering the benefit programs established by the General Assembly. Members are current and former government employees or retirees, who either contribute money into our trust funds, or who are receiving pension benefits, or who will receive benefits or a refund of contributions in the future.*



### **Kentucky Retirement Systems**

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Hours of Operation:

8:00 AM - 4:30 PM Monday-Friday

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