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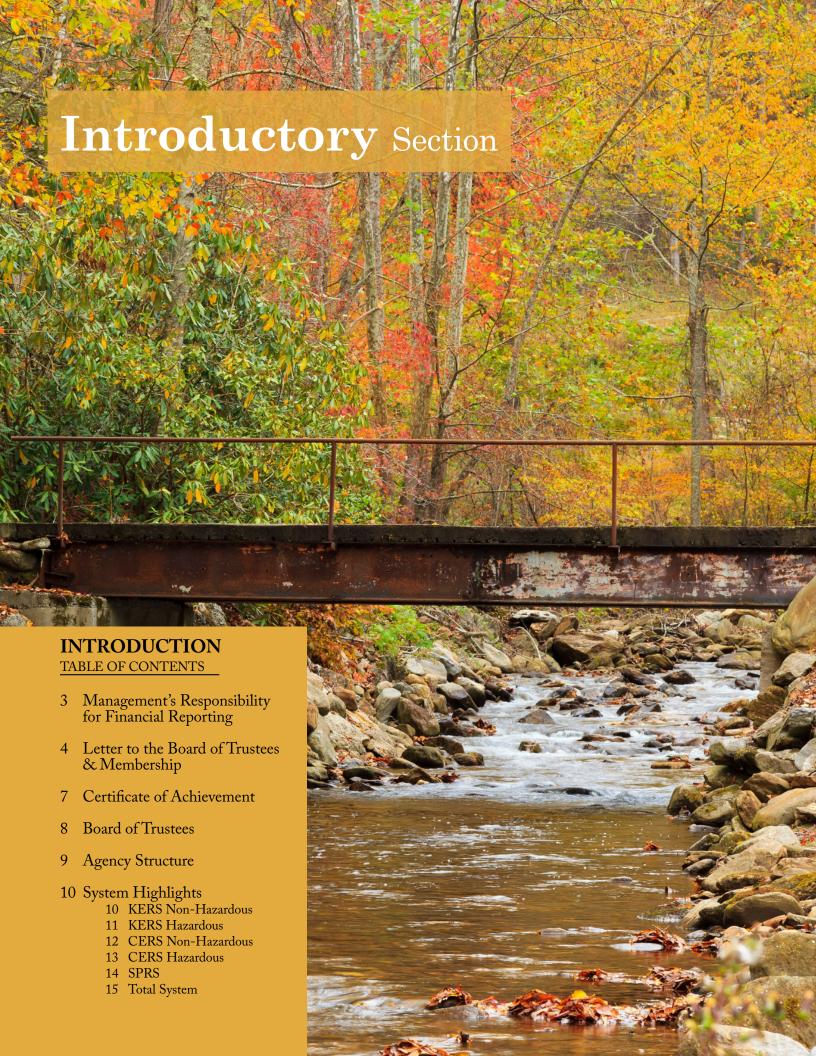
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# Management's Responsibility for Financial Reporting

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

**December 5, 2013** Management has prepared the basic financial statements of Kentucky Retirement Systems and is responsible for the integrity and fairness of the information presented. Some amounts included in the 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 basic financial statements conform to US Generally Accepted Accounting Principles. Financial information presented throughout the annual report is consistent with the basic financial statements.

**Responsibility** Ultimate responsibility for the basic 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. 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, Kentucky Auditor of Public Accounts, have conducted an independent audit of the basic financial statements in accordance with US Generally Accepted Auditing Standards. This audit is described in their Independent Auditors' Report on page eighteen 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 financial statements.

William A. Thielen, Esq. // Executive Director

Karen D. Roggenkamp // Chief Operations Officer

Todd E. Coleman, CPA // Controller

Karen DRoggenkamy

William a. Thelen

John 2 Glima-

# To the Trustees & Membership

I am pleased to present the Comprehensive Annual Financial Report of the Kentucky Employees Retirement System (KERS), County Employees Retirement System (CERS), and State Police Retirement System (SPRS) for the fiscal year ended June 30, 2013.

December 5, 2013 I am pleased 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, 2013. 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, the members of KERS, CERS and SPRS (collectively referred to as KRS) 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 INITIATIVES** 



Kentucky Employees Retirement System

#### **CERS**

County Employees Retirement System

#### **SPRS**

State Police Retirement System

#### ARC

Annual Required Contribution

One of the most consequential events that occurred during the 2013 fiscal year was the passage of Senate Bill 2 (SB 2) – a significant pension reform bill – during the Kentucky General Assembly's 2013 Regular Session. The major changes made by SB 2 included the following: 1) inserting language in Kentucky Revised Statutes 61.565(5) that requires the payment of the full actuarially required contribution rate to KERS and SPRS in fiscal years occurring on or after July 1, 2014; 2) establishing a hybrid cash balance plan for all members who begin participating in KERS, SPRS and CERS on or after January 1, 2014; 3) establishing limits on the granting of Cost of Living Adjustments (COLAs); 4) requiring the last participating employer to pay the actuarial cost of "pension spiking", i.e., annual increases in an employee's creditable compensation greater than ten percent (10%) over the employee's last five (5) fiscal years of employment that are not the direct result of a bona fide promotion or career advancement; 5) establishing a Public Pension Oversight Board, the purpose of which is "to review, analyze, and provide oversight to the General Assembly on the benefits, administration, investments, funding, laws and administrative regulations, and legislation pertaining to the Kentucky Retirement Systems"; and 6) expanding the KRS Board of Trustees from nine to thirteen members by adding three new Governor appointees and one new CERS elected member to the board.

In April 2013, immediately following the end of the legislative session, the KRS staff began extensive efforts to design and implement changes to our technology system to accommodate the new hybrid cash balance benefit tier and the pension spiking provisions. Additionally, the KRS Board of Trustees approved a plan submitted by staff to renovate the KRS board room to provide sufficient space for the enlarged board, KRS staff and members of the public desiring to attend board meetings.

Another significant issue that continued to impact KRS during FY 2013 is ongoing lawsuits involving KRS member agencies which are seeking legal determinations that will allow them to terminate participation in KERS and CERS. If these agencies are successful in obtaining legal rulings that allow them to withdraw without paying their proportionate share of the unfunded liability of the KERS and CERS systems, then all other participating employers would be adversely affected through the payment of higher employer contribution rates. Consequently, KRS is expending significant monetary and staff resources defending these various lawsuits.

KRS continued during the 2013 fiscal year, whenever the opportunity presented itself, to educate its members, participating employers, legislators, executive branch officials and the general public about the funded status of its retirement plans, including the impact of reductions to the actuarially recommended employer contribution rates for the KERS and SPRS plans. This underfunding, along with unfunded annual cost of living allowances (COLAs) and two major economic recessions in the last decade, have resulted in a decline of funding ratios (the ratio of assets to accrued liabilities) for the KERS nonhazardous and SPRS pension trusts to alarmingly low levels. As of June 30, 2013, the funded ratio of the KERS nonhazardous pension plan is 23.20% of the actuarial value of assets. The funded ratio of the SPRS pension plan is 37.10% of the actuarial value of assets.

Centers for Medicare & Medicaid Services

Employer Group Waiver Plan

During the first six months of the 2013 fiscal year, KRS continued to contract with the Centers for Medicare and Medicaid Services (CMS) for an Employee Group Waiver Plan (EGWP) that provided medical and pharmacy insurance benefits for Medicare-eligible retirees. However, in August 2012, the KRS Board of Trustees approved a recommendation made by the KRS Retiree Health Plan Committee to provide Medicare Advantage plans to Medicare eligible retirees beginning January 1, 2013. The Medicare Advantage plans are fully insured health insurance plans provided by Humana Insurance Company, Inc. (Humana). These plans replaced the self-insured EGWP. In addition to the Medicare Advantage plans that provide both medical and pharmacy benefits, KRS did maintain a self-insured Medical Only plan that is also administered by Humana. The projected cost savings of moving to the Medicare Advantage plans was very significant. Premium costs to KRS members were significantly below the rates projected for the self-insured EGWP plans. Based on Humana's contractual commitments for a two-year period, KRS' actuary, Cavanaugh Macdonald, projected that the cost savings would be between \$45.6 million dollars and \$67.8 million dollars, which would be shared on roughly a 50-50 basis by retirees who pay all or a portion of their health insurance premiums and the underfunded KRS health insurance trust.

**START** Strategic Technology Advancements for the Retirement of Tomorrow KRS' progress continued on our technology system deployment. Strategic Technology Advancements for the Retirement of Tomorrow (START) provides employer interface and web based functionality, and allows active members, as well as retirees, to access their account information online. The warranty period was completed in November 2012. Additionally, our technology staff has been making the required changes dictated by the provisions of SB 2, which will be implemented beginning January 1, 2014. Our Employer Reporting, Compliance, and Education (ERCE) staff continued to work with employers through on-site visits and correspondence. Our employer education included additional outreach to participating universities and boards of education to accommodate special reporting needs.

To assist both employers and members, KRS completed a redesign of our website (http://www.kyret. ky.gov). The updated website provides improved navigation and research capabilities, in addition to allowing active members and retirees to access their account information in a secure manner.

During the 2013 fiscal year, KRS continued its member education and outreach program, which included seminars throughout the Commonwealth, on-site workshops and online training opportunities. Nine Pre-Retirement Education Program (PREP) programs were conducted throughout the state. These programs offer a general retirement education and planning curriculum as well as focused training on how to utilize the active Member Self Service feature on the KRS website. In May, KRS staff launched a series of Active Member Self Service workshops onsite, assisting 130 members through instructor led computer lab sessions.

KRS continues to seek new ways to serve and educate our membership. KRS is exploring more online communications platforms and recently distributed the first electronic newsletter to 41,000 active members and retirees. Since KRS started offering webinars in April, more than 40 have been hosted providing active members with general benefit and planning information. During the month of October, KRS staff scheduled 19 webinars to provide information to retirees enrolling in the non-Medicare insurance plans during the open enrollment period. To date, nearly 1,200 active members and retirees have participated in a webinar. KRS also launched its Facebook page (www.facebook/kyretirement) in October and continues to analyze the potential for additional social media channels. Our staff will continue to explore educational outreach opportunities and will expand upon these efforts in 2014.

The economic problems in the post financial crisis period continue to overhang the financial markets; however, the financial markets and economy continue to move forward with the support of the Federal Reserve. For the 2013 fiscal year, the economy was healthier and the financial markets were in somewhat better shape than they had been for several years.

The 2013 fiscal year was full of uncertainty, which caused volatility spikes in the market throughout the twelve-month period. When the dust settled, public equities performed well, especially within the developed markets, and high yield fixed income investors were rewarded. Investments in real estate and absolute return strategies were also solid performers, while more traditional fixed income investors suffered losses.

Despite a strong surge from the public equity and high yield fixed income spaces, questions surrounding how pension funds will meet their expected return targets, and thus fund their liabilities, are valid and taking center stage. Now more than ever, funds are faced with the challenge to meet return expectations in a slow growth environment and have turned to alternative investment strategies to do just that. Asset classes like private equity, real estate, real return, and absolute return strategies are being employed more significantly with a concurrent reduction in both traditional bonds and public equities. KRS has already moved in this direction while still carefully monitoring how the new asset classes impact returns, risks, and liquidity within the portfolios. Along with the additional asset classes now at staff's disposal, recently approved target asset allocations for each plan (in response to the changing nature of the markets and individual plan needs) have been implemented by staff. The fiscal year was characterized by a continued build out of the portfolios.

For the fiscal year ended June 30, 2013, the KRS pension fund returned 10.82%, which was 0.39% short of the benchmark return of 11.21%. The KRS insurance fund returned 10.11% for the fiscal year compared to the benchmark's 11.05% return. These investment gains are net of fees and expenses, and it should be noted that they exceeded the actuarially assumed rate of 7.75% by a significant margin.

For the 10-years ending June 30, 2013, the KRS pension fund portfolio earned an annualized total return of 6.60%, slightly underperforming the benchmark return of 6.79%. The KRS insurance fund also missed its benchmark for the 10-year period ending June 30, 2013, earning 6.18% versus 6.93% for the benchmark.

#### **ACTUARIAL** FUNDING

KRS administers both a pension fund and an insurance fund for each of the systems it manages. These trusts are used to fund monthly pension and health care payments to and on behalf of retirees. Nonhazardous employees are statutorily required to contribute 5% of pre-tax salary to their pension benefit, while hazardous employees contribute 8% on a pre-tax basis. All employees hired with an initial participation date on or after September 1, 2008 must contribute an additional 1% of their pre-tax compensation toward their retiree health insurance benefits. These monies are deposited in a 401(h) account within the pension trust. Employer contributions are calculated annually by the Board of Trustees and include the normal cost of pension and insurance benefits plus a contribution toward the unfunded liability of the pension and insurance trusts designed to amortize that liability over a period no longer than 30 years. Employer contributions also include an administrative fee that is used to pay annual operating expenses of KRS. The administrative expense is shared among the plans based on the ratio of a plan's membership to the total system membership at the beginning of a fiscal year.

Funding ratios have fallen both steadily and significantly over the last decade as a result of unfavorable market conditions, higher than anticipated retirement rates, employer underfunding in the KERS nonhazardous and SPRS plans, and increased expenses for annual cost of living adjustments that were not pre-funded by the employers. While improved market conditions and the increased funding in the KERS and SPRS plans have slowed the growth of the unfunded liabilities of the various systems, the pension funding levels continued to decline for 2013. One of the reasons is that KRS uses a five-year smoothing method to lessen the impact of annual market gains and losses. Twenty percent (20%) of the market gains or losses are recognized each year over the five-year smoothing period. The full effects of the market losses in 2009 will not be eliminated until after the 2013 fiscal year. The funding levels of all systems as of June 30, 2013 are listed on page 119 of the Actuarial Section.

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 nine. A list of external investment managers can be found in the investment section of this report.

#### CERTIFICATE OF ACHIEVEMENT



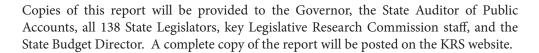
The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Kentucky Retirement Systems for its Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2012. The Certificate 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 fifteenth 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 2013 CAFR will continue to meet the Certificate of Achievement Program's requirements, and we will be submitting it to the GFOA for their consideration.

KRS also received a 2012 Recognition Award for Administration that was presented by the Public Pension Coordinating Council, a confederation of the National Association of State Retirement Administrators (NASRA), the National Conference on Public Employee Retirement Systems (NCPERS), and the National Council on Teacher Retirement (NCTR). The award is given in recognition of meeting professional standards for plan administrators set forth in the Public Pension Standards.

#### OTHER INFORMATION

Kentucky statutes require an annual audit by either an independent certified public accountant or the Auditor of Public Accounts. In addition, during the 2013 legislative session language was added to Kentucky Revised Statutes 61.645(12) by the enactment of SB 2 which requires the Kentucky Auditor of Public Accounts to conduct the annual financial statements audit at least once every five years. The Auditor of Public Accounts performed the audit for the fiscal year ended June 30, 2013. The results of that audit are contained in the Financial Section.

#### CONCLUSION



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 2013 to make this a successful year for KRS. We look forward to continuing to provide service of the highest quality to our members.

William A. Thielen, Esq. // Executive Director

William a. Thelen

# **Board of Trustees**

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, and six 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.



Randy Overstreet, Chair Elected by SPRS Term ends March 31, 2015



**Dr. Daniel Bauer,** Vice Chair Governor Appointee Term ends March 31, 2016



Mike Cherry Governor Appointee Term ends March 31, 2016



Edwin Davis Elected by CERS Term ends March 31, 2017



**Thomas Elliott**Governor Appointee *Term ends March 31, 2015* 



**J.T. Fulkerson** Governor Appointee *Term ends July 1, 2017* 



Joseph Hardesty Governor Appointee Term ends July 1, 2017



**Bobby Henson** Elected by KERS Term ends March 31, 2014



**Tim Longmeyer** Personnel Secretary *Term ends Ex-Officio* 



David Rich Elected by CERS Term ends October 31, 2017



Susan Smith Elected by KERS Term ends March 31, 2014

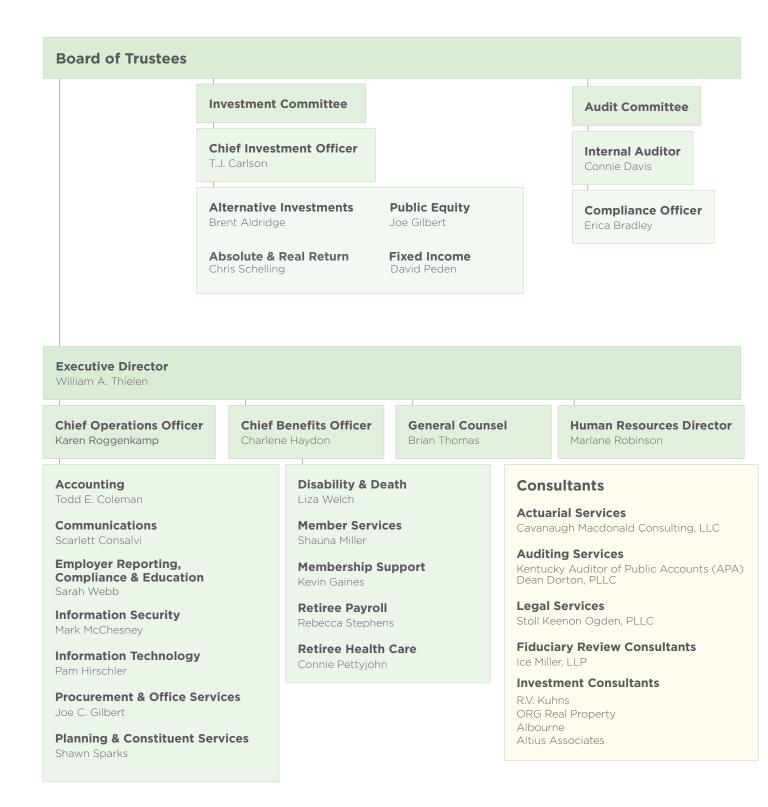


Richard Tanner Governor Appointee Term ends July 1, 2017

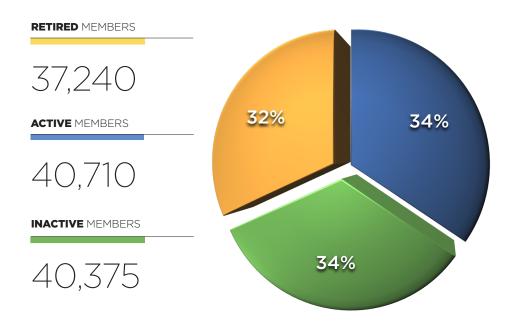


Vacancy Elected by CERS Term ends March 31, 2017

# Agency Structure as of December 1, 2013



# KERS Non-Hazardous



**RETIRED** MEMBERSHIP

AVERAGE AGE

67.6

AVERAGE ANNUAL BENEFIT PAYMENT

\$21,698

**ACTIVE MEMBERSHIP** 

AVERAGE AGE

44.5

AVERAGE SALARY

\$38,943

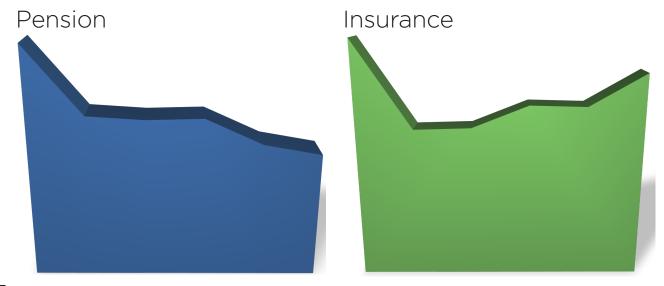
KERS HISTORY

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

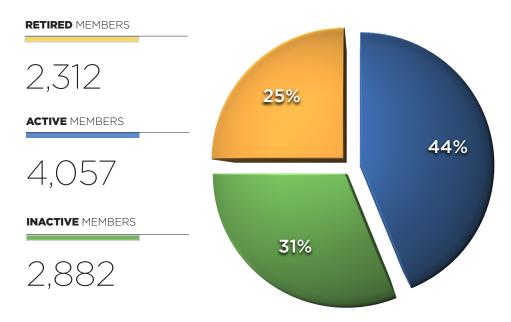
#### **PLAN NET POSITION**

Plan Net Position (in Thousands)

Insurance	\$574,479	\$365,367	\$368,799	\$421,972	\$418,490	\$496,040
Pension S	\$5,056,869	\$3,584,601	\$3,504,501	\$3,533,393	\$2,977,069	\$2,760,753
Fund	2008	2009	2010	2011	2012	2013



# KERS Hazardous



**RETIRED** MEMBERSHIP

AVERAGE AGE

62.7

AVERAGE ANNUAL BENEFIT PAYMENT

\$14,905

**ACTIVE MEMBERSHIP** 

AVERAGE AGE

AVERAGE SALARY

\$31,988

#### KERS HISTORY

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

#### **PLAN NET POSITION**

Plan Net	Position	(in	Thousands)
----------	----------	-----	------------

Fund	2008	2009	2010	2011	2012	2013
Pension	\$484,438	\$388,951	\$443,606	\$509,120	\$476,589	\$514,592
Insurance	\$269,300	\$219,500	\$271,239	\$319,736	\$330,730	\$372,883
Total	\$753,738	\$608,451	\$714,846	\$828,856	\$807,319	\$887,475

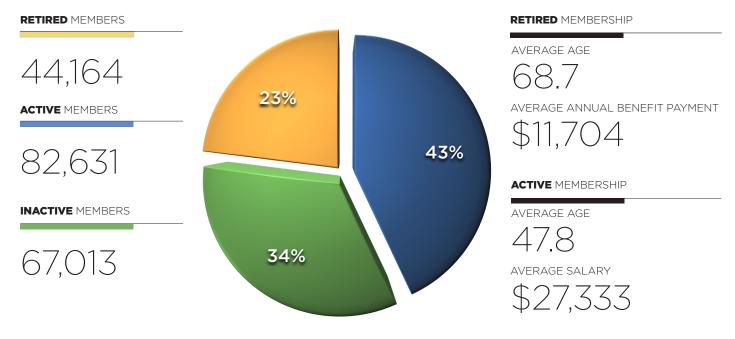




### Insurance



## CERS Non-Hazardous



CERS HISTORY

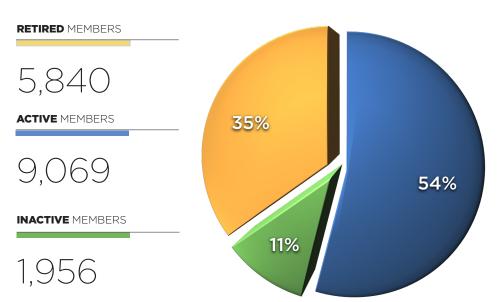
County Employees Retirement System (CERS) was established July 1, 1958 by the state legislature.

#### **PLAN NET POSITION**

Plan Net	Plan Net Position (in Thousands)							
Fund	2008	2009	2010	2011	2012	2013		
Pension	\$5,431,735	\$4,331,010	\$4,820,490	\$5,543,962	\$5,381,602	\$5,795,568		
Insurance	\$1,105,945	\$894,490	\$1,094,821	\$1,418,818	\$1,428,821	\$1,618,960		
Total	\$6,537,680	\$5,225,500	\$5,915,311	\$6,962,780	\$6,810,423	\$7,414,528		



# **CERS Hazardous**



**RETIRED** MEMBERSHIP

AVERAGE AGE

59.6

AVERAGE ANNUAL BENEFIT PAYMENT

\$25,042

**ACTIVE MEMBERSHIP** 

AVERAGE AGE

39.1

AVERAGE SALARY

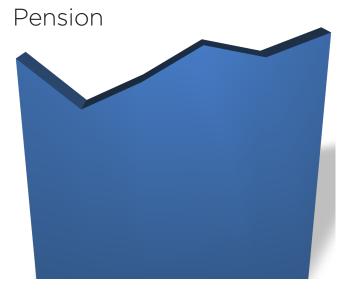
\$50,605

#### CERS HISTORY

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

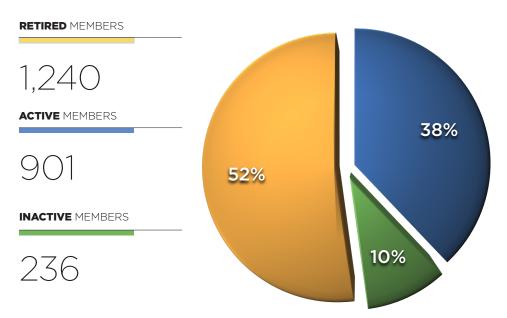
#### **PLAN NET POSITION**

Fund	2008	2009	2010	2011	2012	2013
Pension	\$1,644,982	\$1,320,560	\$1,506,894	\$1,751,962	\$1,672,970	\$1,833,571
Insurance	\$576,414	\$483,233	\$586,614	\$761,075	\$785,874	\$891,320
Total	\$2,221,396	\$1,803,793	\$2,093,508	\$2,513,037	\$2,458,844	\$2,724,891





## **SPRS**



**RETIRED** MEMBERSHIP

AVERAGE AGE

AVERAGE ANNUAL BENEFIT PAYMENT

\$37,820

**ACTIVE MEMBERSHIP** 

AVERAGE AGE

AVERAGE SALARY

\$50,173

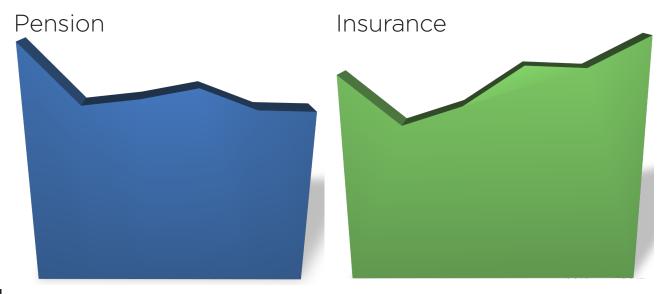
SPRS HISTORY

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

#### **PLAN NET POSITION**

Plan Net Position (in Thousands)

Fund	2008	2009	2010	2011	2012	2013
Pension	\$337,359	\$256,575	\$264,949	\$279,283	\$250,476	\$248,698
Insurance	\$121,782	\$93,682	\$104,511	\$126,737	\$125,398	\$142,691
Total	\$459,141	\$350,257	\$369,460	\$406,020	\$375,874	\$391,389



# Total System

90,796

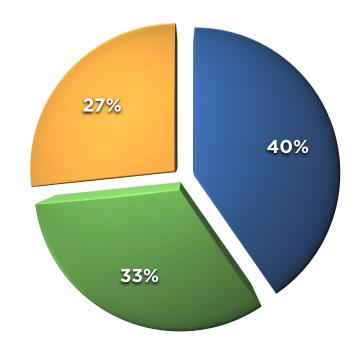
**RETIRED** MEMBERS

**ACTIVE MEMBERS** 

137,368

**INACTIVE MEMBERS** 

112,462



#### **NET POSITION**

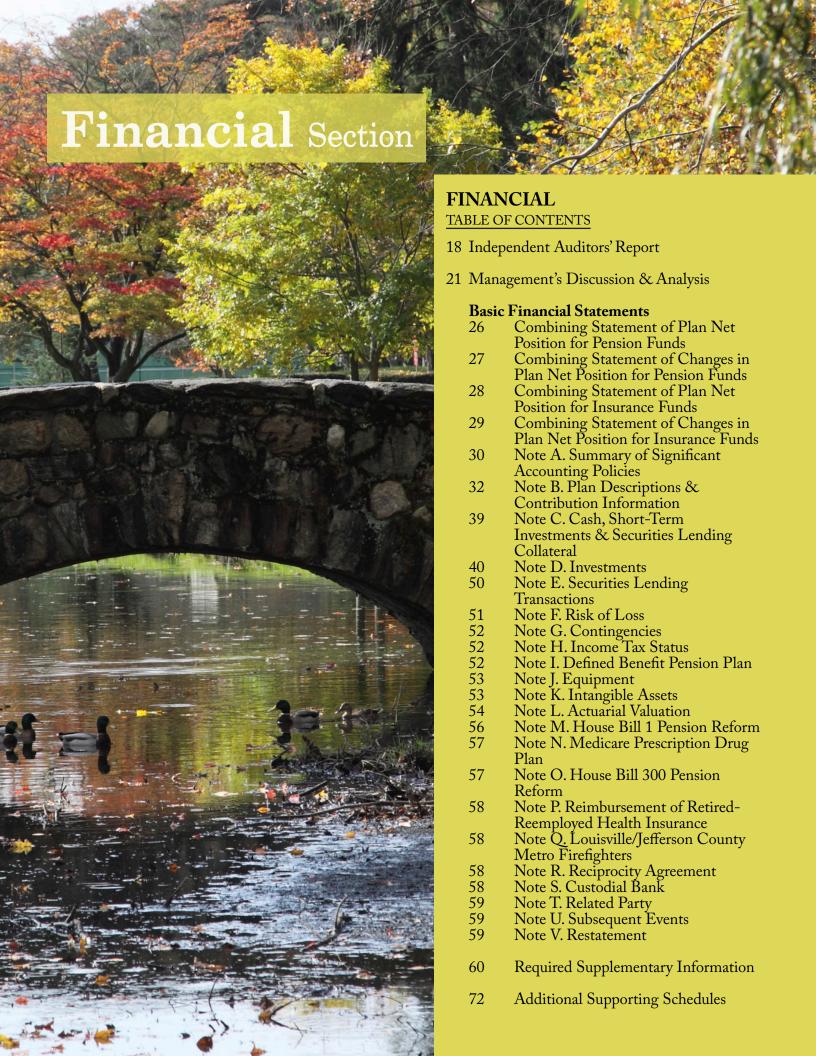
#### Net Position (in Thousands)

Fund	2008	2009	2010	2011	2012	2013
Pension	\$12,955,383	\$9,881,697	\$10,540,440	\$11,617,720	\$10,754,057	\$11,153,182
Insurance	\$2,647,920	\$2,056,272	\$2,425,987	\$3,048,338	\$3,089,313	\$3,521,894
Total	\$15,603,303	\$11,937,969	\$12,966,427	\$14,666,058	\$13,843,370	\$14,675,076

## Pension

## Insurance







# ADAM H. EDELEN AUDITOR OF PUBLIC ACCOUNTS

Board of Trustees Kentucky Retirement Systems Frankfort, Kentucky

#### Independent Auditor's Report

#### Report on the Financial Statements

We have audited the accompanying combining financial statements of the Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of and for the year ended June 30, 2013, and the related notes to the financial statements, which collectively comprise the Kentucky Retirement Systems basic financial statements as listed in the table of contents.

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

Kentucky Retirement Systems' management is responsible for the preparation and fair presentation of these 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 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 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 financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatements of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Kentucky Retirement Systems' preparation and fair presentation of the 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 Kentucky Retirement Systems' internal control. Accordingly, we express no such 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 financial statements.

209 St. CLAIR STREET FRANKFORT, KY 40601-1817 TELEPHONE 502.564.5841
FACSIMILE 502.564.2912
WWW.AUDITOR.KY.GOV

Board of Trustees Kentucky Retirement Systems

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 financial statements referred to above present fairly, in all material respects, the plan net position of the Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of June 30, 2013 and the changes in plan net position for the year then ended, in accordance with accounting principles generally accepted in the United States of America.

#### Emphasis-of-Matters

Reporting Entity

As discussed in Note A, the financial statements present only the Kentucky Retirement Systems, and are not intended to present fairly the financial position of the Commonwealth of Kentucky, or the results of its operations in conformity with accounting principles generally accepted in the United States of America.

Report on Summarized Comparative Information

The combining financial statements of Kentucky Retirement Systems for the year ended June 30, 2012 were audited by other auditors whose report dated December 5, 2012, stated that the plan net assets (position) as of June 30, 2012 and changes in plan net assets (position) for the year then ended were in conformity with accounting principles generally accepted in the United States of America. The combining financial statements for the year then ended (not presented herein), were audited by other auditors whose report, dated December 5, 2012, expressed an unqualified opinion on those statements.

#### **Other Matters**

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis (pages 7 through 12) and the Schedules of Funding Progress and Schedules of Contributions from Employers and Contributing Entities (pages 69 through 79) be presented to supplement the basic financial statements. Such information, although not a part of the basic 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 financial statements in an appropriate operational, economical, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with

#### Board of Trustees Kentucky Retirement Systems

knowledge we obtained during our audit of the basic 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.

#### Supplementary Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Kentucky Retirement System's basic financial statements. The additional supporting schedules (pages 83 through 86) are presented for purposes of additional analysis and are not a required part of the basic financial statements. The 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 financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic 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 financial statements or to the basic 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 financial statements as a whole.

#### Other Reporting Required by Government Auditing Standards

In accordance with Government Auditing Standards, we have also issued our report dated December 5, 2013 on our consideration of the Kentucky Retirement System's 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 KRS' internal control over financial reporting and compliance.

Adam H. Edelen

Auditor of Public Accounts

# Management's Discussion & Analysis

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, 2013. Please read it in conjunction with the financial statements, which begin on page 10.

**Pension Fund** 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 increased by \$399.1 million during fiscal 2013.
- Member and Employer contributions reported for fiscal 2013, totaled \$1,027.2 million compared to \$872.8 million in fiscal 2012. This increase is due to an increase in the employer contribution rates and the collection of additional health insurance contributions.
- The net appreciation in the fair value of investments was \$890.6 million for the fiscal year ended June 30, 2013 compared to net depreciation of \$261.2 million for the prior fiscal year. Included in this net appreciation in fiscal 2013 were realized gains on sales of investments of \$464.6 million.
- Interest, dividend and net securities lending income was \$291.3 million compared to \$270.3 million in fiscal 2012.
- Pension benefits paid to retirees and beneficiaries totaled \$1,706.2 million compared to \$1,649.2 million in fiscal 2012. Refund of contributions paid to former members upon termination of employment totaled \$32.2 million compared to \$31.0 million in fiscal 2012.
- The Administrative Expense Budget includes expenses for health care fees, investments, and internal audit as separate line items. Administrative expense totaled \$30.5 million compared to \$27.8 million in the prior fiscal year. Certain START Project costs were capitalized in fiscal 2013 between fixed assets and intangible assets, as appropriate.
- The member health insurance contribution totaled \$9.1 million, for the fiscal year ended June 30, 2013, compared to \$7.3 million in the prior fiscal 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 Kentucky Retirement Systems increased by \$432.5 million during fiscal 2013.
- Premiums received from retirees who participated in the Medicare eligible self-funded plan totaled \$26.3 million, compared to \$28.4 million in fiscal 2012. The decrease is a result of Centers for Medicare & Medicaid Services (CMS) paying a portion of the retiree's premium. In addition, the decrease is attributable to changes in coverage chosen by retirees.
- Employer contributions of \$447.3 million were received compared to \$436.2 million in fiscal 2012. This increase is due to an increase in the insurance contribution rate.
- The Employer Group Waiver Plan receipts from the CMS subsidies totaled \$11.2 million compared to \$17.8 million in fiscal 2012. Changes in receipts depend upon the fluctuation of membership in the Plan.
- The net appreciation in the fair value of investments was \$232.9 million compared to net depreciation of \$118.7 million for the prior fiscal year. Included in this net depreciation in fiscal 2013 were realized gains on sales of investments of \$108.4 million.
- Interest, dividend and net securities lending income was \$90.4 million compared to \$71.4 million in fiscal 2012.
- Tremiums paid by the fund for hospital and medical insurance coverage (under age 65) totaled \$283.1 million. Payments for the self-funded healthcare reimbursements (over age 65) totaled \$78.8 million. The total of insurance premiums paid plus selffunded reimbursements was \$361.9 million for fiscal 2013. Insurance premiums paid plus self-funded healthcare reimbursements for the prior plan year totaled \$380.4 million. On August 6, 2012, the Board of Trustees 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 fullyinsured Medicare Advantage Plan. The Humana Medicare Advantage Plan became effective January 1, 2013.
- As part of the application process to the Centers for Medicare & Medicaid Services to enter into a contract to offer a Medicare Prescription Drug Plan, Kentucky Retirement Systems was required to establish a segregated Insolvency Account in the amount of \$100 thousand; this account must retain a minimum balance of \$100 thousand. The account consists of cash and/or cash equivalents, and is invested on a daily basis. The balance as of June 30, 2013, totaled \$100 thousand.
- The reimbursement of retired-reemployed health insurance totaled \$5.8 million for the fiscal year ended June 30, 2013, compared to \$6.3 million in the prior fiscal year.

Using This Financial Report Because of the long-term nature of a defined benefit pension plan and post-employment healthcare benefit plan, the financial statements alone cannot provide sufficient information to properly reflect the plan's ongoing plan perspective. This financial report consists of two financial statements and two required schedules of historical trend information. The Combining Statement of Plan Net Position for the Pension Funds, on page 26 and the Combining Statement of Plan Net Position for the Insurance Fund, on page 28, provide a snapshot of the financial position of each of the three systems at June 30, 2013. The Combining Statement of Changes in Plan Net Position for the Pension Funds, on page 27, and the Combining Statement of Changes in Plan Net Position for the Insurance Fund, on page 29, summarize the additions and deductions that occurred for each of the three systems during fiscal 2013.

The Schedules of Funding Progress, on pages 61-63, includes 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 Contributions from Employers and Other Contributing Entities, on pages 67-71, presents 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.

Funds as a Whole Kentucky Retirement Systems' combined net position increased, during the fiscal year ended June 30, 2013, by \$831.6 million from \$13,843.4 million to \$14,675.0 million. Net position for the prior fiscal year decreased by \$822.6 million. The increase in net position for the plan year ended June 30, 2013 is primarily attributable to a net appreciation in the fair value of investments, an increase in in member contributions and a decrease in health care costs. The analysis below focuses on net position (Table 1) and changes in net position (Table 2) of Kentucky Retirement Systems' Pension and Insurance Funds.

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

	Pension F	unds		Insurance	Fund		Total		
Assets	2013	2012	2011	2013	2012	2011	2013	2012	2011
Cash & Investments	\$12,431.7	\$11,922.7	\$13,217.3	\$3,992.1	\$3,243.5	\$3,458.4	\$16,423.8	\$15,166.2	\$16,675.7
Receivables	136.1	145.6	115.3	49.1	71.9	32.3	185.2	217.5	147.6
Equip/Int Assets, net of dep/amort.	16.1	13.8	9.7				16.1	13.8	9.7
Total Assets	12,583.9	12,082.1	13,342.3	4,041.2	3,315.4	3,490.7	16,625.1	15,397.5	16,833.0
Total Liabilities	(1,430.8)	(1,328.1)	(1,724.6)	(519.3)	(226.0)	(442.4)	(1,950.1)	(1,554.1)	(2,167.0)
Plan Net Position	\$11,153.1	\$10,754.0	\$11,617.7	\$3,521.9	\$3,089.4	\$3,048.3	\$14,675.0	\$13,843.4	\$14,666.0

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

	Pension F	unds		Insurance	Fund		Total		
Additions	2013	2012	2011	2013	2012	2011	2013	2012	2011
Member Cont.	\$276.3	\$274.1	\$306.0	\$	\$	\$	\$276.3	\$274.1	\$306.0
Employer Cont.	741.8	591.4	506.6	447.3	436.2	387.5	1,189.1	1,027.6	894.1
Heath Ins. Cont.	9.1	7.3	6.6				9.1	7.3	6.6
Premiums Rec'd				26.3	28.4	31.0	26.3	28.4	31.0
Retired Remp Ins.				5.8	6.3	4.0	5.8	6.3	4.0
Employer Group Waiver Plan				11.2	17.8	22.1	11.2	17.8	22.1
Invest. Inc. (net)	1,140.8	(28.5)	1,902.2	313.6	(55.3)	561.2	1,454.4	(83.8)	2,463.4
<b>Total Additions</b>	2,168.0	844.3	2,721.4	804.2	433.4	1,005.8	2,972.2	1,277.7	3,727.2
Deductions									
Benefit payments	1,706.2	1,649.2	1,591.5				1,706.2	1,649.2	1,591.5
Refunds	32.2	31.0	27.5				32.2	31.0	27.5
Administrative Ex.	30.5	27.8	24.9	9.8	11.9	10.4	40.3	39.7	305.3
Capital Projects Ex.			0.2						0.2
Healthcare Costs				361.9	380.4	373.1	361.9	380.4	373.1
<b>Total Deductions</b>	1,768.9	1,708.0	1,644.1	371.7	392.3	383.5	2,140.6	2,100.3	2,027.6
Increase (Decrease) in Plan Net Position	\$399.1	\$(863.7)	\$1,077.3	\$432.5	\$41.1	\$622.3	\$831.6	\$(822.6)	\$1,699.6

**FUND** ACTIVITIES



#### In Thousands or Millions

Much of the data presented in this report is abbreviated "in thousands" or "in millions". For example \$1,000 represented "in millions" is really \$1,000,000,000.

#### **Pension Fund Activities**

Member contributions increased by \$2.2 million. 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. Members may also pay contributions to repurchase previously refunded service credit or to purchase various types of elective service credit.

Employer contributions increased by \$150.4 million due to the increase in employer contribution rate applied to covered payroll.

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

Asset	2013	2012	2011
(Decrease) Increase in fair value of investments	\$426	\$(238)	\$707
Investment income net of investment expense	250	232	244
(Loss) Gain on sale of investments	465	(23)	951
Net Investment (Loss) Income	\$1,141	\$(29)	\$1,902

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

Asset	2013	2012	2011
(Decrease) Increase in fair value of investments	\$125	\$(21)	\$169
Investment income net of investment expense	81	63	44
(Loss) Gain on sale of investments	108	(97)	348
Net Investment (Loss) Income	\$314	\$(55)	\$561

Insurance fund deductions decreased by \$20.6 million due to the cessation of the self funding plan.

*Insurance fund net position increased by \$432.5 million due to the increase in* insurance contribution rates.

> Net position of the pension funds increased by \$399.1 million (\$11,153.1 million compared to \$10,754.0 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 \$432.5 million (\$3,521.9 million compared to \$3,089.4 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. The increase in net position is primarily attributable to the increase in employer contribution rates for insurance.

Net investment income increased by \$1,170 million. This can be illustrated in Table 3. The pension funds experienced an increase in income primarily due to the gain on the sale of investments.

Pension fund deductions increased by \$60.9 million caused principally by an increase of \$57 million in benefit payments. Refunds of member contributions increased by \$1.2 million and administrative expenses increased by \$2.7 million. Certain START Project costs were capitalized in fiscal 2013 between fixed assets and intangible assets, as appropriate.

**Insurance Fund Activities** Employer contributions paid into the insurance fund increased by \$11.1 million over the prior fiscal year. This increase is a result of the increase in the employer contribution rate applied to covered payroll.

Net investment income increased \$369.0 million. This increase in net investment income is due primarily to the increase in the fair value of investments. This is illustrated in Table 4 above.



Hazardous (i.e. KERS Haz)

Non-Haz

Non-Hazardous (i.e. CERS Non-Haz)



#### **KERS**

Kentucky Employees Retirement System

County Employees Retirement System

#### **SPRS**

State Police Retirement System

Hazardous (i.e. KERS Haz)

#### Non-Haz

Non-Hazardous (i.e. CERS Non-Haz)

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 Funding Progress beginning on page 61. 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 Kentucky Retirement Systems' 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 \$744.9 million for a total unfunded amount of \$14,502.9 million for the fiscal year ended June 30, 2013, compared to an unfunded amount of \$13,758.0 million for the fiscal year ended June 30, 2012. In recent years, funding levels for the pension funds have fallen dramatically due to investment returns less than the actuarially assumed rate, higher than anticipated retirement rates, and expenditures for unfunded retiree Cost of Living Adjustments. In addition, KERS, KERS Hazardous, and SPRS are funded less than the actuarially determined rate. Within the KERS and SPRS plans, employer contribution rate reductions enacted by the Kentucky General Assembly have limited the Plans' ability to correct the declining funding levels.

The insurance plan's unfunded actuarial accrued liability for the plan year ended June 30, 2013, decreased to \$3,092.1 million from \$4,321.5 million for the plan year ended June 30, 2012. This is a decrease in the unfunded actuarial accrued liability of \$1,229.4 million. This decrease is due to the change for the Medicareeligible retirees from the self-insured health plans to fully insured Medicare Advantage plans administered by Humana.

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 Contributions from Employers and Other Contributing Entities on pages 67-71. 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 is less than the rate recommended by the KRS Actuary and adopted by the KRS Board of Trustees.

# Combining Statement of Plan Net Position for Pension Funds (in Thousands) as of June 30, 2013 with Comparative Totals as of June 30, 2012

Assets			20	13			2012-Restated
	KERS Haz	KERS Non-Haz	CERS Haz	CERS Non-Haz	SPRS	Total	Tota
Cash & Short-Term Investment	s						
Cash	\$211	\$2,308	\$399	\$2,631	\$163	\$5,712	\$2,938
Short-Term Investments	26,067	93,239	79,031	210,316	10,528	419,181	375,339
Total Cash and Short-Term Investments	26,278	95,547	79,430	212,947	10,691	424,893	378,277
Receivables							
Contributions	3,793	36,852	11,293	47,972	2,393	102,303	108,073
Investment Income	1,499	8,401	5,553	17,608	698	33,759	37,523
Total Receivables	5,292	45,253	16,846	65,580	3,091	136,062	145,596
Investments at Fair Value							
Corporate and Government Bonds	156,139	862,989	578,076	1,846,615	76,709	3,520,528	3,639,387
Equity Contracts	12	62	42	132	3	251	50
Interest Rate Contracts	1,395	7,563	5,021	15,935	682	30,596	29,477
Foreign Exchange Contracts	593	3,212	2,132	6,768	290	12,995	62,184
Swaps	184	996	661	2,099	90	4,030	1,552
Options	44	238	158	501	22	963	873
Corporate Stocks	297,104	1,615,528	1,055,658	3,350,598	145,365	6,464,253	6,195,476
Mortgages	16,119	97,139	61,915	189,099	7,668	371,940	272,641
Real Estate	11,081	28,248	33,052	98,537	4,026	174,944	54,047
Total Investments at Fair Value	482,671	2,615,975	1,736,715	5,510,284	234,855	10,580,500	10,255,687
Securities Lending Collateral Invested	67,714	258,692	251,414	813,671	34,947	1,426,438	1,288,813
Equipment (net of accumulated depreciation)	111	1,309	197	2,254	25	3,896	3,949
Intangible Assets (net of accumulated amortization)	351	4,163	585	7,027	68	12,194	9,832
Total Assets	582,417	3,020,939	2,085,187	6,611,763	283,677	12,583,983	12,082,154
Liabilities							
Accounts Payable	111	1,494	202	2,524	32	4,363	39,284
Securities Lending Collateral Obligations	67,714	258,692	251,414	813,671	34,947	1,426,438	1,288,813
Total Liabilities	67,825	260,186	251,616	816,195	34,979	1,430,801	1,328,097
Total Net Position Held in Trust for Employee	\$514,592	\$2,760,753	\$1,833,571	\$5,795,568	\$248,698	\$11,153,182	\$10,754,057

Combining Statement of Changes in Plan Net Position for Pension Funds (in Thousands) as of June 30, 2013 with Comparative Totals as of June 30, 2012

Additions			20	13			2012-Restated
	KERS Haz	KERS Non-Haz	CERS Haz	CERS Non-Haz	SPRS	Total	Tota
Members' Contributions	\$11,467	\$96,744	\$42,863	\$120,777	\$4,495	\$276,346	\$274,094
Employers' Contributions	27,334	280,874	120,140	294,914	18,501	741,763	591,453
Health Insurance Contributions (HB1)	402	3,344	734	4,659	48	9,187	7,275
Total Contributions	39,203	380,962	163,737	420,350	23,044	1,027,296	872,822
Investment Income							
From Investing Activities							
א Net Appreciation in FV	40,302	236,845	141,113	452,088	20,293	890,641	(261,180)
וע Interest/Dividends	12,657	76,966	45,198	144,667	6,511	285,999	270,024
ン Total Investing Activities Income	52,959	313,811	186,311	596,755	26,804	1,176,640	8,844
וע Investment Expense	1,816	12,325	6,111	19,876	999	41,127	37,730
Net Income from Investing Activities	51,143	301,486	180,200	576,879	25,805	1,135,513	(28,886)
From Securities Lending Activ	vities						
צ Securities Lending Income	367	1,726	1,055	2,615	159	5,922	327
From Securities Lending Expe	ense						
ש Security Borrower Rebates	(25)	(9)	(57)	(124)	(9)	(224)	(261)
ש Security Lending Agent Fees	38	210	141	457	19	865	229
Net Income from Securities Lending Activities	354	1,525	971	2,282	149	5,281	359
Total Net Investment Income	51,497	303,011	181,171	579,161	25,954	1,140,794	(28,527)
Total Additions	90,700	683,973	344,908	999,511	48,998	2,168,090	844,295
Deductions							
Benefit Payments	48,855	873,906	179,696	553,204	50,559	1,706,220	1,649,179
Refunds	2,762	12,907	3,158	13,306	31	32,164	30,977
Administrative Expenses	733	10,719	1,202	17,743	184	30,581	27,785
Capital Project Expenses							17
Total Deductions	52,350	897,532	184,056	584,253	50,774	1,768,965	1,707,958
Net Increase in Plan Position	38,350	(213,559)	160,852	415,258	(1,776)	399,125	(863,663
Total Net Position Held in Trus	st for Emplo	yee					
Beginning of Year	476,242	2,974,312	1,672,719	5,380,310	250,474	10,754,057	11,617,720
	\$514,592	\$2,760,753	\$1,833,571	\$5,795,568	\$248,698	\$11,153,182	\$10,754,057

# Combining Statement of Plan Net Position for Insurance Funds (in Thousands) as of June 30, 2013 with Comparative Totals as of June 30, 2012

Assets			20	2012			
	KERS Haz	KERS Non-Haz	CERS Haz	CERS Non-Haz	SPRS	Total	Tota
Cash and Short-Term Investme	ents						
Cash	\$84	\$695	\$74	\$516	\$54	\$1,423	\$1,232
Short-Term Investments	14,954	34,002	39,709	68,156	6,515	163,336	185,386
Medicare Drug Deposit	11	20	23	43	5	102	101
Total Cash and Short Term Investments	15,049	34,717	39,806	68,715	6,574	164,861	186,719
Receivables							
Contributions	2,096	12,555	6,196	16,877	1,271	38,995	61,322
Investment Income	1,071	1,382	2,577	4,684	409	10,123	10,616
Total Receivables	3,167	13,937	8,773	21,561	1,680	49,118	71,938
Investments at Fair Value							
Corporate and Government Bonds	128,023	159,403	309,623	557,748	48,310	1,203,107	1,085,491
Equity Contracts	7	10	18	32	2	69	2
Interest Rate Contracts	595	756	1,414	2,570	226	5,561	7,279
Swaps	159	202	378	689	60	1,488	289
Foreign Exchange Contracts	365	464	868	1,579	139	3,415	22,630
Options	30	38	71	129	11	279	145
Corporate Stocks	208,979	268,256	491,215	897,454	79,459	1,945,363	1,658,212
Mortgages	11,068	14,003	26,376	47,826	4,215	103,488	75,347
Real Estate	5,638	7,741	13,324	24,439	2,161	53,303	8,101
Total Investments at Fair Value	354,864	450,873	843,287	1,532,466	134,583	3,316,073	2,857,496
Securities Lending Collateral Invested	54,464	62,666	134,020	240,037	19,921	511,108	199,218
Total Assets	427,544	562,193	1,025,886	1,862,779	162,758	4,041,160	3,315,371
Liabilities							
Accounts Payable	197	3,487	546	3,782	146	8,158	26,840
Securities Lending Collateral Obligations	54,464	62,666	134,020	240,037	19,921	511,108	199,218
Total Liabilities	54,661	66,153	134,566	243,819	20,067	519,266	226,058
Total Net Position Held in Trust for Other Post Employment Benefits	\$372,883	\$496,040	\$891,320	\$1,618,960	\$142,691	\$3,521,894	\$3,089,313
See accompanying notes to the co	ombining finan	cial statements.					

Combining Statement of Changes in Plan Net Position for Insurance Funds (in Thousands) as of June 30, 2013 with Comparative Totals as of June 30, 2012

Additions			20	)13			2012
	KERS Haz	KERS Non-Haz	CERS Haz	CERS Non-Haz	SPRS	Total	Tota
Employers' Contributions	\$25,144	\$162,191	\$84,962	\$158,212	\$16,829	\$447,338	\$436,137
Employer Group Waiver Plan	243	4,846	562	5,360	178	11,189	17,800
Premiums Received from Retirees	357	11,154	300	14,512	23	26,346	28,403
Retired Reemployed Healthcare (HBI)	538	3,140	357	1,781		5,816	6,349
Total Contributions	26,282	181,331	86,181	179,865	17,030	490,689	488,689
Investment Income							
From Investing Activities							
Net Appreciation in FV	24,273	30,061	59,305	109,582	9,642	232,863	(118,701)
וע Interest/Dividends	9,406	11,734	22,496	41,307	3,702	88,645	71,241
ע Total Investing Activities Income	33,679	41,795	81,801	150,889	13,344	321,508	(47,460)
וע Investment Expense	1,018	1,571	2,306	4,280	424	9,599	8,029
Net Income from Investing Activities	32,661	40,224	79,495	146,609	12,920	311,909	(55,489)
From Securities Lending Activiti	es						
צ Securities Lending Income	260	471	471	723	83	2,008	84
From Securities Lending Expens	se						
צ Security Borrower Rebates	4	(2)	8	6	(1)	15	(153)
ນ Security Lending Agent Fees	30	36	73	132	11	282	68
Net Income from Securities Lending Activities	226	437	390	585	73	1,711	169
Total Net Investment Income	32,887	40,661	79,885	147,194	12,993	313,620	(55,320)
Total Additions	59,169	221,992	166,066	327,059	30,023	804,309	433,369
Deductions							
Healthcare Premiums Subsidies	14,793	109,932	55,842	91,272	11,279	283,118	248,278
Administrative Fees	179	4,285	679	4,431	184	9,758	11,972
Self Funding Insurance Costs	2,044	30,225	4,099	41,217	1,267	78,852	132,144
Total Deductions	17,016	144,442	60,620	136,920	12,730	371,728	392,394
Net Increase in Net Position	42,153	77,550	105,446	190,139	17,293	432,581	40,975
Total Net Position Held in Trust f	for Other Po	st Employmen	t Benefits				
Beginning of Year	330,730	418,490	785,874	1,428,821	125,398	3,089,313	3,048,338

Although the assets of the plans are commingled for investment purposes, each plan's assets may be 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 KRS Sections 16.555, 61.570, and 78.630.

Under the provisions of Kentucky Revised Statute Section 61.645, the Board of Trustees (the Board) of Kentucky Retirement Systems (KRS) administers the Kentucky Employees Retirement System (KERS), County Employees Retirement System (CERS), and State Police Retirement System (SPRS).

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 commingled for investment purposes. Although, the funds are comingled, each plan pays only its pro-rata share of expenses based on the proportionate amount of funds it has invested and each fund is allocated only its share of gains and losses. The following notes apply to the various funds administered by KRS.

NOTE A.

# Accounting Policies This summary of significant accounting policies of he Kentucky Retirement Systems (KRS) is presented to assist in understanding KRS' Basis of Accounting KRS' combining financial statements are prepared using the accounting. Plan member contributions are recognized in the

and objectivity. The accounting policies conform to generally accepted accounting principles and have been consistently applied in the preparation of the financial statements.

financial statements. The financial statements

and notes are representations of KRS' manage-

ment, which is responsible for their integrity

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.

Note A. Summary of Significant

Methods 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 ex-dividend date. Gain (loss) on investments includes KRS gains and losses on investments bought and sold as well as held during the fiscal year.

**Estimates** The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America 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 ended June 30, 2013 and 2012 was \$3,000 (see Note J for further information).

Intangible AssetsIntangible assets, currently computer software, are valued at

#### N

#### **KERS**

Kentucky Employees Retirement System

#### CERS

County Employees Retirement System

#### SPRS

State Police Retirement System

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 ended June 30, 2013 and 2012 was \$3,000 (see Note K for further information).

Contributions Receivable Contributions receivable consists of amounts due from employers. The management of KRS considers contributions receivable to be fully collectable; accordingly, no allowance for doubtful accounts is considered necessary. If amounts become uncollectable, 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** 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.

Payment of Benefits Benefits are recorded when paid.

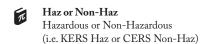
**Expense Allocation** Administrative expenses of KRS are allocated in proportion to the number of total members participating in each plan and direct investment manager expenses are allocated in proportion to the percentage of investment assets held by each plan.

Component Unit KRS is a component unit of the Commonwealth of Kentucky 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 KRS Board of Trustees without further legislative review. The methods used to determine the employer rates for all Systems 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 June 2012, the GASB issued Statement No. 67, "Financial Reporting for Pension Plans-an amendment of GASB Statement No. 25". The objective of this Statement is to improve financial reporting by state and local governmental pension plans. This Statement requires 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 requires 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 plan's board, among other detailed requirements. The Statement becomes effective for the fiscal year beginning July 1, 2013. KRS intends to comply with the Statement's requirements.

In June 2012, the GASB issued Statement No. 68, "Accounting and Financial Reporting for Pensions-an amendment of GASB Statement No. 27". The objective of this Statement is to improve financial reporting by state and local governmental pension plans. In addition, it requires the liability of the employers and nonemployer contributing entities to employees for defined benefit pensions (net pension liability) to be measured as the portion of the present value of projected benefit payments to be provided through the pension plan to current active and inactive employees that is attributed to those employees' past periods of service (total pension liability), less the amount of the pension plan's fiduciary net position. In addition, this Statement requires additional changes to the Required Supplementary Information, among other extensive changes. This Statement becomes effective for the fiscal year beginning July 1, 2014. KRS intends to comply the Statement's requirements.





# Note B. Plan Descriptions & Contribution Information

#### Membership Information \*

#### **KERS** Employees

		2013			2012	
Members	Non-Haz	Haz	Total	Non-Haz	Haz	Total
Retirees and Beneficiaries Receiving Benefits	37,240	2,312	39,552	36,508	2,180	38,688
Inactive Vested Memberships	40,375	2,882	43,257	39,445	2,490	41,935
Active Plan Members	40,710	4,057	44,767	42,210	3,540	45,750
Total	118,325	9,251	127,576	118,163	8,210	126,373
Number of Participating Employers			348			385

#### **CERS** Employees

		2013			2012	
Members	Non-Haz	Haz	Total	Non-Haz	Haz	Total
Retirees and Beneficiaries Receiving Benefits	44,164	5,840	50,004	42,068	5,513	47,581
Inactive Vested Memberships	67,013	1,956	68,969	63,564	1,643	65,207
Active Plan Members	82,631	9,069	91,700	85,779	6,906	92,685
Total	193,808	16,865	210,673	191,411	14,062	205,473
Number of Participating Employers			1,126			1,129

#### SPRS Employees

Members	2013	2012
Retirees and Beneficiaries Receiving Benefits	1,240	1,203
Inactive Vested Memberships	236	224
Active Plan Members	901	904
Total	2,377	2,331
Number of Participating Employers	1	1

<sup>\*</sup> 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 Non-Hazardous, then KERS Non-hazardous.

#### 2013 Hospital & Medical Contracts Insurance Fund

System	Single	Couple/ Family	Parent	Medicare Without Prescription	Medicare With Prescription
KERS Non-Haz	9,364	1,276	618	1,474	16,834
KERS Haz	625	451	106	60	985
CERS Non-Haz	7,652	857	340	2,707	18,824
CERS Haz	1,425	2,155	400	79	2,324
SPRS	283	421	76	20	682
Total	19,349	5,160	1,540	4,340	39,649

### 2012 Hospital & Medical Contracts Insurance Fund

System	Single	Couple/ Family	Parent	Medicare Without Prescription	Medicare With Prescription
KERS Non-Haz	9,764	1,917	734	1,721	15,015
KERS Haz	645	517	93	67	751
CERS Non-Haz	7,972	1,317	383	3,119	16,355
CERS Haz	1,385	2,237	310	73	1,853
SPRS	291	444	62	15	581
Total	20,057	6,432	1,582	4,995	34,555

#### KERS NON-HAZ PENSION



Kentucky Administrative Regulation

For the fiscal years ended June 30, 2013 and 2012 participating employers contributed 23.61% and 19.82%, respectively, of each employee's creditable compensation. The actuarially determined rates as set forth in the annual actuarial valuation for the fiscal years ended June 30, 2013 and 2012, were 44.55% and 40.71%, respectively, of each employee's creditable compensation.

**Plan Description** KERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in non-hazardous duty positions of any state department, board, or agency directed by Executive Order to participate in KERS. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan 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. Effective July 1, 2009, and on July 1 of each year thereafter, the COLA is limited to 1.5% provided the recipient has been receiving a benefit for at least twelve months prior to the effective date of the COLA. If the recipient has been receiving a benefit for less than twelve 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 twelve months preceding the effective date of the COLA. The Kentucky General Assembly reserves the right to suspend or reduce cost-of-living adjustments if, in its judgment, the welfare of the Commonwealth so demands. On July 1, 2013, the COLA was not granted.

Contributions For the fiscal years ended June 30, 2013 and 2012, plan members who began participating prior to September 1, 2008, were required to contribute 5% of their annual creditable compensation. The Commonwealth

was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), 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 the fiscal years ended June 30, 2013 and 2012, participating employers contributed 23.61% and 19.82%, respectively, of each employee's creditable compensation. The actuarially determined rates set by the Board for the fiscal years ended June 30, 2013 and 2012, were 44.55% and 40.71%, respectively, of each employee's creditable compensation. Administrative costs of KRS are financed through employer contributions and investment earnings.

In accordance with House Bill 1, House Bill 1 signed by the Governor on June 27, 2008, plan members who began participating on, or after, September 1, 2008, were required to contribute a total of 6% of their annual creditable compensation. Five percent of the contribution was deposited to the member's account while the 1% was deposited to an account created under 26 USC Section 401(h) in the Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420E). 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% of their annual creditable compensation.

KERS HAZ PENSION

For the fiscal years ended June 30, 2013 and 2012, participating employers contributed 29.79% and 28.98%, respectively, of each employee's creditable compensation. The actuarially determined rates as set forth in the annual actuarial valuation for the fiscal years ended June 30, 2013 and 2012, were 35.89% and 33.84%, respectively, of each employee's creditable compensation.

**Plan Description** KERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in hazardous duty positions of any state department, board, or agency directed by Executive Order to participate in KERS. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan 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. Effective July 1, 2009, and on July 1 of each year thereafter, the COLA is limited to 1.5% provided the recipient has been receiving a benefit for at least twelve months prior to the effective date of the COLA. If the recipient has been receiving a benefit for less than twelve 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 twelve months preceding the effective date of the COLA. The Kentucky General Assembly reserves the right to suspend or reduce cost-of-living adjustments if, in its judgment, the welfare of the Commonwealth so demands. On July 1, 2013, the COLA was not granted.

**Contributions** For the fiscal years ended June 30, 2013 and 2012, plan members who began participating prior to September 1, 2008, were required to contribute 8% of their annual creditable compensation. The Commonwealth was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the 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 the fiscal years ended June 30, 2013 and 2012, participating employers contributed 29.79% and 28.98%, respectively, of each employee's creditable compensation. The actuarially determined rates set by the Board for the fiscal years ended June 30, 2013 and 2012, were 35.89% and 33.84%, respectively, of each employee's creditable compensation. Administrative costs of KRS are financed through employer contributions and investment earnings.

**House Bill 1** In accordance with HB 1, signed by the

Governor on June 27, 2008, plan members who began **CERS NON-HAZ PENSION** 

**Plan Description** CERS is a cost-sharing multipleemployer defined benefit pension plan that covers substantially all regular full-time members employed in nonhazardous duty positions of each participating county, city, and school board, and any additional eligible local agencies electing to participate. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Prior to July 1, 2009, cost-ofliving 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. Effective July 1, 2009, and on July 1 of each year thereafter, the COLA is limited to 1.5% provided the recipient has been receiving a benefit for at least twelve months prior to the effective date of the COLA. If the recipient has been receiving a benefit for less than twelve 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 twelve months preceding the effective date of the COLA. The Kentucky General Assembly reserves the right to suspend or reduce cost-of-living adjustments if, in its judgment, the welfare of the Commonwealth so demands. On July 1, 2013, the COLA was not granted.

**Contributions**For the fiscal years ended June 30, 2013 and 2012, plan members who began participating prior to September 1, 2008, were required to contribute 5% of their annual creditable compensation. Participating employers were required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the 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 participating on, or after, September 1, 2008, were required to contribute a total of 9% of their annual creditable compensation. Eight percent of the contribution was deposited to the member's account while the 1% was deposited to an account created under 26 USC Section 401(h) in the Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420E). 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 8% of their annual creditable compensation.

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. For the fiscal years ended June 30, 2013 and 2012, participating employers contributed 19.55% and 18.96%, respectively, of each employee's creditable compensation. The actuarially determined rates set by the Board for the fiscal years ended June 30, 2013 and 2012, were 19.55% and 18.96%, respectively. Administrative costs of KRS are financed through employer contributions and investment earnings.

**House Bill 1** In accordance with House Bill 1, signed by the Governor on June 27, 2008, plan members who began participating on, or after, September 1, 2008, were required to contribute a total of 6% of their annual creditable compensation. Five percent of the contribution was deposited to the member's account while the 1% was deposited to an account created under 26 USC Section 401(h) in the Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420E). 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% of their annual creditable compensation.

For the fiscal years ended June 30, 2013 and 2012, participating employers contributed 37.60% and 35.76%, respectively, of each employee's creditable compensation. The actuarially determined rates as set forth in the annual actuarial valuation for the fiscal years ended June 30, 2013 and 2012, were 37.60% and 35.76%, respectively, of each employee's creditable compensation.

**Plan Description** CERS is a cost-sharing multiple-employer defined benefit pension plan that covers substantially all regular full-time members employed in hazardous duty positions of each participating county, city and school board, and any additional eligible local agencies electing to participate in CERS. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Prior to July 1, 2009, cost-ofliving 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. Effective July 1, 2009, and on July 1 of each year thereafter, the COLA is limited to 1.5% provided the recipient has been receiving a benefit for at least twelve months prior to the effective date of the COLA. If the recipient has been receiving a benefit for less than twelve months prior to the effective date of the COLA, the increase shall be reduced on a prorata basis for each month the recipient has not been receiving benefits in the twelve months preceding the effective date of the COLA. The Kentucky General Assembly reserves the right to suspend or reduce costof-living adjustments if, in its judgment, the welfare of the Commonwealth so demands. On July 1, 2013, the COLA was not granted.

Contributions For the fiscal years ended June 30, 2013 and 2012, plan members who began participating prior to September 1, 2008, were required to contribute 8% of their annual creditable compensation. The participating employers were required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the 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 neces-

sary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. For the fiscal years ended June 30, 2013 and 2012, participating employers contributed 37.6% and 35.76%, respectively, of each employee's creditable compensation. The actuarially determined rates set by the Board for the fiscal years ended June 30, 2013 and 2012, were 37.6% and 35.76%, respectively, of each employee's creditable compensation. Administrative costs of KRS are financed through employer contributions and investment earnings.

**House Bill 1** In accordance with House Bill 1, signed by the Governor on June 27, 2008, plan members who began participating on, or after, September 1, 2008, were required to contribute a total of 9% of their annual creditable compensation. Eight percent of the contribution was deposited to the member's account while the 1% was deposited to an account created under 26 USC Section 401(h) in the Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420E). 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 8% of their annual creditable compensation.

For the fiscal years ended June 30, 2013 and 2012, the Commonwealth contributed 63.67% and 52.13%, respectively, of each employee's creditable compensation. The actuarially determined rates set by the Board for the fiscal years ended June 30, 2013 and 2012 were 103.41% and 94.63%, respectively, of each employee's creditable compensation.

**Plan Description** SPRS is a single-employer defined benefit pension plan that covers all full-time state troopers employed in a hazardous duty position by the Kentucky State Police. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan 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. Effective July 1, 2009, and on July 1 of each year thereafter, the COLA is limited to 1.5% provided the recipient has been receiving a benefit for at least twelve months prior to the effective date of the COLA. If the recipient has been receiving a benefit for less than twelve months prior to the effective date of the COLA, the increase shall be reduced on a prorata basis for each month the recipient has not been receiving benefits in the twelve months preceding the effective date of the COLA. The Kentucky General Assembly reserves the right to suspend or reduce costof-living adjustments if, in its judgment, the welfare of the Commonwealth so demands. On July 1, 2013, the COLA was not granted.

**Contributions**For the fiscal years ended June 30, 2013 and 2012, plan members who began participating prior to September 1, 2008, were required to contribute 8% of their annual creditable compensation. The Commonwealth was required to contribute at an actuarially determined rate. Per Kentucky Revised Statute Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the 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 the fiscal years ended June 30, 2013 and 2012, the Commonwealth contributed 63.67% and 52.13%, respectively, of each employee's creditable compensation. The actuarially determined rates set by the Board for the fiscal years ended June 30, 2013 and 2012 were 103.41% and 94.63%, respectively, of each employee's creditable compensation. Administrative costs of KRS are financed through employer contributions and investment earnings.

**House Bill 1** In accordance with House Bill 1, signed by the Governor on June 27, 2008, plan members who began participating on, or after, September 1, 2008, were required to contribute a total of 9% of their annual creditable compensation. Eight percent of the contribution was deposited to the member's account while the 1% was deposited to an account created under 26 USC Section 401(h) in the Pension Fund (see Kentucky Administrative Regulation 105 KAR 1:420E). 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 8% of their annual creditable compensation.

**Plan Description** The Kentucky Retirement Systems Insurance Fund (Fund) was established to provide hospital and medical insurance for members receiving benefits from KERS, CERS, and SPRS. The 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, 2013, insurance premiums withheld from benefit payments for members of the systems were \$27,574,678 and \$1,209,245 for KERS nonhazardous and hazardous, respectively; \$27,804,392 and \$2,068,890 for CERS non-hazardous and hazardous, respectively; and, \$238,774 for SPRS. For fiscal 2012, insurance premiums withheld from benefit payments for members of KERS were \$29,136,828 and \$1,235,155 for KERS non-hazardous and KERS hazardous, respectively; \$27,541,099 and \$1,982,303 for CERS non-hazardous and CERS hazardous, respectively; and, \$246,384 for SPRS. The 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, 2013, the Fund had 100,708 retirees and beneficiaries for whom benefits were available. The amount of contribution paid by the Funds 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 as follows:

#### 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%

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 ten dollars (\$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 fifteen dollars (\$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 ten dollars (\$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 cost of living adjustment (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 of Trustees 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 of Trustees 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 twenty years.

KRS commenced self-funding of healthcare benefits for its Medicare eligible retirees on January 1, 2006. A self-funded plan is one in which KRS assumes the financial risk for providing healthcare benefits to its retirees. The self-funded plan pays for claims out-of-pocket as they are presented instead of paying a pre-determined premium to an insurance carrier for a fully-insured plan. KRS funds the risk of its self-insured program directly from its insurance assets.

Stop-loss insurance can be arranged to limit KRS' loss to a specified amount to ensure that catastrophic claims do not upset the financial integrity of the self-funded plan. The amount of stop-loss insurance is a function of KRS' size, nature of its business, financials, and tolerance for risk.

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.

FIN

## 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:

Cash & Short-Term Investments KERS		
Assets	2013	2012
Cash	\$2,519,457	\$1,340,506
Short-Term Investments	119,306,174	120,094,230
Securities Lending Collateral Invested	326,406,362	764,877,463
KERS Total	\$448,231,993	\$886,312,199
CERS		
Assets	2013	2012
Cash	\$3,030,064	\$1,352,380
Short-Term Investments	289,346,687	243,678,862
Securities Lending Collateral Invested	1,065,084,771	505,826,461
CERS Total	\$1,357,461,522	\$750,857,703
SPRS		
SPRS Assets	2013	2012
	<b>2013</b> \$162,872	<b>2012</b> \$245,955
Assets		
<b>Assets</b> Cash	\$162,872	\$245,955
Assets  Cash  Short-Term Investments	\$162,872 10,528,027	\$245,955 11,565,956
Assets  Cash  Short-Term Investments  Securities Lending Collateral Invested	\$162,872 10,528,027 34,947,388	\$245,955 11,565,956 18,109,078
Assets Cash Short-Term Investments Securities Lending Collateral Invested SPRS Total	\$162,872 10,528,027 34,947,388	\$245,955 11,565,956 18,109,078
Assets  Cash  Short-Term Investments  Securities Lending Collateral Invested  SPRS Total  KRS Insurance Fund	\$162,872 10,528,027 34,947,388 \$45,638,287	\$245,955 11,565,956 18,109,078 <b>\$29,920,989</b>
Assets  Cash  Short-Term Investments  Securities Lending Collateral Invested  SPRS Total  KRS Insurance Fund  Assets	\$162,872 10,528,027 34,947,388 \$45,638,287	\$245,955 11,565,956 18,109,078 <b>\$29,920,989</b>
Assets Cash Short-Term Investments Securities Lending Collateral Invested SPRS Total KRS Insurance Fund Assets Cash	\$162,872 10,528,027 34,947,388 <b>\$45,638,287</b> <b>2013</b> \$1,422,780	\$245,955 11,565,956 18,109,078 <b>\$29,920,989</b> <b>2012</b> \$1,230,685
Assets Cash Short-Term Investments Securities Lending Collateral Invested SPRS Total KRS Insurance Fund Assets Cash Short-Term Investments	\$162,872 10,528,027 34,947,388 <b>\$45,638,287</b> <b>2013</b> \$1,422,780 163,336,293	\$245,955 11,565,956 18,109,078 <b>\$29,920,989</b> <b>2012</b> \$1,230,685 185,385,495

### Note D. Investments

The Board of Trustees of KRS recognizes its duty to invest funds in accordance with the "Prudent Person Rule" and manage those funds consistent with the long-term nature of KRS. For assets not managed internally by staff, the Board enters into contracts with investment managers who use the following guidelines and restrictions in the selection and timing of transactions as long as the security is not prohibited by the Kentucky Revised Statutes.

**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 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 of Trustees, 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.

**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 STIF's, 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.

**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. Investments in derivative securities which are subject to large or unanticipated changes in duration or cash flow, such as interest only (IO), principal only (PO), inverse floater, or structured note securities are expressly prohibited, unless specifically allowed by a manager's contract. In accordance with GASB Statement No. 53, "Accounting and Financial Reporting for Derivative Instruments", KRS provides this additional disclosure regarding its derivatives:

**Background Info** As of June 30, 2013, KRS has the following derivative instruments outstanding (see table below). All have various Effective Dates and Maturity Dates.

Item	Туре	Objective	Terms	Cost	Notional Cost	Market Value	Notional Market Value
Pensi	on-Assets						
А	Equity Contracts	Substitute for common stock	Various	\$644,329	-	\$253,980	-
В	Foreign Exchange Contracts	Hedge against the decrease of non US dollar currencies	Various	-	-	\$5,671,744	-
С	Interest Rate Contracts/Swaps	Hedge against the risk that interest rates will move in an adverse direction	Various	\$11,277,287	-	12,909,640	-
D	Swaps	Hedge against sudden or dramatic shifts in interest rates	Various	\$494,460	-	\$1,249,208	-
Pensi	on-Liabilities						
E	Interest Rate Contracts/SWAPs	Hedge against the risk that interest rates will move in an adverse direction	Various	\$11,364,674	-	\$17,685,865	-
F	Foreign Exchange Contracts	Hedge against the decrease of non US dollar currencies	Various	-	-	\$7,323,378	-
G	Swaps	Hedge against sudden or dramatic shifts in interest rates	Various	\$3,854,687	_	\$2,781,142	_
Н	Options	Hedge against the holding of an asset	Various	\$552,357	-	\$963,493	-
Insura	ance-Assets						
l	Equity Contracts	Substitute for common stock	Various	\$63,771	-	\$69,368	_
J	Foreign Exchange Contracts	Hedge against the decrease of non US dollar currencies	Various	-	-	\$1,231,522	-
K	Interest Rate Contracts/Swaps	Hedge against the risk that interest rates will move in an adverse direction	Various	\$1,323,467	_	\$2,244,024	-
L	Swaps	Hedge against sudden or dramatic shifts in interest rates	Various	\$230,412	-	\$457,509	_
Insura	ance-Liabilities						
М	Interest Rate Contracts/Swaps	Hedge against the risk that interest rates will move in an adverse direction	Various	\$1,543,967	-	\$3,316,619	_
Ν	Foreign Exchange Contracts	Hedge against the decrease of non US dollar currencies	Various	-	-	\$2,184,902	-
0	Swaps	Hedge against sudden or dramatic shifts in interest rates	Various	\$1,041,230	_	\$1,030,306	-
Р	Options	Hedge against the holding of an asset	Various	\$160,853	-	\$279,432	_

**Derivative Policy** 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.

**CMOs** 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.

Derivative instruments A and I are substitutes for common stock with an investment that is recorded at fair value. Derivative instruments B, F, J and N hedge against the decrease of non US dollar currencies. For accounting and financial reporting purposes, all derivative instruments are considered investment derivative instruments. The derivatives have been segregated on the Combined Statement of Plan Net Position for both Pension and Insurance.

#### **RISKS**

**Basis Risk** Derivative instruments A and I 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. Derivative instruments B, F, J, and N expose KRS to basis risk in that the value of the foreign currency futures or forwards may decrease in fair value relative to the cash market.

**Interest Rate Risk** Derivative instruments C, D, E, G, H, K, L, M, O, and P 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 be continued 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, which became the depository bank of KRS on July 1, 2011. 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, 2013 and 2012, deposits for KRS pension funds were \$9,333,855 and \$30,925,504, 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, 2013 and 2012, deposits for KRS insurance fund were \$1,430,267 and \$3,130,778, 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, 2013 and 2012, 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	2013	2012
Foreign Currency	\$7,380,209	\$4,509,853
Insurance Fund		
Foreign Currency	\$2,352,683	\$1,736,160

**Investment Policies** Kentucky Revised Statute 61.650 grants the responsibility for the investment of plan assets to the Board of Trustees of KRS. The Board of Trustees 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 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 Committee establishes specific investment guidelines in the Investment Management Agreement for each investment management firm.

The following tables present a summary of the investments by type as of June 30, 2013 and 2012:

### Pension Fund Investments Summary As of June 30, 2013 & 2012

Туре	2013	2012
US Gov't & Agency Fixed Income Securities	\$1,582,604,644	\$1,789,467,703
US Corporate Fixed Income Securities	1,297,990,113	1,222,776,472
Municipal Debt Securities	70,363,221	79,109,093
Short-Term Investments	425,404,014	375,339,048
Equity Securities	4,764,035,886	4,504,816,279
Private Equity Limited Partnerships	1,705,481,097	1,797,263,220
Real Estate	174,943,810	54,047,344
Other*	978,860,163	808,209,209
Total	\$10,999,682,948	\$10,631,028,368

*This	balance	consists	of the	following

Type	2013	2012
Cash Collateral - US Dollars	\$13,401,306	\$21,644,777
Sukuk <sup>1</sup>	263,923	495,200
Derivative Offsets		
¥ Equity Futures	(1,739,458)	(12,467,000)
¥ Hedge Funds	988,790,368	817,486,374
Liabilities		
ט Obligation to Return Cash Collateral - US Dollars	(21,855,976)	(18,950,142)
Total	\$978.860.163	\$808.209.209

<sup>1</sup>The Arabic name for financial certificates, but commonly refers to the Islamic equivalent of bonds, since fixed income interest bearing bonds are not permissible in Islam, Sukuk securities are structured to comply with Islamic Law and its investment principles, which prohibits the charging, or paying, of

Credit Risk of 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 professional 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 funds debt securities portfolio are managed using the following guidelines adopted by the KRS Board of Trustees:

- 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.
- Tixed 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 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

#### Insurance Fund Investments Summary As of June 30, 2013 & 2012

Туре	2013	2012
US Gov't & Agency Fixed Income Securities	\$555,483,396	\$596,153,822
US Corporate Fixed Income Securities	407,385,223	322,100,002
Municipal Debt Securities	14,780,723	15,609,402
Short-Term Investments	164,183,759	185,486,186
Equity Securities	1,605,002,880	1,368,123,183
Private Equity Limited Partnerships	343,283,318	323,438,095
Real Estate	53,302,498	8,100,453
Other**	336,086,682	223,968,702
Total	\$3,479,508,479	\$3,042,979,845

#### \*\*This balance consists of the following

Туре	2013	2012
Cash Collateral - US Dollars	\$2,569,213	\$5,119,746
Derivative Offsets		
ע Equity Futures	25,664,188	(3,005,800)
<b>u</b> Hedge Funds	312,234,300	226,403,187
Liabilities		
ע Swaps - US Dollars		(2,858,431)
ט Obligation to Return Cash Collateral - US Dollars	(4,381,019)	(1,690,000)
Total	\$336,086,682	\$223,968,702

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.

- The duration of the total fixed income portfolio shall not deviate from the KRS Fixed Income by more than 25%.
- The duration of the TIPS portfolio shall not deviate from the KRS Fixed Income Index by more than 25%.
- 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 15% of the market value of the aggregate market value of KRS' fixed income investments.

The following tables present the KRS pension and insurance fund's debt ratings as of June 30, 2013 and 2012:

Pension Fund Debt Securities at Fair Value as of June 30, 2013 & 2012

Insurance Fund Debt Securities at Fair Value as of June 30, 2013 & 2012

Quality Rating	2013	2012
AAA	\$56,665,771	\$176,752,688
AA+	68,857,699	51,817,259
AA	19,419,263	19,865,864
AA-	30,605,331	40,184,012
A+	32,370,283	31,408,066
А	71,719,597	80,076,147
A-	109,560,109	108,297,775
BBB+	36,533,579	57,879,171
BBB	109,743,197	103,233,884
BBB-	81,558,127	81,350,025
BB+	62,890,911	56,241,281
BB	66,451,521	63,795,374
BB-	60,743,226	74,378,918
B+	82,924,826	69,386,148
В	77,704,921	70,846,202
B-	50,252,951	57,149,848
CCC+	41,097,638	27,020,113
CCC	17,224,076	20,493,357
CCC-	13,687,724	5,572,497
CC	4,457,848	720,167
D	3,937,401	6,361,973
NR	99,198,973	99,054,796
Total Credit Risk Debt Securities	1,197,604,972	1,301,885,565
Government Bonds	474,844,831	607,041,559
Government Mortgage- Backed Securities (GNMA)	338,663,465	248,950,785
Government Issued Commercial Mortgage Backed	9,811,110	10,311,861
Government Agencies	34,674,668	32,423,616
Indexed Linked Bonds	708,142,577	890,739,882
Total Debt Securities	\$2,763,741,623	\$3,091,353,268

Quality Rating	2013	2012
AAA	\$17,298,219	\$99,272,032
AA+	19,036,700	8,741,517
AA	7,906,648	6,899,008
AA-	4,369,454	7,739,207
A+	11,034,344	11,301,734
А	18,123,716	20,358,203
A-	29,449,395	24,992,822
BBB+	8,243,645	11,979,181
BBB	24,640,602	22,934,068
BBB-	25,801,896	15,084,027
BB+	22,285,959	11,563,376
BB	23,613,368	15,166,400
BB-	20,795,416	17,353,229
B+	25,323,893	14,268,206
В	19,984,139	16,588,386
B-	16,449,995	14,831,663
CC	816,507	961,988
CCC	5,087,979	5,522,254
CCC+	10,899,205	5,323,130
CCC-	3,039,033	1,086,041
D	1,088,434	2,118,411
NR	55,438,787	3,624,521
Total Credit Risk Debt Securities	370,727,334	337,709,404
Government Bonds	152,008,017	164,367,747
Government Mortgage- Backed Securities (GNMA)	97,015,116	70,007,438
Government Issued Commercial Mortgage Backed	3,007,215	3,156,940
Government Agencies	9,505,690	7,506,492
Indexed Linked Bonds	292,931,190	351,115,205
Total Debt Securities	\$925,194,562	\$933,863,226

**Pension Fund Securities** At both June 30, 2013 and 2012, the weighted average quality rating of the pension fund debt securities portfolio was AA+. As of June 30, 2013 and 2012, the KRS pension portfolio had \$580,572,016 and \$451,965,878, 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 exposure within the insurance portfolio) was moved to the newly created Real Return Asset Class.

As of June 30, 2013, the Pension Funds held \$1,604,688, or .02%, and the Insurance Fund held \$517,120, or .02%, of its investments in Exchange Traded Funds.

**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 KRS Board of Trustees:

- 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.

**ETF** Exchange Traded Fund

Fannie Mae Federal National Mortgage Association As of June 30, 2013, the Pension Funds held \$1,604,688, or .02%, and the Insurance Fund held \$517,120, or .02%, of its investments in Exchange Traded Funds (ETF's). ETF's are securities that represent ownership in a long term unit investment trust that holds a portfolio of common stocks or other securities designed to track the performance of a designated index. Similar to a stock, ETF's can be traded continuously throughout the trading day, or can be held for the long term.

As of June 30, 2013, the Pension Funds held \$235,623,204, or 2.2%, of its investment in the Federal National Mortgage Association (Fannie Mae). Historically, Fannie Mae has been a publicly owned government corporation, recently entering conservatorship by the US Government, to purchase mortgages from lenders and resell them to investors; shares of Fannie Mae are traded on the New York Stock Exchange. Fannie Mae's debt has been perceived to be nearly as safe as US Treasury debt, given the US Government's implicit guarantee which has allowed it to pay lower interest rates to its debt holders.

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. Prior to June 30, 2011, the KRS pension fund benchmark for its fixed income securities was a combination of the Barclays Aggregate Index and the Barclays TIPS Index. As of June 30, 2013 and 2012, the modified duration of the KRS pension fund fixed income benchmark was 5.38 and 5.02, respectively. At the same points in time, the modified duration of the KRS pension fund fixed income securities portfolio was 5.73 and 5.61, respectively.

The KRS insurance fund benchmarks its fixed income securities portfolio to the Barclays US Universal Index. Prior to June 30, 2011, the KRS insurance fund benchmark for its fixed income securities was a combination of the Barclays Aggregate Index and the Barclays TIPS Index. As of June 30, 2013 and 2012, the modified duration of the KRS insurance fund fixed income benchmark was 5.38 and 5.02, respectively. At the same points in time, the modified duration of the KRS insurance fund fixed income securities portfolio was 5.91 and 5.66, respectively.

### KRS Pension Funds Interest Rate Risk As of June 30,

### Pension Fund Interest Rate Risk

Туре	2013	Weighted Average Modified Duration	2012	Weighted Average Modified Duration
Asset Backed Securities	\$44,213,100	2.71	\$69,305,698	1.28
Bank Loans	105,603,296	4.72	91,076,272	0.14
Collateralized Bonds	14,222,649	0.72	14,259,490	0.07
Commercial Mortgage Backed Securities	66,526,681	3.10	59,670,935	2.90
Commercial Paper	74,997,823	0.02		
Corporate Bonds	674,221,512	5.36	333,162,366	4.70
Corporate Convertable Bonds	19,949,113	8.58	16,819,919	4.10
Government Agencies	34,674,668	5.12	32,423,616	5.20
Government Bonds	474,844,831	5.66	607,041,559	5.70
Government Mortgage Backed Securities	338,663,465	4.20	248,950,785	1.40
Government Issued Commercial Mortgage Backed Securities	9,811,110	2.66	10,311,861	3.30
Hedge Funds	-	-	335,635,038	-
Hedge Multi Strategy	-	-	3,738,246	-
Indexed Linked Government Bonds	708,142,577	8.18	890,739,882	8.30
Municipal Bonds	70,363,221	10.29	79,109,093	10.70
Non-Government Backed CMOs	10,612,072	2.04	23,690,395	0.93
Other Fixed Income	-		227,154,341	
Short Term Investments	-		39,719,110	
Short Term Bills/Notes	116,631,583	0.17	8,049,462	0.34
Sukuk*	263,923	6.55	495,200	4.20
Total	\$2,763,741,624	5.67	\$3,091,353,268	5.85

<sup>\*</sup> The Arabic name for financial certificates, but commonly refers to the Islamic equivalent of bonds; since fixed income interest bearing bonds are not permissible in Islam, Sukuk securities are structured to comply with Islamic Law and its investment principles, which prohibits the charging, or paying, of interest.

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

#### Insurance Fund Interest Rate Risk

Туре	2013	Weighted Average Modified Duration	2012	Weighted Average Modified Duration
Asset Backed Securities	\$14,649,066	3.18	\$20,616,445	2.40
Bank Loans	28,930,449	4.72	19,461,761	3.90
Collateralized Bonds	4,841,918	1.13	5,256,039	0.80
Commercial Mortgage Backed Securities	17,161,225	3.67	12,783,807	3.30
Commercial Paper	24,998,658	0.04		
Corporate Bonds	216,295,976	5.34	71,656,715	5.80
Corporate Convertible Bonds	4,909,873	8.44	3,788,169	7.90
Fixed Income			83,061,859	
Government Agencies	9,505,690	5.46	7,506,492	6.40
Government Bonds	152,008,017	5.83	164,367,747	5.80
Government Mortgage Backed Securities	97,015,116	4.79	70,007,438	3.10
Government Issued Commercial Mortgages	3,007,215	2.72	3,156,940	3.60
Hedge Fund			85,762,072	
Hedge Multi Strategy			1,584,968	
Index Linked Government Bonds	292,931,190	8.25	351,115,205	8.30
Municipal/Provincial Bonds	14,780,723	9.60	15,609,402	10.00
Non-Government Backed CMOs	2,572,249	1.77	5,339,625	1.10
Short Term Investments			11,619,360	
Short Term Bills/Notes	41,587,197	0.15	1,169,182	.50
Total	\$925,194,562	5.92	\$933,863,226	6.60

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.



Record Currency Management Dynamic Currency Hedging Program **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 financial statements.

The dynamic currency hedging program previously run by Record Currency Management was terminated on November 3, 2011, and was completely unwound by October 2012.

### Pension Fund Investments at Fair Value as of June 30, 2013 & 2012

Foreign Equities	2013	2012
Argentine Peso		\$592,995
Australian Dollar	59,808,966	58,388,163
Brazilian Real	40,565,297	23,932,101
British Pound Sterling	191,809,147	196,765,497
Canadian Dollar	79,160,793	103,163,185
Chilean Peso	8,572,207	2,675,122
Chinese Yuan	3,921,175	5,183,187
Columbian Peso	4,030,792	3,148,357
Czech Koruna	3,152,676	3,158,280
Danish Krone	12,793,980	8,606,995
Euro	329,323,153	312,248,180
Hong Kong Dollar	96,949,251	90,614,411
Hungarian Forint	4,448,425	1,251,857
Indian Rupee	3,759,830	3,536,235
Indonesian Rupiah	7,187,236	14,715,167
Israeli Shekel	2,069,010	1,703,453
Japanese Yen	263,796,152	232,665,797
Malaysian Ringgit	5,704,224	3,068,235
Mexican Peso	22,181,651	18,202,265
New Taiwan Dollar		25,479,684
New Zealand Dollar	7,500,911	1,013,380
Norwegian Krone	9,727,168	4,046,964
Peruvian Nuevo Sol	471,934	1,216,727
Philippine Peso	3,021,216	6,438,447
Polish Zloty	5,945,095	4,802,910
Russian Ruble	7,159,994	7,570,244
Singapore Dollar	19,834,359	22,349,886
South African Rand	23,424,203	23,545,955
South Korean Won	50,679,693	70,999,258
Swedish Krona	28,143,780	27,191,886
Swiss Franc	96,580,108	81,004,268
Taiwan Dollar	35,426,792	
Thai Bhat	5,867,698	9,159,880
Turkish Lira	4,549,826	6,233,784
Total Securities Subject to Foreign Currency Risk	1,437,566,742	1,374,672,755
USD (securities held by International Investment Managers)	9,562,116,206	9,256,355,650
Total International Investment Securities	\$10,999,682,948	\$10,631,028,405

### Insurance Fund Investments at Fair Value as of June 30, 2013 & 2012

Foreign Equities	2013	2012
Australian Dollar	\$17,372,842	\$20,374,499
Brazilian Real	11,659,097	6,775,870
British Pound Sterling	61,860,945	69,217,342
Canadian Dollar	25,663,239	35,948,462
Chilean Peso	2,724,948	786,711
Chinese Yuan	1,214,863	1,298,990
Columbian Peso	1,036,746	796,126
Czech Koruna	1,072,552	990,353
Danish Krone	4,233,231	2,959,795
Euro	105,942,398	105,768,977
Hong Kong Dollar	30,780,462	31,672,609
Hungarian Forint	1,415,885	315,114
Indian Rupee	1,149,108	882,340
Indonesian Rupiah	2,005,381	4,828,536
Israeli Shekel	639,441	429,103
Japanese Yen	84,659,071	79,821,116
Malaysian Ringgit	1,618,726	740,285
Mexican Peso	6,607,537	4,224,645
New Taiwan Dollar		8,671,587
New Zealand Dollar	2,131,571	296,011
Norwegian Krone	3,039,601	1,355,472
Peruvian Nuevo Sol	108,768	304,965
Philippine Peso	633,481	1,699,557
Polish Zloty	1,829,456	1,263,786
Russian Ruble	2,274,414	1,762,447
Singapore Dollar	6,063,920	7,014,550
South African Rand	7,537,217	7,916,313
South Korean Won	15,998,698	23,790,001
Swedish Krona	9,106,266	9,210,394
Swiss Franc	30,623,672	28,469,252
Taiwan Dollar	11,121,400	
Thai Bhat	1,627,962	3,108,109
Turkish Lira	1,456,908	2,072,912
Total Securities Subject to Foreign Currency Risk	455,209,806	464,766,229
USD (securities held by International Investment Managers)	3,024,298,673	2,578,213,716
Total International Investment Securities	\$3,479,508,479	\$3,042,979,945

## Note E. 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 percent 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, 2013, 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 F. 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.

**Claims Against Board** 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.

**Job-Related Illness** 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 all medical expenses related to the illness or injury and up to sixty-six and two-third percent (66 2/3%) of wages for temporary disability. Each agency pays premiums based on fund reserves and payroll.

Only claims pertaining to workers' compensation have been filed during the past three fiscal years. Settlements did not exceed insurance coverage in any of the past three fiscal years. There were no claims which were appealed to the Kentucky Workers' Compensation Board.

## Note G. Contingencies

In the normal course of business, KRS is exposed to risks of loss from various legal proceedings, some of which could have a material impact if the decisions are adverse. However, as of the date of this report, the likelihood of incurring such a loss cannot be determined and a dollar amount cannot be reasonably estimated.

NOTE H.

### Note H. 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 2013.

NOTE I.

## Note I. Defined Benefit Pension Plan



#### **KERS**

Kentucky Employees Retirement System

County Employees Retirement System

#### **SPRS**

State Police Retirement System

All eligible employees of KRS participate in KERS (non-hazardous), a costsharing, multiple-employer defined pension plan that covers substantially 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, 2013, 2012, and 2011. Plan members who began participating on, or after, September 1, 2008, contributed 6% of creditable compensation for the periods ended June 30, 2013, 2012, and 2011. KRS contributed 23.61%, 19.82%, and 16.98%, of covered payroll for the periods ended June 30, 2013, 2012, and 2011, respectively. The chart below includes the covered payroll and contribution amounts for KRS for the three periods included in this discussion.

Payroll & Contributions			
	2013	2012	2011
Covered Payroll	\$ 13,925,712	\$13,784,847	\$13,444,315
Required Employer Contributions	\$3,271,165	\$2,726,780	\$2,282,864
Employer Percentage Contributed	100%	100%	100%

## Note J. Equipment

#### Equipment Expenses as of June 30

Expense	2013	2012
Equipment At-Cost	\$ 6,752,838	\$6,753,648
Less Accumulated Depreciation	(2,856,799)	(2,805,034)
Total	\$3,896,039	\$3,948,614

Depreciation expense for the fiscal years ended June 30, 2013 and 2012 amounted to \$52,575 and \$68,471, respectively. The decrease in equipment at cost is due to some assets being fully depreciated as of June 30, 2013.

NOTE K.

## Note K. Intangible Assets

GAS

Governmental Accounting Standards Board

#### START

Strategic Technology Advancements for the Retirement of Tomorrow

The provisions of GASB Statement No. 51, "Accounting and Financial Reporting for Intangible Assets" require that intangible assets be recognized in the 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	2013	2012
Software At-Cost	\$16,254,290	\$12,724,117
Less Accumulated Amortization	(4,059,389)	(2,893,011)
Total	\$12,194,901	\$9,831,106

Amortization expense for the fiscal years ended June 30, 2013 and 2012 amounted to \$1,166,377 and \$1,210,750, respectively. The increase in software at cost is due to the capitalization of the final costs associated with the START project.

### Note L. Actuarial Valuation

Pension Fund Valuation

**Actuarial Assumptions** 

Investment Rate of Return

☑ Includes Price Inflation at

T

Haz

Hazardous (i.e. KERS Haz)

Non-Haz

Non-Hazardous (i.e. CERS Non-Haz)

<sup>1</sup>The actuarial investment rate of return for developing insurance liabilities and contribution rates is 7.75% for the Kentucky Employees Retirement System (non-hazardous) and the State Police Retirement System. The lower rate is required under the parameters set by the Governmental Accounting Standards Board (GASB) Statements 43 and 45 since the actual rate contributed by the employers is less than the actuarially recommended rate. The actuarial investment rate of return for developing insurance liabilities and contribution rates assumptions were changed for Fiscal 2012 from 4.5% to 7.5 % in Fiscal 2013. The change impacted the Schedule of Funding Progress-Insurance Actuarial Accrued Liability for KERS Non-Hazardous and SPRS. The Fiscal 2012 information in the Schedule of Funding Progress was not restated from Fiscal 2012. However, the revised assumption rate of 7.5% was used in calculating the Fiscal 2013 Actuarial Accrued Liability.

<sup>2</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.

The provisions of GASB Statement No. 50, "Pension Disclosures, an Amendment of GASB No. 25 and No. 27", require that actuarial information included in the Notes to the Required Supplementary Information be moved to the Notes to the Financial Statements. In accordance with GASB No. 50, KRS has moved the following information from the Notes to the Required Supplementary Information to the Notes to the Financial Statements:

	Non-Haz	Haz
Valuation Date	June 30, 2013	June 30, 2013
Actuarial Cost Method	Entry Age	Entry Age
Amortization Method	Level Percent Closed	Level Percent Closed
Remaining Amortization Period	30 Years	30 Years
Asset Valuation Method	Five-year Smoothed Market	Five-year Smoothed Market
Actuarial Assumptions		
Investment Rate of Return	7.75%	7.75%
ע Includes Price Inflation at	3.5%	3.5%
Projected Salary Increases	4.75-17.0%	4.5-21.0%
ע Includes Wage Inflation at	4.5%	4.5%
Insurance Fund Valuation <sup>1</sup>		
	Non-Haz	Haz
Valuation Date	June 30, 2013	June 30, 2013
Actuarial Cost Method	Entry Age	Entry Age
Amortization Method	Level Percent Closed	Level Percent Closed
Remaining Amortization Period	30 Years	30 Years
Asset Valuation Method	Five-year Smoothed Market	Five-year Smoothed Market
Medical Trend Assumption (Pre-Medicare)	8.5-5.0%	8.5-5.0%
Medical Trend Assumption (Post-Medicare)	7.0-5.0%	7.0-5.0%
Year of Ultimate Trend	2019	2019

 $7.75\%^{2}$ 

3.5%

7.75%

3.5%

#### **Unfunded Actuarial Accrued Liability** KRS had the following Unfunded Actuarial Accrued Liabilities as of June 30 2013 and 2012:

Unfunded Actuarial Accrued Liabilities as of June 30 Pension Fund

Haz Hazardous (i.e. KERS Haz)

Non-Hazardous (i.e. CERS Non-Haz)

Actuarial Accrued Liability

System	2013	2012
KERS Non-Haz	\$8,750,479,307	\$8,259,731,398
KERS Haz	278,323,786	255,473,161
CERS Non-Haz	3,741,781,631	3,592,332,096
CERS Haz	1,322,514,183	1,262,612,750
SPRS	409,780,326	387,897,090
Total Pension Funds	\$14,502,879,233	\$13,758,046,495

Unfunded Actuarial Accrued Liabilities as of June 30 Insurance Fund

System	2013	2012
KERS Non-Haz	\$1,631,169,807	\$2,679,249,646
KERS Haz	14,743,272	39,018,458
CERS Non-Haz	815,649,903	857,917,437
CERS Haz	544,558,426	535,802,215
SPRS	86,005,683	209,531,710
Total Insurance Funds	\$3,092,127,091	\$4,321,519,466
Total Unfunded Actuarial Accrued Liability	\$17,595,006,324	\$18,079,565,961

The Schedule of Funding Progress for Pension Funds begins on page 61. The Schedule of Funding Progress for the Insurance Fund begins on page 64.

Pension 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	\$2,636,122,852	\$11,386,602,159	23.2	\$1,644,408,698	532.1
KERS Haz	505,656,808	783,980,594	64.5	132,015,368	210.8
CERS Non-Haz	5,637,094,483	9,378,876,114	60.1	2,236,277,489	167.3
CERS Haz	1,801,691,410	3,124,205,593	57.7	461,672,567	286.5
SPRS	241,800,328	651,580,654	37.1	45,256,202	905.5
Total Pension Funds	10,822,365,881	25,325,245,114	42.6	4,519,630,324	562.3

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	497,584,327	2,128,754,134	23.4	1,644,408,698	99.2
KERS Haz	370,774,403	385,517,675	96.2	132,015,368	11.2
CERS Non-Haz	1,628,244,197	2,443,894,100	66.6	2,236,277,489	36.5
CERS Haz	892,774,391	1,437,332,817	62.1	461,672,567	118.0
SPRS	136,321,060	222,326,743	61.3	45,256,202	190.0
Total Insurance Funds	3,525,698,378	6,617,825,469	53.3	4,519,630,324	146.4
Totals	\$14,348,064,259	\$31,943,070,583	44.8%	\$9,039,260,648	354.4

NOTE M.

### Note M. House Bill 1 Pension Reform

House Bill 1 was signed by the Governor of the Commonwealth on June 27, 2008. It contained a number of changes that KRS implemented effective September 1, 2008.

House Bill 1 also contained statutory changes to Kentucky Revised Statute 61.637, the law governing members who become reemployed following retirement.

**Employee Contributions** 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. 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). 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. 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. **Employer Rates** Employer contribution rates for KERS and SPRS for fiscal 2013 were established in the 2010-2012 Executive Branch Budget (House Bill 1) during the 2010 Extraordinary Session of the Kentucky General Assembly. Employer contribution rates for CERS for fiscal 2013 were adopted by the KRS Board of Trustees based on the actuarially recommended rates. The Employer contribution rates were established as follows (effective July 1, 2012) for fiscal 2013:

#### **Employer Contribution Rates** Fiscal Year 2013

System	Rate
KERS Non-Haz	23.61%
KERS Haz	29.79%
CERS Non-Haz	19.55%
KERS Haz	37.60%
SPRS	63.67%

Although the majority of changes in this legislation 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 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.

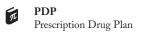


- Service Purchase Costs The actuarial factors used to determine the cost to purchase a service must assume the earliest date a member can retire with an unreduced benefit, and must also assume a 1.5% COLA will be enacted. This change results in an increased service purchase cost for any purchase calculated 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. Specifically, a member who retired and is 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.

NOTE N.

## Note N. Medicare Prescription Drug Plan



In fiscal 2009, Kentucky Retirement Systems 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 at Northern Trust. As of June 30, 2013 and 2012, the Insolvency Account amounted to \$100,001 and \$100,691, respectively.

NOTE O.

## Note O. House Bill 300 Pension Reform

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.

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

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, 2013 and 2012, the reimbursement totaled \$9,187,367 and \$6,349,929, respectively.

NOTE Q.

## Note Q. Louisville/Jefferson County Metro Firefighters

Firefighter employees of Louisville/Jefferson County Metro Government were awarded a total of \$28,440,159 for back-pay. Of that total, \$28,425,232, was determined to be the amount of creditable compensation. The total contributions owed to KRS were calculated by applying the contribution rate in effect for each fiscal year awarded (fiscal 1986 to fiscal 2009) while considering the appropriate participation status, hazardous or non-hazardous, of each employee. These calculations established that the total employer contribution owed was \$5,113,511, and the total employee contribution owed was \$2,083,310, for a total of \$7,196,821. These amounts were received on July 27, 2010.

KRS also calculated the impact on final compensation caused by the retroactive benefits paid to those firefighters who have already retired. KRS was required to pay retroactive benefit payments totaling \$6,221,219, reflecting additional benefits due to the increase in final compensation. The liability was paid on August 22, 2010, by issuance of benefit payments to the individual firefighter members.

Kentucky Revised Statute 61.675(3)(b) requires that KRS collect interest on unmade or delinquent contributions. The interest owed by the Louisville/Jefferson County Metro Government, as calculated by KRS' actuaries, amounted to \$12,020,731. Therefore, the total amount due KRS was \$19,217,552. As stated earlier, \$7,196,821 was received on July 27, 2010.

In April 2012, KRS received \$3,866,429 and in July 2012, KRS received an additional \$7,000,000, for interest owed, which by settlement extinguished the liability to KRS.

## Note R. 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 S.

NOTE R.

### Note S. Custodial Bank

As a result of a thorough 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 T. Related Party

Perimeter Park West, Inc. (PPW) is a legally separate, tax-exempt Kentucky corporation established in 1998 to own the land and buildings in which KRS is located. PPW leases the buildings to KRS (the lease is renewed every five years) 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, 2013:

Lease payments to PPW from KRS: \$1,131,065 Dividends to KRS from PPW: \$ 485,030

NOTE U.

## Note U. Subsequent Events

Management has evaluated the period from June 30, 2013, to December 5, 2013, (the date the financial statements were available to be issued) for items requiring recognition or disclosure in the financial statements.

NOTE V.

### Note V. Restatement

The Pension Funds' Net Position as of June 30, 2012, and the decrease in the Pension Funds' Net Position for the fiscal year then ended, have been restated to correct accrued contributions and Health Insurance Contributions at June 30, 2012. See detailed note below. The net effect of this correction for reporting purposes was a decrease of \$4,647,263 in pension contributions and health insurance contributions for the fiscal year ended June 30, 2012. The restatement resulted from the failure of an adjusting entry to be reflected in the financial statements.

Restatement of Fiscal 2012 Financial Statements

	As Previously Reported	As Restated
Pension Funds:		
Contributions Receivable	\$112,722	\$108,073
Total Net Position	\$10,758,706	\$10,754,057
Insurance Fund:		
Health Insurance Contributions	\$11,924	\$ 7,275
Net Decrease in Net Position	\$859,014	\$863,663

Required Supplementary Information

# Required Supplementary Information

Schedules of Funding Progress for KERS Pension Funds

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]
Non-Hazardous						
June 30, 2004	\$6,000,513,743	\$7,049,613,171	\$1,049,099,428	85.1%	\$1,645,412,496	63.8%
June 30, 2005	5,578,685,746	7,579,074,839	2,000,389,093	73.6	1,655,907,288	120.8
June 30, 2006	5,394,086,323	8,994,826,247	3,600,739,924	60.0	1,702,230,777	211.5
June 30, 2007	5,396,782,459	9,485,939,277	4,089,156,818	56.9	1,780,223,493	229.7
June 30, 2008	5,318,792,893	10,129,689,985	4,810,897,092	52.5	1,837,873,488	261.8
June 30, 2009	4,794,611,365	10,658,549,532	5,863,938,167	45.0	1,754,412,912	334.2
June 30, 2010	4,210,215,585	11,004,795,089	6,794,579,504	38.3	1,815,146,388	374.3
June 30, 2011	3,726,986,087	11,182,142,032	7,455,155,945	33.3	1,731,632,748	430.5
June 30, 2012	3,101,316,738	11,361,048,136	8,259,731,398	27.3	1,644,896,681	502.1
June 30, 2013	2,636,122,852	11,386,602,159	8,750,479,307	23.2	1,644,408,698	532.1
Hazardous						
June 30, 2004	\$397,212,763	\$403,578,036	\$6,365,273	98.4%	\$126,664,812	5.0%
June 30, 2005	405,288,662	438,994,257	33,705,595	92.3	131,687,088	25.6
June 30, 2006	427,984,192	508,655,903	80,671,711	84.1	138,747,320	58.1
June 30, 2007	467,287,809	558,992,329	91,704,520	83.6	144,838,020	63.3
June 30, 2008	502,132,214	618,010,827	115,878,613	81.2	148,710,060	77.9
June 30, 2009	502,503,287	674,411,781	171,908,494	74.5	146,043,576	117.7
June 30, 2010	502,729,009	688,149,451	185,420,442	73.1	143,557,944	129.2
June 30, 2011	510,748,505	721,293,444	210,544,239	70.8	133,053,792	158.2
June 30, 2012	497,226,296	752,699,457	255,473,161	66.1	131,976,754	193.6
June 30, 2013	505,656,808	783,980,594	278,323,786	64.5	132,015,368	210.8
Total						
June 30, 2004	\$6,397,726,506	\$7,453,191,207	\$1,055,464,701	85.8%	\$1,772,077,308	59.6%
June 30, 2005	5,983,974,408	8,018,069,096	2,034,094,688	74.6	1,787,594,376	113.8
June 30, 2006	5,822,070,515	9,503,482,150	3,681,411,635	61.3	1,840,978,097	200.0
June 30, 2007	5,864,070,268	10,044,931,606	4,180,861,338	58.4	1,925,061,513	217.2
June 30, 2008	5,820,925,107	10,747,700,812	4,926,775,705	54.2	1,986,583,548	248.0
June 30, 2009	5,297,114,652	11,332,961,313	6,035,846,661	46.7	1,900,456,488	317.6
June 30, 2010	4,712,944,594	11,692,944,540	6,979,999,946	40.3	1,958,704,332	356.4
June 30, 2011	4,237,734,592	11,903,435,476	7,665,700,884	35.6	1,864,686,540	411.1
June 30, 2012	3,598,543,034	12,113,747,593	8,515,204,559	29.7	1,776,873,435	479.2
June 30, 2013	3,141,779,660	12,170,582,753	9,028,803,093	25.8	1,776,424,066	508.3

<sup>\*\*</sup> Covered payroll was actuarially computed

### Schedules of Funding Progress for CERS Pension Funds

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]
Non-Hazardous						
June 30, 2004	\$5,187,851,530	\$4,936,459,488	\$(251,392,042)	105.1%	\$1,826,870,880	(13.8)%
June 30, 2005	5,059,208,687	5,385,156,690	325,948,003	94.0	1,885,275,000	17.3
June 30, 2006	5,162,894,136	6,179,569,267	1,016,675,131	83.5	1,982,437,473	51.3
June 30, 2007	5,467,824,480	6,659,446,126	1,191,621,646	82.1	2,076,848,328	57.4
June 30, 2008	5,731,502,438	7,304,217,691	1,572,715,253	78.5	2,166,612,648	72.6
June 30, 2009	5,650,789,991	7,912,913,512	2,262,123,521	71.4	2,183,611,848	103.6
June 30, 2010	5,546,857,291	8,459,022,280	2,912,164,989	65.6	2,236,855,380	130.2
June 30, 2011	5,629,611,183	8,918,085,025	3,288,473,842	63.1	2,276,595,948	144.4
June 30, 2012	5,547,235,599	9,139,567,695	3,592,332,096	60.7	2,236,546,345	160.6
June 30, 2013	5,637,094,483	9,378,876,114	3,741,781,631	60.1	2,236,277,489	167.3
Hazardous						
June 30, 2004	\$1,457,612,042	\$1,640,830,120	\$183,218,078	88.8%	\$392,562,624	46.7%
June 30, 2005	1,452,353,023	1,795,617,335	343,264,312	80.9	411,121,728	83.5
June 30, 2006	1,515,075,017	2,020,142,770	505,067,753	75.0	426,927,550	118.3
June 30, 2007	1,639,288,924	2,208,736,179	569,447,255	74.2	458,998,956	124.1
June 30, 2008	1,750,867,373	2,403,122,095	652,254,722	72.9	474,241,332	137.5
June 30, 2009	1,751,487,540	2,578,444,600	826,957,060	67.9	469,315,464	176.2
June 30, 2010	1,749,464,388	2,672,151,907	922,687,519	65.5	466,548,660	197.8
June 30, 2011	1,779,545,393	2,859,041,052	1,079,495,659	62.2	466,963,860	231.2
June 30, 2012	1,747,379,297	3,009,992,047	1,262,612,750	58.1	464,228,923	272.0
June 30, 2013	1,801,691,410	3,124,205,593	1,322,514,183	57.7	461,672,567	286.5
Total						
June 30, 2004	\$6,645,463,572	\$6,577,289,608	\$(68,173,964)	101.0%	\$2,219,433,504	(3.1)%
June 30, 2005	6,511,561,710	7,180,774,025	669,212,315	90.7	2,296,396,728	29.2
June 30, 2006	6,677,969,153	8,199,712,037	1,521,742,884	81.4	2,409,365,023	63.2
June 30, 2007	7,107,113,404	8,868,182,305	1,761,068,901	80.1	2,535,847,284	69.4
June 30, 2008	7,482,369,811	9,707,339,786	2,224,969,975	77.1	2,640,853,980	84.3
June 30, 2009	7,402,277,531	10,491,358,112	3,089,080,581	70.6	2,652,927,312	116.4
June 30, 2010	7,296,321,679	11,131,174,187	3,834,852,508	65.5	2,703,404,040	141.9
June 30, 2011	7,409,156,576	11,777,126,077	4,367,969,501	62.9	2,743,559,808	159.2
June 30, 2012	7,294,614,896	12,149,559,742	4,854,944,846	60.0	2,700,775,268	179.8
June 30, 2013	7,438,785,893	12,503,081,707	5,064,295,814	59.5	2,697,950,056	187.7

### Schedules of Funding Progress for SPRS Pension Funds

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, 2004	\$385,077,195	\$437,482,425	\$52,405,230	88.0%	\$43,835,208	119.6%
June 30, 2005	353,511,622	458,593,576	105,081,954	77.1	43,720,092	240.4
June 30, 2006	344,016,197	516,482,298	172,466,101	66.6	47,743,865	361.2
June 30, 2007	348,806,508	547,955,286	199,148,778	63.7	49,247,580	404.4
June 30, 2008	350,891,451	587,129,257	236,237,806	59.8	53,269,080	443.5
June 30, 2009	329,966,989	602,328,868	272,361,879	54.8	51,660,396	527.2
June 30, 2010	304,577,292	612,444,806	307,867,514	49.7	51,506,712	597.7
June 30, 2011	285,580,631	634,379,401	348,798,770	45.0	48,692,616	716.3
June 30, 2012	259,791,575	647,688,665	387,897,090	40.1	48,372,506	801.9
June 30, 2013	241,800,328	651,580,654	409,780,326	37.1	45,256,202	905.5

<sup>\*\*</sup> Covered payroll was actuarially computed

### Schedules of Funding Progress for KERS Insurance Funds

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]
Non-Hazardous						
June 30, 2004	\$600,586,961	\$2,335,905,365	\$1,735,318,404	25.7%	\$1,645,412,496	105.5%
June 30, 2005	607,068,351	2,680,559,188	2,073,490,837	22.7	1,655,907,288	125.2
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
Hazardous						
June 30, 2004	\$169,158,879	\$323,503,563	\$154,344,684	52.3%	\$126,664,812	121.9%
June 30, 2005	187,947,644	386,844,695	198,897,051	48.6	131,687,088	151.0
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
Total						
June 30, 2004	\$769,745,840	\$2,659,408,928	\$1,889,663,088	28.9%	\$1,772,077,308	106.6%
June 30, 2005	795,015,995	3,067,403,883	2,272,387,888	25.9	1,787,594,376	127.1
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

See Independent Auditors' Report.

### Schedules of Funding Progress for CERS Insurance Funds

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]	
Non-Hazardous							
June 30, 2004	\$585,399,072	\$2,438,734,696	\$1,853,335,624	24.0%	\$1,826,870,880	101.5%	
June 30, 2005	663,941,949	2,788,754,654	2,124,812,705	23.8	1,885,275,000	112.7	
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	
Hazardous							
June 30, 2004	\$310,578,162	\$1,025,684,477	\$715,106,315	30.3%	\$392,562,624	182.2%	
June 30, 2005	359,180,461	1,283,299,092	924,118,631	28.0	411,121,728	224.8	
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	
Total							
June 30, 2004	\$895,977,234	\$3,464,419,173	\$2,568,441,939	25.9%	\$2,219,433,504	115.7%	
June 30, 2005	1,023,122,410	4,072,053,746	3,048,931,336	25.1	2,296,396,728	132.8	
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	
** Covered payroll was actuarially computed							

See Independent Auditors' Report.

### Schedules of Funding Progress for SPRS Insurance Funds

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, 2004	\$96,622,908	\$197,604,301	\$100,981,393	48.9%	\$43,835,208	230.4%
June 30, 2005	100,207,082	234,159,510	133,952,428	42.8	43,720,092	306.4
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
** Covered payro	ll was actuarially com	nouted				

See Independent Auditors' Report.

# Schedules of Contributions from Employers & Other Contributing Entities KERS Non-Hazardous

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Pension Funds				
June 30, 2004	\$47,739,067	\$21,696,543	-	45.4%
June 30, 2005	85,798,943	50,332,750	-	58.7
June 30, 2006	129,125,800	60,680,607	-	47.0
June 30, 2007	176,774,106	88,248,677	-	49.9
June 30, 2008	264,742,985	104,655,217	-	39.5
June 30, 2009	294,495,010	112,383,083	-	38.2
June 30, 2010	348,494,678	144,050,560	-	41.3
June 30, 2011	381,915,236	193,754,471	-	50.7
June 30, 2012	441,094,470	214,786,132	-	48.7
June 30, 2013	485,395,934	280,874,152	-	57.9
Insurance Funds				
June 30, 2004	\$77,951,553	\$78,016,737	-	100.1%
June 30, 2005	86,974,271	49,909,228	-	57.4
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
Total				
June 30, 2004	\$125,690,620	\$99,713,280	-	79.3%
June 30, 2005	172,773,214	100,241,978	-	58.0
June 30, 2006	331,624,102	108,315,246	-	32.7
June 30, 2007	396,543,070	152,263,009	\$10,744,049	41.1
June 30, 2008	823,488,805	161,400,159	6,633,538	20.4
June 30, 2009	657,202,388	186,926,015	8,167,982	29.7
June 30, 2010	725,050,865	238,027,477	8,550,914	34.0
June 30, 2011	676,813,049	323,090,023	-	47.7
June 30, 2012	738,998,694	370,843,348	-	50.2
June 30, 2013	771,539,068	446,204,709	-	57.8

### Schedules of Contributions from Employers & Other Contributing Entities KERS Hazardous

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Pension Funds				
June 30, 2004	\$9,600,978	\$9,769,580	-	101.8%
June 30, 2005	9,449,878	9,758,547	-	103.3
June 30, 2006	10,787,472	10,803,206	-	100.1
June 30, 2007	12,219,689	13,237,321	-	108.3
June 30, 2008	14,147,341	15,257,079	-	107.8
June 30, 2009	15,708,254	15,843,289	-	100.9
June 30, 2010	17,814,630	17,658,058	-	99.1
June 30, 2011	20,605,070	19,140,508	-	92.9
June 30, 2012	20,264,754	20,808,540	-	102.7
June 30, 2013	21,501,581	27,333,681	-	127.1
Insurance Funds				
June 30, 2004	\$14,942,092	\$14,959,617	-	100.1%
June 30, 2005	15,892,977	15,395,977	-	96.9
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
Total				
June 30, 2004	\$24,543,070	\$24,729,197	-	100.8%
June 30, 2005	25,342,855	25,154,524	-	99.3
June 30, 2006	39,305,035	27,814,951	-	70.8
June 30, 2007	43,524,467	32,772,140	\$104,669	75.5
June 30, 2008	65,362,270	37,254,420	73,891	57.1
June 30, 2009	50,378,721	36,650,493	186,081	73.1
June 30, 2010	52,859,908	39,579,593	319,059	75.5
June 30, 2011	50,190,327	39,093,088	-	77.9
June 30, 2012	48,590,960	45,346,627	-	93.3
June 30, 2013	47,754,492	53,016,084	-	111.0

# Schedules of Contributions from Employers & Other Contributing Entities CERS Non-Hazardous

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Pension Funds				
June 30, 2004	\$43,111,505	\$44,028,465	-	102.1%
June 30, 2005	53,117,955	54,616,800	-	102.8
June 30, 2006	83,123,669	90,834,052	-	109.3
June 30, 2007	112,508,305	124,260,850	-	110.4
June 30, 2008	138,311,398	150,925,334	-	109.1
June 30, 2009	161,097,151	179,284,551	-	111.3
June 30, 2010	186,724,383	207,075,842	-	110.9
June 30, 2011	218,984,628	248,518,574	-	113.5
June 30, 2012	261,764,019	275,736,191	-	105.3
June 30, 2013	294,914,244	294,914,244		100.0
Insurance Funds				
June 30, 2004	\$89,289,520	\$89,344,241	-	100.1%
June 30, 2005	106,612,633	106,638,253	-	100.0
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
Total				
June 30, 2004	\$132,401,025	\$133,372,706	-	100.7%
June 30, 2005	159,730,588	161,255,053	-	101.0
June 30, 2006	356,066,426	219,701,869	-	61.7
June 30, 2007	398,108,795	271,869,651	\$9,623,431	70.7
June 30, 2008	544,853,127	347,035,445	6,003,181	64.8
June 30, 2009	425,830,683	303,137,162	7,623,628	73.0
June 30, 2010	453,055,709	373,682,939	9,156,991	84.5
June 30, 2011	432,414,052	435,404,150	-	100.7
June 30, 2012	476,185,027	447,661,027	-	94.0
June 30, 2013	490,475,114	454,906,887	-	92.7

# Schedules of Contributions from Employers & Other Contributing Entities CERS Hazardous

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Pension Funds				
June 30, 2004	\$27,050,382	\$27,640,775	-	102.2%
June 30, 2005	39,437,725	39,947,747	-	101.3
June 30, 2006	44,059,404	49,976,485	-	113.4
June 30, 2007	53,889,838	61,553,118	-	114.2
June 30, 2008	64,082,063	72,154,734	-	112.6
June 30, 2009	69,056,365	78,151,677	-	113.2
June 30, 2010	76,390,669	82,887,128	-	108.5
June 30, 2011	78,795,602	85,078,181	-	108.0
June 30, 2012	83,588,958	89,329,217	-	106.9
June 30, 2013	120,139,906	120,139,906		100.0
Insurance Funds				
June 30, 2004	\$47,018,046	\$47,036,777	-	100.0%
June 30, 2005	54,094,495	54,106,577	-	100.0
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
Total				
June 30, 2004	\$74,068,428	\$74,677,552	-	100.8%
June 30, 2005	93,532,220	94,054,324	-	100.6
June 30, 2006	142,356,939	114,830,263	-	80.7
June 30, 2007	169,828,737	131,625,903	\$656,523	77.9
June 30, 2008	232,805,702	162,267,934	419,774	70.0
June 30, 2009	195,813,713	148,936,918	627,938	76.4
June 30, 2010	205,618,118	165,930,003	1,493,440	81.4
June 30, 2011	188,022,269	183,670,467	-	97.7
June 30, 2012	194,351,535	181,892,881	-	93.6
June 30, 2013	222,150,578	205,459,299	-	92.5

### Schedules of Contributions from Employers & Other Contributing Entities SPRS

Year Ended	Annual Required Contributions	Actual Contributions	Retiree Drug Subsidy Contributions	Percentage Contributed
Pension Funds				
June 30, 2004	\$1,175,711	\$1,152,752	-	98.0%
June 30, 2005	3,730,805	2,851,461	-	76.4
June 30, 2006	6,352,777	4,244,445	-	66.8
June 30, 2007	9,023,665	6,142,326	-	68.1
June 30, 2008	13,823,490	7,443,277	-	53.8
June 30, 2009	15,951,841	8,186,259	-	51.3
June 30, 2010	18,764,941	9,489,399	-	50.6
June 30, 2011	18,463,372	12,657,225	-	68.6
June 30, 2012	20,497,924	15,361,781	-	74.9
June 30, 2013	23,117,291	18,501,090	-	80.0
Insurance Funds				
June 30, 2004	\$8,434,834	\$8,455,498	-	100.2%
June 30, 2005	8,608,536	6,631,031	-	77.0
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
Total				
June 30, 2004	\$9,610,545	\$9,608,250	-	100.0%
June 30, 2005	12,339,341	9,482,492	-	76.8
June 30, 2006	18,907,425	11,124,962	-	58.8
June 30, 2007	24,256,985	12,630,926	\$361,942	53.6
June 30, 2008	57,293,225	14,772,506	183,564	26.1
June 30, 2009	45,276,507	15,599,811	229,240	35.0
June 30, 2010	49,067,092	17,858,827	273,684	37.5
June 30, 2011	44,235,946	23,708,189	-	53.6
June 30, 2012	48,744,710	27,322,249	-	56.0
June 30, 2013	50,351,520	35,329,771	-	70.2

# Additional Supporting Schedules

# Schedule of Administrative Expenses (in Thousands)

Expense	2013	2012
Personnel		
Salaries and Per Diem	\$14,987	\$14,316
Fringe Benefits	6,349	5,561
Tuition Assistance	26	31
Total Personnel	\$21,362	\$19,908
Contractual Services		
Actuarial	\$401	\$297
Audit	169	30
Healthcare	135	
Human Resources	54	40
Legal	746	806
Medical	381	229
Miscellaneous	194	1,008
Total Contractual Services	\$2,080	\$2,410
Communication		
Printing	\$272	\$299
Telephone	154	132
Postage	507	525
Travel	101	182
Total Communication	\$1,034	\$1,138
Internal Audit		
Travel/Conferences	\$3	\$1
Dues/Subscriptions	1	2
Miscellaneous	0	1
Total Internal Audit	\$4	\$4

Note: In fiscal 2012, Administrative Expenses include the Healthcare Fees and Investment Expenses which are paid through the Pension Funds and reimbursed by the Insurance Fund.

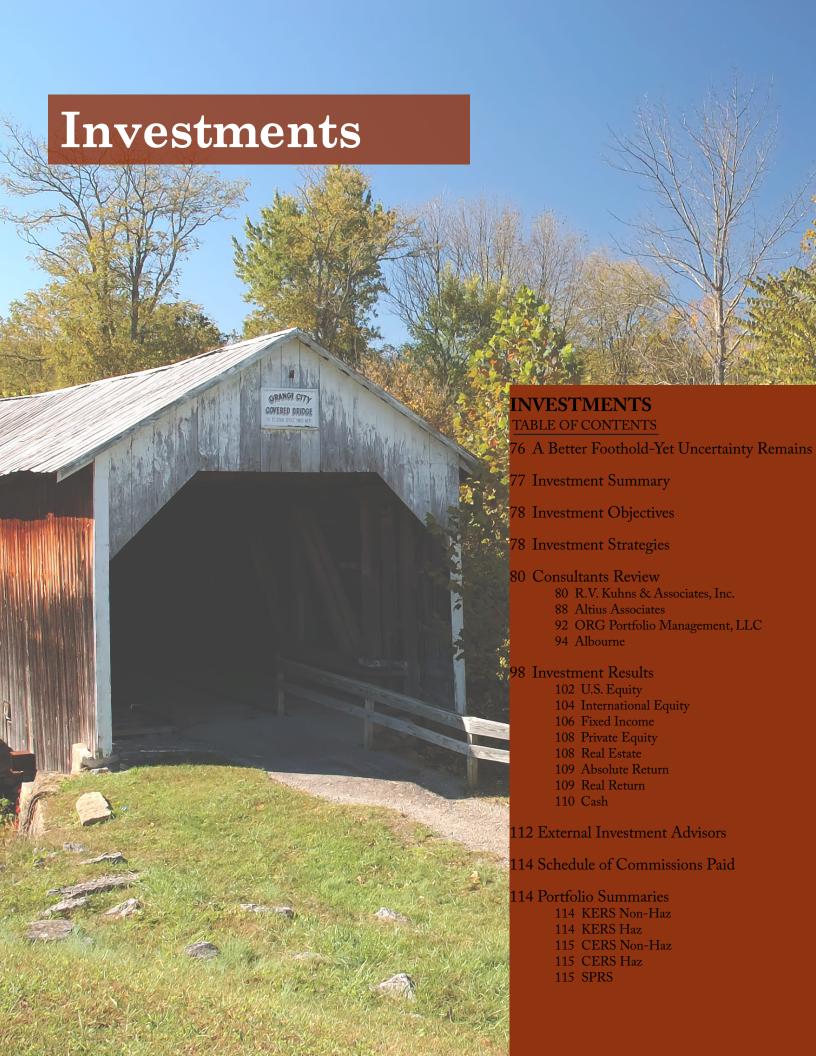
Expense	2013	2012
Investments (Pension Fund)		
Travel/Conferences	\$60	\$41
Dues/Subscriptions	41	26
Software	180	149
Contractual	1,513	858
Miscellaneous	9	15
Legal	126	265
Total Investments	\$1,929	\$1,354
Rentals		
Office Space	\$1,165	\$1,144
Equipment	54	91
Total Rentals	\$1,219	\$1,235
Miscellaneous		
Utilities	\$206	\$201
Software	1,168	
Supplies	153	140
Insurance	67	76
Maintenance	15	40
Other	122	
Total Miscellaneous	\$1,731	\$457
Depreciation/Amortization	1,219	1,279
Total Pension Fund Administrative Expenses	\$30,578	\$27,785
Investment Expenses (Insurance	ce Fund)	
Investment Consultant		\$246
Investment Related Travel		9
Dues & Subscriptions		7
Conferences		3
Miscellaneous		4
Software		43
Legal Counsel		76
Subtotal		388
Healthcare Fees	9,759	11,584
Total Insurance Fund Administrative Expenses	\$9,759	\$11,972
Total Administrative Expenses	\$40,337	\$39,757

# Schedule of Direct Investment Expenses (in Thousands)

	2013	2012
Pension Funds		
Security Lending Fees		
<b>y</b> Broker Rebates	\$(224)	\$(261)
以 Lending Agent Fees	865	229
Total Security Lending	641	(32)
Contractual Services		
บ Investment Management	41,128	37,730
■ Security Custody/Investment Consultant	1,513	858
บ Investment Related Travel	52	31
<b>y</b> Software	180	149
<b>u</b> Dues & Subscriptions	41	26
<b>y</b> Conferences	8	10
ນ Miscellaneous	9	15
<b>y</b> Legal Counsel	126	265
Total Contractual Services	43,057	39,084
Insurance Funds		
Security Lending Fees		
<b>y</b> Broker Rebates	15	(153)
<b>u</b> Lending Agent Fees	282	68
Total Security Lending	297	(85)
Contractual Services		
y Investment Management	9,599	8,029
¥ Security Custody/Investment Consultant		246
ע Investment Related Travel		9
¥ Software		43
ע Dues & Subscriptions		7
ע Conferences		3
ע Miscellaneous		4
ע Legal Counsel	0	76
Total Contractual Services	9,599	8,417
Total Investment Expenses	\$53,594	\$47,384

## Schedule of Professional Consultant Fees (in Thousands)

Fees	2013	2012
Actuarial Services	\$401	\$297
Medical Review Services	381	229
Audit Services	169	30
Legal Counsel	872	806
Compliance		98
Workflow		28
Healthcare	135	699
Banking	9	66
Human Resources	54	40
Miscellaneous	186	117
Total	2,207	2,410



# A Better Foothold - Yet Uncertainty Remains

The economic problems post financial crisis continue to overhang the financial markets; however, the financial markets and economy continue to move forward with the support of the Federal Reserve. For the 2013 fiscal year, the economy was healthier and the financial markets were in somewhat better shape than they had been for several years.

> Individuals' personal balance sheets have been strengthened and this has given consumers confidence to increase their spending. Corporations have worked to strengthen their own balance sheets, but have had little motivation to invest in plant and equipment or hire additional workers. Despite the improved conditions, the theme for the year was one of market uncertainty, brought on by issues in Europe, Federal Reserve actions, and U.S. politics. The fixed income markets would prove susceptible to these influences; however, the equity markets, in particular within the developed world, would prove to be resilient.

> The European debt crisis had reached a peak by the start of the fiscal year leaving global investors to consider the implications of a Eurozone break up. A European recession seemed inevitable, and the question became to what extent would this effect the fragile U.S. recovery. Investors piled into U.S. Treasuries seeking safety while flattening the yield curve. In response to debt crisis in Europe and the fear of contagion, the European Central Bank along with several other central banks, including the Fed, issued additional economic stimulus plans. This reassured investors and a rotation transpired from risk-off to risk-on investments, meaning securities with higher risk, and potentially higher returns, were sought after causing a sell-off of U.S. Treasuries (several months of negative returns). Efforts to stabilize the global economy continued during the year with several central banks pledging to support economic efforts giving rise to investor sentiment and ultimately riskier assets.

> Leading up to U.S. elections, the Fed announced that it would begin another round of quantitative easing which would entail purchasing \$40 billion worth of mortgage-backed securities per month,

in conjunction with the already monthly purchase of \$45 billion of Agency MBS. This program would soon end and another would take its place, this time the \$45 billion monthly purchase would be aimed at longterm Treasuries. At the same time, the Fed stated that it would no longer estimate when it would lift its federal funds rate, but rather stated the program would continue until reaching an unemployment rate below 6.5% and an inflation rate at or above 2.5%.

Coming out of the November elections, the U.S. was essentially left with a house divided, and a new source of uncertainty was looming. As if the Eurozone debt debacle and uncertainty brought about with the elections were not enough, the U.S. was now standing at the edge of a "Fiscal Cliff", with global markets anxiously paying attention to policymakers. Essentially, the U.S. was faced with the expiration of the Bush-era tax cuts and the large spending cuts set to take place. This was considered a double-edged sword for the frail economy; effectively increased taxes in conjunction with less government spending could hamper the economy from two sides. Despite healthy debate, congress was able to reach an agreement regarding taxes which minimized the impact felt; spending cuts were delayed and an increase in the debt-ceiling was reached.

During the last quarter of the 2013 fiscal year, additional market volatility was felt, not from an impending crisis or economic or political turmoil, which seemed to persist during the period, but from a statement made by the Federal Reserve. The Fed announced that it might begin to taper its support of the economy by the end of 2013, and end its stimulus package by mid-2014. Volatility in the markets spiked, stock markets fell and interest rates spiked; markets normalized once the Fed stated its policies would not change in the near-term.

Fed Federal Reserve

> **MBS** Mortgage Backed Securities

**GDP** Gross Domestic Product Currently, economic growth, which to date has been primarily driven by support by the Fed, continues to plug along at a slow pace, around 2% as measured by GDP. The unemployment rate has come down steadily for a few years now, but has been stubborn in doing so. Job growth that was once spurred by government positions, is now being led by the private market. Despite the unemployment rate dropping, a factor in that is the decline in the labor participation rate, which is near the lowest levels in decades, obviously a concern and stumbling block for future growth. A bright spot in today's economy is the housing market, which many point to as a driving factor of the 2008 recession. Housing starts and existing home sales have improved, and prices seem to have stabilized and shown signs of improvement as well. A jump start to the housing market is vitally important from a manufacturing and employment perspective, but also from a wealth effect. Many Americans greatest asset is their home, and when one feels more stable and secure, consumer confidence usually follows.

The 2013 fiscal year was full of uncertainty, which caused volatility spikes in the market throughout the twelve month period. As stated above, when the dust settled, public equities performed well, especially within the developed markets, and high yield fixed income investors were rewarded. In

addition, investments in real estate and absolute return strategies were solid performers, while more traditional fixed income investors suffered losses.

**Pension Funds Respond** Despite a strong surge from the public equity and high yield fixed income spaces, questions surrounding how pension funds will meet their expected return targets and thus fund their liabilities are valid and taking center stage. Now more than ever, funds are faced with the challenge to meet return expectations in a slow growth environment and have turned to alternative investment strategies to do just that; private equity, real estate, real return strategies (such as inflation linked bonds and commodities), and absolute return strategies, achieved through a reduction in both traditional bonds and public equities, are being employed more significantly. KRS has already moved in this direction while still keeping a close eye on how the new asset classes impact returns, risks, and liquidity within the portfolios. Along with the additional asset classes now at staff's disposal, recently approved target asset allocations for each plan (in response to the changing nature of the markets and individual plan needs) have been implemented by Staff. The fiscal year was characterized by a continued build out of the portfolios.

### INVESTMENT SUMMARY



#### **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. The Board of Trustees is charged with the responsibility of investing the Systems' assets to provide benefits to 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 Board of Trustees approved a new target asset allocation beginning July 1, 2011. The Board's investment policy as of June 30, 2013 is outlined below.

### Board Investment Policy for Fund Asset Allocation

Asset	Pension Fund	Insurance Fund
U.S. Equity	20.5%	20.0%
International Equity	20.0%	20.0%
Emerging Market Equity	2.9%	4.0%
Core Fixed	9.6%	10.0%
High Yield	4.8%	5.0%
Global Fixed	4.9%	5.0%
Private Equity	10.0%	10.0%
Real Estate	4.5%	5.0%
Absolute Return	10.0%	10.0%
Real Return	10.0%	10.0%
Cash	2.8%	1.0%



#### **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.

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

**Short-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.

**INVESTMENT STRATEGIES** 

The objectives of the portfolios are to produce results that exceed the stated goals.

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 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. As the following charts depict, the Pension and Insurance portfolios were operating within the ranges established by the investment policies.

**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.

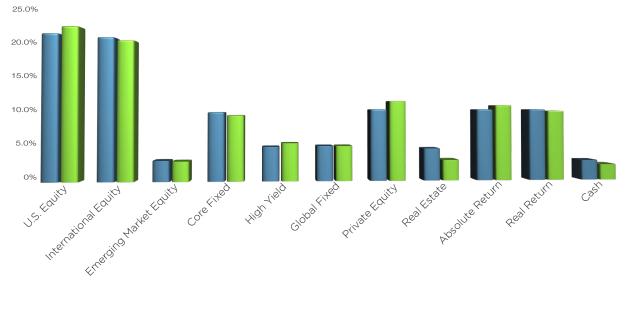
Consulting The Board employs industry leading external consultants to assist in determining and reviewing the asset allocation guidelines and the performance of both the internally managed and externally managed assets. A letter from each consulting firm utilized follows this introduction and discusses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

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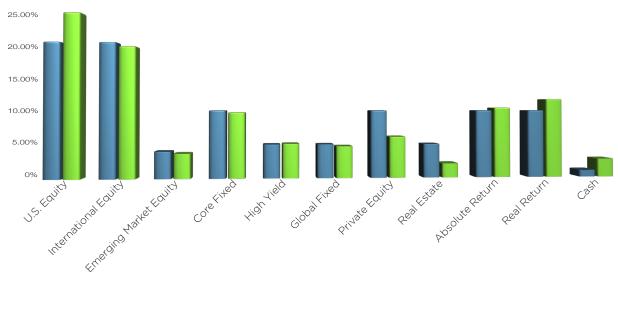
### Asset Allocation Board Policy vs. Actual (Rebalanced)

Asset	Policy's Pension Asset Allocation	Actual Pension Asset Allocation	Policy's Insurance Asset Allocation	Actual Insurance Asset Allocation
U.S. Equity	20.5%	21.5%	20.0%	24.3%
International Equity	20.0%	19.6%	20.0%	19.4%
Emerging Market Equity	2.9%	2.8%	4.0%	3.7%
Core Fixed	9.6%	9.2%	10.0%	9.7%
High Yield	4.8%	5.3%	5.0%	5.1%
Global Fixed	4.9%	4.9%	5.0%	4.7%
Private Equity	10.0%	11.2%	10.0%	6.1%
Real Estate	4.5%	2.9%	5.0%	2.1%
Absolute Return	10.0%	10.6%	10.0%	10.4%
Real Return	10.0%	9.8%	10.0%	11.7%
Cash	2.8%	2.2%	1.0%	2.7%

### PENSION FUND







#### **ECONOMIC REVIEW**

By Rebecca A. Gratsinger CEO, Principal R.V. Kuhns & Associates The start of the fiscal year proved difficult for global investors grappling with fears of a disorderly breakup of the Eurozone, which pushed the 10-year U.S. Treasury yield to a record low of 1.4% in July 2012.

To protect their struggling economies, most major central banks issued unprecedented stimulus packages that propelled markets from a "risk-off' environment (risk adverse) to a "risk-on" environment (risk appetite). U.S. Treasury yields rose from the record low to 2.5% by the end of the fiscal year in June 2013.

Fears surrounding the U.S. facing a "fiscal cliff" (expiration of Bush-era tax cuts and commencement of large spending cuts) peaked after the November elections, which resulted in split-party control of the two Legislative Branches. Those fears allayed following a late deal that minimized the number of tax payers affected by tax hikes. The spending cuts to the U.S. budget, referred to as budget sequestration or sequester, which threatened to derail U.S. economic growth commenced on March 1, 2013, had limited immediate impact on Wall Street as capital markets continued to climb higher. By the second half of the fiscal year, the housing market showed continued signs of recovery as housing starts rose above levels not seen since July 2008.

The first quarter of the fiscal year (CY 3Ql2) began with a strong statement from the European Central Bank ("ECB") followed by several other central banks around the global with new stimulus packages to support their waning economies. Leading into the first fiscal quarter, investors feared there would be an economic setback in the U.S., and Europe was quickly heading toward a recession. The negative sentiment pushed investors into U.S. Treasuries and flattened the yield curve. Once the Federal Reserve, ECB, and China issued plans for economic stimulus packages, followed by South

Africa and Brazil cutting their respective interest rates, investors flipped the switch from risk-off to risk-on. Securities with higher risk became more attractive, and U.S. Treasuries actually returned negative results for the months of August and September, starting a trend that would continue for the next three quarters.

The developed and emerging markets benefited from the ECB firmly supporting the euro and stable rates by committing to buy short-term government debt of struggling euro countries. In July, ECB President Mario Draghi released a statement confirming that the ECB would do "whatever it takes" to support the euro. By September, the ECB had launched a bond purchase program called "Outright Monetary Transactions", which offered countries support for sovereign debt under the condition that participating countries commit to strict fiscal reforms. The condition was a difficult one for those countries that had recently completed election cycles where austerity was a big and unloved topic.

One country in dire need of capital was Spain, whose government feared the possible downgrade to a junk rating by Moody's. Such a move would have triggered an automatic sell of their sovereign debt by certain investors with ratings restrictions, and subsequently raise Spain's borrowing rate. In October, Moody's kept them at investment grade but on negative watch.

In September, the Fed announced the newest round of quantitative easing ("QE3") which involved purchasing \$40 billion per month of Agency mortgage-backed securities ("MBS") until the Fed saw signs of improvement in the jobs market. This was in addition to the \$45 billion the Fed was purchasing per month in Agency MBS from coupons and prepayments from their current MBS portfolio, known as Operation Twist.

Riskier markets gained momentum during the second fiscal quarter (CY 4Q12) as the global stimulus packages boosted investor sentiment.



European Central Bank

### Fed

Federal Reserve

### MBS

Mortgage Backed Securities Remaining consistent with its policy of transparency, the Fed announced at the end of 2012 that they would no longer estimate the year and quarter by which they anticipated raising the federal funds rate. Instead, they targeted an unemployment rate at or below 6.5% and an inflation rate at or above 2.5%. In addition, the Fed announced it would extend the bond purchase program, with plans to initially purchase \$45 billion in long-term Treasuries per month as a replacement to Operation Twist. During the quarter, Japan also announced plans to institute a similar bond purchase program to jump-start its long-languishing economy, further increasing the supply of money around the globe. As the quarter came to a close, headlines were dominated with the "Fiscal cliff', a group of tax increases and spending cuts that were scheduled to take effect at the beginning of 2013.

At the start of the third fiscal quarter (CY 1Q13), lawmakers reached a deal on tax issues, postponed \$85B in spending cuts, known as the sequester, until March 1, and extended the debt ceiling until May 19. The Bureau of Economic

Analysis released the calendar fourth quarter 2012 U.S. GDP estimate at 0.4%, which was an upward revision from -0.1 %. Unemployment figures, a key statistic for the Fed's monetary policy, hovered around 7.6%, still far above the 6.5% milestone. Internationally, a bailout deal in Cyprus dominated headlines as the quarter came to a close. After a  $\in$ 1 0 billion deal was reached, the country was forced to impose capital controls to prevent a bank run, a first in the history of the Eurozone.

The Fed continued to make full use of another non-traditional policy tool - communication - with various degrees of success during the fourth fiscal quarter (CY 2Q13), causing market volatility. The Fed announced that they may begin to taper QE3 by the end of the calendar year and may end the program by mid-2014 based on their economic projections. Markets initially responded negatively, as interest rates rose and stock prices dropped, before rebounding on assurance that the Fed would not take action in the short term.

Indicator	June 2013	June 2012	Yr/Yr	20 Year	40 Year
Capacity Utilization	77.80	78.90	•	79.00	80.00
ប Unemployment Rate	7.60%	8.20%	<b>A</b>	6.00%	6.50%
ע PMI - Manufacturing	50.90	49.70	<b>A</b>	52.00	51.80
ש Baltic Dry Index - Shipping	1,171	1,004	<b>A</b>	2,414	2,056
Real GDP Year-Over-Year	1.60%	2.20%	•	2.50%	2.70%
Consumer Confidence	82.10	62.00	<b>A</b>	93.26	91.09
Breakeven Inflation - 10 Year	1.99	2.10	•	N/A	N/A
CPI Year-Over-Year (Headline)*	1.80%	1.70%	<b>A</b>	2.50%	4.40%
CPI Year-Over-Year (Core)*	1.60%	2.20%	▼	2.20%	4.20%
PPI Year-Over-Year	2.50%	0.70%	<b>A</b>	2.30%	3.90%
M2 Year-Over-Year	6.80%	9.30%	▼	5.90%	6.60%
Personal Savings	4.40%	4.40%		3.90%	6.30%
Disposable Personal Income	0.30%	0.40%	▼	0.40%	0.50%
Personal Consumption Expenditures	1.30%	1.50%	▼	2.00%	3.90%
US Dollar Total Weighted Index	77.55	72.74	<b>A</b>	87.08	94.90
WTI Crude Oil per Barrel	\$97	\$85	<b>A</b>	\$48	\$39
Gold Spot per Oz**	\$1,235	\$1,597	▼	\$320	\$336

<sup>&</sup>lt;sup>1</sup> Based on data courtesy of Bloomberg Professional Services

<sup>\*</sup> CPI figures are cyclically adjusted

<sup>\*\* 20-</sup> and 40-year average Gold spot prices are adjusted for inflation

# Prepared by R.V. Kuhns & Associates, Inc.

#### **CAPITAL MARKETS REVIEW**



For the first half of the fiscal year, investors favored global stocks and global spread sectors over U.S. Treasuries as prevailing central bank policies helped push investors toward higher yielding assets. The sixmonth period ending December 31 generally produced strong returns for equities and riskier fixed income securities. Within the alternative investment space, U.S. and non-U.S. commercial real estate and multifamily housing showed signs of life with increased construction amid economic uncertainty and tepid GDP growth. Broadly speaking, private equity valuations rose and generated positive returns as pent-up distributions began flowing back to investors. Hedge funds posted positive returns between those of equities and fixed income with macro strategies posting the lowest returns.

The start of the second half of the fiscal year marked an all-time high for global stock markets (the U.S. outperformed Non-U.S. markets), and U.S. stocks generally continued that momentum through the end of the fiscal year with a few bumps along the way. The Fed's announcement of a possible tapering of the U.S. stimulus programs negatively affected international markets, particularly emerging markets, which ended the second half in negative territory. Most affected by the Fed's announcement were fixed income markets around the world. A massive selloff crushed bonds as investors reallocated assets in anticipation of the Fed slowing or halting its purchase programs (they later affirmed there would be no change in the short term). The rising rate environment led to significant losses across the maturity spectrum. Commodity-producing emerging market countries were further hurt by the strengthening of the U.S. dollar during the second half of the year. As the fiscal year ended, 10-year U.S. Treasury yields had risen from a low of 1.6% to 2.5% by June 30 (the highest level since the August 2011 debt ceiling crisis). Real estate values continued to climb as the U.S. enjoyed falling commercial occupancy rates while Europe experienced increases in capital inflows and transaction volumes. The Asian markets saw mixed results across the region as China experienced a liquidity shortage and slowing of economic growth, while Japan continued to be a bright spot in the global economy, as investors reacted positively to Shinzo Abe's economic revitalization strategy. Private equity continued a favorable upward trend and hedge funds generated strong returns (with the exception of macro and emerging market strategies posting negative returns).

The following table summarizes the returns earned by the major markets for the trailing one-year period ending June 30, 2013.

One-Year Trailing Performance as of June 30, 2013

Index	Description	Return
S&P 500	Large Cap U.S. Equity	20.60%
R Mid Cap	Mid Cap U.S. Equity	25.41%
R 2000	Small Cap U.S. Equity	24.20%
MSCI EAFE (Gross)	Large Cap International Equity	19.14%
MSCI EAFE SC (Gross)	Small Cap International Equity	21.25%
MSCI Emg Mkts (Gross)	Emerging Markets Equity	3.23%
Barclays US Agg Bond	U.S. Investment Grade Bonds	-0.69%
Barclays US Trsy	U.S. Treasury Bonds	-1.64%
Barclays US Trsy: US TIPS	U.S. TIPS	-4.78%
Barclays US Corp: Hi Yld	U.S. High Yield Bonds	9.49%
Wilshire US REIT	U.S. Real Estate Investment Trusts	8.41%
NCREIF ODCE (Gross)	U.S. Open End Core Real Estate	12.17%
HFRI FOF Diversified	Absolute Return	7.19%
BofA ML 3 Mo US T-Bill	U.S. Cash Equivalents	0.11%

"An uncertain market environment demands careful attention and thoughtful treatment of the assets entrusted to the Board's care by the Systems' employee participants. We expect the Board's continued high standard of care for these assets and commitment to diversification to allow the Systems to meet its long-term goals and objectives."

Rebecca A. Gratsinger CEO, Principal R.V. Kuhns & Associates

#### **ASSET ALLOCATION REVIEW**



**KERS**Kentucky Employees Retirement System

At the beginning of the second fiscal quarter, the Board completed a review of the asset allocation strategies for each of the pension and insurance plans. The purpose of the study was to review each plan's specific asset allocation strategy against its current and future cash flow requirements. The study resulted in small changes to the cash equivalents targets to better align with the liquidity needs of each plan. In addition, the KERS Non-Hazardous plan also saw a reduction in its emerging markets equity target asset allocation. In October, 2012, the statement of investment policy issued by the Board incorporated the new plan specific target asset allocations to be effective on January 1, 2013. The Board has been transitioning to the new plan specific target asset allocations in a prudent manner.

# Prepared by R.V. Kuhns & Associates, Inc.

#### **PENSION PLAN REVIEW**

The combined market value of the Kentucky Retirement Systems ("Systems") Pension Plan assets (collectively called hereafter, "The Fund") increased from \$10.7 billion on June 30, 2012 to \$11.0 billion on June 30, 2013. The Fund's investments collectively returned 11.0% for the fiscal year and compared to the 11.2% return earned by its target allocation benchmark, the Fund underperformed by 0.2%. The Fund's three- and five-year annualized returns of 9.8% and 4.9%, respectively, underperformed its target allocation benchmark of 10.5% and 5.4%, respectively. The current actuarial assumed rate of return is 7.75%, which represents the Fund's long-term return goal.

The Systems' current pension 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 Systems also invests in real return assets, real estate, absolute return strategies, and private equity.

### Pension Plan Asset Allocation vs. Target Allocation

Asset	Market Value	Allocation	KERS Target	KERS Haz Target	CERS Target C	ERS Haz Target	SPRS Target
U.S. Equity	\$2,377,421,805	21.5%	22.0%	20.0%	20.0%	20.0%	20.0%
Non U.S. Equity	\$2,158,471,074	19.6%	20.0%	20.0%	20.0%	20.0%	20.0%
Emerging Markets Equity	\$307,266,001	2.8%	0.0%	4.0%	4.0%	4.0%	4.0%
Fixed Income	\$2,144,008,289	19.4%	20.0%	19.0%	19.0%	19.0%	18.0%
Real Return	\$1,086,124,317	9.8%	10.0%	10.0%	10.0%	10.0%	10.0%
Real Estate	\$325,232,577	2.9%	3.0%	5.0%	5.0%	5.0%	5.0%
Absolute Return	\$1,165,274,234	10.6%	10.0%	10.0%	10.0%	10.0%	10.0%
Private Equity	\$1,231,630,294	11.2%	10.0%	10.0%	10.0%	10.0%	10.0%
Cash Equivalent	\$237,229,107	2.2%	5.0%	2.0%	2.0%	2.0%	3.0%
Total	\$11,032,657,699	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Effective January 1, 2013, the Board established an updated asset allocation strategy for each of the pension plans reflective of a cash equivalents target that is aligned with current and future cash flow requirements. In addition, the KERS Non-Hazardous plan removed its dedicated allocation to emerging markets equity. The table above shows the updated asset allocation strategies for each pension plan.

For each plan, the current deviations to the targets are being brought closer to the current target allocations in a prudent manner over time. For less liquid asset classes (private equity and real estate), it may take years before the current allocation is in line with the current target.

#### **INSURANCE PLAN REVIEW**

The combined market value of the Kentucky Retirement Systems Insurance Plan assets increased from \$3.1 billion on June 30, 2012 to \$3.5 billion on June 30, 2013. The Fund's investments returned 10.3% for the fiscal year, underperforming the target allocation benchmark of 11.1% by -0.8%. The Fund's three-year annualized return of 10.2% also trailed the target allocation benchmark of 12.3%. The Fund's five-year annualized return moved into positive territory, increasing from -0.2% as of June 30, 2012 to 3.5% as of June 30, 2013, but still falling short of its benchmark by -0.8%. The current actuarial assumed rate of return is 7.75%, which represents the Fund's long-term return goal.

The Systems' 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 Systems also invests in real return, real estate, absolute return strategies, and private equity.

Insurance Plan Asset Allocation vs. Target Allocation

Asset	Market Value	Allocation	Insurance Target
U.S. Equity	\$848,562,262	24.3%	20.0%
Non U.S. Equity	\$675,998,028	19.4%	20.0%
Emerging Markets Equity	\$127,994,361	3.7%	4.0%
Fixed Income	\$682,330,224	19.6%	20.0%
Real Return	\$409,589,939	11.7%	10.0%
Real Estate	\$73,968,816	2.1%	5.0%
Absolute Return	\$361,434,527	10.4%	10.0%
Private Equity	\$214,467,277	6.1%	10.0%
Cash Equivalent	\$95,034,500	2.7%	1.0%
Total	\$3,489,379,935	100.0%	100.0%

Effective January 1, 2013, the Board established an updated asset allocation strategy for the insurance plans reflective of a cash equivalents target that is better aligned with current and future cash flow requirements. The changes resulted in consistent target asset allocation strategies across all of the insurance plans, as shown in the table above.

For each plan, the current deviations to the targets are being brought closer to the current target allocations in a prudent manner over time. For less liquid asset classes (private equity), it may take years before the current allocation is in line with the current target.

# Prepared by R.V. Kuhns & Associates, Inc.

### MANAGER REVIEW

Pension Plan The domestic equity portfolio remained relatively unchanged over the trailing fiscal year and performed well on both an absolute and relative basis. The internally managed S&P 500 Index portfolio performed in line with the Index for the fiscal year, returning 20.4% versus 20.6%, respectively. The return dispersion is primarily attributed to the effect that the portfolio's small cash exposure had on performance as equity markets appreciated. Active management had a positive effect on INVESCO's Structured Core Equity portfolio as it posted a strong return of 23.8% for the fiscal year, besting the S&P 500 Index by 3.2%. Returns were mixed across the all-cap managers relative to their respective benchmarks, but posted strong double-digit returns. Within value, River Road All Cap Value [22.0%] unperformed, while Westwood All Cap Value [29.0%] outperformed the Russell 3000 Value Index return of 25.3%. Within growth, Westfield All Cap Growth returned 26.8% for the fiscal year and significantly outperformed the Russell 3000 Growth Index return of 17.6%. All three of the mid-cap managers that were funded in June 2012, Sasco Capital, Systematic Financial Management, and Geneva Capital Management, struggled to keep pace. The two value managers, Sasco and Systematic, returned 17.9% and 23.9%, respectively, both lagging the impressive Russell Mid Cap Value Index return of 27.7%. On the growth side, Geneva Capital returned 14.8% versus the Russell Mid Cap Growth Index, which returned 22.9%. The Northern Trust Structured Small Cap portfolio exceeded its benchmark, the Russell 2000 Index, by 1.2%. In total, the U.S. equity portfolio outperformed its U.S. Equity Custom Index (21.6% vs. 21.5%) for the fiscal year.

Within international equity, the non-U.S. equity portfolios all posted positive returns. The Boston Company Non-US Value Equity portfolio, which held the largest allocation within the composite as of June 2013, was the best performer, returning 19.1%, outperforming the MSCI ACW Ex US Index by 5.0%. Pyramis International Growth had strong performance compared to the Index (17.0% vs. 14.1%), while the passive BlackRock ACW Ex US Index portfolio performed in line with its benchmark (13 .9% vs. 13.6%). The Northern Trust Small Cap Equity Index portfolio ended the year

slightly above its benchmark, the MSCI ACW Ex US Small Cap Index (17.0% vs. 15.9%). In aggregate, the non-U.S. equity portfolio outperformed the MSCI ACW Ex US Index by 2.6% over the fiscal year. Within the emerging markets equity portfolio, the Systems added the BlackRock Emerging Markets Equity Index fund at the end of the fiscal year. The Plan's two emerging market equity portfolios managed by Aberdeen Asset Management and Wellington Management Company both outperformed the MSCI Emerging Markets Index, which returned 3.2% for the fiscal year. While capital in both funds appreciated, the positions sizes were subsequently reduced as a result of rebalancing and capacity concerns surrounding Aberdeen's rapidly increasing assets under management. Aberdeen continued to be the top performer, besting the benchmark by 3.2%, while Wellington also contributed to performance, outperforming by 1.1%. In aggregate, the emerging market equity portfolio outperformed the MSCI Emerging Markets Index by 2.3% over the fiscal year.

There were minimal structural changes to the fixed income portfolio over the fiscal year as the only significant change was the liquidation of Commerce Street Income Partners. Both core managers, NISA (-0.6%) and PIMCO (-0.6%) performed in line with the Barclays US Aggregate Bond Index return of -0.7%. The two high yield managers, Columbia (9.8%) and Loomis Sayles (13.2%), both added value on a relative and absolute basis, besting the Barclays US Corporate High Yield Index (9.5%) by 0.3% and 3.7%, respectfully. Manulife, the global bond manager, had an exceptional year, significantly outperforming the Barclays Multiverse Index (6.0% vs. 1.7%). The sector-specific manager, Waterfall, also significantly outperformed its benchmark, the Opportunistic Fixed Income Custom Index (Barclays US Corporate High Yield Index and Barclays ABS US Floating Rate Index), for the fiscal year (14.4% vs. 6.5%). The high yield/bank loans investment managed by Shenkman returned 7.5%, lagging the US High Yield/Bank Loans Blended Index by 1.0%. Stone Harbor, the Systems' emerging market debt manager, produced a return of 0.7%, underperforming its benchmark, the JPMorgan Emerging Market Bond Global Diversified Index, which returned 1.1%. Overall, the total fixed income portfolio returned 3.1% for the fiscal year, outperforming the Fixed Income Custom Index by 2.8%.

The Systems' real return composite primarily consists of the Systems' two TIPS managers and the PIMCO All Asset fund, with smaller allocations to three alternative real return portfolios, Tenaska Power Fund, Tortoise Capital, and the recently added, Amerra Fund. During the fiscal year, the internally managed TIPS portfolio was reduced as a result

of rebalancing; a portion of these proceeds were directed toward the PIMCO All Asset fund. While TIPS had a difficult year, both the internally managed portfolio (-4.7%) and the Weaver Barksdale TIPS portfolio (-4.6%) performed in line with the Barclays US TIPS Index (-4.8%). The PIMCO All Asset fund, which serves to diversify the real return portfolio returned 5.8%, significantly outperforming both the Barclays US Treasury 1-10 Year Index (-3.1%) and the All Asset Composite Index (2.6%). In total, the real return portfolio returned -0.6%, trailing the Consumer Price Index + 3% by -5.5%, which returned 4.8% for the fiscal year.

The alternative investment portfolio consists of an absolute return strategy portfolio, longer term investments in real estate, and private equity. The Systems continued to develop the real estate portfolio during the fiscal year with the addition of a second Walton Street Real Estate Fund and Greenfield Acquisition Partners. The fiscal year return for the real estate portfolio was 12.0% vs. 12.2% for the Real Estate Blended Index. The three multi-strategy funds of hedge funds, Blackstone Alternative Asset Management ("BAAM"), Pacific Alternative Asset Management Company ("P AAMCO"), and Prisma Capital Partners all posted strong relative performance against the one quarter lagged HFN Fund of Funds Diversified Index (8.2%), returning 12.9%, 13.1 %, and 11.0%, respectively. Additionally, the Systems' investment in Arrowhawk Durable Alpha Fund was liquidated. In aggregate, the absolute return portfolio returned 12.3% for the fiscal year. Over the past five years ending June 30, 2012, the total private equity portfolio has underperformed the Alternatives Custom Index (4.9% vs. 10.6%). However, over a longer period of 10 years, the portfolio has exceeded the Alternatives Custom Index by 2.1%.

Insurance Plan The Insurance Plan invests in all of the same portfolios as the Pension Plan with the exception of investments in INVESCO Structured Core Equity and Northern Trust International Small Cap Equity Index. During the fiscal year, the Internal International Equity portfolio was fully liquidated and the BlackRock ACWI Ex US Small Cap portfolio was funded in place of the Northern Trust International Small Cap Equity Index. 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

**Board Initiatives** During the first quarter of the fiscal year, the Board initiated a Request for Proposal (RFP) for custody services. After a comprehensive due diligence process, and with the assistance of KRS staff and R.V. Kuhns & Associates, the Board selected Bank of New York Mellon

Asset Servicing during the third quarter of the fiscal year. Preparations for the transition from Northern Trust to Bank of New York Mellon commenced thereafter, and assets were transitioned at the end of the fiscal year.

The Board continues to review the effectiveness of the approved asset allocation to meet the assumed rates of returns for the pension and insurance plans. Research, selection, and implementation of investments within alternative investment and inflation-protection strategies continue as a means to protect the portfolios in the event of market shocks and potentially higher inflationary environment. Presently, there is no clear outlook on when inflation will become a significant threat to the purchasing power of earnings generated by the portfolios. However, the Board proactively seeks investment strategies expected to mitigate the effects while contributing to the growth of the portfolios.

Oversight The Systems' investment policies, goals, and objectives, as well as the performance of its assets are regularly monitored by KRS staff, the Board, and R.V. Kuhns & Associates, Inc. These evaluations include reviews of the investment management firms and the custodial bank that serve the Systems. Market values and investment performance returns referenced above are based upon financial statements prepared by Northern Trust. We rely on their data and have not independently audited it. However, their financial statements are, to the best of our knowledge, believed to be reliable.

**Summary** An uncertain market environment demands careful attention and thoughtful treatment of the assets entrusted to the Board's care by the Systems' employee participants. We expect the Board's continued high standard of care for these assets and commitment to diversification to allow the Systems to meet its long-term goals and objectives.

**Rebecca A. Gratsinger** // CEO, Principal R.V. Kuhns & Associates, Inc. October 18, 2013

# Prepared by Altius Associates

#### **PRIVATE EQUITY MARKET OVERVIEW**

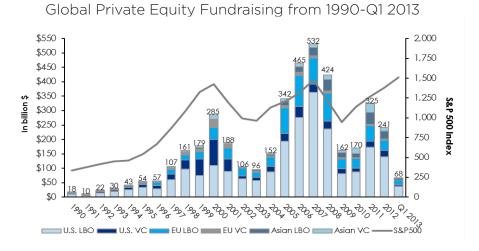
By P. Bradford Young Co-CEO, Head of Investments Altius Associates

Altius Associates was hired in December 2011 to advise the KRS Board of Trustees and Staff in its private equity investment activities. This is our second annual review of the KRS private equity investment program.

Overall, the private equity market continues to gain momentum since the recession. Highlights include:

**Fundraising** Fundraising remains challenging, but is improving for top firms. Top private equity firms have been able to quickly raise funds at target, and even cap amounts, while funds

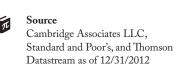


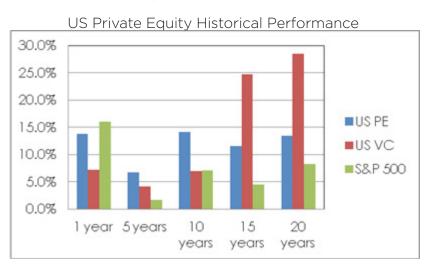


with uncertain or average performance are having difficulty fundraising. The following chart highlights global private equity fundraising since 1990:

**Deal Flow** Deal flow is stable and valuations have remained relatively steady. Many private equity firms have been actively looking for exit opportunities for existing portfolio holdings, while selectively looking for new acquisitions. The credit markets have remained liquid and favorable for strong companies.

**Distributions** Distributions for private equity portfolios have been strong over the past year. This has been a combination of recaps, dividends, exits and IPOs.





**Performance** Performance of the broader private equity industry has been solid over the past year. Five, ten, fifteen, and twenty year performance for the private equity industry remains well above public indices, as shown in the following chart.

At Altius' hiring in 2011, KRS had committed \$2.15 billion to 50 managers across the private markets spectrum including buyout, venture/growth, and credit-oriented strategies. KRS also has exposure to a number of funds as well as more opportunistic strategies. The portfolio is well diversified across strategies, in large, mid and small market buyout; venture and growth capital; and the remainder in credit and other strategies.

Altius has previously identified the following areas of focus for further development of the portfolio:

- Pursue a global fund allocation and increase direct exposure to non-US general partners
- Smooth out investment pace and refrain from being too tactical with pacing

Fund Investments	Commitment Date	Committed (in millions)	Drawn %
CVC VI	Jul-13	\$45,8	
Triton IV	Apr-13	\$49.2	
Riverside Capital Appreciation Fund VI	Dec-12	\$54.2	
Wayzata Opportunities Fund VI	Jun-12	\$54.2	5.7%
Harvest Partners VI	May-12	\$40.0	43.0%
As of 06/30/2013			

- Maintain smaller/mid-market buyout bias without increasing the number of managers
- Increase allocation per commitment and focus on maintaining a manageable number of manager relationships
- Opportunistically invest in the secondary market
- Slowly reduce exposure to pure venture capital

KRS committed to the following funds in the last 18 months:

The commitments to Triton IV and CVC VI were the first direct European private equity investments KRS has made to date. Altius will continue to introduce KRS to strong European managers in order to increase its exposure in the region. The next step in diversifying across regions would be to make investments in areas such as Asia and Latin America, which Altius considers to be attractive markets.



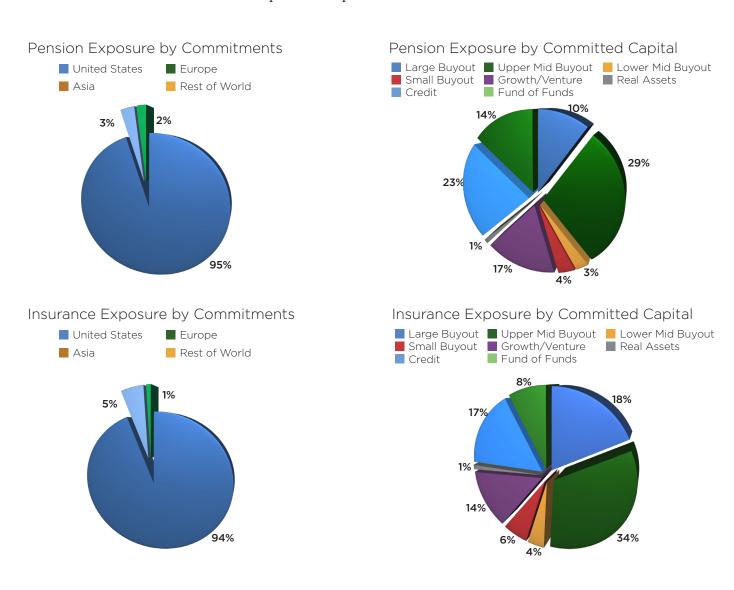
**IPO** Initial Public Offering

**USD** United States Dollar

## Prepared by **Altius Associates**

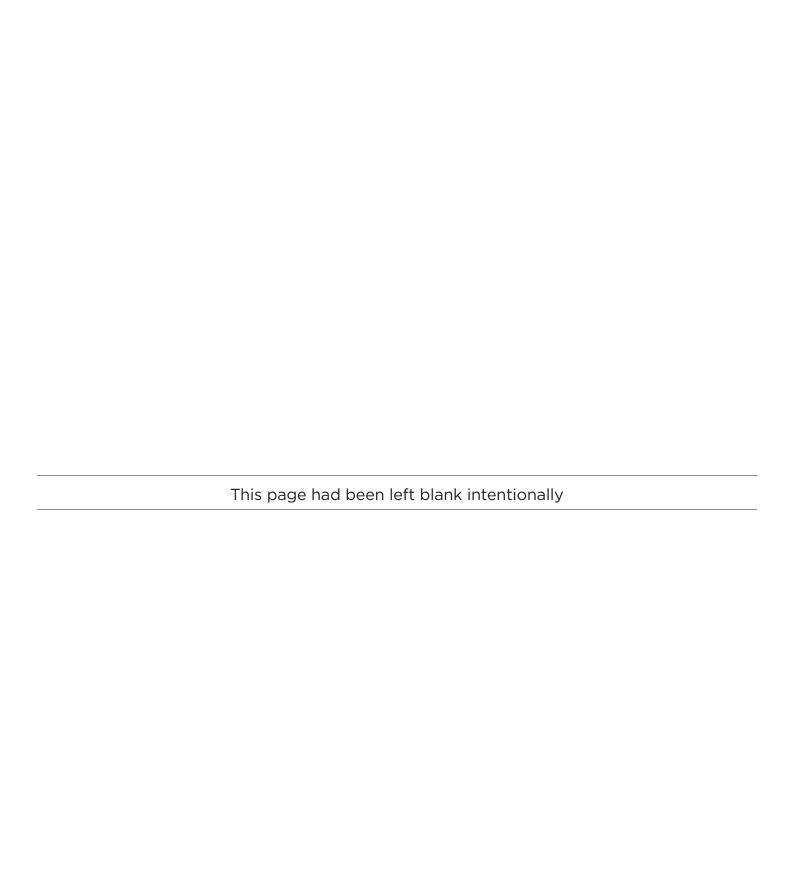
#### **PRIVATE EQUITY EXPOSURE**

As of June 30, 2013 KRS has USD2.6 billion in commitments to private equity of which USD2.0 billion has been drawn. KRS has experienced capital calls of USD28.3 million for new and follow-on investments



over the first half of 2013. In that same timeframe, there have been USD121.7 million in distributions generated by the portfolio investments. The strong distributions have been driven by the combination of exits, recapitalizations, dividends, and IPOs. The KRS pension and insurance portfolios have appreciated in 2013 (from December 31, 2012 to June 30, 2013) on a net multiple basis to 1.37x from 1.34x and 1.41x from 1.38x, respectively.

P. Bradford Young // Co-CEO, Head of Investments
Altius Associates
October 2013



## Prepared by ORG Portfolio Management, LLC

By Jonathan Berns Principal ORG Portfolio Management

ORG Portfolio Management LLC ("ORG") serves as the Real Estate Investment Consultant for 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

To this point, the KRS portfolio has been concentrated in the US, but this will become less pronounced as more commitments are made to other regions. The aim, as the portfolio matures, is to reach an allocation of approximately 60% US, 25% Europe and 15% rest of World. The exposure to different segments of the private equity space is spread quite well, given the relative attractiveness of those markets. Further, it is worth mentioning that during the year KRS was recognized by Pensions & Investments (July 2nd, 2013 press release) as being a top 10 private equity investor over the last decade amongst a universe of pension plans.

Overall, the KRS private equity portfolio is well diversified across venture, buyout and opportunistic strategies in the US. The program is now sufficiently mature to begin to make commitments internationally and Altius is well positioned to assist KRS with the continued development of the portfolio.

The U.S. economy continues its period of sustained, if still modest, growth. Consumer confidence continues to strengthen due to the improving job outlook, rising home and stock prices and increased credit availability although the prospect of credit tapering at the Federal Reserve may cause an initial spike in interest rates and increase volatility. Employment continues to grow with additional jobs in construction and office, although many of these jobs are parttime. Corporations continue to hold cash on their balance sheet and only using this cash as necessary for growth which further impacts economic growth.

The U.S. commercial real estate market continued to see improvement in 2013. The capitalization rates as of June 30, 2013 for all sectors have declined from the prior year ending June 2012.

The industrial sector continued to improve, with vacancy rates declining for twelve consecutive quarters. The greatest decline in vacancy was in Fort Worth and Nashville and leasing activity was also

reportedly strong in the Dallas, Houston and Riverside markets. Class A warehouses have been spearheading the sector recovery thus far, but leasing activity has also picked up in medium and small warehouses

The apartment sector performance was lower for the period ending June 30, 2013 by over 2.5%. Outlook remains strong, however, for recovery given recent social trends in education, marriage and family planning. New supply continues to come on to the market in response to continued strong demand and rental rates increased in every market. Class B and C properties are reportedly outpacing Class A properties in rent and occupancy, but rents are expected to remain at record levels across all classes in major metros, especially San Francisco, Texas markets, New York, Seattle and Denver.

Office sector fundamentals are showing improvement, particularly in regions with strong employment in energy, technology and professional services. Vacancy rates declined particularly in Central Business District areas, trailed by suburban markets and the market has seen a strong demand for Class A buildings as both investors and tenants search for quality and efficiency. Increased demand tempered by muted supply is expected to contribute to continued absorption.

The retail sector has continued the trend of moderate growth, with necessity and high-end retailers reporting the strongest sales as compared to their mid-market peers. A number of retailers are attempting to keep pace with the economy by experimenting with smaller footprints and scaled-back sales projections. Retailers and Class A shopping malls located in primary markets are recovering at a much quicker pace than those Class B and C malls and other retailers in secondary market locations.

Capitalization Rates	2nd Qtr. 2013	2nd Qtr. 2012	Basis Point Change				
Total	5.38%	5.56%	-0.12				
Apartments	5.05%	5.15%	-0.10				
Retail	5.64%	5.88%	-0.24				
Office	5.31%	5.46%	-0.15				
Industrial/Warehouse	6.16%	6.04%	-0.12				
Source: NCREIF - Current Value Weighted Capitalization Rates							

### ORG'S VIEW

ORG has noted that commercial real estate market slowed down over the 2012 levels based upon the National Council of Real Estate Investment Fiduciaries ("NCREIF") Property Index ("NPI") which had a 10.7% return for the period ending June 30, 2013 vs. the 12.0% return for the one year period ending June

30, 2012. The U.S. labor market continues to grow on the strength of consumer spending, although many of the new jobs are part-time. The labor participation rate is also not high by historical standards. The ratio of part-time to full-time workers remains high compared to pre-recession levels as employers are reviewing the impact of the new healthcare laws.

ORG has noted that the one year income return as of 6/30/2013 for core open end funds gross of fees as reported by the NCREIF Open-End Diversified Core Equity ("ODCE") Index is 5.3%. This low income returns 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. ORG is concerned that the strategies targeting gateway core markets will underperform expectations for core real estate.

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 suggested focus includes secondary markets (e.g., Atlanta, Houston, Dallas and Seattle among numerous others) and real estate debt.

ORG also recommends strategies in distressed opportunistic funds where investors can capitalize on the continual deleveraging 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.

#### **REAL ESTATE INVESTMENTS**

**2008-2010 Investment Activity** In December 2008, Kentucky Retirement Systems made \$40 million commitments each to 1) Mesa West Real Estate Income Fund II, 2) PRIMA Mortgage Investment Trust and 3) Walton Street Real Estate Fund VI.

- Year to Date through September 2013, Mesa West Real Estate Income Fund II made no capital calls and returned \$15.9 million in capital and preferred return distributions. Since inception, \$19.1 million has been funded with \$20.9 million remaining capital to be called.
- PRIMA Mortgage Investment Trust called Kentucky
  Retirement Systems' entire \$40 million commitment
  by the end of the 3rd quarter 2009 and the investment
  is fully funded. Year to Date through September 2013,
  PRIMA Mortgage Investment Trust distributed \$2.3
  million to KRS. Since inception, PRIMA has distributed
  \$12.2 million.
- Year to Date through September 2012, Walton Street Real Estate Fund VI made one capital call totaling \$1.6 million. Since inception, \$28.2 million has been funded with \$11.8 million remaining capital to be called.

2011 Investment Activity Kentucky Retirement Systems made 1) a \$100 million commitment to H/2 Credit Partners in April 2011 with an additional \$3 million commitment in October 2012 for a total commitment of \$103 million and 2) a \$101.9 million commitment to Harrison Street Core Property Fund in December 2011 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 called \$100 million commitment during 2011 and the additional \$3 million was called in 2012. This investment is fully funded.

Year to Date through September 2013, Harrison Street
Core Property Fund II made one capital call totaling
\$3.8 million and returned \$2.0 million of income
distributions. Since inception, \$105.7 million has been
funded with \$17.9 million remaining capital to be called.

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

- Year to Date through September 2013, Walton Street Real Estate Fund VII made one capital call totaling \$5.3 million. Since inception, \$5.3 million has been funded with \$49.6 million remaining capital to be called.
- Year to Date through September 2013, Greenfield Acquisition Partners VI made six capital calls totaling \$47.8 million and returned \$4.4 million in capital and income distributions. Since inception, \$44.6 million has been funded with \$10.3 million remaining capital to be
- Year to Date through September 2013, Mesa West Core Lending Fund made five capital calls totaling \$68.1 million.
   Since inception, \$68.1 million has been funded with \$14.9 million remaining capital to be called.

**2013 Investment Activity** Kentucky Retirement Systems made a \$30 million investment in Rubenstein Properties II, L.P. and has made no capital calls to date.

**Jonathan Berns** // Principal ORG Portfolio Management, LLC October 18, 2013

## Prepared by **ALBOURNE**

By Gailen Krug Partner Senior Portfolio Analyst KRS staff have developed a thoughtful and careful strategy, selecting managers to build a direct portfolio that is, even in its early stages, well-diversified, risk-mitigating, and structured to achieve the intended objectives.

The KRS Absolute Return and Real Return direct investment portfolios are both progressing per the portfolio structures approved during the February 5th Investment Committee Meeting.

#### **REAL RETURN DISCUSSION**

The Real Return portfolio has focused on maintaining a balance with respect to liquidity and diversification objectives. Thus far manager selection has focused on finding managers which feature intermediate duration and higher cash flow potential, whilst maintaining strong downside protection. When pursuing such managers, the challenge is seeking opportunities that will provide a high probability of meeting minimum return requirements and an implied optionality for inflation participation. Consideration has also been given to the existing real return exposures and in particular diversification away from the current TIPS allocation. Thus far successful allocations have been made to two managers. Our objectives going forward will be to continue to diversify across subsectors and strategies whilst reducing the overall TIPS exposure.

Through May and June 2013 TIPS came under significant pressure, losing almost 10% of their value, but appear to have stabilized at current levels. The abrupt response was due to signaling from the US Federal Reserve with respect to interest rates and market participation. The events of May and June highlighted the sensitivity of the asset class in an ongoing low rate environment. Thus we continue to recommend reduction of exposure to TIPs in favor of other assets that have a higher probability of meeting the minimum return requirements of institutional investors such as Kentucky Retirement Systems. As part of a diversified portfolio, TIPS have the advantage of ongoing inflationary protection; however, the return expectations, when held to maturity, are relatively unattractive. The tradeoff between liquidity and performance must be carefully considered.



MARKET & REAL ASSET COMMENTS

Though global economic conditions continue to improve, it is increasingly easy to envisage either an acceleration in growth or events that might combine to cause activity to stumble. The sharp rise in long term interest rates over the summer emphasized the degree of skill (and luck) that will be needed for the Central Banks to smoothly unwind quantitative easing, as well as the consequences, which could lead to a rapid re-pricing of assets. Plus, in the short term, the recent US government shutdown and the stalemate surrounding the debt ceiling have added to the potential future downside risks. Thus we anticipate inflationary conditions to be muted over the short term as US economic growth continues to gradually gather pace. The recovery in Europe is

likely to be gradual. Fiscal policy will be less of a drag over the coming year. In China, manufacturing data suggests that growth has started to reaccelerate, helped both by external demand and modest policy changes. Japan, the latest country to embark on aggressive monetary easing, is showing encouraging signs both in terms of growth and a rise in inflation. We anticipate the global influence on monetary inflation to be negligible over the short term, but expect increasing upward pressure on both asset and monetary inflation over the longer term. Uncertainty will remain with respect to the magnitude of anticipated increases in inflation over the long term.

The real asset universe has seen several changes over the previous 12 months. We continue to see the development of new investment vehicles in capital assets and agriculture. The traditional asset classes of timber, infrastructure and energy have shown improvements with respect to their respective investment environments. Timber investments have shown a modest recovery reporting year-over-year gains of 9%, agriculture is experiencing regional fluctuations with respect to performance with the rapid acceleration of values in the US Midwest slowing to more reasonable performance profiles.

Infrastructure has seen an increase in interest over the previous 12 months with select managers raising record size funds. Over the previous 12 months, performance in core infrastructure has been within historic norms of 8% – 12%, with greenfield projects and emerging markets performing in the mid teens. We continued to favor greenfield strategies and operational-oriented General Partners (GPs) over brownfield GPs given the higher potential returns and leverage limitations in the current market. To date, despite over 20 US states having enabled PPP legislation, a lack of political will has been a major contributor towards the limited PPP penetration in the US market. PPPs will need to be increasingly considered as a value for money alternative to the municipal bond markets, particularly in states with a poor financial position and economic outlook, where the ability to raise sufficient capital through

the municipal bond markets may be challenging. Given the modest GDP growth prospects across much of the world, assets such as toll roads, airports, and ports are likely to perform in line with growth expectations. Increasingly, contracted and/ or regulated assets are likely to continue to attract high valuations in light of the fact that these assets are better positioned for any forthcoming economic

Energy is still a favorable sector going forward for real assets and is anticipated to benefit greatly in an inflationary environment. Despite continuing pressure on natural gas prices and crude oil being fairly range bound over the previous 12 months, there appears to be a strong appetite for the space. Fundraising for oil and gas funds was buoyant in 2012, almost reaching \$20 billion. The energy space is one of the few sectors where M&A activity is robust. The midstream space may be particularly compelling as producers look for more efficient ways to get their products to market from emerging resource plays. Pricing for fully developed, contracted assets looks to be on the high side given the relative stability of midstream assets and low cost the capital of public MLPs and infrastructure funds. However, there still appears to be ample opportunity for new development. Another sector of particular interest is mining, where equity valuations remain at multiyear lows and financing for the industry is in short supply.

Overall, we believe that opportunities are setting up quite nicely for real assets and that investors such as Kentucky Retirement Systems will have ample opportunities to develop well-diversified portfolios to capture growing global demand and potential inflationary pressures arising out of this.

### PPP Public Private Partnerships

M&A Mergers & Acquisitions

MLPs Master Limited Partnerships

### **ABSOLUTE RETURN DISCUSSION**

The Absolute Return portfolio has begun implementation, with the structure approved as of the February 5th 2013 Investment Committee Meeting. An initial slate of five managers was approved for implementation during the August meeting, and these managers were selected in order to minimize creating any overweights to particular strategies during the investment process. Implementation of the total portfolio is planned to occur over a multi-year timeframe, with the goal of reducing current hedge fund of funds exposure and replacing it with direct hedge fund investments. We expect the direct portfolio to enhance the absolute return allocation in a number of ways, including reducing overall fee drag, increasing transparency, and giving better access to high quality managers. The KRS portfolio is being structured to enhance performance and mitigate risk.

#### **MARKET & HEDGE FUND COMMENTS**

**EU** European Union

CTA

Commodity Trading Advisors

FOMC Federal Open Market Committee

**QE** Quantitative Easing

ECB European Central Bank This fiscal year was punctuated by many events which impacted the market environment on a month by month basis; the following commentary is therefore designed to be a blow by blow discussion of each month during the year.

The year began in July 2012 on an upbeat note in the wake of the June 28 EU summit announcements. By mid month US corporate earnings were looking better than expected and spirits were lifted again. However in the third week of the month Italian and Spanish yields shot up, and in the case of Spain, rose into bailout territory. This finally prompted support from Mario Draghi (President of the European Central Bank), to state his willingness to do "whatever it takes" to make the Euro work, which sparked a strong risk asset rally into monthend. Most discretionary fundamental hedge fund managers were cautious on positioning at the time, with many having been whipsawed by previous changes in market sentiment; however, despite the conservative positioning, all major strategies were positive. CTAs were the strongest performers.

During August, risk markets traded up following Draghi's July 26th pledge to take control of European sovereign interest rates, and safe haven bonds sold off. Bonds reversed their sell-off on the release of FOMC minutes on August 22, noting a deceleration of economic activity and paving the way for another round of QE. Equities and commodities however continued the rally. August was a positive month for most fundamental equity and credit hedge fund strategies, while those in the directional space suffered. Only CTAs and Global Macro managers were negative for the month. Higher beta strategies were the strongest performers with the Equity Long/Short and Event Driven managers posting the biggest numbers.

In September risk assets were strong, particularly in the first two weeks as the markets rallied in response to the ECB's sovereign buying announcement, and the Fed's QE3 in the US. The month continued to be a respite from the risk-on/risk-off market environment. The rally helped bolster overall hedge fund returns during the month. The structured credit space benefited from the Fed's actions, while CTAs were negative.

Performance of risk assets was a mixed bag in

October: the month saw choppy trading in equities; Europe was the only region in which broad equity indices closed positive. Risky credit however continued to rally, and Europe too had a particularly good month. Commodities on the other hand were dismal. Across the developed world investor attention shifted away from Europe and toward the US elections and the impending fiscal cliff negotiations. It was a tough month for hedge funds that had become more bullish during Q3. The systematic and macro strategies were the worst performers. Structured credit managers continued to outperform on a relative basis.

November was a moderately good month for risk assets. Markets sold off at the beginning of the month after the US election, bounded back in the middle of the month, traded sideways for a while, and then turned up in the last week of the month. It was a positive but unspectacular month for most hedge fund strategies with Global Macro managers being the weakest performers. Equity Long/Short managers also disappointed, unable to navigate the markets. Toward the end of the month, managers slightly increased risk on the back of stronger market tones.

December was dominated by the discussions taking place in Washington surrounding the resolution to the fiscal cliff, and a last second deal was reached that averted the full impacts coming into force. Even with the uncertainty markets managed to be positive for the month. All of the major hedge fund strategies were positive for the month with Distressed being the standout performer. The month ended a year where the market movements made it a difficult environment for managers, characterized as "risk on, risk off."

January 2013 proved to be a risk-on month, though it also highlighted that correlations and in particular volatility had been more subdued versus six months earlier. The rally in assets gave hedge funds a good start to the year with all major strategies positive. The higher beta strategies were the best performers, led primarily by Equity Long/Short and Distressed managers. CTA managers were also able to participate in the rally, posting meaningful gains.

Risk asset returns were mixed to poor in February, with the exception of the US stock market. Although markets started out continuing the gains

of December and January, the Italian elections, the FOMC minutes showing concern for QE, and the UK's sovereign downgrade cast a chill over risk assets. Despite a relatively difficult month for markets, hedge funds performed well with most strategies positive for the month. CTA and Global Macro managers were the most negative strategies, versus Distressed and Structured Credit managers on the positive side.

In March, a strong beginning to the month was interrupted by the eruption in Cyprus. The fallout however proved to be less than many observers thought would be the case, despite the new and aggressive restructuring actions, and the worry that these could be used in future bailouts. Hedge funds broadly performed well, with all major strategies positive for the month. Equity Long/Short was the strongest of the major strategies, while Global Macro managers struggled the most.

During April risk assets broadly rose. The S&P closed the month at an all time high, we saw history's largest corporate bond issuance at historically low rates, and periphery sovereign spreads in Europe dropped to pre Euro-crisis levels. This was in spite of a weak ISM print and the worst payroll miss since June 2012. Equity volatility was subdued in the month, except for a spike on the day of the Boston bombings, and settled to a level not seen since early 2007. Hedge funds continued their good 2013 performance, although it was Macro and CTA's that performed the best. Equity Long/Short struggled the most.

May started well with positive economic data coming from the US, towards the end of the month the Case-Shiller housing index showed the strongest gain in house prices since 2006. This upbeat data and Bernanke's comments led to a surge in treasury yields. The fixed income markets in particular saw significant volatility. With the exception of CTA and Global Macro, hedge funds had a broadly positive month. Equity Long/Short and Event Driven strategies led the positive performers, while Global Macro and CTAs were hit badly. In particular, returns from some of the larger and more well-known CTA managers were significantly worse than

average.

The big event during June was the Fed's press conference on the 19th, perceived as more hawkish than expected. Bernanke's comments dislocated the US treasury curve, causing a significant blow to risk assets across the board. It was a difficult month for the majority of hedge fund strategies with few areas to hide; CTA's were the worst hit, but all major strategies were down for the month. Equity market neutral managers faired the best, closing the month flat.

Hedge funds are an effective business model for deploying risk capital; they benefit from markets moving toward efficiency, and we continue to believe that they are the most appropriate way to achieve the objectives set forth in the KRS Absolute Return portfolio.

Gailen Krug // Partner Senior Portfolio Analyst Albourne October 20, 2013

# 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 2013 Results The KRS pension fund produced a net return of 10.82%, which fell short of the benchmark return of 11.21%. However, the 10.82% return did meet the actuarially required rate of return of 7.75%, for the period. It should be noted that this 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 below benchmark performance of the pension fund can primarily be attributed to underperformance experienced in both the Private Equity and Real Return asset classes. The underperformance of the two asset classes can be explained in great part due to benchmarking. Private equity is a difficult asset class to appropriately benchmark as a "perfect" private equity index does not exist. There are a number of ways to address this. KRS has adopted a public equity index plus a premium model. The issue with this is when public equities perform very strongly, private equity managers are usually slower to mark the portfolio to market; this, plus a premium, exacerbates underperformance.

The effectiveness of a private equity portfolio is better

assessed at longer-term intervals. The underperformance experienced at the total fund resulting from weakness in the Real Return portfolio is also in part due to a benchmarking issue. The KRS Real Return portfolio has a healthy allocation to the U.S. TIPS market, which struggled greatly the last two months of the fiscal year due to the Fed's mention of tapering its stimulus package support. The Barclays U.S. TIPS Index is not part of the total fund's performance index, thus the benchmark is not a true rollup of the asset class's exposure. This mismatch helped to create the perceived underperformance at the total fund level.

The KRS insurance fund gained 10.11% net of expenses for the fiscal year ending June 30, 2013, compared to the benchmark's 11.05% return and the actuarially required rate of 7.75%. Like the pension fund, the insurance fund's underperformance can be primarily attributed to weakness from the Private Equity and Real Return portfolios; due to similar benchmarking issues.

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

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
KRS Total Fund	Apr-84	10.82%	9.59%	4.75%	6.60%	9.40%
Performance Benchmark <sup>2</sup>	-	11.21%	10.52%	5.39%	6.79%	9.54%

### 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	10.11%	10.10%	3.42%	6.18%	7.42%
Performance Benchmark <sup>3</sup>	-	11.05%	12.33%	4.26%	6.93%	7.81%

<sup>&</sup>lt;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>&</sup>lt;sup>2</sup>Current Policy Benchmark is compromised 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>&</sup>lt;sup>3</sup>Current Policy Benchmark is compromised 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.

#### **BENCHMARKS**

\*

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 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.

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.

### 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%

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.

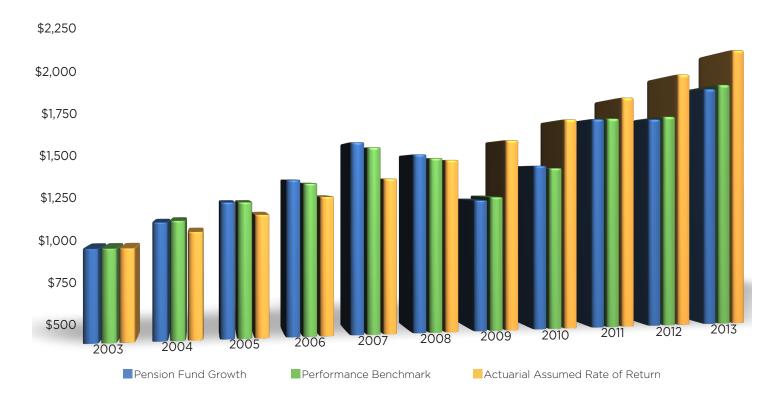
★ Note: Returns reported by KRS are "net". For the purposes of this report, total fund return information is net of fees and expenses, with audited data beginning in July 2011. At the manager or individual account level, returns are net of fees beginning with July 2011, and gross of fees for prior historical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

For the 10-years ending June 30, 2013, the KRS pension fund portfolio earned an annualized total net return of 6.60%. As shown in the investment results table, the KRS pension fund return has trailed the benchmark in all measured time periods. 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, 2013, the chart indicates that \$1,000 would have grown to \$1,902, while the same \$1,000 invested in the benchmark or in the actuarial objective would have grown to \$1,929 and \$2,139, respectively.

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

Portfolio	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Pension Fund Growth	\$1,000	\$1,136	\$1,241	\$1,361	\$1,569	\$1,503	\$1,244	\$1,441	\$1,714	\$1,717	\$1,902
Performance Benchmark	\$1,000	\$1,144	\$1,241	\$1,342	\$1,542	\$1,483	\$1,262	\$1,428	\$1,719	\$1,734	\$1,929
Actuarial Assumed Rate of Return	\$1,000	\$1,083	\$1,172	\$1,268	\$1,367	\$1,473	\$1,587	\$1,710	\$1,842	\$1,985	\$2,139

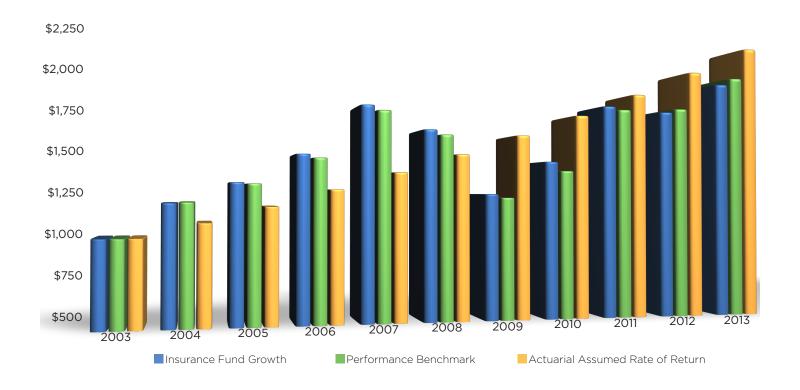


The KRS insurance fund has just underperformed its benchmark for the 10-year period ending June 30, 2013, earning 6.18% versus 6.93%. Performance is illustrated by the growth of dollars chart below. The graph highlights the performance of \$1,000 invested in the KRS insurance portfolio (\$1,915), benchmark (\$1,955), and actuarial objective (\$2,139) over the past 10 years.

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

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

Portfolio	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Insurance Fund Growth	\$1,000	\$1,194	\$1,308	\$1,469	\$1,753	\$1,616	\$1,241	\$1,433	\$1,769	\$1,739	\$1,915
Performance Benchmark	\$1,000	\$1,198	\$1,301	\$1,448	\$1,724	\$1,587	\$1,220	\$1,379	\$1,750	\$1,760	\$1,955
Actuarial Assumed Rate of Return	\$1,000	\$1,083	\$1,172	\$1,268	\$1,367	\$1,473	\$1,587	\$1,710	\$1,842	\$1,985	\$2,139



# U.S. Equity

For the fiscal year ending June 30, 2013, the KRS pension fund's U.S. equity portfolio posted a return of 21.41%, which just trailed its benchmark by 0.05%. The KRS insurance U.S. equity portfolio posted a return of 21.30%, underperforming its benchmark return by 0.16%.

★ 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.

Since inception performance remains good; the pension's equity portfolio has generated an annualized average return of 11.14% throughout its duration, while the insurance equity portfolio posted an average annual return of 9.02% (the pension fund just edging out its benchmark, while the insurance fund's allocation has trailed by 42 basis points).

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Jul-00	21.41%	18.13%	7.35%	7.92%	11.14%
▶ Performance Benchmark¹	-	21.46%	18.60%	7.46%	8.02%	11.07%
Insurance Fund	Jul-00	21.30%	17.88%	7.06%	7.61%	9.02%
☑ Performance Benchmark¹	-	21.46%	18.43%	7.18%	7.68%	9.44%
Market Indices						
Russell 1000 (Large Cap)	-	21.24%	18.63%	7.12%	7.67%	_
Russell 2000 (Small Cap)	-	24.21%	18.67%	8.77%	9.53%	-
Russell 3000 (Total Equity)	-	21.46%	18.63%	7.25%	7.81%	_

Top 10 U.S. Equity Holdings Pension Fund

Company	Shares	Market Value
EXXON MOBIL CORP COM	486,601	\$43,964,400
APPLE INC COM STK	102,082	\$40,432,639
JOHNSON & JOHNSON	332,431	\$28,542,526
GENERAL ELECTRIC CO	1,207,582	\$28,003,827
CHEVRON CORP COM	235,667	\$27,888,833
JPMORGAN CHASE & CO	524,218	\$27,673,468
MICROSOFT CORP COM	770,987	\$26,622,181
GOOGLE INC CL A CL A	28,577	\$25,158,333
PFIZER INC COM	840,083	\$23,530,725
BERKSHIRE HATHAWAY B	187,697	\$21,007,048
Total	4,715,925	\$292,823,980

Top 10 U.S. Equity Holdings Insurance Fund

Company	Shares	Market Value
APPLE INC COM STK	38,475	\$15,239,178
EXXON MOBIL CORP COM	158,136	\$14,287,588
MICROSOFT CORP COM	302,683	\$10,451,644
GOOGLE INC CL A	11,355	\$9,996,601
JOHNSON & JOHNSON	111,704	\$9,590,905
GENERAL ELECTRIC CO	367,766	\$8,528,494
WELLS FARGO & CO NEW	204,436	\$8,437,074
CHEVRON CORP COM	70,850	\$8,384,389
JPMORGAN CHASE & CO	158,358	\$8,359,719
PROCTER & GAMBLE COM	99,612	\$7,669,128
Total	1,523,375	\$100,944,719

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 timeweighted cash flow.

The relative performance is best illustrated again by the growth of a dollar charts. For the 10-year period ending June 30, 2013, the pension fund's chart indicates that \$1,000 would have resulted in \$2,145 while the same \$1,000 invested in the benchmark would result in \$2,103. For the KRS insurance fund, ending June 30, 2013, a \$1,000 investment would be valued at \$2,084, compared to \$2,095 in the benchmark.

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

Portfolio	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Pension Fund Growth	\$1,000	\$1,216	\$1,293	\$1,446	\$1,725	\$1,503	\$1,131	\$1,300	\$1,729	\$1,767	\$2,145
ע Performance Benchmark	\$1,000	\$1,214	\$1,292	\$1,411	\$1,692	\$1,468	\$1,085	\$1,261	\$1,667	\$1,731	\$2,103
Insurance Fund Growth	\$1,000	\$1,205	\$1,294	\$1,421	\$1,703	\$1,481	\$1,109	\$1,271	\$1,684	\$1,718	\$2,084
≥ Performance Benchmark	\$1,000	\$1,204	\$1,291	\$1,410	\$1,697	\$1,481	\$1,091	\$1,261	\$1,661	\$1,725	\$2,095



# International Equity

For the fiscal year, ending June 30, 2013, the KRS pension fund's international equity portfolio gained 16.45%, outperforming its benchmark by 2.31%. The KRS insurance international equity portfolio also outpaced its benchmark, posting a return of 15.96% versus 14.14% during the same twelve month period.

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.

As the accompanying table indicates, international equities experienced positive results during the fiscal year, though it should be noted that developed market investors enjoyed significant performance.

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). The KRS pension funds non-US equity portfolio has generated an annualized return of 6.22% over the trailing three-year period, while the insurance funds non-US equity portfolio saw returns that averaged 5.25% during the same period. Over the past five years, though relatively flat, both funds have outperformed their respective benchmarks. The KRS Pension and Insurance funds have posted annualized returns for the period of 0.36% and -0.43% respectively, compared to respective benchmark returns of 0.12% and -0.56%. 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	16.45%	6.22%	0.36%	7.69%	1.78%
≥ Performance Benchmark¹	-	14.14%	8.67%	0.12%	8.20%	2.42%
Insurance Fund	Apr-00	15.96%	5.25%	-0.43%	8.01%	1.78%
≥ Performance Benchmark¹	-	14.14%	8.58%	-0.56%	7.85%	1.28%
Market Indices						
MSCI ACWI Ex US	-	14.14%	8.48%	-0.34%	9.09%	-
MSCI Emerging Markets	-	3.23%	3.72%	-0.11%	7.67%	-

Pension and Insurance benchmark is the MSCI ACWI ex-US; this became effective July 1, 2011.

Top 10 International Equity Holdings Pension Fund

Company	Shares	Market Value
HSBC HLDGS ORD	2,614,560	\$27,044,730
TOYOTA MOTOR CORP	424,500	\$25,597,775
NOVARTIS AG	305,380	\$21,657,240
ROCHE HLDGS AG	84,890	\$21,084,553
TOTAL	379,245	\$18,488,526
MITSUBISHI UFJ FIN	2,740,100	\$16,881,675
UBS AG	938,371	\$15,947,794
SANOFI	153,671	\$15,904,036
ROYAL DUTCH SHELL 'A'	419,599	\$13,364,521
BP ORD USD0.25	1,931,589	\$13,337,190
Total	9,991,905	\$189,308,042

Top 10 International Equity Holdings Insurance Fund

Company	Shares	Market Value
HSBC HLDGS ORD	837,023	\$8,658,077
TOYOTA MOTOR CORP	135,900	\$8,194,906
NOVARTIS AG	97,443	\$6,910,559
ROCHE HLDGS AG	27,660	\$6,870,052
TOTAL	121,613	\$5,928,740
MITSUBISHI UFJ FIN	879,000	\$5,415,493
SANOFI	49,266	\$5,098,738
UBS AG	286,987	\$4,877,399
BP ORD USD0.25	635,291	\$4,386,542
ROYAL DUTCH SHELL 'A'	134,520	\$4,284,556
Total	3,204,703	\$60,625,063

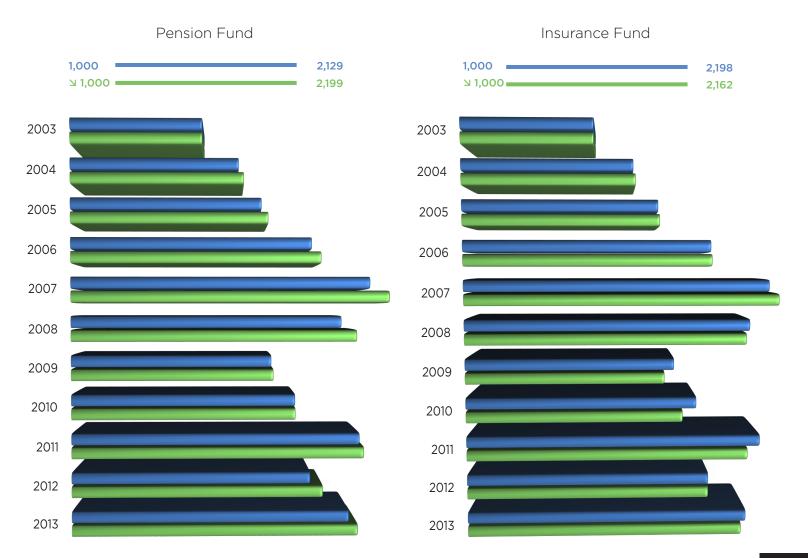
Note: KRS uses the Modified Dietz Method as its basis for calculations, which is used to determine the performance of an investment portfolio based on a timeweighted cash flow.

The following chart depicts the growth of \$1,000 invested in the KRS international equity portfolios and the blended benchmarks since FY03. For the KRS pension fund, ending June 30, 2013, \$1,000 would have resulted in \$2,129, while the same amount invested in the benchmark would have resulted in \$2,199. For the KRS insurance fund, ending June 30, 2013, \$1,000 would have grown to \$2,198, while an investment in the index would have been valued \$2,162.

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

Portfolio	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Pension Fund Growth	\$1,000	\$1,277	\$1,451	\$1,836	\$2,285	\$2,065	\$1,527	\$1,711	\$2,209	\$1,828	\$2,129
ע Performance Benchmark	\$1,000	\$1,317	\$1,503	\$1,910	\$2,436	\$2,186	\$1,544	\$1,714	\$2,244	\$1,927	\$2,199
Insurance Fund Growth	\$1,000	\$1,299	\$1,489	\$1,899	\$2,357	\$2,210	\$1,618	\$1,795	\$2,302	\$1,895	\$2,198
ע Performance Benchmark	\$1,000	\$1,317	\$1,503	\$1,910	\$2,436	\$2,186	\$1,544	\$1,689	\$2,207	\$1,895	\$2,162

The non-U.S. equity portfolio included emerging market equity exposure from 03/31/08 through 06/30/11; a separate growth of a dollar chart for the emerging market equity asset class will be produced once the Systems have experienced a sufficient history within the space. In addition, the non-U.S. equity portfolio growth chart includes the currency overlay for the 2012 fiscal year; in prior years the impact of the currency overlay program was rolled up into the aggregate return of the funds. The Systems no longer employ a currency overlay mandate.



## Fixed Income

For the fiscal year, ending June 30, 2013, the KRS pension fund's fixed income portfolio returned 2.67%, outperforming its performance benchmark by 2.43%.

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.

As the accompanying table indicates, both of the broad market indices, the Barclays Aggregate Index and the Barclays US Universal Index, posted fairly flat returns for the twelve month period ending June 30, 2013; however, the Barclays High Yield Index performed very well during the period. The KRS insurance fixed income portfolio posted a 2.46% rate of return, which outpaced the index by 222 basis points.

Over the past three years ending June 30, 2013, the KRS pension fund's fixed portfolio has generated an annualized average net return of 5.55% versus its custom performance benchmark return of 4.16%. The insurance fund's fixed portfolio posted a 5.56% return during the same period, outpacing its benchmark return by 0.64%. Over the five year period, the pension fund has outpaced the benchmark by 41 basis points, while the insurance fund has added 49 basis points annually over its index. Over the ten year period, the pension fund has edged the benchmark by 0.13%, while the insurance fund has outperformed its benchmark by 31 basis points.

### Top 10 Fixed Income Holdings Pension Fund

Company	Par Value	Market Value
MFO PIMCO FDS PAC INVT MGMT SER ALL AST FD INSTL CL	\$27,010,972	\$323,321,331
UNITED STATES TREAS NTS DTD 02/15/2013 2% DUE 02-15-2023 REG	\$56,900,000	\$54,761,812
US TREAS BDS INDEX LINKED NOTES 2.375 DUE 01-15-2027 REG	\$35,310,000	\$49,024,766
UNITED STATES TREAS NTS INDEX LINKED 2.375 DUE 01-15- 2017 REG	\$32,200,000	\$41,158,959
UNITED STATES TREAS BDS INFLATION INDEX LINKED 3.875% 04-15-2029	\$18,399,000	\$37,512,534
UNITED STATES TREAS BDS INDEX LINKED 1.75 DUE 01-15-2028 REG	\$25,310,000	\$31,478,362
USA TREASURY NTS 1.125% TIPS 15/1/21 USD1000 01-15-2021	\$26,000,000	\$29,560,322
FNMA SINGLE FAMILY MORTGAGE 3% 15 YEARS SETTLES JULY	\$28,000,000	\$28,800,632
US TREAS BDS INDEX LINKED 2.00 DUE 01-15-2026 REG	\$20,638,000	\$27,924,025
FNMA SINGLE FAMILY MORTGAGE 4% 30 YEARS SETTLES JULY	\$26,000,000	\$27,085,708
Total	\$295,767,972	\$650,628,451
Note: The above table does not include mu	tual fund and comr	mingled positions.

## Top 10 Fixed Income Holdings Insurance Fund

Company	Par Value	Market Value
MFO PIMCO FDS PAC INVT MGMT SER ALL AST FD INSTL CL	\$8,459,107	\$101,255,515
MFO STONE HBR INVT FDS EMERGING MKTS DEBT FD INSTL CL	\$2,863,662	\$30,727,094
FNMA SINGLE FAMILY MORTGAGE 3% 15 YEARS SETTLES JULY	\$24,000,000	\$24,686,256
UNITED STATES TREAS NTS DTD 02/15/2013 2% DUE 02-15-2023 REG	\$23,800,000	\$22,905,644
FEDERAL NATL MTG ASSN GTD MTG POOL #AH5849 4.5% 02-01- 2041 BEO	\$19,059,967	\$20,599,822
US TREAS BDS INDEX LINKED NOTES 2.375 DUE 01-15-2027 REG	\$13,675,000	\$18,986,510
UNITED STATES TREAS NTS DTD 11/15/2012 1.625% DUE 11-15-2022 REG	\$17,000,000	\$15,869,772
UNITED STATES TREAS NTS DTD 00399 04-15-2017	\$15,000,000	\$15,757,759
USA TREASURY NTS TIPS DTD 00340 04-15-2016	\$13,000,000	\$14,048,449
LIC TDE ACAITC TIDC 07 15 2022	\$14.000.000	\$13.838.126
US TREAS NTS TIPS 07-15-2022	φ. 1,000,000	,,

#### Return on Fixed Income

Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Apr-84	2.67%	5.55%	5.60%	4.90%	8.07%
☑ Performance Benchmark¹	-	0.24%	4.16%	5.19%	4.77%	7.82%
Insurance Fund	Jul-00	2.46%	5.56%	5.07%	5.58%	6.94%
≥ Performance Benchmark¹	-	0.24%	4.92%	4.58%	5.27%	6.75%
Market Indices						
BC Aggregate	-	-0.69%	3.51%	5.19%	4.52%	-
BC Corporate High Yield	-	9.49%	10.74%	10.94%	8.91%	-
BC U.S. Universal	-	0.24%	4.09%	5.53%	4.84%	-
Pension and Insurance benchmark is the Barclays US Universal; this became effective July 1, 2011.						

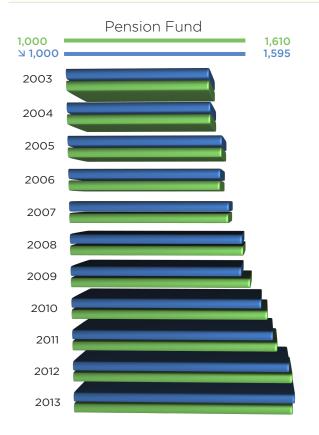
#### **GROWTH OF \$1,000**

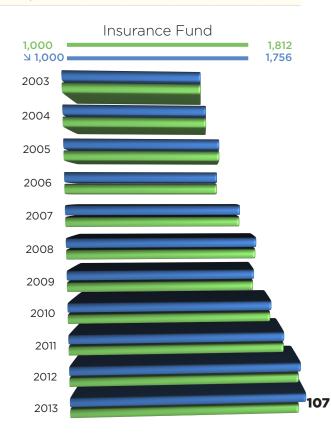
★ Note: KRS uses the Modified Dietz Method as its basis for calculations, which is used to determine the performance of an investment portfolio based on a time-weighted cash flow. The chart below shows the growth of \$1,000 invested in KRS fixed income portfolio over the past ten years. For the KRS pension fund, ending June 30, 2013, \$1,000 would have grown to \$1,610, while the same \$1,000 invested in the benchmark would have grown to \$1,595. For the KRS insurance fund, ending June 30, 2013, \$1,000 would have grown to \$1,812, which earned \$56 more than the benchmark's growth.

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

Portfolio	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Pension Fund Growth	\$1,000	\$1,009	\$1,089	\$1,076	\$1,137	\$1,229	\$1,223	\$1,367	\$1,451	\$1,569	\$1,610
ע Performance Benchmark	\$1,000	\$1,009	\$1,086	\$1,073	\$1,132	\$1,238	\$1,288	\$1,411	\$1,482	\$1,591	\$1,595
Insurance Fund Growth	\$1,000	\$1,039	\$1,136	\$1,119	\$1,291	\$1,415	\$1,399	\$1,534	\$1,635	\$1,768	\$1,812
¥ Performance Benchmark	\$1,000	\$1,039	\$1,136	\$1,117	\$1,286	\$1,408	\$1,392	\$1,525	\$1,632	\$1,752	\$1,756

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 within the space.





## Private Equity

For the fiscal year ending June 30, 2013, the KRS pension fund's private equity portfolio posted a return of 11.12%.

The portfolio consists primarily of investments within many private equity limited partnerships. The custom benchmark for the pension private equity portfolio returned 19.10% during this same period. The insurance private equity portfolio returned 11.19% versus its performance benchmark return of 19.10%. It is worth noting that it is difficult to accurately benchmark private equity investments over short time periods. 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.

As the accompanying table indicates, the past few years of market volatility combined with very strong public markets this past fiscal year has impacted the intermediate results in the private equity portfolios. For the three and five years ending June 30, 2013, the pension fund's private equity portfolio trailed its benchmark by -6.02% and -5.68%, respectively. For the three and five-year time period, the insurance fund's private equity portfolio has underperformed its benchmark by -5.50% and -2.83%, respectively. However, for the ten year period, both the pension and insurance funds have outpaced their respective indices by 2.09% and 0.52%. Since its inception in October 1990, the pension portfolio has outpaced its benchmark by 1.11% per year, while the insurance portfolio has outperformed its benchmark by 1.30% 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	11.12%	12.42%	4.89%	11.24%	11.00%
ע Performance Benchmark <sup>1</sup> 19.10% 18.44% 10.57% 9.15% 9.899						
Insurance Fund	Jul-01	11.19%	13.96%	6.62%	9.23%	7.31%
<b>y</b> Performance Benchmark <sup>1</sup> 19.10% 19.46% 9.45% 8.71% 6.01%						
¹Pension and Insurance benchmark is the Russell 3000 Quarter Lagged + 400bps.						

## Real Estate

For the fiscal year, ending June 30, 2013, the KRS pension fund's real estate portfolio gained 12.03%, just trailing its benchmark which gained 12.17%.

The KRS insurance real estate portfolio also fell to its benchmark, losing 173 basis points to the index, returning 10.44% for the period. For the three year ending June 30, 2013, the pension fund portfolio outpaced its benchmark by 0.26%, and the insurance fund outperformed its benchmark by 1.21%.

Return on Real Estate <sup>1</sup>						
Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Jul-84	12.03%	13.79%	7.46%	6.67%	5.57%
ע Performance Benchmark <sup>1</sup>		12.17%	13.53%	2.45%	8.58%	7.55%
Insurance Fund	May-09	10.44%	14.74%			9.22%
ע Performance Benchmark <sup>1</sup> 12.17% 13.53% 5.019						
<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, 2013, the KRS pension fund's absolute return portfolio gained 12.30% versus its benchmark which earned 8.16%.

★ 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.

The KRS insurance absolute return portfolio also bested the benchmark, out earning the index by 404 basis points, returning 12.20% for the period. Note: Though the allocation's inception date is April, 2010, the current book of managers, now consisting of three funds of funds, were employed in September 2011.

### Return on Absolute Return

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Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Apr-10	12.30%	6.34%			5.02%
ע Performance Benchmark <sup>1</sup>		8.16%	3.21%			2.99%
Insurance Fund	Apr-10	12.20%	6.35%			4.85%
ע Performance Benchmark <sup>1</sup>		8.16%	3.21%			2.99%

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

## Real Return

For the fiscal year, ending June 30, 2013, the KRS pension fund's real return portfolio fell -0.69% versus its benchmark return of 4.80%.

The KRS insurance real return portfolio trailed its index by 648 basis points, falling -1.68% for the period. The real return portfolio was a source of relative underperformance for the fiscal year, due primarily to the U.S. TIPS investments. Through the first 10 months of the fiscal year, KRS' investments within the asset class were ahead of the benchmark.

However, during the month of May, the Fed made note of its intention to temper easing, which sent the bond market into a tail spin, rates increased nearly a point, and the U.S. TIPS market fell dramatically in a very short-time period. Unfortunately, KRS had a healthy weight to those securities and fell behind the asset class' benchmark. Note: The real return allocation was formed effective July 1, 2011.

### Return on Real Return

Y Performance Benchmark¹         4.80%            4.76%           Insurance Fund         Jul-11         -1.68%            4.89%	Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Insurance Fund Jul-11 -1.68% 4.899	Pension Fund	Jul-11	-0.69%				5.45%
	Ŋ Performance Benchmark¹		4.80%				4.76%
<b>y</b> Performance Benchmark <sup>1</sup> 4.80% 2.999	Insurance Fund	Jul-11	-1.68%				4.89%
	¥ Performance Benchmark¹		4.80%				2.99%

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

## Cash

For the fiscal year, ending June 30, 2013, the KRS pension fund's cash portfolio returned 0.32%, outpacing its benchmark, the Citi Group 3-month Treasury by 0.24%.

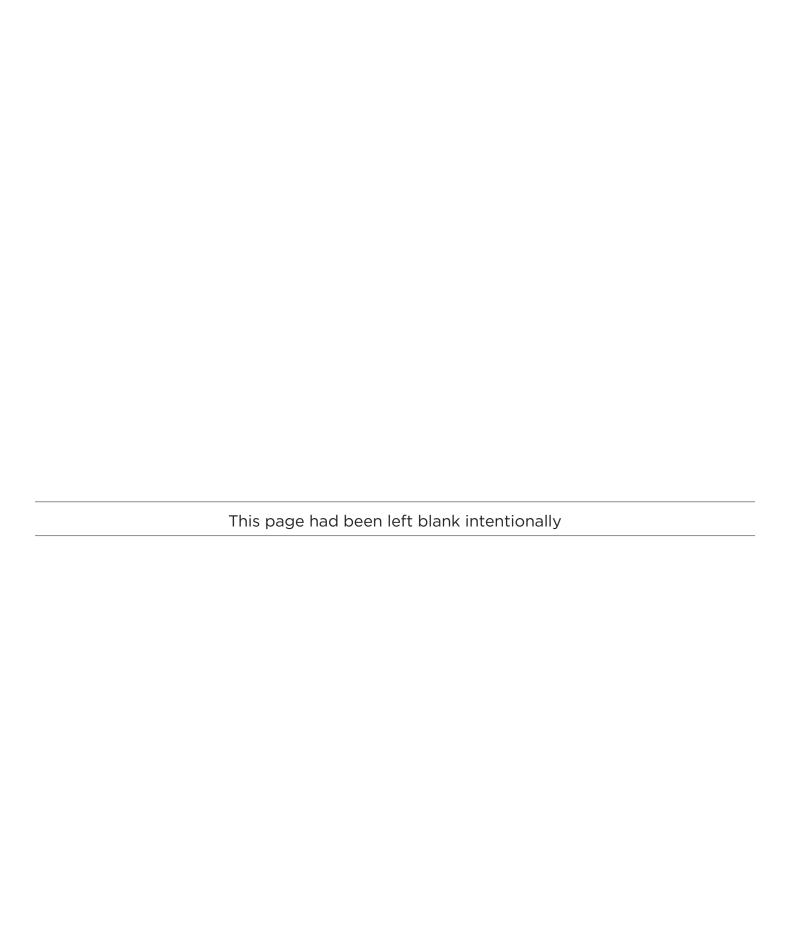
> The KRS insurance cash portfolio also outperformed the index, posting a return of 0.49% during the same twelve month period.

> 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, 2013, the pension fund portfolio has outperformed its custom benchmark by 0.48% on an annualized basis. Since its inception, the portfolio has exceeded its benchmark by 0.46% per year. The insurance portfolio has also done very well, exceeding its benchmark return over the five-year and since inception periods by 0.17% and 0.21%, respectively.

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Return	$\cap$	( $ach$
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Portfolio	Inception Date	Fiscal Year	3-Year	5-Year	10-Year	Inception
Pension Fund	Jan-88	0.32%	0.33%	0.71%	2.18%	4.15%
<b>y</b> Performance Benchmark¹		0.08%	0.09%	0.23%	1.64%	3.69%
Insurance Fund	Jul-92	0.49%	0.32%	0.40%	2.10%	3.23%
ע Performance Benchmark <sup>1</sup>		0.08%	0.09%	0.23%	1.64%	3.02%

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



Following are additional schedules which indicate the Investment Advisors employed along with the total assets each firm 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 or for the year ended June 30, 2013.

External Investment Advisors & Assets Under Management (in Thousands)

AMERRA AG Fund II, New York, New York Arbor Investments II, Chicago, Illinois 18366 Arcano Capital, New York, New York 11316 Arrowhawk Capital Partners, Darien, Connecticut Arrowhawk Capital Partners, Darien, Connecticut Arrowhawk Capital V, New York, New York 1537 Avenue Capital V, New York, New York 1538 Bay Hills Emerging Partners I, San Francisco, California 154, 22, 234 Blackstone Alternative Asset Management, New York New York 1559 Blackstone Capital Partners V, & VI, New York, New York 1560 Blackstone Capital Partners V, & VI, New York, New York 1570 Blackstone Capital Partners V, & VI, New York, New York 1570 Blackstone Capital Partners V, & VI, New York, New York 1570 Blackstone Capital Partners V, & VI, New York, New York 1570 Blackstone Capital Partners V, & VI, New York, New York 1570 Blackstone Capital Partners V, & VI, New York, New York 1570 Columbia Capital IV, Alexandria, Virginia 1570 Columbia Capital IV, Alexandria, Virginia 1570 Cormerce Street Income Partners LP, Dallas, Texas 1571 Crestview Partners II, New York, New York 1572 Dall Capital Management, Melho Park, California 1573 Bessex Woodland VIII, Palo Alto, California 1573 Geneva Capital Management, Milwaukee, Wisconsin 1574 Geneva Capital Management, Milwaukee, Wisconsin 1575 GCCR Golder Rauner IX, Chicago, Illinois 1574 Credit Partners, II, Mami, Florida 1775 HIJG BIO Venture II, Mismi, Florida 1776 HIJG BIO Venture II, Mismi, Florida 1777 Harvest Partners, II, Mami, Florida 1778 Harvest Partners, II, Mami, Florida 1779 Harvest Partners, II, Mami, Florida 1779 Harvest Partners, V & VI, New York, New York 1779 Harvest Partners, V & VI, New York, New York 1779 Horvest Partners, V & VI, New York, New York 1779 Horvest Partners, V & VI, New York, New York 1779 Horvest Partners, V & VI, New York, New York 1779 Horvest Partners, V & VI, New York, New York 1779 Horvest Partners, V & VI, Venton, New York 1779 Horvest Partners, V & VI, Venton, New York 1779 Horvest Partners, V & VI, Venton, New York 1779 Horvest Partners, V & VI, Venton, New	Advisor	Assets Under Management
Arbor Investments II, Chicago, Illinois Arcano Capital, New York, New York Arrowhawk Capital Partners, Darien, Connecticut Artio Global Investors, New York, New York Arowhawk Capital Partners, Darien, Connecticut Artio Global Investors, New York, New York Avenue Capital V, New York, New York Avenue Capital V, New York, New York Avenue Capital V, New York, New York BlackRock Global Investors, San Francisco, California BlackRock Global Investors, San Francisco, California BlackRock Global Investors, San Francisco, California Blackstone Alternative Asset Management, New York, New York Blackstone Capital Partners V & VI, New York, New York Columbia Asset Management, Minneapolis, Minnesota Columbia Capital IV, Alexandria, Virginia Columbia Capital IV, Alexandria, Virginia Commerce Street Income Partners LP, Dallas, Texas Crestview Partners II, New York, New York Delli Capital Management, Menio Park, California Basca Alexandria, Virginia Sanza Basca Alexandria, Virginia Sanza Basca Alexandria, Virginia Sanza Basca Ba	Aberdeen Asset Management, Aberdeen, Scotland	159,722
Arcano Capital, New York, New York Arrowhawk Capital Partners, Darien, Connecticut Artio Global Investors, New York, New York 55 Avenue Capital IV, New York, New York 137 Bay Hills Emerging Partners I, San Francisco, California 87,500 BlackRock Global Investors, San Francisco, California 10,42,234 Blackstone Capital Partners V & VI, New York, New York 10,42,234 Blackstone Capital Partners V & VI, New York, New York 10,42,234 Blackstone Capital Partners V & VI, New York, New York 10,42,234 Blackstone Capital Partners V & VI, New York, New York 10,42,234 Blackstone Capital Partners V & VI, New York, New York 10,42,434 Blackstone Capital Partners V & VI, New York, New York 10,42,434 Blackstone Capital Partners V & VI, New York, New York 10,42,434 Blackstone Capital Partners V & VI, New York, New York 10,42,434 Blackstone Capital Partners V, New York, New York 10,434 Blackstone Capital Partners II, New York, New York 10,434 Blackstone Capital Partners II, New York, New York 10,435 Blackstone Capital Partners II, New York, New York 10,435 Blackstone Capital Partners II, New York, New York 10,435 Blackstone Capital Partners II, New York, New York 10,435 Blackstone Capital Partners II, New York 10,435 Blackstone Capital Partners II, Miami, Florida 11,435 Blackstone Capital Partners, St. Mindin, Florida 11,435 Blackstone Capital Partners, St. Menlo Park, California 13,436 Blackstone Capital Partners, V& VI, New York, New York 14,495 Blackstone Capital Partners, London, England 10,436 Blackstone Capital Partners, London, England 10,434 Blackstone Capital Partners, London, England 10,444	AMERRA AG Fund II, New York, New York	29,535
Arrowhawk Capital Partners, Darien, Connecticut Artio Global Investors, New York, New York Avenue Capital V, New York, New York Avenue Capital V, New York, New York Bay Hills Emerging Partners I, San Francisco, California By Hills Emerging Partners I, San Francisco, California BlackRock Global Investors, San Francisco, California Blackstone Alternative Asset Management, New York, New York Blackstone Capital Partners V & VI, New York, New York Blackstone Capital Partners V & VI, New York, New York Columbia Asset Management, Minneapolis, Minnesota Columbia Capital IV, Alexandria, Virginia Commerce Street Income Partners LP, Dallas, Texas Crestview Partners II, New York, New York 58,775 Doll Capital Management, Menlo Park, California 8,570 Duff, Ackerman & Goodrich Ventures II & V, Palo Alto, California 155,386 Essex Woodland VIII, Palo Alto, California 194,225 Geneva Capital Management, Milwaukee, Wisconsin 67CR Golder Rauner IX, Chicago, Illinois 161,634 HLG BIO Venture II, Miami, Florida 18,554 HLG Venture Partners II, Miami, Florida 18,555 HLG Venture Partners Stamford, Connecticut 120,973 Harrison Street, Chicago, Illinois 107,087 Harrison Street, Chicago, Illinois 107,087 Harrison Street, Chicago, Illinois 107,087 Horsley Bridge International V LLC, San Fransico, California 13,376 Institutional Venture Partners XI, Menlo Park, California 13,376 Institutional Venture Partners XI, Menlo Park, California 13,376 Keyhaven Capital Partners, L-D,IV & VI, Los Angeles, California 14,975 Menuliffe Financial, Boston, Massachusetts 149,744 Manuliffe Financial, Boston, Massachusetts	Arbor Investments II, Chicago, Illinois	18,167
Artio Global Investors, New York, New York  Avenue Capital V, New York, New York  Bay Hills Emerging Partners I, San Francisco, California  BlackRock Global Investors, San Francisco, California  BlackRock Global Investors, San Francisco, California  BlackRock Global Investors, San Francisco, California  Blackstone Alternative Asset Management, New York, New York  Blackstone Capital Partners V & VI, New York, New York  Columbia Asset Management, Minneapolis, Minnesota  Columbia Capital IV, Alexandria, Virginia  Commerce Street Income Partners LP, Dallas, Texas  Crestview Partners II, New York, New York  Columbia Godrich Ventures II & V, Palo Alto, California  Basex Woodland VIII, Wanther Bartners II, Miami, Florida  Basex Woodland VIII, Wanther Bartners II, Wanther B	Arcano Capital, New York, New York	11,315
Avenue Capital V, New York, New York  Bay Hills Emerging Partners I, San Francisco, California  87.502  BlackRock Global Investors, San Francisco, California  1.042.234  Blackstone Alternative Asset Management, New York, New York  509.494  Blackstone Capital Partners V & VI, New York, New York  61.174  Columbia Asset Management, Minneapolis, Minnesota  221.085  Columbia Capital IV, Alexandria, Virginia  30.966  Commerce Street Income Partners LP, Dallas, Texas  Crestview Partners II, New York, New York  58.775  Duff, Ackerman & Goodrich Ventures II & V, Palo Alto, California  65.882  Essex Woodland VIII, Palo Alto, California  67.893  Essex Woodland VIII, Palo Alto, California  67.894  Essex Woodland VIII, Palo Alto, California  67.895  Essex Woodland VIII, Palo Alto, California  67.896  Essex Woodland VIII, Palo Alto, California  67.897  Essex Woodland VIII, Palo Alto, California  67.897	Arrowhawk Capital Partners, Darien, Connecticut	-
Bay Hills Emerging Partners I, San Francisco, California BlackRock Global Investors, San Francisco, California 1,042,234 Blackstone Alternative Asset Management, New York, New York 509,494 Blackstone Capital Partners V & VI, New York, New York 81,174 Columbia Asset Management, Minneapolis, Minnesota 221,085 Columbia Capital IV, Alexandria, Viginia 30,965 Commerce Street Income Partners LP, Dallas, Texas Crestview Partners II, New York, New York 58,775 Doll Capital Management, Menlo Park, California 85,705 Doll Capital Management, Menlo Park, California 1055,386 Essex Woodland VIII, Palo Alto, California 1055,386 Essex Woodland VIII, Palo Alto, California 1056,343 H.I.G BIO Venture II, Miami, Florida 11,852 H.I.G. Venture Partners II, Miami, Florida 11,852 HArvest Partners, Stamford, Connecticut 12,9973 Harrison Street, Chicago, Illinois 107,083 Harvest Partners V & VI, New York, New York 14,975 Horsley Bridge International V LLC, San Fransico, California 13,568 Institutional Venture Partners XI, Menlo Park, California 13,568 Institutional Venture Partners XI, Menlo Park, California 13,568 Institutional Venture Partners, Lendon, England 14,975 Horsley Bridge International V LLC, San Fransico, California 16,589 17,590 17,591 18,592 18,593 18,593 18,593 18,593 18,593 18,593 18,594 18,595 18,59	Artio Global Investors, New York, New York	52
BlackRock Global Investors, San Francisco, California  1,042,234 Blackstone Alternative Asset Management, New York, New York  81,174 Columbia Asset Management, Minneapolis, Minnesota  221,085 Columbia Capital Partners V & VI, New York, New York  81,174 Columbia Asset Management, Minneapolis, Minnesota  221,085 Columbia Capital IV, Alexandria, Virginia  30,965 Commerce Street Income Partners LP, Dallas, Texas  Crestview Partners II, New York, New York  58,775 Doll Capital Management, Menlo Park, California  8,570 Duff, Ackerman & Goodrich Ventures II & V, Palo Alto, California  155,386 Essex Woodland VIII, Palo Alto, California  19,425 Geneva Capital Management, Milwaukee, Wisconsin  66,643 BLG BlO Venture II, Miami, Florida  11,65 PlO Venture II, Miami, Florida  11,65 Venture Partners II, Miami, Florida  11,67 Venture Partners, Stamford, Connecticut  120,973 Harrison Street, Chicago, Illinois  13,376 Harvest Partners, V & VI, New York, New York  14,975 Horsley Bridge International V LLC, San Fransico, California  13,376 Institutional Venture Partners XI, Menlo Park, California  13,376 Institutional Venture Partners, London, England  9,756 Leonard Green & Partners, L.P.,IV & VI, Los Angeles, California  19,583 Leonard Green & Partners, L.P.,IV & VI, Los Angeles, California  19,583 Manulife Financial, Boston, Massachusetts	Avenue Capital V, New York, New York	137
Blackstone Alternative Asset Management, New York, New York  Blackstone Capital Partners V & VI, New York, New York  Blackstone Capital Partners V & VI, New York, New York  Columbia Asset Management, Minneapolis, Minnesota  Columbia Capital IV, Alexandria, Virginia  30,965  Commerce Street Income Partners LP, Dallas, Texas  Crestview Partners II, New York, New York  58,775  Doll Capital Management, Menlo Park, California  8,570  Duff, Ackerman & Goodrich Ventures II & V, Palo Alto, California  155,386  Essex Woodland VIII, Palo Alto, California  9,425  Geneva Capital Management, Milwaukee, Wisconsin  66neva Capital Management, Milwaukee, Wisconsin  67CR Golder Rauner IX, Chicago, Illinois  67CR Golder Rauner IX, Chicago, Illinois  61,432  H.I.G. BIO Venture II, Miami, Florida  H.I.G. Venture Partners II, Miami, Florida  H.I.G. Venture Partners, Stamford, Connecticut  120,973  Harrison Street, Chicago, Illinois  107,087  Hellman & Friedman VI, New York, New York  Hellman & Friedman VI, New York, New York  Horsley Bridge International V LLC, San Fransico, California  13,376  Institutional Venture Partners XI, Menlo Park, California  13,376  Institutional Venture Partners, London, England  9,756  Leonard Green & Partners, L.P.,IV & VI, Los Angeles, California  Leonard Green & Partners, L.P.,IV & VI, Los Angeles, California  19,583  Leonard Green & Partners, L.P.,IV & VI, Los Angeles, California  19,583  Hanulife Financial, Boston, Massachusetts	Bay Hills Emerging Partners I, San Francisco, California	87,502
Blackstone Capital Partners V & VI, New York, New York Columbia Asset Management, Minneapolis, Minnesota 221,085 Columbia Capital IV, Alexandria, Virginia 30,965 Commerce Street Income Partners LP, Dallas, Texas Crestview Partners II, New York, New York 58,775 Doll Capital Management, Menlo Park, California 8,570 Duff, Ackerman & Goodrich Ventures II & V, Palo Alto, California 155,386 Essex Woodland VIII, Palo Alto, California 19,425 Geneva Capital Management, Milwaukee, Wisconsin 285,65 GTCR Golder Rauner IX, Chicago, Illinois 56,343 H.I.G BIO Venture II, Miami, Florida 1,852 H.I.G. Venture Partners II, Miami, Florida 1,852 H.I.G. Venture Partners, Stamford, Connecticut 120,973 Harrison Street, Chicago, Illinois 107,087 Harvest Partners V & VI, New York, New York 14,975 Horsley Bridge International V LLC, San Fransico, California 13,376 Institutional Venture Partners XI, Menlo Park, California 13,376 Institutional Venture Partners, LP, IV & VI, Los Angeles, California 19,583 Leonard Green & Partners, LP, IV & VI, Los Angeles, California 19,583 Manulife Financial, Boston, Massachusetts 149,744 Manulife Financial, Boston, Massachusetts	BlackRock Global Investors, San Francisco, California	1,042,234
Columbia Asset Management, Minneapolis, Minnesota  Columbia Capital IV, Alexandria, Virginia  Commerce Street Income Partners LP, Dallas, Texas  Crestview Partners II, New York, New York  58,775  Doll Capital Management, Menlo Park, California  8,570  Duff, Ackerman & Goodrich Ventures II & V, Palo Alto, California  Essex Woodland VIII, Palo Alto, California  19,429  Geneva Capital Management, Milwaukee, Wisconsin  Geneva Capital Management, Milwaukee, Wisconsin  6GTCR Golder Rauner IX, Chicago, Illinois  56,343  H.I.G BIO Venture II, Miami, Florida  1,852  H.I.G. Venture Partners II, Miami, Florida  1,852  H.I.G. Venture Partners, Stamford, Connecticut  120,973  Harrison Street, Chicago, Illinois  107,087  Harvest Partners V & VI, New York, New York  Hellman & Friedman VI, New York, New York  Hellman & Friedman VI, New York, New York  Horsley Bridge International V LLC, San Fransico, California  Institutional Venture Partners XI, Menlo Park, California  Invesco, Atlanta, Georgia  JW Childs Equity III, Boston, Massachusetts  Leonard Green & Partners, L.P., IV & VI, Los Angeles, California  Manulife Financial, Boston, Massachusetts  149,744  Manulife Financial, Boston, Massachusetts	Blackstone Alternative Asset Management, New York, New York	509,494
Columbia Capital IV, Alexandria, Virginia 30,965 Commerce Street Income Partners LP, Dallas, Texas Crestview Partners II, New York, New York 58,775 DOII Capital Management, Menlo Park, California 8,570 Duff, Ackerman & Goodrich Ventures II & V, Palo Alto, California 155,386 Essex Woodland VIII, Palo Alto, California 19,425 Geneva Capital Management, Milwaukee, Wisconsin 6GTCR Golder Rauner IX, Chicago, Illinois 56,343 H.I.G. BIO Venture II, Miami, Florida 1,852 H.I.G. Venture Partners II, Miami, Florida 1,852 H.I.G. Venture Partners II, Miami, Florida 1,852 Harrison Street, Chicago, Illinois 107,087 Harvest Partners V & VI, New York, New York 14,975 Horsley Bridge International V LLC, San Fransico, California 1,3576 Institutional Venture Partners XI, Menlo Park, California 1,356 Institutional Venture Partners, L, P.I.V & VI, Los Angeles, California 1,975 Keyhaven Capital Partners, L-P.I.V & VI, Los Angeles, California 1,975 Manulife Financial, Boston, Massachusetts 1,974 Manulife Financial, Boston, Massachusetts	Blackstone Capital Partners V & VI, New York, New York	81,174
Commerce Street Income Partners LP, Dallas, Texas  Crestview Partners II, New York, New York  58,779  Doll Capital Management, Menlo Park, California  8,570  Duff, Ackerman & Goodrich Ventures II & V, Palo Alto, California  155,386  Essex Woodland VIII, Palo Alto, California  19,425  Geneva Capital Management, Milwaukee, Wisconsin  6TCR Golder Rauner IX, Chicago, Illinois  6TCR Golder Rauner IX, Chicago, Illinois  61,6343  H.I.G. Venture Partners II, Miami, Florida  11,852  H.I.G. Venture Partners II, Miami, Florida  11,852  H.I.G. Venture Partners, Stamford, Connecticut  120,973  Harrison Street, Chicago, Illinois  107,087  Harvest Partners V & VI, New York, New York  14,975  Horsley Bridge International V LLC, San Fransico, California  13,376  Institutional Venture Partners XI, Menlo Park, California  13,568  Invesco, Atlanta, Georgia  216,490  JW Childs Equity III, Boston, Massachusetts  22,514  Keyhaven Capital Partners, L.P.,IV & VI, Los Angeles, California  195,832  Leonard Green & Partners, L.P.,IV & VI, Los Angeles, California  Manulife Financial, Boston, Massachusetts  149,744	Columbia Asset Management, Minneapolis, Minnesota	221,085
Crestview Partners II, New York, New York  58,775  Doll Capital Management, Menlo Park, California  8,570  Duff, Ackerman & Goodrich Ventures II & V, Palo Alto, California  155,386  Essex Woodland VIII, Palo Alto, California  19,425  Geneva Capital Management, Milwaukee, Wisconsin  285,65  GTCR Golder Rauner IX, Chicago, Illinois  56,343  H.I.G BIO Venture II, Miami, Florida  11,852  H.I.G. Venture Partners II, Miami, Florida  11,852  H.I.G. Venture Partners, Stamford, Connecticut  120,973  Harrison Street, Chicago, Illinois  107,087  Harvest Partners V & VI, New York, New York  Hellman & Friedman VI, New York, New York  Hellman & Friedman VI, New York, New York  Horsley Bridge International V LLC, San Fransico, California  institutional Venture Partners XI, Menlo Park, California  13,376  Institutional Venture Partners, Lne, IV & VI, Los Angeles, California  22,514  Keyhaven Capital Partners, Lne, IV & VI, Los Angeles, California  195,832  Leonard Green & Partners, Lne, IV & VI, Los Angeles, California  Manulife Financial, Boston, Massachusetts  149,744  Manulife Financial, Boston, Massachusetts	Columbia Capital IV, Alexandria, Virginia	30,969
Doll Capital Management, Menlo Park, California  8,570  Duff, Ackerman & Goodrich Ventures II & V, Palo Alto, California  155,386  Essex Woodland VIII, Palo Alto, California  19,429  Geneva Capital Management, Milwaukee, Wisconsin  285,657  GTCR Golder Rauner IX, Chicago, Illinois  56,343  H.I.G BIO Venture II, Miami, Florida  11,852  H.I.G. Venture Partners II, Miami, Florida  11,852  H./2 Credit Partners, Stamford, Connecticut  120,973  Harrison Street, Chicago, Illinois  107,087  Harvest Partners V & VI, New York, New York  47,498  Hellman & Friedman VI, New York, New York  Horsley Bridge International V LLC, San Fransico, California  13,376  Institutional Venture Partners XI, Menlo Park, California  13,568  Invesco, Atlanta, Georgia  216,490  JW Childs Equity III, Boston, Massachusetts  22,514  Keyhaven Capital Partners, L.P.,IV & VI, Los Angeles, California  195,832  Leonard Green & Partners, L.P.,IV & VI, Los Angeles, California  Manulife Financial, Boston, Massachusetts	Commerce Street Income Partners LP, Dallas, Texas	-
Duff, Ackerman & Goodrich Ventures II & V, Palo Alto, California  155,386 Essex Woodland VIII, Palo Alto, California  19,429 Geneva Capital Management, Milwaukee, Wisconsin  285,65 GTCR Golder Rauner IX, Chicago, Illinois  56,343 H.I.G BIO Venture II, Miami, Florida  2,225 H.I.G. Venture Partners II, Miami, Florida  11,852 H/2 Credit Partners, Stamford, Connecticut  120,973 Harrison Street, Chicago, Illinois  107,087 Harvest Partners V & VI, New York, New York  47,498 Hellman & Friedman VI, New York, New York  Horsley Bridge International V LLC, San Fransico, California Institutional Venture Partners XI, Menlo Park, California Invesco, Atlanta, Georgia  216,490 JW Childs Equity III, Boston, Massachusetts  Leonard Green & Partners, L.P.,IV & VI, Los Angeles, California Loomis, Sayles & Company, Boston, Massachusetts  149,744 Manulife Financial, Boston, Massachusetts	Crestview Partners II, New York, New York	58,779
Essex Woodland VIII, Palo Alto, California 19,429 Geneva Capital Management, Milwaukee, Wisconsin 285,65 GTCR Golder Rauner IX, Chicago, Illinois 56,343 H.I.G BIO Venture II, Miami, Florida 2,225 H.I.G. Venture Partners II, Miami, Florida 11,852 H/2 Credit Partners, Stamford, Connecticut 120,973 Harrison Street, Chicago, Illinois 107,087 Harvest Partners V & VI, New York, New York 47,498 Hellman & Friedman VI, New York, New York 14,975 Horsley Bridge International V LLC, San Fransico, California 13,376 Institutional Venture Partners XI, Menlo Park, California 13,568 Invesco, Atlanta, Georgia 216,490 JW Childs Equity III, Boston, Massachusetts 22,514 Keyhaven Capital Partners, London, England 9,758 Leonard Green & Partners, L.P.,IV & VI, Los Angeles, California 195,832 Loomis, Sayles & Company, Boston, Massachusetts 225,913 Manulife Financial, Boston, Massachusetts	Doll Capital Management, Menlo Park, California	8,570
Geneva Capital Management, Milwaukee, Wisconsin 285,65 GTCR Golder Rauner IX, Chicago, Illinois 56,343 H.I.G BIO Venture II, Miami, Florida 2,225 H.I.G. Venture Partners II, Miami, Florida 118,52 H/2 Credit Partners, Stamford, Connecticut 120,973 Harrison Street, Chicago, Illinois 107,087 Harvest Partners V & VI, New York, New York 47,498 Hellman & Friedman VI, New York, New York 14,975 Horsley Bridge International V LLC, San Fransico, California 13,376 Institutional Venture Partners XI, Menlo Park, California 35,618 Invesco, Atlanta, Georgia 216,490 JW Childs Equity III, Boston, Massachusetts 22,514 Keyhaven Capital Partners, London, England 9,758 Leonard Green & Partners, L.P.,IV & VI, Los Angeles, California 195,832 Loomis, Sayles & Company, Boston, Massachusetts 225,913 Manulife Financial, Boston, Massachusetts 149,744	Duff, Ackerman & Goodrich Ventures II & V, Palo Alto, California	155,386
GTCR Golder Rauner IX, Chicago, Illinois 56,343 H.I.G BIO Venture II, Miami, Florida 2,225 H.I.G. Venture Partners II, Miami, Florida 11,852 H/2 Credit Partners, Stamford, Connecticut 120,973 Harrison Street, Chicago, Illinois 107,087 Harvest Partners V & VI, New York, New York 47,498 Hellman & Friedman VI, New York, New York 14,975 Horsley Bridge International V LLC, San Fransico, California 13,376 Institutional Venture Partners XI, Menlo Park, California 35,618 Invesco, Atlanta, Georgia 216,490 JW Childs Equity III, Boston, Massachusetts 22,514 Keyhaven Capital Partners, L.P.,IV & VI, Los Angeles, California 195,832 Loomis, Sayles & Company, Boston, Massachusetts 225,913 Manulife Financial, Boston, Massachusetts 149,744	Essex Woodland VIII, Palo Alto, California	19,429
H.I.G BIO Venture II, Miami, Florida 2,225 H.I.G. Venture Partners II, Miami, Florida 11,852 H/2 Credit Partners, Stamford, Connecticut 120,973 Harrison Street, Chicago, Illinois 107,087 Harvest Partners V & VI, New York, New York 47,498 Hellman & Friedman VI, New York, New York 14,975 Horsley Bridge International V LLC, San Fransico, California 13,376 Institutional Venture Partners XI, Menlo Park, California 35,618 Invesco, Atlanta, Georgia 216,490 JW Childs Equity III, Boston, Massachusetts 22,514 Keyhaven Capital Partners, London, England 9,758 Leonard Green & Partners, L.P.,IV & VI, Los Angeles, California 195,832 Loomis, Sayles & Company, Boston, Massachusetts 225,913 Manulife Financial, Boston, Massachusetts 149,744	Geneva Capital Management, Milwaukee, Wisconsin	285,651
H.I.G. Venture Partners II, Miami, Florida  11,852 H/2 Credit Partners, Stamford, Connecticut  120,973 Harrison Street, Chicago, Illinois  107,087 Harvest Partners V & VI, New York, New York  Hellman & Friedman VI, New York, New York  14,975 Horsley Bridge International V LLC, San Fransico, California  Institutional Venture Partners XI, Menlo Park, California  Invesco, Atlanta, Georgia  216,490 JW Childs Equity III, Boston, Massachusetts  Keyhaven Capital Partners, London, England  Leonard Green & Partners, L.P.,IV & VI, Los Angeles, California  Loomis, Sayles & Company, Boston, Massachusetts  Manulife Financial, Boston, Massachusetts  149,744	GTCR Golder Rauner IX, Chicago, Illinois	56,343
H/2 Credit Partners, Stamford, Connecticut  Harrison Street, Chicago, Illinois  107,087  Harvest Partners V & VI, New York, New York  Hellman & Friedman VI, New York, New York  Horsley Bridge International V LLC, San Fransico, California  13,376  Institutional Venture Partners XI, Menlo Park, California  35,618  Invesco, Atlanta, Georgia  216,490  JW Childs Equity III, Boston, Massachusetts  Keyhaven Capital Partners, London, England  9,758  Leonard Green & Partners, L.P.,IV & VI, Los Angeles, California  195,832  Loomis, Sayles & Company, Boston, Massachusetts  225,913  Manulife Financial, Boston, Massachusetts	H.I.G BIO Venture II, Miami, Florida	2,225
Harrison Street, Chicago, Illinois  107,087  Harvest Partners V & VI, New York, New York  Hellman & Friedman VI, New York, New York  Horsley Bridge International V LLC, San Fransico, California  Institutional Venture Partners XI, Menlo Park, California  Invesco, Atlanta, Georgia  216,490  JW Childs Equity III, Boston, Massachusetts  Keyhaven Capital Partners, London, England  Leonard Green & Partners, L.P.,IV & VI, Los Angeles, California  Loomis, Sayles & Company, Boston, Massachusetts  Manulife Financial, Boston, Massachusetts  149,744	H.I.G. Venture Partners II, Miami, Florida	11,852
Harvest Partners V & VI, New York, New York  Hellman & Friedman VI, New York, New York  Horsley Bridge International V LLC, San Fransico, California  Institutional Venture Partners XI, Menlo Park, California  Invesco, Atlanta, Georgia  JW Childs Equity III, Boston, Massachusetts  Eventual Partners, London, England  Jeonard Green & Partners, L.P.,IV & VI, Los Angeles, California  Loomis, Sayles & Company, Boston, Massachusetts  Manulife Financial, Boston, Massachusetts  149,744	H/2 Credit Partners, Stamford, Connecticut	120,973
Hellman & Friedman VI, New York, New York  Horsley Bridge International V LLC, San Fransico, California  Institutional Venture Partners XI, Menlo Park, California  Invesco, Atlanta, Georgia  JW Childs Equity III, Boston, Massachusetts  Keyhaven Capital Partners, London, England  Leonard Green & Partners, L.P.,IV & VI, Los Angeles, California  Loomis, Sayles & Company, Boston, Massachusetts  Manulife Financial, Boston, Massachusetts  149,744	Harrison Street, Chicago, Illinois	107,087
Horsley Bridge International V LLC, San Fransico, California  Institutional Venture Partners XI, Menlo Park, California  35,618  Invesco, Atlanta, Georgia  216,490  JW Childs Equity III, Boston, Massachusetts  22,514  Keyhaven Capital Partners, London, England  9,758  Leonard Green & Partners, L.P.,IV & VI, Los Angeles, California  195,832  Loomis, Sayles & Company, Boston, Massachusetts  225,913  Manulife Financial, Boston, Massachusetts	Harvest Partners V & VI, New York, New York	47,498
Institutional Venture Partners XI, Menlo Park, California 35,618 Invesco, Atlanta, Georgia 216,490 JW Childs Equity III, Boston, Massachusetts 22,514 Keyhaven Capital Partners, London, England 9,758 Leonard Green & Partners, L.P.,IV & VI, Los Angeles, California 195,832 Loomis, Sayles & Company, Boston, Massachusetts 225,913 Manulife Financial, Boston, Massachusetts 149,744	Hellman & Friedman VI, New York, New York	14,975
Invesco, Atlanta, Georgia 216,490  JW Childs Equity III, Boston, Massachusetts 22,514  Keyhaven Capital Partners, London, England 9,758  Leonard Green & Partners, L.P.,IV & VI, Los Angeles, California 195,832  Loomis, Sayles & Company, Boston, Massachusetts 225,913  Manulife Financial, Boston, Massachusetts 149,744	Horsley Bridge International V LLC, San Fransico, California	13,376
JW Childs Equity III, Boston, Massachusetts  Keyhaven Capital Partners, London, England  Leonard Green & Partners, L.P.,IV & VI, Los Angeles, California  Loomis, Sayles & Company, Boston, Massachusetts  Manulife Financial, Boston, Massachusetts  149,744	Institutional Venture Partners XI, Menlo Park, California	35,618
Keyhaven Capital Partners, London, England 9,758 Leonard Green & Partners, L.P.,IV & VI, Los Angeles, California 195,832 Loomis, Sayles & Company, Boston, Massachusetts 225,913 Manulife Financial, Boston, Massachusetts 149,744	Invesco, Atlanta, Georgia	216,490
Leonard Green & Partners, L.P.,IV & VI, Los Angeles, California 195,832  Loomis, Sayles & Company, Boston, Massachusetts 225,913  Manulife Financial, Boston, Massachusetts 149,744	JW Childs Equity III, Boston, Massachusetts	22,514
Loomis, Sayles & Company, Boston, Massachusetts  225,913  Manulife Financial, Boston, Massachusetts  149,744	Keyhaven Capital Partners, London, England	9,758
Manulife Financial, Boston, Massachusetts 149,744	Leonard Green & Partners, L.P.,IV & VI, Los Angeles, California	195,832
	Loomis, Sayles & Company, Boston, Massachusetts	225,913
Matlin Patterson Global Opportunities I & II, New York, New York 36,044	Manulife Financial, Boston, Massachusetts	149,744
	Matlin Patterson Global Opportunities I & II, New York, New York	36,044

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

Advisor	Assets Under Management
Merit Capital Partners IV, Chicago, Illinois	14,143
Mesa West, Los Angeles, California	82,258
MHR Insitituional Advisors III, New York, New York	3,255
Mill Road Capital, Greenwich, Connecticut	28,198
New Mountain Partners II, New York, New York	49,176
NISA Investment Advisors, St. Louis, Missouri	733,459
Northern Trust Global Investors, Chicago, Illinois	463,045
Oak Hill Partners II, New York, New York	77,151
Oak Tree Opportunities VIIB, Los Angeles, California	2,170
Pacific Alternative Asset Management Company, Irvine, California	510,837
PIMCO, New Port Beach, California	1,457,400
Prima Mortgage, New York, New York	49,970
Prisma Capital Partners, New York, New York	506,378
Pyramis Global Advisors, Boston, Massachusetts	862,000
River Road Asset Management, Louisville, Kentucky	45,764
Riverside Capital VI, NewYork, New York	-
Sasco Capital, Fairfield, Connecticut	59,510
Shenkman Capital, Stamford, Connecticut	154,249
Stone Harbor Investments, New York, New York	146,563
Sun Capital Partners IV, Boca Raton, Florida	2,211
Systematic Financial Management, Teaneck, New Jersey	251,267
Technology Crossover Ventures VI, Palo Alto, California	691
Tenaska Power Fund II, Omaha, Nebraska	15,405
The Boston Company, Boston, Massachusetts	876,297
The Camelot Group, New York, New York	28,008
Tortoise Capital, Leawodd, Kansas	85,305
Vantagepoint Venture IV, San Bruno, California	33,704
Vista Equity Partners III & IV, San Francisco, California	70,553
Walton Street Real Estate Fund &VII, Chicago, Illinois	38,351
Warburg Pincus IX, New York, New York	84,485
Waterfall Investment, New York, New York	162,502
Wayzata Investment Partners I & III, Wayzata, Minnesota	122,886
Weaver Barksdale & Associates, Brentwood, Tennessee	370,511
Wellington Management Company, Boston, Massachusetts	159,194
Westfield Capital, Boston, Massachusetts	154,870
Westwood Management, Dallas, Texas	142,615
Total	\$11,829,824

Master Custodian is Northern Trust Company, from Chicago, Illinois. Investment consultants are R.V. Kuhns & Associates from Portland, Oregon; Albourne America, LLC from San Francisco, California; Altius Associates from Richmond, Virginia; and ORG Real Property from Cleveland, Ohio.

### Schedule of Commissions Paid

Asset	Total Shares	<b>Commissions Paid</b>	Price per Share
U.S. Equities	84,386,389	\$1,549,904	\$0.018
	<b>Total Value of Trades</b>	<b>Commissions Paid</b>	As a % of Trade
Non-U.S. Equities	\$4,056,852,601	\$3,919,843	0.097%
Total Commissions Paid		\$5,469,747	

## External Investment Expenses (in Thousands) Equity & Fixed Income Portfolio

Expense	Fees Paid	Share of Assets
Pension Funds	\$41,769	0.3797%
Insurance Funds	\$9,896	0.2844%
Contractual	\$1,513	0.0104%
Other Investment-Related Fees	\$416	0.0029%
Total Expenses	\$53,594	0.3701%

#### **PORTFOLIO SUMMARIES**

## KERS Non-Haz Pension Fund as of June 30, 2013 (in Thousands)

## KERS Non-Haz Insurance Fund as of June 30, 2013 (in Thousands)

Market Value

\$131,716

\$34,486

\$106,933

\$108,579

\$103,181

\$484,895

Share of Market Value

27.2%

22.0%

22.4%

21.3%

100.0%

7.1%

Asset	Market Value	Share of Market Value	Asset
Bonds	\$738,920	27.3%	Bonds
Short-Term	\$98,546	3.6%	Short-Term
Alternatives	\$801,824	29.6%	Alternatives
Domestic Equities	\$513,161	18.9%	Domestic Equities
International Equities	\$556,763	20.6%	International Equities
Total Portfolio	\$2,709,214	100.0%	Total Portfolio

## KERS Haz Insurance Fund as of June 30, 2013 (in Thousands)

KERS Haz Pension Fund as of June 30, 20	)13
(in Thousands)	

Asset	Market Value	Share of Market Value	Asset	Market Value	Share of Market Value
Bonds	\$126,667	24.9%	Bonds	\$106,570	28.8%
Short-Term	\$26,925	5.3%	Short-Term	\$15,318	4.2%
Alternatives	\$136,628	26.8%	Alternatives	\$74,947	20.3%
Domestic Equities	\$106,638	21.0%	Domestic Equities	\$91,821	24.8%
International Equities	\$111,880	22.0%	International Equities	\$81,173	21.9%
Total Portfolio	\$508,738	100.0%	Total Portfolio	369,829	100.0%

## CERS Non-Haz Pension Fund as of June 30, 2013 (in Thousands)

Asset	Market Value	Share of Market Value
Bonds	\$1,527,114	26.8%
Short-Term	\$220,009	3.8%
Alternatives	\$1,413,709	24.7%
Domestic Equities	\$1,300,867	22.7%
International Equities	\$1,258,901	22.0%
Total Portfolio	\$5,720,600	100.0%

## CERS Haz Pension Fund as of June 30, 2013 (in Thousands)

Asset	Market Value	Share of Market Value
Bonds	\$479,093	26.4%
Short-Term	\$82,394	4.5%
Alternatives	\$449,270	24.8%
Domestic Equities	\$407,283	22.4%
International Equities	\$397,706	21.9%
Total Portfolio	\$1,815,746	100.0%

## SPRS Pension Fund as of June 30, 2013 (in Thousands)

Asset	Market Value	Share of Market Value
Bonds	\$61,096	24.9%
Short-Term	\$10,932	4.5%
Alternatives	\$67,782	27.6%
Domestic Equities	\$51,484	21.0%
International Equities	\$54,089	22.0%
Total Portfolio	\$245,383	100.0%

## CERS Non-Haz Insurance Fund as of June 30, 2013 (in Thousands)

Asset	Market Value	Share of Market Value
Bonds	\$465,187	29.1%
Short-Term	\$69,721	4.3%
Alternatives	\$320,458	20.0%
Domestic Equities	\$395,650	24.8%
International Equities	\$349,649	21.8%
Total Portfolio	\$1,600,665	100.0%

## CERS Haz Insurance Fund as of June 30, 2013 (in Thousands)

Asset	Market Value	Share of Market Value
Bonds	\$258,356	29.3%
Short-Term	\$40,573	4.6%
Alternatives	\$176,311	20.0%
Domestic Equities	\$214,973	24.3%
International Equities	\$192,806	21.8%
Total Portfolio	\$883,019	100.0%

## SPRS Insurance Fund as of June 30, 2013 (in Thousands)

Asset	Market Value	Share of Market Value
Bonds	\$40,027	28.3%
Short-Term	\$6,655	4.7%
Alternatives	\$30,172	21.4%
Domestic Equities	\$33,424	23.7%
International Equities	\$30,825	21.9%
Total Portfolio	\$141,103	100.0%





## Certification of **Actuarial Results**

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.

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 for the upcoming fiscal year based upon the results of the most recent annual valuation. These rates are determined actuarially based upon current membership data, plan provisions, and the assumptions and funding policies adopted by the KRS Board. Employer contribution rates become effective one year after the valuation date. The recently completed June 30, 2013 actuarial valuation will be used by the Board of Trustees to certify the employer contribution rates for the fiscal year beginning July 1, 2014 and ending June 30, 2015 for KERS, CERS and SPRS. The same rates will be used for the fiscal year beginning July 1, 2015 and ending June 30, 2016 for KERS and SPRS.

**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 normal cost is expected to remain level as a percent of payroll in future years. 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 statue made by Senate Bill 2 (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 over a 30-year period. Beginning with the June 30, 2006 valuation, the assumptions and methods used are to meet the requirements of GASB Statement No. 43. As with the pension fund, going forward, the UAL



#### UAL

Unfunded Accrued Liability

#### GASE

Governmental Accounting Standards Board

#### HB

House Bill

#### **KERS**

Kentucky Employees Retirement System

#### **CERS**

County Employees Retirement System

#### **SPRS**

State Police Retirement System

#### COLA

Cost of Living Adjustment

will be amortized over a 30-year period beginning June 30, 2013. The amortization period will decrease by one each year in the future. 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 stable as a percentage of payroll over future years.

The impact of HB1 passed into law in 2008 and SB2 passed into law in 2013 will be to eventually reduce the contribution rates otherwise required as more active members are covered under the lower benefit structure effective for those hired after August 31, 2008 and January 1, 2014. SB2 introduced a Cash Blance Plan for members hired on or after January 1, 2014. 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, 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. 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, the 2006 (and for KERS Hazardous and CERS Non-Hazardous the 2009) assumption changes, and increasing expenditures for retiree Cost of Living Adjustments (COLA). Within the KERS and SPRS plans, employer contribution rate reductions enacted by the State Legislature have severely limited the plans' ability to correct the declining funding levels. SB 2 requires the state to contribute the full actuarially determined employer contribution rates compared to the HB 1 phase-in rates which would not have required the full actuarially determined employer contribution rate for many years. As of June 30, 2013 the funding levels for the pension [and insurance] funds are as follows:

### Funding Level of Pension Fund

System	Funding Level
KERS Non-Hazardous	23.2%
KERS Hazardous	64.5%
CERS Non-Hazardous	60.1%
CERS Hazardous	57.7%
SPRS	37.1%

### Funding Level of Insurance Fund

System	Funding Level
KERS Non-Hazardous	23.4%
KERS Hazardous	96.2%
CERS Non-Hazardous	66.6%
CERS Hazardous	62.1%
SPRS	61.3%

**System Pension Funding Level** The Board's funding objective for the insurance funds is to increase the funded level consistently over time.

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.

> **Data** In completing the valuation of these systems, we have relied on data provided by Kentucky Retirement Systems, as well as financial data provided by the plan's external auditor. 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 August 20, 2009 based on the experience investigation report dated August 17, 2009, meet the parameters set for disclosure under GASB Statements No. 25 and 43. 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, 2014 and any adjustments will be reflected in the June 30, 2014 actuarial valuation.

> The information presented in this letter describes the pertinent issues relative Closing 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.

> Based on the continuation of current funding policies adopted by the Board, adequate provision is being determined for the funding of the actuarial liabilities of the Kentucky Employees Retirement System, the County Employees Retirement System, and the State Police Retirement System as required by the Kentucky Revised Statutes. 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 2014-2015, which is a positive development for the long term sustainability of those systems. CERS has always received the actuarially determined contributions, and its sustainability is not in question.

Thomas J. Cavanaugh FSA, FCA, MAAA, EA // CEO Cavanaugh Macdonald Consulting, LLC December 5, 2013

## 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.

**As of June 30, 2013** The most recent study was completed in August 2009 and reviewed plan experience for the period from July 1, 2005 through June 30, 2008. All assumptions, with the exception of health care trend rates, used in the June 30, 2011 actuarial valuation were based on the study performed in 2009 and in accordance with the actuary's recommendations. The next Experience Study is scheduled to be completed in early 2014.

**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) over no more than a 30-year period.

**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 withthe 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.

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. The Asset Valuation Method was adopted in 2006.

**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. The amortization period will decrease by one each year in the future.

**Investment Return Assumption** The future investment earnings of plan assets are assumed to accumulate at a rate of 7.75% per annum. This rate consists of a 3.5% inflationary component and a 4.25% real rate of return component. In accordance with GASB Statement 43, the investment return assumption had been reduced to a blended rate of 4.5% for KERS and SPRS insurance funds due to a lack of pre-funding benefits. This assumption was adopted in 2006. However, given the requirement for full actuarially determined contributions beginning with the results of the June 30, 2013 actuarial valuation, the investment return assumption for all funds is 7.75% per annum.

**Salary Increase Assumptions** member salaries are assumed to increase at the rates provided in Table 1. The rates include a 4.5% percent inflationary component and an additional increase due to promotion based upon plan experience. These assumptions were adopted in 2009.

**Table 1.** Salary Increase Assumptions

Service	KERS Non-Haz	KERS Haz	CERS Non-Haz	CERS Haz	SPRS
O-1	17.00%	21.00%	13.00%	20.00%	17.00%
0-2	9.00%	9.00%	9.50%	10.50%	12.00%
O-3	6.50%	7.00%	6.00%	6.50%	10.00%
0-4	6.00%	6.50%	6.00%	5.75%	9.00%
0-5	6.00%	6.00%	5.50%	5.50%	8.00%
0-6	6.00%	5.50%	5.50%	5.00%	7.00%
O-7	5.50%	5.00%	5.25%	4.50%	6.00%
0-8	5.50%	5.00%	5.25%	4.50%	6.50%
0-9	5.50%	5.00%	5.00%	4.50%	5.50%
O-10	5.00%	5.00%	5.00%	4.50%	5.00%
O-11	5.00%	5.00%	4.75%	4.50%	4.50%

Payroll Growth Assumption Active member payroll is assumed to increase at a rate of 4.5% per annum. This assumption was adopted in 2006.



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

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

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

	Trend					
Fiscal Year Ended	Under Age 65	Age 65 and Over				
2014	8.5%	7.0%				
2015	7.5%	6.5%				
2016	6.5%	6.0%				
2017	6.0%	5.5%				
2018	5.5%	5.0%				
2019 and beyond	5.0%	5.0%				

**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 2009.

**Table 3.** Retirement Rate Assumptions

	Non-Hazard	ous				Н	azardous			
Age	KERS <sup>1</sup>	KERS <sup>2</sup>	CERS <sup>3</sup>	Service	KERS⁴	KERS⁵	CERS <sup>6</sup>	CERS <sup>7</sup>	SPRS <sup>8</sup>	SPRS <sup>9</sup>
55	8.0%		8.0%	20	22.0%		20.0%		9.0%	
56	8.0%		8.0%	21	22.0%		20.0%		9.0%	
57	8.0%		8.0%	22	22.0%		20.0%		10.0%	
58	8.0%		8.0%	23	22.0%		20.0%		22.0%	
59	8.0%		8.0%	24	22.0%		30.0%		22.0%	
60	10.0%	10.0%	10.0%	25	35.0%	22.0%	33.0%	20.0%	22.0%	9.0%
61	20.0%	20.0%	20.0%	26	37.0%	22.0%	33.0%	20.0%	22.0%	9.0%
62	22.5%	22.5%	22.0%	27	37.0%	22.0%	33.0%	20.0%	25.0%	10.0%
63	22.5%	22.5%	22.0%	28	39.0%	22.0%	39.0%	20.0%	25.0%	22.0%
64	22.5%	22.5%	22.0%	29	38.0%	22.0%	33.0%	30.0%	25.0%	22.0%
65	22.5%	25.0%	22.0%	30	38.0%	35.0%	33.0%	33.0%	25.0%	22.0%
66	22.5%	25.0%	22.0%	31	38.0%	37.0%	33.0%	33.0%	33.3%	22.0%
67	22.5%	25.0%	22.0%	32	50.0%	37.0%	50.0%	33.0%	33.3%	25.0%
68	22.5%	25.0%	22.0%	33	50.0%	39.0%	40.0%	39.0%	33.3%	25.0%
69	22.5%	25.0%	22.0%	34	50.0%	38.0%	40.0%	33.0%	33.3%	25.0%
70	22.5%	25.0%	22.0%	35	60.0%	38.0%	40.0%	33.0%	33.3%	25.0%
71	22.5%	25.0%	22.0%	36	60.0%	38.0%	40.0%	33.0%	33.3%	33.3%
72	22.5%	25.0%	22.0%	37	60.0%	50.0%	40.0%	50.0%	33.3%	33.3%
73	22.5%	25.0%	22.0%	38	60.0%	50.0%	40.0%	40.0%	33.3%	33.3%
74	22.5%	25.0%	22.0%	39	60.0%	50.0%	40.0%	40.0%	33.3%	33.3%
75+	100.0%	100.0%	100.0%	40+	60.0%	60.0%	40.0%	40.0%	33.3%	33.3%

<sup>&</sup>lt;sup>1</sup>For members participating before 9/1/2008. If service is at least 27 years, the rate is 25%.

<sup>9</sup>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 50% of the 1994 Group Annuity Mortality (GAM) Table. For nondisabled members retiring on or after July 1, 2006, the mortality table was changed from the 1983 GAM table to the 1994 GAM table. For disabled members retiring on or after July 1, 2006, the mortality table was changed from the 1983 GAM table set forward five years to the 1994 GAM table set forward five years. 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 pre-retirement mortality assumption was adopted in 2009 and the post-retirement mortality assumptions were adopted in 2006.

<sup>&</sup>lt;sup>2</sup>For members participating on or after 9/1/2008. If age plus service is at least 87, the rate is 25%.

<sup>&</sup>lt;sup>3</sup>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.

<sup>&</sup>lt;sup>4</sup>For members participating before 9/1/2008. The annual rate of service retirement is 100% at age 65.

<sup>&</sup>lt;sup>5</sup>For members participating on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.

<sup>&</sup>lt;sup>6</sup>For members participating before 9/1/2008. The annual rate of service retirement is 100% at age 62.

<sup>&</sup>lt;sup>7</sup>For members participating on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.

<sup>&</sup>lt;sup>8</sup>For members whose participation began before 9/1/2008. The annual rate of service retirement is 100% at age 55.

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

	Active Member I	Mortality	Retired Member I	Disabled Member Mortality*			
Age	Males	Females	Males	Females	Mal	es	Females
Under 20	0.02%	0.01%	0.04%	0.03%		-	-
22	0.03%	0.01%	0.06%	0.03%		-	-
32	0.04%	0.02%	0.08%	0.04%		-	-
42	0.06%	0.04%	0.13%	0.08%	0.19%	0.11%	
52	0.16%	0.09%	0.32%	0.17%	0.56%	0.29%	
62	0.51%	0.29%	1.01%	0.58%	1.80%	1.08%	
72	1.42%	0.83%	2.85%	1.65%	4.52%	2.84%	

<sup>\*</sup> For members retiring on or after July 1, 2006.

Withdrawal Rates The withdrawal rate is a function of both age and service. This type of structure is known as "select and ultimate rates". This structure reflects the fact that both service and age affect the likelihood of a member staying in active

employment. The ultimate period for these systems covers a member's withdrawal rate after the first five years of service. These assumptions were adopted in 2009.

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

	KERS Non-H	lazardous			KERS Haz	zardous	
Select Ra	Select Rates		Rates	Select R	Select Rates		Rates
Years of Service	Probability	Age	Probability	Years of Service	Probability	Age	Probability
1	19.00%	20	6.00%	1	26.00%	20	4.00%
2	13.00%	25	5.08%	2	11.50%	25	4.00%
3	10.00%	30	4.26%	3	8.25%	30	3.50%
4	9.00%	35	3.21%	4	7.50%	35	3.00%
5	6.50%	40	3.00%	5	7.00%	40	3.00%
		45	3.00%			45	3.00%
		50	3.00%			50	3.00%
		55	3.00%			55	3.00%
		60	3.00%			60	3.00%

CERS Non-Hazardous					CERS Hazardous					
Select Ra	Select Rates Ultimate I		Rates		Select Rates		Ultimate I		Rates	
Years of Service	Probability	Age	Probability		Years of Service	Probability	Ag	е	Probability	
1	25.00%	20	5.75%		1	14.00%	2	0	3.00%	
2	14.00%	25	5.75%		2	7.50%	2	5	2.70%	
3	10.00%	30	5.30%		3	6.00%	3	0	2.50%	
4	8.00%	35	4.40%		4	4.50%	3	5	2.50%	
5	6.50%	40	3.70%		5	4.00%	4	0	2.50%	
		45	3.02%				4	5	2.50%	
		50	2.70%				5	0	2.50%	
		55	2.20%				5	5	-	
		60	0.75%				6	0	-	

Table 5 Continued. Selected Rates of Termination Prior to Retirement

SPRS Non-Hazardous								
Select Ra	ates	Ultimate Rates	5					
Years of Service	Probability	Age	Probability					
1	20.00%	20	2.50%					
2	7.50%	25	2.50%					
3	3.00%	30	2.50%					
4	3.00%	35	2.50%					
5	3.00%	40	2.50%					
		45	2.50%					
		50	2.50%					
		55	-					
		60	-					

### **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. For non-hazardous members, the assumptions are set using three quarters of the Old-Age Survivors and Disability Insurance (OASDI) rates. For hazardous members, the assumptions are set using one times the OASDI rates. These assumptions were adopted in 2009.



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

Non-Hazardo	ous	Hazardous	S
Age	Probability	Age	Probability
20-24	0.0354%	20-24	0.0531%
25-29	0.0474%	25-29	0.0711%
30-34	0.0612%	30-34	0.0918%
35-39	0.0853%	35-39	0.1280%
40-44	0.1329%	40-44	0.1994%
45-49	0.2213%	45-49	0.3320%
50-54	0.3727%	50-54	0.5590%
55-59	0.6133%	55-59	0.9200%
60-64	0.9745%	60-64	1.4618%

## Summary of Actuarial Valuation Results as of June 30, 2013

	KERS Non-Haz	KERS Haz	CERS Non-Haz	CERS Haz	SPRS
Recommended Rate Fiscal 2014-2015					
Pension Fund Contribution	30.84%	16.37%	12.75%	20.73%	53.90%
Insurance Fund Contribution	7.93	9.97	5.35	14.97	21.86
Recommended Employer Contribution	38.77%	26.34%	18.10%	35.70%	75.76%
Funded Status as of Valuation Da	te				
Pension Fund					
א Actuarial Liability	\$11,386,602,159	\$783,980,594	\$9,378,876,114	\$3,124,205,593	\$651,580,654
א Actuarial Value of Assets	\$2,636,122,852	\$505,656,808	\$5,637,094,483	\$1,801,691,410	\$241,800,328
ນ Unfunded Liability on Actuarial Value of Assets	\$8,750,479,307	\$278,323,786	\$3,741,781,631	\$1,322,514,183	\$409,780,326
ע Funding Ratio on Actuarial Value of Assets	23.15%	64.50%	60.10%	57.67%	37.11%
ע Market Value of Assets	\$2,747,428,086	\$513,162,166	\$5,780,830,355	\$1,830,657,969	\$248,559,040
<b>ປ</b> Unfunded Liability on Market Value of Assets	\$8,639,174,073	\$270,818,428	\$3,598,045,759	\$1,293,547,624	\$403,021,614
ש Funding Ratio on Market Value of Assets	24.13%	65.46%	61.64%	58.60%	38.15%
Insurance Fund					
ע Actuarial Liability	\$2,128,754,134	\$385,517,675	\$2,443,894,100	\$1,437,332,817	\$222,326,743
ע Actuarial Value of Assets	\$497,584,327	\$370,774,403	\$1,628,244,197	\$892,774,391	\$136,321,060
ע Unfunded Liability on Actuarial Value of Assets	\$1,631,169,807	\$14,743,272	\$815,649,903	\$544,558,426	\$86,005,683
ש Funding Ratio on Actuarial Value of Assets	23.37%	96.18%	66.62%	62.11%	61.32%
ש Market Value of Assets	\$509,364,080	\$374,309,576	\$1,633,696,661	\$894,232,297	\$142,830,916
ש Unfunded Liability on Market Value of Assets	\$1,619,390,054	\$11,208,099	\$810,197,439	\$543,100,520	\$79,495,827
צ Funding Ratio on Market Value of Assets	23.93%	97.09%	66.85%	62.21%	64.24%
Member Data					
Number of Active Members	42,226	4,127	81,815	9,123	902
Total Annual Payroll (Active Members) <sup>1</sup>	\$1,644,408,698	\$132,015,368	\$2,236,277,489	\$461,672,567	\$45,256,202
Average Annual Pay (Active Members)	\$38,943	\$31,988	\$27,333	\$50,605	\$50,173
Number of Retired Members & Beneficiaries	40,194	3,430	47,676	7,293	1,346
Average Annual Retirement Allowance	\$21,698	\$14,905	\$11,704	\$25,042	\$37,820
Number of Vested Inactive Members	8,189	368	11,899	614	60
Number of Inactive Members Due a Refund	35,857	3,117	61,179	1,802	330
Number of Vested Inactive Members Number of Inactive Members					:

<sup>&</sup>lt;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, 2013.

# Recommended Employer Contribution Rates as of June 30, 2013 KERS Non-Haz

Valuation Date	Fiscal Year	Pension Fund Normal Cost	Pension Fund Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Rate
6/30/08	2009-2010	3.97%	14.99%	18.96%	20.49%	39.45%
6/30/09	2010-2011	4.26%	17.51%	21.77%	16.81%	38.58%
6/30/10	2011-2013	4.23%	20.07%	24.30%	16.41%	40.71%
6/30/11	2013-2013	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%

## KERS Haz

Valuation Date	Fiscal Year	Pension Fund: Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Rate
6/30/08	2009-2010	7.52%	4.46%	11.98%	23.56%	35.54%
6/30/09	2010-2011	7.94%	6.17%	14.11%	20.26%	34.37%
6/30/10	2011-2013	7.19%	6.92%	14.11%	19.73%	33.84%
6/30/11	2013-2013	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%

## CERS Non-Haz

Valuation Date	Fiscal Year	Pension Fund: Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Rate
6/30/08	2009-2010	4.46%	4.16%	8.62%	12.29%	20.91%
6/30/09	2010-2011	4.60%	5.43%	10.03%	9.78%	19.81%
6/30/10	2011-2013	4.72%	6.98%	11.70%	9.59%	21.29%
6/30/11	2013-2013	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%

## CERS Haz

Valuation Date	Fiscal Year	Pension Fund: Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Rate
6/30/08	2009-2010	8.23%	7.88%	16.11%	27.25%	43.36%
6/30/09	2010-2011	7.56%	9.23%	16.79%	23.27%	40.06%
6/30/10	2011-2013	7.31%	10.60%	17.91%	23.74%	41.65%
6/30/11	2013-2013	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%

### Recommended Employer Contribution Rates as of June 30, 2013 **SPRS**

Valuation Date	Fiscal Year	Pension Fund Normal Cost	Pension Fund Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Rate
6/30/08	2009-2010	9.83%	25.40%	35.23%	56.89%	92.12%
6/30/09	2010-2011	8.12%	27.62%	35.74%	49.89%	85.63%
6/30/10	2011-2013	7.75%	32.05%	39.80%	54.83%	94.63%
6/30/11	2013-2013	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%



Kentucky Employees Retirement System

#### **CERS**

County Employees Retirement System

#### SPRS

State Police Retirement System

Unfunded Accrued Liability

**KERS Funds** The contribution rates for KERS Non-Hazardous and KERS Hazardous shown in the tables on page 11 are the full funding rates presented by the actuary in the 2008 through 2013 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.

**CERS Funds** The insurance fund contribution rates and the employer contribution rates for CERS Non-Hazardous and CERS Hazardous shown in the tables on page 11 are the full funding rates presented by the actuary in the 2008 through 2013 annual valuations. However, in the case of CERS Non-Hazardous and CERS Hazardous, in 2006 the actuary recommended a fiveyear 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%.

**SPRS Funds** The contribution rates for SPRS shown in the tables on page 12 are the full funding rates presented by the actuary in the 2008 through 2013 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, 2013 KERS Non-Haz Pension Fund

		Value of	Assets	Unfunded	l Liability	Funding	Level
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/08	\$10,129,689,985	\$5,318,792,893	\$5,056,867,294	\$4,810,897,092	\$5,072,822,691	52.5%	49.9%
6/30/09	\$10,658,549,532	\$4,794,611,365	\$3,584,196,429	\$5,863,938,167	\$7,074,353,103	45.0%	33.6%
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%

## KERS Non-Haz Insurance Fund

		Value of A	Assets	Unfunded	Liability	Funding	Level
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/08	\$5,431,499,285	\$603,197,761	\$574,480,809	\$4,828,301,524	\$4,857,018,476	11.1%	10.6%
6/30/09	\$4,507,325,571	\$534,172,580	\$365,771,088	\$3,973,152,991	\$4,141,554,483	11.9%	8.1%
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%

### KERS Haz Pension Fund

		Value of Assets		<b>Unfunded Liability</b>		Funding Level	
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/08	\$618,010,827	\$502,132,214	\$484,440,015	\$115,878,613	\$133,570,812	81.3%	78.4%
6/30/09	\$674,411,781	\$502,503,287	\$388,913,374	\$171,908,494	\$285,498,406	74.5%	57.7%
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%

## KERS Haz Insurance Fund

		Value of A	Assets	Unfunded I	Liability	Funding	Level
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/08	\$541,657,214	\$288,161,759	\$269,299,859	\$253,495,455	\$272,357,355	53.2%	49.7%
6/30/09	\$491,132,170	\$301,634,592	\$219,537,255	\$189,497,578	\$271,594,915	61.4%	44.7%
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%

# **Continued.** Summary of Actuarially Unfunded Liabilities as of June 30, 2013 CERS Non-Haz Pension Fund

		Value of	Assets	Unfunded	Liability	Funding	Level
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/08	\$7,304,217,691	\$5,731,502,438	\$5,431,735,605	\$1,572,715,253	\$1,872,482,086	78.5%	74.4%
6/30/09	\$7,912,913,512	\$5,650,789,991	\$4,330,593,934	\$2,262,123,521	\$3,582,319,578	71.4%	54.7%
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%

## CERS Non-Haz Insurance Fund

		Value of	Assets	Unfunded	Liability	Funding	Level
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/08	\$3,583,193,466	\$1,168,883,170	\$1,105,944,178	\$2,414,310,296	\$2,477,249,288	32.6%	30.9%
6/30/09	\$3,070,386,018	\$1,216,631,769	\$894,905,841	\$1,853,754,249	\$2,175,480,177	39.6%	29.2%
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%

### CERS Haz Pension Fund

		Value of	Assets	Unfunded	Liability	Funding	Level
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/08	\$2,403,122,095	\$1,750,867,373	\$1,644,983,243	\$652,254,722	\$758,138,852	72.9%	68.5%
6/30/09	\$2,578,444,600	\$1,751,487,540	\$1,320,522,868	\$826,957,060	\$1,257,921,732	67.9%	51.2%
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	57.7%	58.6%

## CERS Haz Insurance Fund

		Value of A	Assets	Unfunded	Liability	Funding	Level
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/08	\$1,769,782,957	\$613,526,319	\$576,414,457	\$1,156,256,638	\$1,193,368,500	34.7%	32.6%
6/30/09	\$1,593,548,263	\$651,130,782	\$483,269,862	\$942,417,481	\$1,110,278,401	40.9%	30.3%
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%

# **Continued.** Summary of Actuarially Unfunded Liabilities as of June 30, 2013 SPRS Pension Fund

		Value of Assets		Unfunded I	<b>Funding Level</b>		
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/08	\$587,129,257	\$350,891,451	\$337,358,918	\$236,237,806	\$249,770,339	59.8%	57.5%
6/30/09	\$602,328,868	\$329,966,989	\$256,571,073	\$272,361,879	\$345,757,795	54.8%	42.6%
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%

## SPRS Insurance Fund

		Value of A	ssets	Unfunded	Liability	Funding	Level
Valuation Date	Actuarial Liability	Actuarial	Market	Actuarial	Market	Actuarial	Market
6/30/08	\$445,107,468	\$123,961,197	\$121,781,967	\$321,146,271	\$323,325,501	27.9%	27.4%
6/30/09	\$364,031,141	\$123,526,647	\$93,686,940	\$240,504,494	\$270,344,201	33.9%	25.7%
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	\$208,3335,936	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%

## Analysis of Financial Experience

Gains or Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience (in Millions) as of June 30, 2013

Nage & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss. (12.6) (29.5) Disability Retirements. If disability claims are less than assumed, there is a gain. If more (26.8) (2.8) Disability Retirements. If disability claims are less than assumed, there is a gain. If more (26.8) (2.8) Disability Retirements. If disability claims are less than assumed, there is a gain. If more (26.8) (2.8) Disability Retirements. If more liabilities are released by withdrawals than assumed, from the released spain. If more liability more liability are released by withdrawals than assumed, from the released spain. If more liability more liability are released by withdrawals than assumed, from the releases, a loss. For insurance, smaller claims increases than assumed generates a gain. If more liability are released to the release of the releases, a loss. For insurance, smaller claims increases than assumed generates a gain. If more liability are released by withdrawals than assumed, if there is a gain. If (165.5) (24.5) Disability Retirement. If retired members live longer than assumed, there is a gain. If (165.5) (24.5) Desth After Retirement. If retired members live longer than assumed, there is a loss. If not a loss a long, a gain. Dether Miscellaneous gains and losses resulting from changes in valuation software, data (16.7) (16.5) Disability Retirements. If mancial transactions, insurance election changes, etc. Disability Retirements. Adjustments for plan amendments, assumption changes, method (10.4) Disability Retirements. If disability claims are less than assumed, there is a gain. If more (16.7) (2.5) Disability Retirements. If disability claims are less than assumed, there is a gain. If more (16.6) (10.6) Disability Retirements. If survivor claims are less than assumed, there is a gain. If more (16.6) (10.6) Disability Retirements. If more liabilities are released by withdrawals than assumed. (16.6) (16.6) Disability Retirements. If there are smaller pay increases than assumed, there	Type of Activity	Retirement Gain	Insurance Gain
Disability Retirements. If disability claims are less than assumed, there is a gain. If more (26.8) (23.5 am.s. a loss.  Ocabath-in Service Benefits. If survivor claims are less than assumed, there is a gain, if more claims, there is a loss.  Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.  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. If greater increases, a loss. For insurance, smaller relating increases than assumed generates a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed, there is a gain. If (165.5) (24.5 assumed line) and there is a greater investment income than assumed, there is a gain. If (165.5) (24.5 assumed line) and there is a greater investment income than assumed, there is a gain. If (165.5) (24.5 assumed line) and increases income, a loss.  Death After Retirement. If retired members live longer than assumed, there is a loss. If not gain long, a gain.  Other, Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.  Salain (or Loss) During Year From Financial Experience (78.7) (42.5 a) (78.7) (78.	KERS Non-Hazardous		
claims, a loss.  Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more (0.6) (1.4) (1.	Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss	s. (112.6)	(29.3)
Nithdrawal From Employment. If more liabilities are released by withdrawals than assumed, here is a gain. If smaller releases, a loss.  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. If greater increases, a loss. Pay insurance, smaller claims increases than assumed generates a gain. If greater increases, a loss. Pay or Claims Increases. Additional unfunded accrued liability will produce a loss.  New Members. Additional unfunded accrued liability will produce a loss.  (13.2) (3.5) (24.5) (24.5) (24.5) (24.5) (24.5) (24.5) (25.5) (24.5) (24.5) (25.5) (24.5) (25.5) (26.5) (2	Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(26.8)	(2.8)
there is a gain. If smaller releases, a loss.  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.  New Members. Additional unfunded accrued liability will produce a loss.  (3.2) (3.3) (3.3)  New Members. Additional unfunded accrued liability will produce a loss.  (3.2) (3.3)  New Members. Additional unfunded accrued liability will produce a loss.  (3.2) (3.3)  (3.2) (3.3)  (3.2) (3.3)  (3.2) (3.3)  (3.2) (3.3)  (3.2) (3.3)  (3.3) (3.3)  (3.3) (3.3)  (3.4) (3.5)  (3.5) (3.5)  (3.5) (3.5) (3.5)  (3.5) (3.5) (3.5)  (3.5) (3.5) (3.5)  (3.5) (3.5) (3.5)  (3.5) (3.5) (3.5) (3.5)  (3.5) (3.5) (3.5) (3.5)  (3.6) (3.5)	Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(0.6)	(1.4)
greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.  New Members. Additional unfunded accrued liability will produce a loss.  (32) (33) (24) (25) (24) (25) (24) (25) (25) (24) (25) (25) (26) (26) (26) (26) (26) (26) (26) (26	Withdrawal From Employment. If more liabilities are released by withdrawals than assumed there is a gain. If smaller releases, a loss.	, 72.2	24.2
nvestment Income. If there is a greater investment income than assumed, there is a gain. If (165.5) (24.5 ess income, a loss.  Death After Retirement. If retired members live longer than assumed, there is a loss. If not is long, a gain.  Other, Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.  Sain (or Loss) During Year From Financial Experience (78.7) 42.  Non-Recurring Items, Adjustments for plan amendments, assumption changes, method 0.0 1.014.  hanges and data corrections.  Composite Gain (or Loss) During Year (78.7) 1,056.  KERS Hazardous  Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss. (16.7) 2.  Disability Retirements. If disability claims are less than assumed, there is a gain. If more (3.0) (0.2).  Claims, there is a loss.  Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, 16.6 9.  Payor Claims Increases, a loss. For insurance, smaller pay increases than assumed, there is a gain. If gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain. If greater increases, a loss.  New Members. Additional unfunded accrued liability will produce a loss. (3.4) (3.2).  Death After Retirement. If retired members live longer than assumed, there is a gain. If each constitution of the passion of the p	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.	81.9	41.2
sess income, a loss.  Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.  Dither. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.  Gain (or Loss) During Year From Financial Experience  (78.7) 42  Non-Recurring Items. Adjustments for plan amendments, assumption changes, method ada corrections.  Composite Gain (or Loss) During Year  (78.7) 1,056  KERS Hazardous  Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.  Claims, a loss.  Disability Retirements. If disability claims are less than assumed, there is a gain. If more (3.0) (0.2)  Claims, there is a loss.  Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If grain. If grain in grains are less than assumed, there is a gain. If grain in grain in grains are less than assumed, there is a gain. If grain in grain in grains, there is a gain. If survivor claims are released by withdrawals than assumed, less a gain. If grain in grain in grain in grains, and grain in grain in grains, and grain. If grain in grains, and grain in grains, and grain in grains, and grain in grains, and grain. If grain in grains, and grain in gra	New Members. Additional unfunded accrued liability will produce a loss.	(13.2)	(3.7)
Dither. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.  Sain (or Loss) During Year From Financial Experience  (78.7)  42  Non-Recurring Items. Adjustments for plan amendments, assumption changes, method  0.0  1,014  changes and data corrections.  Composite Gain (or Loss) During Year  (78.7)  1,056  KERS Hazardous  Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.  (16.7)  2.0  Closability Retirements. If disability claims are less than assumed, there is a gain. If more  (3.0)  (0.2)  claims, a loss.  Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more  claims, there is a loss.  Withdrawal From Employment. If more liabilities are released by withdrawals than assumed.  Age a gain. If more Employment. If more liabilities are released by withdrawals than assumed.  Payor or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If payor a gain. If gain a gain a gain a gain a gain a gain a	Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(165.5)	(24.9)
Adjustments, timing of financial transactions, insurance election changes, etc.  Sain (or Loss) During Year From Financial Experience  Non-Recurring Items. Adjustments for plan amendments, assumption changes, method  0.0 1,014.  Composite Gain (or Loss) During Year  (78.7) 1,056.  KERS Hazardous  Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.  (16.7) 2.  Disability Retirements. If disability claims are less than assumed, there is a gain. If more (3.0) (0.2) (0.2) (1.2	Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	16.8	54.2
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method  0.0 1,014. changes and data corrections.  Composite Gain (or Loss) During Year  (78.7) 1,056.  KERS Hazardous  Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.  (16.7) 2.  Disability Retirements. If disability claims are less than assumed, there is a gain. If more  (3.0) (0.2). claims, a loss.  Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more  (3.0) (0.2). claims, there is a loss.  Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If more  Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.  Pay or Claims Increases, a loss. For insurance, smaller claims increases than assumed generates a jain; larger, a loss.  New Members. Additional unfunded accrued liability will produce a loss.  Cleath After Retirement. If retired members live longer than assumed, there is a gain. If  2.2 (3.4) (3.2).  Cleath After Retirement. If retired members live longer than assumed, there is a loss. If not as gain. If retired members live longer than assumed, there is a loss. If not as gain. If retired members live longer than assumed, there is a loss. If not as gain. If retired members live longer than assumed, there is a loss. If not as gain. If retired members live longer than assumed, there is a loss. If not as gain. If retired members live longer than assumed, there is a loss. If not as gain. If retired members live longer than assumed, there is a loss. If not as long, a gain.  Cleath After Retirement. If retired members live longer than assumed, there is a loss. If not as gain. If the longer live longer than assumed, there is a loss. If not as gain. If the longer live lo	Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	69.1	(15.4)
Composite Gain (or Loss) During Year (78.7) 1,056.  KERS Hazardous  Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss. (16.7) 2.  Disability Retirements. If disability claims are less than assumed, there is a gain. If more (3.0) (0.3)  Claims, a loss.  Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more (3.0) (0.3)  Claims, there is a loss.  Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.  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 jain; larger, a loss.  New Members. Additional unfunded accrued liability will produce a loss.  Cleath After Retirement. If retired members live longer than assumed, there is a gain. If (16.0) (11.6)  Cleath After Retirement. If retired members live longer than assumed, there is a loss. If not 2.2 (3.4)  Cleath After Retirement. If retired members live longer than assumed, there is a loss. If not 2.2 (3.5)  Cleath After Retirement, If retired members live longer than assumed, there is a loss. If not 2.2 (3.5)  Cleath After Retirement, If retired members live longer than assumed, there is a loss. If not 2.2 (3.5)  Cleath After Retirement, If retired members live longer than assumed, there is a loss. If not 2.2 (3.3)  Cleath After Retirement, If retired members live longer than assumed, there is a loss. If not 2.2 (3.3)  Cleath After Retirement, If retired members live longer than assumed, there is a loss. If not 2.2 (3.3)  Cleath After Retirement, If retired members live longer than assumed, there is a loss, If not 2.2 (3.3)  Cleath After Retirement, If retired members live longer than assumed, there is a loss, If not 2.2 (3.3)  Cleath After Retirement, If retired members live longer than assumed, there is a loss, If not 2.2 (3.4)  Cleath After Retirement, If retired memb	Gain (or Loss) During Year From Financial Experience	(78.7)	42.1
Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.  Age & Service Retirements. If disability claims are less than assumed, there is a gain. If more  (3.0)  (0.2)  Claims, a loss.  Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more  (3.0)  (0.2)  Claims, there is a loss.  Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.  Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If gain; larger, a loss.  New Members. Additional unfunded accrued liability will produce a loss.  New Members. Additional unfunded accrued liability will produce a loss.  Cleath After Retirement. If retired members live longer than assumed, there is a gain. If gain. If gain.  Cleath After Retirement. If retired members live longer than assumed, there is a loss. If not gain.  Cleath After Retirement. If retired members live longer than assumed, there is a loss. If not gain.  Cleath After Retirement. If retired members live longer than assumed, there is a loss. If not gain.  Cleath After Retirement. If retired members live longer than assumed, there is a loss. If not gain.  Cleath After Retirement. If retired members live longer than assumed, there is a loss. If not gain.  Cleath After Retirement. If retired members live longer than assumed, there is a loss. If not gain.  Cleath After Retirement. If retired members live longer than assumed, there is a loss. If not gain.  Cleath After Retirement. If retired members live longer than assumed, there is a loss. If not gain.  Cleath After Retirement. If retired members live longer than assumed, there is a loss. If not gain.	Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	0.0	1,014.4
Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.  (16.7) 2.  Disability Retirements. If disability claims are less than assumed, there is a gain. If more  (10.2) 2.  Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more  (10.2) 2.  Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more  (10.2) 2.  Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more  (10.3) 2.  Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more  (10.4) 2.  Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more  (10.4) 2.  Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more  (10.4) 3.  Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If great is a gain. If great increases, a loss.  (10.4) 4.  Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If great increases, a loss.  (10.4) 4.  Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If great increases, a loss.  (10.5) 4.  Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If great increases, a loss.  (10.5) 4.  Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If great increases, a loss.  (10.5) 4.  Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If great increases, a loss.  (10.6) 4.  Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If great increases, a loss.  (10.6) 4.  Death-In Service Benefits. If surviver less than assumed, there is a gain. If great increases, a loss.  (10.6) 4.  Death-In Service Benefits. If surviver less than assumed, there is a gain. If great increases, a loss.  (10.6) 4.  Death-In Service Benefits. In Service In Service In Service In S	Composite Gain (or Loss) During Year	(78.7)	1,056.5
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.  Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.  Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.  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.  New Members. Additional unfunded accrued liability will produce a loss.  New Members. Additional unfunded accrued liability will produce a loss.  Obeath After Retirement. If retired members live longer than assumed, there is a gain. If ess income, a loss.  Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.  Gain (or Loss) During Year From Financial Experience  Cash On-Recurring Items. Adjustments for plan amendments, assumption changes, method  Ochanges and data corrections.	KERS Hazardous		
Claims, a loss.  Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.  Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.  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.  New Members. Additional unfunded accrued liability will produce a loss.  New Members. Additional unfunded accrued liability will produce a loss.  Obeath After Retirement. If retired members live longer than assumed, there is a gain. If ess income, a loss.  Death After Retirement. If retired members live longer than assumed, there is a loss. If not loss long, a gain.  Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.  Gain (or Loss) During Year From Financial Experience  (23.3)  25.  Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss	s. (16.7)	2.0
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.  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.  New Members. Additional unfunded accrued liability will produce a loss.  New Members. If there is a greater investment income than assumed, there is a gain. If ess income, a loss.  Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.  Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.  Gain (or Loss) During Year From Financial Experience  (23.3)  Other. Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(3.0)	(0.2)
There is a gain. If smaller releases, a loss.  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.  New Members. Additional unfunded accrued liability will produce a loss.  New Members. Additional unfunded accrued liability will produce a loss.  (3.4)  (3.2)  Investment Income. If there is a greater investment income than assumed, there is a gain. If ess income, a loss.  Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.  Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.  Gain (or Loss) During Year From Financial Experience  (23.3)  Ochanges and data corrections.	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
greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss.  New Members. Additional unfunded accrued liability will produce a loss.  (3.4) (3.2)  nivestment Income. If there is a greater investment income than assumed, there is a gain. If ess income, a loss.  Death After Retirement. If retired members live longer than assumed, there is a loss. If not ess long, a gain.  Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.  Gain (or Loss) During Year From Financial Experience  (23.3)  25.  Non-Recurring Items. Adjustments for plan amendments, assumption changes, method  Ochanges and data corrections.	Withdrawal From Employment. If more liabilities are released by withdrawals than assumed there is a gain. If smaller releases, a loss.	, 16.6	9.3
nvestment Income. If there is a greater investment income than assumed, there is a gain. If ess income, a loss.  Death After Retirement. If retired members live longer than assumed, there is a loss. If not es long, a gain.  Other. Miscellaneous gains and losses resulting from changes in valuation software, data edjustments, timing of financial transactions, insurance election changes, etc.  Gain (or Loss) During Year From Financial Experience  Non-Recurring Items. Adjustments for plan amendments, assumption changes, method  Ochanges and data corrections.	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.	6.3	10.8
Death After Retirement. If retired members live longer than assumed, there is a loss. If not 2.2 6 as long, a gain.  Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.  Gain (or Loss) During Year From Financial Experience (23.3) 25.  Non-Recurring Items. Adjustments for plan amendments, assumption changes, method 0.0 0.0 changes and data corrections.	New Members. Additional unfunded accrued liability will produce a loss.	(3.4)	(3.2)
Dither. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.  Gain (or Loss) During Year From Financial Experience  Von-Recurring Items. Adjustments for plan amendments, assumption changes, method  Changes and data corrections.	Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(16.0)	(11.6)
Adjustments, timing of financial transactions, insurance election changes, etc.  Gain (or Loss) During Year From Financial Experience  (23.3) 25.  Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	2.2	6.1
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method Changes and data corrections.	Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	(9.4)	11.8
changes and data corrections.	Gain (or Loss) During Year From Financial Experience	(23.3)	25.0
Composite Gain (or Loss) During Year (23.3) 25.	Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	0.0	0.0
	Composite Gain (or Loss) During Year	(23.3)	25.0

# **Continued.** Gains or Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience (in Millions) as of June 30, 2013

Type of Activity	Retirement Gain	Insurance Gain
CERS Non-Hazardous		
Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss	i. (227.3)	(13.1)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	77.5	(4.1)
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(1.2)	(1.9)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed there is a gain. If smaller releases, a loss.	, 56.7	16.7
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.	77.1	35.7
New Members. Additional unfunded accrued liability will produce a loss.	(12.3)	(3.0)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(165.0)	(51.3)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	0.4	39.5
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	124.5	38.1
Gain (or Loss) During Year From Financial Experience	(69.6)	56.6
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	0.0	0.0
Composite Gain (or Loss) During Year	(69.6)	56.6
CERS Hazardous		
Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss	(46.3)	(8.4)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(6.7)	(0.2)
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.2	(0.2)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed there is a gain. If smaller releases, a loss.	, 38.9	24.5
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.	25.5	44.8
New Members. Additional unfunded accrued liability will produce a loss.	(7.4)	(3.9)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(59.2)	(27.8)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	(1.9)	10.2
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	(2.2)	(38.8)
Gain (or Loss) During Year From Financial Experience	(59.2)	0.2
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	0.0	0.0
Composite Gain (or Loss) During Year	(59.2)	0.2

## Continued. Gains or Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience (in Millions) as of June 30, 2013

Type of Activity	Retirement Gain	Insurance Gain
SPRS		
Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss	. (8.2)	(5.7)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(0.2)	(0.7)
Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.0	0.0
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	4.4	7.5
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.	4.4	8.9
New Members. Additional unfunded accrued liability will produce a loss.	(0.1)	(0.1)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(9.3)	(2.2)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	(1.0)	2.2
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.	2.7	(2.8)
Gain (or Loss) During Year From Financial Experience	(7.3)	7.1
Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.	0.0	117.0
Composite Gain (or Loss) During Year	(7.3)	124.1

### **SOLVENCY**

## Solvency Test

Solvency Test for KERS Non-Hazardous Pension Fund as of June 30, 2013

	Actuarial Liabilities					ies Covered by Jarial Assets	
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/08	\$875,178,068	\$7,162,496,700	\$2,092,015,217	\$5,318,792,893	100.0%	62.0%	
6/30/09	\$793,574,765	\$8,205,155,691	\$1,659,819,076	\$4,794,611,365	100.0%	48.8%	
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%	

**Continued.** Solvency Test for KERS Non-Hazardous Insurance Fund as of June 30, 2013

	Actuarial Liabilities						ies Covered by Jarial Assets	
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)	
6/30/08	\$0	\$2,788,189,754	\$2,643,309,531	\$603,197,761	100.0%	21.6%		
6/30/09	\$0	\$2,861,867,088	\$1,645,458,483	\$534,172,580	100.0%	18.7%		
6/30/10	\$0	\$2,744,534,054	\$1,721,601,987	\$471,341,628	100.0%	17.2%		
6/30/11	\$0	\$2,568,002,978	\$1,712,086,655	\$451,620,442	100.0%	17.6%		
6/30/12	\$0	\$1,924,068,623	\$1,201,261,534	\$446,080,511	100.0%	23.2%		
6/30/13	\$0	\$1,338,772,860	\$789,981,274	\$497,584,327	100.0%	37.2%		

## KERS Hazardous Pension Fund as of June 30, 2013

	Actuarial Liabilities						vered by Assets	
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)	
6/30/08	\$89,590,638	\$355,771,877	\$172,648,312	\$502,132,214	100.0%	100.0%	32.9%	
6/30/09	\$87,779,938	\$413,972,356	\$172,659,487	\$502,503,287	100.0%	100.0%	0.4%	
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%		

## KERS Hazardous Insurance Fund as of June 30, 2013

	Actuarial Liabilities						vered by ssets		
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)		
6/30/08	\$0	\$228,834,940	\$312,822,274	\$288,161,759	100.0%	100.0%	19.0%		
6/30/09	\$0	\$242,123,365	\$249,008,805	\$301,634,592	100.0%	100.0%	23.9%		
6/30/10	\$0	\$268,510,709	\$224,786,820	\$314,427,296	100.0%	100.0%	20.4%		
6/30/11	\$0	\$285,539,861	\$221,518,906	\$329,961,615	100.0%	100.0%	20.1%		
6/30/12	\$0	\$196,578,935	\$188,013,471	\$345,573,948	100.0%	100.0%	79.2%		
6/30/13	\$0	\$202,031,515	\$183,486,160	\$370,774,403	100.0%	100.0%	92.0%		

## CERS Non-Hazardous Pension Fund as of June 30, 2013

	Actuarial Liabilities						ties Covered by uarial Assets	
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)	
6/30/08	\$963,213,677	\$4,058,767,419	\$2,282,236,595	\$5,731,502,438	100.0%	100.0%	31.1%	
6/30/09	\$991,628,551	\$4,542,483,102	\$2,378,801,859	\$5,650,789,991	100.0%	100.0%	4.9%	
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%		

**Continued.** Solvency Test for CERS Non-Hazardous Insurance Fund as of June 30, 2013

	Actuarial Liabilities					ies Covered by Jarial Assets	
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/08	\$0	\$1,521,450,274	\$2,061,743,192	\$1,168,883,170	100.0%	76.8%	
6/30/09	\$0	\$1,478,782,753	\$1,591,603,265	\$1,216,631,769	100.0%	82.3%	
6/30/10	\$0	\$1,526,533,372	\$1,631,806,802	\$1,293,038,593	100.0%	84.7%	
6/30/11	\$0	\$1,460,808,255	\$1,613,164,950	\$1,433,450,793	100.0%	98.1%	
6/30/12	\$0	\$1,146,907,750	\$1,223,863,538	\$1,512,853,851	100.0%	100.0%	29.9%
6/30/13	\$0	\$1,205,599,287	\$1,238,294,813	\$1,628,244,197	100.0%	100.0%	34.1%

CERS Hazardous Pension Fund as of June 30, 2013

	Actuarial Liabilities					es Covere arial Asse	•
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)
6/30/08	\$338,324,362	\$1,406,982,409	\$657,815,324	\$1,750,867,373	100.0%	100.0%	0.8%
6/30/09	\$350,308,879	\$1,540,262,587	\$687,873,134	\$1,751,487,540	100.0%	91.0%	
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%	

CERS Hazardous Insurance Fund as of June 30, 2013

	Actuarial Liabilities							
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)	
6/30/08	\$0	\$722,435,184	\$1,047,347,773	\$613,526,319	100.0%	84.9%		
6/30/09	\$0	\$725,899,836	\$867,648,427	\$651,130,782	100.0%	89.7%		
6/30/10	\$0	\$814,300,256	\$860,402,960	\$692,769,770	100.0%	85.1%		
6/30/11	\$0	\$771,631,287	\$876,071,468	\$770,790,274	100.0%	99.9%		
6/30/12	\$0	\$575,099,089	\$789,743,968	\$829,040,842	100.0%	100.0%	32.2%	
6/30/13	\$0	\$660,955,331	\$776,377,486	\$892,774,391	100.0%	100.0%	29.9%	

SPRS Pension Fund as of June 30, 2013

	Actuarial Liabilities								
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)		
6/30/08	\$41,391,416	\$426,311,368	\$119,426,473	\$350,891,451	100.0%	72.6%			
6/30/09	\$41,664,469	\$459,585,353	\$101,079,046	\$329,966,989	100.0%	62.7%			
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%			

## Continued. Solvency Test for SPRS Insurance Fund as of June 30, 2013

	Actuarial Liabilities							
Valuation Date	(1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members Employer Portion	Actuarial Value of Assets	(1)	(2)	(3)	
6/30/08	\$0	\$178,655,245	\$266,452,223	\$123,961,197	100.0%	69.4%		
6/30/09	\$0	\$167,091,453	\$196,939,688	\$123,526,647	100.0%	73.9%		
6/30/10	\$0	\$253,580,827	\$181,379,668	\$121,175,083	100.0%	47.8%		
6/30/11	\$0	\$252,439,726	\$185,988,037	\$123,687,289	100.0%	49.0%		
6/30/12	\$0	\$190,258,729	\$143,645,053	\$124,372,072	100.0%	65.4%		
6/30/13	\$0	\$139,508,590	\$82,818,153	\$136,321,060	100.0%	97.7%		

#### **VALUATIONS**

## 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 for 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
6/30/08	414	48,085	\$1,837,873,488	\$38,221	2.9%	43.2	9.1
6/30/09	334	46,060	\$1,754,412,912	\$38,090	(0.3)%	43.0	8.7
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

### 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
6/30/08	16	4,393	\$148,710,060	\$33,852	1.6%	41.4	6.9
6/30/09	20	4,334	\$146,043,576	\$33,697	(0.5)%	41.4	7.0
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

<sup>&</sup>lt;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, 2013.

## Summary of Active Member Valuation Data for 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
6/30/08	1,110	85,221	\$2,166,612,648	\$25,423	3.9%	45.9	8.3
6/30/09	1,108	83,724	\$2,183,611,848	\$26,081	2.6%	46.2	8.6
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

## **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
6/30/08	299	10,173	\$474,241,332	\$46,618	2.2%	38.7	8.3
6/30/09	290	9,757	\$469,315,464	\$48,100	3.2%	38.4	8.8
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

### **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
6/30/08	1	993	\$53,269,080	\$53,645	4.2%	36.9	10.8
6/30/09	1	946	\$51,660,396	\$54,609	1.8%	37.3	11.0
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

<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, 2013

## Retired Member Valuation

## Summary of Retired Member Valuation Data for KERS Non-Haz

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances	% Increase in Allowances	Average Annual Allowance
6/30/08	2,573	1,115	35,307	\$710,505,270	13.60%	\$20,124
6/30/09	3,465	889	37,883	\$ 812,559,070	14.36%	\$21,449
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

## KERS Haz

Valuation Date	Number of Employers	Total Active Members	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/08	261	59	2,404	\$33,588,993	22.01%	\$13,972
6/30/09	339	95	2,648	\$38,695,501	15.20%	\$14,613
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

### 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
6/30/08	3,366	1,351	37,759	\$393,757,510	12.92%	\$10,478
6/30/09	3,060	883	39,756	\$ 440,061,418	11.76%	\$11,069
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

## **CERS Haz**

Valuation Date	Number of Employers	Total Active Members	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
6/30/08	469	206	5,422	\$127,477,109	12.08%	\$23,511
6/30/09	650	264	5,808	\$ 139,886,751	9.73%	\$24,085
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

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 Retired Member Valuation Data for SPRS

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances	% Increase in Allowances	Average Annual Allowance
6/30/08	42	12	1,135	\$41,293,017	10.98%	\$36,382
6/30/09	75	26	1,184	\$44,273,937	7.22%	\$37,394
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

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



Kentucky Employees Retirement System

County Employees Retirement System

Consumer Price Index

**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 Kentucky Revised Statutes 61.565 and Kentucky Revised Statutes 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 fulltime 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

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).

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.

Final Compensation	X Benefi	t Factor X	Years of Service	
	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.		
Average of the five highest if participation began before 9/1/2008.	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.	Includes earned service purchased service, prior service, and sick leave service (if the member's	
	CERS 2.20% if:	Member begins participating prior to 8/1/2004.	employer participates ir an approved sick leave program).	
	CERS 2.00% if:	Member begins participating on or after 8/1/2004 and before 9/1/2008.	icave programy.	
Average of the last complete five if participation began on or after 9/1/2008.	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 9/1/2008.		

**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 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 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 suspend or reduce COLAs. HB 265 of 2013 eliminated the July 1, 2012 and July 1, 2013 COLAs for all retirees.

**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, 2008, and by 1.5% annually from July 1, 2008.

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; 6% thereafter through June 30, 1986; 4% thereafter through June 30, 2003, and 2.5% thereafter. For employees hired 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 hired on or after September 1, 2008, interest will be credited at a rate of 2.5%.



CPI Consumer Price Index

# Summary of Benefit Provisions KERS Hazardous, CERS Hazardous & SPRS Plans

#### KERS

Kentucky Employees Retirement System

#### **CERS**

County Employees Retirement System

#### **SPRS**

State Police Retirement System

**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 Kentucky Revised Statutes 61.565 and Kentucky Revised Statutes 61.752. KERS and 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.

Retirement Eligibility for Members Whose 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 for Members Whose Participation Began On or After 9/1/08

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.

**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.

Members hired on or after 8/1/2004 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 noted above based upon actual service.

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.

#### Benefit Formula

Final Compensation	X Benef	Benefit Factor		
Average of the three highest if participation began before 9/1/2008.	KERS 2.49%, CERS 2.50%, SPRS 2.50%, if:	Member begins participating before 9/1/2008.	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 on or after 9/1/2008.		

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

**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 suspend or reduce COLAs. HB 265 of 2013 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, 2008, and by 1.5% annually from July 1, 2008.

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; 6% thereafter through June 30, 1986; 4% thereafter through June 30, 2003, and 2.5% thereafter. For employees hired 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 hired on or after September 1, 2008, interest will be credited at a rate of 2.5%.



Cost of Living Adjustment

Consumer Price Index



# **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.

Member Breakdown The data for years 2006-2009 reflects the number of accounts in each system. A single member may have multiple accounts, which contribute to one pension. Beginning in 2010: 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.

KERS Non-Haz Membership					
Fiscal Year	Active	Inactive	Retired	Total	
2008	48,202	32,717	35,286	116,205	
2009	46,060	34,515	37,883	118,458	
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	
KERS Haz N	1embership	)			
2008	4,397	3,534	2,402	10,333	
2009	4,334	3,056	2,648	10,038	
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	
CERS Non-	Haz Membe	ership			
2008	85,803	55,279	37,558	178,640	
2009	83,724	60,275	39,756	183,755	
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	

**KERS** 

Kentucky Employees Retirement System

**CERS** 

County Employees Retirement System

**SPRS** 

State Police Retirement System

Haz

Hazardous (i.e. KERS Haz)

Non-Haz

Non-Hazardous (i.e. CERS Non-Haz)

Continued. CERS Haz Membership				
Fiscal Year	Active	Inactive	Retired	Total
2008	10,185	4,815	5,314	20,314
2009	9,757	2,522	5,808	18,087
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
SPRS				
2008	995	302	1,136	2,433
2009	946	332	1,184	2,462
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
Kentucky Retire	ement Systems	Membershi	p Totals	
2008	149,582	96,647	81,696	327,925
2009	144,821	101,552	87,279	333,652
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

#### Schedule of Participating Employers in CERS

Agency Classification	Number of Agencies	Number of Employees
Airport Boards	5	508
Ambulance Services	20	405
Area Development Districts	14	699
Boards of Education	174	48,634
Cities	220	10,112
Community Action Agencies	22	2,718
Conservation Districts	44	57
County Attorneys	69	645
County Clerks	16	594
Development Authorities	5	9
Fire Departments	39	762
Fiscal Courts	118	11,017
Health Departments	1	297
Housing Authorities	41	430
Jailers	2	33
Libraries	86	1,174
Other Retirement Systems	2	3
P1 State Agencies	1	1,679
Parks and Recreation	7	62
Planning Commissions	16	211
Police Departments	2	16
Riverport Authorities	5	66
Sanitation Districts	9	355
Sheriff Departments	12	820
Special Districts & Boards	51	1,413
Tourist Commissions	23	176
Urban Government Agencies	2	6,705
Utility Boards	119	3,883
Total	1,125	93,483

#### Schedule of Participating Employers in KERS

Agency Classification	Number of Agencies	Number of Employees	
County Attorneys	61	352	
Health Departments	58	3,124	
Master Commissioner	32	75	
Non-P1 State Agencies	38	1,381	
Other Retirement Systems	2	287	
P1 State Agencies	137	32,412	
Regional Mental Health Units	13	4,510	
Universities	7	3,828	
Total	348	45,969	
Calcadula of Dautiainatina Tanalayana			

#### Schedule of Participating Employers in SPRS

Kentucky State Police -	1	906
Uniformed Officers		

# Principal Participating Employers in KERS

Participating Employer	Rank	Covered Employees	% of Total System
Department For Community Based Services	1	4,328	9.42%
Department Of Highways	2	3,962	8.62%
Department Of Corrections	3	3,905	8.49%
Bluegrass Regional Mental Health Mental Retardation Board	4	1,534	3.34%
Judicial Department Administrative Office Of The Courts	5	1,329	2.89%
Department Of Juvenile Justice	6	1,279	2.78%
Department for Behavioral Health Developmental Intellectual Disabilities	7	1,085	2.36%
Northern Kentucky University	8	962	2.09%
Kentucky State Police	9	949	2.06%
Department Of Revenue	10	934	2.03%
All Others		25,702	55.91%
Total		45,969	100%

# Principal Participating Employers in CERS

Participating Employer	Rank	Covered Employees	% of Total System
Jefferson County Board Of Education	1	6,590	7.05%
Louisville Jefferson County Metro Government	2	5,150	5.51%
Fayette County Board Of Education	3	1,991	2.13%
Judicial Department Administrative Office Of The Courts	4	1,679	1.80%
Lexington Fayette Urban County Government	5	1,555	1.66%
Boone County Board Of Education	6	1,119	1.20%
Bullitt County Board Of Education	7	1,048	1.12%
Hardin County Board Of Education	8	1,017	1.09%
Pike County Board Of Education	9	992	1.06%
Warren County Board Of Education	10	913	0.98%
All Others		71,429	76.41%
Total		93,483	100%

# Average Monthly Benefit by Length of Service in KERS

	KERS Non-H	azardous	us KERS Hazard		
Service Credit Range	Number of Accounts	Average Monthly Benefit	Number of Accounts	Average Monthly Benefit	
Under 5 Years	4,580	\$151	621	\$180	
5 or more but less than 10	5,158	\$416	695	\$579	
10 or more but less than 15	4,604	\$689	625	\$1,013	
15 or more but less than 20	3,985	\$1,022	542	\$1,538	
20 or more but less than 25	4,419	\$1,349	721	\$2,001	
25 or more but less than 30	10,668	\$2,285	141	\$2,747	
30 or more but less than 35	6,184	\$3,207	57	\$3,562	
35 or more	2,550	\$4,512	9	\$3,704	
Total	42,148	\$1,702	3,411	\$1,186	

#### Average Monthly Benefit by Length of Service in CERS

	CERS Non-H	lazardous	CERS Hazardous		
Service Credit Range	Number of Accounts	Average Monthly Benefit	Number of Accounts	Average Monthly Benefit	
Under 5 Years	5,828	\$146	612	\$219	
5 or more but less than 10	9,424	\$328	889	\$658	
10 or more but less than 15	8,842	\$520	678	\$1,210	
15 or more but less than 20	6,994	\$767	622	\$1,703	
20 or more but less than 25	7,202	\$988	2,666	\$2,386	
25 or more but less than 30	8,833	\$1,911	1,138	\$3,326	
30 or more but less than 35	2,215	\$2,668	391	\$4,111	
35 or more	592	\$3,619	87	\$5,061	
Total	49,930	\$920	7,083	\$2,088	

#### Average Monthly Benefit by Length of Service in SPRS

Service Credit Range	Number of Accounts	Average Monthly Benefit
Under 5 Years	67	\$326
5 or more but less than 10	44	\$884
10 or more but less than 15	44	\$1,311
15 or more but less than 20	78	\$1,988
20 or more but less than 25	395	\$2,529
25 or more but less than 30	419	\$3,541
30 or more but less than 35	228	\$4,699
35 or more	62	\$5,706
Total	1,337	\$3,127

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) for KERS

Non-Hazardous					Hazardous	
Fiscal Year	Pension	Insurance	Total	Pension	Insurance	Total
June 30 2008	5,056,869	574,479	5,631,348	484,438	269,300	753,738
June 30 2009	3,584,601	365,367	3,949,968	388,951	219,500	608,451
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
CERS						
June 30 2008	5,431,735	1,105,945	6,537,680	1,644,982	576,414	2,221,396
June 30 2009	4,331,010	894,490	5,225,500	1,320,560	483,233	1,803,793
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
SPRS						
June 30 2008	337,359	121,782	459,141			
June 30 2009	256,575	93,682	350,257			
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			

# Kentucky Retirement Systems Total

Fiscal Year	Pension	Insurance	Total
June 30 2008	12,955,383	2,647,920	15,603,303
June 30 2009	9,881,697	2,056,272	11,937,969
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

Additions	2008	2009	2010	2011	2012	2013
Members' Contributions	\$116,487	\$108,362	\$90,780	\$109,879	\$96,418	\$96,744
Employers' Contributions	104,655	112,383	144,051	185,558	211,071	280,874
Health Insurance Contributions (HB1)	-	404	1,799	2,441	5,337	3,344
Net Investment Income	(221,578)	(867,675)	526,209	599,790	9,789	303,011
Total Additions	(436)	(646,526)	762,839	\$897,668	322,615	683,973
Deductions						
Benefit Payments	699,052	808,513	825,627	838,372	858,151	873,906
Refunds	9,076	9,127	8,887	10,931	12,004	12,907
Administrative Expenses	7,724	8,102	8,424	8,558	8,776	10,719
Capital Project Expenses	-	-	-	67	8	
Other Expenses	-	-	-	-	-	
Total Deductions	715,852	825,742	842,938	857,928	878,939	897,532
Total Changes in Plan Net Position	\$(716,288)	\$(1,472,268)	\$(80,099)	\$39,740	\$(556,324)	\$(213,559)
KERS Non-Haz Insurance Fun	d					
Additions	2008	2009	2010	2011	2012	2013
Employers' Contributions	\$56,745	\$74,434	\$\$92,679	\$123,256	\$146,844	\$162,191
Net Investment Income	(38,965)	(154,894)	50,765	77,225	(4,803)	40,661

Additions	2008	2009	2010	2011	2012	2013
Employers' Contributions	\$56,745	\$74,434	\$\$92,679	\$123,256	\$146,844	\$162,191
Net Investment Income	(38,965)	(154,894)	50,765	77,225	(4,803)	40,661
Member Drug Reimbursement	6,634	8,168	8,551	10,025	7,865	4,846
Premiums Rec'd from Retirees	12,940	12,320	13,588	15,826	15,666	14,294
Total Additions	37,354	(59,972)	165,583	\$226,332	\$165,563	221,992
Deductions						
Benefit Payments	122,946	145,036	157,819	161,804	163,841	140,157
Administrative Expenses	3,487	4,104	4,333	4,667	5,203	4,285
Total Deductions	126,433	149,140	162,152	166,471	169,044	144,442
Total Changes in Plan Net Position	\$(89,079)	\$(209,112)	\$3,431	\$59,861	169,044	77,550

KERS Haz Pension Fund						
Additions	2008	2009	2010	2011	2012	2013
Member Contributions	\$13,091	\$12,442	\$11,110	\$12,959	\$11,602	\$11,467
Employer Contributions	15,257	15,843	17,658	18,085	17,367	27,334
Health Insurance Contribution (HB1)	-	38	118	241	629	402
Net Investment Income	(20,673)	(84,262)	65,588	83,492	(10,286)	51,497
Total Additions	7,675	(55,939)	94,474	\$114,777	19,312	90,700
Deductions						
Benefit Payments	31,606	37,556	37,796	44,509	48,424	48,855
Refunds	1,742	1,277	1,286	2,062	2,543	2,762
Administrative Expenses	664	715	737	721	877	733
Capital Project Expenses	-	-	-	6	-	-
Total Deductions	34,012	39,548	39,819	47,298	51,844	52,350
Total Changes in Plan Net Position	\$(26,337)	\$(95,487)	\$54,655	\$67,479	\$(32,532)	\$38,350
KERS Haz Insurance Fund						
Additions	2008	2009	2010	2011	2012	2013
Employers' Contributions	\$21,997	\$20,803	\$21,835	\$18,826	\$23,984	\$25,144
Net Investment Income	(25,740)	(60,641)	42,406	45,205	60	32,887
Member Drug Reimbursement	74	186	319	365	351	243
Premiums Rec'd from Retirees	247	300	835	588	876	895
Total Additions	(3,422)	(39,352)	65,395	\$64,984	\$25,271	\$59,169
Deductions						
Benefit Payments	8,069	10,304	13,456	15,327	13,941	16,837
Administrative Expenses	95	144	200	223	335	179
Total Deductions	8,164	10,448	13,656	15,550	14,276	17,016
Total Changes in Plan Net Position	\$(11,586)	\$(49,800)	\$51,739	\$49,434	\$10,995	\$42,153

CERS NOTE 182 FETSIOTT UTIL						
Additions	2008	2009	2010	2011	2012	2013
Members' Contributions	\$125,014	\$122,518	\$106,558	\$144,861	\$119,123	\$120,777
Employers' Contributions	150,925	179,286	207,076	247,968	270,664	294,914
Health Insurance Contribution (HB1)	-	415	1,345	3,216	5,101	4,659
Net Investment Income	(228,020)	(927,090)	669,072	887,514	(3,349)	579,161
Total Additions	47,919	(624,871)	984,051	\$1,283,559	\$391,539	\$999,511
Deductions						
Benefit Payments	403,958	451,304	470,249	494,344	524,385	553,204
Refunds	11,924	10,719	10,001	11,816	12.765	13,306
Administrative Expenses	13,238	13,831	14,323	14,324	16,740	17,743
Capital Project Expenses	-	-	-	112	9	-
Other Expenses	-	-	-	-	-	-
Total Deductions	429,120	475,854	494,571	520,596	553,899	584,253
Total Changes in Plan Net Position	\$(381,201)	\$(1,100,725)	\$489,478	\$762,963	\$(162,360)	\$415,258
CERS Non-Haz Insurance Fund						
Additions	2008	2009	2010	2011	2012	2013
Employer Contributions	\$196,110	\$123,761	\$166,032	\$185,639	\$164,297	\$158,212
Net Investment Income	(95,924)	(244,148)	136,528	274,743	(32,992)	147,194
Member Drug Reimbursement	6,003	7,624	9,157	10,449	8,443	5,360
Premiums Rec'd from Retirees	15,104	14,356	16,216	18,053	17,493	16,293
Total Additions	121,293	(98,407)	327,933	\$488,884	\$157,241	327,059
Total Additions  Deductions	121,293	(98,407)	327,933	\$488,884	\$157,241	327,059
	121,293 95,966	(98,407) 108,995	327,933 123,133	\$488,884 131,945	\$157,241 141,694	327,059 132,489
Deductions			·	. ,		
<b>Deductions</b> Benefit Payments	95,966	108,995	123,133	131,945	141,694	132,489

CERS Haz Pension Fund						
Additions	2008	2009	2010	2011	2012	2013
Members' Contributions	\$44,260	\$42,582	\$37,200	\$53,918	\$41,797	\$42,863
Employers' Contributions	72,155	78,151	82,887	84,595	77,311	120,140
Health Insurance Contribution (HB1)	-	37	174	1,157	811	734
Net Investment Income	(97,393)	(302,748)	206,073	286,688	(24,724)	181,171
Total Additions	19,022	(181,978)	326,334	\$426,358	95,195	344,908
Deductions						
Benefit Payments	125,191	138,810	136,810	167,540	169,352	179,696
Refunds	2,641	2,436	1,956	2,654	3,516	3,158
Administrative Expenses	1,143	1,198	1,234	1,191	1,319	1,202
Capital Project Expenses	-	-	-	9	-	
Other Expenses	-	-	-	-	-	
Total Deductions	128,975	142,444	140,000	171,394	174,187	184,056
Total Changes in Plan Net Position	\$(109,953)	\$(324,422)	\$186,334	\$254,964	\$(79,992)	\$ 160,852
CERS Haz Insurance Fund						
Additions	2008	2009	2010	2011	2012	2013
Employers' Contributions	\$90,113	\$70,783	\$82,970	\$98,203	\$90,204	\$84,962
Net Investment Income	(48,529)	(123,461)	67,288	139,242	(16,127)	79,885
Member Drug Reimbursement	420	628	1,493	972	871	562
Premiums Rec'd from Retirees	222	330	508	516	695	657
Total Additions	42,226	(51,720)	152,259	\$238,933	\$75,643	\$166,066
Deductions						
Benefit Payments	35,604	41,017	48,321	51,831	50,155	59,941
Administrative Expenses	364	444	554	580	688	679
Total Deductions	35,968	41,461	48,875	52,411	50,843	60,620
Total Changes in Plan Net Position	\$6,258	\$(93,181)	\$103,384	\$186,522	\$24,800	\$105,446

Changes in Plan	Net Position(in	Thousands)	for SPRS P	ension Fund

Additions	2008	2009	2010	2011	2012	2013
Members' Contributions	\$5,407	\$4,938	\$4,127	\$5,225	\$5,154	\$4,495
Employers' Contributions	7,443	8,186	9,489	11,920	15,040	18,501
Health Insurance Contribution (HB1)	-	5	12	31	46	48
Net Investment Income	(12,283)	(51,175)	40,602	44,739	43	25,954
Total Additions	567	(38,046)	54,230	\$61,915	\$20,283	\$48,998
Deductions						
Benefit Payments	39,367	42,547	45,582	46,754	48,867	50,559
Refunds	85	69	144	58	149	31
Administrative Expenses	137	122	130	124	73	184
Capital Project Expenses	-	-	-	1	-	
Other Expenses	-	-	-	-	-	
Total Deductions	39,589	42,738	45,856	46,937	49,089	50,774
Total Changes in Plan Net Position	\$(39,022)	\$(80,784)	\$8,374	\$14,978	\$(28,806)	\$(1,776)
SPRS Insurance Fund						
Additions	2008	2009	2010	2011	2012	2013
Employer Contributions	\$7,329	\$7,414	\$8,369	\$10,051	10,810	\$16,829
Net Investment Income	(11,440)	(28,166)	13,085	24,773	(1,458)	12,993
Member Drug Reimbursement	184	229	274	318	279	178
Insurance Appropriation	-	-	-	-	-	
Premiums Rec'd from Retirees	9	23	16	18	20	23
Total Additions	(3,918)	(20,500)	21,744	\$35,160	\$9,651	\$30,023
Deductions						
Benefit Payments	6,768	7,476	10,769	12,172	10,791	12,546
Administrative Expenses	106	124	147	179	201	184
Total Deductions	6,874	7,600	10,916	12,351	10,992	12,730
Total Changes in Plan Net Position	\$(10,792)	\$28,100	\$10,828	\$22,809	\$(1,341)	\$17,293

### Schedule of Benefit Expenses for KERS Non-Haz

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2007-08					
Average Benefit	\$980	\$1,831	\$897	\$906	\$1,624
Number of Accounts	4,845	27,080	2,579	839	35,343
Total Monthly Benefits	\$4,747,523	\$49,585,033	\$2,313,860	\$760,088	\$57,406,504
% of Total Monthly Benefits	8.3%	86.4%	4.0%	1.3%	100.0%
FY 2008-09					
Average Benefit	\$1,036	\$1,926	\$927	\$931	\$1,717
Number of Accounts	5,041	29,386	2,566	861	37,854
Total Monthly Benefits	\$5,223,184	\$56,596,178	\$2,377,856	\$801,966	\$64,999,184
% of Total Monthly Benefits	8.0%	87.1%	3.7%	1.2%	100.0%
FY 2009-10					
Average Benefit	\$1,009	\$1,912	\$936	\$963	\$1,692
Number of Accounts	5,991	30,303	2,625	813	39,732
Total Monthly Benefits	\$6,046,047	\$57,939,304	\$2,457,461	\$782,980	\$67,225,791
% of Total Monthly Benefits	9.00%	86.20%	3.60%	1.20%	100.00%
FY 2010-11					
Average Benefit	\$1,008	\$1,920	\$974	\$1,071	\$1,703
Number of Accounts	6,118	30,900	2,629	835	40,482
Total Monthly Benefits	\$6,166,372	\$59,318,561	\$2,561,377	\$894,077	\$68,940,387
% of Total Monthly Benefits	8.94%	86.04%	3.72%	1.30%	100.00%
FY 2011-12					
Average Benefit	\$1,008	\$1,927	\$1,029	\$925	\$1,709
Number of Accounts	6,218	31,580	2,626	959	41,383
Total Monthly Benefits	\$6,269,576	\$60,879,802	\$2,702,410	\$887,236	\$70,739,025
% of Total Monthly Benefits	8.86%	86.06%	3.82%	1.25%	100.00%
FY 2012-13					
Average Benefit	\$1,003	\$1,915	\$1,020	\$889	\$1,696
Number of Accounts	6,441	32,310	2,687	962	42,400
Total Monthly Benefits	\$6,459,840	\$61,882,399	\$2,740,491	\$855,033	\$71,937,763
% of Total Monthly Benefits	8.98%	86.02%	3.81%	1.19%	100.00%

These tables (pages 13-17) 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 for KERS Haz

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2007-08					
Average Benefit	\$912	\$1,455	\$549	\$751	\$1,094
Number of Accounts	1,231	952	173	78	2,434
Total Monthly Benefits	\$1,123,281	\$1,384,856	\$94,999	\$58,567	\$2,661,703
% of Total Monthly Benefits	42.2%	52.0%	3.6%	2.2%	100.0%
FY 2008-09					
Average Benefit	\$941	\$1,517	\$576	\$778	\$1,143
Number of Accounts	1,353	1,066	173	74	2,666
Total Monthly Benefits	\$1,272,796	\$1,617,453	\$99,607	\$57,607	\$3,047,462
% of Total Monthly Benefits	41.8%	53.1%	3.3%	1.8%	100.0%
FY 2009-10					
Average Benefit	\$933	\$1,489	\$593	843	\$1,137
Number of Accounts	1,446	1,146	157	75	2,824
Total Monthly Benefits	\$1,348,511	\$1,706,876	\$93,064	\$63,194	\$3,211,645
% of Total Monthly Benefits	42.00%	53.10%	2.90%	2.00%	100.00%
FY 2010-11					
Average Benefit	\$957	\$1,526	\$600	\$814	\$1,166
Number of Accounts	1,571	1,240	158	79	3,048
Total Monthly Benefits	\$1,503,160	\$1,892,300	\$94,766	\$64,299	\$3,554,525
% of Total Monthly Benefits	42.29%	53.24%	2.66%	1.81%	100.00%
FY 2011-12					
Average Benefit	\$976.67	\$1,541.49	\$581	\$721	\$1,179
Number of Accounts	1,657	1,339	180	92	3,268
Total Monthly Benefits	\$1,618,343	\$2,064,050	\$104,644	\$66,409	\$3,853,449
% of Total Monthly Benefits	42.00%	53.56%	2.72%	1.72%	100.00%
FY 2012-13					
Average Benefit	\$961	\$1,543	\$662	\$725	\$1,177
Number of Accounts	1,751	1,417	190	93	3,451
Total Monthly Benefits	\$1,682,541	\$2,186,334	\$125,704	\$67,440	\$4,062,019
% of Total Monthly Benefits	41.42%	53.82%	3.10%	1.66%	100.00%

These tables (pages 13-17) 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 for CERS Non-Haz

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2007-08					
Average Benefit	\$523	\$978	\$776	\$582	\$852
Number of Accounts	8,109	25,070	3,679	876	37,734
Total Monthly Benefits	\$4,241,906	24,530,372	2,856,173	510,523	32,138,704
% of Total Monthly Benefits	13.2%	76.3%	8.9%	1.6%	100.0%
FY 2008-09					
Average Benefit	\$547	\$1,021	\$804	\$613	\$890
Number of Accounts	8,471	26,720	3,728	917	39,836
Total Monthly Benefits	\$4,634,447	\$27,268,861	\$2,998,565	\$561,804	\$35,463,676
% of Total Monthly Benefits	13.1%	76.9%	8.5%	1.5%	100.0%
FY 2009-10					
Average Benefit	\$570	\$1,022	\$835	\$623	\$898
Number of Accounts	9,418	28,747	3,951	836	42,952
Total Monthly Benefits	\$5,372,501	\$29,377,417	\$3,298,478	\$520,995	\$38,569,391
% of Total Monthly Benefits	13.90%	76.20%	8.60%	1.30%	100.00%
FY 2010-11					
Average Benefit	\$577	\$1,031	\$847	\$651	\$906
Number of Accounts	10,054	30,224	4,095	873	45,246
Total Monthly Benefits	\$5,802,568	\$31,149,398	\$3,469,974	\$568,188	\$40,990,128
% of Total Monthly Benefits	14.16%	75.99%	8.47%	1.38%	100.00%
FY 2011-12					
Average Benefit	\$587	\$1,039	\$870	\$636	\$914
Number of Accounts	10,620	31,797	4,280	1,052	47,749
Total Monthly Benefits	\$6,237,369	\$33,041,035	\$3,724,859	\$669,377	\$43,672,642
% of Total Monthly Benefits	14.28%	75.66%	8.53%	1.53%	100.00%
FY 2012-13					
Average Benefit	\$591	\$1,042	\$878	\$625	\$917
Number of Accounts	11,266	33,393	4,537	1,075	50,271
Total Monthly Benefits	\$6,661,524	\$34,797,169	\$3,982,213	\$672,310	\$46,113,216
% of Total Monthly Benefits	14.45%	75.46%	8.64%	1.45%	100.00%

These tables (pages 13-17) 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.

Continued. Schedule of Benefit Expenses for CERS Haz

Number of Accounts         1.307         3.5555         610         101         5.573           Total Monthly Benefits         \$1,861,441         7.922,072         601,207         103,077         10.487,797           % of Total Monthly Benefits         17.8%         75.5%         5.7%         1.0%         100.0%           FY 2008-09           Average Benefit         \$1,452         \$2,299         \$1,014         \$1,020         \$1,934           Number of Accounts         1,413         3,733         634         10.4         5,882           Total Monthly Benefits         \$2,052,162         \$8,581,241         \$642,604         \$106,103         \$11,382,110           % of Total Monthly Benefits         18.0%         75.4%         5.7%         0.9%         100.0%           FY 2009-10           Number of Accounts         1,495         3,656         468         89         5,906           Total Monthly Benefits         \$1,359         \$9,106,888         \$590,020         \$100,562         \$11,931,161           % of Total Monthly Benefits         \$1,495         3,656         468         89         5,906           % of Total Monthly Benefits         \$1,495         3,656         468         89		Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
Number of Accounts         1.307         3.5555         610         101         5.573           Total Monthly Benefits         \$1,861,441         7.922,072         601,207         103,077         10.487,797           % of Total Monthly Benefits         17.8%         75.5%         5.7%         1.0%         100.0%           FY 2008-09           Average Benefit         \$1,452         \$2,299         \$1,014         \$1,020         \$1,934           Number of Accounts         1,413         3,733         634         10-4         5,882           Total Monthly Benefits         \$2,052,162         \$8,581,241         \$642,604         \$106,103         \$11,382,110           % of Total Monthly Benefits         18.0%         75.4%         5.7%         0.9%         100.0%           FY 2009-10           Number of Accounts         1,495         3,856         468         89         5,906           Total Monthly Benefits         \$1,295         3,856         468         89         5,906           % of Total Monthly Benefits         \$1,295         76.30%         5.00%         0.80%         100.00%           FY 201-11           Average Benefit         \$1,432         \$2,410 <th>FY 2007-08</th> <th></th> <th></th> <th></th> <th></th> <th></th>	FY 2007-08					
Total Monthly Benefits \$1,861,441 7,922,072 601,207 103,077 10,487,797 % of Total Monthly Benefits 17,8% 75,5% 5,7% 1.0% 100.0% FY 2008-09  Average Benefit \$1,452 \$2,299 \$1,014 \$1,020 \$1,934 Number of Accounts 1,413 3,733 634 104 5,884 Total Monthly Benefits \$2,052,162 \$8,8581,241 \$642,604 \$106,103 \$11,382,102 % of Total Monthly Benefits 18,0% 75,4% 5,7% 0,9% 100,0% FY 2009-10  Average Benefit \$1,427 \$2,362 \$1,261 \$1,130 \$2,015 Number of Accounts 1,495 3,856 468 89 5,906 Total Monthly Benefits \$1,495 3,856 468 89 5,906 \$100,066 \$11,931,667 \$100,000 \$100,0	Average Benefit	\$1,424	\$2,228	\$986	\$1,021	\$1,882
% of Total Monthly Benefits         17.8%         75.5%         5.7%         1.0%         100.0%           FY 2008-09           Average Benefit         \$1.452         \$2.299         \$1.014         \$1.020         \$1.934           Number of Accounts         1,413         3,733         634         104         5.884           Total Monthly Benefits         \$2.052,162         \$8.581,241         \$642,604         \$106,103         \$11,382,102           % of Total Monthly Benefits         18.0%         75.4%         5.7%         0.9%         100.0%           FY 2009-10         Variage Benefit         \$1,427         \$2,362         \$1,261         \$11,30         \$2,015           Number of Accounts         1,495         3,856         468         89         5,906           % of Total Monthly Benefits         17.90%         76.30%         5.00%         0.80%         100.00%           FY 2010-11         Average Benefit         \$1,432         \$2,410         \$1,362         \$1,153         \$2,056           Number of Accounts         1,643         4,082         487         90         6,302           % of Total Monthly Benefits         \$2,352,710         \$9.838,311         \$663,455         \$10,360         <	Number of Accounts	1,307	3,555	610	101	5,573
FY 2008-09           Average Benefit         \$1,452         \$2,299         \$1,014         \$1,020         \$1,934           Number of Accounts         1,413         3,733         634         104         5,884           Total Monthly Benefits         \$2,052,162         \$8,581,241         \$642,604         \$106,103         \$11,382,102           % of Total Monthly Benefits         18.0%         75.4%         5,7%         0,9%         100,008           FY 2009-10         Average Benefit         \$1,427         \$2,362         \$1,261         \$1,130         \$2,015           Number of Accounts         1,495         3,856         468         89         5,906           Total Monthly Benefits         \$2,133,697         \$9,106,888         \$590,020         \$100,562         \$11,931,607           % of Total Monthly Benefits         \$1,432         \$2,410         \$1,362         \$1,153         \$2,056           % of Total Monthly Benefits         \$1,432         \$2,410         \$1,362         \$1,153         \$2,056           Number of Accounts         1,643         4,082         487         90         6,302           Total Monthly Benefits         \$1,235         \$9,838,311         \$663,455         \$103,808         \$12,958,284 </td <td>Total Monthly Benefits</td> <td>\$1,861,441</td> <td>7,922,072</td> <td>601,207</td> <td>103,077</td> <td>10,487,797</td>	Total Monthly Benefits	\$1,861,441	7,922,072	601,207	103,077	10,487,797
Average Benefit         \$1,452         \$2,299         \$1,014         \$1,020         \$1,934           Number of Accounts         1,413         3,733         634         104         5,884           Total Monthly Benefits         \$2,052,162         \$8,581,241         \$642,604         \$106,103         \$11,382,102           % of Total Monthly Benefits         18.0%         75,4%         5,7%         0,9%         100,00%           FY 2009-10           Average Benefit         \$1,427         \$2,362         \$1,261         \$11,30         \$2,015           Number of Accounts         1,495         3,856         468         89         5,906           Total Monthly Benefits         \$2,133,697         \$9,106,888         \$590,020         \$100,562         \$11,931,167           % of Total Monthly Benefits         \$1,790%         76,30%         5,00%         0,80%         100,00%           FY 2010-11           Average Benefit         \$1,432         \$2,410         \$1,362         \$1,153         \$2,056           Number of Accounts         1,643         4,082         487         90         6,302           Total Monthly Benefits         \$2,352,710         \$9,838,311         \$663,455         \$103,808	% of Total Monthly Benefits	17.8%	75.5%	5.7%	1.0%	100.0%
Number of Accounts         1,413         3,733         634         104         5,884           Total Monthly Benefits         \$2,052,162         \$8,581,241         \$642,604         \$106,103         \$11,382,102           % of Total Monthly Benefits         18.0%         75.4%         5.7%         0.9%         100.0%           FY 2009-10           Average Benefit         \$1,427         \$2,362         \$1,261         \$1,130         \$2,015           Number of Accounts         1,495         3,856         468         89         5,906           Total Monthly Benefits         \$2,133,697         \$9,106,888         \$590,020         \$100,562         \$11,931,67           % of Total Monthly Benefits         \$1,790%         76,30%         5.00%         0.80%         100,00%           FY 2010-11           Average Benefit         \$1,432         \$2,410         \$1,362         \$1,153         \$2,056           Number of Accounts         1,643         4,082         487         90         6,302           Total Monthly Benefits         \$1,343         \$2,242         \$1,300         \$1,046         \$2,04           Werage Benefit         \$1,430         \$2,422         \$1,300         \$1,046	FY 2008-09					
Total Monthly Benefits         \$2,052,162         \$8,581,241         \$642,604         \$106,103         \$11,382,100           % of Total Monthly Benefits         18.0%         75.4%         5.7%         0.9%         100.0%           FY 2009-10           Average Benefit         \$1,427         \$2,362         \$1,261         \$1,130         \$2,015           Number of Accounts         1,495         3,856         468         89         5,908           Total Monthly Benefits         \$2,133,697         \$9,106,888         \$590,020         \$100,562         \$11,931,167           % of Total Monthly Benefits         17,90%         76,30%         5,00%         0,80%         100,00%           FY 2010-11           Average Benefit         \$1,432         \$2,410         \$1,362         \$1,153         \$2,056           Number of Accounts         1,643         4,082         487         90         6,302           Total Monthly Benefits         \$2,352,710         \$9,838,311         \$663,455         \$103,808         \$12,958,284           % of Total Monthly Benefits         \$18,16%         75,92%         5,12%         0,80%         100,00%           FY 2011-12           Ave	Average Benefit	\$1,452	\$2,299	\$1,014	\$1,020	\$1,934
% of Total Monthly Benefits         18.0%         75.4%         5.7%         0.9%         100.0%           FY 2009-10           Average Benefit         \$1,427         \$2,362         \$1,261         \$1,130         \$2,015           Number of Accounts         1,495         3,856         468         89         5,906           Total Monthly Benefits         \$2,133,697         \$9,106,888         \$590,020         \$100,562         \$11,931,167           % of Total Monthly Benefits         17,90%         76,30%         5,00%         0,80%         100,00%           FY 2010-11         Average Benefit         \$1,432         \$2,410         \$1,362         \$1,153         \$2,056           Number of Accounts         1,643         4,082         487         90         6,302           Total Monthly Benefits         \$2,352,710         \$9,838,311         \$663,455         \$103,808         \$12,958,284           % of Total Monthly Benefits         \$18,16%         75,92%         5,12%         0,80%         100,00%           FY 2011-12         Average Benefit         \$1,430         \$2,422         \$1,300         \$1,046         \$2,04           Number of Accounts         1,766         4,407         662         110	Number of Accounts	1,413	3,733	634	104	5,884
FY 2009-10           Average Benefit         \$1,427         \$2,362         \$1,261         \$1,130         \$2,015           Number of Accounts         1,495         3,856         468         89         5,906           Total Monthly Benefits         \$2,133,697         \$9,106,888         \$590,020         \$100,562         \$11,931,167           % of Total Monthly Benefits         17,90%         76,30%         5,00%         0,80%         100,00%           FY 2010-11         Average Benefit         \$1,432         \$2,410         \$1,362         \$1,153         \$2,056           Number of Accounts         1,643         4,082         487         90         6,302           Total Monthly Benefits         \$2,352,710         \$9,838,311         \$663,455         \$103,808         \$12,958,284           % of Total Monthly Benefits         18,16%         75,92%         5,12%         0,80%         100,00%           FY 2011-12         Average Benefit         \$1,430         \$2,422         \$1,300         \$1,046         \$2,04           Number of Accounts         1,766         4,407         662         110         6,945           Total Monthly Benefits         \$2,526,722         \$10,673,928         \$861,223         \$115	Total Monthly Benefits	\$2,052,162	\$8,581,241	\$642,604	\$106,103	\$11,382,110
Average Benefit         \$1,427         \$2,362         \$1,261         \$1,130         \$2,015           Number of Accounts         1,495         3,856         468         89         5,906           Total Monthly Benefits         \$2,133,697         \$9,106,888         \$590,020         \$100,562         \$11,931,167           % of Total Monthly Benefits         17,90%         76,30%         5,00%         0,80%         100,00%           FY 2010-11           Average Benefit         \$1,432         \$2,410         \$1,362         \$1,153         \$2,056           Number of Accounts         1,643         4,082         487         90         6,302           Total Monthly Benefits         \$2,352,710         \$9,838,311         \$663,455         \$103,808         \$12,958,284           % of Total Monthly Benefits         \$2,352,710         \$9,838,311         \$663,455         \$103,808         \$12,958,284           % of Total Monthly Benefits         \$1,430         \$2,422         \$1,300         \$1,046         \$2,04           Number of Accounts         1,766         4,407         662         110         6,945           % of Total Monthly Benefits         \$2,526,722         \$10,673,928         \$861,223         \$115,107         \$14,176,98<	% of Total Monthly Benefits	18.0%	75.4%	5.7%	0.9%	100.0%
Number of Accounts         1,495         3,856         468         89         5,908           Total Monthly Benefits         \$2,133,697         \$9,106,888         \$590,020         \$100,562         \$11,931,167           % of Total Monthly Benefits         17,90%         76,30%         5,00%         0,80%         100,00%           FY 2010-11           Average Benefit         \$1,432         \$2,410         \$1,362         \$1,153         \$2,056           Number of Accounts         1,643         4,082         487         90         6,302           Total Monthly Benefits         \$2,352,710         \$9,838,311         \$663,455         \$103,808         \$12,958,284           % of Total Monthly Benefits         18,16%         75,92%         5,12%         0,80%         100,00%           FY 2011-12         Average Benefit         \$1,430         \$2,422         \$1,300         \$1,046         \$2,04           Number of Accounts         1,766         4,407         662         110         6,945           Total Monthly Benefits         \$2,526,722         \$10,673,928         \$861,223         \$115,107         \$14,176,98           % of Total Monthly Benefits         \$1,433         \$2,429         \$1,121         \$1,073	FY 2009-10					
Total Monthly Benefits \$2,133,697 \$9,106,888 \$590,020 \$100,562 \$11,931,167 % of Total Monthly Benefits 17.90% 76.30% 5.00% 0.80% 100.00% FY 2010-11  Average Benefit \$1,432 \$2,410 \$1,362 \$1,153 \$2,056 Number of Accounts 1,643 4,082 487 90 6,302 \$103,808 \$12,958,284 % of Total Monthly Benefits \$2,352,710 \$9,838,311 \$663,455 \$103,808 \$12,958,284 % of Total Monthly Benefits 18.16% 75.92% 5.12% 0.80% 100.00% FY 2011-12  Average Benefit \$1,430 \$2,422 \$1,300 \$1,046 \$2,044 Number of Accounts 1,766 4,407 662 110 6,945 \$1041 Monthly Benefits \$2,526,722 \$10,673,928 \$861,223 \$115,107 \$14,176,98 % of Total Monthly Benefits 17.82% 75.29% 6.07% 0.81% 100.00% FY 2012-13  Average Benefit \$1,433 \$2,429 \$1,121 \$1,073 \$2,03 Number of Accounts 1,883 4,683 681 119 7,366 \$1041 Monthly Benefits \$2,699,176 \$11,374,811 \$763,700 \$127,689 \$14,965,376 \$1041 Monthly Benefits \$2,699,176 \$11,374,811 \$763,700 \$127,689 \$14,965,376 \$1041 Monthly Benefits \$2,699,176 \$11,374,811 \$763,700 \$127,689 \$14,965,376 \$11,000 \$110,00	Average Benefit	\$1,427	\$2,362	\$1,261	\$1,130	\$2,019
% of Total Monthly Benefits         17.90%         76.30%         5.00%         0.80%         100.00%           FY 2010-11           Average Benefit         \$1,432         \$2,410         \$1,362         \$1,153         \$2,056           Number of Accounts         1,643         4,082         487         90         6,302           Total Monthly Benefits         \$2,352,710         \$9,838,311         \$663,455         \$103,808         \$12,958,284           % of Total Monthly Benefits         18.16%         75.92%         5,12%         0,80%         100,00%           FY 2011-12           Average Benefit         \$1,430         \$2,422         \$1,300         \$1,046         \$2,04           Number of Accounts         1,766         4,407         662         110         6,945           Total Monthly Benefits         \$2,526,722         \$10,673,928         \$861,223         \$115,107         \$14,176,98           % of Total Monthly Benefits         17,82%         75,29%         6,07%         0,81%         100,00%           FY 2012-13         Average Benefit         \$1,433         \$2,429         \$1,121         \$1,073         \$2,03           Number of Accounts         1,883         4,683         681         119	Number of Accounts	1,495	3,856	468	89	5,908
FY 2010-11           Average Benefit         \$1,432         \$2,410         \$1,362         \$1,153         \$2,056           Number of Accounts         1,643         4,082         487         90         6,302           Total Monthly Benefits         \$2,352,710         \$9,838,311         \$663,455         \$103,808         \$12,958,284           % of Total Monthly Benefits         18.16%         75.92%         5.12%         0.80%         100.00%           FY 2011-12           Average Benefit         \$1,430         \$2,422         \$1,300         \$1,046         \$2,04           Number of Accounts         1,766         4,407         662         110         6,945           Total Monthly Benefits         \$2,526,722         \$10,673,928         \$861,223         \$115,107         \$14,176,98           % of Total Monthly Benefits         17,82%         75.29%         6.07%         0.81%         100.00%           FY 2012-13           Average Benefit         \$1,433         \$2,429         \$1,121         \$1,073         \$2,03           Number of Accounts         1,883         4,683         681         119         7,366           Total Monthly Benefits         \$2,699,176         \$11,374,8	Total Monthly Benefits	\$2,133,697	\$9,106,888	\$590,020	\$100,562	\$11,931,167
Average Benefit \$1,432 \$2,410 \$1,362 \$1,153 \$2,056  Number of Accounts 1,643 4,082 487 90 6,302  Total Monthly Benefits \$2,352,710 \$9,838,311 \$663,455 \$103,808 \$12,958,284  % of Total Monthly Benefits 18.16% 75.92% 5.12% 0.80% 100.00%  FY 2011-12  Average Benefit \$1,430 \$2,422 \$1,300 \$1,046 \$2,04  Number of Accounts 1,766 4,407 662 110 6,945  Total Monthly Benefits \$2,526,722 \$10,673,928 \$861,223 \$115,107 \$14,176,98  % of Total Monthly Benefits 17.82% 75.29% 6.07% 0.81% 100.00%  FY 2012-13  Average Benefit \$1,433 \$2,429 \$1,121 \$1,073 \$2,03  Number of Accounts 1,883 4,683 681 119 7,366  Total Monthly Benefits \$2,699,176 \$11,374,811 \$763,700 \$127,689 \$14,965,376	% of Total Monthly Benefits	17.90%	76.30%	5.00%	0.80%	100.00%
Number of Accounts         1,643         4,082         487         90         6,302           Total Monthly Benefits         \$2,352,710         \$9,838,311         \$663,455         \$103,808         \$12,958,284           % of Total Monthly Benefits         18.16%         75.92%         5.12%         0.80%         100.00%           FY 2011-12           Average Benefit         \$1,430         \$2,422         \$1,300         \$1,046         \$2,04           Number of Accounts         1,766         4,407         662         110         6,945           Total Monthly Benefits         \$2,526,722         \$10,673,928         \$861,223         \$115,107         \$14,176,98           % of Total Monthly Benefits         17.82%         75.29%         6.07%         0.81%         100.00%           FY 2012-13           Average Benefit         \$1,433         \$2,429         \$1,121         \$1,073         \$2,03           Number of Accounts         1,883         4,683         681         119         7,366           Total Monthly Benefits         \$2,699,176         \$11,374,811         \$763,700         \$127,689         \$14,965,376	FY 2010-11					
Total Monthly Benefits \$2,352,710 \$9,838,311 \$663,455 \$103,808 \$12,958,2842 \$0 of Total Monthly Benefits 18.16% 75.92% 5.12% 0.80% 100.00% FY 2011-12  Average Benefit \$1,430 \$2,422 \$1,300 \$1,046 \$2,044 Number of Accounts 1,766 4,407 662 110 6,945 Total Monthly Benefits \$2,526,722 \$10,673,928 \$861,223 \$115,107 \$14,176,98 % of Total Monthly Benefits 17.82% 75.29% 6.07% 0.81% 100.00% FY 2012-13  Average Benefit \$1,433 \$2,429 \$1,121 \$1,073 \$2,03 Number of Accounts 1,883 4,683 681 119 7,366 Total Monthly Benefits \$2,699,176 \$11,374,811 \$763,700 \$127,689 \$14,965,376 \$100.00% \$112,689 \$14,965,376 \$110.00% \$112,689 \$14,965,376 \$110.00% \$112,689 \$14,965,376 \$110.00% \$112,689 \$14,965,376 \$110.00% \$112,689 \$112,00% \$112,00% \$112,00% \$112,00% \$112,00% \$112,00% \$112,00% \$112,00% \$112,00% \$112,00% \$112,00% \$112,00% \$112,00% \$112,00% \$112,0	Average Benefit	\$1,432	\$2,410	\$1,362	\$1,153	\$2,056
% of Total Monthly Benefits 18.16% 75.92% 5.12% 0.80% 100.00% FY 2011-12  Average Benefit \$1,430 \$2,422 \$1,300 \$1,046 \$2,04* Number of Accounts 1,766 4,407 662 110 6,945	Number of Accounts	1,643	4,082	487	90	6,302
FY 2011-12         Average Benefit       \$1,430       \$2,422       \$1,300       \$1,046       \$2,04         Number of Accounts       1,766       4,407       662       110       6,945         Total Monthly Benefits       \$2,526,722       \$10,673,928       \$861,223       \$115,107       \$14,176,98         % of Total Monthly Benefits       17.82%       75.29%       6.07%       0.81%       100.00%         FY 2012-13         Average Benefit       \$1,433       \$2,429       \$1,121       \$1,073       \$2,03         Number of Accounts       1,883       4,683       681       119       7,366         Total Monthly Benefits       \$2,699,176       \$11,374,811       \$763,700       \$127,689       \$14,965,376	Total Monthly Benefits	\$2,352,710	\$9,838,311	\$663,455	\$103,808	\$12,958,284
Average Benefit         \$1,430         \$2,422         \$1,300         \$1,046         \$2,04           Number of Accounts         1,766         4,407         662         110         6,945           Total Monthly Benefits         \$2,526,722         \$10,673,928         \$861,223         \$115,107         \$14,176,98           % of Total Monthly Benefits         17.82%         75.29%         6.07%         0.81%         100.00%           FY 2012-13           Average Benefit         \$1,433         \$2,429         \$1,121         \$1,073         \$2,03           Number of Accounts         1,883         4,683         681         119         7,366           Total Monthly Benefits         \$2,699,176         \$11,374,811         \$763,700         \$127,689         \$14,965,376	% of Total Monthly Benefits	18.16%	75.92%	5.12%	0.80%	100.00%
Number of Accounts         1,766         4,407         662         110         6,945           Total Monthly Benefits         \$2,526,722         \$10,673,928         \$861,223         \$115,107         \$14,176,98           % of Total Monthly Benefits         17.82%         75.29%         6.07%         0.81%         100.00%           FY 2012-13           Average Benefit         \$1,433         \$2,429         \$1,121         \$1,073         \$2,03           Number of Accounts         1,883         4,683         681         119         7,366           Total Monthly Benefits         \$2,699,176         \$11,374,811         \$763,700         \$127,689         \$14,965,376	FY 2011-12					
Total Monthly Benefits         \$2,526,722         \$10,673,928         \$861,223         \$115,107         \$14,176,98           % of Total Monthly Benefits         17.82%         75.29%         6.07%         0.81%         100.00%           FY 2012-13           Average Benefit         \$1,433         \$2,429         \$1,121         \$1,073         \$2,03           Number of Accounts         1,883         4,683         681         119         7,366           Total Monthly Benefits         \$2,699,176         \$11,374,811         \$763,700         \$127,689         \$14,965,376	Average Benefit	\$1,430	\$2,422	\$1,300	\$1,046	\$2,041
% of Total Monthly Benefits       17.82%       75.29%       6.07%       0.81%       100.00%         FY 2012-13         Average Benefit       \$1,433       \$2,429       \$1,121       \$1,073       \$2,03         Number of Accounts       1,883       4,683       681       119       7,366         Total Monthly Benefits       \$2,699,176       \$11,374,811       \$763,700       \$127,689       \$14,965,376	Number of Accounts	1,766	4,407	662	110	6,945
FY 2012-13         Average Benefit       \$1,433       \$2,429       \$1,121       \$1,073       \$2,03         Number of Accounts       1,883       4,683       681       119       7,366         Total Monthly Benefits       \$2,699,176       \$11,374,811       \$763,700       \$127,689       \$14,965,376	Total Monthly Benefits	\$2,526,722	\$10,673,928	\$861,223	\$115,107	\$14,176,981
Average Benefit       \$1,433       \$2,429       \$1,121       \$1,073       \$2,03         Number of Accounts       1,883       4,683       681       119       7,366         Total Monthly Benefits       \$2,699,176       \$11,374,811       \$763,700       \$127,689       \$14,965,376	% of Total Monthly Benefits	17.82%	75.29%	6.07%	0.81%	100.00%
Number of Accounts         1,883         4,683         681         119         7,366           Total Monthly Benefits         \$2,699,176         \$11,374,811         \$763,700         \$127,689         \$14,965,376	FY 2012-13					
Total Monthly Benefits \$2,699,176 \$11,374,811 \$763,700 \$127,689 \$14,965,376	Average Benefit	\$1,433	\$2,429	\$1,121	\$1,073	\$2,031
•	Number of Accounts	1,883	4,683	681	119	7,366
% of Total Monthly Benefits 18.04% 76.01% 5.10% 0.85% 100.00%	Total Monthly Benefits	\$2,699,176	\$11,374,811	\$763,700	\$127,689	\$14,965,376
	% of Total Monthly Benefits	18.04%	76.01%	5.10%	0.85%	100.00%

These tables (pages 13-17) 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 for SPRS

	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments	Total
FY 2007-08					
Average Benefit	\$3,281	\$2,892	\$1,265	\$1,970	\$2,843
Number of Accounts	150	931	56	26	1,163
Total Monthly Benefits	\$492,198	\$2,692,030	\$70,822	\$51,215	\$3,306,265
% of Total Monthly Benefits	14.9%	81.4%	2.1%	1.6%	100.0%
FY 2008-09					
Average Benefit	\$3,400	\$2,985	\$1,293	\$2,025	\$2,934
Number of Accounts	146	978	58	26	1,208
Total Monthly Benefits	\$496,355	\$2,919,782	\$74,971	\$52,649	\$3,543,757
% of Total Monthly Benefits	14.0%	82.4%	2.1%	1.5%	100.0%
FY 2009-10					
Average Benefit	\$3,492	\$3,066	\$1,467	\$2,130	\$3,032
Number of Accounts	147	1,004	50	26	1,227
Total Monthly Benefits	\$513,322	\$3,078,221	\$73,354	\$55,379	\$3,720,275
% of Total Monthly Benefits	13.80%	82.70%	2.00%	1.50%	100.00%
FY 2010-11					
Average Benefit	\$3,529	\$3,112	\$1,494	\$2,162	\$3,070
Number of Accounts	146	1,037	55	26	1,264
Total Monthly Benefits	\$515,270	\$3,226,744	\$82,184	\$56,210	\$3,880,408
% of Total Monthly Benefits	13.28%	83.15%	2.12%	1.45%	100.00%
FY 2011-12					
Average Benefit	\$3,560	\$3,135	\$1,372	\$2,136	\$3,077
Number of Accounts	150	1,083	66	25	1,324
Total Monthly Benefits	\$534,132	\$3,396,203	\$90,562	\$53,404	\$4,074,303
% of Total Monthly Benefits	13.11%	83.36%	2.22%	1.31%	100.00%
FY 2012-13					
Average Benefit	\$3,601	\$3,130	\$1,320	\$2,198	\$3,068
Number of Accounts	149	1,126	74	23	1,372
Total Monthly Benefits	\$536,481	\$3,524,248	\$97,681	\$50,563	\$4,208,973
% of Total Monthly Benefits	12.75%	83.73%	2.32%	1.20%	100.00%

These tables (pages 13-17) 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
FY 2007-08					
Number of Accounts	2,219	243	2,736	355	40
Average Service Credit (months)	261	233	204	240	275
Average Final Compensation	\$49,414	\$44,992	\$31,447	\$54,223	\$67,775
Average Monthly Benefit	\$1,929	\$1,289	\$917	\$2,014	\$3,239
Average System Payment for Health Insurance	\$221	\$381	\$181	\$625	\$501
FY 2008-09					
Number of Accounts	3,229	257	2,761	322	59
Average Service Credit (months)	277	241	205	242	269
Average Final Compensation	\$51,617	\$48,542	\$34,940	\$57,016	\$69,388
Average Monthly Benefit	\$2,105	\$1,387	\$1,029	\$2,005	\$3,146
Average System Payment for Health Insurance	\$396	\$520	\$274	\$715	\$461
FY 2009-10					
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
FY 2010-11					
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
FY 2011-12					
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
FY 2012-13					
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

This table represents all individuals who had an initial retirement date within the fiscal year.

# Payment Options Selected by Retired Members

	Basic	Social Security Adjustment	Period Certain	Suvivorship	Рор Uр	Lump Sum
KERS Non-Haz						
Number of Accounts	13,903	3,309	5,433	9,413	8,092	2,235
Monthly Benefits	\$21,742,312	\$5,885,623	\$8,576,398	\$16,104,686	\$17,037,050	\$2,578,805
KERS Haz						
Number of Accounts	856	267	399	724	935	266
Monthly Benefits	\$921,023	\$330,043	\$414,280	\$414,280	\$1,280,230	\$267,670
CERS Non-Haz						
Number of Accounts	19,641	1,921	7,369	9,906	7,999	3,417
Monthly Benefits	\$15,195,983	\$2,562,996	\$6,266,451	\$9,909,288	\$9,891,754	\$2,279,399
CERS Haz						
Number of Accounts	1,164	513	666	1,675	2,845	482
Monthly Benefits	\$2,141,610	\$832,212	\$1,051,623	\$3,328,258	\$6,842,002	\$758,963
SPRS						
Number of Accounts	130	202	121	378	519	22
Monthly Benefits	\$392,132	\$432,444	\$289,957	\$1,222,592	\$1,820,383	\$51,464
KRS Total						
Number of Accounts	35,694	6,212	13,988	22,096	20,390	6,422
Monthly Benefits	\$40,393,060	\$10,043,318	\$16,598,709	\$30,979,104	\$36,871,419	\$5,936,301

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**

#### **KERS**

Kentucky Employees Retirement System

#### CERS

County Employees Retirement System

State Police Retirement System

#### HB

House Bill

In KERS, CERS, and SPRS both the employee and the employer contribute a percent 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 as of June 30, 2013

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
KERS Non-Haz						
Budgeted Rate	10.01	11.61	16.98	19.82	23.61	26.79
Recommended Rate	36.92	39.45	38.58	40.71	44.55	45.28
KERS Haz						
Budgeted Rate	24.35	24.69	26.12	28.98	29.79	32.21
Recommended Rate	34.78	35.54	34.37	33.84	35.89	28.84
CERS Non-Haz						
Budgeted Rate	13.50	16.16	16.93	18.96	19.55	18.89
Recommended Rate	20.51	20.91	19.81	21.29	21.21	19.58
CERS Haz						
Budgeted Rate	29.50	32.97	33.25	35.76	37.60	35.70
Recommended Rate	42.66	43.36	40.06	41.65	41.94	37.79
SPRS						
Budgeted Rate	30.07	33.08	45.54	52.13	63.67	71.15
Recommended Rate	91.93	92.12	85.63	94.63	103.41	96.52

# 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
Reemployed Retirees in KRS	Non-Haz	Haz	Total	Non-Haz	Haz	Total	Total
Total Active Employees	40,884	3,913	44,797	81,916	8,795	90,711	885
Total Retirees	37,240	2,312	39,552	44,164	5,840	50,004	1,240
Reemployed Retirees	624	53	677	756	546	1,302	113
% of Reemployed Retirees to Total Actives	1.53%	1.35%	1.51%	0.92%	6.21%	1.44%	12.77%
% of Reemployed Retirees to Total Retirees	1.68%	2.29%	1.71%	1.71%	9.35%	2.60%	9.11%
Average Age at Initial Retirement	50	48	50	52	46	49	47
Months of Service Credit at Initial Retirement	348	302	344	309	288	300	335
Final Compensation At Initial Retirement	\$52,798	\$45,308	\$52,212	\$38,804	\$54,215	\$45,267	\$59,145
Reemployed Retirees Avg. Annualized Salary Earned in Fiscal Year 2012-2013 (Second Retirement Account)	\$43,185	\$36,270	\$42,644	\$39,218	\$49,274	\$43,435	\$52,343
Retirees Returning to Work for the Same Employer	210	7	217	507	85	592	0
% Retirees Returning to Work For Same Employer	33.65%	13.21%	32.05%	67.06%	15.57%	45.47%	0.00%

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 group rates on medical insurance and other managed care coverage for 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

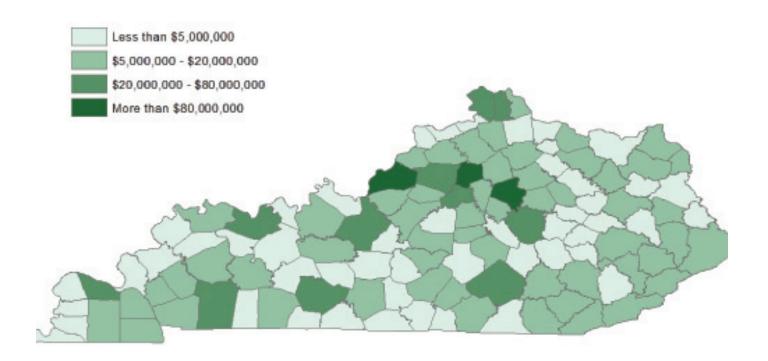
	KERS Non-Haz	KERS Haz	CERS Non-Haz	CERS Haz	SPRS
Number	27,378	1,871	28,095	5,310	1,164
Average Service Credit (Months)	311	266	257	281	329
Avg Monthly System Payment for Health Insurance	\$353	\$681	\$290	\$928	\$863
Avg Monthly Member Payment for Health Insurance	\$82	\$51	\$82	\$34	\$17
Total Monthly Payment for Health Insurance	\$11,911,989	\$1,370,116	\$10,450,560	\$5,106,501	\$1,024,992

Insurance Contracts by Type						
KERS Non-Haz	2008	2009	2010	2011	2012	2013
KEHP Parent Plus	568	762	722	732	734	618
KEHP Couple/Family	2,187	2,621	1,971	2,155	1,917	1,276
KEHP Single	9,383	10,635	10,420	10,321	9,764	9,364
Medicare without Prescription	1,969	1,920	1,831	1,821	1,721	1,474
Medicare with Prescription	12,636	13,231	13,765	13,988	15,015	16,834
KERS Haz						
KEHP Parent Plus	69	74	66	75	93	106
KEHP Couple/Family	443	502	453	521	517	451
KEHP Single	741	823	599	615	645	625
Medicare without Prescription	91	88	63	60	67	60
Medicare with Prescription	687	763	525	570	751	985

CERS Non-Haz	2008	2009	2010	2011	2012	2013
KEHP Parent Plus	292	335	342	351	383	340
KEHP Couple/Family	1,320	1,456	1,369	1,552	1,317	857
KEHP Single	7,126	7,609	7,692	8,013	7,972	7,652
Medicare without Prescription	3,105	3,110	3,106	3,167	3,119	2,707
Medicare with Prescription	12,684	13,583	14,477	15,100	16,355	18,824
CERS Haz						
KEHP Parent Plus	226	245	239	253	310	400
KEHP Couple/Family	1,947	2,041	2,062	2,156	2,237	2,155
KEHP Single	1,394	1,404	1,274	1,310	1,385	1,425
Medicare without Prescription	73	80	58	58	73	79
Medicare with Prescription	1,367	1,518	1,438	1,527	1,853	2,324
SPRS						
KEHP Parent Plus	17	22	47	52	62	76
KEHP Couple/Family	305	311	462	474	444	421
KEHP Single	240	221	264	278	291	283
Medicare without Prescription	7	9	12	14	15	20
Medicare with Prescription	410	418	467	499	581	682
KRS Total						
KEHP Parent Plus	1,172	1,438	1,416	1,463	1,582	1,540
KEHP Couple/Family	6,202	6,931	6,317	6,858	6,432	5,160
KEHP Single	18,884	20,692	20,249	20,537	20,057	19,349
Medicare without Prescription	5,245	5,207	5,070	5,120	4,995	4,340
Medicare with Prescription	27,784	29,513	30,672	31,684	34,555	39,649

# Total Fiscal Year Retirement Payments by County

County	Payees	Total	County	Payees	Total	County	Payees	Total
Adair	398	\$6,025,104	Grant	499	\$8,091,857	Mclean	258	\$3,179,407
Allen	341	\$3,804,205	Graves	726	\$10,389,556	Meade	349	\$4,437,436
Anderson	1,204	\$27,057,376	Grayson	587	\$7,701,829	Menifee	194	\$2,408,944
Ballard	180	\$2,196,783	Green	236	\$3,239,032	Mercer	645	\$10,754,380
Barren	868	\$12,741,318	Greenup	547	\$6,745,905	Metcalfe	275	\$2,852,120
Bath	320	\$4,394,868	Hancock	198	\$2,265,655	Monroe	217	\$2,376,132
Bell	613	\$8,766,085	Hardin	1,721	\$25,548,392	Montgomery	548	\$7,533,230
Boone	1,367	\$24,212,531	Harlan	523	\$7,261,397	Morgan	502	\$7,588,866
Bourbon	462	\$6,663,175	Harrison	420	\$5,351,328	Muhlenberg	555	\$5,790,242
Boyd	867	\$13,163,374	Hart	284	\$3,935,402	Nelson	811	\$12,699,372
Boyle	793	\$12,972,184	Henderson	910	\$14,126,341	Nicholas	178	\$2,105,572
Bracken	202	\$2,319,537	Henry	864	\$16,826,931	Ohio	519	\$5,233,364
Breathitt	410	\$5,726,015	Hickman	110	\$1,559,050	Oldham	1,162	\$21,143,208
Breckinridge	383	\$4,928,326	Hopkins	1,030	\$14,022,079	Owen	499	\$10,208,812
Bullitt	1,161	\$18,520,711	Jackson	262	\$3,219,687	Owsley	170	\$2,262,362
Butler	295	\$3,698,595	Jefferson	14,654	\$278,677,737	Pendleton	305	\$4,691,356
Caldwell	468	\$6,273,373	Jessamine	785	\$12,630,397	Perry	639	\$8,933,564
Calloway	939	\$11,461,665	Johnson	549	\$7,682,779	Pike	1,050	\$14,104,870
Campbell	1,271	\$21,208,567	Kenton	1,903	\$35,772,794	Powell	322	\$3,898,967
Carlisle	119	\$1,503,426	Knott	368	\$5,325,162	Pulaski	1,968	\$30,157,601
Carroll	284	\$4,014,392	Knox	502	\$7,062,247	Robertson	77	\$891,727
Carter	680	\$7,955,120	Larue	320	\$4,328,756	Rockcastle	340	\$4,224,019
Casey	314	\$3,824,287	Laurel	1,036	\$16,071,035	Rowan	806	\$12,063,548
Christian	1,420	\$22,606,179	Lawrence	284	\$3,314,122	Russell	489	\$6,277,618
Clark	780	\$11,980,890	Lee	256	\$3,814,042	Scott	980	\$18,225,419
Clay	507	\$6,554,796	Leslie	224	\$3,040,290	Shelby	1,541	\$33,189,976
Clinton	227	\$2,542,074	Letcher	503	\$6,327,196	Simpson	244	\$2,595,145
Crittenden	201	\$2,388,905	Lewis	273	\$3,000,560	Spencer	426	\$7,728,557
Cumberland	174	\$2,279,016	Lincoln	538	\$6,125,439	Taylor	560	\$7,211,769
Daviess	2,149	\$34,468,183	Livingston	218	\$3,379,817	Todd	251	\$2,885,747
Edmonson	199	\$2,473,685	Logan	507	\$6,130,861	Trigg	467	\$6,595,238
Elliott	176	\$2,007,345	Lyon	327	\$5,326,282	Trimble	240	\$3,190,131
Estill	323	\$3,976,127	Madison	1,974	\$28,655,268	Union	306	\$3,336,024
Fayette	4,678	\$93,674,837	Magoffin	304	\$3,868,974	Warren	2,356	\$36,923,238
Fleming	398	\$6,362,824	Marion	465	\$5,743,588	Washington	296	\$4,215,884
Floyd	785	\$11,908,364	Marshall	745	\$9,765,408	Wayne	449	\$5,810,949
Franklin	6,615	\$181,096,841	Martin	208	\$2,212,429	Webster	311	\$3,757,917
Fulton	169	\$1,825,960	Mason	339	\$5,071,729	Whitley	857	\$11,474,064
Gallatin	101	\$1,590,693	Mccracken	1,385	\$23,036,840	Wolfe	293	\$4,215,958
Garrard	358	\$5,058,500	Mccreary	335	\$3,111,070	Woodford	827	\$19,115,078



Benefits paid to retirees and beneficiaries of Kentucky Retirement Systems have a wide ranging impact on the state's economic health. In fiscal year 2013, KRS paid more than \$1.6 billion dollars to its recipients. More than 95 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 dollar paid out in pension benefits supported 1.24 dollars 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 the pension funds into the economy is a stabilizing element.

#### Total Fiscal Year Retirement Payments

	Payees	Payments
Kentucky Total	94,400	\$1,582,273,309
Out of State	5,665	\$82,106,379
Grand Total	100,065	\$1,664,379,688*

<sup>\*</sup> This table represents all payees receiving a monthly payment during the fiscal year.

