# BUILDING a better FUTURE for Kentuckians



# Comprehensive Annual FINANCIAL REPORT





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



# INTRODUCTION

- Management's Responsibility 6 for Financial Reporting
- 7 Letter to the Board of Trustees & Membership
- 11 Board of Trustees
- Agency Structure 12
- System Highlights 14 **KERS Non-Hazardous KERS Hazardous CERS Non-Hazardous CERS** Hazardous SPRS Total System

## **FINANCIAL**

- Report of Independent Auditors 22 25
  - Management's Discussion & Analysis
- 27 Fund Activities
- 29 **Historical Trends**
- Combining Statement 30 Of Plan Net Position
- 34 Note A. Summary Of Significant Accounting Policies
- Note B. Plan Descriptions 36 & Contribution Information
- Krs Pension Plans 38
- 40 Krs Insurance
- Note C. Cash, Short-Term Investments 41 & Securities Lending Collateral
- 42 Note D. Investments 53
  - Note E. Securities Lending Transactions
- Note F. Risk Of Loss 54
- 54 Note G. Contingencies
- Note H. Income Tax Status 55 Note I. Defined Benefit Pension Plan
- 56 Note J. Equipment Note K. Intangible Assets
- 57 Note L. Actuarial Valuation
- Note M. Gasb 67 59
- Note N. House Bill 1 Pension Reform 61
- Note O. Medicare 62 Prescription Drug Plan Note P. House Bill 300 Pension Reform Note Q. Reimbursement Of **Retired-Reemployed Health** Insurance
- 63 Note R. Louisville/Jefferson County Metro Firefighters Note S. Reciprocity Agreement Note T. Custodial Bank Note U. Related Party
- Note V. Senate Bill 2 Pension Reform 64
- Note W. City Of Fort Wright 65
- Note X. Seven County Services, Inc. 66 Note Y. Write Off Of Recievable
- Note Z. Bank Of America Settlement Note Aa. Subsequent Events
- Required Supplementary Information 67 77
- Additonal Supporting Schedules

### **INVESTMENTS**

- 84 U.S. Economy Getting Stronger
  - 85 Investment Summary
  - 86 Investment Strategies
  - 87 Investment Objectives
- 88 Investment Results
- 89 Benchmarks
  - 90 Long-Term Results
- 92 U.S. Equity
- 94 International Equity
- 96 Fixed Income
- 98 Private Equity
- 98 Real Estate
- 99 Absolute Return
- 99 Real Return
- 100 Cash
- 101 Additional Schedules & Required Supplemental Information
  - 103 Consultants
  - 105 Market Values By Plan
- 108 Letters From
  - Investment Consultants 109 RVK, INC. 118 ALBOURNE
    - 121 PCA
    - 124 ORG

# TABLE OF CONTENTS



# ACTUARIAL

- 130 Certification of Actuarial Results
- 132 Summary of Actuarial Assumptions
- 143 Analysis of Financial Experience
- 148 Active Member Valuation
- 150 Retired Member Valuation
- 151 Summary of Benefit Provisions KERS & CERS Non-Hazardous Plans
- 154 Summary of Benefit Provisions KERS Hazardous CERS Hazardous SPRS Plans

### STATISTICAL

- 158 Fund Statistics
- 160 Participation Employer
- 162 Member Monthly Benefit
- 163 Plan Net Position
- 159 Schedule of Benefit Expenses
- 174 Analysis of Initial Retirees
- 179 Payment Options
- 176 Employer Contribution Rates
- 177 Retired Reemployed
- 178 Insurance Contracts
- 180 Payment by Counties

Our members are more than an average Kentuckian. These men and women are the foundation of what our state is built on, literally. Our members consist of those that build and protect our way of life in our state. They consist of law enforcement, emergency services, fire and rescue, city and state government, health departments, military affaris, court personnel, utilities, etc. These employees are the core of everyday life for the citizens of Kentucky.

2014 Comprehensive Annual Financial Report For The Fiscal Year Ended June 30, 2014 Document Prepared By KRS Communication Division

# Introduction







# SECTION

### INTRODUCTION TABLE OF CONTENTS

- 6 Management's Responsibility for Financial Reporting
- 7 Letter to the Board of Trustees & Membership
- 11 Board of Trustees
- 12 Agency Structure
- 14 System Highlights KERS Non-Hazardous KERS Hazardous CERS Non-Hazardous CERS Hazardous SPRS Total System

# 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 4, 2014** 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. The cost of a control should not exceed the benefits to be derived, the objective is to provide reasonable, rather than absolute assurance, that the financial statements are free of any material mistatements. These internal controls are reviewed by internal audit programs. All internal audit reports are submitted to the Audit Committee and Board of Trustees.

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

William a. Shielon

William A. Thielen, Esq. // Executive Director

Karen DRoggenkamp

Karen D. Roggenkamp // Chief Operations Officer

Jord 2. Clima

Todd E. Coleman, CPA // Controller



# To the Trustees & Membership

It is my pleasure to present the Comprehensive Annual Financial Report (CAFR) of the Kentucky Employees Retirement System (KERS), County Employees Retirement System (CERS), and State Police Retirement System (SPRS) for the fiscal year that ended June 30, 2014. Responsibility for the accuracy of the data as well as the completeness and fairness of the presentation rests with the management of the Kentucky Retirement Systems. We present this information to assist the Board of Trustees, members of KERS, CERS and SPRS (collectively referred to as KRS), State executive and legislative branch officials, and the general public in understanding KRS' financial and actuarial status. This CAFR conforms to the principles of governmental accounting and reporting set forth by the Governmental Accounting Standards Board. KRS' financial transactions are reported on the accrual basis of accounting. Additionally, internal accounting controls provide reasonable assurance regarding the safekeeping of assets and fair presentation of the financial statements and supporting schedules. Please refer to Management's Discussion and Analysis in the Financial Section.

### **Major Issues and Initiatives**

One of KRS' most pressing issues during fiscal year 2014 involved the implementation of the significant pension reforms brought about by the passage of Senate Bill 2 (SB 2) during the 2013 Regular Session of the Kentucky General Assembly. Most notably, SB 2 established a new hybrid cash balance plan benefit tier for members of KERS, SPRS and CERS participating on or after January 1, 2014. Additionally, SB 2 attempted to address the underfunding of the pension system by requiring the payment of the full actuarially required contribution rate to KERS and SPRS in fiscal years beginning on or after July 1, 2014, establishing limits on the granting of Cost of Living Adjustments (COLAs), and requiring the last participating employer to pay the actuarial cost of what is commonly known as "pension spiking", i.e., annual increases in an employee's creditable compensation during an employee's last years of employment, which result in a greater retirement benefit. Finally, SB 2 altered the governance structure of Kentucky Retirement Systems by expanding the Board of Trustees from nine to thirteen members, including three new Governor appointees and one new CERS elected member and establishing the Public Pension Oversight Board, intended "... 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."

In addition to the implementation of SB 2, Kentucky Retirement Systems continued to deal with a number of ongoing lawsuits involving member agencies regarding their attempts to terminate participation in KERS and CERS. The most significant of these suits involves a Chapter 11 Federal bankruptcy action filed by Seven Counties Services, the Commonwealth's designated mental health services provider for Jefferson County and its six contiguous counties, in an attempt to remove its self from KERS. On May 30, 2014, the United States Bankruptcy Court issued an Opinion that held that Seven Counties is not a "governmental unit", as that term is defined in the Bankruptcy Code, and it is, therefore, eligible to proceed under Chapter 11 of the Bankruptcy Code. The Bankruptcy Court also held that the relationship between Seven Counties and Kentucky Employees Retirement System ("KERS") is an "executory contract" and Seven Counties may reject that contract in accordance with the provisions of the Bankruptcy Code. Kentucky Retirement Systems has appealed. However, if Seven Counties Services or any of the other 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. Kentucky Retirement Systems is also defending a lawuit filed in June 2014 by the City of Fort Wright, Kentucky, alleging improprieties in the investment decisions made by the KRS Investment Committee and Board of Trustees. The defense of these and other lawsuits is causing Kentucky Retirement Systems to expend significant monetary and staff resources.

KERS Kentucky Employees Retirement System

CERS County Employees Retirement System

SPRS State Police Retirement System

**ARC** Annual Required Contribution



CMS Centers for Medicare & Medicaid Services

> **EGWP** Employer Group Waiver Plan

START Strategic Technology Advancements for the Retirement of Tomorrow



As always, KRS continued during the 2014 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 twelve years, 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, 2014, the funded ratio of the KRS nonhazardous pension plan is 21% of the actuarial value of assets. The funded ratio of the SPRS pension plan is 35.64% of the actuarial value of assets. The KERS nonhazardous plan continues in a negative cash flow situation such that more money is paid out in benefits than is contributed by employees and employers and earned in investment returns. This is true for the 2014 fiscal year during which the KERS nonhazardous fund asset base decreased by approximately \$182 million dollars even though the investment return for the plan was approximately 15.5%.

Our educational efforts during the 2014 fiscal year involved numerous appearances before the newly created Public Pension Oversight Board (PPOB). The PPOB began meeting monthly in March 2014. Kentucky Retirement System's staff has been present at each meeting of the PPOB and presented materials designed to educate the members about our retirement system. We will continue to do so in the months ahead.

#### **Health Insurance**

KRS administered approximately 70,000 health insurance contracts for benefit recipients during fiscal year 2014. Continuing the positive impacts on both funding status and benefits resulting from the Board of Trustees August 2012 decision to move to a Medicare Advantage plan, the Board approved a recommendation made by the Retiree Health Plan Committee to continue to provide Medicare Advantage plan to Medicare eligible retirees beginning January 1, 2015. The Medicare Advantage Plans are fully insured health insurance plans provided by Humana. Premium costs to KRS members were significantly below the rates projected in 2013 for the self-insured Employer Group Waiver Plans (EGWP). The actual savings for plan year 2013 was \$30,598,162.09. The cost savings is shared on roughly a 50-50 basis by retirees who pay all or a portion of their health insurance premiums and the underfunded health insurance trust.

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

The Board of Trustees has approved a recommendation made by the Retiree Health Plan Committee to submit a Request for Proposal for Medicare Advantage Plans during 2015 for the 2016 plan year and beyond.

### Information Technology, Employer Reporting and Communications

During fiscal year 2014, KRS' Information Technology business area has expended over 7,500 labor hours to complete programming, development, and testing to implement Senate Bill 2 (Tier 3 benefit plan). In addition to this major work effort, KRS has continued to enhance our technology capabilities to better serve the changing needs of our members. Starting in September 2014 (in time for insurance open enrollments), we added Call Back Assist functionality to our Call Center. This popular feature allows a member to receive a call back at a designated time from one of our retirement counselors. Also we have enhanced our self service portal (My Retirement) to calculate retirement benefits, and over 9,500 members used our web site to complete health insurance enrollment during the month of October. Data security and disaster recovery are also key priorities. Our Information Security staff members are very proactive in safeguarding against cyber attacks and protecting member information. We continually remind KRS reporting employers to send information across our secure portal. During the fiscal year, we have taken significant steps toward improving our disaster recovery capabilities and have deployed equipment to the Commonwealth Office of Technology to help establish redundant processing capabilities.

Employer Reporting, Compliance, and Education (ERCE) staff continued to work with reporting employers through on-site visits and correspondence. As a result, reporting errors and outstanding invoices have decreased especially for school boards. This has resulted in both improved monetary receipts and better retirement information. This team is also very involved in working with employers regarding Senate Bill 2 pension spiking provisions, GASB 68 impacts, and House Bill 364, which was enacted during the 2014 legislative session on the issue of reemployment for retired sheriffs.

As both our membership and eligible retirees grows, KRS Communications continues to expand our website (https://kyret.ky.gov) content to meet membership information needs. During the past 12 months, we had over 1.0 million website views. We have added video offerings to increase awareness and education on benefits by tier, insurance options, governance, self- service, and investment strategies. To reach more employers and members across Kentucky, we have increased the usage of webinars (over 2,600), social media (www. facebook/kyretirement), digital newsletters, launched KRS YouTube, and added video conferencing capability.

### Investments

The investment landscape presented opportunities in the fiscal year for each KRS asset class to achieve positive returns. The KRS Pension fund returned 15.55% beating its benchmark, of 14.91%. The KRS Insurance fund returned 14.89% versus its benchmark return of 15.03%. U.S. equities led the way followed by non U.S. equities, private equity, and emerging markets equity all showing significant double digit returns. Also performing well were real estate, both credit and interest rate sensitive fixed income, and most absolute return strategies were positive, though some of those strategies performed better than others. The inflation sensitive assets and strategies were positive contributors, though challenged due to lingering deflationary concerns and a strengthening dollar.

The positive performance of the capital markets for the fiscal year allowed most public pensions across the country to improve their funding status. The exception was KERS Nonhazardous Pension, the principal balance of this plan has decreased to a level where significant positive investment performance does not offset the amount of KERS Nonhazardous assets that need to be sold to fund benefit payments to its retired members each year.

Many public pensions around the country continue to evaluate appropriate asset allocation strategies and there is on-going debate as to the longevity of the strong bull market in U.S. equities. KRS reevaluates the asset allocation for the ten portfolios it manages every year with its Investment Committee and consultant looking for minor changes that need to be made. Once every five years KRS works with its general investment consultant, RV Kuhns, to conduct an asset liability study and potentially make more meaningful changes to the asset allocation during that process. KRS made no significant changes to any of the five systems' pension or insurance portfolio allocations during the fiscal year and KRS' investment portfolios remained in the bottom third of risk takers in the public pension space as measured by a peer group of 80 funds using our ten year standard deviation.

During the fiscal year significant progress was made in building out the real estate asset allocation, real return asset allocation, and the direct hedge fund program for each of the systems that have exposure to those asset classes. All three of these asset classes were strategic initiatives put in place four years ago during the last asset liability study process and approved by the KRS Investment Committee for each of the respective systems.

KRS did change custodial banks at the beginning of the 2013-14 fiscal year and made a switch in investment reporting methodologies from the plan allocation method to the unitization method to better track ownership of each system's assets. This now allows for KRS to produce a rate of return performance measurement for each KRS system on a monthly and ongoing basis.



In a response to a call from our constituents to understand better the investment process, David Peden, the KRS Chief Investment Officer, presented a five part town hall series on the KRS investment process. KRS has archived this town hall series and made it available as an educational resource. And, as earlier mentioned, the Kentucky Retirement Systems has made use of the opportunity to present to the PPOB every month and has viewed these meetings as a way to keep the legislature, our constituents, and the broader public informed on various topics related to KRS investments and demonstrate how the KRS investment portfolio is being affected by the capital markets. KRS staff looks forward to the continued work of the PPOB.

### **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. Non-hazardous 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, principally during 2008-2009, 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 for the KERS nonhazardous and SPRS plans continued to decline for 2014. The funding levels of all systems as of June 30, 2014 are listed on pages 131 the Actuarial Section.

### **Professional Services**

KRS continues to engage a number of professional consultants to assist trustees and staff in key business areas such as investments, taxes, auditing services and legal representation. A list of the Board's contract consultants can be found in the organizational chart on page 12. A list of external investment managers can be found in the investment section of this report.

### Conclusion

Summary versions of the 2014 CAFR will be provided to the Governor, the State Auditor of Public Accounts, all 138 state legislators, to key Legislative Research Commission staff, and the State Budget Director. A complete copy of the report will be posted on the KRS website.

I would like to take this opportunity to thank the KRS Board of Trustees, the staff, and our advisors and service providers who worked tirelessly during FY 2014 to make this a successful year for KRS. We look forward to continuing success during FY 2015 and endeavor to provide service of the highest quality to our members.

William a. Thelen

William A. Thielen, Esq. // Executive Director



# **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 serves ex officio, and six are appointed by Governor Steve Beshear. Three of the six appointees are selected from lists of nominees provided by the Kentucky Association of Counties, the Kentucky League of Cities, and the Kentucky School Board Association, so that each organization has a representative.



David Rich Elected by CERS Term ends October 31, 2017

Mary Helen Peter Elected by KERS Term ends March 31, 2012



**Randy Stevens Governor** Appointee Term ends July 1, 2017

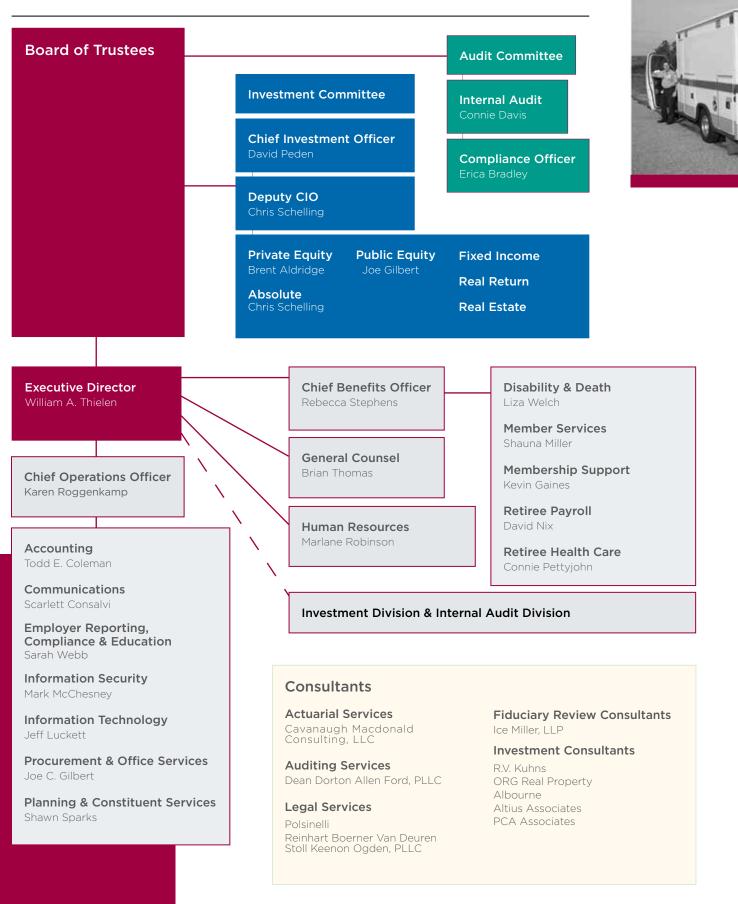
### **Certificate of** Achievement

The Government Finance Officers Association (GFOA) awarded a Certificate of Achievement for **Excellence** in Financial Reporting to the Kentucky **Retirement Systems for** its Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2013. The Certificate of Achievement is a prestigious national award recognizing excellence in the preparation of state and local government financial reports and is valid for a period of one year. This was the sixteenth consecutive award earned by KRS. In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized document. The report must satisfy both generally accepted accounting principles and applicable legal requirements. We believe our 2014 CAFR will continue to meet the Certificate of Achievement Program's requirements, and we will be submitting it to the GFOA for their consideration.

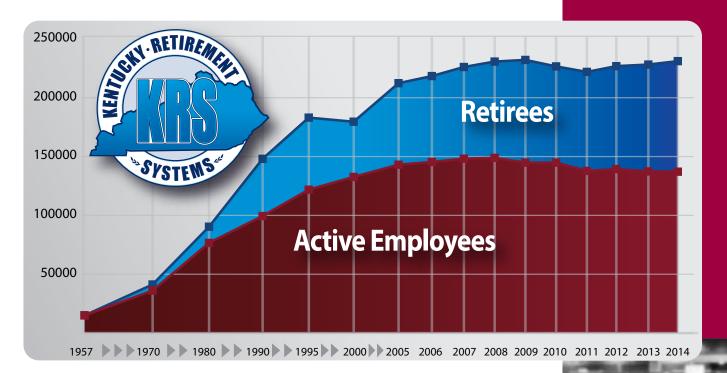


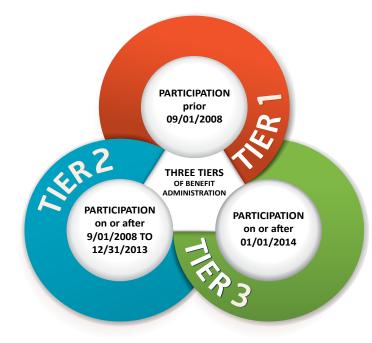
11 INT

# Agency Structure as of December 1, 2014









### **BENEFIT TIERS**

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

# 



# **KERS** Nonhazardous

**RETIRED** MEMBERSHIP

AVERAGE AGE

was established 67.7 AVERAGE ANNUAL BENEFIT PAYMENT

\$22,404

**ACTIVE** MEMBERSHIP

AVERAGE AGE 44.8

AVERAGE SALARY

\$39,081

| TP    | A P  |
|-------|------|
|       |      |
| No. V |      |
|       |      |
| P VM  | REAL |
|       |      |
|       |      |

Kentucky Employees Retirement

System (KERS)

July 1, 1956

by the state

legislature.

|          |        |        |        | IUIIIa   | zaruu   | us               |
|----------|--------|--------|--------|----------|---------|------------------|
| Detired  | Active |        | ACTIVE | INACTIVE | RETIRED | TOTAL<br>PERSONS |
| Retired  | Active | Tier 1 | 27,869 | 33,941   | 38,022  | 99,832           |
|          |        | Tier 2 | 11,145 | 7,102    | 0       | 18,247           |
| Inactive |        | Tier 3 | 1,486  | 170      | 0       | 1,656            |
|          |        | TOTAL  | 40,500 | 41,213   | 38,022  | 119,735          |

| Plan Net Position (in Thousands) |             |             |             |             |             |             |  |  |  |  |  |
|----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|--|--|--|--|--|
| Fund                             | 2009        | 2010        | 2011        | 2012        | 2013        | 2014        |  |  |  |  |  |
| Pension                          | \$3,584,601 | \$3,504,501 | \$3,533,393 | \$2,977,069 | \$2,760,753 | \$2,578,291 |  |  |  |  |  |
| Insurance                        | \$365,367   | \$368,799   | \$421,972   | \$418,490   | \$496,040   | \$646,904   |  |  |  |  |  |
| Total                            | \$3,949,968 | \$3,873,300 | \$3,955,365 | \$3,395,559 | \$3,256,793 | \$3,225,195 |  |  |  |  |  |



# **KERS** Hazardous

**RETIRED** MEMBERSHIP

average age **63.1** 

AVERAGE ANNUAL BENEFIT PAYMENT

\$15,952

ACTIVE MEMBERSHIP

AVERAGE AGE 40.6 AVERAGE SALARY \$32,077 Kentucky Employees Retirement System (KERS) was established **July 1, 1956** by the state legislature.

| _              |        | $\sim$ |          |         |       |    |
|----------------|--------|--------|----------|---------|-------|----|
|                |        |        | nazard   | lous    |       |    |
| Retired Active |        | ACTIVE | INACTIVE | RETIRED | TOTAL |    |
| Retired Active | Tier 1 | 2,232  | 2,002    | 2,467   | 6,701 |    |
|                | Tier 2 | 1,505  | 1,231    | 0       | 2,736 |    |
| Inactive       | Tier 3 | 357    | 85       | 0       | 442   |    |
|                | TOTAL  | 4,094  | 3,318    | 2,467   | 9,879 |    |
|                |        |        |          |         |       | 22 |

| Plan Net Position (in Thousands) |           |           |           |           |           |           |  |  |  |  |  |
|----------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|--|--|--|--|--|
| Fund                             | 2009      | 2010      | 2011      | 2012      | 2013      | 2014      |  |  |  |  |  |
| Pension                          | \$388,951 | \$443,606 | \$509,120 | \$476,589 | \$514,592 | \$561,484 |  |  |  |  |  |
| Insurance                        | \$219,500 | \$271,239 | \$319,736 | \$330,730 | \$372,883 | \$433,525 |  |  |  |  |  |
| Total                            | \$608,451 | \$714,846 | \$828,856 | \$807,319 | \$887,475 | \$995,009 |  |  |  |  |  |





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

# **CERS** Nonhazardous

**RETIRED** MEMBERSHIP

AVERAGE AGE

69.5

AVERAGE ANNUAL BENEFIT PAYMENT

# \$11,569

ACTIVE MEMBERSHIP

AVERAGE AGE

48.1

AVERAGE SALARY

# \$28,013

|     | A | TA | F    | Ret |
|-----|---|----|------|-----|
| A A |   | P  | MM . | In  |
| A   |   |    |      |     |
| U   |   | Ŋ  | P    |     |
| X   | B |    |      |     |

|          |        |        |        | Unitaz   |         | L S     |
|----------|--------|--------|--------|----------|---------|---------|
| Detired  | Active |        | ACTIVE | INACTIVE | RETIRED | TOTAL   |
| Retired  | Active | Tier 1 | 53,190 | 55,520   | 46,111  | 154,821 |
|          |        | Tier 2 | 26,419 | 14,521   | 1       | 40,941  |
| Inactive |        | Tier 3 | 2,885  | 190      | 0       | 3,075   |
|          |        | TOTAL  | 82,494 | 70,231   | 46,112  | 198,837 |

Den ponhazard

| Plan Net Position (in Thousands) |             |             |             |             |             |             |  |  |  |  |  |
|----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|--|--|--|--|--|
| Fund                             | 2009        | 2010        | 2011        | 2012        | 2013        | 2014        |  |  |  |  |  |
| Pension                          | \$4,331,010 | \$4,820,490 | \$5,543,962 | \$5,381,602 | \$5,795,568 | \$6,528,146 |  |  |  |  |  |
| Insurance                        | \$894,490   | \$1,094,821 | \$1,418,818 | \$1,428,821 | \$1,618,960 | \$1,878,711 |  |  |  |  |  |
| Total                            | \$5,225,500 | \$5,915,311 | \$6,962,780 | \$6,810,423 | \$7,414,528 | \$8,406,857 |  |  |  |  |  |



# **CERS** Hazardous

RETIRED MEMBERSHIP

AVERAGE AGE

61.0

\$27,135

ACTIVE MEMBERSHIP

AVERAGE AGE

**39.2** AVERAGE SALARY

\$52,117

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

|          |        |        | } ł    | nazard   | ous     |        |
|----------|--------|--------|--------|----------|---------|--------|
| Retired  | 2      |        | ACTIVE | INACTIVE | RETIRED | TOTAL  |
| Retired  | Active | Tier 1 | 6,710  | 1,607    | 6,065   | 14,382 |
|          |        | Tier 2 | 2,281  | 425      | 1       | 2,707  |
| Inactive |        | Tier 3 | 198    | 6        | 0       | 204    |
|          |        | TOTAL  | 9,189  | 2,038    | 6,066   | 17,293 |

| Plan Net Position (in Thousands) |             |             |             |             |             |             |  |  |  |  |  |
|----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|--|--|--|--|--|
| Fund                             | 2009        | 2010        | 2011        | 2012        | 2013        | 2014        |  |  |  |  |  |
| Pension                          | \$1,320,560 | \$1,506,894 | \$1,751,962 | \$1,672,970 | \$1,833,571 | \$2,087,002 |  |  |  |  |  |
| Insurance                        | \$483,233   | \$586,614   | \$761,075   | \$785,874   | \$891,320   | \$1,030,303 |  |  |  |  |  |
| Total                            | \$1,803,793 | \$2,093,508 | \$2,513,037 | \$2,458,844 | \$2,724,891 | \$3,117,305 |  |  |  |  |  |





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

# SPRS

**RETIRED** MEMBERSHIP

AVERAGE AGE

61.8

AVERAGE ANNUAL BENEFIT PAYMENT

\$40,330

ACTIVE MEMBERSHIP

AVERAGE AGE

AVERAGE SALARY

VE INACTIVE

185

54

0

239

RETIRED

1,278

1

0

1,279

TOTAL

2,167

212

0

2,379

\$52,182

|          |        | ACTIVE                       |
|----------|--------|------------------------------|
| Active   | Tier 1 | 704                          |
|          | Tier 2 | 157                          |
| Inactive | Tier 3 | 0                            |
|          | TOTAL  | 861                          |
|          |        |                              |
|          | Active | Tier 1<br>Tier 2<br>Inactive |

| Plan Net Position (in Thousands) |           |           |           |           |           |           |  |  |  |  |  |
|----------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|--|--|--|--|--|
| Fund                             | 2009      | 2010      | 2011      | 2012      | 2013      | 2014      |  |  |  |  |  |
| Pension                          | \$256,575 | \$264,949 | \$279,283 | \$250,476 | \$248,698 | \$260,974 |  |  |  |  |  |
| Insurance                        | \$93,682  | \$104,511 | \$126,737 | \$125,398 | \$142,691 | \$164,958 |  |  |  |  |  |
| Total                            | \$350,257 | \$369,460 | \$406,020 | \$375,874 | \$391,389 | \$425,932 |  |  |  |  |  |

POLIC



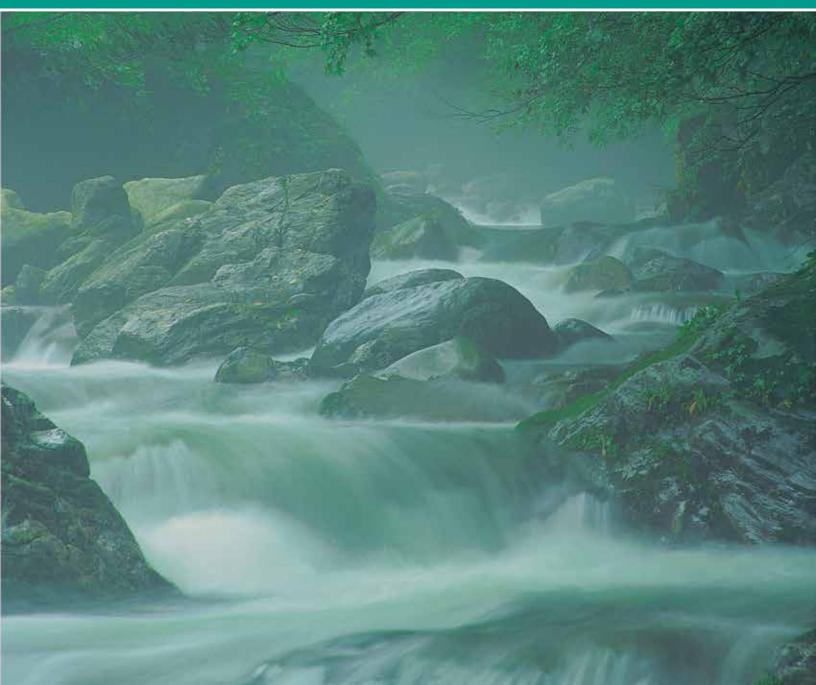
#### Total System 93,946 **RETIRED** MEMBERS RED TOTAL MEMBERS 348,123 93,946 **ACTIVE** MEMBERS 137,138 ビフ SAN **INACTIVE** MEMBERS 6soill 117,039 RETIRE **KEN**7 ACTIVE INACTIVE RETIRED TOTAL SYSTEMS Retired Active Tier 1 90,705 93,943 277,903 93,255 Tier 2 41, 507 64,843 23,333 3 Inactive 4,926 Tier 3 451 0 5,377 TOTAL 137,138 117,039 93,946 348,123

| Plan Net  | t Position   | (in Thousar  | nds)         |              |              |              |
|-----------|--------------|--------------|--------------|--------------|--------------|--------------|
| Fund      | 2009         | 2010         | 2011         | 2012         | 2013         | 2014         |
| Pension   | \$9,881,697  | \$10,540,440 | \$11,617,720 | \$10,754,057 | \$11,153,182 | \$12,015,897 |
| Insurance | \$2,056,272  | \$2,425,987  | \$3,048,338  | \$3,089,313  | \$3,521,894  | \$4,154,401  |
| Total     | \$11,937,969 | \$12,966,427 | \$14,666,058 | \$13,843,370 | \$14,675,076 | \$16,170,298 |



# Financial







# SECTION

### FINANCIAL TABLE OF CONTENTS

- 22 REPORT OF INDEPENDENT AUDITORS
- 25 MANAGEMENT'S DISCUSSION & ANALYSIS
- 27 FUND ACTIVITIES
- 29 HISTORICAL TRENDS
- 30 COMBINING STATEMENT OF PLAN NET POSITION
- 34 NOTE A. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES
- 36 NOTE B. PLAN DESCRIPTIONS & CONTRIBUTION INFORMATION
- 38 KRS PENSION PLANS
- 40 KRS INSURANCE
- 41 NOTE C. CASH, SHORT-TERM INVESTMENTS & SECURITIES LENDING COLLATERAL
- 42 NOTE D. INVESTMENTS
- 53 NOTE E. SECURITIES LENDING TRANSACTIONS
- 54 NOTE F. RISK OF LOSS NOTE G. CONTINGENCIES
- 55 NOTE H. INCOME TAX STATUS NOTE I. DEFINED BENEFIT PENSION PLAN
- 56 NOTE J. EQUIPMENT NOTE K. INTANGIBLE ASSETS
- 57 NOTE L. ACTUARIAL VALUATION
- 59 NOTE M. GASB 67
- 61 NOTE N. HOUSE BILL 1 PENSION REFORM
- 62 NOTE O. MEDICARE PRESCRIPTION DRUG PLAN NOTE P. HOUSE BILL 300 PENSION REFORM NOTE Q. REIMBURSEMENT OF RETIRED-REEMPLOYED HEALTH INSURANCE
- 63 NOTE R. LOUISVILLE/JEFFERSON COUNTY METRO FIREFIGHTERS NOTE S. RECIPROCITY AGREEMENT NOTE T. CUSTODIAL BANK NOTE U. RELATED PARTY
- 64 NOTE V. SENATE BILL 2 PENSION REFORM
- 65 NOTE W. CITY OF FORT WRIGHT NOTE X. SEVEN COUNTY SERVICES, INC.
- 66 NOTE Y. WRITE OFF OF RECEIVABLE NOTE Z. BANK OF AMERICA SETTLEMENT NOTE AA. SUBSEQUENT EVENTS
- 67 REQUIRED SUPPLEMENTARY INFORMATION
- 68 REQUIRED SUPPLEMENTARY INFORMATION
- 77 ADDITIONAL SUPPORTING SCHEDULES







# Report of Independent Auditors

Board of Trustees Kentucky Retirement Systems Frankfort, Kentucky

### **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 fiscal year ended June 30, 2014, and the related notes to the combining financial statements, which collectively comprise the Kentucky Retirement System's basic combining financial statements as listed in the table of contents.

### Management's Responsibility for the Financial Statements

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

### Auditor's Responsibility

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

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the combining financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatements of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation



of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no 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 combining financial statements.

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

#### Opinion

In our opinion, the combining financial statements referred to above present fairly, in all material respects, the respective combining plan net position of the Pension Funds and Insurance Fund of the Kentucky Retirement Systems, a component unit of the Commonwealth of Kentucky, as of June 30, 2014 and the respective combining changes in plan net position for the year then ended, in accordance with accounting principles generally accepted in the United States of America.

#### Report on Summarized Comparative Information

The combining financial statement of Kentucky Retirement Systems as of and for the fiscal year ended June 30, 2013, (not presented herein), were audited by other auditors whose report dated December 5, 2013, expressed an unmodified opinion on those statements. In our opinion, the summarized comparative information presented herein as of and for the fiscal year ended June 30, 2013, is consistent, in all material respects, with the audited combining financial statements from which it has been derived.

### **Other Matters**

#### **Required Supplementary Information**

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis on the following page and the Schedules of Changes in the Net Pension Liability, Schedules of Net Pension Liability Schedules Funding Progress, Schedules of Employer Contributions, Schedules of Funding Progress, and Schedules of Contributions from Employers and Contributing Entities (pages 68 through 80) be presented to supplement the basic combining financial statements. Such information, although not a part of the basic combining financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of the financial reporting for placing the basic combining financial statements in an appropriate operational, economical, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of



inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic combining financial statements, and other knowledge we obtained during our audit of the basic combining financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures did not provide us with sufficient evidence to express an opinion or provide any assurance.

#### **Supplementary Information**

Our audit was conducted for the purpose of forming an opinion on the combining financial statements that collectively comprise the Kentucky Retirement Systems' basic combining financial statements. The additional supporting schedules (pages 81 and 82) are presented for purposes of additional analysis and are not a required part of the basic combining financial statements. These schedules are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic combining financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic combining financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic combining financial statements or to the basic combining financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the additional supporting schedules are fairly stated, in all material respects, in relation to the basic combining financial statements as a whole. The Introductory, Actuarial, Investments, and Statistical sections are presented for purposes for additional analysis and are not a required part of the combining financial statements. These sections have not been subjected to the auditing procedures applied in the audit of the combining financial statements, and accordingly, we express no opinion on them.

### Other Reporting Required by Government Auditing Standards

In accordance with Government Auditing Standards, we have also issued our report dated December 4, 2014 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 Kentucky Retirement System's internal control over financial reporting and compliance.

Dean Dotton allen Ford, PLLC

December 4, 2014 Lexington, Kentucky



# 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, 2014. Please read it in conjunction with the combining financial statements, which begin on page 30.

### **Pension Funds**

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

- »The combined net position of all pension funds administered by Kentucky Retirement Systems increased by \$862.8 million during fiscal 2014.
- » Total contributions reported for fiscal 2014, totaled \$1,055.7 million compared to \$1,027.2 million in fiscal 2013. This increase is due to a rise in the employer contribution rates and the collection of additional health insurance contributions.
- » The member health insurance contribution totaled \$12.4 million, for the fiscal year ended June 30, 2014, compared to \$9.1 million in the prior fiscal year.
- » The net appreciation in the fair value of investments was \$1,361.9 million for the fiscal year ended June 30, 2014 compared to net appreciation of \$890.6 million for the prior fiscal year.
- » Interest, dividend and net securities lending income was \$327.5 million compared to \$291.3 million in fiscal 2013.
- » Pension benefits paid to retirees and beneficiaries for fiscal 2014 totaled \$1,769.7 million compared to \$1,706.2 million in fiscal 2013. Refund of contributions paid to former members upon termination of employment totaled \$33.6 million compared to \$32.2 million in fiscal 2013.
- » 2014 administrative expenses totaled \$34.2 million (Pension \$32.6 million; Insurance \$1.6 million) compared to \$40.3 million (Pension \$30.6 million; Insurance \$9.8 million) for the prior year. The decrease of \$6.1 million is related to lower health care fees (\$8.2 million) partially offset by higher legal and technology expenses (see Schedule of Administrative Expenses on page 77).

### **Insurance Fund**

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

- » The Board contracted 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. Prior to this, KRS assumed the financial risk for providing health care benefits for its retirees.
- »The combined net position of the insurance fund administered by Kentucky Retirement Systems increased by \$632.5 million during fiscal 2014.
- » Premiums received from retirees who participated in the Medicare eligible self-funded plan totaled \$2.4 million, compared to \$26.3 million in fiscal 2013. 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 the cessation of the self funding plan.
- » Employer contributions of \$397.4 million were received for fiscal 2014 compared to \$447.3 million in fiscal 2013. This change is due to a decrease in the insurance contribution rate applied to CERS covered payroll.
- » The reimbursement of retired-reemployed health insurance for fiscal 2014 totaled \$5.6 million for the fiscal year ended June 30, 2014, compared to \$5.8 million in the prior fiscal year.
- » The Employer Group Waiver Plan receipts from the CMS subsidies for fiscal 2014 totaled \$14,295 compared to \$11.2 million in fiscal 2013. This decrease is due to the cessation of the self funding plan.
- » The net appreciation in the fair value of investments for fiscal 2014 was \$445.7 million compared to net appreciation of \$232.9 million for the prior fiscal year.
- » Interest, dividend and net securities lending income for fiscal 2014 was \$97.1 million compared to \$90.4 million in fiscal 2013.
- » On August 6, 2012, the Board of Trustees voted to cease self-funding of healthcare benefits for most KRS Medicare eligible retirees. Premiums paid by the fund for hospital and medical insurance coverage (under age 65) totaled \$292.2 million. Payments for the self-funded healthcare reimbursements (over age 65) continued to decline and totaled \$6.2 million. The total of insurance premiums paid was \$298.4 million for fiscal 2014 compared to the prior plan year totaled \$361.9 million.
- » As part of the application process to the CMS 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 \$100,000; 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. The balance as of June 30, 2014, totaled \$100,039.





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, 2014. Please read it in conjunction with the financial statements, which begins on page 68.

**Using This Financial Report** Because of the long-term nature of a defined benefit pension plan and post-employment healthcare benefit plan, the combining financial statements alone cannot provide sufficient information to properly reflect the plan's ongoing plan perspective. This financial report consists of two combining financial statements and two required schedules of historical trend information. The Combining Statement of Plan Net Position for the Pension Funds, on page 30, and the Combining Statement of Plan Net Position for the Insurance Fund, on page 32, provides a snapshot of the financial position of each of the three systems at June 30, 2014. The Combining Statement of Changes in Plan Net Position for the Insurance Funds and the Combining Statement of Changes in Plan Net Position for the Insurance Funds and the Combining Statement of Changes in Plan Net Position for the Insurance Fund summarizes the additions and deductions that occurred for each of the three systems during fiscal 2014.

The Schedules of the Net Pension Liability, the Schedules of Changes of Net Pension Liability, and Schedules of Funding Progress, on page 68, include current and historical trend information about the actuarially funded status of each plan from a long-term, ongoing plan perspective and the progress made in accumulating sufficient assets to pay benefits and insurance premiums when due. The Schedules of Employer Contribution, Schedules of Contributions from Employers and Other Contributing Entities, starting on page 71, present current and historical trend information about the annual required contributions and the contributions made in relation to the requirement. These schedules provide information that contributes to understanding the changes over time in the funded status of the plans

**Funds as a Whole** Kentucky Retirement Systems' combined net position increased \$1,495.3 million, during the fiscal year ended June 30, 2014. Net position for the prior fiscal year increased by \$831.6 million. The increase in net position for the plan year ended June 30, 2014 is primarily attributable to a net appreciation in the fair value of investments, an increase 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)

|  | Pe         | ension Fund | s          | Insu      | Irance Fund | ł         |            | Total      |            |
|--|------------|-------------|------------|-----------|-------------|-----------|------------|------------|------------|
| Assets                                 | 2014       | 2013        | 2012       | 2014      | 2013        | 2012      | 2014       | 2013       | 2012       |
| Cash & Investments                     | \$12,758.2 | \$12,431.7  | \$11,922.7 | \$4,392.4 | \$3,992.1   | \$3,243.5 | \$17,150.6 | \$16,423.8 | \$15,166.2 |
| Receivables                            | 750.2      | 136.1       | 145.6      | 289.3     | 49.1        | 71.9      | 1,039.5    | 185.2      | 217.5      |
| Equip/Int Assets,<br>net of dep/amort. | 10.5       | 16.1        | 13.8       |           |             |           | 10.5       | 16.1       | 13.8       |
| Total Assets                           | 13,518.9   | 12,583.9    | 12,082.1   | 4,681.7   | 4,041.2     | 3,315.4   | 18,200.6   | 16,625.1   | 15,397.5   |
| Total Liabilities                      | (1,503.0)  | (1,430.8)   | (1,328.1)  | (527.3)   | (519.3)     | (226.0)   | (2,030.3)  | (1,950.1)  | (1,554.1)  |
| Plan Net Position                      | \$12,015.9 | \$11,153.1  | \$10,754.0 | \$4,154.4 | \$3,521.9   | \$3,089.4 | \$16,170.3 | \$14,675.0 | \$13,843.4 |

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

|   |         | Pension | Funds     |       | Insurance | e Fund |         | Tot     | al        |
|---|---------|---------|-----------|-------|-----------|--------|---------|---------|-----------|
| Additions                                   | 2014    | 2013    | 2012      | 2014  | 2013      | 2012   | 2014    | 2013    | 2012      |
| Member Cont.                                | \$275.0 | \$276.3 | \$274.1   | \$ \$ | 5         | \$     | \$275.0 | \$276.3 | \$274.1   |
| Employer Cont.                              | 768.3   | 741.8   | 591.4     | 397.4 | 447.3     | 436.2  | 1,165.7 | 1,189.1 | 1,027.6   |
| Health Ins. Cont.                           | 12.4    | 9.1     | 7.3       |       |           |        | 12.4    | 9.1     | 7.3       |
| Premiums Rec'd                              |         |         |           | 2.4   | 26.3      | 28.4   | 2.4     | 26.3    | 28.4      |
| Retired Remp Ins.                           |         |         |           | 5.6   | 5.8       | 6.3    | 5.6     | 5.8     | 6.3       |
| Employer Group<br>Waiver Plan               |         |         |           |       | 11.2      | 17.8   |         | 11.2    | 17.8      |
| Invest. Inc. (net)                          | 1,643.0 | 1,140.8 | (28.5)    | 527.1 | 313.6     | (55.3) | 2,170.1 | 1,454.4 | (83.8)    |
| Total Additions                             | 2,698.7 | 2,168.0 | 844.3     | 932.5 | 804.2     | 433.4  | 3,631.2 | 2,972.2 | 1,277.7   |
| Deductions                                  |         |         |           |       |           |        |         |         |           |
| Benefit payments                            | 1,769.7 | 1,706.2 | 1,649.2   |       |           |        | 1,769.7 | 1,706.2 | 1,649.2   |
| Refunds                                     | 33.6    | 32.2    | 31.0      |       |           |        | 33.6    | 32.2    | 31.0      |
| Administrative Ex.                          | 32.6    | 30.5    | 27.8      | 1.6   | 9.8       | 11.9   | 34.2    | 40.3    | 39.7      |
| Healthcare Costs                            |         |         |           | 298.4 | 361.9     | 380.4  | 298.4   | 361.9   | 380.4     |
| Total Deductions                            | 1,835.9 | 1,768.9 | 1,708.0   | 300   | 371.7     | 392.3  | 2,135.9 | 2,140.6 | 2,100.3   |
| Increase (Decrease)<br>in Plan Net Position | \$862.8 | \$399.1 | \$(863.7) | 632.5 | \$432.5   | \$41.1 | 1,495.3 | \$831.6 | \$(822.6) |

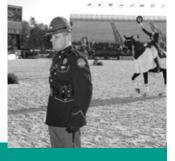
# FUND ACTIVITIES

### **Pension Fund Activities**

Member contributions decreased by \$1.3 million. This is due to a cessation of the contributions from Seven Counties Services, Inc., a former member employer. In addition, there were lower services purchases. 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 \$26.5 million due to the rise in employer contribution rate applied to covered payroll.

Much of the data presented in this report is abbreviated *"in thousands"* or *"in millions."* 



Net position of the pension funds increased by \$862.8 million (\$12,015.9 million compared to \$11,153.1 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 \$632.5 million (\$4,154.4 million compared to \$3,521.9 million). All of these assets are restricted in use to provide hospital and medical insurance benefits to members of the pension funds who receive a monthly retirement allowance.

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

| Asset  | 2014    | 2013    | 2012    |
|--|---------|---------|---------|
| Increase (Decrease) in fair value of investments | \$489   | \$426   | \$(238) |
| Investment income net of investment expense      | 281     | 250     | 232     |
| Gain (Loss) on sale of investments               | 873     | 465     | (23)    |
| Net Investment Income (Loss)                     | \$1,643 | \$1,141 | \$(29)  |

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

| Asset  | 2014  | 2013  | 2012   |
|--|-------|-------|--------|
| Increase (Decrease) in fair value of investments | \$288 | \$125 | \$(21) |
| Investment income net of investment expense      | 81    | 81    | 63     |
| Gain (Loss) on sale of investments               | 158   | 108   | (97)   |
| Net Investment Income (Loss)                     | \$527 | \$314 | \$(55) |

Insurance fund deductions decreased by \$71.7 million due to the cessation of the self funding plan.



Net investment income increased by \$502 million. This is 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 \$67.0 million caused principally by an increase of \$63.5 million in benefit payments. Refunds of member contributions increased by \$1.5 million.

**Insurance Fund Activities** Employer contributions paid into the insurance fund decreased by \$49.9 million over the prior fiscal year. This decrease is a result of the reduction of the employer contribution rates applied to CERS Nonhazardous and CERS Hazardous covered payrolls, as well as the loss of insurance contributions from Seven Counties Services, Inc.

Net investment income increased \$213 million. This increase in net investment income is due primarily to the rise in the fair value of investments. This is illustrated in Table 4.





# Historical Trends

Accounting standards require that the Statement of Net Position state asset value at fair value and include only benefits and refunds due plan members and beneficiaries and accrued investment and administrative expense as of the reporting date. Information regarding the actuarial funding status of the Pension and Insurance Funds is provided in the Schedules of Net Pension Liability and the Schedules of Funding Progress beginning on page 68. 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.

The unfunded actuarial accrued liability in the pension plans increased by \$327.2 million for a total unfunded amount of \$14,830.1 million as of June 30, 2014, compared to an unfunded amount of \$14,502.9 million as of June 30, 2013. In recent years, funding levels for the pension funds have fallen significantly due to investment returns less than the actuarially assumed rate and have been higher than anticipated retirement rates. In addition, KERS, KERS Hazardous, and SPRS are funded less than the actuarially determined rate. Within the KERS and SPRS systems, employer contribution rate reductions enacted by the Kentucky General Assembly have limited the ability of KRS to correct the declining funding levels.

The insurance plan's unfunded actuarial accrued liability as of June 30, 2014, decreased to \$2,943.6 million from \$3,092.1 million as of June 30, 2013. This is a decrease in the unfunded actuarial accrued liability of \$148.5 million. This decrease is due to the change for the Medicare-eligible 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 Employer Contributions and in the Schedules of Contributions from Employers and Other Contributing Entities on page 71. The difference in the annual required contributions and actual contributions made by employers and other contributing entities in the KERS and SPRS systems 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, 2014 with Comparative Totals as of June 30, 2013

| Assets   |             |                 |             |                 |           | 2014         | 2013         |
|--|-------------|-----------------|-------------|-----------------|-----------|--------------|--------------|
|  | KERS<br>Haz | KERS<br>Non Haz | CERS<br>Haz | CERS<br>Non Haz | SPRS      | KRS<br>Total | KRS<br>Total |
| Cash & Short-Term Investments                          |             |                 |             |                 |           |              |              |
| Cash   | \$117       | \$1,408         | \$222       | \$1,724         | \$273     | \$3,744      | \$5,712      |
| Short-Term Investments                                 | 21,453      | 109,678         | 60,761      | 238,111         | 10,980    | 440,983      | 419,181      |
| Total Cash and Short-Short Term<br>Investments         | 21,570      | 111,086         | 60,983      | 239,835         | 11,253    | 444,727      | 424,893      |
| Receivables  |             |                 |             |                 |           |              |              |
| Contributions  | 4,398       | 36,521          | 12,765      | 51,683          | 2,683     | 108,050      | 102,303      |
| Investment Income                                      | 29,441      | 153,768         | 110,363     | 334,389         | 14,140    | 642,101      | 33,759       |
| Total Receivables                                      | 33,839      | 190,289         | 123,128     | 386,072         | 16,823    | 750,151      | 136,062      |
| Investments at Fair Value                              |             |                 |             |                 |           |              |              |
| Corporate & Government Bonds                           | 135,640     | 702,249         | 534,434     | 1,616,383       | 62,596    | 3,051,302    | 3,520,528    |
| Absolute Return  | 61,379      | 302,079         | 219,359     | 690,883         | 29,497    | 1,303,197    |              |
| Private Equities                                       | 61,393      | 394,632         | 197,409     | 605,579         | 28,453    | 1,287,466    |              |
| Derivatives  | 195         | 811             | 723         | 2,233           | 89        | 4,051        |              |
| Equity Contracts                                       |             |                 |             |                 |           |              | 251          |
| nterest Rate Contracts                                 |             |                 |             |                 |           |              | 30,596       |
| Foreign Exchange Contracts                             |             |                 |             |                 |           |              | 12,995       |
| Swaps  |             |                 |             |                 |           |              | 4,030        |
| Options  |             |                 |             |                 |           |              | 963          |
| Corporate Stocks                                       | 254,625     | 932,372         | 982,307     | 3,072,452       | 116,524   | 5,358,280    | 6,464,253    |
| Mortgages  |             |                 |             |                 |           |              | 371,940      |
| Real Estate  | 22,586      | 89,558          | 74,546      | 230,961         | 9,455     | 427,106      | 174,944      |
| Total Investments at Fair Value                        | 535,818     | 2,421,701       | 2,008,778   | 6,218,491       | 246,614   | 11,431,402   | 10,580,500   |
| Securities Lending Collateral<br>Invested              | 41,482      | 184,071         | 154,899     | 482,685         | 18,960    | 882,097      | 1,426,438    |
| Equipment (net of accumulated<br>depreciation)         | 7           | 70              | 12          | 131             | 1         | 221          | 3,896        |
| Intangible Assets (net of<br>accumulated amortization) | 301         | 3,505           | 494         | 5,965           | 53        | 10,318       | 12,194       |
| Total Assets   | 633,017     | 2,910,722       | 2,348,294   | 7,333,179       | 293,704   | 13,518,916   | 12,583,983   |
| Liabilities  |             |                 |             |                 |           |              |              |
| Accounts Payable                                       | 1,990       | 2,138           | 1,186       | 3,340           | 282       | 8,936        | 4,363        |
| nvestment Accounts Payable                             | 28,061      | 146,223         | 105,207     | 319,007         | 13,488    | 611,986      |              |
| Securities Lending Collateral<br>Obligations           | 41,482      | 184,071         | 154,899     | 482,685         | 18,960    | 882,097      | 1,426,438    |
| Total Liabilities                                      | 71,533      | 332,432         | 261,292     | 805,032         | 32,730    | 1,503,019    | 1,430,801    |
| Total Net Position for Pension<br>Benefits             | \$561,484   | \$2,578,290     | \$2,087,002 | \$6,528,147     | \$260,974 | \$12,015,897 | \$11,153,182 |

See accompanying notes to the combining financial statements.

Combining Statement of Changes in Plan Net Position for Pension Funds (*in Thousands*) for the fiscal year ended June 30, 2014 with Comparative Totals for the fiscal year ended June 30, 2013

| Additions  |             |                 |             |                 |           | 2014         | 2013         |
|--|-------------|-----------------|-------------|-----------------|-----------|--------------|--------------|
|  | KERS<br>Haz | KERS<br>Non Haz | CERS<br>Haz | CERS<br>Non Haz | SPRS      | KRS<br>Total | KRS<br>Total |
| Members' Contributions                           | \$11,995    | \$92,941        | \$42,631    | \$122,459       | \$5,006   | \$275,032    | \$276,346    |
| Employers' Contributions                         | 11,671      | 296,836         | 115,240     | 324,231         | 20,279    | 768,257      | 741,763      |
| Health Insurance<br>Contributions (HB1)          | 551         | 4,546           | 1,091       | 6,109           | 70        | 12,367       | 9,187        |
| Total Contributions                              | 24,217      | 394,323         | 158,962     | 452,799         | 25,355    | 1,055,656    | 1,027,296    |
| Investment Income                                |             |                 |             |                 |           |              |              |
| From Investing Activities                        |             |                 |             |                 |           |              |              |
| Net Appreciation in FV                           | 66,475      | 265,388         | 241,913     | 757,252         | 30,912    | 1,361,940    | 890,641      |
| ע Interest/Dividends                             | 16,335      | 80,939          | 54,124      | 161,830         | 10,399    | 323,627      | 285,999      |
| ▪ Total Investing<br>Activities Income           | 82,810      | 346,327         | 296,037     | 919,082         | 41,311    | 1,685,567    | 1,176,640    |
| Investment Expense ע                             | 2,261       | 9,153           | 8,221       | 25,695          | 1,020     | 46,350       | 41,127       |
| Net Income from<br>Investing Activities          | 80,549      | 337,174         | 287,816     | 893,387         | 40,291    | 1,639,217    | 1,135,513    |
| From Securities Lending Activ                    | vities      |                 |             |                 |           |              |              |
| Securities Lending Income                        | 181         | 852             | 702         | 2,243           | 88        | 4,066        | 5,922        |
| From Securities Lending Expe                     | ense        |                 |             |                 |           |              |              |
| Security Borrower (income)                       | (25)        | (30)            | (91)        | (277)           | (10)      | (433)        | (224)        |
| ע Security Lending Agent<br>⊂ees                 | 31          | 134             | 119         | 376             | 15        | 675          | 865          |
| Net Income from Securities<br>_ending Activities | 175         | 748             | 674         | 2,144           | 83        | 3,824        | 5,281        |
| Total Net Investment Income                      | 80,724      | 337,922         | 288,490     | 895,531         | 40,374    | 1,643,041    | 1,140,794    |
| Total Additions                                  | 104,941     | 732,245         | 447,452     | 1,348,330       | 65,729    | 2,698,697    | 2,168,090    |
| Deductions                                       |             |                 |             |                 |           |              |              |
| Benefit Payments                                 | 54,321      | 889,936         | 189,635     | 582,850         | 53,026    | 1,769,768    | 1,706,220    |
| Refunds  | 2,830       | 13,627          | 2,665       | 14,286          | 214       | 33,621       | 32,164       |
| Administrative Expenses                          | 898         | 11,145          | 1,721       | 18,615          | 214       | 32,593       | 30,581       |
| Total Deductions                                 | 58,049      | 914,708         | 194,021     | 615,751         | 53,453    | 1,835,982    | 1,768,965    |
| Net Increase in Plan Position                    | 46,892      | (182,463)       | 253,431     | 732,579         | 12,276    | 862,715      | 399,125      |
| Total Net Position for Pension                   | Benefits    |                 |             |                 |           |              |              |
| Beginning of Year                                | 514,592     | 2,760,753       | 1,833,571   | 5,795,568       | 248,698   | 11,153,182   | 10,754,057   |
| End of Year                                      | \$561,484   | \$2,578,290     | \$2,087,002 | \$6,528,147     | \$260,974 | \$12,015,897 | \$11,153,182 |

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

# Combining Statement of Plan Net Position for Insurance Funds (in Thousands) as of June 30, 2014 with Comparative Totals as of June 30, 2013

| Assets  |             |                 |             |                 |           | 2014         | 2013         |
|---|-------------|-----------------|-------------|-----------------|-----------|--------------|--------------|
|   | KERS<br>Haz | KERS<br>Non Haz | CERS<br>Haz | CERS<br>Non Haz | SPRS      | KRS<br>Total | KRS<br>Total |
| Cash and Short-Term Investments                   | 5           |                 |             |                 |           |              |              |
| Cash  | \$50        | \$101           | \$2         | \$101           | \$100     | \$354        | \$1,423      |
| Short-Term Investments                            | 14,788      | 31,821          | 28,645      | 57,968          | 5,467     | 138,689      | 163,336      |
| Medicare Drug Deposit                             | 10          | 20              | 23          | 42              | 5         | 100          | 102          |
| Total Cash and Short Term<br>Investments          | 14,848      | 31,942          | 28,670      | 58,111          | 5,572     | 139,143      | 164,861      |
| Receivables                                       |             |                 |             |                 |           |              |              |
| Contributions                                     | 2,194       | 14,398          | 5,222       | 13,617          | 1,237     | 36,668       | 38,995       |
| Investment Income                                 | 27,308      | 39,256          | 62,179      | 113,965         | 9,969     | 252,677      | 10,123       |
| Total Receivables                                 | 29,502      | 53,654          | 67,401      | 127,582         | 11,206    | 289,345      | 49,118       |
| Investments at Fair Value                         |             |                 |             |                 |           |              |              |
| Corporate & Government Bonds                      | 150,261     | 224,946         | 359,809     | 652,955         | 57,459    | 1,445,430    | 1,203,107    |
| Derivatives                                       | 91          | 111             | 225         | 405             | 36        | 868          |              |
| Private Equities                                  | 27,003      | 39,791          | 68,507      | 123,385         | 12,155    | 270,841      |              |
| Absolute Return                                   | 45,241      | 67,749          | 108,162     | 191,587         | 17,270    | 430,009      |              |
| Equity Contracts                                  |             |                 |             |                 |           |              | 69           |
| Interest Rate Contracts                           |             |                 |             |                 |           |              | 5,561        |
| Swaps   |             |                 |             |                 |           |              | 1,488        |
| Foreign Exchange Contracts                        |             |                 |             |                 |           |              | 3,415        |
| Options   |             |                 |             |                 |           |              | 279          |
| Corporate Stocks                                  | 175,794     | 243,662         | 417,006     | 760,918         | 64,359    | 1,661,739    | 1,945,363    |
| Mortgages   |             |                 |             |                 |           |              | 103,488      |
| Real Estate                                       | 16,039      | 21,459          | 38,076      | 69,293          | 6,138     | 151,005      | 53,303       |
| Total Investments at Fair Value                   | 414,429     | 597,718         | 991,785     | 1,798,543       | 157,417   | 3,959,892    | 3,316,073    |
| Securities Lending Collateral<br>Invested         | 8,470       | 66,345          | 44,714      | 169,211         | 4,630     | 293,370      | 511,108      |
| Total Assets                                      | 467,249     | 749,659         | 1,132,570   | 2,153,447       | 178,825   | 4,681,750    | 4,041,160    |
| Liabilities                                       |             |                 |             |                 |           |              |              |
| Accounts Payable                                  | 2           | 9               | 6           | 28              | 2         | 47           | 8,158        |
| Investment Accounts Payable                       | 25,252      | 36,400          | 57,547      | 105,497         | 9,235     | 233,931      |              |
| Securities Lending Collateral<br>Obligations      | 8,470       | 66,345          | 44,714      | 169,211         | 4,630     | 293,370      | 511,108      |
| Total Liabilities                                 | 33,724      | 102,754         | 102,267     | 274,736         | 13,867    | 527,348      | 519,266      |
| Total Plan Net Position for<br>Insurance Benefits | \$433,525   | \$646,905       | \$1,030,303 | \$1,878,711     | \$164,958 | \$4,154,402  | \$3,521,894  |

See accompanying notes to the combining financial statements.

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

Combining Statement of Changes in Plan Net Position for Insurance Funds (in Thousands) for the fiscal year ended June 30, 2014 with Comparative Totals for the fiscal year ended June 30, 2013

| Additions  |             |                 |             |                 |           | 2014         | 2013         |
|--|-------------|-----------------|-------------|-----------------|-----------|--------------|--------------|
|  | KERS<br>Haz | KERS<br>Non Haz | CERS<br>Haz | CERS<br>Non Haz | SPRS      | KRS<br>Total | KRS<br>Total |
| Employers' Contributions                         | \$23,336    | \$164,176       | \$74,265    | \$121,160       | \$14,498  | \$397,435    | \$447,338    |
| Employer Group Waiver Plan                       |             | 8               |             | 6               |           | 14           | 11,189       |
| Premiums Received from<br>Retirees               | 38          | 917             | 31          | 1,450           | 11        | 2,447        | 26,346       |
| Retired Reemployed<br>Healthcare (HBI)           | 538         | 2,434           | 527         | 2,117           | (5)       | 5,611        | 5,816        |
| Total Contributions                              | 23,912      | 167,535         | 74,823      | 124,733         | 14,504    | 405,507      | 490,689      |
| Investment Income                                |             |                 |             |                 |           |              |              |
| From Investing Activities                        |             |                 |             |                 |           |              |              |
| א Net Appreciation in FV                         | 43,411      | 83,783          | 105,346     | 195,952         | 17,168    | 445,660      | 232,863      |
| ע Interest/Dividends                             | 10,293      | 14,724          | 23,681      | 43,178          | 3,937     | 95,813       | 88,645       |
| ע Total Investing<br>Activities Income           | 53,704      | 98,507          | 129,027     | 239,130         | 21,105    | 541,473      | 321,508      |
| וע Investment Expense                            | 1,622       | 1,929           | 4,075       | 7,388           | 647       | 15,661       | 9,599        |
| Net Income from<br>Investing Activities          | 52,082      | 96,578          | 124,952     | 231,742         | 20,458    | 525,812      | 311,909      |
| From Securities Lending Activit                  | ies         |                 |             |                 |           |              |              |
| ש Securities Lending Income                      | 144         | 175             | 354         | 638             | 54        | 1,365        | 2,008        |
| From Securities Lending Expen                    | se          |                 |             |                 |           |              |              |
| ש Security Borrower (income)                     | (11)        | (14)            | (28)        | (54)            | (5)       | (112)        | 15           |
| ע Security Lending Agent<br>Fees                 | 23          | 30              | 57          | 103             | 9         | 222          | 282          |
| Net Income from Securities<br>Lending Activities | 132         | 159             | 325         | 589             | 50        | 1,255        | 1,711        |
| Total Net Investment Income                      | 52,214      | 96,737          | 125,277     | 232,331         | 20,508    | 527,067      | 313,620      |
| Total Additions                                  | 76,126      | 264,272         | 200,100     | 357,064         | 35,012    | 932,574      | 804,309      |
| Deductions                                       |             |                 |             |                 |           |              |              |
| Healthcare Premiums Subsidies                    | 15,448      | 111,051         | 60,522      | 92,637          | 12,584    | 292,242      | 283,118      |
| Administrative Fees                              | 77          | 719             | 273         | 488             | 57        | 1,614        | 9,758        |
| Excise Tax                                       | 1           | 17              | 1           | 20              | 1         | 40           | -            |
| Self Funding Insurance Costs                     | (42)        | 1,620           | 321         | 4,168           | 103       | 6,170        | 78,852       |
| Total Deductions                                 | 15,484      | 113,407         | 61,117      | 97,313          | 12,745    | 300,066      | 371,728      |
| Net Increase in Net Position                     | 60,642      | 150,865         | 138,983     | 259,751         | 22,267    | 632,508      | 432,581      |
| Total Plan Net Position for Insur                | ance Benefi | ts              |             |                 |           |              |              |
| Beginning of Year                                | 372,883     | 496,040         | 891,320     | 1,618,960       | 142,691   | 3,521,894    | 3,089,313    |
| End of Year                                      | \$433,525   | \$646,905       | \$1,030,303 | \$1,878,711     | \$164,958 | \$4,154,402  | \$3,521,89   |

See accompanying notes to the combining financial statements.

# **NOTE A.** Summary of Significant Accounting Policies

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

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

Under the provisions of Kentucky Revised Statute Section 61.701, the KRS Board of Trustees 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 following notes apply to the various funds administered by KRS.

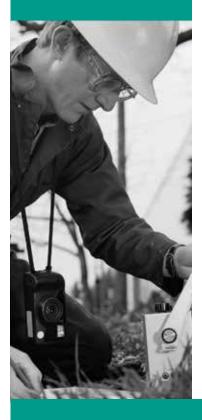
**Basis of Accounting** KRS' combining financial statements are prepared using the accrual basis of accounting. Plan member contributions are recognized in the period in which contributions are due. Employer contributions to the plan are recognized when due and the employer has made a formal commitment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

**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 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 2014 and 2013 was \$3,000 (*see Note J for further information*).

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



**Intangible Assets** Intangible assets, currently computer software, are valued at historical cost and amortization is computed utilizing the straight-line method over the estimated useful lives of the assets which is ten years. The capitalization threshold used in fiscal years 2014 and 2013 was \$3,000 (*see Note K for further information*).

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

**Investment Income/Receivable/Payable** Due to the timing of receiving partnership financial information, the fair values of the investments in certain limited partnerships have been estimated using the net asset value of the ownership interest in partners' capital as of March 31 of each fiscal year. KRS management will monitor differences in the fair values of these investments between March 31 and June 30, of each fiscal year, and will disclose any and all material differences. The investment receivable payable accounts consists of buys and sells of securities, as well as all investment related accruals.

Payment of Benefits Benefits are recorded when paid.

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

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

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

**Reclassifications** Certain amounts in 2013 combining financial statements have been reclassified to conform to the 2014 presentation with no impact on total assets, liabilities, plan net position, or changes in plan net positions.

Recent Accounting Pronouncements In June 2012, the Governmental Accounting Standards Board (GASB) issued Statement No. 67, Financial Reporting for Pensions-an Amendment of GASB Statement No. 25. The objective of this statement was to improve financial reporting by state and local governmental pension plans. The statement required defined benefit pension plans to present two financial statement fiduciary net position and a statement of changes in fiduciary net position. In addition, the statement required that notes to the financial statements include descriptive information, such as the types of benefits provided, the classes of plan members covered, and the composition of the pension plans board, among other detailed requirements. KRS adopted the requirements of this statement. It has only impacted the pension funds. The insurance fund was not impacted and remains consistent with fiscal 2013.

In June 2012, the Governmental Accounting Standards Board (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. This statement will impact KRS and will be implemented in fiscal 2015.

In November 2013, the GASB issued Statement No. 71, *Pension Transition for Contributions made Subsequent to the Measurement Date-an Amendment of GASB Statement No.* 68. The objective of this Statement is to address an issue regarding application of the transition provisions of GASB Statement No. 68. The issue relates to amounts associated with contributions, if any, made by a state or local government employer or non-employer contributing entity to a defined benefit pension plan after the measurement date of the government's beginning net pension liability. This Statement becomes effective for the fiscal year beginning July 1, 2014. KRS is currently reviewing the Statement's requirements. This statement will impact KRS and will be implemented in fiscal 2015. 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.



# **Note B.** Plan Descriptions & Contribution Information

Membership Information \*

| KERS Employees                                |         |       |         |         |       |         |
|---|---------|-------|---------|---------|-------|---------|
|   |         | 2014  | 2013    |         |       |         |
| Members                                       | Non-Haz | Haz   | Total   | Non-Haz | Haz   | Total   |
| Retirees and Beneficiaries Receiving Benefits | 38,022  | 2,467 | 40,489  | 37,240  | 2,312 | 39,552  |
| Inactive Memberships                          | 41,213  | 3,318 | 44,531  | 40,375  | 2,882 | 43,257  |
| Active Plan Members                           | 40,500  | 4,094 | 44,594  | 40,710  | 4,057 | 44,767  |
| Total   | 119,735 | 9,879 | 129,614 | 118,325 | 9,251 | 127,576 |
| Number of Participating Employers             |         |       | 354     |         |       | 348     |

### **CERS Employees**

|   |         | 2014   |         |         | 2013   |         |
|---|---------|--------|---------|---------|--------|---------|
| Members                                       | Non-Haz | Haz    | Total   | Non-Haz | Haz    | Total   |
| Retirees and Beneficiaries Receiving Benefits | 46,112  | 6,066  | 52,178  | 44,164  | 5,840  | 50,004  |
| Inactive Memberships                          | 70,231  | 2,038  | 72,269  | 67,013  | 1,956  | 68,969  |
| Active Plan Members                           | 82,494  | 9,189  | 91,683  | 82,631  | 9,069  | 91,700  |
| Total   | 198,837 | 17,293 | 216,130 | 193,808 | 16,865 | 210,673 |
| Number of Participating Employers             |         |        | 1,137   |         |        | 1,126   |
| SPRS Employees                                |         |        |         |         |        |         |
| Members                                       |         |        | 2014    |         |        | 2013    |
| Retirees and Beneficiaries Receiving Benefits |         |        | 1,279   |         |        | 1,240   |
| Inactive Memberships                          |         |        | 239     |         |        | 236     |
| Active Plan Members                           |         |        | 861     |         |        | 901     |
| Total   |         |        | 2,379   |         |        | 2,377   |
| Number of Participating Employers             |         |        | 1       |         |        | 1       |

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



### 2014 Hospital & Medical Contracts Insurance Fund

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

### 2013 Hospital & Medical Contracts Insurance Fund

| System       | Single | Couple/ Family | Parent | Medicare Without<br>Prescription | Medicare With<br>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                        |



Senate Bill 2 was signed by the Governor on April 4, 2013. Plan members who began participating on, or after, January 1, 2014, are required to participate in the Tier 3 plan.



## **KRS** Pension Plans

#### **Pension Plan Descriptions**

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

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

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

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

**Cost of Living Adjustment (COLA)** On July 1, 2013, the COLA was not granted. Effective July 1, 2009, and on July 1 of each year thereafter through June 30, 2014, the COLA is limited to 1.5% provided the recipient has been receiving a benefit for at least 12 months prior to the effective date of the COLA. If the recipient has been receiving a benefit for less than 12 months prior to the effective date of the COLA. If the recipient basis for each month the recipient has not been receiving benefits in the 12 months preceding the effective date of the COLA. The Kentucky General Assembly reserves the right to suspend or reduce the COLA if, in its judgment, the welfare of the Commonwealth so demands.

**Contributions** For the fiscal years ended June 30, 2014 and 2013, plan members who began participating prior to September 1, 2008, were required to contribute 5% nonhazardous and 8% hazardous of their annual creditable compensation. The Commonwealth was required to contribute at an actuarially determined rate for KERS and SPRS pensions. Participating employers were required to contribute at an actuarially determined rate for CERS pensions. Per Kentucky Revised Statute Sections {KERS 61.565(3); CERS 78.545(33); SPRS 16.645(18)}, normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. However, formal commitment to provide the contributions by the employer is made through the biennial budget for KERS and SPRS.



For the fiscal year ended June 30, 2014 participating employers contributed a percentage of each employee's creditable compensation. The actuarially determined rates set by the Board for the fiscal years was a percentage of each employee's creditable compensation. See Chart below for the 2014 and 2013 fiscal year percentages.

| PENSION              |                                   |        |        |                          |  |  |
|----------------------|-----------------------------------|--------|--------|--------------------------|--|--|
|                      | Employer<br>Contribution<br>Rates |        |        | arially<br>nended<br>tes |  |  |
|                      | 2014                              | 2013   | 2014   | 2013                     |  |  |
| KERS<br>Nonhazardous | 17.29%                            | 14.86% | 32.57% | 28.03%                   |  |  |
| KERS<br>Hazardous    | 14.89%                            | 13.41% | 17.00% | 16.16%                   |  |  |
| CERS<br>Nonhazardous | 13.74%                            | 12.62% | 13.74% | 12.62%                   |  |  |
| CERS<br>Hazardous    | 21.77%                            | 20.10% | 21.77% | 20.10%                   |  |  |
| SPRS                 | 39.50%                            | 33.24% | 53.35% | 47.48%                   |  |  |

*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% for nonhazardous and 9% for hazardous of their annual creditable compensation. 5% for nonhazardous and 8% for hazardous of the contribution was deposited to the member's account while the 1% was deposited to an account created for the payment of health insurance benefits under 26 USC Section 401(h) in the Pension Fund

(see Kentucky Administrative Regulation 105 KAR 1:420E). Interest is paid each June 30 on members' accounts at a rate of 2.5%. If a member terminates employment and applies to take a refund, the member is entitled to a full refund of contributions and interest; however, the 1% contribution to the 401(h) account is non-refundable and is forfeited. For plan members who began participating prior to September 1, 2008, their contributions remain at 5% for nonhazardous and 8% for hazardous of their annual creditable compensation.

In accordance with Senate Bill 2, signed by the Governor on April 4, 2013, plan members who began participating on, or after, January 1, 2014, were required to contribute to the Cash Balance Plan. The Cash Balance Plan is known as a hybrid plan because it has characteristics of both a defined benefit plan and a defined contribution plan. Members in the plan contribute a set percentage of their salary each month to their own account. Members contribute 5% (nonhazardous) and 8% (hazardous) of their annual creditable compensation and 1% to the health insurance fund which is not credited to the member's account and is not refundable. The employer contribution rate is set annually by the Board based on an actuarial valuation. The employer contributes a set percentage of the member's salary. Each month, when employer contributions are received, an employer pay credit is deposited to the member's account. A member's account is credited with a 4% (nonhazardous) and 7.5% (hazardous) employer pay credit. The employer pay credit represents a portion of the employer contribution.



## **KRS** Insurance

Plan Description The Kentucky Retirement Systems Insurance Fund (Insurance Fund) was established to provide hospital and medical insurance for members receiving benefits from KERS, CERS, and SPRS. The Insurance Fund pays a prescribed contribution for whole or partial payment of required premiums to purchase hospital and medical insurance. For the fiscal year ended June 30, 2014, insurance premiums withheld from benefit payments for members of the systems were \$24,002,506 and \$1,117,614 for KERS nonhazardous and hazardous, respectively; \$24,206,307 and \$1,936,349 for CERS nonhazardous and hazardous, respectively; and, \$177,804 for SPRS. For fiscal year 2013, insurance premiums withheld from benefit payments for members of KERS were \$27,574,678 and \$1,209,245 for KERS nonhazardous and KERS hazardous, respectively; \$27,804,392 and \$2,068,890 for CERS nonhazardous and CERS hazardous, respectively; and, \$238,774 for SPRS. The Insurance Fund pays the same proportion of hospital and medical insurance premiums for the spouse and dependents of retired hazardous members killed in the line of duty. As of June 30, 2014, the Insurance Fund had 104,635 retirees and beneficiaries for whom benefits were available.

The amount of contribution paid by the Insurance Fund is based on years of service. For members participating prior to

| INSURANCE            |                                   |        |        |                          |  |  |
|----------------------|-----------------------------------|--------|--------|--------------------------|--|--|
|                      | Employer<br>Contribution<br>Rates |        | Recom  | arially<br>mended<br>tes |  |  |
|                      | 2014                              | 2013   | 2014   | 2013                     |  |  |
| KERS<br>Nonhazardous | 9.50%                             | 8.75%  | 12.71% | 16.52%                   |  |  |
| KERS<br>Hazardous    | 17.32%                            | 16.38% | 11.84% | 19.73%                   |  |  |
| CERS<br>Nonhazardous | 5.15%*                            | 6.93%* | 5.84%  | 8.59%                    |  |  |
| CERS<br>Hazardous    | 13.93%*                           | 17.5%* | 16.02% | 20.10%                   |  |  |
| SPRS                 | 31.65%                            | 30.43% | 43.17% | 55.93%                   |  |  |

\* Final rate as a result of the 10 year phase-in of increases to the insurance rate.

July 1, 2003, years of service and respective percentages of the maximum contribution are shown in the chart.

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, nonhazardous employees whose participation began on, or after, July 1, 2003 earn \$10 per month for insurance benefits at retirement for every year of earned service without regard to a maximum dollar amount. Hazardous employees whose participation began on, or after, July 1, 2003 earn \$15 per month for insurance benefits at retirement for every year of earned service without regard to a maximum dollar amount. Upon death of a hazardous employee, the employee's spouse receives \$10 per month for insurance benefits for each year of the deceased employee's earned hazardous service. This dollar amount is subject to adjustment annually based on the retiree COLA, which is updated annually due to changes in the Consumer Price Index for all urban consumers. This benefit is not protected under the inviolable contract provisions of Kentucky Revised Statute 16.652, 61.692 and 78.852. The Kentucky General Assembly reserves the right to suspend or reduce this benefit if, in its judgment, the welfare of the Commonwealth so demands.

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

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

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

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

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

#### Cash & Short-Term Investments **KERS** Assets 2014 2013 Cash \$1,525,039 \$2,519,457 Short-Term Investments 131,130,977 119,306,174 Securities Lending Collateral Invested 225.552.963 326.406.362 **KERS** Total \$358,208,979 \$448,231,993 CERS Assets 2014 2013 Cash \$1,945,877 \$3,030,064 298,872,570 Short-Term Investments 289,346,687 Securities Lending Collateral Invested 637,584,374 1,065,084,771 CERS Total \$938,402,821 \$1,357,461,522 SPRS Assets 2014 2013 Cash \$273,391 \$162,872 Short-Term Investments 10,979,712 10,528,027 Securities Lending Collateral Invested 18,959,641 34,947,388 SPRS Total \$30,212,744 \$45,638,287 **KRS Insurance Fund** Assets 2014 2013 Cash \$354,145 \$1,422,780 Short-Term Investments 138,688,699 163,336,293 Medicare Drug Deposit 100,039 100,691

293,369,587

\$432,512,470

511,107,721

\$675,967,485

Securities Lending Collateral Invested

Insurance Fund Total

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



## Note D. Investments

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

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

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

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

**Cash Equivalent Securities** The following short-term investment vehicles are considered acceptable: Publicly traded investment grade corporate bonds, variable rate demand notes, government and agency bonds, mortgages, municipal bonds, and collective Short Term Investment Fund's (STIF), money market funds or instruments (including, but not limited to, certificates of deposit, bank notes, deposit notes, bankers' acceptances and commercial paper) and repurchase agreements, relating to the above instruments. Instruments may be selected from among those having an investment grade rating at the time of purchase by at least one recognized bond rating service. In cases where the instrument has a split rating, the lower of the two ratings shall prevail. All instruments shall have a maturity at the time of purchase that does not exceed two years. Repurchase agreements shall be deemed to have a maturity equal to the period remaining until the date on which the repurchase of the underlying securities is scheduled to occur. Variable rate securities shall be deemed to have a maturity equal to the time

#### PRUDENT PERSON RULE -

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





In accordance with GASB Statement No. 53, Accounting and Financial Reporting for Derivative Instruments, KRS provides this additional disclosure regarding its derivatives. As of June 30, 2014, KRS has the following derivative instruments outstanding:

| NOT  | E D: INVESTMENTS                            |  |             |               |              |         |                       |
|------|---|--|-------------|---------------|--------------|---------|-----------------------|
| Item | Туре  | Objective  | Cost        | Notional Cost | Market Value | Terms   | Notional Market Value |
| PEN  | SION:                                       |  |             |               |              |         |                       |
| A    | Equity Private                              | Hedge against changes in interest rates  | \$2,291,237 | \$0           | \$3,027,212  | Various | \$0                   |
| В    | US Equity Index<br>Futures                  | Hedge against the risk that<br>interest rates will move in an<br>adverse direction | 0           | 6,639,010     | 145,700      | Various | 6,784,710             |
| С    | International<br>Government Bond<br>Futures | Hedge against sudden or<br>dramatic shifts in interest rates                       | 0           | (49,289,734)  | (1,039,224)  | Various | (50,328,958)          |
| D    | Interest Rate<br>Swaps                      | Hedge against sudden or<br>dramatic shifts in interest rates                       | 87,898      | 0             | 1,113,524    | Various | 0                     |
| E    | Credit Default<br>Swaps                     | Hedge against sudden or<br>dramatic shifts in interest rates                       | (892,077)   | 0             | 871,689      | Various | 0                     |
| F    | Treasury Notes                              | Hedge against sudden or<br>dramatic shifts in interest rates                       | \$O         | (34,999,286)  | (51,433)     | Various | (35,050,719)          |
| G    | Treasury Bonds                              | Hedge against sudden or<br>dramatic shifts in interest rates                       | \$O         | (3,201,879)   | (17,183)     | Various | (3,219,062)           |
| เทรเ | JRANCE:                                     |  |             |               |              |         |                       |
| Н    | Equity Private<br>Placements                | Hedge against changes in interest rates  | 869,759     | 0             | 1,157,266    | Various | 0                     |
| I    | US Equity Index<br>Futures                  | Hedge against risk that<br>interest rates will move in an<br>adverse direction     | 0           | 5,353,003     | 122,377      | Various | 5,475,380             |
| J    | International<br>Government Bond<br>Futures | Hedge against sudden or<br>dramatic shifts in interest rates                       | 0           | (14,986,768)  | (316,145)    | Various | (15,302,913)          |
| K    | Interest Rate<br>Swaps                      | Hedge against sudden or<br>dramatic shifts interest rates                          | (438,660)   | 0             | (213,601)    | Various | 0                     |
| L    | Credit Default<br>Swaps                     | Hedge against sudden or<br>dramatic shifts in interest rates                       | (507,545)   | 0             | 155,993      | Various | 0                     |
| М    | Treasury Notes                              | Hedge against sudden or<br>dramatic shifts in interest rates                       | 0           | (19,783,259)  | (33,982)     | Various | (19,817,241)          |
| Ν    | Treasury Bonds                              | Hedge against sudden or<br>dramatic shifts in interest rates                       | 0           | (956,539)     | (3,774)      | Various | (960,313)             |

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



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.

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

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

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

**Derivative Policy** All of the above derivative instruments have various effective dates and maturity dates.

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

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

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

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

### RISKS

**Basis Risk** Derivative instruments B and 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.

**Interest Rate Risk** Derivative instruments A, C, D, E, F, G, H, J, K, L, M, and N expose KRS to interest rate risk in that changes in interest rates will adversely affect the fair values of KRS' financial instruments.

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

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

As of June 30, 2014 and 2013, deposits for KRS pension funds were \$4,041,524 and \$9,333,855, 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, 2014 and 2013, deposits for KRS insurance fund were \$1,445,674 and \$1,430,267, 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, 2014 and 2013, 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.

#### Pension Funds Investments Summary As of June 30, 2014 & 2013

| Туре  | 2014             | 2013             |
|---|------------------|------------------|
| US Gov't & Agency<br>Fixed Income<br>Securities | \$-              | \$1,582,604,644  |
| US Corporate Fixed<br>Income Securities         | -                | 1,297,990,113    |
| Municipal Debt<br>Securities                    | -                | 70,363,221       |
| Fixed Income<br>Securities                      | 3,051,301,974    |                  |
| Short-Term<br>Investments                       | 440,983,259      | 425,404,014      |
| Equity Securities                               | 5,358,280,375    | 4,764,035,886    |
| Private Equity<br>Limited Partnerships          | 1,287,466,227    | 1,705,481,097    |
| Real Estate                                     | 427,105,738      | 174,943,810      |
| Derivatives                                     | 4,050,284        |                  |
| Absolute Return                                 | 1,303,197,181    |                  |
| Other*  | -                | 978,860,163      |
| Total   | \$11,872,385,038 | \$10,999,682,948 |
|   |                  |                  |

\*This balance consists of the following

| Туре  | 2014        | 2013          |
|---|-------------|---------------|
| Cash Collateral - US<br>Dollars                           | \$-         | \$13,401,306  |
| Sukuk <sup>1</sup>  | -           | 263,923       |
| Derivative Offsets:                                       |             |               |
| ע Equity Futures  | -           | (1,739,458)   |
| <b>ע</b> Hedge Funds                                      | -           | 988,790,368   |
| Liabilities   |             |               |
| ☑ Obligation<br>to Return Cash<br>Collateral - US Dollars | -           | (21,855,976)  |
| Total   | <b>\$</b> 0 | \$978,860,163 |

<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 interest.

| Custodial Credit R | isk         |             |
|--------------------|-------------|-------------|
| Pension Fund       | 2014        | 2013        |
| Foreign Currency   | \$9,692,881 | \$7,380,209 |
| Insurance Fund     |             |             |
| Foreign Currency   | \$3,145,400 | \$2,352,683 |



### Insurance Fund Investments Summary As of June 30, 2014 & 2013

| Туре   | 2014            | 2013            |
|--|-----------------|-----------------|
| US Gov't & Agency Fixed<br>Income Securities | \$-             | \$555,483,396   |
| US Corporate Fixed Income<br>Securities      | -               | 407,385,223     |
| Municipal Debt Securities                    | -               | 14,780,723      |
| Fixed Income Securities                      | 1,445,430,202   |                 |
| Short-Term Investments                       | 138,688,699     | 164,183,759     |
| Equity Securities                            | 1,661,738,753   | 1,605,002,880   |
| Private Equity Limited<br>Partnerships       | 270,841,221     | 343,283,318     |
| Real Estate                                  | 151,004,974     | 53,302,498      |
| Derivatives                                  | 868,135         |                 |
| Absolute Return                              | 430,008,984     |                 |
| Other**                                      | -               | 336,086,682     |
| Total  | \$4,098,580,968 | \$3,479,508,479 |

\*\*This balance consists of the following

| Туре   | 2014 | 2013          |
|--|------|---------------|
| Cash Collateral - US Dollars                           | \$-  | \$2,569,213   |
| Derivative Offsets:                                    |      |               |
| ע Equity Futures                                       | -    | 25,664,188    |
| <b>ע</b> Hedge Funds                                   | -    | 312,234,300   |
| Liabilities  |      |               |
| ☑ Obligation to Return<br>Cash Collateral - US Dollars | -    | (4,381,019)   |
| Total  | \$O  | \$336,086,682 |

**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 investment management firms. All portfolio managers are required by the Statement of Investment Policy to maintain diversified portfolios. Each portfolio is also required to be in compliance with risk management guidelines that are assigned to them based upon the portfolio's specific mandate. In total, the pension and insurance funds debt securities portfolios are managed using the following guidelines adopted by the Board of KRS:

- » Bonds, notes or other obligations issued or guaranteed by the US Government, its agencies or instrumentalities are permissible investments and may be held without restrictions.
- Fixed income investments will be similar in type to those securities found in the KRS fixed income benchmarks and the characteristics of the KRS fixed income portfolio will be similar to the KRS fixed income benchmarks. The duration of the total fixed income portfolio shall not deviate from the KRS Fixed Income by more than 25%.
- » The duration of the Treasury Inflation Protected Securities (TIPS) portfolio shall not deviate from the KRS Fixed Income Index by more than 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 funds and insurance fund debt ratings as of June 30, 2014 and 2013:

## Pension Funds Debt Securities at Fair Value as of June 30, 2014 & 2013

## Insurance Fund Debt Securities at Fair Value as of June 30, 2014 & 2013

| Quality Rating                                     | 2014            | 2013            |
|--|-----------------|-----------------|
| AAA  | \$40,306,583    | \$56,665,771    |
| AA+  | 62,002,369      | 68,857,699      |
| АА   | 21,388,493      | 19,419,263      |
| AA-  | 27,797,954      | 30,605,331      |
| A+   | 34,695,288      | 32,370,283      |
| А  | 99,344,507      | 71,719,597      |
| A-   | 117,151,936     | 109,560,109     |
| BBB+   | 84,269,097      | 36,533,579      |
| BBB  | 64,675,676      | 109,743,197     |
| BBB-   | 89,120,107      | 81,558,127      |
| BB+  | 87,235,873      | 62,890,911      |
| BB   | 93,648,993      | 66,451,521      |
| BB-  | 83,840,452      | 60,743,226      |
| B+   | 75,094,584      | 82,924,826      |
| В  | 84,811,455      | 77,704,921      |
| B-   | 61,972,436      | 50,252,951      |
| CCC+   | 42,517,725      | 41,097,638      |
| CCC  | 11,865,038      | 17,224,076      |
| CCC-   | 4,487,098       | 13,687,724      |
| CC   | 1,925,471       | 4,457,848       |
| D  | 6,999,911       | 3,937,401       |
| NR   | 659,751,771     | 99,198,973      |
| Total Credit Risk Debt<br>Securities               | 1,854,902,817   | 1,197,604,972   |
| Government Agencies                                | 5,222,397       | 474,844,831     |
| Government Mortgage-<br>Backed Securities (GNMA)   | 179,134,299     | 338,663,465     |
| Government Issued<br>Commercial Mortgage<br>Backed | 4,479,667       | 9,811,110       |
| Government Bonds                                   | 385,836,479     | 34,674,668      |
| Indexed Linked Bonds                               | 621,726,315     | 708,142,577     |
| Total Debt Securities                              | \$3,051,301,974 | \$2,763,741,623 |

**Pension Fund Securities** At both June 30, 2014 and 2013, the weighted average quality rating of the pension fund debt securities portfolio was AA+. As of June 30, 2014 and 2013, the KRS pension portfolio had \$1,214,150,807 and \$580,572,016, respectively, in debt securities rated below BBB-.

| Quality Rating                                     | 2014            | 2013          |
|--|-----------------|---------------|
| ААА  | \$12,231,453    | \$17,298,219  |
| AA+  | 8,736,341       | 19,036,700    |
| АА   | 6,724,487       | 7,906,648     |
| AA-  | 7,319,989       | 4,369,454     |
| A+   | 16,055,561      | 11,034,344    |
| А  | 29,080,777      | 18,123,716    |
| A-   | 38,388,115      | 29,449,395    |
| BBB+   | 28,031,588      | 8,243,645     |
| BBB  | 24,786,892      | 24,640,602    |
| BBB-   | 28,672,541      | 25,801,896    |
| BB+  | 29,313,139      | 22,285,959    |
| BB   | 30,971,226      | 23,613,368    |
| BB-  | 28,542,731      | 20,795,416    |
| B+   | 27,461,463      | 25,323,893    |
| В  | 30,109,234      | 19,984,139    |
| B-   | 20,447,164      | 16,449,995    |
| CC   | 623,198         | 816,507       |
| CCC  | 2,695,453       | 5,087,979     |
| CCC+   | 12,603,007      | 10,899,205    |
| CCC-   | 1,145,250       | 3,039,033     |
| D  | 2,556,978       | 1,088,434     |
| NR   | 586,985,099     | 55,438,787    |
| Total Credit Risk Debt<br>Securities               | 983,481,686     | 370,727,334   |
| Government Agencies                                | 1,511,319       | 152,008,017   |
| Government Mortgage-<br>Backed Securities (GNMA)   | 65,071,852      | 97,015,116    |
| Government Issued<br>Commercial Mortgage<br>Backed | 1,497,608       | 3,007,215     |
| Government Bonds                                   | 142,080,994     | 9,505,690     |
| Indexed Linked Bonds                               | 251,786,743     | 292,931,190   |
| Total Debt Securities                              | \$1,445,430,202 | \$925,194,562 |

**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.

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



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

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

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

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

The KRS pension fund benchmarks its fixed income securities portfolio to the Barclays US Universal Index. As of June 30, 2014 and 2013, the modified duration of the KRS pension fund fixed income benchmark was 5.37 and 5.38, respectively. At the same points in time, the modified duration of the KRS pension fund fixed income securities portfolio was 5.37 and 5.73, respectively.

The KRS insurance fund benchmarks its fixed income securities portfolio to the Barclays US Universal Index. As of June 30, 2014 and 2013, the modified duration of the KRS insurance fund fixed income benchmark was 5.37 and 5.38, respectively. At the same points in time, the modified duration of the KRS insurance fund fixed income securities portfolio was 3.99 and 5.91, respectively.



### KRS Pension Funds Interest Rate Risk As of June 30, 2014 and 2013

| Туре   | 2014            | Weighted Average<br>Modified Duration | 2013            | Weighted Average<br>Modified Duration |
|--|-----------------|---------------------------------------|-----------------|---------------------------------------|
| Asset Backed Securities                                    | \$86,379,081    | 9.12                                  | \$44,213,100    | 2.71                                  |
| Bank Loans   | 327,431,127     | 4.19                                  | 105,603,296     | 4.72                                  |
| Collateralized Bonds                                       | 23,113,753      | 3.62                                  | 14,222,649      | 0.72                                  |
| Commercial Mortgage Backed<br>Securities                   | 77,841,331      | 2.10                                  | 66,526,681      | 3.10                                  |
| Commercial Paper   | -               | -                                     | 74,997,823      | 0.02                                  |
| Corporate Bonds  | 390,494,755     | 5.67                                  | 674,221,512     | 5.36                                  |
| Corporate Bonds - Industrial                               | 40,955,705      | 6.27                                  |                 |                                       |
| Corporate Convertable Bonds                                | -               | -                                     | 19,949,113      | 8.58                                  |
| Government Agencies  | 65,501,546      | 4.75                                  | 34,674,668      | 5.12                                  |
| Government Bonds   | 125,600,774     | 6.10                                  | 474,844,831     | 5.66                                  |
| Government Mortgage Backed<br>Securities                   | 178,480,106     | 5.21                                  | 338,663,465     | 4.20                                  |
| Government Issued Commercial<br>Mortgage Backed Securities | -               | -                                     | 9,811,110       | 2.66                                  |
| Covered Bonds  | 878,873         | 1.80                                  | -               | -                                     |
| Indexed Linked Government Bonds                            | -               | -                                     | 708,142,577     | 8.18                                  |
| Municipal Bonds  | 79,048,655      | 10.31                                 | 70,363,221      | 10.29                                 |
| Non-Government Backed CMOs                                 | -               | -                                     | 10,612,072      | 2.04                                  |
| Supranational Bonds  | 6,341,105       | 1.82                                  | -               |                                       |
| Treasuries   | 1,207,419,080   | 7.04                                  |                 |                                       |
| Swaps  | 4,298,025       | 0.58                                  |                 |                                       |
| Mutual Funds   | 396,848,860     | -                                     |                 |                                       |
| Other  | 40,669,198      | 3.96                                  |                 |                                       |
| Short Term Bills/Notes                                     | -               | -                                     | 116,631,5832    | 0.17                                  |
| Sukuk*   |                 | -                                     | 263,923         | 6.55                                  |
| Total  | \$3,051,301,974 | 5.37                                  | \$2,763,741,623 | 5.67                                  |

\* 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, 2014 and 2013

| Insurance Fund Interest Rate Ris       | sk              |                                       |               |                                       |
|--|-----------------|---------------------------------------|---------------|---------------------------------------|
| Туре                                   | 2014            | Weighted Average<br>Modified Duration | 2013          | Weighted Average<br>Modified Duration |
| Asset Backed Securities                | \$32,726,218    | 8.67                                  | \$14,649,066  | 3.18                                  |
| Bank Loans                             | 125,099,366     | 4.38                                  | 28,930,449    | 4.72                                  |
| Collateralized Bonds                   | 3,750,470       | 3.99                                  | 4,841,918     | 1.13                                  |
| Commercial Mortgage Backed Securities  | 24,807,988      | 2.16                                  | 17,161,225    | 3.67                                  |
| Commercial Paper                       | -               | -                                     | 24,998,658    | 0.04                                  |
| Corporate Bonds                        | 140,705,415     | 5.56                                  | 216,295,976   | 5.34                                  |
| Corporate Bonds - Utilities            | 16,095,997      | 6.26                                  |               |                                       |
| Corporate Convertible Bonds            | -               | -                                     | 4,909,873     | 8.44                                  |
| Government Agencies                    | 15,681,837      | 4.90                                  | 9,505,690     | 5.46                                  |
| Government Bonds                       | 16,254,026      | 4.00                                  | 152,008,017   | 5.83                                  |
| Government Mortgage Backed Securities  | 65,071,852      | 5.52                                  | 97,015,116    | 4.79                                  |
| Covered Bonds                          | 1,171,830       | 1.80                                  |               |                                       |
| Government Issued Commercial Mortgages | _               | _                                     | 3,007,215     | 2.72                                  |
| Index Linked Government Bonds          | -               | -                                     | 292,931,190   | 8.25                                  |
| Municipal/Provincial Bonds             | 17,791,073      | 9.00                                  | 14,780,723    | 9.60                                  |
| Supranational Bonds                    | 2,166,067       | 2.04                                  |               |                                       |
| Treasuries                             | 464,396,484     | 7.01                                  |               |                                       |
| Swaps                                  | 391,233,379     | -                                     |               |                                       |
| Mutual Funds                           | 121,882,992     | -                                     |               |                                       |
| Other                                  | 6,595,211       | 6.98                                  |               |                                       |
| Non-Government Backed CMOs             | -               | -                                     | 2,572,249     | 1.77                                  |
| Short Term Bills/Notes                 | -               | -                                     | 41,587,197    | 0.15                                  |
| Total                                  | \$1,445,430,202 | 3.99                                  | \$925,194,562 | 5.92                                  |

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

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

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

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

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



### The following tables present KRS' exposure to foreign currency risk as of June 30, 2014 and 2013:

| Australian Dollar<br>Brazilian Real<br>British Pound Sterling | 63,542,348     | 59,808,966    |
|---|----------------|---------------|
| British Pound Sterling  |                | 55,000,000    |
| -   | 28,173,468     | 40,565,297    |
|   | 225,259,654    | 191,809,147   |
| Canadian Dollar   | 41,437,776     | 79,160,793    |
| Chilean Peso  | 4,818,876      | 8,572,207     |
| Chinese Yuan  | 4,109,501      | 3,921,175     |
| Columbian Peso  | 4,865,113      | 4,030,792     |
| Czech Koruna  | 1,662,246      | 3,152,676     |
| Danish Krone  | 27,618,618     | 12,793,980    |
| uro   | 325,339,051    | 329,323,153   |
| long Kong Dollar  | 45,368,576     | 96,949,25     |
| lungarian Forint  | 730,125        | 4,448,425     |
| ndian Rupee   | 23,379,225     | 3,759,830     |
| ndonesian Rupiah  | 12,326,348     | 7,187,236     |
| sraeli Shekel   | 4,250,242      | 2,069,010     |
| apanese Yen   | 186,247,197    | 263,796,152   |
| 1alaysian Ringgit   | 6,116,803      | 5,704,224     |
| 1exican Peso  | 27,518,975     | 22,181,65     |
| lew Zealand Dollar  | 13,863,381     | 7,500,91      |
| Jorwegian Krone   | 14,222,852     | 9,727,168     |
| Peruvian Nuevo Sol  | 469,626        | 471,934       |
| hilippine Peso  | 6,423,771      | 3,021,210     |
| Polish Zloty  | 4,131,804      | 5,945,09      |
| Russian Ruble   | 13,292,845     | 7,159,994     |
| ingapore Dollar   | 15,472,920     | 19,834,359    |
| outh African Rand   | 9,392,321      | 23,424,203    |
| outh Korean Won   | 36,562,132     | 50,679,693    |
| wedish Krona  | 36,459,940     | 28,143,780    |
| wiss Franc  | 73,390,790     | 96,580,108    |
| aiwan Dollar  | 24,529,304     | 35,426,792    |
| hai Bhat  | 8,824,588      | 5,867,698     |
| urkish Lira   | 6,681,457      | 4,549,820     |
| otal Securities Subject to Foreign Currency Risk              | 1,266,367,170  | 1,437,566,742 |
| JSD (securities held by International Investment Managers)    | 10,606,017,868 | 9,562,116,206 |

| Foreign Equities   | 2014            | 2013            |
|--|-----------------|-----------------|
| Australian Dollar  | \$21,159,098    | \$17,372,842    |
| Brazilian Real   | 9,868,083       | 11,659,097      |
| British Pound Sterling                                     | 78,588,743      | 61,860,945      |
| Canadian Dollar  | 15,048,631      | 25,663,239      |
| Chilean Peso   | 1,575,128       | 2,724,948       |
| Chinese Yuan   | 1,636,081       | 1,214,863       |
| Columbian Peso   | 807,218         | 1,036,746       |
| Czech Koruna   | 588,014         | 1,072,552       |
| Danish Krone   | 9,378,996       | 4,233,231       |
| Euro   | 118,658,845     | 105,942,398     |
| Hong Kong Dollar   | 15,678,888      | 30,780,462      |
| Hungarian Forint   | 286,753         | 1,415,885       |
| Indian Rupee   | 8,677,608       | 1,149,108       |
| Indonesian Rupiah  | 3,629,915       | 2,005,381       |
| Israeli Shekel   | 1,372,593       | 639,441         |
| Japanese Yen   | 67,029,052      | 84,659,071      |
| Malaysian Ringgit  | 2,079,289       | 1,618,726       |
| Mexican Peso   | 8,877,951       | 6,607,537       |
| New Taiwan Dollar  | 8,240.119       | 11,121,400      |
| New Zealand Dollar   | 5,220,476       | 2,131,571       |
| Norwegian Krone  | 4,809,239       | 3,039,604       |
| Peruvian Nuevo Sol   | -               | 108,768         |
| Philippine Peso  | 2,341,661       | 633,481         |
| Polish Zloty   | 1,674,073       | 1,829,456       |
| Russian Ruble  | 5,374,587       | 2,274,414       |
| Singapore Dollar   | 5,421,756       | 6,063,920       |
| South African Rand   | 3,143,309       | 7,537,217       |
| South Korean Won   | 13,915,662      | 15,998,698      |
| Swedish Krona  | 12,354,751      | 9,106,266       |
| Swiss Franc  | 24,820,751      | 30,623,672      |
| Thai Bhat  | 3,288,977       | 1,627,962       |
| Turkish Lira   | 2,494,686       | 1,456,908       |
| Total Securities Subject to Foreign Currency Risk          | 439,185,835     | 455,209,806     |
| USD (securities held by International Investment Managers) | 3,659,395,133   | 3,024,298,673   |
| Total International Investment Securities                  | \$4,098,580,968 | \$3,479,508,479 |

In accordance with GASB Statement No. 67, *Financial Reporting for Pension Plans*, KRS provides this additional disclosure regarding its money-weighted rate of return for the pension funds. The money weighted rate of return is a method of calculating period-by-period returns on pension plan investments that adjusts for the changing amounts actually invested. For purposes of this Statement, money-weighted rate of return is calculated as the internal rate of return on pension plan investments, net of pension plan investment expense. See below for the money-weighted rate of return as of June 30, 2014, as calculated by the custodial bank, BNY-Mellon:

| Pension Funds |                                 |   |  |  |
|---------------|---------------------------------|---|--|--|
| KHAZ          | CERZ                            | CHAZ  | SPRS   |  |
| 15.65         | 15.56                           | 15.50   | 15.66  |  |
| e Fund        |                                 |   |  |  |
| KHAZ          | CERZ                            | CHAZ  | SPRS   |  |
| 15.14         | 15.02                           | 15.00   | 15.03  |  |
|               | кнаz<br>15.65<br>• Fund<br>кнаz | кнаz     Секz       15.65     15.56       Fund     Кнаz | KHAZ         CERZ         CHAZ           15.65         15.56         15.50           Fund         KHAZ         CERZ         CHAZ |  |

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% 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, 2014, 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.

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





#### TORT-

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



## 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 of Claims.

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

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

## Note 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. 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 year 2014.

## **Note I.** Defined Benefit Pension Plan

All eligible employees of KRS participate in KERS (nonhazardous), a cost-sharing, multiple-employer defined pension plan that covers regular full-time employees in nonhazardous 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, 2014, 2013, and 2012. Plan members who began participating on, or after, September 1, 2008, contributed 6% of creditable compensation for the periods ended June 30, 2014, 2013, and 2012. Plan members who began participating, on or after, January 1, 2014, contributed 6% of creditable compensation for the periods ended June 30, 2014, 2013, and 2012. Plan members who began participating, on or after, January 1, 2014, contributed 6% of creditable compensation for the periods ended June 30, 2014, 2013, and 2012. Plan members who began participating on or after, January 1, 2014, contributed 6% of creditable compensation for the periods ended June 30, 2014, 2013, and 2012. Plan members who began participating on or after, January 1, 2014, contributed 6% of creditable compensation for the period ended June 30, 2014, 2013, and 2012, respectively. The chart below includes the covered payroll and contribution amounts for KRS for the three periods ended June 30 included in this discussion.

### **Payroll & Contributions**

|                                    | 2014          | 2013          | 2012         |
|------------------------------------|---------------|---------------|--------------|
| Covered Payroll                    | \$ 13,916,055 | \$ 13,925,712 | \$13,784,847 |
| Required Employer<br>Contributions | \$3,722,937   | \$3,271,165   | \$2,726,780  |
| Employer Percentage<br>Contributed | 100%          | 100%          | 100%         |

### COVERED PAYROLL-

The employee payroll that is subject to Pension Contributions Withholding.





## Note J. Equipment

### Equipment Expenses (as of June 30, 2014)

| Expense                       | 2014         | 2013         |  |
|-------------------------------|--------------|--------------|--|
| Equipment At-Cost             | \$ 2,569,251 | \$ 6,752,838 |  |
| Less Accumulated Depreciation | (2,348,055)  | (2,856,799)  |  |
| Total                         | \$221,196    | \$3,896,039  |  |

Depreciation expense for the fiscal years ended June 30, 2014 and 2013 amounted to \$44,714 and \$52,575, respectively. The decrease in equipment at cost is due to some assets being fully depreciated as of June 30, 2014, as well as several changes to the fixed asset policy regarding capitalization. The capitalization threshold was increased from \$1,000 to \$3,000. The fixed asset register was updated to remove those items that were classified as inventory, but were not depreciable assets.

## Note K. Intangible Assets

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, 2014)

| Expense                       | 2014         | 2013         |
|-------------------------------|--------------|--------------|
| Software At-Cost              | \$16,254,290 | \$16,254,290 |
| Less Accumulated Amortization | (5,935,919)  | (4,059,389)  |
| Total                         | \$10,318,371 | \$12,194,901 |

Amortization expense for the fiscal years ended June 30, 2014 and 2013 amounted to \$1,876,530 and \$1,166,377, respectively. The increase is due to the capitalization of all START expenses through June 30, 2014.

#### INTANGIBLE ASSET-

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





## Note L. Actuarial Valuation

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

| Insurance Fund Valuation                    | 1 (Valuation Date June 30, 2014) |                           |  |
|---|----------------------------------|---------------------------|--|
|   | Non-Haz                          | Haz                       |  |
| Actuarial Cost Method                       | Entry Age                        | Entry Age                 |  |
| Amortization Method                         | Level Percent Closed             | Level Percent Closed      |  |
| Remaining Amortization Period               | 29 Years                         | 29 Years                  |  |
| Asset Valuation Method                      | Five-year Smoothed Market        | Five-year Smoothed Market |  |
| Medical Trend Assumption<br>(Pre-Medicare)  | 7.75-5.0%                        | 7.75-5.0%                 |  |
| Medical Trend Assumption<br>(Post-Medicare) | 6.0-5.0%                         | 6.0-5.0%                  |  |
| Year of Ultimate Trend                      | 2020                             | 2020                      |  |
| Actuarial Assumptions                       |                                  |                           |  |
| Investment Rate of Return                   | 7.75%                            | 7.75%                     |  |
| ■ Includes Price Inflation at               | 3.5%                             | 3.5%                      |  |

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

### ACTUARIAL VALUATION -

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



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

| Pension Funds - Unfunded Actuarial Accrued Liabilities as of June 30  |  |   |  |  |
|---|--|---|--|--|
| System  | 201  | 4 2013  |  |  |
| KERS Non Haz  | \$9,126,153,50   | 8 \$8,750,479,307   |  |  |
| KERS Haz  | 288,952,80   | 2 278,323,786   |  |  |
| CERS Non Haz  | 3,655,388,92   | 4 3,741,781,631   |  |  |
| CERS Haz  | 1,321,158,72   | 6 1,322,514,183   |  |  |
| SPRS  | 438,376,67   | 409,780,326   |  |  |
| Total Pension Funds   | \$14,830,057,62  | 7 \$14,502,879,233  |  |  |
| Insurance Fund - Unfunded Actuarial Accrued Liabilities as of June 30 |  |   |  |  |
| insurance Fund  | - Unfunded Actuarial Accrued Liabli                              | lities as of June 30  |  |  |
| System  | - Unfunded Actuarial Accrued Liabil                              |   |  |  |
|   |  | 4 2013  |  |  |
| System  | 201  | 4         2013           9         \$1,631,169,807  |  |  |
| System<br>KERS Non Haz  | <b>201</b><br>\$1,605,523,27                                     | 4         2013           9         \$1,631,169,807           7)         14,743,272  |  |  |
| System<br>KERS Non Haz<br>KERS Haz                                    | <b>201</b><br>\$1,605,523,27<br>(22,409,047                      | 4         2013           9         \$1,631,169,807           7)         14,743,272           5         \$815,649,903  |  |  |
| System<br>KERS Non Haz<br>KERS Haz<br>CERS Non Haz                    | <b>201</b><br>\$1,605,523,27<br>(22,409,047<br>785,715,13        | 4         2013           9         \$1,631,169,807           7)         14,743,272           5         815,649,903           2         544,558,426                                |  |  |
| System<br>KERS Non Haz<br>KERS Haz<br>CERS Non Haz<br>CERS Haz        | 201<br>\$1,605,523,27<br>(22,409,047<br>785,715,13<br>496,131,14 | 4         2013           9         \$1,631,169,807           7)         14,743,272           5         815,649,903           2         544,558,426           7         86,005,683 |  |  |



### The Schedule of Funding Progress for the Insurance Fund begins on page 68.

| Pension Funds Schedule of Funding Progress |                              |                         |        |                 |                                       |
|--|------------------------------|-------------------------|--------|-----------------|---------------------------------------|
| System                                     | Actuarial Value<br>of Assets | AAL Entry Age<br>Normal | Funded | Covered Payroll | Unfunded as a % of<br>Covered Payroll |
| KERS Non Haz                               | \$2,423,956,716              | \$11,550,110,224        | 21     | \$1,577,496,447 | 578.5                                 |
| KERS Haz                                   | 527,897,261                  | 816,850,063             | 64.6   | 129,076,038     | 223.9                                 |
| CERS Non Haz                               | 6,117,133,692                | 9,772,522,616           | 62.6   | 2,272,270,287   | 160.9                                 |
| CERS Haz                                   | 1,967,640,027                | 3,288,825,753           | 59.8   | 479,164,016     | 275.7                                 |
| SPRS                                       | 242,741,735                  | 681,118,402             | 35.6   | 44,615,885      | 982.6                                 |
| Total Pension Funds                        | 11,279,369,431               | 26,109,427,058          | 43.2   | 4,502,622,673   | 329.4                                 |

### Insurance Fund Schedule of Funding Progress

| System               | Actuarial Value of<br>Assets | AAL Entry Age<br>Normal | Funded | Covered Payroll | Unfunded as a % of<br>Covered Payroll |
|----------------------|------------------------------|-------------------------|--------|-----------------|---------------------------------------|
| KERS Non Haz         | 621,236,646                  | 2,226,759,925           | 27.9   | 1,577,496,447   | 101.8                                 |
| KERS Haz             | 419,395,867                  | 396,986,820             | 105.6  | 129,076,038     | (17.4)                                |
| CERS Non Haz         | 1,831,199,465                | 2,616,914,600           | 70     | 2,272,270,287   | 34.6                                  |
| CERS Haz             | 997,733,237                  | 1,493,864,379           | 66.8   | 479,164,016     | 103.5                                 |
| SPRS                 | 155,594,760                  | 234,271,127             | 66.4   | 44,615,885      | 176.3                                 |
| Total Insurance Fund | 4,025,159,975                | 6,968,796,851           | 57.7   | 4,502,622,673   | 65.4                                  |
| Totals               | \$15,304,529,406             | \$33,078,223,909        | 46.3%  | \$9,005,245,346 | 197.4                                 |

## Note M. GASB 67

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

The total pension liability was determined by an actuarial valuation as of June 30, 2014, using the following actuarial assumptions, applied to all periods included in the measurement:

- Inflation 3.5 percent
- Salary increases 4.5 percent, average, including inflation;
- Investment rate of return 7.75 percent, net of pension plan investment expense, including inflation.

The rates of mortality for the period after service retirement are according to the 1983 Group Annuity Mortality Table for all retired members and beneficiaries as of June 30, 2006 and the 1994 Group Annuity Mortality Table for all other members. The Group Annuity Mortality Table set forward 5 years is used for the period after disability retirement.

The actuarial assumptions used in the June 30, 2014 valuation were based on the results of an actuarial experience study for the period July 1, 2005 – June 30, 2008.

The long-term expected return on system assets is reviewed as part of the regular experience studies prepared every five years. The most recent analysis, performed for the period covering fiscal years 2005 through 2008, is outlined in a report dated August 25, 2009. Several factors are considered in evaluating the long-term rate of return assumption including long-term historical data, estimates inherent in current market data, and a log-normal distribution analysis in which best estimate ranges of expected future real rates of return (expected return and net of investment expense) were developed by the

| Table Note: Net Pension Liability  |              |           |             |             |           |  |  |
|--|--------------|-----------|-------------|-------------|-----------|--|--|
|  | KERS         |           | CERS        |             | SPRS      |  |  |
|  | Non Haz      | HAZ       | Non Haz     | HAZ         | HAZ       |  |  |
| Total Pension Liability  | \$11,550,110 | \$816,850 | \$9,772,523 | \$3,288,826 | \$681,119 |  |  |
| Fiduciary Net Position   | 2,578,290    | 561,484   | 6,528,147   | 2,087,002   | 260,974   |  |  |
| Net Pension Liability  | 8,971,820    | 255,366   | 3,244,376   | 1,201,824   | 420,145   |  |  |
| Ratio of Fiduciary<br>Net Position to Total<br>Pension Liability                                   | 22.32%       | 68.74%    | 66.80%      | 63.46%      | 38.32%    |  |  |
| Inflation  | 3.5%         | 3.5%      | 3.5%        | 3.5%        | 3.5%      |  |  |
| Salary Increases<br>(average including<br>inflation)   | 4.5%         | 4.5%      | 4.5%        | 4.5%        | 4.5%      |  |  |
| Investment Rate<br>of Return (Net<br>of Pension Plan<br>Investment Expense<br>including Inflation) | 7.75%        | 7.75%     | 7.75%       | 7.75%       | 7.75%     |  |  |

The Total Pension Liability was determined by an actuarial valuation as of June 30, 2014, using the following actuarial assumptions, applied to all periods included in the measurement.

The Net Pension Liability is equal to the Total Pension Liability minus the Fiduciary Net Position. That result as of June 30, 2014, for the plan is presented in the table above (\$ thousands). The Total Pension Liability was determined by an actuarial valuation as of June 30, 2014, using the following actuarial assumptions, applied to all periods included in the measurement.

The objective of GASB 67 was to improve financial reporting by state and local governmental pension plans. The statement 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 plans board, among other detailed requirements.



investment consultant for each major asset class. These ranges were combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and then adding expected inflation. The capital market assumptions developed by the investment consultant are intended for use over a 10-year horizon and may not be useful in setting the long-term rate of return for funding pension plans which covers a longer timeframe. The assumption is intended to be a long term assumption and is not expected to change absent a significant change in the asset allocation, a change in the inflation assumption, or a fundamental change in the market that alters expected returns in future years.

The discount rate determination does not use a municipal bond rate. Projected future benefit payments for all current plan members were projected through 2116.

The projection of cash flows used to determine the discount rate assumed that local employers would contribute the actuarially determined contribution rate of projected compensation over the remaining 29 year amortization period of the unfunded actuarial accrued liability. The actuarial determined contribution rate is adjusted to reflect the phase in of anticipated gains on actuarial value of assets over the first four years of the projection period.

June 30, 2014 is the actuarial valuation date upon which the Total Pension Liability is based.

#### **Table Note**

| Asset Class                   | Target<br>Allocation | Long Term<br>Expected<br>Nominal Return |
|-------------------------------|----------------------|---|
| Domestic Equity               | 30%                  | 8.45%                                   |
| International Equity          | 22%                  | 8.85%                                   |
| Emerging Market Equity        | 5%                   | 10.5%                                   |
| Private Equity                | 7%                   | 11.25%                                  |
| Real Estate                   | 5%                   | 7%                                      |
| Core US Fixed Income          | 10%                  | 5.25%                                   |
| High Yield US Fixed<br>Income | 5%                   | 7.25%                                   |
| Non US Fixed Income           | 5%                   | 5.5%                                    |
| Commodities                   | 5%                   | 7.75%                                   |
| TIPS                          | 5%                   | 5%                                      |
| Cash                          | 1%                   | 3.25%                                   |
| Total                         | 100%                 |   |

No update procedures were used to determine the Total Pension Liability. An expected Total Pension Liability is determined as of July 1, 2013 using standard roll back techniques. The roll back calculation subtracts the annual normal cost (also called the service cost), adds the actual benefit payments and refunds for the plan year and then applies the expected investment rate of return for the year. The procedure was used to determine the Total Pension Liability as of July 1, 2013,

The Discount Rate is defined as the single rate of return that when applied to all projected benefit payments results in an actuarial value of projected benefit payments.

The discount rate used to measure the total pension liability for the systems was 7.75% for both, nonhazardous and hazardous. The following presents the net pension liability, calculated using the discount rate of percent, as well as what the systems' net position liability would be if it were calculated using a discount rate that is one percentage point lower (6.75%) or one percentage point higher (8.75%) than the current rate for nonhazardous and (6.75%) or one percentage point higher (8.75%) than the current rate for hazardous (\$ thousands):

#### **Net Pension Liability** 1% Decrease Current 1% Increase **KERS** Discount Rate Nonhazardous (6.75%) (7.75%)(8.75%) \$10,093,046 \$8,971,820 \$7,960,935 Hazardous (6.75%) (8.75%) (7.75%)180,571 342,685 255,366 CERS Nonhazardous (6.75%) (8.75%) (7.75%)\$4.269.383 \$3.244.376 \$2,338,760

|           | \$ <del>4</del> ,209,303 | <b>\$3,244,370</b> | φ2,550,700 |
|-----------|--------------------------|--------------------|------------|
| Hazardous | (6.75%)                  | (7.75%)            | (8.75%)    |
|           | 1,572,178                | 1,201,824          | 887,365    |
| SPRS      |                          |                    |            |
| Hazardous | (6.75%)                  | (7.75%)            | (8.75%)    |
|           | \$489.185                | \$420.145          | \$361.457  |



## Note N. 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 for nonhazardous 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) for the payment of health insurance benefits. Hazardous employees who began participating with KRS on, or after, September 1, 2008, contributed a total of 9% of all their creditable compensation, with 8% credited to the member's account,



and 1% deposited to the KRS Pension Fund 401(h) account for the payment of health insurance benefits. Interest paid each June on these members' accounts is set at a rate of 2.5%. If a member terminates his/her employment and applies to take a refund, the member is entitled to a full refund of contributions and interest in his/her account; however, the 1% contributed to the 401(h) account in the KRS Pension Fund is non-refundable and is forfeited.

Employer contribution rates for KERS and SPRS for fiscal 2014 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 year 2014 were adopted by the Board of KRS based on the actuarially recommended rates. The Employer contribution rates were established as follows (effective July 1, 2013) for fiscal year 2014:

### Employer Contribution Rates

| KERS Nonhazardous | 26.79% |
|-------------------|--------|
| KERS Hazardous    | 32.21% |
| CERS Nonhazardous | 18.89% |
| CERS Hazardous    | 35.70% |
| SPRS              | 71.15% |



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

• *Cost of Living Adjustment (COLA)*: Beginning July 1, 2009, COLA for retirees were set by statute at 1.5% each July 1 of each year thereafter through June 30, 2014. 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.* A retired member who was reemployed on, or after, September 1, 2008, cannot accrue additional service credit in KRS, even if employed in a position that would otherwise be required to participate in KRS. However, if a retiree is reemployed in a regular full time position, his/her employer is required to pay contributions on all creditable compensation earned during the period of reemployment. These contributions are used to reduce the unfunded actuarial liability.

## **Note O.** Medicare Prescription Drug Plan

In fiscal year 2009, KRS submitted an application to the Centers for Medicare & Medicaid Services, of the Department of Health & Human Services, to enter into a contract to offer a Medicare Prescription Drug Plan (PDP), as described in the Medicare Prescription Drug Benefit Final Rule published in the Federal Register on January 28, 2005 (70 Fed. Reg. 4194). As part of the application process, KRS was required to establish a segregated Insolvency Account in the amount of \$100,000; this account must retain a minimum balance of \$100,000. The account consists of cash and/or cash equivalents and is invested on a daily basis. On February 19, 2009, KRS established the KRS Insurance Prescription Drug Fund. As of June 30, 2014 and 2013, the Insolvency Account amounted to \$100,039 and \$100,691, respectively.

## **Note P.** 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 Q.** 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, 2014 and 2013, the reimbursement totaled \$12,366,990 and \$9,187,367, respectively.

## **Note R.** 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 year 1986 to fiscal year 2009) while considering the appropriate participation status, hazardous or nonhazard-ous, 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 S. 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 T. Custodial Bank

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

## Note U. Related Party

Perimeter Park West, Inc. (PPW) is a legally separate, tax-exempt Kentucky corporation established in 1998 to own the land and buildings on which KRS is located. PPW leases the buildings to KRS (the lease is renewed periodically) and provides maintenance for the buildings and land. PPW is considered a related party to KRS and has its own separate financial audit. The following presents the amounts recorded between KRS and PPW for the fiscal year ended June 30, 2014:

Lease payments to PPW from KRS:\$674,320Dividends to KRS from PPW:\$ 0

### **RE-EMPLOYED-**

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





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



### Note V. Senate Bill 2 Pension Reform

Senate Bill 2 was signed by the Governor on April 4, 2013. It contained a number of changes to the pension system that KRS implemented, effective January 1, 2014. The Bill created the hybrid cash balance plan for members who began participation on, or after, January 1, 2014. The Cash Balance Plan is known as a hybrid plan because it has characteristics of both a defined benefit plan and a defined contribution plan. The plan resembles a defined contribution plan because it determines the value of benefits for each participant based on individual accounts. However, the assets of the plan remain in a single investment pool like a traditional defined benefit plan. The plan is a defined benefit plan since it uses a specific formula to determine benefits.

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

Members and employers contribute a specified amount into the member's account. The account earns a guaranteed amount of interest at the end of each fiscal year. If the member has participated in the plan during the fiscal year, there may be an additional interest credit added to the member's account depending on KRS' investment returns. All interest is paid on the preceding year's balance.

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

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

- Nonhazardous members 5% of creditable compensation
- Hazardous members 8% of creditable compensation
- *All members* 1% to the health insurance fund which is not credited to the member's account and is not refundable

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

In addition, Senate Bill 2 implemented provisions requiring employers to pay the actuarial cost of increases in an employee's salary in the last five years prior to retirement which result in increases the employee's pension, commonly known as pension spiking. All salary increases greater than 10% from one fiscal year to the next are presumed pension spikes. The law specifically excludes three situations from being considered pension spiking: 1. bona fide promotions; 2. career advancements; and 3. lump sum compensatory time paid at termination. For all members who retire on, or after, January 1, 2014, KRS will analyze the last five years of wages used in the retirement calculation to determine if a pension spike has occurred. If a pension spike has occurred, KRS will notify the last employer. Regardless of when the pension spike occurred, the last participating employer shall be required to pay for any additional actuarial costs resulting from annual increases in employee salary greater than ten percent (10%), which do qualify under one of three exceptions. If there were multiple last employers, the cost is divided equally amongst them. The employer is permitted a 12-month period to remit the amount due without interest.

## Note W. City Of Fort Wright

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

## Note X. Seven Counties Services, Inc.

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

The combined net position of all pension funds administered by Kentucky Retirement Systems increased by \$862.8 million during fiscal 2014.





### The net appreciation in the fair value of investments was \$1,361.9 million for the fiscal year ended June 30, 2014 compared to net appreciation of \$890.6 million for the prior fiscal year.

## Note Y. Write Off Of Receivable

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

| KERS<br>Hazardous    | \$5,216,615 |
|----------------------|-------------|
| CERS<br>Nonhazardous | 102,823     |
| CERS<br>Hazardous    | 91,305      |
| SPRS                 | 571,336     |
| Total                | \$5,982,079 |



## Note Z. Bank of America Settlement

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

| KERS   | \$8,442,347  |
|--------|--------------|
| KERS H | 767,141      |
| CERS   | 10,280,391   |
| CERS H | 2,865,365    |
| SPRS   | 644,756      |
| Total  | \$23,000,000 |

## Note Aa. Subsequent Events

Management has evaluated the period from June 30, 2014, to December 4, 2014, (the date the combining financial statements were available to be issued) for items requiring recognition or disclosure in the combining financial statements.



## **REQUIRED** SUPPLEMENTARY INFORMATION

| Year Ended**  | Actuarial Value<br>of Assets (a) | AAL Entry Age<br>Normal (b) | UAAL<br>(b-a)   | Funded<br>(a/b) | Covered<br>Payroll (c) | UAAL as % of Covere<br>Payroll [(b-a)/d |
|---------------|----------------------------------|-----------------------------|-----------------|-----------------|------------------------|---|
| Nonhazardous  |                                  |                             |                 |                 |                        |   |
| 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                                     |
| June 30, 2006 | 611,350,765                      | 7,815,480,774               | 7,204,130,009   | 7.8             | 1,702,230,777          | 423                                     |
| June 30, 2007 | 621,171,658                      | 5,201,355,055               | 4,580,183,397   | 11.9            | 1,780,223,493          | 257                                     |
| lune 30, 2008 | 603,197,761                      | 5,431,499,285               | 4,828,301,524   | 11.1            | 1,837,873,488          | 262                                     |
| lune 30, 2009 | 534,172,580                      | 4,507,325,571               | 3,973,152,991   | 11.9            | 1,754,412,912          | 226                                     |
| lune 30, 2010 | 471,341,628                      | 4,466,136,041               | 3,994,794,413   | 10.6            | 1,815,146,388          | 220                                     |
| lune 30, 2011 | 451,620,442                      | 4,280,089,633               | 3,828,469,191   | 10.6            | 1,731,632,748          | 22                                      |
| lune 30, 2012 | 446,080,511                      | 3,125,330,157               | 2,679,249,646   | 14.3            | 1,644,896,681          | 162                                     |
| lune 30, 2013 | 497,584,327                      | 2,128,754,134               | 1,631,169,807   | 23.4            | 1,644,408,698          | 99                                      |
| lune 30, 2014 | 621,236,646                      | 2,226,759,925               | 1,605,523,279   | 27.9            | 1,577,496,447          | 101                                     |
| lazardous     |                                  |                             |                 |                 |                        |   |
| une 30, 2004  | \$169,158,879                    | \$323,503,563               | \$154,344,684   | 52.3%           | \$126,664,812          | 121.9                                   |
| une 30, 2005  | 187,947,644                      | 386,844,695                 | 198,897,051     | 48.6            | 131,687,088            | 151                                     |
| une 30, 2006  | 212,833,318                      | 621,237,856                 | 408,404,538     | 34.3            | 138,747,320            | 294                                     |
| une 30, 2007  | 251,536,756                      | 504,842,981                 | 253,306,225     | 49.8            | 144,838,020            | 174                                     |
| une 30, 2008  | 288,161,759                      | 541,657,214                 | 253,495,455     | 53.2            | 148,710,060            | 170                                     |
| une 30, 2009  | 301,634,592                      | 491,132,170                 | 189,497,578     | 61.4            | 146,043,576            | 129                                     |
| une 30, 2010  | 314,427,296                      | 493,297,529                 | 178,870,233     | 63.7            | 143,557,944            | 124                                     |
| une 30, 2011  | 329,961,615                      | 507,058,767                 | 177,097,152     | 65.1            | 133,053,792            | 133                                     |
| une 30, 2012  | 345,573,948                      | 384,592,406                 | 39,018,458      | 89.9            | 131,976,754            | 29                                      |
| une 30, 2013  | 370,774,403                      | 385,517,675                 | 14,743,272      | 96.2            | 132,015,368            | 11                                      |
| une 30, 2014  | 419,395,867                      | 396,986,820                 | (22,409,047)    | 105.6           | 129,076,038            | (17.4                                   |
| otal          |                                  |                             |                 |                 |                        |   |
| une 30, 2004  | \$769,745,840                    | \$2,659,408,928             | \$1,889,663,088 | 28.9%           | \$1,772,077,308        | 106.6                                   |
| une 30, 2005  | 795,015,995                      | 3,067,403,883               | 2,272,387,888   | 25.9            | 1,787,594,376          | 12                                      |
| une 30, 2006  | 824,184,083                      | 8,436,718,630               | 7,612,534,547   | 9.8             | 1,840,978,097          | 413                                     |
| une 30, 2007  | 872,708,414                      | 5,706,198,036               | 4,833,489,622   | 15.3            | 1,925,061,513          | 25                                      |
| une 30, 2008  | 891,359,520                      | 5,973,156,499               | 5,081,796,979   | 14.9            | 1,986,583,548          | 255                                     |
| une 30, 2009  | 835,807,172                      | 4,998,457,741               | 4,162,650,569   | 16.7            | 1,900,456,488          | 219                                     |
| une 30, 2010  | 785,768,924                      | 4,959,433,570               | 4,173,664,646   | 15.8            | 1,958,704,332          | 213                                     |
| une 30, 2011  | 781,582,057                      | 4,787,148,400               | 4,005,566,343   | 16.3            | 1,864,686,540          | 214                                     |
| une 30, 2012  | 791,654,459                      | 3,509,922,563               | 2,718,268,104   | 22.6            | 1,776,873,435          | 153                                     |
| une 30, 2013  | 868,358,730                      | 2,514,271,809               | 1,645,913,079   | 34.5            | 1,776,424,066          | 92                                      |
| une 30, 2014  | 1,040,632,513                    | 2,623,746,745               | 1,583,114,232   | 39.7            | 1,706,572,485          | 92                                      |

| Year Ended**  | Actuarial Value<br>of Assets (a) | AAL Entry Age<br>Normal (b) | UAAL<br>(b-a)   | Funded<br>(a/b) | Covered<br>Payroll (c) | UAAL as % of Covered<br>Payroll [(b-a)/c] |
|---------------|----------------------------------|-----------------------------|-----------------|-----------------|------------------------|---|
| Nonhazardous  |                                  |                             |                 |                 |                        |   |
| 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.                                       |
| June 30, 2012 | 1,512,853,851                    | 2,370,771,288               | 857,917,437     | 63.8            | 2,236,546,345          | 38.4                                      |
| June 30, 2013 | 1,628,244,197                    | 2,443,894,100               | 815,649,903     | 66.6            | 2,236,277,489          | 36.5                                      |
| June 30, 2014 | 1,831,199,465                    | 2,616,914,600               | 785,715,135     | 70.0            | 2,272,270,287          | 34.6                                      |
| 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                                     |
| June 30, 2014 | 997,733,237                      | 1,493,864,379               | 496,131,142     | 66.8            | 479,164,016            | 103.5                                     |
| 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                                      |
| June 30, 2014 | 2,828,932,702                    | 4,110,778,979               | 1,281,846,277   | 68.8            | 2,751,434,303          | 46.6                                      |



#### Schedules of Funding Progress for SPRS Insurance Fund Year Ended\*\* **Actuarial Value** UAAL Funded Covered UAAL as % of Covered AAL Entry Age of Assets (a) Normal (b) (b-a) (a/b) Payroll (c) 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 26.6 49,247,580 644.8 317,547,317 June 30, 2008 27.8 53,269,080 602.9 123,961,197 445,107,468 321,146,271 June 30, 2009 123,526,647 364,031,141 240,504,494 33.9 51,660,396 465.5 June 30, 2010 121,175,083 313,785,412 27.9 51,506,712 609.2 434,960,495 June 30, 2011 123,687,289 438,427,763 314,740,474 28.2 48,692,616 646.4 433.2 June 30, 2012 124,372,072 333,903,782 209,531,710 48,372,506 37.2 June 30, 2013 136,321,060 222,326,743 86,005,683 61.3 45,256,202 190.0 June 30, 2014 155,594,760 234,271,127 78,676,367 66.4 44,615,885 176.3

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



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

| KERS Nonhaza   | rdous                            |                      |                                       |                           |
|----------------|----------------------------------|----------------------|---------------------------------------|---------------------------|
| Year Ended     | Annual Required<br>Contributions | Actual Contributions | Retiree Drug Subsidy<br>Contributions | Percentage<br>Contributed |
| Insurance Fund |                                  |                      |                                       |                           |
| 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                      |
| June 30, 2014  | 208,880,813                      | 166,609,592          | -                                     | 79.8                      |

### **KERS** Hazardous

| Year Ended                | Annual Required<br>Contributions | Actual Contributions | Retiree Drug Subsidy<br>Contributions | Percentage<br>Contributed |
|---------------------------|----------------------------------|----------------------|---------------------------------------|---------------------------|
| Insurance Fund            | Contributions                    |                      | contributions                         | Contributed               |
| 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                      |
| June 30, 2014             | 15,627,018                       | 23,873,967           | -                                     | 152.8                     |
| See Independent Auditors' | Report.                          |                      |                                       |                           |

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

| CERS Nonhazardous         |                                  |                      |                                       |                           |  |  |
|---------------------------|----------------------------------|----------------------|---------------------------------------|---------------------------|--|--|
| Year Ended                | Annual Required<br>Contributions | Actual Contributions | Retiree Drug Subsidy<br>Contributions | Percentage<br>Contributed |  |  |
| Insurance Fund            |                                  |                      |                                       |                           |  |  |
| 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                      |  |  |
| June 30, 2014             | 130,651,800                      | 123,278,028          | -                                     | 94.4                      |  |  |
| See Independent Auditors' | ' Report.                        |                      |                                       |                           |  |  |

### **CERS** Hazardous

| Year Ended     | Annual Required<br>Contributions | Actual Contributions | Retiree Drug Subsidy<br>Contributions | Percentage<br>Contributed |
|----------------|----------------------------------|----------------------|---------------------------------------|---------------------------|
| Insurance Fund |                                  |                      |                                       |                           |
| 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                      |
| June 30, 2014  | 74,360,438                       | 74,791,619           | -                                     | 100.6                     |



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

### SPRS

| Year Ended                  | Annual Required<br>Contributions | Actual Contributions | Retiree Drug Subsidy<br>Contributions | Percentage<br>Contributed |
|-----------------------------|----------------------------------|----------------------|---------------------------------------|---------------------------|
| Insurance Fund              |                                  |                      |                                       |                           |
| 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                      |
| June 30, 2014               | 20,879,022                       | 14,493,242           | -                                     | 69.4                      |
| See Independent Auditors' F | Penort                           |                      |                                       |                           |

See Independent Auditors' Report.



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

| Actuarial Cost Method         | Entry Age   |
|-------------------------------|---|
| Amortization Method           | Level of Percentage of Payroll, closed  |
| Remaining Amortization Period | 29 years  |
| Asset Valuation Method        | 5 year Smoothed Market  |
| Inflation                     | 3.5%  |
| Salary Increase               | 4.5%, average, including Inflation  |
| Investment Rate of Return     | 7.75%, for both Non Hazardous and Hazardous, Net of<br>Pension Plan Investment Expense, including Inflation |

There were no changes of benefit terms or assumptions.

| Schedule of Emp   | Schedule of Employer Contributions - Pension Funds |           |           |           |           |           |           |           |           |           |
|---|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| KERS<br>Nonhazardous  | 2014   | 2013      | 2012      | 2011      | 2010      | 2009      | 2008      | 2007      | 2006      | 2005      |
| Actuarially Determined<br>Employer<br>Contribution                        | \$520,765  | \$485,396 | \$441,094 | \$381,915 | \$348,495 | \$294,495 | \$264,743 | \$176,774 | \$129,126 | \$85,799  |
| Actual Employer<br>Contributions  | 296,836  | 280,874   | 214,786   | 193,754   | 144,051   | 112,383   | 104,655   | 88,249    | 60,681    | 50,333    |
| Annual Contribution<br>Deficiency (Excess)                                | 223,929  | 204,522   | 226,308   | 188,161   | 204,444   | 182,112   | 160,088   | 88,525    | 68,445    | 35,466    |
| Covered Employee<br>Payroll   | 1,577,496  | 1,644,409 | 1,644,897 | 1,731,633 | 1,815,146 | 1,754,413 | 1,837,873 | 1,780,223 | 1,702,231 | 1,655,907 |
| Actual Contributions<br>as a Percentage of<br>Covered Employee<br>Payroll | 18.82%   | 17.08%    | 13.06%    | 11.19%    | 7.94%     | 6.41%     | 5.69%     | 4.96%     | 3.56%     | 3.04%     |

| Schedule of Emp   | Schedule of Employer Contributions- Pension Funds |          |          |          |          |          |          |          |          |         |  |
|---|---|----------|----------|----------|----------|----------|----------|----------|----------|---------|--|
| KERS<br>Hazardous   | 2014  | 2013     | 2012     | 2011     | 2010     | 2009     | 2008     | 2007     | 2006     | 2005    |  |
| Actuarially<br>Determined Employer<br>Contribution                        | \$13,570  | \$21,502 | \$20,265 | \$20,605 | \$17,815 | \$15,708 | \$14,147 | \$12,220 | \$10,787 | \$9,450 |  |
| Actual Employer<br>Contributions  | 11,670  | 27,334   | 20,809   | 19,141   | 17,658   | 15,843   | 15,257   | 13,237   | 10,803   | 9,759   |  |
| Annual Contribution<br>Deficiency (Excess)                                | 1,900   | (5,832)  | (544)    | 1,464    | 157      | (135)    | (1,110)  | (1,017)  | (16)     | (309)   |  |
| Covered Employee<br>Payroll   | 129,076   | 132,015  | 131,977  | 133,054  | 143,558  | 146,044  | 148,710  | 144,838  | 138,747  | 131,687 |  |
| Actual Contributions<br>as a Percentage of<br>Covered Employee<br>Payroll | 9.04%   | 20.7%    | 15.77%   | 14.39%   | 12.3%    | 10.85%   | 10.26%   | 9.14%    | 7.79%    | 7.41%   |  |

| Schedule of En  | Schedule of Employer Contributions- Pension Funds |           |           |           |           |           |           |           |           |           |  |
|---|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| CERS<br>Nonhazardous  | 2014  | 2013      | 2012      | 2011      | 2010      | 2009      | 2008      | 2007      | 2006      | 2005      |  |
| Actuarially<br>Determined<br>Employer<br>Contribution                     | \$324,231   | \$294,914 | \$261,764 | \$218,985 | \$186,724 | \$161,097 | \$138,311 | \$112,508 | \$83,124  | \$53,118  |  |
| Actual Employer<br>Contributions  | 324,231   | 294,914   | 275,736   | 248,519   | 207,076   | 179,285   | 150,925   | 124,261   | 90,834    | 54,617    |  |
| Annual Contribution<br>Deficiency (Excess)                                | 0   | 0         | (13,972)  | (29,534)  | (20,352)  | (18,188)  | 12,614    | (11,753)  | (7,710)   | (1,499)   |  |
| Covered Employee<br>Payroll   | 2,272,270   | 2,236,277 | 2,236,546 | 2,276,596 | 2,236,855 | 2,183,612 | 2,166,613 | 2,076,848 | 1,982,437 | 1,885,275 |  |
| Actual Contributions<br>as a Percentage of<br>Covered Employee<br>Payroll | 14.27%  | 13.19%    | 12.33%    | 10.92%    | 9.26%     | 8.21%     | 6.97%     | 5.98%     | 4.58%     | 2.9%      |  |

| Schedule of Employer Contributions- Pension Funds                         |           |           |          |          |          |          |          |          |          |          |
|---|-----------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|
| CERS<br>Hazardous   | 2014      | 2013      | 2012     | 2011     | 2010     | 2009     | 2008     | 2007     | 2006     | 2005     |
| Actuarially<br>Determined<br>Employer<br>Contribution                     | \$115,240 | \$120,140 | \$83,589 | \$78,796 | \$76,391 | \$69,056 | \$64,082 | \$53,890 | \$44,059 | \$39,438 |
| Actual Employer<br>Contributions  | 115,240   | 120,140   | 89,329   | 85,078   | 82,887   | 78,152   | 72,155   | 61,553   | 49,979   | 39,948   |
| Annual Contribution<br>Deficiency (Excess)                                | 0         | 0         | (5,740)  | (6,282)  | (6,496)  | (9,096)  | (8,073)  | (7,663)  | (5,917)  | (510)    |
| Covered Employee<br>Payroll   | 479,164   | 461,673   | 464,229  | 466,964  | 466,549  | 469,315  | 474,241  | 458,999  | 429,928  | 411,122  |
| Actual Contributions<br>as a Percentage of<br>Covered Employee<br>Payroll | 24.05%    | 26.02%    | 19.24%   | 18.22%   | 17.77%   | 16.65%   | 15.21%   | 13.41%   | 11.71%   | 9.72%    |

| Schedule of En   | nployer Co | ontributi | ions- Pei | nsion Fu | nds      |          |          |         |         |         |
|--|------------|-----------|-----------|----------|----------|----------|----------|---------|---------|---------|
| SPRS   | 2014       | 2013      | 2012      | 2011     | 2010     | 2009     | 2008     | 2007    | 2006    | 2005    |
| Actuarially<br>Determined<br>Employer<br>Contribution                        | \$25,808   | \$23,117  | \$20,498  | \$18,463 | \$18,765 | \$15,952 | \$13,823 | \$9,024 | \$6,353 | \$3,731 |
| Actual Employer<br>Contributions   | 20,279     | 18,501    | 15,362    | 12,657   | 9,489    | 8,186    | 7,443    | 6,142   | 4,244   | 2,851   |
| Annual<br>Contribution<br>Deficiency (Excess)                                | 5,529      | 4,616     | 5,136     | 5,806    | 9,276    | 7,766    | 6,380    | 2,882   | 2,109   | 880     |
| Covered Employee<br>Payroll  | 44,616     | 45,256    | 48,373    | 48,693   | 51,507   | 51,660   | 53,269   | 49,248  | 47,744  | 43,720  |
| Actual<br>Contributions as<br>a Percentage of<br>Covered Employee<br>Payroll | 45.45%     | 40.88%    | 31.76%    | 25.99%   | 18.42%   | 15.85%   | 13.97%   | 12.47%  | 8.89%   | 6.52%   |

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

|  | KERS<br>Nonhazardous | KERS<br>Hazardous | CERS<br>Nonhazardous | CERS<br>Hazardous | SPRS<br>Hazardous |
|--|----------------------|-------------------|----------------------|-------------------|-------------------|
| Total Pension<br>Liability (TPL)                           | 2014                 | 2014              | 2014                 | 2014              | 2014              |
| Service Cost   | \$133,361            | \$16,880          | \$192,482            | \$66,762          | \$7,142           |
| Interest   | 853,653              | 59,594            | 710,527              | 238,665           | 50,391            |
| Benefit Changes  | 0                    | 0                 | 0                    | 0                 | 0                 |
| Difference<br>between Expected<br>and Actual<br>Experience | 0                    | 0                 | 0                    | 0                 | 0                 |
| Changes of<br>Assumptions                                  | 0                    | 0                 | 0                    | 0                 | 0                 |
| Benefit Payments   | (889,936)            | (54,321)          | (582,850)            | (189,635)         | (53,026)          |
| Refunds of<br>Contributions                                | (13,627)             | (2,830)           | (14,286)             | (2,664)           | (213)             |
| Net Change in TPL  | 83,450               | 19,323            | 305,873              | 113,127           | 4,294             |
| TPL - Beginning  | 11,466,660           | 797,527           | 9,466,650            | 3,175,699         | 676,825           |
| TPL - Ending (a)   | 11,550,110           | 816,850           | 9,772,323            | 3,288,826         | 681,119           |

| Plan Net Position   |             |           |           |           |          |
|---|-------------|-----------|-----------|-----------|----------|
| Contributions -<br>Employers  | 296,836     | 11,671    | 324,231   | 115,240   | 20,279   |
| Contributions-<br>Members   | 97,487      | 12,546    | 128,568   | 43,722    | 5,076    |
| Net Investment<br>Income  | 337,922     | 80,724    | 895,531   | 288,490   | 40,374   |
| Benefit Payments  | (889,936)   | (54,321)  | (582,850) | (189,635) | (53,026) |
| Administrative<br>Expense   | (11,145)    | (898)     | (18,615)  | (1,721)   | (215)    |
| Refunds of<br>Contributions   | (13,627)    | (2,830)   | (14,286)  | (2,665)   | (213)    |
| Other   | 0           | 0         | 0         | 0         | 0        |
| Net Change<br>in Plan Position  | (182,463)   | 46,892    | 732,579   | 253,431   | 12,276   |
| Plan Net Position-<br>Beginning   | 2,760,753   | 514,592   | 5,795,568 | 1,833,571 | 248,698  |
| Plan Net Position-<br>Ending (b)  | 2,578,290   | 561,484   | 6,528,147 | 2,087,002 | 260,974  |
| Net Pension<br>Liability - Ending<br>(a-b)                                    | \$8,971,820 | 255,366   | 3,244,376 | 1,201,824 | 420,145  |
| Ratio of Plan Net<br>Position to TPL  | 22.32%      | 68.74%    | 66.80%    | 63.46%    | 38.32%   |
| Covered Employee<br>Payroll   | \$1,577,496 | \$129,076 | 2,272,270 | 479,164   | 44,616   |
| Net Pension<br>Liability as a<br>percentage of<br>Covered Employee<br>Payroll | 568.74%     | 197.84%   | 142.78%   | 250.82%   | 941.69%  |



### Schedule of Administrative Expenses

(in Thousands) for the fiscal years ended June 30, 2014

| Expense                    | 2014     | 2013     |  |
|----------------------------|----------|----------|--|
| Personnel                  |          |          |  |
| Salaries and Per Diem      | \$13,869 | \$14,987 |  |
| Fringe Benefits            | 6,899    | 6,349    |  |
| Tuition Assistance         | 33       | 26       |  |
| Total Personnel            | 20,801   | 21,362   |  |
| Contractual Services       |          |          |  |
| Actuarial                  | 521      | 401      |  |
| Audit                      | 76       | 169      |  |
| Healthcare                 | 257      | 135      |  |
| Human Resources            | -        | 54       |  |
| Legal                      | 1,787    | 746      |  |
| Medical                    | 258      | 381      |  |
| Miscellaneous              | 312      | 194      |  |
| Total Contractual Services | 3,211    | 2,080    |  |
| Communication              |          |          |  |
| Printing                   | 359      | 272      |  |
| Telephone                  | 123      | 154      |  |
| Postage                    | 545      | 507      |  |
| Travel                     | 159      | 101      |  |
| Total Communication        | 1,186    | 1,034    |  |
| Rentals                    |          |          |  |
| Office Space               | 706      | 1,165    |  |
| Equipment                  | 84       | 54       |  |
| Total Rentals              | 790      | 1,219    |  |
| Internal Audit             |          |          |  |
| Travel/Conferences         | \$4      | \$3      |  |
| Dues/Subscriptions         | 1        | 1        |  |
| Total Internal Audit       | \$5      | \$4      |  |

| Expense   | 2014   | 2013   |  |
|---|--------|--------|--|
| Investments (Pension Fund)                      |        |        |  |
| Travel/Conferences                              | 61     | 60     |  |
| Dues/Subscriptions                              | 34     | 41     |  |
| Computer  | 169    | 180    |  |
| Contractual                                     | 1,490  | 1,513  |  |
| Miscellaneous                                   | 7      | 9      |  |
| Legal   | 449    | 126    |  |
| Total Investments                               | 2,210  | 1,929  |  |
| Miscellaneous                                   |        |        |  |
| Utilities                                       | 225    | 206    |  |
| Software  | 2,268  | 1,168  |  |
| Supplies  | 122    | 153    |  |
| Insurance                                       | 67     | 67     |  |
| Dues & Subscriptions                            | 47     |        |  |
| Maintenance                                     | 6      | 15     |  |
| Other   | 21     | 125    |  |
| Total Miscellaneous                             | 2,756  | 1,734  |  |
| Depreciation/Amortization                       | 1,634  | 1,219  |  |
| Total Pension Fund<br>Administrative Expenses   | 32,593 | 30,581 |  |
| Healthcare Fees                                 | 1,614  | 9,758  |  |
| Total Insurance Fund<br>Administrative Expenses | 1,614  | 9,758  |  |
| Total Administrative<br>Expenses                | 34,207 | 40,339 |  |



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

|  | 2014     | 2013     |
|--|----------|----------|
| Pension Funds                            |          |          |
| Security Lending Fees                    |          |          |
| ۷ Broker Rebates                         | \$(433)  | \$(224)  |
| ۲ Lending Agent Fees                     | 675      | 865      |
| Total Security Lending                   | 242      | 641      |
| Contractual Services                     |          |          |
| រ Investment Management                  | 42,867   | 39,198   |
| ۷ Security Custody/Investment Consultant | 2,763    | 1,513    |
| ۷ Investment Related Travel              | 54       | 52       |
| <b>Y</b> Software                        | 169      | 180      |
| ۷ Dues & Subscriptions                   | 34       | 41       |
| ۷ Conferences                            | 7        | 8        |
| ۷ Miscellaneous                          | 7        | 9        |
| ۷ Legal Counsel                          | 449      | 126      |
| Total Contractual Services               | 46,350   | 41,127   |
| Insurance Funds                          |          |          |
| Security Lending Fees                    |          |          |
| <b>У</b> Broker Rebates                  | (112)    | 15       |
| ۷ Lending Agent Fees                     | 222      | 282      |
| Total Security Lending                   | 110      | 297      |
| Contractual Services                     |          |          |
| ۷ Investment Management                  | 14,896   | 9,599    |
| Security Custody/Investment Consultant   | 765      |          |
| Total Contractual Services               | 15,661   | 9,599    |
| Total Investment Expenses                | \$62,363 | \$51,664 |

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

| Fees                    | 2014  | 2013  |
|-------------------------|-------|-------|
| Actuarial Services      | \$521 | \$401 |
| Medical Review Services | 258   | 381   |
| Audit Services          | 76    | 169   |
| Legal Counsel           | 1,787 | 746   |
| Healthcare              | 257   | 135   |
| Human Resources         | -     | 54    |
| Miscellaneous           | 312   | 194   |
| Total                   | 3,211 | 2,207 |



# REPORT ON INTERNAL CONTROL

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







#### **REPORT OF INDEPENDENT AUDITORS**

Board of Trustees Kentucky Retirement Systems Frankfort, Kentucky

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards issued by the Comptroller General of the United States, the combining financial statements of the Kentucky Retirement Systems as of and for the fiscal year ended June 30, 2014, and the related notes to the combining financial statements, which collectively comprise the Kentucky Retirement Systems' basic combining financial statements, and have issued our report thereon dated December 4, 2014.

#### **Internal Control Over Financial Reporting**

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

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





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

#### **Compliance and Other Matters**

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

#### **Purpose of this Report**

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

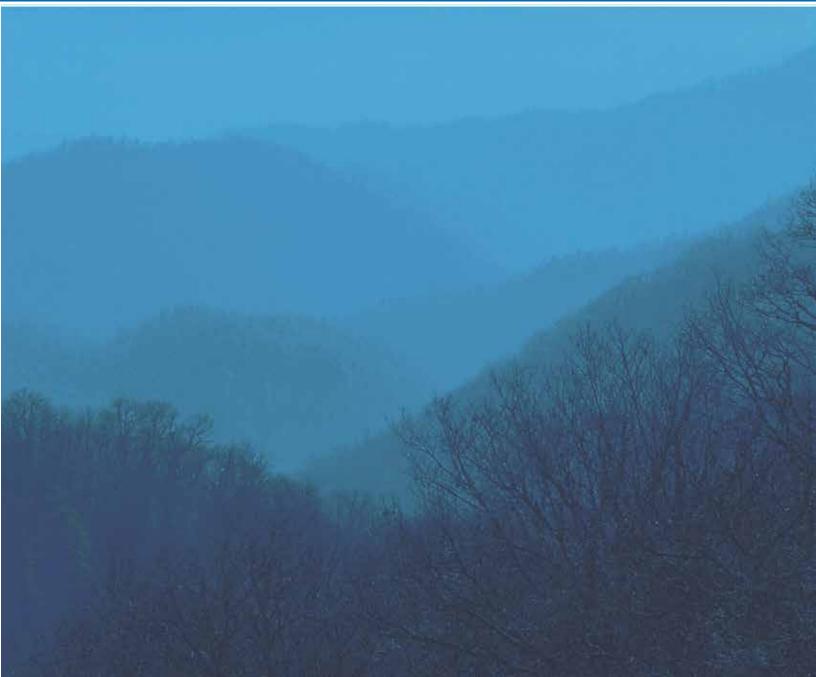
Dean Dotton allen Ford, PLLC

December 4, 2014 Lexington, Kentucky



# Investment







# SECTION

### INVESTMENT

### TABLE OF CONTENTS

- 84 U.S. ECONOMY GETTING STRONGER
  - 85 INVESTMENT SUMMARY
  - 86 INVESTMENT STRATEGIES
  - 87 INVESTMENT OBJECTIVES
- 88 INVESTMENT RESULTS
  - 89 BENCHMARKS
  - 90 LONG-TERM RESULTS
- 92 U.S. EQUITY
- 94 INTERNATIONAL EQUITY
- 96 FIXED INCOME
- 98 PRIVATE EQUITY
- 98 REAL ESTATE
- 99 ABSOLUTE RETURN
- 99 REAL RETURN
- 100 CASH
- 101 ADDITIONAL SCHEDULES & REQUIRED SUPPLEMENTAL INFORMATION
  - 103 CONSULTANTS
  - 105 MARKET VALUES BY PLAN
- 108 LETTERS FROM INVESTMENT CONSULTANTS
  - 109 RVK, INC.
  - 118 ALBOURNE
  - 121 PCA
  - 124 ORG

Fed Federal Reserve

MBS Mortgage Backed Securities

GDP Gross Domestic Product



# **U.S. Economy Getting Stronger** Producing Strong Investment Results

Investment returns were driven by the U.S. public equity market for the fiscal year, continuing the multi-year positive run for U.S. stocks. Investors really haven't seen these types of returns or the duration of the current rally since the late 1990s. In addition, the recent IPO market has been robust, allowing private companies to offer shares to the public.

Investors finally saw some signs of economic growth in the spring of 2014 after a tough winter where we saw dismal GDP growth and only moderate employment growth. Employment numbers improved in the spring with all monthly job gains exceeding 200,000 per month, plus GDP in the second quarter of 2014 was positive 4.2 percent annualized versus negative 2.1 percent annualized for the first quarter of 2014. The second quarter numbers gave some evidence that the U.S. stock market was not getting ahead of itself and staved off any selloff or correction.

While the domestic economy is improving, the world is not without its worry. The Ukraine and Russia conflict was exacerbated with the downing of the Malaysian Airlines flight, resulting in further economic sanctions placed on Russia. This situation has caused an already weak European economy to get worse and slip back into recession. The economic weakness is forcing the European Central Bank to take accommodative actions and increase money supply resulting in extremely low interest rates. European banks still have yet to clean up many bad loans on their books post financial crisis. The Israel and Hamas conflict has been an active military engagement for a number of months now and as the fiscal year was ending, Iraq was in a deteriorating situation politically and militarily, though maybe some progress has been made more recently.

The Federal Reserve continues to taper its bond buying program. Treasury yields really haven't risen since the taper actually began with yields on the 10 year and 30 year range bound. The Fed's message to the markets at the last Federal Open Market Committee meeting is that it intends to keep rates on cash instruments low until the summer of 2015. As a result, high yield fixed income has continued to do tremendously well as market participants search for yield.

Absolute Return strategies are doing well as an overall portfolio diversifier because for the first time post financial crisis, not every asset is either going up or down together. Credit related strategies are doing extremely well, but Long/Short equity managers are struggling a bit due to the overall strength of the equity market. In calendar year 2013, 92% of the companies in the S&P 500 had positive performance, creating a tough environment to try to short stocks. In addition, March 2014 was an incredibly difficult month for long/short equity managers as many of the companies that hedge funds owned traded down in a significant way, though most of those same names rebounded in April. A portfolio's total absolute return performance was driven by how much net long exposure to equities it had and how much European exposure it had.

Commercial real estate, specifically core real estate, appears to be priced at fair value. It's hard to imagine an economic scenario that allows commercial real estate to continue to go up in value in the short run. The better value in the real estate markets are properties where owners and property managers can rehab and add value through structural investments in or repurposing existing properties making them more valuable to tenants or potential purchasers.

Private equity realization of returns has been stronger with the IPO markets being robust for the past 12 months. Investors are starting to see quality returns as firms seek to utilize the robust IPO market or sell companies to strategic buyers. Along the same lines, guidance from the Fed with respect to historically low short-term interest rates has allowed underlying portfolio companies to clean up their balance sheets making them more valuable on a cash flow basis and to potential buyers.

#### INVESTMENT SUMMARY

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

**Investment Policy** The KRS Board of Trustees approved a new target asset allocation beginning July 1, 2011. As of June 30, 2014, the KRS Pension fund's policy allocation invests 20.5% of the assets in U.S. equities, 20.0% in broad market international equities, 2.9% in emerging market equities, 9.6% in core fixed income, 4.8% in high yield fixed income, 4.9% in global fixed income, 10.0% in private equity, 10.0% in real return strategies, 10.0% in absolute return strategies, 4.5% in real estate, and 2.8% in cash or short-term securities. As of June 30, 2014, the KRS Insurance fund's policy allocation invests 20.0% of the assets in U.S. equities, 20.0% in broad market international equities, 4.0% in emerging market equities, 10.0% in core fixed income, 5.0% in global fixed income, 10.0% in real return strategies, 10.0% in global fixed income, 5.0% in high yield fixed income, 5.0% in global fixed income, 5.0% in real return strategies, 10.0% in absolute return strategies, 5.0% in core fixed income, 5.0% in core fixed income, 5.0% in absolute return strategies, 5.0% in core fixed income, 5.0% in core fixed income, 5.0% in absolute return strategies, 5.0% in core fixed income, 5.0% in core fixed income, 5.0% in the strategies, 5.0% in real estate, and 1.0% in cash or short-term securities.

The following charts graphically depict the Board's investment policy.

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

| Asset                     | Policy's Pension<br>Asset Allocation | Actual Pension<br>Asset Allocation | Policy's Insurance<br>Asset Allocation | Actual Insurance<br>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<br>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%                                 |
|                           |                                      |                                    |  |                                      |

Investment Policies Visit https://kyret.ky.gov/ <u>investments</u> to read our Statement of Investment policy. Other policies include Brokerage, Securities Trading, Placement Agents, Proxy Voting and more.



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



#### INVESTMENT STRATEGIES

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

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

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

**Investment Consulting** The Board employs industry leading external consultants to assist in determining and reviewing the asset allocation guidelines and the performance of both the internally managed and externally managed assets. A letter from each consulting firm utilized, starting at page 108, discusses current allocations, performance, and significant changes during the fiscal year.





Over the long-term, the investment program seeks to exceed the actuarially required rate of return of 7.75%, while also exceeding the return allowed by its total fund benchmark.

#### INVESTMENT OBJECTIVES

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

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

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

**Longer-Term:** The total assets of the Systems should achieve a return measured over 30 to 40 years which exceeds the actuarially required rate of return of 7.75% while also exceeding the return achieved by its total fund benchmark.

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





### Investment 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 2014 Results** For the fiscal year ended June 30, 2014, the KRS pension fund produced a net return of 15.55%, which outpaced the benchmark return of 14.91%, as well as the actuarially required rate of return of 7.75%. It should be noted that the actuarially required rate is an annualized return that may not be met, or possibly greatly surpassed in any given year; this objective has been met over the long-term.

The outperformance of the pension fund can primarily be attributed to the overweight to U.S. equities, the strongest performing asset class, combined with the relative outperformance provided by the Fixed Income allocation. Further, fund outperformance was influenced by the strong relative performance of the Real Return and Absolute Return allocations. Overall outperformance was somewhat tamed by the slight relative underperformance of the Public Equity allocation, coupled with the underperformance of the Real Estate portfolio.

The KRS insurance fund gained 14.89% net of expenses for the fiscal year ending June 30, 2014, compared to the benchmark's 15.03% return and the actuarially required rate of 7.75%. The underperformance versus the pension fund was due primarily to a slightly lower allocation to total equities (public + private) and a higher allocation to fixed income, which was one of the lower returning asset classes.

### **INVESTMENT RESULTS TABLE**

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

| Portfolio                          | Inception Date | Fiscal Year | 3-Year | 5-Year | 10-Year | Inception |
|------------------------------------|----------------|-------------|--------|--------|---------|-----------|
| KRS Total Pension Fund             | Apr-84         | 15.55%      | 8.59%  | 11.97% | 6.78%   | 9.60%     |
| Performance Benchmark <sup>2</sup> | -              | 14.91%      | 8.84%  | 11.91% | 6.84%   | 9.71%     |

#### 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         | 14.89%      | 7.48%  | 12.10% | 6.28%   | 7.69%     |
| Performance Benchmark <sup>3</sup> | -              | 15.03%      | 8.71%  | 13.02% | 6.50%   | 8.07%     |

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

<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>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

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

#### **Total Fund Benchmarks**

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

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

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.





#### LONG-TERM RESULTS

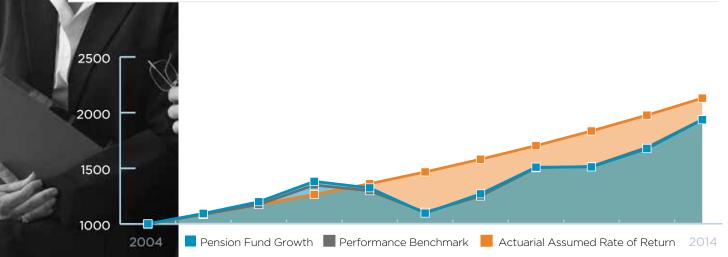


#### **Long-Term Results:**

For the 10-years ending June 30, 2014, the KRS pension fund portfolio earned an annualized total net return of 6.78% versus the benchmark annualized return of 6.84%. As shown in the investment results table on page 88, the KRS pension fund return has trailed the benchmark over the 10 year period but has performed better than the benchmark over the past 5 years. 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.

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

| 9 | Portfolio                           | 2004    | 2005    | 2006    | 2007    | 2008    | 2009    | 2010    | 2011    | 2012    | 2013    | 2014    |
|---|-------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | Pension Fund Growth                 | \$1,000 | \$1,093 | \$1,198 | \$1,381 | \$1,323 | \$1,096 | \$1,269 | \$1,509 | \$1,511 | \$1,675 | \$1,935 |
| 1 | Performance Benchmark               | \$1,000 | \$1,085 | \$1,173 | \$1,348 | \$1,297 | \$1,104 | \$1,249 | \$1,503 | \$1,516 | \$1,686 | \$1,938 |
|   | Actuarial Assumed Rate<br>of Return | \$1,000 | \$1,083 | \$1,172 | \$1,263 | \$1,360 | \$1,466 | \$1,580 | \$1,702 | \$1,834 | \$1,976 | \$2,129 |





As of June 30, 2014, the chart indicates that \$1,000 would have grown to \$1,935, while the same \$1,000 invested in the benchmark or in the actuarial objective would have grown to \$1,938 and \$2,129, respectively.

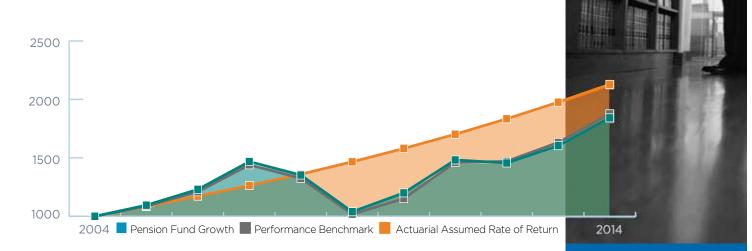
The KRS insurance fund has slightly underperformed its benchmark for the 10-year period ending June 30, 2014, earning 6.28% versus 6.50%. Performance is illustrated by the growth of dollars chart below. The graph highlights the performance of \$1,000 invested in the KRS insurance portfolio (\$1,842), benchmark (\$1,877), and actuarial objective (\$2,129) over the past 10 years.

As the results show in the accompanying investment results table on page 88, the KRS insurance fund has struggled during all measured standard return ranges.



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

| Portfolio                           | 2004    | 2005    | 2006    | 2007    | 2008    | 2009    | 2010    | 2011    | 2012    | 2013    | 2014    |
|-------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Insurance Fund Growth               | \$1,000 | \$1,095 | \$1,230 | \$1,468 | \$1,353 | \$1,039 | \$1,200 | \$1,482 | \$1,456 | \$1,604 | \$1,842 |
| Performance Benchmark               | \$1,000 | \$1,087 | \$1,209 | \$1,440 | \$1,325 | \$1,018 | \$1,151 | \$1,461 | \$1,470 | \$1,632 | \$1,877 |
| Actuarial Assumed Rate<br>of Return | \$1,000 | \$1,083 | \$1,172 | \$1,263 | \$1,360 | \$1,466 | \$1,580 | \$1,702 | \$1,834 | \$1,976 | \$2,129 |



# U.S. Equity

For the fiscal year ending June 30, 2014, the KRS pension fund's U.S. equity portfolio posted a return of 24.87%, versus the benchmark return of 25.22%. The KRS insurance U.S. equity portfolio posted a return of 24.45%, underperforming the benchmark return by 0.77%.

Since inception performance remains solid; the pension's equity portfolio has generated an annualized return of 11.57% throughout its duration, while the benchmark posted an annualized annual return of 11.51%. The insurance fund returned 9.68% since inception, while the benchmark returned 9.45%.

The relative performance is best illustrated again by the growth of a dollar charts on following page. For the 10-year period ending June 30, 2014, the pension fund's chart below indicates that \$1,000 would have resulted in \$2,202 while the same \$1,000 invested in the benchmark would result in \$2,170. For the KRS insurance fund, ending June 30, 2014, a \$1,000 investment would be valued at \$2,153, compared to \$2,179 in the benchmark.

#### Return on U.S. Equity

| Portfolio                                       | Inception<br>Date | Fiscal Year | 3-Year | 5-Year | 10-Year | Inception |
|---|-------------------|-------------|--------|--------|---------|-----------|
| Pension Fund                                    | Jul-00            | 24.87%      | 15.67% | 18.80% | 8.20%   | 11.57%    |
| $\mathbf{v}$ Performance Benchmark <sup>1</sup> | -                 | 25.22%      | 16.46% | 19.40% | 8.28%   | 11.51%    |
| Insurance Fund                                  | Jul-00            | 24.45%      | 15.46% | 18.51% | 7.96%   | 9.68%     |
| ש Performance Benchmark <sup>1</sup>            | -                 | 25.22%      | 16.46% | 19.18% | 8.10%   | 9.45%     |
| Market Indices                                  |                   |             |        |        |         |           |
| Russell 1000 (Large Cap)                        | -                 | 25.35%      | 16.63% | 19.25% | 8.19%   | -         |
| Russell 2000 (Small Cap)                        | -                 | 23.64%      | 14.57% | 20.21% | 8.70%   | -         |
| Russell 3000 (Total Equity)                     | -                 | 25.22%      | 16.46% | 19.33% | 8.23%   | -         |
|   |                   |             |        |        |         |           |

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

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

| Company                | Shares    | Market Value  |
|------------------------|-----------|---------------|
| APPLE INC COM STK      | 631,530   | \$58,688,083  |
| EXXON MOBIL CORP COM   | 356,828   | \$35,925,443  |
| MICROSOFT CORP COM     | 627,282   | \$26,157,659  |
| JOHNSON & JOHNSON      | 246,621   | \$25,801,489  |
| WELLS FARGO & CO       | 436,027   | \$22,917,579  |
| GENERAL ELECTRIC CO    | 862,420   | \$22,664,398  |
| PFIZER INC COM         | 705,702   | \$20,945,235  |
| BERKSHIRE HATHAWAY INC | 163,290   | \$20,665,982  |
| JP MORGAN CHASE & CO.  | 351,773   | \$20,269,160  |
| VERIZON COMMUNICATIONS | 412,206   | \$20,169,240  |
| Total                  | 4,793,679 | \$274,204,269 |

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

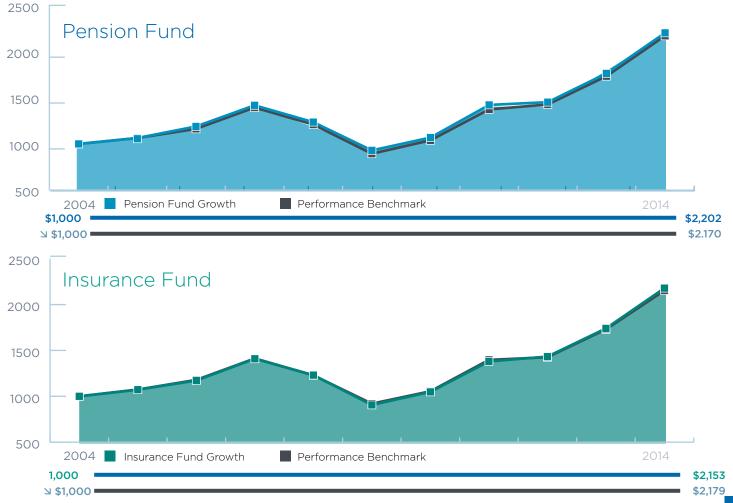
| Company                | Shares    | Market Value  |
|------------------------|-----------|---------------|
| APPLE INC COM STK      | 247,572   | \$23,006,866  |
| EXXON MOBIL CORP COM   | 151,211   | \$15,223,923  |
| MICROSOFT CORP COM     | 272,142   | \$11,348,321  |
| JOHNSON & JOHNSON      | 106,917   | \$11,185,657  |
| WELLS FARGO & CO       | 191,970   | \$10,089,943  |
| GENERAL ELECTRIC CO    | 353,092   | \$9,279,258   |
| CHEVRON CORP COM       | 68,552    | \$8,949,464   |
| JPMORGAN CHASE & CO    | 153,715   | \$8,857,058   |
| VERIZON COMMUNICATIONS | 178,830   | \$8,750,152   |
| BERKSHIRE HATHAWAY INC | 63,398    | \$8,023,651   |
| Total                  | 1,787,399 | \$114,714,293 |

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.



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

| U.S. Equity Portfolio<br>Growth of \$1,000 |         |         |         |         |         |       |         |         |         |         |         |
|--|---------|---------|---------|---------|---------|-------|---------|---------|---------|---------|---------|
| Portfolio                                  | 2004    | 2005    | 2006    | 2007    | 2008    | 2009  | 2010    | 2011    | 2012    | 2013    | 2014    |
| Pension Fund Growth                        | \$1,000 | \$1,063 | \$1,189 | \$1,418 | \$1,236 | \$930 | \$1,069 | \$1,422 | \$1,452 | \$1,763 | \$2,202 |
| ע Performance Benchmark                    | \$1,000 | \$1,064 | \$1,163 | \$1,394 | \$1,210 | \$894 | \$1,039 | \$1,374 | \$1,427 | \$1,733 | \$2,170 |
| Insurance Fund Growth                      | \$1,000 | \$1,074 | \$1,179 | \$1,413 | \$1,229 | \$920 | \$1,055 | \$1,397 | \$1,426 | \$1,730 | \$2,153 |
| Performance Benchmark ע                    | \$1,000 | \$1,072 | \$1,172 | \$1,409 | \$1,231 | \$906 | \$1,048 | \$1,380 | \$1,433 | \$1,740 | \$2,179 |



## International Equity

For the fiscal year, ending June 30, 2014, the KRS pension fund's international equity portfolio gained 21.07%, underperforming its benchmark by 1.20%. The KRS insurance international equity portfolio also trailed its benchmark, posting a return of 21.01% versus 22.27% during the same twelve month period.

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 outperformance versus the emerging markets.

International equity investors have experienced a volatile period of returns over the past several years, resulting in a chart that resembles a roller coaster (below). Over the past five years both funds have underperformed their respective benchmarks. The KRS Pension and Insurance funds have posted annualized returns for the period of 10.76% and 10.21% respectively, compared to respective benchmark returns of 11.73% and 11.36%. 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.



| Portfolio                                  | Inception<br>Date | Fiscal Year | 3-Year | 5-Year | 10-Year | Inception |
|--|-------------------|-------------|--------|--------|---------|-----------|
| Pension Fund                               | Jul-00            | 21.07%      | 5.18%  | 10.76% | 7.13%   | 3.05%     |
| ${f u}$ Performance Benchmark <sup>1</sup> | -                 | 22.27%      | 6.21%  | 11.73% | 7.40%   | 3.73%     |
| Insurance Fund                             | Apr-00            | 21.01%      | 4.99%  | 10.21% | 7.31%   | 3.06%     |
| ${f u}$ Performance Benchmark <sup>1</sup> | -                 | 22.27%      | 6.21%  | 11.36% | 7.03%   | 2.63%     |
| Market Indices                             |                   |             |        |        |         |           |
| MSCI ACWI Ex US                            | -                 | 22.27%      | 6.21%  | 11.59% | 8.22%   | -         |
| MSCI Emerging Markets                      | -                 | 14.68%      | -0.06% | 9.58%  | 12.30%  | -         |

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  |
|--------------------|------------|---------------|
| NOVARTIS AG        | 140,346    | \$12,708,371  |
| LLOYDS BANKING     | 9,531,992  | \$12,101,470  |
| ROCHE HLDGS AG     | 39,436     | \$11,762,316  |
| PRUDENTIAL PLC     | 446,377    | \$10,235,018  |
| GN STORE NORD DKK4 | 342,754    | \$9,819,589   |
| SYMRISE AG NPV     | 176,751    | \$9,630,336   |
| RECKITT BENCKISER  | 105,662    | \$9,213,975   |
| BG GROUP PLC ORD   | 432,299    | \$9,128,706   |
| INT'L CONSOLIDATED | 1,436,479  | \$9,100,086   |
| BAYER AG ORD NPV   | 63,092     | \$8,910,345   |
| Total              | 12,715,188 | \$102,610,212 |

#### Top 10 International Equity Holdings Insurance Fund

| Company            | Shares    | Market Value |
|--------------------|-----------|--------------|
| SANOFI             | 56,178    | \$5,967,152  |
| NOVARTIS AG        | 48,980    | \$4,435,153  |
| LLOYDS BANKING     | 3,224,676 | \$4,093,931  |
| ROCHE HLDGS AG     | 13,710    | \$4,089,191  |
| PRUDENTIAL PLC     | 151,150   | \$3,465,732  |
| GN STORE NORD DKK4 | 115,730   | \$3,315,559  |
| SYMRISE AG NPV     | 59,466    | \$3,240,024  |
| RECKITT BENCKISER  | 35,745    | \$3,117,048  |
| BG GROUP PLC ORD   | 146,930   | \$3,102,669  |
| INT'L CONSOLIDATED | 485,354   | \$3,074,715  |
| Total              | 4,337,919 | \$37,901,174 |

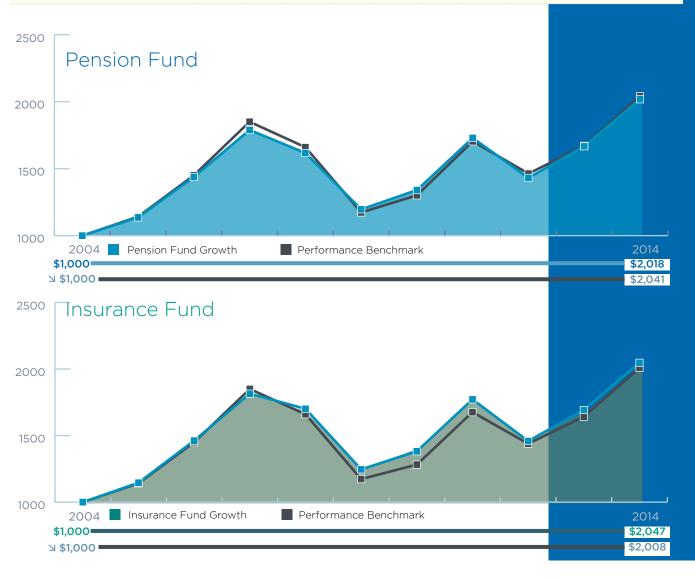


The following chart depicts the growth of \$1,000 invested in the KRS international equity portfolios and the blended benchmarks since the beginning of the 2004 fiscal year. For the KRS pension fund, ending June 30, 2014, \$1,000 would have resulted in \$2,018, while the same amount invested in the benchmark would have resulted in \$2,041. For the KRS insurance fund, ending June 30, 2014, \$1,000 would have grown to \$2,047, while an investment in the index would have been valued \$2,008.

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

| Portfolio                      | 2004    | 2005    | 2006    | 2007    | 2008    | 2009    | 2010    | 2011    | 2012    | 2013    | 2014    |
|--------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Pension Fund Growth            | \$1,000 | \$1,136 | \$1,438 | \$1,789 | \$1,617 | \$1,196 | \$1,340 | \$1,729 | \$1,431 | \$1.667 | \$2,018 |
| <b>צ</b> Performance Benchmark | \$1,000 | \$1,141 | \$1,450 | \$1,850 | \$1,660 | \$1,173 | \$1,301 | \$1,704 | \$1,463 | \$1,670 | \$2,041 |
| Insurance Fund Growth          | \$1,000 | \$1,146 | \$1,462 | \$1,815 | \$1,701 | \$1,246 | \$1,382 | \$1,772 | \$1,459 | \$1,692 | \$2,047 |
| Performance Benchmark ע        | \$1,000 | \$1,141 | \$1,450 | \$1,850 | \$1,660 | \$1,173 | \$1,282 | \$1,676 | \$1,439 | \$1,642 | \$2,008 |

a 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.



| Top 10 Fixed Income He<br>Pension Fund                             | oldings       |               | Top 10 Fixed Income Hol<br>Insurance Fund              | dings        |               |
|--|---------------|---------------|--|--------------|---------------|
| Company  | Par Value     | Market Value  | Company  | Par Value    | Market Value  |
| US TREASURY NOTE<br>DD 02/15/2014 2.75%<br>DUE 02-15-2024          | \$108,800,000 | \$111,273,459 | STONE HARBOR EMERGING                                  | \$4,280,481  | \$47,684,559  |
| AUSTRALIA GOVERNMENT<br>BOND 5.25% 03/15/2019                      | \$37,200,000  | \$38,619,884  | US TREASURY NOTE<br>01/31/2014 2.75% DUE 01/31/2021    | \$39,800,000 | \$40,704,813  |
| US TREAS NOTE 2.375%<br>DUE 01-15-2021 DD02/28/14                  | \$31,700,000  | \$31,571,235  | US TREASURY NOTE<br>01/31/2021 2.125% DD 01/31/2014    | \$21,500,000 | \$21,605,823  |
| AUSTRALIA GOVERNMENT<br>BOND 5.25% 03/15/2019                      | \$26,200,000  | \$26,531,357  | FNMA POOL #0AH5849 4.5%<br>2/01/41 DD 2/01/11          | \$17,058,013 | \$18,654,966  |
| US TREAS-CPI INFLAT 2.375%<br>01-15-2027 DD 01/15/07               | \$21,522,490  | \$26,410,441  | US TREAS-CPI INFLAT 2.375%<br>01-15-2027 DD 01/15/07   | \$10,108,870 | \$12,404,685  |
| UNITED STATES NOTE 2.5%<br>05-15-2024 DD 05/15/14                  | \$23,950,000  | \$23,916,326  | AUSTRALIA GOVERNMENT<br>BOND 5.25% 03/15/2019          | \$10,200,000 | \$10,589,323  |
| MORGAN ST REV REPO 0.15%<br>07/01/14 DD 06/30/14                   | \$23,100,000  | \$23,100,000  | BNP PARIBAS CAT 2 REPO 0.14%<br>07/01/14 DD 06/30/14   | \$9,600,000  | \$9,600,000   |
| ITALY BUONI POLIENNALI DEL<br>TES 5.5% 11/01/2022                  | \$13,200,000  | \$22,166,084  | ITALY BUONI POLIENNALI DEL<br>TES 5.5% 11/01/2022      | \$5,100,000  | \$8,564,169   |
| BRAZIL NOTAS DO TESOURO<br>NACION 10.0% 01/01/2021                 | \$20,638,000  | \$27,924,025  | SLOVENIA GOVERNMENT<br>INTERNATIO 4.75% 5/10/18        | \$7,700,000  | \$8,296,750   |
| LOOMIS SAYLES FULL<br>DISCRETION INSTITUTIONAL<br>SECURITIZED FUND | \$1,594,017   | \$18,426,832  | US TREASURY NOTE<br>09/31/2016 2.75% DUE<br>09/30/2011 | \$8,150,000  | \$8,228,957   |
| Total  | \$333,591,506 | \$341,220,095 | Total  | \$33,407,365 | \$186,334,046 |
|  | 1 1 1 5 1     |               | .,.  |              |               |

Note: The above table does not include mutual fund and commingled positions.



# Fixed Income

For the fiscal year, ending June 30, 2014, the KRS pension fund's fixed income portfolio returned 7.05%, outperforming its performance benchmark by 1.85%.

As the accompanying table indicates, both of the broad market indices, the Barclays Aggregate Index and the Barclays US Universal Index, posted moderate returns for the twelve month period ending June 30, 2014; however, the Barclays High Yield Index performed very well. The KRS insurance fixed income portfolio posted a 6.52% rate of return, which outpaced the index by 132 basis points.

Over the five year period, the pension fund has outpaced the benchmark by 174 basis points, while the insurance fund has added 69 basis points annually over its index. Over the ten year period, the pension fund has edged the benchmark by 0.31%, while the insurance fund has outperformed its benchmark by 43 basis points.

The chart on the following page shows the growth of \$1,000 invested in KRS fixed income portfolio over the past ten years. For the KRS pension fund, ending June 30, 2014, \$1,000 would have grown to \$1,708, while the same \$1,000 invested in the benchmark would have grown to \$1,662. For the KRS insurance fund, ending June 30, 2014, \$1,000 would have grown to \$1,858, more than the \$1,779 of the benchmark.

| Return on Fixed Income                          |                |             |        |        |         |           |
|---|----------------|-------------|--------|--------|---------|-----------|
| Portfolio                                       | Inception Date | Fiscal Year | 3-Year | 5-Year | 10-Year | Inception |
| Pension Fund                                    | Apr-84         | 7.05%       | 5.85%  | 7.16%  | 5.52%   | 8.04%     |
| ע Performance Benchmark <sup>1</sup>            | -              | 5.20%       | 4.22%  | 5.42%  | 5.21%   | 7.74%     |
| Insurance Fund                                  | Jul-00         | 6.52%       | 5.62%  | 6.57%  | 5.84%   | 6.92%     |
| $\mathbf{v}$ Performance Benchmark <sup>1</sup> | -              | 5.20%       | 4.22%  | 5.88%  | 5.41%   | 6.68%     |
| Market Indices                                  |                |             |        |        |         |           |
| BC Aggregate                                    | -              | 4.37%       | 3.66%  | 4.85%  | 4.93%   | -         |
| BC Corporate High Yield                         | -              | 11.73%      | 9.48%  | 13.98% | 9.05%   | -         |
| BC U.S. Universal                               | -              | 5.20%       | 4.17%  | 5.58%  | 5.27%   | -         |
|   |                |             |        |        |         |           |

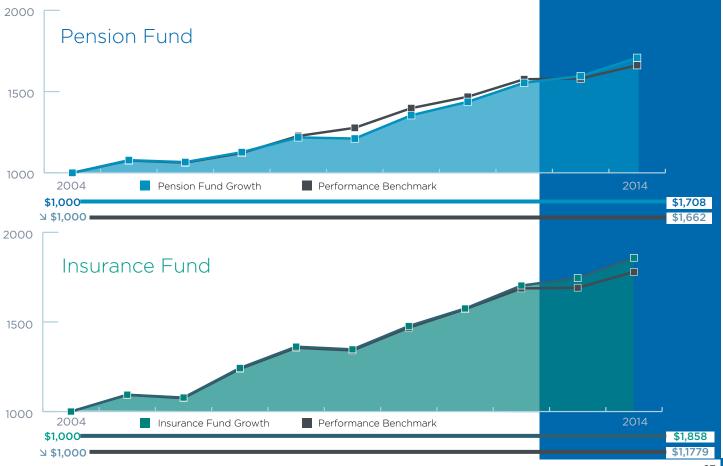
<sup>1</sup>Pension and Insurance benchmark is the Barclays US Universal; this became effective July 1, 2011.

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

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

| Portfolio               | 2004    | 2005    | 2006    | 2007    | 2008    | 2009    | 2010    | 2011    | 2012    | 2013    | 2014    |
|-------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Pension Fund Growth     | \$1,000 | \$1,078 | \$1,066 | \$1,127 | \$1,218 | \$1,211 | \$1,354 | \$1,437 | \$1,554 | \$1,595 | \$1,708 |
| ע Performance Benchmark | \$1,000 | \$1,076 | \$1,063 | \$1,122 | \$1,227 | \$1,277 | \$1,398 | \$1,468 | \$1,576 | \$1,580 | \$1,662 |
| Insurance Fund Growth   | \$1,000 | \$1094  | \$1,078 | \$1,243 | \$1,362 | \$1,347 | \$1,477 | \$1,575 | \$1,703 | \$1,745 | \$1,858 |
| ש Performance Benchmark | \$1,000 | \$1,093 | \$1,075 | \$1,238 | \$1,356 | \$1,341 | \$1,468 | \$1,571 | \$1,687 | \$1,691 | \$1,779 |

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, 2014, the KRS pension fund's private equity portfolio posted a return of 22.71%; the portfolio consists primarily of investments within many private equity limited partnerships.

The insurance private equity portfolio returned 22.07%. During the fiscal year it was decided that the short-term benchmark (1- & 3-year) would match the actual performance experienced by the portfolios; due to the difficulty in assessing short term returns. Performance is typically based on appraisals of a business' value, and managers are often slow to mark valuations up or down, which can distort relative performance against a public market benchmark when that index moves dramatically. A better indication of the health of the program would be the mid to longer-term time periods. This is because businesses have likely been sold and transacted at a true price (rather than estimate of value), thus providing a better performance measurement.

For the five years ending June 30, 2014, the pension fund's private equity portfolio trailed its benchmark by -3.02%. For the same five-year time period, the insurance fund's private equity portfolio has underperformed its benchmark by -2.48%. However, for the ten year period, the pension fund outperformed its benchmark by 0.80%, while the insurance fund has underperformed by -0.40%. Since its inception in October 1990, the pension portfolio has outpaced its benchmark by an annualized 97 basis points per year, while the insurance portfolio has underperformed its benchmark by an annualized 63 basis points since its July 2001 inception.

#### Return on Private Equity

| Portfolio               | Inception Date | Fiscal<br>Year | 3-Year | 5-Year | 10-Year | Inception |
|-------------------------|----------------|----------------|--------|--------|---------|-----------|
| Pension Fund            | Oct-90         | 22.71%         | 15.43% | 17.18% | 10.79%  | 11.39%    |
| ש Performance Benchmark | 1              | 22.71%         | 15.43% | 20.20% | 9.99%   | 10.42%    |
| Insurance Fund          | Jul-01         | 22.07%         | 14.60% | 17.88% | 8.95%   | 9.03%     |
| ש Performance Benchmark | 1              | 22.07%         | 14.60% | 20.36% | 9.35%   | 9.66%     |

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

# Real Estate

For the fiscal year ending June 30, 2014, the KRS pension fund's real estate portfolio gained 8.06%, trailing its benchmark returns of 12.74%.

The KRS insurance real estate portfolio also fell short of its benchmark, losing 567 basis points to the index. For the five years ending June 30, 2014, both the pension and insurance fund portfolios outperformed their benchmarks' return by 280 basis points.

| Return on Real Estate <sup>1</sup> |                |             |        |        |         |           |  |  |
|------------------------------------|----------------|-------------|--------|--------|---------|-----------|--|--|
| Portfolio                          | Inception Date | Fiscal Year | 3-Year | 5-Year | 10-Year | Inception |  |  |
| Pension Fund                       | Jul-84         | 8.06%       | 9.16%  | 9.11%  | 6.31%   | 5.66%     |  |  |
| ש Performance Benchmark            |                | 12.74%      | 11.99% | 6.31%  | 6.19%   | 6.01%     |  |  |
| Insurance Fund                     | May-09         | 7.07%       | 8.34%  | 9.11%  |         | 8.80%     |  |  |
| Performance Benchmark <sup>1</sup> |                | 12.74%      | 11.99% | 6.31%  |         | 3.07%     |  |  |

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





# <u>Absolute Return</u>

# For the fiscal year, ending June 30, 2014, the KRS pension fund's absolute return portfolio gained 8.46% versus its benchmark which earned 5.08%.

The KRS insurance absolute return portfolio also bested the benchmark, outperforming the index by 329 basis points, returning 8.37% for the period. For the three years ending June 30, 2014 the pension and insurance portfolios outperformed the benchmark by an annualized 4.32% and 4.24%, respectively. Since inception, the portfolio has provided steady returns, annualized at 5.82% for the pension portfolio and 5.67% for the insurance portfolio. The portfolio is comprised of three fund of funds, and five direct relationships.

#### **Return on Absolute Return**

| Portfolio                                       | Inception Date | Fiscal Year | 3-Year | 5-Year | 10-Year | Inception |
|---|----------------|-------------|--------|--------|---------|-----------|
| Pension Fund                                    | Apr-10         | 8.46%       | 7.03%  |        |         | 5.82%     |
| $\mathbf{v}$ Performance Benchmark <sup>1</sup> |                | 5.08%       | 2.71%  |        |         | 3.48%     |
| Insurance Fund                                  | Apr-10         | 8.37%       | 6.95%  |        |         | 5.67%     |
| ש Performance Benchmark <sup>1</sup>            |                | 5.08%       | 2.71%  |        |         | 3.48%     |
|   |                |             |        |        |         |           |

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

# Real Return

For the fiscal year ending June 30, 2014, the KRS pension fund's real return portfolio gained 8.99% versus its benchmark return of 5.67%.

The KRS insurance real return portfolio outpaced its index by 291 basis points, posting a return of 8.56% for the period. Over the past three years, the real return portfolios have outperformed the benchmark by 171 basis points in the pension fund and 120 basis points in the insurance fund.

| Return on Real Retu                             | Return on Real Return |             |        |        |         |           |  |  |  |  |
|---|-----------------------|-------------|--------|--------|---------|-----------|--|--|--|--|
| Portfolio                                       | Inception Date        | Fiscal Year | 3-Year | 5-Year | 10-Year | Inception |  |  |  |  |
| Pension Fund                                    | Jul-11                | 8.99%       | 6.62%  |        |         | 6.62%     |  |  |  |  |
| $\mathbf{v}$ Performance Benchmark <sup>1</sup> |                       | 5.67%       | 4.91%  |        |         | 4.91%     |  |  |  |  |
| Insurance Fund                                  | Jul-11                | 8.56%       | 6.10%  |        |         | 6.10%     |  |  |  |  |
| <b>צ</b> Performance Benchmark <sup>1</sup>     |                       | 5.65%       | 4.90%  |        |         | 4.90%     |  |  |  |  |
| <sup>1</sup> Pension and Insurance benchm       | ark is CPI + 300bp.   | s           |        |        |         |           |  |  |  |  |



| Top 10 Alternatives Asset Holdings<br>Pension Fund |               |                 | Top 10 Alternatives Asset Holdings<br>Insurance Fund |           |               |  |  |
|--|---------------|-----------------|--|-----------|---------------|--|--|
| Company  | SUB ASSET     | Market Value    | Company  | Par Value | Market Value  |  |  |
| PACIFIC ALT ASST MGT CO                            | ABS RET       | \$395,876,831   | INTERNAL TIPS  | REAL RET  | \$231,034,678 |  |  |
| BLACKSTONE ALT ASST MGT                            | ABS RET       | \$389,395,011   | BLACKSTONE ALT ASST MGT                              | ABS RET   | \$130,482,519 |  |  |
| PACIFIC INV MGT CO                                 | REAL RET      | \$379,951,824   | PACIFIC ALT ASST MGT CO                              | ABS RET   | \$126,933,486 |  |  |
| PRISMA CAPITAL PARTNERS                            | ABS RET       | \$373,572,915   | PRISMA CAPITAL PARTNERS                              | ABS RET   | \$126,522,395 |  |  |
| INTERNAL TIPS                                      | REAL<br>RET   | \$297,346,486   | PRIMA MORTGAGE                                       | REAL RET  | \$116,406,086 |  |  |
| WEAVER BARKDALE TIPS<br>DUFF, ACKEMAN & GOODRICH   | REAL RET      | \$286,283,789   | PACIFIC INV MGT CO                                   | REAL EST  | \$34,771,836  |  |  |
| DAG VENTURES                                       | PRIVATE<br>EQ | \$108,789,508   | HARRISON STREET                                      | REAL EST  | \$31,743,561  |  |  |
| TORTOISE CAPITAL                                   | REAL RET      | \$101,237,134   | TORTOISE CAPITAL                                     | REAL RET  | \$30,597,224  |  |  |
| H/2 CREDIT PARTNERS                                | REAL EST      | \$96,146,880    | H/2 CREDIT PARTNERS                                  | REAL EST  | \$27,361,565  |  |  |
| HARRIZON STREET                                    | REAL EST      | \$92,897,238    | MAGNETAR CAPITAL MTP                                 | REAL RET  | \$25,790,846  |  |  |
| Total  |               | \$2,521,497,615 | Total  |           | \$881,644,196 |  |  |

Note: The above table does not include mutual fund and commingled positions.



### Cash

For the fiscal year, ending June 30, 2014, the KRS pension fund's cash portfolio returned 0.61%, outpacing its benchmark, the Citi Group 3-month Treasury by 0.57%.

The KRS insurance cash portfolio also outperformed the index, posting a return of 0.22% 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, 2014, the pension fund portfolio has outperformed its custom benchmark by 0.50% 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 0.21% and 0.12%, respectively.

| Return on Cash                       |                |             |        |        |         |           |
|--------------------------------------|----------------|-------------|--------|--------|---------|-----------|
| Portfolio                            | Inception Date | Fiscal Year | 3-Year | 5-Year | 10-Year | Inception |
| Pension Fund                         | Jan-88         | 0.61%       | 0.38%  | 0.58%  | 2.12%   | 4.01%     |
| Performance Benchmark <sup>1</sup> ע |                | 0.04%       | 0.05%  | 0.08%  | 1.54%   | 3.55%     |
| Insurance Fund                       | Jul-92         | 0.22%       | 0.30%  | 0.29%  | 1.94%   | 3.00%     |
| ע Performance Benchmark <sup>1</sup> |                | 0.04%       | 0.05%  | 0.08%  | 1.54%   | 2.88%     |

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

## Additional Schedules & Required Supplemental Information

Following are additional schedules which indicate the Investment Advisors employed along with the assets each of the firms manages for the Systems, external investmentrelated expenses incurred, portfolio summaries for each of the five pension and insurance plans, and commissions paid by the Systems as of year ended June 30, 2014.

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

| Advisor   | Assets Under Management |
|---|-------------------------|
| Aberdeen Asset Management, Aberdeen, Scotland                     | 175,122                 |
| American Century Investments, Kansas City, Kansas                 | 197,558                 |
| AMERRA AG Fund II, New York, New York                             | 47,266                  |
| Arbor Investments II, Chicago, Illinois                           | 18,116                  |
| Arcano Capital, New York, New York                                | 18,445                  |
| Avenue Capital V, New York, New York                              | 41                      |
| Bay Hills Emerging Partners I, II, III, San Francisco, California | 117,148                 |
| BlackRock Global Investors, San Francisco, California             | 1,580,668               |
| Blackstone Alternative Asset Management, New York, New York       | 519,878                 |
| Blackstone Capital Partners V & VI, New York, New York            | 104,324                 |
| Conway MacKenzie Growth Partners I, Chicago, Illinois             | 13,629                  |
| Columbia Asset Management, Minneapolis, Minnesota                 | 220,904                 |
| Columbia Capital IV, Alexandria, Virginia                         | 34,911                  |
| Crestview Partners II, New York, New York                         | 69,935                  |
| CVC Capital Partners VI, London, England                          | 361                     |
| DivcoWest IV, San Francisco, California                           | 6,945                   |
| Doll Capital Management, Menlo Park, California                   | 12,684                  |
| Duff, Ackerman & Goodrich Ventures II, III, IV, V, Palo Alto, CA  | 207,578                 |
| Essex Woodland VIII, Palo Alto, California                        | 26,124                  |
| Franklin Templeton, New York, New York                            | 195,766                 |
| Geneva Capital Management, Milwaukee, Wisconsin                   | 303,644                 |
| Greenfield Acquisition Partners VI, Westport, Connecticut         | 54,353                  |
| GTCR Golder Rauner IX, Chicago, Illinois                          | 53,389                  |
| H/2 Core Real Estate Debt, Stamford, Connecticut                  | 7,178                   |
| H/2 Credit Partners, Stamford, Connecticut                        | 123,508                 |
| Harrison Street, Chicago, Illinois                                | 124,641                 |
| Harvest Partners V & VI, New York, New York                       | 58,233                  |
| HBK II, Dallas, Texas   | 20,945                  |
| Hellman & Friedman VI, New York, New York                         | 13,243                  |
| H.I.G BIO Venture II, Miami, Florida                              | 4,293                   |
| H.I.G. Capital Partners V, Miami, Florida                         | 763                     |
| H.I.G. Venture Partners II, Miami, Florida                        | 13,794                  |
| Horsley Bridge International V LLC, San Fransico, California      | 23,415                  |
| Institutional Venture Partners XI & XII, Menlo Park, California   | 29,590                  |
| Invesco, Atlanta, Georgia   | 227,882                 |
| -   |                         |



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

| Advisor  | Assets Under Management |
|--|-------------------------|
| JW Childs Equity III, Boston, Massachusetts                    | 4,501                   |
| Keyhaven Capital Partners, London, England                     | 10,969                  |
| Knighthead Capital, New York, New York                         | 21,338                  |
| Lazard Asset Management, New York, New York                    | 398,090                 |
| Leonard Green & Partners, L.P.,IV & VI, Los Angeles, CA        | 138,668                 |
| Levine Leichtman V, Los Angeles, California                    | 7,865                   |
| Loomis, Sayles & Company, Boston, Massachusetts                | 233,649                 |
| LSV Asset Management, Chicago, Illinois                        | 200,615                 |
| Luxor Capital, New York, New York                              | 20,184                  |
| Magnetar Capital MTP, Evanston, Illinois                       | 109,304                 |
| Manulife Financial, Boston, Massachusetts                      | 167,112                 |
| Matlin Patterson Global Opportunities I, II, III, New York, NY | 38,582                  |
| Merit Capital Partners IV, Chicago, Illinois                   | 11,378                  |
| Mesa West, Los Angeles, California                             | 22,015                  |
| Mesa West Core Lending, Los Angeles, California                | 76,435                  |
| MHR Insitituional Advisors III, New York, New York             | 3,001                   |
| Mill Road Capital, Greenwich, Connecticut                      | 28,577                  |
| MKP Opportunity, New York, New York                            | 19,825                  |
| New Mountain Partners II & III, New York, New York             | 44,382                  |
| NISA Investment Advisors, St. Louis, Missouri                  | 762,865                 |
| Northern Trust Global Investors, Chicago, Illinois             | 513,786                 |
| Oak Hill Partners II & III, New York, New York                 | 55,368                  |
| Oak Tree Opportunities VIIB, Los Angeles, California           | 1,647                   |
| Pacific Alternative Asset Management Company, Irvine, CA       | 522,810                 |
| PIMCO, New Port Beach, California                              | 1,629,822               |
| Pine River Capital, Minntonka, MN                              | 19,772                  |
| Prima Mortgage, New York, New York                             | 91,697                  |
| Prisma Capital Partners, New York, New York                    | 500,095                 |
| Pyramis Global Advisors, Boston, Massachusetts                 | 407,593                 |
| River Road Asset Management, Louisville, Kentucky              | 45,362                  |
| Riverside Capital VI, NewYork, New York                        | 5,113                   |
| Rubenstein PF II, Oakland, California                          | 6,837                   |
| Sasco Capital, Fairfield, Connecticut                          | 73,010                  |
| Shenkman Capital, Stamford, Connecticut                        | 157,361                 |
| Stockbridge, San Francisco, California                         | 52,414                  |
| Stone Harbor Investments, New York, New York                   | 166,194                 |
| Sun Capital Partners IV, Boca Raton, Florida                   | 2,079                   |
| Systematic Financial Management, Teaneck, New Jersey           | 287,576                 |
| Technology Crossover Ventures VI, Palo Alto, California        | 723                     |
| Tenaska Power Fund II, Omaha, Nebraska                         | 16,603                  |
|  | Continued next page     |



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

| Advisor  | Assets Under Management |
|--|-------------------------|
| The Boston Company, Boston, Massachusetts                  | 202,425                 |
| Tortoise Capital, Leawodd, Kansas                          | 131,834                 |
| Triton Fund IV, Frankfurt, Germany                         | 6,778                   |
| Vantagepoint Venture IV, San Bruno, California             | 28,168                  |
| Vista Equity Partners III & IV, San Francisco, California  | 81,876                  |
| Walton Street Real Estate Fund VI & VII, Chicago, Illinois | 59,140                  |
| Warburg Pincus IX & X, New York, New York                  | 65,378                  |
| Waterfall Investment, New York, New York                   | 184,811                 |
| Wayzata Investment Partners I, II, III, Wayzata, Minnesota | 64,370                  |
| Weaver Barksdale & Associates, Brentwood, Tennessee        | 286,284                 |
| Wellington Management Company, Boston, Massachusetts       | 181,569                 |
| Westfield Capital, Boston, Massachusetts                   | 174,974                 |
| Westwood Management, Dallas, Texas                         | 150,213                 |
| Total  | 13,119,311              |

#### CONSULTANTS

Master Custodian is **Bank of New York-Mellon**, from New York, New York. Investment consultants are **R.V. Kuhns & Associates** from Portland, Oregon; **Albourne America**, **LLC** from San Francisco, California; and **Pension Consulting Alliance** from Portland, Oregan; **ORG Real Property** from Cleveland, Ohio.

| Schedule of Commissions Paid |                       |                         |                 |  |  |  |
|------------------------------|-----------------------|-------------------------|-----------------|--|--|--|
| Asset                        | Total Shares          | <b>Commissions Paid</b> | Price per Share |  |  |  |
| U.S. Equities                | 69,619,982            | \$2,277,700             | \$0.033         |  |  |  |
|                              | Total Value of Trades | <b>Commissions Paid</b> | As a % of Trade |  |  |  |
| Non-U.S. Equities            | \$2,619,583,575       | \$3,727,340             | O.14%           |  |  |  |
| Total Commissions Paid       |                       | \$6,005,040             |                 |  |  |  |

#### External Investment Expenses (in Thousands)

| Pension Fund                 | Fees Paid | Share of Assets |
|------------------------------|-----------|-----------------|
| Portfolio Management Expense | \$45,077  | 0.3787%         |
| Custody Expense              | 1,273     | 0.0107%         |
| Total Pension Expense        | 46,350    | 0.3894%         |
| Insurance Fund               |           |                 |
| Portfolio Management Expense | 14,896    | 0.3618%         |
| Custody Expense              | 765       | 0.0186%         |
| Total Insurance Expense      | 15,661    | 0.3804%         |
| Contractual                  | 110       | 0.0026%         |
| Total Expenses               | \$62,363  | 0.3856%         |



### External Investment Expense - Asset Class/Type Breakdown

#### Pension Fund

|                                   | U.S.<br>Public | Non U.S.<br>Equity | Emerging<br>Market | Fixed<br>Income | Real<br>Return | Private<br>Equity | Real<br>estate | Absolute<br>Return | Cash     | Total      |
|-----------------------------------|----------------|--------------------|--------------------|-----------------|----------------|-------------------|----------------|--------------------|----------|------------|
| Investment<br>Advisory Fees       | 4,410,303      | 4,670,690          | 1,923,004          | 8,535,158       | 1,682,412      | 3,796,750         | 1,878,971      | 6,346,511          | -        | 33,243,799 |
| TMPG Charges                      |                |                    |                    | 18,195          |                |                   |                |                    |          | 18,195     |
| Stock Loan Fees                   | 216,900        | 115,533            |                    | 110,288         | 181,438        |                   |                |                    |          | 624,160    |
| Miscellaneous                     | 402.85         | 85,758             | 7.36               | 711             |                | 161               | 6,094          |                    |          | 93,134     |
| Taxes & Insurance                 |                | 1,222,128          |                    |                 |                |                   |                |                    |          | 1,222,128  |
| Interest Expense                  | 1.04           | 15.00              |                    |                 |                | (9,151)           | (51,786)       |                    |          | (60,921)   |
| Other                             | 9,347          | 106,778            |                    |                 |                | 3,138,857         | 2,713,595      |                    |          | 5,968,578  |
| Commission on<br>Future Contracts | 1,671          | 4,650              |                    | 27,084          |                |                   |                |                    |          | 33,405     |
| Commission on<br>Swaps Contracts  |                |                    |                    | 4,885           |                |                   |                |                    |          | 4,885      |
| Miscellaneous<br>Tax              |                |                    |                    | 479             |                |                   |                |                    |          | 479        |
| Custodial Fees                    |                |                    |                    |                 |                |                   |                |                    | 766,325  | 766,325    |
|                                   | 4,638,625      | 6,205,552          | 1,923,011          | 8,696,800       | 1,863,850      | 6,926,617         | 4,546,874      | 6,346,511          | 766,325  | 41,914,166 |
|                                   |                |                    |                    |                 |                | Financi           | al Statemer    | t Reported         | Expenses | 46,349,957 |
|                                   |                |                    |                    |                 |                |                   | Differ         | ence Due to        | Accurals | 4,435,791  |

#### Insurance Fund

|                                   |           |           |         |           |         | Financia  | al Statemer | nt Reported | Expenses | 15,660,650 |
|-----------------------------------|-----------|-----------|---------|-----------|---------|-----------|-------------|-------------|----------|------------|
|                                   | 1,847,925 | 2,312,147 | 788,645 | 2,803,127 | 527,066 | 2,134,701 | 1,293,371   | 2,040,250   | 458,880  | 14,206,112 |
| Custodial Fees                    |           |           |         |           |         |           |             |             | 458,880  | 458,880    |
| Commission on<br>Swaps Contracts  |           |           |         | 2,387     |         |           |             |             |          | 2,387      |
| Commission on<br>Future Contracts | 834       | 1,375     |         | 8,656     |         |           |             |             |          | 10,865     |
| Other                             | 3,346     | 36,337    |         |           |         | 695,243   | 800,063     |             |          | 1,534,989  |
| Interest Expense                  |           |           |         |           |         | (7,617)   | (22,781)    |             |          | (30,398)   |
| Taxes & Insurance                 |           | 404,057   |         |           |         |           |             |             |          | 404,057    |
| Miscellaneous                     | 20,275    | 25,224    |         | 2,311     |         |           |             |             |          | 47,810     |
| Stock Loan Fees                   | 69,672    | 33,354    |         | 33,173    | 64,542  |           |             |             |          | 200,742    |
| TMPG Charges                      |           |           |         | (280)     |         |           |             |             |          | (280)      |
| Investment<br>Advisory Fees       | 1,753,798 | 1,811,799 | 788,645 | 2,756,880 | 462,524 | 1,447,074 | 16,090      | 2,040,250   |          | 11,577,060 |

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

#### KERS

#### Pension Fund

|                     | Non Haza      | Hazardo                  | us            |                          |
|---------------------|---------------|--------------------------|---------------|--------------------------|
| Asset               | Market Value  | Share of<br>Market Value | Market Value  | Share of<br>Market Value |
| US Equity           | \$414,144,666 | 16.3%                    | \$117,890,274 | 21.1%                    |
| Non- US Equity      | 506,941,517   | 20%                      | 112,562,290   | 20.1%                    |
| Emerging Markets    | -             | 0%                       | 23,081,789    | 4.1%                     |
| Total Public Equity | \$921,086,183 | 36.3%                    | \$253,534,353 | 45.4%                    |
| Core                | 334,847,451   | 13.2%                    | 58,731,777    | 10.5%                    |
| Global              | 53,168,364    | 2.1%                     | 10,921,143    | 2.0%                     |
| High Yield          | 129,622,107   | 5.1%                     | 26,841,417    | 4.8%                     |
| Fixed Income        | \$517,637,922 | 20.4                     | \$96,494,337  | 17.3%                    |
| Real Return         | 258,878,223   | 10.2%                    | 55,453,468    | 9.9%                     |
| Private Equity      | 386,206,070   | 15.2%                    | 55,566,808    | 9.9%                     |
| Real Estate         | 88,306,039    | 3.5%                     | 23,378,481    | 4.2%                     |
| Absolute Return     | 284,325,621   | 11.2%                    | 58,310,920    | 10.4%                    |
| Cash                | 80,713,135    | 3.2%                     | 14,395,182    | 2.6%                     |
| Miscellaneous       | 1,770,883     | 0%                       | 1,516,893     | 0.3%                     |
| TOTAL PORTFOLIO     | 2,538,924,077 | 100.00%                  | \$558,650,442 | 100.00%                  |

#### Insurance Fund

| TOTAL PORTFOLIO     | \$632,414,863 | 100.0% | \$431,282,815 | 100%  |
|---------------------|---------------|--------|---------------|-------|
| Miscellaneous       | (27,445)      | O.%    | (21,596)      | 0.0%  |
| Cash                | 21,874,195    | 3.5%   | 7,617,934     | 1.8%  |
| Absolute Return     | 65,075,804    | 10.3%  | 43,029,533    | 10.0% |
| Real Estate         | 23,811,374    | 3.8%   | 17,801,928    | 4.1%  |
| Private Equity      | 34,496,043    | 5.5%   | 23,060,070    | 5.3%  |
| Real Return         | 60,810,691    | 9.6%   | 43,453,807    | 10.1% |
| Total Fixed Income  | \$126,154,010 | 19.9%  | \$87,577,934  | 20.3% |
| High Yield          | 129,622,107   | 4.8%   | 20,624,192    | 4.8%  |
| Global              | 53,168,364    | 2.4%   | 9,492,237     | 2.2%  |
| Core                | 334,847,451   | 12.7%  | 57,461,505    | 13.3% |
| Total Public Equity | \$300,220,192 | 47.5%  | \$208,763,204 | 48.4% |
| Emerging Markets    | 24,538,464    | 3.9%   | 16,984,733    | 3.9%  |
| Non- US Equity      | 123,749,799   | 19.6%  | 85,444,072    | 19.8% |
| US Equity           | 151,931,929   | 24.0%  | 106,334,399   | 24.7% |

"The displayed market values here within the Investment Section only include those investable assets held by each System, and therefore, do not include associated contributions, payables, and the Start Program software, which are included in those market values displayed in the Financial Section on pages 30 and 32."



### CERS

### Pension Fund

|                     | Non Hazardous   |                          |                 | Hazardous                |  |  |
|---------------------|-----------------|--------------------------|-----------------|--------------------------|--|--|
| Asset               | Market Value    | Share of<br>Market Value | Market Value    | Share of<br>Market Value |  |  |
| US Equity           | \$1,503,287,882 | 23.2%                    | \$480,352,490   | 23.2%                    |  |  |
| Non- US Equity      | 1,288,514,682   | 19.9%                    | 412,087,162     | 19.9%                    |  |  |
| Emerging Markets    | 268,364,989     | 4.1%                     | 86,007,572      | 4.1%                     |  |  |
| Total Public Equity | \$3,060,167,554 | 47.3%                    | \$978,447,225   | 47.2%                    |  |  |
| Core                | 697,295,066     | 10.8%                    | 243,901,131     | 11.8%                    |  |  |
| Global              | 127,826,109     | 2.0%                     | 40,019,124      | 1.9%                     |  |  |
| High Yield          | 326,579,773     | 5.0%                     | 102,654,156     | 4.9%                     |  |  |
| Fixed Income        | \$1,151,700,948 | 17.8%                    | \$386,574,410   | 18.6%                    |  |  |
| Real Return         | 650,974,211     | 10.1%                    | 207,895,299     | 10.0%                    |  |  |
| Private Equity      | 540,943,858     | 8.4%                     | 176,969,991     | 8.5%                     |  |  |
| Real Estate         | 256,445,295     | 4.0%                     | 81,179,575      | 3.9%                     |  |  |
| Absolute Return     | 656,344,356     | 10.1%                    | 208,449,852     | 10.0%                    |  |  |
| Cash                | 154,000,822     | 2.4%                     | 33,436,793      | 1.6%                     |  |  |
| Miscellaneous       | 1,406,318       | 0%                       | 1,743,210       | O.1%                     |  |  |
| TOTAL PORTFOLIO     | \$6,471,983,361 | 100.00%                  | \$2,074,696,355 | 100.00%                  |  |  |
| Insurance Fund      |                 |                          |                 |                          |  |  |
| US Equity           | 460,970,914     | 24.7%                    | 251,487,445     | 24.5%                    |  |  |
| Non- US Equity      | 372,020,686     | 19.9%                    | 204,142,931     | 19.9%                    |  |  |
| Emerging Markets    | 73,907,174      | 4.0%                     | 40,569,478      | 4.0%                     |  |  |
| Total Public Equity | \$906,898,774   | 48.6%                    | \$496,199,854   | 48.4%                    |  |  |
| Core                | 241,003,856     | 12.9%                    | 132,084,739     | 12.9%                    |  |  |
| Global              | 43,169,654      | 2.3%                     | 23,637,900      | 2.3%                     |  |  |
| High Yield          | 90,417,782      | 4.8%                     | 49,643,167      | 4.8%                     |  |  |
| Total Fixed Income  | \$374,591,293   | 20.1%                    | \$205,365,806   | 20.0%                    |  |  |
| Real Return         | 191,088,044     | 10.2%                    | 107,531,837     | 10.5%                    |  |  |
| Private Equity      | 106,441,573     | 5.7%                     | 59,203,509      | 5.8%                     |  |  |
| Real Estate         | 76,949,489      | 4.1%                     | 42,235,761      | 4.1%                     |  |  |
| Absolute Return     | 182,020,385     | 9.8%                     | 102,898,881     | 10.0%                    |  |  |
| Cash                | 27,128,204      | 1.5%                     | 11,703,370      | 1.1%                     |  |  |
| Miscellaneous       | (96,467)        | O.%                      | (53,558)        | 0.0%                     |  |  |
| TOTAL PORTFOLIO     | \$1,865,021,295 | 100.0%                   | \$1,025,085,460 | 100%                     |  |  |



### SPRS

#### Pension Fund

|                     | Non Ha        | zardous                  |
|---------------------|---------------|--------------------------|
| Asset               | Market Value  | Share of<br>Market Value |
| US Equity           | \$53,269,325  | 20.6%                    |
| Non- US Equity      | 51,984,913    | 20.1%                    |
| Emerging Markets    | 10,882,192    | 4.2%                     |
| Total Public Equity | \$116,136,430 | 45.0%                    |
| Core                | 28,804,910    | 11.2%                    |
| Global              | 5,267,194     | 2.0%                     |
| High Yield          | 12,405,674    | 4.8%                     |
| Fixed Income        | \$46,477,778  | 18.0%                    |
| Real Return         | 23,755,890    | 9.2%                     |
| Private Equity      | 25,890,859    | 10.0%                    |
| Real Estate         | 9,928,438     | 3.8%                     |
| Absolute Return     | 27,961,970    | 10.8%                    |
| Cash                | 7,739,962     | 3.0%                     |
| Miscellaneous       | 354,180       | O.1%                     |
| TOTAL PORTFOLIO     | \$258,245,507 | 100.00%                  |
| Insurance Fund      |               |                          |
| US Equity           | \$37,915,544  | 23.2%                    |
| Non- US Equity      | 32,567,621    | 19.9%                    |
| Emerging Markets    | 6,473,502     | 4.0%                     |
| Total Public Equity | \$76,956,668  | 47.0%                    |
| Core                | 21,646,686    | 13.2%                    |
| Global              | 4,393,955     | 2.7%                     |
| High Yield          | 7,744,758     | 4.7%                     |
| Total Fixed Income  | \$33,785,399  | 20.6%                    |
| Real Return         | 16,188,832    | 9.9%                     |
| Private Equity      | 10,659,641    | 6.5%                     |
| Real Estate         | 6,802,180     | 4.2%                     |
| Absolute Return     | 16,429,784    | 10.0%                    |
| Cash                | 2,806,684     | 1.7%                     |
| Miscellaneous       | (7,557)       | 0%                       |
| TOTAL PORTFOLIO     | \$163,621,631 | 100.00%                  |





Letters from Investment Consultants



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

Dear Board of Trustees,

# **Economic Review**

The fiscal year began in July 2013 with softer U.S. economic growth, fiscal uncertainty, and minimal inflationary pressure. Given that as the backdrop, the Federal Reserve surprised many market participants in September with its decision to delay tapering of its quantitative easing (QE) program. The headline unemployment rate declined from 7.6% to 7.3% during the quarter. Job growth was slow but steady, with a significant portion of the improvement due to reduced labor force participation. While real GDP growth remained low, stock prices traded near record highs intra-quarter and bond yields remained near historical lows. Despite the increasing threat of U.S. involvement in Syria, geopolitical events had limited market impact.

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

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

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

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

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

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

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

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



|                                 | June<br>2014 | June<br>2013 | Yr/<br>Yr   | 20<br>Year | 40<br>Year |
|---------------------------------|--------------|--------------|-------------|------------|------------|
| Capacity Utilization            | 79.10        | 77.80        |             | 78.80      | 79.70      |
| Unemployment Rate               | 6.10%        | 7.50%        | $\boxtimes$ | 6.00%      | 6.50%      |
| PMI – Manufacturing             | 55.30        | 52.50        | $\boxtimes$ | 52.10      | 51.70      |
| Baltic Dry Index - Shipping     | 850          | 1,171        | $\boxtimes$ | 1,619      | 1,440      |
| Real GDP YoY                    | 2.60%        | 1.80%        |             | 2.50%      | 2.70%      |
| Consumer Confidence (Conf. Bd.) | 85.18        | 82.13        | $\boxtimes$ | 93.42      | 90.85      |
| Breakeven Inflation - 10 Year   | 2.24         | 1.99         |             | 2.05       | 2.05       |
| CPI YoY (Headline)*             | 2.10%        | 1.80%        | $\boxtimes$ | 2.40%      | 4.20%      |
| CPI YoY (Core)*                 | 1.90%        | 1.60%        |             | 2.10%      | 4.20%      |
| PPI YoY                         | 2.70%        | 2.30%        | $\boxtimes$ | 2.40%      | 3.70%      |
| M2 YoY                          | 6.70%        | 6.90%        |             | 6.00%      | 6.60%      |
| Personal Savings                | 5.40%        | 5.30%        | $\boxtimes$ | 5.00%      | 7.30%      |
| Disposable Personal Income      | 0.50%        | 0.50%        | -           | 0.40%      | 0.50%      |
| Personal Consumption            |              |              |             |            |            |
| Expenditures                    | 1.60%        | 1.40%        | $\boxtimes$ | 1.90%      | 3.70%      |
| US Dollar Total Weighted Index  | 75.91        | 77.72        |             | 86.43      | 94.33      |
| WTI Crude Oil per Barrel        | \$105        | \$97         | $\boxtimes$ | \$52       | \$41       |
| Gold Spot per Oz**              | \$1,327      | \$1,235      |             | \$335      | \$342      |

\* CPI figures are cyclically adjusted. \*\* 20- and 40-year average Gold spot prices are adjusted for inflation.

# **Capital Markets Review**

# Global Equity

At the start of the fiscal year, the U.S. Equity market produced positive returns for the quarter led by high beta stocks, which outperformed low beta stocks. The preference for lower quality securities supported the view that investors were willing to pay more for companies with less stable financial profiles. As the first half of the fiscal year came to a close, markets began experiencing a decrease of intra-stock correlations (all stock not moving in tandem as much) and a greater role of fundamentals in determining stock prices (a plus for the KRS active managers).

The new year and beginning of the second half of the fiscal year saw U.S. stock returns falter but recover as market preferences shifted toward favoring high-dividend paying stocks during a period when interest rates fell from their highs achieved in 2013. This change hurt some active managers' bias toward stocks with high-dividend growth potential rather than those with high current payouts in preparation for rising rates. Active managers continued to struggle relative to their respective indexes through the end of the fiscal year despite posting strong absolute returns.

Outside of the U.S., despite increased international market volatility, the first half of the fiscal year ended in double digits for developed markets and single digits for emerging markets, which also lagged the U.S. equity market. Investors shifted away from those areas of the markets that have been perceived as "safe" or "defensive" and moved into more economically sensitive areas of the market. The second half of the fiscal year began with weaker performance in developed markets and negative results within the emerging markets. Stocks sold off in January because of slowing growth and economic concerns. The main drivers were a surprise contraction in China's manufacturing activity along with eased controls on dollar purchases in Argentina following a devaluation of the currency.

Both developed and emerging markets generated strong absolute returns in last fiscal quarter. Emerging markets outperformed domestic and developed international markets. Initially, Russia and surrounding markets weighed heavily on emerging markets as turmoil in Ukraine persisted. However, concerns dissipated, and Russian stocks responded with a greater than 10% return in May. India equities generated double digit returns due to expected economic and social reforms resulting from the election of Prime Minister Narendra Modi.



# Global Fixed Income

The fixed income market performance was solid across the board for the fiscal year ending June 30, 2014. The appetite for yield was prevalent as Convertibles and U.S. Caa Credit posted the highest returns across the global fixed income sector for the second year in a row. After a difficult end to the previous fiscal year, fixed income markets regained lost ground during the first fiscal quarter, although not without interest rate volatility caused by the Fed's announcement to continue purchasing \$40 billion per month of MBS under the QE program. However, yields continued to rise through the end of the first half of the fiscal year as investors looked to exit ahead of the Fed's tapering of QE purchases. In a search for greater yielding securities, demand was high for sectors like high yield and bank loans.

In the developed markets, real policy rates remained low across the globe. Japan kept their government bond yields under 1% and the European Central Bank reduced interest rates from 50 basis points to 25 basis points. Both hard currency and local currency emerging market debt had a difficult first half of the fiscal year after selling off drastically because of the "taper tantrum."

During the third fiscal quarter and start of 2014, the Fed began tapering the QE program. The Treasury yield curve significantly flattened (benefiting longer maturity securities) and credits gained favor and earned strong returns as investors pushed further out the risk spectrum. Turning abroad, hard currency EMD outperformed local currency EMD following heightened currency volatility early in the quarter.

# Alternatives

Within hedge funds, long-biased long/short strategies, both equity and fixed income, were among the bestperforming strategies, driven mostly by strong global equity markets and tightening spreads. Midway through the first half of the fiscal year, some hedge funds protected assets by increasing their hedges and reducing net exposures given uncertainty (and volatile markets) surrounding a potential shutdown of the U.S. government and debt ceiling debate.

The second half of the fiscal year offered hedge funds an opportunity to demonstrate their role in pension plans with impressive downside protection relative to equity markets early in 2014 and a February rally in most risk assets providing a tailwind. Fundamental analysis proved profitable while macro, discretionary, and systematic strategies lagged other strategies amid trend reversals. Short biased strategies were not only the worst performers but also the only broad strategy to post negative returns.

# Real Return

The fiscal year experienced a muted inflationary environment, which challenged many strategies heavily reliant upon higher inflation. Having such strategies typically dragged on total portfolio returns, but stand ready to protect assets when inflation starts to rise. A brief quarter of positive returns in the first fiscal quarter gave way to negative returns broadly distributed among various strategies. While resource equities and floating rate bonds fared relatively well, precious metals and TIPS did not.

The second half of the fiscal year yielded stronger results despite the continued low expectations for inflation at least through the end of the fiscal year. It appeared the global monetary stimulation was not effective enough to move inflation in any meaningful way. TIPS, REITs, and MLPs performed well, but commodities and natural resources produced mixed results.

# Real Estate

Investor appetite for risk positively affected the core (public) and non-core (private) real estate market, especially commercial property that was boosted by an ability to attract and raise capital in the secondary markets. The office market expansion has been driven by private sector job growth, particularly in areas with heavy concentrations of technology and energy companies. According to CBRE, 45 of 63 of the largest regional markets have experienced declines in office and industrial vacancy for 16 quarters in a row.



The following table summarizes the returns earned by the major markets for the trailing oneyear period ending June 30, 2014:

| Index                     | Description                    | Return |
|---------------------------|--------------------------------|--------|
| S&P 500                   | Large Cap U.S. Equity          | 24.61  |
| R Mid Cap                 | Mid Cap U.S. Equity            | 26.85  |
| R 2000                    | Small Cap U.S. Equity          | 23.64  |
| MSCI EAFE (Gross)         | Large Cap Intl Equity          | 24.09  |
| MSCI EAFE SC (Gross)      | Small Cap Intl Equity          | 29.48  |
| MSCI Emg Mkts (Gross)     | Emerging Mkts Equity           | 14.68  |
| Barclays US Agg Bond      | U.S. Invmt Grade Bonds         | 4.38   |
| Barclays US Trsy          | U.S. Treasury Bonds            | 2.04   |
| Barclays US Trsy: US TIPS | U.S. TIPS                      | 4.44   |
| Barclays US Corp: Hi Yld  | U.S. High Yield Bonds          | 11.73  |
| Wilshire US REIT          | U.S. Real Estate Inv Trusts    | 13.54  |
| NCREIF ODCE (Gross)       | U.S. Open End Core Real Estate | 12.75  |
| HFRI FOF Diversified      | Absolute Return                | 7.54   |
| BofA ML 3 Mo US T-Bill    | U.S. Cash Equivalents          | 0.06   |

One-Year Trailing Asset Class Performance As of June 30, 2014

# **Asset Allocation Review**

As is customary, the Board reviewed the asset allocation for each of the pension and insurance plans and concluded that any consideration for changes should originate from an asset liability study. The last study was completed in 2009. Since then, plan demographic and actuarial assumptions have changed, the actuary completed a five-year experience study, and contributions into the Plans have improved. Furthermore, there has been significant governmental influence on capital markets in an attempt to stimulate economic growth around the world to recover from the Great Recession of 2008. Such unprecedented monetary stimulus and artificial depression of interest rates globally have not only affected current valuations, but also influence expectations when governments will eventually withdraw from capital markets.

A comprehensive asset liability study, as required by the Board within the Investment Policy Statement every five years, informs the Board on how to structure the investments of each plan based on each plan's projected liabilities and forecasted net cash flows using certain actuarial assumptions. The Board prudently balances the need for investment growth with the need for liquidity to structure the asset allocation of each plan, and expects to review the asset liability study and approve asset allocation targets during fiscal year 2014-2015.

# **Pension Plan Review**

The combined market value of the Kentucky Retirement System ("System") Pension Plan assets (collectively called hereafter, "The Fund") increased from \$11.0 billion on June 30, 2013 to \$11.9 billion on June 30, 2014. The Fund's investments collectively returned 15.5%, net of fees1, for the fiscal year and compared to the 14.9% return earned by its target allocation benchmark, the Fund outperformed by 0.6%. The Fund's three- and five-year annualized returns of 8.6% and 12.0%, respectively, closely matched and outperformed the target allocation benchmark returns of 8.8% and 11.9%, respectively, over the same time periods. The current actuarial assumed rate of return is 7.75%, which represents the Fund's long-term return goal. Over the longer term, the Fund has exceeded this important funding target.



The System's 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 System also invests in real return strategies, real estate, absolute return strategies, and private equity. The Board aggressively negotiates fees on all investments. The table below shows aggregate actual and target allocations.

| Remarky Remember by stems remain rans research modulor vor ranget, modulor |                   |                |                    |  |  |  |
|--|-------------------|----------------|--------------------|--|--|--|
|  | Market Value (\$) | Allocation (%) | Pension Target (%) |  |  |  |
| U.S. Equity  | 2,568,944,638     | 21.6           | 20.5               |  |  |  |
| Non-U.S. Equity  | 2,372,090,567     | 19.9           | 20.0               |  |  |  |
| Emg. Markets Equity  | 388,336,543       | 3.3            | 2.9                |  |  |  |
| Fixed Income   | 2,198,885,388     | 18.5           | 19.3               |  |  |  |
| Real Return  | 1,196,957,093     | 10.1           | 10.0               |  |  |  |
| Real Estate  | 459,237,829       | 3.9            | 4.5                |  |  |  |
| Absolute Return  | 1,235,392,719     | 10.4           | 10.0               |  |  |  |
| Private Equity   | 1,185,577,588     | 10.0           | 10.0               |  |  |  |
| Cash Equivalent  | 290,285,893       | 2.4            | 2.8                |  |  |  |
| Other  | 6,791,484         | 0.1            | -                  |  |  |  |
| Total  | 11,902,499,742    | 100.0          | 100.0              |  |  |  |

Kentucky Retirement Systems Pension Plans Asset Allocation vs. Target Allocation

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

# **Insurance Plan Review**

The combined market value of the Kentucky Retirement System Insurance Plan assets increased from \$3.5 billion on June 30, 2013 to \$4.1 billion on June 30, 2014. The Fund's investments returned 14.9% for the fiscal year, underperforming the target allocation benchmark of 15.0% by 0.1%. The Fund's three-year annualized return of 7.5% trailed the target allocation benchmark of 8.7%, and the five-year annualized return of 12.1% fell short of its benchmark's return of 13.0% by -0.9%. The current actuarial assumed rate of return is 7.75%, which represents the Fund's long-term return goal. Over the longer term, the Fund has exceeded this important funding target.

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

|                     | Market Value (\$) | Allocation (%) | Insurance Target (%) |
|---------------------|-------------------|----------------|----------------------|
| U.S. Equity         | 1,008,640,233     | 24.5           | 20.0                 |
| Non-U.S. Equity     | 817,925,113       | 19.9           | 20.0                 |
| Emg. Markets Equity | 162,473,351       | 3.9            | 4.0                  |
| Fixed Income        | 827,474,441       | 20.1           | 20.0                 |
| Real Return         | 419,073,211       | 10.2           | 10.0                 |
| Real Estate         | 167,600,732       | 4.1            | 5.0                  |
| Absolute Return     | 409,454,386       | 9.9            | 10.0                 |
| Private Equity      | 233,860,836       | 5.7            | 10.0                 |
| Cash Equivalent     | 71,230,429        | 1.7            | 1.0                  |
| Total               | 4,117,426,006     | 100.0          | 100.0                |



The current deviations of each plan are within an allowable and acceptable range. The allocations across plans differ based on plan-specific liquidity requirements. For less liquid asset classes (private equity), it may take years before the current allocation is in line with the target allocation.

# **Investment Portfolio Review**

# **Pension Plan**

The domestic equity portfolio remained relatively unchanged over the fiscal year and performed well on an absolute basis but trailed the Russell 3000 Index by 35 basis points (24.9% versus 25.2%).

Although there were no changes to the non-U.S. portfolio during the fiscal year, work began during the fiscal year to restructure the non-U.S. portfolio by expanding mandates to include both developed and emerging market securities (diversified "core" strategies) and repositioning current managers in addition to hiring new managers with more concentrated strategies to "satellite" or complement the core strategies. The implementation occurred after the end of the fiscal year. For the fiscal year, the non-U.S. equity portfolio posted a 21.1%, which trailed the MSCI All Country World Ex U.S. Index return of 22.3% by 1.2%.

The dedicated emerging market portfolio also trailed the benchmark return of the MSCI Emerging Markets Index by 1.0% (13.7% versus 14.7%). There were no changes to the portfolio during the fiscal year.

The global fixed income portfolio remained unchanged over the fiscal year and outperformed the Barclays Universal Bond Index by 1.8% (7.0% versus 5.2%).

The growing allocation to the real return portfolio consists of Treasury Inflation Protected Securities (TIPS), a diversified real return fund, energy-related investments, and an agricultural fund recently added at the beginning of the fiscal year. Having hired a dedicated consultant focused on real assets, the plan is to continue building a portfolio diversified across several strategies that, when combined, offers inflation protection and capital appreciation. During the fiscal year, the real return portfolio earned a 9.0% return, which outperformed its custom benchmark that incorporates the various strategies (5.7%) by 3.3%.

The real estate portfolio continually evolves as new deals are sourced and funded in a prudent manner. Because many of the real estate funds are closed-end funds with the ability to exit after several years, it is more appropriate to measure the returns over periods longer than a 12-month period. While the real estate portfolio's fiscal year return lagged the benchmark, the NCREIF ODCE Index (8.1% versus 12.7%), it does exceed the benchmark by 2.8% over the trailing five-year period with a return of 9.1% versus 6.3%.

The absolute return portfolio was originally developed with fund-of-hedge funds to gain immediate exposure to the space. During the fiscal year, the fund-of-hedge funds have served as sources of capital to fund prudently selected and well negotiated direct hedge fund investments. The migration to direct strategies should continue into the future as opportunities best suited for the Fund become available. During the fiscal year, the absolute return portfolio earned an 8.5% return, which outperformed the HFRI Fund of Funds Diversified Index (5.1%) by 3.4%.

The private equity portfolio continually evolves as new deals are sourced and funded in a prudent manner. Because the private equity funds are closed-end funds with the ability to exit after several years, it is more appropriate to



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

measure the returns over periods longer than a 12-month period. There are two benchmarks used to measure the success of the private equity portfolio. The first is a shorter-term custom benchmark, which matches the return of private equity portfolio (22.7%) over the fiscal year. Over a five-year period, the private equity portfolio earned a strong absolute return of 17.2%, but lagged its second benchmark, the Russell 3000 Index + 4%, by 3.0%.

The cash and equivalents held in the portfolio is not expected to add significant value to the portfolio. Rather, it is expected to maintain the market value of the assets held in cash with a return that keeps pace with 3-month Treasury Bills. For the fiscal year, the cash equivalents portfolio earned 0.6% relative to the "cash" benchmark of 3-month Treasury Bills Index's return of 0.0%.

# **Insurance** Plan

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

# **Board Initiatives**

As previously mentioned, the Board continues to review the effectiveness of the approved asset allocation to meet the assumed rates of returns for the pension and insurance plans. To better align the liabilities and net cash flows of the pension and insurance plans with the investment asset allocation, the Board requested that the general consultant RVK, Inc. complete an asset liability study for all plans before the close of the next fiscal year. The study should either confirm the current allocations or drive a decision to implement adjustments based on the cash flow demands of each portfolio within each plan.

Research, selection, and implementation of investments within hedge funds 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.

While the Fed has indicated current forecasts of economic improvements in the U.S. could lead to raising interests rates, the global fixed income portfolio has adaptive strategies in place to mitigate the negative effects of such an event. Furthermore, the Board plans to reevaluate the fixed income portfolio's structure in the next fiscal year to position the portfolio to benefit from a higher interest rate environment.



# Oversight

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

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

# Summary

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

Sincerely

Rebecca Gratsinger Chief Executive Officer, Principal RVK, Inc.



655 Montgomery Street, Suite 1910 San Francisco, CA 94111 • Tel +1 415 489 7200 105 Rowayton Avenue Norwalk, CT 06853 • Tel +1 203 299 4400 • www.albourne.com

### Real Return Discussion

The Real Return portfolio has recently undergone a policy shift that has resulted in the addition of Real Estate as part of the overall strategic allocation. This decision was agreed upon and implemented after the departure of the former CIO and a restructuring of staff responsibilities. It should be noted that this is not an uncommon approach for many institutional plans.

Due to the complex nature of the KRS plan, liquidity has been a major consideration with respect to the construction of the portfolio. Manager selection has focused on finding strategies which feature intermediate duration and high cash flow potential. We continue to source opportunities with strong downside protection, thus the majority of strategies are considered conservative in nature with characteristics of strong asset protection. While keeping the objective of inflation protection and risk reduction whilst maintaining a suitable liquidity profile intact, the portfolio has continued to evolve with the addition of three strategies in the previous reporting year. The strategies continue to build on the existing real return exposure and continue to provide diversification away from the core holdings in TIPS. They are also expected to provide implied optionality for inflation participation. Allocations have been added to Timber, Mining (Debt), and Royalties to complement the existing exposure to Agriculture and Energy. The portfolio is performing in line with expectations considering its vintage, with capital drawn in strategies from the previous year and the beginnings of an emergence from the shallow "J curves" typical of new programs. The most recent allocations in the current reporting year have yet to deploy capital in a meaningful manner; hence we cannot ascertain performance expectations. Earlier allocations, including TIPS in particular, have improved from the interest rate dislocation of 2013 and are showing moderate to strong performance relative to expectations.

#### Market and Real Asset comments\_

Global economic conditions continue to improve, particularly in the US, but global instability is proving to be a threat that has weighed heavily on commodities such as metals and energy. Recent global events such as the crisis in the Ukraine, instability in the Middle East and the potential of the growing terrorist threat have made traders overly cautious across the entire commodity spectrum. Energy prices have generally trended downward largely driven by increased US production but also due to low forecasted economic growth globally. The mining sector is continually being pressured although it appears to have stabilized from the poor conditions of 2012. Recovery in Europe is proving to be more of a challenge and political events do not seem to be assisting. The recent shift to monetary policy suggests that growth may have stalled relative to the expectations of 2013. We anticipate the global influence on monetary inflation to be negligible over the short term due to both low growth rates in economic activity and the global instability mentioned above. However, we do 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 thus our strategy selection will remain conservative and focus on strategies that are more likely to participate in an optional format to unanticipated inflation.

The process of portfolio construction has involved in-depth analysis by staff, in conjunction with Albourne, and extensive due diligence including site visits with a wide array of managers. By focusing on income generating strategies, the portfolio has successfully navigated the most recent turnultuous environment yet we have continued to improve diversification and have added strategies that are likely to participate in economic growth whilst maintaining strong downside protection and asset stability. Liquidity considerations will continue to be emphasized over the short term and we will continue to source opportunities that focus on inflation linked income characteristics and inflation protection through participation.



### Absolute Return discussion

Now in its second fiscal year, the Absolute Return portfolio is steadily growing its number of direct manager strategies and, consequently, its diversification and return potential.

During the fiscal year, the KRS investment staff presented several managers for the Investment Committee's consideration and approval. This process involved in-depth analysis by staff, research and analysis by Albourne, site visits, triangulating the research with the portfolio's existing fund-offund managers, general consultants and other professional resources. A broad and diverse field of fund candidates was evaluated before winnowing the group to the final presentations. These managers were selected in order to avoid disproportionate over- or under-weighting in specific strategies during the transitional investment process, scheduled to occur over a multi-year time frame.

Ultimately, the portfolio will consist of direct fund investments, reducing the reliance on fund-of-fund managers. The portfolio will benefit from lower fees, increased transparency, more flexibility in committing and/or redeeming from investments, increased return potential, and risk mitigation.

#### Market and Hedge Fund Comments

This fiscal year was punctuated by many events which individually had an impact on the market environment on a month by month basis; the following commentary is therefore designed to be a discussion of each month during the year.

After a tumultuous June, July 2013 provided some respite with talk of central banks keeping rates lower for longer. The broad equity markets rallied during the month on generally positive economic data and were encouraged by US Federal Reserve Chairman Ben Bernanke's confirmation that the withdrawal of quantitative easing was not on a "preset course." Even Detroit's municipal bond default did not impact bond markets negatively. The Emerging Markets saw some relief, however, fears of China's slow-down weighed on the markets, in addition to country specific issues. The US dollar started strongly, but slid against a basket of other currencies later in the month. It was a good month for the majority of hedge fund strategies; the higher beta equity strategies were up however, both systematic and discretionary Macro strategies suffered.

Going into August 2013 it looked like the broad market rally might continue. European economic data started to look mildly positive. However, concerns that the Federal Reserve might be scaling back its monthly asset purchases created a weakness and provided a turning point in the market. Debate as to who will take over the US Federal Reserve's chair, a sell-off in the Emerging Market currencies, equities and bonds in addition to heightened tensions in the Middle East made August a poor month for risk assets. The prospect of the end of the flood of global liquidity influenced investor confidence, and commodities were the only major area to be positive for the month. August was generally not a great month for most hedge fund strategies either. Dispersion ranges varied significantly by strategy as did average returns. Relative Value strategies were on the strong end of the return spectrum, while systematic strategies such as CTAs and Quantitative Equity Market Neutral were at the weak end. Global macro and multi-strategy funds also had a difficult month.

After a poor August, risk assets performed well in **September 2013** in a month where tapering, or rather the lack thereof, was the key theme; the extension of the quantitative easing programme coupled with a decline in Middle East tensions led to oil prices dropping and markets performing well. Equity markets were positive across the globe with the Emerging Markets leading the way and Japan leading the developed markets. Credit markets mirrored the rises in equity while commodities were the one area of the market that did suffer in September. Most hedge funds had a strong month. That said, September was a challenging environment for the majority of Global Macro managers to navigate as they were generally surprised by the US Federal Reserve's decision to delay tapering. CTAs also continued to struggle and commodity strategies were down on average.



October 2013 was dominated by the shutdown of the US government following the failure to agree on a new budget. Although some risk assets struggled at the beginning of the month, the markets were surprisingly resilient and the mid-month resolution sprouted an equity market rally. The MSCI World, FTSE 100 and S&P 500 all ended positively for the month, and the Emerging Markets and European peripheries also managed to participate in the rally. In contrast, Asia performed worse: Japan's growth in exports fell and China was hurt by its large holding of US Treasury bonds. Government bond yields broadly declined during the month and commodities continued their poor year with only Silver and Brent oil posting any significant positive returns. It was a good month for hedge funds with most strategies in positive territory. Equity Long/Short came out on top whilst limited risk exposure for Global Macro prompted a cautious approach and muted returns.

**November 2013** was predominantly a good month for the markets. Developed equity markets continued to rally and the Japanese Nikkei reached a six year high. Strong US GDP and job data led to an increase in Treasury yields. In Europe, the ECB cut interest rates causing the Euro to fall versus the Dollar and a rally in European stocks. The Emerging Markets initially plummeted in the first half of the month but had some respite following US Federal Reserve Chair Janet Yellen's dovish testimony supporting loose monetary policy. However, this proved to be only a temporary relief and the markets fell a second time as the end of the month approached. Commodities once again struggled: precious metals were hit the hardest with gold reaching a four month low. November was a strong month in general for hedge funds. CTAs performed well: aided by their exposure to Japan, and Global Macro managers reversed a cautious approach to take advantage of the steepening of the developed market yield curve. Emerging Market equities and fixed income proved to be challenging, though Discretionary Commodities struggled the most; they were severely caught out by the high WTI/Brent spread.

**December 2013** was a strong month to end the year, marked largely by the decision from the US Federal Reserve's Open Market Committee to start tapering and the subsequent Developed Market equity rally. However, the Emerging Markets did not react to the tapering well and credit concerns caused China's markets to weaken further. Developed Market bond yields increased significantly during the month, notably US 5 year yields. The start of the month brought about a 5 year high for the GBP while the US Dollar also strengthened against most currencies. December marked the end of an all around poor year for commodities with the exception of oil which was up 6.1%. After a 12 year streak of annual gains, gold ended the year down and similarly corn plummeted this year after a 3 year boom. Hedge funds finished the year strong with most strategies posting positive returns for the month. Asia Pacific Equity Long/Short was the top performing strategy and Multi-Strategy managers finished the year on a high with few negative numbers seen throughout.

After the highs of December, January 2014 proved to be a jittery and influential month, with risk assets selling off sharply. A combination of concerns over US interest rate rises, soft economic data, continued tapering and specific country events saw sentiment turn negative with the Emerging Markets feeling a wave of concern. This triggered a scramble to defend Emerging Market currencies and in turn a flurry of unsuccessful interest rate and policy reactions. There was significant divergence between hedge fund strategies: Multi-strategy, fixed income, fundamental equity market neutral and developed equity had a strong start to the year. On the other hand, Global Macro and CTAs suffered from the significant sell off, increased market volatility and multiple market reversals.

February 2014 marked a broad market recovery. In particular, equities rallied following the waiver of the US debt ceiling for another year and commodities had their best month since October 2011, helped mostly by coffee. Increasing tension in Ukraine prompted a downgrade in credit rating and a sharp fall in their currency versus the dollar. Similarly, China witnessed the steepest dive in currency versus the dollar since 2005, caused by an increase in negative credit stories. Despite some mixed performances for both Global Macro and CTAs, it was a generally positive month for most hedge fund strategies, especially for Equity Long Short.



In March 2014, continued negative sentiment in China and mounting tensions in Ukraine halted February's rally. After positive jobs data in the US, 10 year Treasury yields saw their largest weekly rise of the year and the US Dollar rallied, marking a strong month for US bonds and currency. Following the confirmation that the US Federal Reserve will continue to taper by another \$10bn, a surprise came in the form of continued strong performances in the Emerging Markets with Brazil and India leading the charge. March proved to be a difficult month for most hedge fund strategies with only Relative Value Credit and Fixed Income avoiding losses on average. In contrast to February, Equity Long Short across all regions had the most challenging month.

April 2014 was a mixed month for both the markets and hedge fund strategies. Natural gas led the recovery in commodities from their halt in performance last month. Equities saw substantial volatility throughout the month: a poor start was the result of a reversal in momentum caused primarily by the technology sector; however a pick-up in M&A activity brought about a mixed recovery towards the end of the month. The crisis in the Ukraine escalated, causing the Russian Ruble and the Ukrainian Hryvnia to weaken. The US dollar also fell against most currencies. Whilst Fixed Income returns were mildly positive, government bond yields fell across the board, particularly Greece, Spain and Italy. Following a very poor first quarter, CTAs had a positive month, especially commodity focused strategies. Equity Long Short struggled with the correction in momentum and Global Macro continued to battle against low and falling volatility (as in January). Structured Credit performed well aided by strong technicals, cash bonds and fundamentals.

May 2014 was a quiet yet fairly positive month: global equities and developed market government bonds performed well, spurred on by the expectation of the ECB loosening monetary policy at the start of June. The US dollar recovered and corporate credit had a positive month with outperformance from the Emerging Markets. Commodities had their second down month of the year. There were significant elections in the European Parliament, India and Ukraine, while the ripple effect of the Ukrainian crisis temporarily eased. Notably, the markets grappled with the continued slide in US Treasury yields. For most hedge fund strategies, the average return was positive, albeit in some cases only marginally. Hedge funds were aided by strengthening in the equity markets and a broad recovery in growth stocks. CTAs had a good month, with longer term trend followers benefitting from the equity and bond rally, although commodity and currency exposure proved more challenging.

June 2014 was a mixed month beginning with the ECB's rate cut and lending boost followed by midmonth flare ups between Russia and Ukraine. In equities, led by Emerging Markets, positive performance came from most countries/regions with the exception of Europe. US government bond yields reversed their previous downward trajectory while Sterling rallied against the dollar on the back of a hawkish tone from the Bank of England. European bond yields continued to decline, reaching new all-time lows in several countries. Commodities were mixed after a poor previous month. June was generally another positive month for hedge fund strategies; average returns for strategies tended to be in line with or slightly below May's performance (with the exception of Distressed and Relative Value Credit-both of which had a slightly better month). CTAs had a third consecutive strong month.

July 2014 was a challenging month. The S&P 500 continued its three month streak of reaching alltime highs until US and European equity markets saw gains reverse at month end. A missile attack on a Malaysian passenger jet and fears of an earlier rate rise in the US weighed on sentiment. Equities ended down on the month (with the exception of Japan and Emerging Markets). Outside of the US and Greece, government bond yields continued their descent. Most commodities including oil fell on the month. July was challenging for most hedge fund strategies as well; returns were on average negative to mildly positive. The sharp equity sell off at the end of the month, spurred on by Argentina's second default, in many cases tipped managers into negative territory. The bright spot, however, was global macro; long US Dollar trades finally benefitted, whilst in contrast CTAs were hurt by their short

US Dollar positioning.

Albõurne

Gallen Krug, Partner Senior Portfolio Analyst Albourne

S. Itm King

G. Stephen Kennedy, Partner Senior Portfolio Analyst Albourne

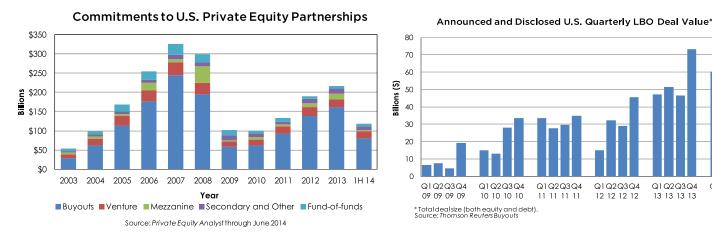
411 NW Park Avenue, Suite 401, Portland, OR 97209 • Tel: 503.226.1050 Fax: 503.226.7702 • www.pensionconsulting.com

## September 30, 2014

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

# **Private Equity Industry Trends:**

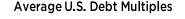
• Fundraising activities continue to exhibit increases from lows seen early in the financial crisis. Approximately \$119 billion of commitments were raised domestically in the first half of 2014, with buyouts continuing to represent the largest proportion of capital raised. This pace is on track to exceed the full calendar year 2013 commitment amount of \$217 billion.

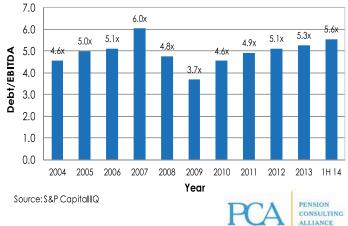


• Announced U.S. buyout deal volume exhibited an increase in Q2 2014 from the prior quarter and is on pace to exceed 2013 levels. Total announced U.S. buyout deal volume was \$62.2 billion in Q2 2014, up from \$60.2 billion in the first quarter but down from \$73.3 billion in the fourth quarter of 2013. At \$219 billion in 2013, activity last year was the highest annual level over the past six years.

• Risk metrics in the leveraged buyout market increased during the first half of 2014 as both purchase price multiples and debt multiples increased. The average purchase price multiple in the first half of 2014, at 9.2x, increased from 8.8x in 2013 and was well above the ten-year average of 8.5x. Debt multiples for the first half of 2014 were at 5.6x, above the 5.3x level for the 2013 calendar year.



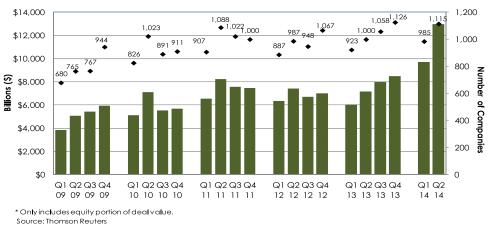




Q1 Q2

14 14

• Venture capital investment activity continued to increase in the first half of 2014. Approximately \$13.0 billion was invested across 1,115 companies during the second quarter of 2014 which exceeded the \$9.7 billion invested across 985 companies in the first quarter. In the 2013 calendar year, \$29.7 billion was invested across approximately 4,100 companies.



# Quarterly U.S. Venture Capital Deal Volume\*

• Exit activity for venture capital investments continued to show strength in the first half of 2014. The number of merger and acquisition (M&A) transactions increased in the first half of 2014, and annualized, is on pace to exceed 2013 levels. The initial public offering (IPO) market also exhibited increases in the first half of 2014 and is on pace to exceed 2013 levels.

# Performance:

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

|                     |       |       | ,,    |       | ,     |
|---------------------|-------|-------|-------|-------|-------|
| Index               | 1 Yr  | 3 Yr  | 5 Yr  | 10 Yr | 20 Yr |
| All Private Equity* | 19.3% | 13.6% | 15.7% | 12.1% | 14.3% |
| Russell 3000        | 22.6% | 14.6% | 21.9% | 7.9%  | 9.6%  |
| MSCI EAFE           | 18.1% | 7.7%  | 16.6% | 7.0%  | 5.9%  |
|                     |       |       |       |       |       |

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

# **KRS Private Equity Portfolio:**

As of June 30, 2014, KRS had committed \$2.9 billion to 38 managers (60 partnerships) gaining exposure across the spectrum of private equity strategies including buyout, venture/growth, and credit-oriented strategies. Approximately \$2.5 billion has been drawn down while \$2.1 billion of capital has been returned. During the first six months of 2014, \$73.18 million has been drawn down to fund investments and \$201.3 million of distributions have been returned.

The Pension Plan had \$2.35 billion of commitments and the Insurance Plan had \$490 million of active commitments as of mid-year 2014. The portfolio is well diversified across target investment strategies.



# **KRS Commitments:**

Over the past twelve months ending June 30, 2014, KRS has committed \$120.0 million across two partnerships.

| KRS Commitment Activity, last twelve months                         |          |        |  |  |  |  |  |
|---|----------|--------|--|--|--|--|--|
| Fund Investment         Approval Date         Commitment Amount (M) |          |        |  |  |  |  |  |
| Levine Leichtman Capital Partners V                                 | Nov-2013 | \$70.0 |  |  |  |  |  |
| New Mountain Partners IV  | Nov-2013 | \$50.0 |  |  |  |  |  |
| As of 6/30/2014   |          |        |  |  |  |  |  |

Subsequent to mid-year 2014, \$60.0 million was committed to Crestview Partners III and \$100.0 million to Secondary Opportunities Fund III.

# Program Development:

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

• Continue a disciplined approach to annual commitment pacing and partnership commitment sizing, making larger commitments to fewer managers in order to maintain a manageable number of relationships while progressing towards target allocations.

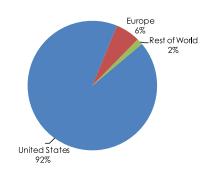
• Consider additional global exposure, committing to direct partnerships where appropriate while utilizing fund of funds where access to a unique segment of the market warrants.

• Revisit approach to the venture capital investments and explore other approaches to gain exposure across the venture capital/growth equity segment.

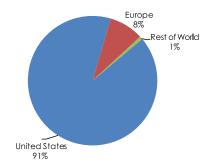
• Explore cost-effective approaches to deploying capital, such as co-investing, to maximize returns while minimizing expenses.

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

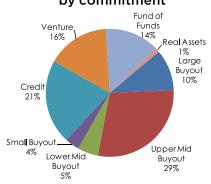
Tad Fergusson, CFA Managing Director Pension Consulting Alliance, Inc.



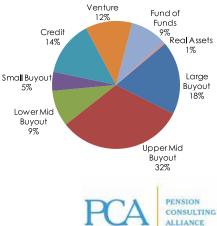
Insurance Geographic Exposure: by commitment



Pension Sector Exposure: by commitment



Insurance Sector Exposure: by commitment



3733 Park East Drive • Cleveland, OH 44122-4334 • tel: 216.468.0055 • fax: 216.468.0054

September 30, 2014

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

# **U.S. Market Overview**

The U.S. economy continues its period of sustained, if still modest, growth although the U.S. economic growth was below expectations for the first quarter, growing only 0.1%. This was mainly attributable to the severe winter experienced by the eastern half of the nation, negative contributions from inventories and trade and a reduction of government spending. The U.S.labor market growth was also slightly below expectations adding an average of 182,000 jobs per month. The unemployment rate was steady at 6.7% as the labor force increased slightly offsetting the growth in employment. However, payroll employment logged considerable improvement recovering the total number of private sector jobs lost during the Global Financial Crisis.

The U.S. commercial real estate market continued to see improvement in 2014. The capitalization rates as of June 30, 2014 for all sectors have declined from the prior year ending June 30, 2013.

| Capitalization Rates    | 2nd Qtr. 2014      | 2nd Qtr. 2013     | Basis Point<br>Change |
|-------------------------|--------------------|-------------------|-----------------------|
| Total                   | 5.18%              | 5.38%             | -0.20                 |
| Apartments              | 4.84%              | 5.05%             | -0.21                 |
| Retail                  | 5.42%              | 5.64%             | -0.22                 |
| Office                  | 5.11%              | 5.31%             | -0.20                 |
| Industrial/Warehouse    | 5.60%              | 5.73%             | -0.13                 |
| Source: NCREIE - Curren | t Value Weighted ( | Capitalization Pa | tas                   |

Source: NCREIF - Current Value Weighted Capitalization Rates

The industrial sector continues to be a strong performer, as manufacturing activity, import/export and online retail sales all have had a positive demand on the warehousing market. Demand for industrial real estate increased during the quarter and net absorption is running more than double the supply of new completions pushing vacancy rates below pre-crisis levels to 6.5%. Rent growth was slightly below in comparison to the previous year. Rent growth is expected to tick upward in subsequent quarters due to various contractual rent increases.



Demand in the apartment sector remained strong, although rent growth continued to grow at a more moderate pace. Effective rent growth increased only by 0.6%, however this increase still puts rent levels near historical peaks. New construction declined slightly with new units numbering 25,745 in comparison to last quarter's 41,881 units. Apartment demand remains solid with the maturation of echo boomers and the continued tight mortgage credit trends which are expected to continue over the next several years. The vacancy rate declined slightly to 4.2% to 4.0%, which is below the cyclical peak of 8.0% at the end of 2009. Based on the change in vacancy, the top performing major markets are Houston, Riverside, Atlanta and Sacramento.

Office fundamentals continue to improve with employment growth. The office growth rate is only one-half the pace of job creation. The areas with most steady growth are those regions with strong energy and technology sectors, although the financial and health/medical services are also recovering steadily. Suburban office is recovering more quickly than Central Business Districts. New supply continues to be limited especially in the suburbs where construction appears to be lower in every region in comparison the last cycle. Two regional exceptions are 1) the expanding Texas markets including Austin and 2) Boston's hot tech suburbs. Also, doing well on the construction project side are 1) New York as it delivers One World Trade Center and 2) San Francisco as it builds into the tech boom.

The retail mall sector remains solid as a whole with vacancy rates unchanged at 10.4%. However, tenant sales growth and same-store NOI growth have decelerated. Operating results from the REITs, who are large owners in the mall universe, indicate that tenant sales growth slowed last year in both Class A and Class B properties. Annual effective rent growth continued to trend upwards reaching 1.6% and regional malls continued to outperform most neighborhood and community shopping centers with vacancy levels of 7.9%. Consumer demand continues to favor necessity retailers and high-end specialty retailers. The top performing markets based on the improvement in vacancy rates are Orlando, Sacramento, San Jose, Suburban Virginia and Tampa.

# **ORG's View**

The returns for the real estate market increased over the 2013 levels based upon the National Council of Real Estate Investment Fiduciaries ("NCREIF") Property Index ("NPI") which had a 11.2% return for the period ending June 30, 2014 vs. the 10.7% return for the one year period ending June 30, 2013.

ORG has noted that the one-year income return as of June 30, 2014 for core open end funds gross of fees as reported by the NCREIF Open-End Diversified Core Equity ("ODCE") Index is 5.2%. This low income return will require substantial rental rate growth or appreciation growth in order for the funds to generate the projected 8-9% rate of return expected for core. The long-term Since Inception appreciation return for the ODCE is 1%. ORG is concerned that the 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 de-leveraging of real estate that continues as debt originated during 2005-2007 continues to mature over the next several years. These opportunities to recapitalize high quality properties that have often been neglected could generate attractive risk adjusted returns over the next several years.



# Kentucky Retirement Systems Real Estate Investments

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

• Year to Date through September 2014, Mesa West Real Estate Income Fund II made no capital calls and returned \$3.8 million in capital and preferred return distributions. Since inception, \$12.4 million has been funded with \$27.6 million remaining capital to be called.

• Year to Date through September 2014, PRIMA Mortgage Investment Trust distributed \$3.3 million in income distributions. The investment is fully funded. Since inception, PRIMA has distributed \$16.4 million.

• Year to Date through September 2014, Walton Street Real Estate Fund VI made no capital calls and returned \$4.8 million in capital and gain distributions. 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, L.P. in April with an additional \$3 million commitment in October 2012. In 2013, \$3.3 million was withdrawn from the fund for a total commitment of \$99.7 million and 2) a \$101.9 million commitment to Harrison Street Core Property Fund, L.P. in December with an additional \$3.8 million commitment in October 2012 and \$17.9 million commitment in June 2013 for a total commitment of \$123.6 million.

• H/2 Credit Partners is fully funded.

• Year to Date through September 2014, Harrison Street Core Property Fund made one capital call totaling \$9.5 million and returned \$3.8 million of income distributions. This investment is fully funded

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

• Year to Date through September 2014, Walton Street Real Estate Fund VII made three capital calls totaling \$16.6 million and returned \$1.0 million of capital and income distributions. Since inception, \$19.8 million has been funded with \$35.1 million remaining capital to be called.

Year to Date through September 2014, Greenfield Acquisition Partners VI made three capital calls totaling \$3.6 million and returned \$4.8 million of capital and income distributions. Since inception, \$52.7 million has been funded with \$2.2 million remaining capital to be called.

• Year to Date through September 2014, Mesa West Core Lending Fund made two capital calls totaling \$4.9 million and returned \$2.3 million of income distributions. Since inception, \$78.7 million has been funded with \$4.3 million remaining capital to be called. 2013 Investment Activity: Kentucky Retirement Systems made 1) a \$30 million commitment to Rubenstein Properties II, L.P. in July, 2) a \$30 million to H/2 Core Debt Fund, L.P. in August, 3) a



\$70 million commitment to Prologis Targeted U.S. Logistics Fund in October and 4) a \$95 million commitment in Stockbridge Smart Markets, L.P. in December.

• Year to Date through September 2014, Rubenstein Properties II made one capital call totaling \$2.1 million and returned \$4.5 million of capital and income distributions. Since inception, \$7.2 million has been funded with \$22.8 million remaining capital to be called.

• Year to Date through September 2014, H/2 Core Debt Fund made three capital calls totaling \$2.7 million. Since inception, \$7.1 million has been funded with \$22.9 million remaining capital to be called.

• Prologis Targeted U.S. Logistics Fund has made no capital calls.

• Year to Date through September 2014, Stockbridge Smart Markets made one capital call totaling \$52.4 and returned \$0.3 million of income distributions. Since inception, \$52.4 has been funded with \$42.6 remaining to be called. 2014 Investment Activity: Kentucky Retirement Systems made 1) a \$40 million commitment to Lubert-Adler Real Estate Fund VII, L.P. in March, 2) a \$30 million commitment to Divco West IV, L.P. in April and 3) \$40 million commitment to Greenfield Acquisition Partners VII, L.P. in July.

• Year to Date through September 2014, Lubert-Adler Real Estate Fund VII made one capital call totaling \$4.0 million. Since inception, \$4.0 million has been funded with \$36.0 million remaining to be called.

• Year to Date through September 2014, Divco West IV made three capital calls totaling \$10.5 million. Since inception, \$10.5 million has been funded with \$19.5 million remaining to be called.

• Year to Date through September 2014, Greenfield Acquisition Partners VII made two capital calls totaling \$8.8 million and returned \$39,400. Since inception, \$8.8 million has been funded with \$31.2 million remaining capital to be called.

Please feel free to contact me regarding any of the information above. Very truly yours,

Jonathan Berns Principal



# Actuarial







# SECTION

# ACTUARIAL

# TABLE OF CONTENTS

- 130 CERTIFICATION OF ACTUARIAL RESULTS
- 132 SUMMARY OF ACTUARIAL ASSUMPTIONS
- 143 ANALYSIS OF FINANCIAL EXPERIENCE
- 148 ACTIVE MEMBER VALUATION
- 150 RETIRED MEMBER VALUATION
- 151 SUMMARY OF BENEFIT PROVISIONS KERS & CERS NON-HAZARDOUS PLANS
- 154 SUMMARY OF BENEFIT PROVISIONS KERS HAZARDOUS CERS HAZARDOUS SPRS PLANS

# Certification of Actuarial Results

The fifty-eighth annual actuarial valuation of the Kentucky Employees Retirement System (KERS), the fifty-fifth annual actuarial valuation of the County Employees Retirement System (CERS), and the fifty-sixth 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, 2014 actuarial valuation will be used by the Board of Trustees to certify the employer contribution rates for the fiscal year beginning July 1, 2015 and ending June 30, 2016 for CERS. The rate determined based on the June 30, 2013 actuarial valuation 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 amortization of any UAL is made over 30 years from the establishment of the amortization base using a level percent of payroll amortization method. In accordance with the changes to statute made by SB2, the amortization period was reestablished as a closed 30 year period beginning with the June 30, 2013 actuarial valuation. The amortization period will decrease by one each year in the future.

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

Relative to the insurance fund, the Board's funding objective is to establish a contribution rate which consists of the normal cost and an amortization payment on the UAL 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 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 relatively 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, respectively. SB2 introduced a Cash Balance 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 relative to, both the pension and insurance funds, can be measured by the relationship of actuarial assets of each fund to the actuarial accrued liabilities. This relationship is known as the funding level and in the absence of benefit improvements, should increase over time until it reaches 100%.

In recent years, funding levels for the pension funds have fallen dramatically in response to investment returns less than the actuarially assumed rate, higher than anticipated

The fifty-seventh annual actuarial valuation of the Kentucky Employees **Retirement System** (KERS), the fiftyfourth 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.



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, 2014 the funding levels for the pension funds are as follows:

#### **Funding Level of Pension Fund** Pension Fund Insurance Fund **KERS Nonhazardous** 21.0% 27.9% **KERS Hazardous** 64.6% 105.6% **CERS Nonhazardous** 62.6% 70.0% **CERS Hazardous** 59.8% 66.8% SPRS 35.6% 66.4%

## 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. 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 most recent experience study was completed on April 30, 2014 but no changes had been adopted by the Board as of the June 30, 2014 valuation date.

# Closing

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

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 4, 2014 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.



# 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.**



# 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. An Experience 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, 2012 actuarial valuation were based on the study performed in 2009 and in accordance with the actuary's recommendations. The most recent experience study was completed on April 30, 2014 but no changes had been adopted by the Board as of the June 30, 2014 valuation date.

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 ance 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 with the changes to statute made by SB2, the amortization period was reestablished as a closed 30 year period beginning with the June 30, 2013 actuarial valuation. The amortization period will decrease by one each year in the future.

**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 by the Board 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:** Active member salaries are assumed to increase at the rates provided in Table 1 on the following page. 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 NonHaz | KERS Haz | CERS NonHaz | CERS Haz | SPRS   |
|---------|-------------|----------|-------------|----------|--------|
| O-1     | 17.00%      | 21.00%   | 13.00%      | 20.00%   | 17.00% |
| 1-2     | 9.00%       | 9.00%    | 9.50%       | 10.50%   | 12.00% |
| 2-3     | 6.50%       | 7.00%    | 6.00%       | 6.50%    | 10.00% |
| 3-4     | 6.00%       | 6.50%    | 6.00%       | 5.75%    | 9.00%  |
| 4-5     | 6.00%       | 6.00%    | 5.50%       | 5.50%    | 8.00%  |
| 5-6     | 6.00%       | 5.50%    | 5.50%       | 5.00%    | 7.00%  |
| 6-7     | 5.50%       | 5.00%    | 5.25%       | 4.50%    | 6.00%  |
| 7-8     | 5.50%       | 5.00%    | 5.25%       | 4.50%    | 6.50%  |
| 8-9     | 5.50%       | 5.00%    | 5.00%       | 4.50%    | 5.50%  |
| 9-10    | 5.00%       | 5.00%    | 5.00%       | 4.50%    | 5.00%  |
| 10+     | 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 Cost of Living Adjustments** (COLA): SB2 only allows the Cost of Living Adjustments (COLAs) to be awarded on a biennial basis if the State Legislature so authorizes and either (i) the system is over 100% funded or (ii) the Legislature appropriates sufficient funds to prepay the increased liability for the COLA.

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

| Table 2. Cost of Retiree Medical Premiums |              |                 |  |  |  |
|---|--------------|-----------------|--|--|--|
|   | Tre          | end             |  |  |  |
| Fiscal Year Ended                         | Under Age 65 | Age 65 and Over |  |  |  |
| 2015                                      | 7.75%        | 6.00%           |  |  |  |
| 2016                                      | 6.75%        | 5.75%           |  |  |  |
| 2017                                      | 6.25%        | 5.50%           |  |  |  |
| 2018                                      | 5.75%        | 5.25%           |  |  |  |
| 2019                                      | 5.25%        | 5.00%           |  |  |  |
| 2020 and beyond                           | 5.00%        | 5.00%           |  |  |  |



**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.

|     | Nor               | n-Hazard          | ous                      |         |       |       | Hazaro            | lous              |       |                   |
|-----|-------------------|-------------------|--------------------------|---------|-------|-------|-------------------|-------------------|-------|-------------------|
| Age | KERS <sup>1</sup> | KERS <sup>2</sup> | <b>CERS</b> <sup>3</sup> | Service | KERS⁴ | KERS⁵ | CERS <sup>6</sup> | CERS <sup>7</sup> | SPRS® | SPRS <sup>®</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>1</sup>For members participating before 9/1/2008. If service is at least 27 years, the rate is 25%.

<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>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>4</sup>For members participating before 9/1/2008. The annual rate of service retirement is 100% at age 65.
 <sup>5</sup>For members participating on or after 9/1/2008. The annual rate of service retirement is 100% at age 60.

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

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

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

<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 non-disabled 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.



# Table 4. Sample Annual Rates of Mortality

| Active Member Mortality |  | Retired Member Mortality*   |   | Disabled Member   | Mortality*  |
|-------------------------|--|---|---|---|---|
| Males                   | Females  | Males   | Females   | Males   | Females   |
| 0.02%                   | 0.01%  | 0.04%   | 0.03%   | -   | -   |
| 0.03%                   | 0.01%  | 0.06%   | 0.03%   | -   | -   |
| 0.04%                   | 0.02%  | 0.08%   | 0.04%   | -   | -   |
| 0.06%                   | 0.04%  | O.13%   | 0.08%   | 0.19%   | O.11%   |
| 0.16%                   | 0.09%  | 0.32%   | 0.17%   | 0.56%   | 0.29%   |
| 0.51%                   | 0.29%  | 1.01%   | 0.58%   | 1.80%   | 1.08%   |
| 1.42%                   | 0.83%  | 2.85%   | 1.65%   | 4.52%   | 2.84%   |
|                         | 0.02%<br>0.03%<br>0.04%<br>0.06%<br>0.16%<br>0.51% | 0.02%         0.01%           0.03%         0.01%           0.04%         0.02%           0.06%         0.04%           0.16%         0.09%           0.51%         0.29% | 0.02%         0.01%         0.04%           0.03%         0.01%         0.06%           0.04%         0.02%         0.08%           0.06%         0.04%         0.13%           0.16%         0.09%         0.32%           0.51%         0.29%         1.01% | 0.02%         0.01%         0.04%         0.03%           0.03%         0.01%         0.06%         0.03%           0.04%         0.02%         0.08%         0.04%           0.06%         0.04%         0.13%         0.08%           0.16%         0.09%         0.32%         0.17%           0.51%         0.29%         1.01%         0.58% | 0.02%         0.01%         0.04%         0.03%         -           0.03%         0.01%         0.06%         0.03%         -           0.04%         0.02%         0.08%         0.04%         -           0.06%         0.04%         0.13%         0.08%         0.19%           0.16%         0.09%         0.32%         0.17%         0.56%           0.51%         0.29%         1.01%         0.58%         1.80% |

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

**Withdrawal Rates** The probability, or likelihood, of active members terminating employment prior to retirement is provided in Table 4 on the following page. 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  | azardou | IS          | KERS Hazardous      |             |      |             |
|---------------------|-------------|---------|-------------|---------------------|-------------|------|-------------|
| Selec               | t Rates     | Ultir   | nate Rates  | Selec               | t Rates     | Ulti | mate Rates  |
| Years of<br>Service | Probability | Age     | Probability | Years of<br>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-H  | azardou        | s           | CERS Hazardous      |             |      |             |
|---------------------|-------------|----------------|-------------|---------------------|-------------|------|-------------|
| Selec               | t Rates     | Ultimate Rates |             | Select Rates        |             | Ulti | mate Rates  |
| Years of<br>Service | Probability | Age            | Probability | Years of<br>Service | Probability | Age  | Probability |
| 1                   | 25.00%      | 20             | 5.75%       | 1                   | 14.00%      | 20   | 3.00%       |
| 2                   | 14.00%      | 25             | 5.75%       | 2                   | 7.50%       | 25   | 2.70%       |
| 3                   | 10.00%      | 30             | 5.30%       | 3                   | 6.00%       | 30   | 2.50%       |
| 4                   | 8.00%       | 35             | 4.40%       | 4                   | 4.50%       | 35   | 2.50%       |
| 5                   | 6.50%       | 40             | 3.70%       | 5                   | 4.00%       | 40   | 2.50%       |
|                     |             | 45             | 3.02%       |                     |             | 45   | 2.50%       |
|                     |             | 50             | 2.70%       |                     |             | 50   | 2.50%       |
|                     |             | 55             | 2.20%       |                     |             | 55   | -           |
|                     |             | 60             | 0.75%       |                     |             | 60   | -           |





# **Table 5 Continued.**Selected Ratesof Termination Prior to Retirement

|                     | SPRS Non-I  | Hazardous |             |
|---------------------|-------------|-----------|-------------|
| Sele                | ect Rates   | Ulti      | mate Rates  |
| Years of<br>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        | -           |
|                     |             |           |             |

#### OASDI Old-Age Survivors & Disability Insurance



**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 Old-Age Survivors and Disability Insurance (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-l               | Hazardous   | Haz   | zardous     |  |  |  |
| 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%     |  |  |  |

|   | KERS Non-Haz     | KERS Haz       | CERS Non-Haz    | CERS Haz        | SPR          |
|---|------------------|----------------|-----------------|-----------------|--------------|
| Recommended Rate<br>Fiscal 2015-2016                  |                  |                |                 |                 |              |
| Pension Fund Contribution                             | 33.57%           | 17.09%         | 12.42%          | 20.26%          | 58.44%       |
| Insurance Fund Contribution                           | 7.74%            | 7.12%          | 4.88%           | 13.42%          | 19.179       |
| Recommended Employer<br>Contribution                  | 41.31%           | 24.21%         | 17.30%          | 33.68%          | 77.619       |
| Funded Status as of Valuation Dat                     | te               |                |                 |                 |              |
| Pension Fund  |                  |                |                 |                 |              |
| Actuarial Liability                                   | \$11,550,110,224 | \$816,850,063  | \$9,772,522,616 | \$3,288,825,753 | \$681,118,40 |
| Actuarial Value of Assets                             | \$2,423,956,716  | \$527,897,261  | \$6,117,133,692 | \$1,967,640,027 | \$242,741,73 |
| ■ Unfunded Liability on<br>Actuarial Value of Assets  | \$9,126,153,508  | \$288,952,802  | \$3,655,388,924 | \$1,321,185,726 | \$438,376,66 |
| ■ Funding Ratio on Actuarial<br>Value of Assets       | 20.99%           | 64.63%         | 62.60%          | 59.83%          | 35.64        |
| ■ Market Value of Assets                              | \$2,560,419,519  | \$559,504,340  | \$6,507,300,157 | \$2,082,998,414 | \$260,763,48 |
| ■ Unfunded Liability on Market<br>Value of Assets     | \$8,989,690,705  | \$257,345,723  | \$3,265,222,459 | \$1,205,827,339 | \$420,354,91 |
| ■ Funding Ratio on Market<br>Value of Assets          | 22.17%           | 68.50%         | 66.59%          | 63.34%          | 38.28        |
| nsurance Fund   |                  |                |                 |                 |              |
| Actuarial Liability                                   | \$2,226,759,925  | \$396,986,820  | \$2,616,914,600 | \$1,493,864,379 | \$234,271,12 |
| Actuarial Value of Assets                             | \$621,236,646    | \$419,395,867  | \$1,831,199,465 | \$997,733,237   | \$155,594,76 |
| ע Unfunded Liability on<br>Actuarial Value of Assets  | \$1,605,523,279  | (\$22,409,047) | \$785,715,135   | \$496,131,142   | \$78,676,36  |
| ע Funding Ratio on Actuarial<br>Value of Assets       | 27.90%           | 105.64%        | 69.98%          | 66.79%          | 66.42        |
| ■ Market Value of Assets                              | \$664,775,708    | \$435,503,976  | \$1,899,557,376 | \$1,034,307,636 | \$165,167,80 |
| ■ Unfunded Liability on Market<br>Value of Assets     | \$1,561,984,217  | (\$38,517,156) | \$717,357,224   | \$459,556,743   | \$69,103,32  |
| ■ Funding Ratio on Market<br>Value of Assets          | 29.85%           | 109.70%        | 72.59%          | 69.24%          | 70.50        |
| Member Data   |                  |                |                 |                 |              |
| Number of Active Members                              | 40,365           | 4,024          | 81,115          | 9,194           | 85           |
| Total Annual Payroll (Active<br>Members) <sup>1</sup> | \$1,577,496,447  | \$129,076,038  | \$2,272,270,287 | \$479,164,016   | \$44,615,88  |
| Average Annual Pay (Active<br>Members)                | \$39,081         | \$32,077       | \$28,013        | \$52,117        | \$52,18      |
| Number of Retired Members &<br>Beneficiaries          | 41,223           | 3,620          | 49,935          | 7,646           | 1,41         |
| Average Annual Retirement<br>Allowance                | \$21,009         | \$14,992       | \$11,246        | \$24,981        | \$37,81      |
| Number of Vested Inactive<br>Members                  | 7,891            | 365            | 10,329          | 588             | 5            |
| Number of Inactive Members                            | 38,748           | 3,643          | 66,661          | 1,940           | 34           |

<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, 2014.

# Recommended Employer Contribution Rates as of June 30, 2014

| NERS N            | onnazardo   | ous                         |   |                              |                                |                              |
|-------------------|-------------|-----------------------------|---|------------------------------|--------------------------------|------------------------------|
| Valuation<br>Date | Fiscal Year | Pension Fund<br>Normal Cost | Pension Fund Payment<br>on Unfunded Liability | Pension Fund<br>Contribution | Insurance Fund<br>Contribution | Recommended<br>Employer Rate |
| 6/30/09           | 2010-2011   | 4.26%                       | 17.51%  | 21.77%                       | 16.81%                         | 38.58%                       |
| 6/30/10           | 2011-2012   | 4.23%                       | 20.07%  | 24.30%                       | 16.41%                         | 40.71%                       |
| 6/30/11           | 2012-2013   | 4.38%                       | 23.65%  | 28.03%                       | 16.52%                         | 44.55%                       |
| 6/30/12           | 2013-2014   | 4.26%                       | 28.31%  | 32.57%                       | 12.71%                         | 45.28%                       |
| 6/30/13           | 2014-2015   | 4.13%                       | 26.71%  | 30.84%                       | 7.93%                          | 38.77%                       |
| 6/30/14           | 2015-2016   | 4.10%                       | 29.47%  | 33.57%                       | 7.74%                          | 41.31%                       |

### **KERS Hazardous**

DE Nonhazardau

| Valuation<br>Date | Fiscal Year | Pension Fund:<br>Normal Cost | Pension Fund: Payment<br>on Unfunded Liability | Pension Fund<br>Contribution | Insurance Fund<br>Contribution | Recommended<br>Employer Rate |
|-------------------|-------------|------------------------------|--|------------------------------|--------------------------------|------------------------------|
| 6/30/09           | 2010-2011   | 7.94%                        | 6.17%  | 14.11%                       | 20.26%                         | 34.37%                       |
| 6/30/10           | 2011-2012   | 7.19%                        | 6.92%  | 14.11%                       | 19.73%                         | 33.84%                       |
| 6/30/11           | 2012-2013   | 7.47%                        | 8.69%  | 16.16%                       | 19.73%                         | 35.89%                       |
| 6/30/12           | 2013-2014   | 6.09%                        | 10.91%   | 17.00%                       | 11.84%                         | 28.84%                       |
| 6/30/13           | 2014-2015   | 5.79%                        | 10.58%   | 16.37%                       | 9.97%                          | 26.34%                       |
| 6/30/14           | 2015-2016   | 5.69%                        | 11.40%   | 17.09%                       | 7.12%                          | 24.21%                       |

The contribution rates for KERS Non-Hazardous and KERS Hazardous shown in the above tables are the full funding rates presented by the actuary in the 2009 through 2014 annual valuations. However, the actual employer contribution rates have been less than those shown above. As a result of HB 1 passed in 2008 the statute called for an employer contribution rate at an increasing percentage of the full funding rates until 100% was achieved in 2025 for KERS Non-Hazardous and 2019 for KERS Hazardous. SB2 eliminated this phase-in beginning with the June 30, 2013 actuarial valuation.



## **KERS Funds**

The contribution rates for KERS Non-Hazardous and KERS Hazardous shown in the tables above are the full funding rates presented by the actuary in the 2009 through 2014annual 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 above are the full funding rates presented by the actuary in the 2009 through 2014 annual valuations. However, in the case of CERS Non-Hazardous and CERS Hazardous, in 2006 the actuary recommended a five-year phase-in of the rate which requires the payment of the insurance benefit normal cost with a five-year phase-in of the unfunded accrued liability (UAL) associated with the insurance funds. In 2008 this recommendation was changed to a ten-year phase-in from the initial starting date as a result of the passage of HB 1 by the Kentucky General Assembly. As a result, the CERS Non-Hazardous insurance fund contribution rate actually recommended by the actuary and adopted by the Board for 2014-2015 is 4.92% and the employer contribution rate is 17.67%. The CERS Hazardous insurance fund contribution rate actually recommended by the actuary and adopted by the Board for 2014-2015 is 13.58% and the employer contribution rate is 34.31%.

# Recommended Employer Contribution Rates as of June 30, 2014

| CERS N            | onhazardo   | bus                          |  |                              |                                |                              |
|-------------------|-------------|------------------------------|--|------------------------------|--------------------------------|------------------------------|
| Valuation<br>Date | Fiscal Year | Pension Fund:<br>Normal Cost | Pension Fund: Payment<br>on Unfunded Liability | Pension Fund<br>Contribution | Insurance Fund<br>Contribution | Recommended<br>Employer Rate |
| 6/30/09           | 2010-2011   | 4.60%                        | 5.43%  | 10.03%                       | 9.78%                          | 19.81%                       |
| 6/30/10           | 2011-2012   | 4.72%                        | 6.98%  | 11.70%                       | 9.59%                          | 21.29%                       |
| 6/30/11           | 2012-2013   | 4.68%                        | 7.94%  | 12.62%                       | 8.59%                          | 21.21%                       |
| 6/30/12           | 2013-2014   | 4.68%                        | 9.06%  | 13.74%                       | 5.84%                          | 19.58%                       |
| 6/30/13           | 2014-2015   | 4.35%                        | 8.40%  | 12.75%                       | 5.35%                          | 18.10%                       |
| 6/30/14           | 2015-2016   | 4.23%                        | 8.19%  | 12.42%                       | 4.88%                          | 17.30%                       |

# **CERS Hazardous**

| Valuation<br>Date | Fiscal Year | Pension Fund:<br>Normal Cost | Pension Fund: Payment<br>on Unfunded Liability | Pension Fund<br>Contribution | Insurance Fund<br>Contribution | Recommended<br>Employer Rate |
|-------------------|-------------|------------------------------|--|------------------------------|--------------------------------|------------------------------|
| 6/30/09           | 2010-2011   | 7.56%                        | 9.23%  | 16.79%                       | 23.27%                         | 40.06%                       |
| 6/30/10           | 2011-2012   | 7.31%                        | 10.60%   | 17.91%                       | 23.74%                         | 41.65%                       |
| 6/30/11           | 2012-2013   | 7.40%                        | 12.70%   | 20.10%                       | 21.84%                         | 41.94%                       |
| 6/30/12           | 2013-2014   | 6.44%                        | 15.33%   | 21.77%                       | 16.02%                         | 37.79%                       |
| 6/30/13           | 2014-2015   | 6.35%                        | 14.38%   | 20.73%                       | 14.97%                         | 35.70%                       |
| 6/30/14           | 2015-2016   | 6.21%                        | 14.05%   | 20.26%                       | 13.42%                         | 33.68%                       |

The insurance fund contribution rates and the employer contribution rates for CERS Non-Hazardous and CERS Hazardous shown in the above tables are the full funding rates presented by the actuary in the 2009 through 2014 annual valuations. However, in the case of CERS Non-Hazardous and CERS Hazardous, in 2006 the actuary recommended a five-year phase-in of the rate which requires the payment of the insurance benefit normal cost with a five-year phase-in of the unfunded accrued liability (UAL) associated with the insurance funds. In 2008 this recommendation was changed to a ten-year phase-in from the initial starting date. As a result, the CERS Non-Hazardous insurance fund contribution rate actually recommended by the actuary based on the phase-in and adopted by the Board for 2015-2016 is 4.64% and the employer contribution rate actually recommended by the actuary and adopted by the Board for 2015-2016 is 12.69% and the employer contribution rate is 32.95%.

# Recommended Employer Contribution Rates as of June 30, 2014

| SPRS              |             |                             |   |                              |                                |                              |
|-------------------|-------------|-----------------------------|---|------------------------------|--------------------------------|------------------------------|
| Valuation<br>Date | Fiscal Year | Pension Fund<br>Normal Cost | Pension Fund Payment<br>on Unfunded Liability | Pension Fund<br>Contribution | Insurance Fund<br>Contribution | Recommended<br>Employer Rate |
| 6/30/09           | 2010-2011   | 8.12%                       | 27.62%  | 35.74%                       | 49.89%                         | 85.63%                       |
| 6/30/10           | 2011-2012   | 7.75%                       | 32.05%  | 39.80%                       | 54.83%                         | 94.63%                       |
| 6/30/11           | 2012-2013   | 8.12%                       | 39.36%  | 47.48%                       | 55.93%                         | 103.41%                      |
| 6/30/12           | 2013-2014   | 8.14%                       | 45.21%  | 53.35%                       | 43.17%                         | 96.52%                       |
| 6/30/13           | 2014-2015   | 8.46%                       | 45.44%  | 53.90%                       | 21.86%                         | 75.76%                       |
| 6/30/14           | 2015-2016   | 8.39%                       | 50.05%  | 58.44%                       | 19.17%                         | 77.61%                       |

The contribution rates for SPRS shown in the above tables are the full funding rates presented by the actuary in the 2009 through 2014 annual valuations. However, the actual employer contribution rates have been less than those shown above. As a result of HB 1 passed in 2008 the statue called for an employer contribution rate at an increasing percentage of the full funding rates until 100% was achieved in 2025 for KERS Non-Hazardous and 2019 for KERS Hazardous. SB2 eliminated this phase-in beginning with the June 30, 2013 actuarial valuation.

#### **SPRS** Funds

The contribution rates for SPRS shown in the tables above are the full funding rates presented by the actuary in the 2009 through 2014 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, 2014

| KERS Non-Haz Pension Fund |                     |                 |                 |                 |                 |               |        |  |  |
|---------------------------|---------------------|-----------------|-----------------|-----------------|-----------------|---------------|--------|--|--|
|                           |                     | Value of Assets |                 | Unfundec        | l Liability     | Funding Level |        |  |  |
| Valuation<br>Date         | Actuarial Liability | Actuarial       | Market          | Actuarial       | Market          | Actuarial     | Market |  |  |
| 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%  |  |  |
| 6/30/14                   | \$11,550,110,224    | \$2,423,956,716 | \$2,560,419,519 | \$9,126,153,508 | \$8,989,690,705 | 21.0%         | 22.2%  |  |  |

# **KERS Non-Haz Insurance Fund**

|                   |                     | Value of A    | Assets        | Unfunded        | Funding Level   |           |        |
|-------------------|---------------------|---------------|---------------|-----------------|-----------------|-----------|--------|
| Valuation<br>Date | Actuarial Liability | Actuarial     | Market        | Actuarial       | Market          | Actuarial | Market |
| 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%  |
| 6/30/14           | \$2,226,759,925     | \$621,236,646 | \$664,775,708 | \$1,605,523,279 | \$1,561,984,217 | 27.9%     | 29.9%  |

# **KERS Haz Pension Fund**

|                   | Value of Assets     |               | Unfunded      | Funding Level |               |           |        |
|-------------------|---------------------|---------------|---------------|---------------|---------------|-----------|--------|
| Valuation<br>Date | Actuarial Liability | Actuarial     | Market        | Actuarial     | Market        | Actuarial | Market |
| 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%  |
| 6/30/14           | \$816,850,063       | \$527,897,261 | \$559,504,340 | \$288,952,802 | \$257,345,723 | 64.6%     | 68.5%  |

# **KERS Haz Insurance Fund**

|                   |                     | Value of Assets |                | Unfunded Liability |                | Funding Level |        |
|-------------------|---------------------|-----------------|----------------|--------------------|----------------|---------------|--------|
| Valuation<br>Date | Actuarial Liability | Actuarial       | Market         | Actuarial          | Market         | Actuarial     | Market |
| 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%  |
| 6/30/14           | \$396,986,820       | \$419,395,867   | \$435,503,976  | (\$22,409,047)     | (\$38,517,156) | 105.6%        | 109.7% |

# Continued. Summary of Actuarially Unfunded Liabilities as of June 30, 2014

| CERS Non-Haz Pension Fund |                     |                 |                 |                 |                    |           |        |
|---------------------------|---------------------|-----------------|-----------------|-----------------|--------------------|-----------|--------|
|                           | Value of Assets     |                 |                 | Unfunded        | Unfunded Liability |           |        |
| Valuation<br>Date         | Actuarial Liability | Actuarial       | Market          | Actuarial       | Market             | Actuarial | Market |
| 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%  |
| 6/30/14                   | \$9,772,522,616     | \$6,117,133,692 | \$6,507,300,157 | \$3,655,388,924 | \$3,265,222,459    | 62.6%     | 66.6%  |

# **CERS Non-Haz Insurance Fund**

|                   |                     | Value of Assets |                 | Unfunded        | Funding Level   |           |        |
|-------------------|---------------------|-----------------|-----------------|-----------------|-----------------|-----------|--------|
| Valuation<br>Date | Actuarial Liability | Actuarial       | Market          | Actuarial       | Market          | Actuarial | Market |
| 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%  |
| 6/30/14           | \$2,616,914,600     | \$1,831,199,465 | \$1,899,557,376 | \$785,715,135   | \$717,357,224   | 70.0%     | 72.6%  |

# **CERS Haz Pension Fund**

|                   |                     | Value of Assets |                 | Unfunded I      | Funding Level   |           |        |
|-------------------|---------------------|-----------------|-----------------|-----------------|-----------------|-----------|--------|
| Valuation<br>Date | Actuarial Liability | Actuarial       | Market          | Actuarial       | Market          | Actuarial | Market |
| 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 | 56.7%     | 58.6%  |
| 6/30/14           | \$3,288,825,753     | \$1,967,640,027 | \$2,082,998,414 | \$1,321,185,726 | \$1,205,827,339 | 59.8%     | 63.3%  |

# **CERS Haz Insurance Fund**

|                   |                     | Value of Assets |                 | Unfunded I    | Funding Level   |           |        |
|-------------------|---------------------|-----------------|-----------------|---------------|-----------------|-----------|--------|
| Valuation<br>Date | Actuarial Liability | Actuarial       | Market          | Actuarial     | Market          | Actuarial | Market |
| 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%  |
| 6/30/14           | \$1,493,864,379     | \$997,733,237   | \$1,034,307,636 | \$496,131,142 | \$459,556,743   | 66.8%     | 69.2%  |



# Continued. Summary of Actuarially Unfunded Liabilities as of June 30, 2014

# **SPRS Pension Fund**

|                   |                        | Value of Assets |               | Unfunded I    | Funding Level |           |        |
|-------------------|------------------------|-----------------|---------------|---------------|---------------|-----------|--------|
| Valuation<br>Date | Actuarial<br>Liability | Actuarial       | Market        | Actuarial     | Market        | Actuarial | Market |
| 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%  |
| 6/30/14           | \$681,118,402          | \$242,741,735   | \$260,763,486 | \$438,376,667 | \$420,354,916 | 35.6%     | 38.3%  |

# **SPRS Insurance Fund**

|                   |                        | Value of Assets |               | Unfunded I    | Funding Level |           |        |
|-------------------|------------------------|-----------------|---------------|---------------|---------------|-----------|--------|
| Valuation<br>Date | Actuarial<br>Liability | Actuarial       | Market        | Actuarial     | Market        | Actuarial | Market |
| 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 | \$208,335,936 | 37.3%     | 37.6%  |
| 6/30/13           | \$222,326,743          | \$136,321,060   | \$142,830,916 | \$86,005,683  | \$79,495,827  | 61.3%     | 64.2%  |
| 6/30/14           | \$234,271,127          | \$155,594,760   | \$165,167,805 | \$78,676,367  | \$69,103,322  | 66.4%     | 70.5%  |



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



# Gains or Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience (*in Millions*) as of June 30, 2014

| Type of Activity  | Retirement<br>Gain | Insurance<br>Gain |
|---|--------------------|-------------------|
| KERS Non-Hazardous  |                    |                   |
| Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.  | (228.9)            | (33.7)            |
| Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.  | (8.1)              | 0.0               |
| Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.  | (0.5)              | (1.1)             |
| Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.   | 92.0               | 5.0               |
| 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. | 68.9               | (13.5)            |
| New Members. Additional unfunded accrued liability will produce a loss.   | (11.4)             | (2.2)             |
| Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.   | 128.8              | 24.1              |
| Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.   | 19.8               | 59.3              |
| Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.  | (1.1)              | 26.0              |
| Gain (or Loss) During Year From Financial Experience  | 59.4               | 63.9              |
| Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.  |                    | 0.0               |
| Composite Gain (or Loss) During Year  | 59.4               | 63.9              |

| KERS Hazardous  |        |       |
|---|--------|-------|
| Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.  | (34.7) | (3.8) |
| Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.  | (0.8)  | 0.7   |
| Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.  | 0.1    | (0.1) |
| Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.   | 20.0   | 3.1   |
| 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. | 7.0    | 7.1   |
| New Members. Additional unfunded accrued liability will produce a loss.   | (7.2)  | (4.3) |
| Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.   | 18.8   | 10.6  |
| Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.   | 4.0    | 21.0  |
| Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.  | (1.2)  | 3.2   |
| Gain (or Loss) During Year From Financial Experience  | 5.9    | 37.5  |
| Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.  | 0.0    | 0.0   |
| Composite Gain (or Loss) During Year  | 5.9    | 37.5  |

# *Continued.* Gains or Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience (*in Millions*) as of June 30, 2014

| Type of Activity  | Retirement<br>Gain | Insurance<br>Gain |
|---|--------------------|-------------------|
| CERS Non-Hazardous  |                    |                   |
| Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.  | (153.8)            | (28.2)            |
| Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.  | (22.3)             | (1.3)             |
| Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.  | (1.1)              | (2.0)             |
| Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.   | 44.7               | 9.7               |
| 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. | 63.0               | (27.5)            |
| New Members. Additional unfunded accrued liability will produce a loss.   | (15.1)             | (4.4)             |
| Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.   | 218.8              | 41.9              |
| Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.   | 1.4                | 60.8              |
| Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.  | 2.0                | 0.0               |
| Gain (or Loss) During Year From Financial Experience  | 137.7              | 49.0              |
| Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.  | 0.0                | 0.0               |
| Composite Gain (or Loss) During Year  | 137.7              | 49.0              |

| CERS Hazardous  |        |        |
|---|--------|--------|
| Age & Service Retirements. If members retire at older ages, there is a gain. If younger, a loss.  | (72.1) | (11.9) |
| Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.  | (3.7)  | 1.3    |
| Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.  | O.1    | (0.2)  |
| Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.   | 22.0   | 2.3    |
| Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed generates a gain; larger, a loss. | 7.5    | 45.0   |
| New Members. Additional unfunded accrued liability will produce a loss.   | (8.4)  | (3.1)  |
| Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.   | 63.9   | 20.4   |
| Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.   | 2.8    | 30.2   |
| Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.  | (0.8)  | (22.7) |
| Gain (or Loss) During Year From Financial Experience  | 11.2   | 61.3   |
| Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.  | 0.0    | 0.0    |
| Composite Gain (or Loss) During Year  | 11.2   | 61.3   |



# *Continued.* Gains or Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience (*in Millions*) as of June 30, 2014

| 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   | . (26.3)        | (10.4)         |
| Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.  | (0.2)           | 0.2            |
| Death-In Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.  | 0.0             | (0.1)          |
| Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.   | (0.7)           | (0.7)          |
| 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. | 4.4             | 5.3            |
| New Members. Additional unfunded accrued liability will produce a loss.   | (0.1)           | 0.0            |
| Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.   | 11.5            | 6.8            |
| Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.   | (1.0)           | 13.1           |
| Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, insurance election changes, etc.  | (2.7)           | (4.9)          |
| Gain (or Loss) During Year From Financial Experience  | (15.1)          | 9.3            |
| Non-Recurring Items. Adjustments for plan amendments, assumption changes, method changes and data corrections.  | 0.0             | 0.0            |
| Composite Gain (or Loss) During Year  | (15.1)          | 9.3            |

### Solvency Test per Funds as of June 30, 2014

#### **KERS Non-Hazardous Pension Fund**

|                   |                                    |                                 | Liabilities Covered by Actuarial Assets |                              |        |       |     |
|-------------------|------------------------------------|---------------------------------|---|------------------------------|--------|-------|-----|
| Valuation<br>Date | (1) Active Member<br>Contributions | (2) Retirees &<br>Beneficiaries | (3) Active Members<br>Employer Portion  | Actuarial Value<br>of Assets | (1)    | (2)   | (3) |
| 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% |     |
| 6/30/14           | \$928,557,540                      | \$8,870,692,596                 | \$1,750,860,088                         | \$2,423,956,716              | 100.0% | 16.9% |     |

#### **KERS Non-Hazardous Insurance Fund**

|                   |                                    |                                 | Liabilities Covered by Actuarial Assets |                              |        |       |     |
|-------------------|------------------------------------|---------------------------------|---|------------------------------|--------|-------|-----|
| Valuation<br>Date | (1) Active Member<br>Contributions | (2) Retirees &<br>Beneficiaries | (3) Active Members<br>Employer Portion  | Actuarial Value<br>of Assets | (1)    | (2)   | (3) |
| 6/30/09           | \$O                                | \$2,861,867,088                 | \$1,645,458,483                         | \$534,172,580                | 100.0% | 18.7% |     |
| 6/30/10           | \$O                                | \$2,744,534,054                 | \$1,721,601,987                         | \$471,341,628                | 100.0% | 17.2% |     |
| 6/30/11           | \$O                                | \$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           | \$O                                | \$1,338,772,860                 | \$789,981,274                           | \$497,584,327                | 100.0% | 37.2% |     |
| 6/30/14           | \$O                                | \$1,425,604,569                 | \$801,155,356                           | \$621,236,646                | 100.0% | 43.6% |     |

#### **KERS Hazardous Pension Fund**

|                   | A                                  | Actuarial Liabilities           |  |                              | Liabilities Covered by Actuarial Assets |        |      |
|-------------------|------------------------------------|---------------------------------|--|------------------------------|---|--------|------|
| Valuation<br>Date | (1) Active Member<br>Contributions | (2) Retirees &<br>Beneficiaries | (3) Active Members<br>Employer Portion | Actuarial Value<br>of Assets | (1)                                     | (2)    | (3)  |
| 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%  |      |
| 6/30/14           | \$83,663,535                       | \$581,231,300                   | \$151,955,228                          | \$527,897,261                | 100.0%                                  | 76.4%  |      |

#### **KERS Hazardous Insurance Fund**

Actuarial Liabilities Liabilities Covered by Actuarial Assets Actuarial Value Valuation (1) Active Member (2) Retirees & (3) Active Members (1) (2) (3) Date Contributions Beneficiaries **Employer Portion** of Assets 6/30/09 \$O \$242,123,365 \$249,008,805 \$301,634,592 100.0% 100.0% 23.9% 6/30/10 \$268,510,709 \$224,786,820 \$314,427,296 100.0% 100.0% \$O 20.4% 6/30/11 \$285,539,861 \$221,518,906 100.0% 100.0% \$O \$329,961,615 20.1% 6/30/12 \$O \$196,578,935 \$188,013,471 \$345,573,948 100.0% 100.0% 79.2% 100.0% 100.0% 92.0% 6/30/13 \$O \$202,031,515 \$183,486,160 \$370,774,403 6/30/14 \$O \$206,477,405 \$190,509,415 \$419,395,867 100.0% 100.0% 100%

#### Continued. Solvency Test as of June 30, 2014

#### **CERS Non-Hazardous Pension Fund**

|                   | ۵                                  | Liabilities Covered by Actuarial Assets |  |                              |        |        |      |
|-------------------|------------------------------------|---|--|------------------------------|--------|--------|------|
| Valuation<br>Date | (1) Active Member<br>Contributions | (2) Retirees &<br>Beneficiaries         | (3) Active Members<br>Employer Portion | Actuarial Value<br>of Assets | (1)    | (2)    | (3)  |
| 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%  |      |
| 6/30/14           | \$1,204,383,085                    | \$5,873,279,494                         | \$2,694,860,037                        | \$6,117,133,692              | 100.0% | 83.6%  |      |

#### **CERS Non-Hazardous Insurance Fund**

|                   | ŀ                                  | Liabilities Covered by Actuarial Assets |  |                              |        |        |       |
|-------------------|------------------------------------|---|--|------------------------------|--------|--------|-------|
| Valuation<br>Date | (1) Active Member<br>Contributions | (2) Retirees &<br>Beneficiaries         | (3) Active Members<br>Employer Portion | Actuarial Value<br>of Assets | (1)    | (2)    | (3)   |
| 6/30/09           | \$O                                | \$1,478,782,753                         | \$1,591,603,265                        | \$1,216,631,769              | 100.0% | 82.3%  |       |
| 6/30/10           | \$O                                | \$1,526,533,372                         | \$1,631,806,802                        | \$1,293,038,593              | 100.0% | 84.7%  |       |
| 6/30/11           | \$O                                | \$1,460,808,255                         | \$1,613,164,950                        | \$1,433,450,793              | 100.0% | 98.1%  |       |
| 6/30/12           | \$O                                | \$1,146,907,750                         | \$1,223,863,538                        | \$1,512,853,851              | 100.0% | 100.0% | 29.9% |
| 6/30/13           | \$O                                | \$1,205,599,287                         | \$1,238,294,813                        | \$1,628,244,197              | 100.0% | 100.0% | 34.1% |
| 6/30/14           | \$O                                | \$1,318,182,882                         | \$1,298,731,718                        | \$1,831,199,465              | 100.0% | 100.0% | 39.5% |

#### **CERS Hazardous Pension Fund**

|                   | A                                  |                                 | Liabilities Covered by Actuarial Assets |                              |        |       |     |
|-------------------|------------------------------------|---------------------------------|---|------------------------------|--------|-------|-----|
| Valuation<br>Date | (1) Active Member<br>Contributions | (2) Retirees &<br>Beneficiaries | (3) Active Members<br>Employer Portion  | Actuarial Value<br>of Assets | (1)    | (2)   | (3) |
| 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% |     |
| 6/30/14           | \$415,069,629                      | \$2,077,516,709                 | \$796,239,415                           | \$1,967,640,027              | 100.0% | 74.7% |     |

#### **CERS Hazardous Insurance Fund**

|                   | Ad                                 |                                 | Liabilities Covered by Actuarial Assets |                              |        |        |       |
|-------------------|------------------------------------|---------------------------------|---|------------------------------|--------|--------|-------|
| Valuation<br>Date | (1) Active Member<br>Contributions | (2) Retirees &<br>Beneficiaries | (3) Active Members<br>Employer Portion  | Actuarial Value<br>of Assets | (1)    | (2)    | (3)   |
| 6/30/09           | \$O                                | \$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% |
| 6/30/14           | \$0                                | \$700,311,599                   | \$793,552,780                           | \$997,733,237                | 100.0% | 100.0% | 37.5% |

#### Continued. Solvency Test as of June 30,2014

Actuarial Liabilities

#### **SPRS Pension Fund**

|                   | ,                                  |                                 | 2                                      |                              | Liabilities CC | wered by Acti | adial Assets |
|-------------------|------------------------------------|---------------------------------|--|------------------------------|----------------|---------------|--------------|
| Valuation<br>Date | (1) Active Member<br>Contributions | (2) Retirees &<br>Beneficiaries | (3) Active Members<br>Employer Portion | Actuarial Value<br>of Assets | (1)            | (2)           | (3)          |
| 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%         |              |
| 6/30/14           | \$41,831,465                       | \$563,011,026                   | \$76,275,911                           | \$242,741,735                | 100.0%         | 35.7%         |              |

Liabilities Covered by Actuarial Assets

#### **SPRS Insurance Fund**

|                   |                                    | Liabilities Covered by Actuarial Assets |  |                              |        |        |       |
|-------------------|------------------------------------|---|--|------------------------------|--------|--------|-------|
| Valuation<br>Date | (1) Active Member<br>Contributions | (2) Retirees &<br>Beneficiaries         | (3) Active Members<br>Employer Portion | Actuarial Value<br>of Assets | (1)    | (2)    | (3)   |
| 6/30/09           | \$O                                | \$167,091,453                           | \$196,939,688                          | \$123,526,647                | 100.0% | 73.9%  |       |
| 6/30/10           | \$O                                | \$253,580,827                           | \$181,379,668                          | \$121,175,083                | 100.0% | 47.8%  |       |
| 6/30/11           | \$O                                | \$252,439,726                           | \$185,988,037                          | \$123,687,289                | 100.0% | 49.0%  |       |
| 6/30/12           | \$O                                | \$190,258,729                           | \$143,645,053                          | \$124,372,072                | 100.0% | 65.4%  |       |
| 6/30/13           | \$O                                | \$139,508,590                           | \$82,818,153                           | \$136,321,060                | 100.0% | 97.7%  |       |
| 6/30/14           | \$O                                | \$143,402,126                           | \$90,869,001                           | \$155,594,760                | 100.0% | 100.0% | 13.4% |

# Active Member Valuation

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

#### **Summary of Active Member Valuation Data**

| KERS Non-Haz      |                        |                         |                             |                       |                              |                |                                    |  |  |  |  |
|-------------------|------------------------|-------------------------|-----------------------------|-----------------------|------------------------------|----------------|------------------------------------|--|--|--|--|
| Valuation<br>Date | Number of<br>Employers | Total Active<br>Members | Annual Payroll <sup>1</sup> | Annual Average<br>Pay | % Increase In<br>Average Pay | Average<br>Age | Average Years of<br>Service Credit |  |  |  |  |
| 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                               |  |  |  |  |
| 6/30/14           | 353                    | 40,365                  | \$1,577,496,447             | \$39,081              | 0.4%                         | 44.8           | 10.5                               |  |  |  |  |

<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, 2014.

#### KERS Haz

| Valuation<br>Date | Number of<br>Employers | Total Active<br>Members | Annual Payroll <sup>1</sup> | Annual Average<br>Pay | % Increase In<br>Average Pay | Average<br>Age | Average Years of<br>Service Credit |
|-------------------|------------------------|-------------------------|-----------------------------|-----------------------|------------------------------|----------------|------------------------------------|
| 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                                |
| 6/30/14           | 18                     | 4,024                   | \$129,076,038               | \$32,077              | 0.3%                         | 40.6           | 7.4                                |

#### **CERS Non-Haz**

| Valuation<br>Date | Number of<br>Employers | Total Active<br>Members | Annual Payroll <sup>1</sup> | Annual Average<br>Pay | % Increase In<br>Average Pay | Average<br>Age | Average Years of<br>Service Credit |
|-------------------|------------------------|-------------------------|-----------------------------|-----------------------|------------------------------|----------------|------------------------------------|
| 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                                |
| 6/30/14           | 1,101                  | 81,115                  | \$2,272,270,287             | \$28,013              | 2.5%                         | 48.1           | 9.6                                |

#### **CERS** Haz

| Valuation<br>Date | Number of<br>Employers | Total Active<br>Members | Annual Payroll <sup>1</sup> | Annual Average<br>Pay | % Increase In<br>Average Pay | Average<br>Age | Average Years of<br>Service Credit |
|-------------------|------------------------|-------------------------|-----------------------------|-----------------------|------------------------------|----------------|------------------------------------|
| 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                               |
| 6/30/14           | 254                    | 9,194                   | \$479,164,016               | \$52,117              | 3.0%                         | 39.2           | 10.6                               |

#### SPRS

| Valuation<br>Date | Number of<br>Employers | Total Active<br>Members | Annual Payroll <sup>1</sup> | Annual Average<br>Pay | % Increase In<br>Average Pay | Average<br>Age | Average Years of<br>Service Credit |
|-------------------|------------------------|-------------------------|-----------------------------|-----------------------|------------------------------|----------------|------------------------------------|
| 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                               |
| 6/30/14           | 1                      | 855                     | \$44,615,885                | \$52,182              | 4.0%                         | 37.8           | 10.9                               |

<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, 2014.

#### **Summary of Retired Member Valuation Data**

| KERS No           | n-Haz           |                   |                                   |                                     |                             |                             |
|-------------------|-----------------|-------------------|-----------------------------------|-------------------------------------|-----------------------------|-----------------------------|
| Valuation<br>Date | Number<br>Added | Number<br>Removed | Total Retirees &<br>Beneficiaries | Annualized Retirement<br>Allowances | % Increase in<br>Allowances | Average Annual<br>Allowance |
| 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                    |
| 6/30/14           | 2,067           | 1,038             | 41,223                            | \$888,430,310                       | 1.87%                       | \$21,552                    |

#### **KERS Haz**

| Valuation<br>Date | Number of<br>Employers | Total Active<br>Members | Annual Average Pay | % Increase In Average<br>Pay | Average Age | Average Years of<br>Service Credit |
|-------------------|------------------------|-------------------------|--------------------|------------------------------|-------------|------------------------------------|
| 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                           |
| 6/30/14           | 256                    | 66                      | 3,620              | \$54,271,718                 | 6.16%       | \$14,992                           |

#### **CERS Non-Haz**

| Valuation<br>Date | Number of<br>Employers | Total Active<br>Members | Annual Average Pay | % Increase In Average<br>Pay | Average Age | Average Years of<br>Service Credit |
|-------------------|------------------------|-------------------------|--------------------|------------------------------|-------------|------------------------------------|
| 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                           |
| 6/30/14           | 3,480                  | 1,221                   | 49,935             | \$582,957,825                | 4.48%       | \$11,674                           |

#### **CERS** Haz

| Valuation<br>Date | Number of<br>Employers | Total Active<br>Members | Annual Average Pay | % Increase In Average<br>Pay | Average Age | Average Years of<br>Service Credit |
|-------------------|------------------------|-------------------------|--------------------|------------------------------|-------------|------------------------------------|
| 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                           |
| 6/30/14           | 469                    | 116                     | 7,646              | \$191,007,832                | 4.58%       | \$24,981                           |

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

| SPRS              |                 |                   |                                   |                                     |                             |                             |
|-------------------|-----------------|-------------------|-----------------------------------|-------------------------------------|-----------------------------|-----------------------------|
| Valuation<br>Date | Number<br>Added | Number<br>Removed | Total Retirees &<br>Beneficiaries | Annualized Retirement<br>Allowances | % Increase in<br>Allowances | Average Annual<br>Allowance |
| 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                    |
| 6/30/14           | 95              | 28                | 1,413                             | \$53,432,446                        | 4.96%                       | \$37,815                    |

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

# **Summary of Benefit Provisions** KERS & CERS Non-Hazardous Plans

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

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

|                           | Retirement Eligibility for Members Whose Participation<br>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.  |  |  |  |  |  |
|                           | nent Eligibility<br>On or After 9/  | for Members Whose Participation  |  |  |  |  |  |
|                           |   | for Members Whose Participation  |  |  |  |  |  |
| Began                     | On or After 9/  | for Members Whose Participation<br>1/08  |  |  |  |  |  |
| <mark>Began</mark><br>Age | On or After 9/<br>Years of Service  | for Members Whose Participation<br>1/08<br>Allowance Reduction   |  |  |  |  |  |
| Began<br>Age<br>65        | On or After 9/<br>Years of Service  | for Members Whose Participation<br>1/08<br>Allowance Reduction<br>None                                 |  |  |  |  |  |



State statute requires active members to contribute 5% of creditable compensation. For members participating on or after September 1, 2008 an additional 1% of creditable compensation is required for health insurance.



**Benefit Formula** 

| Final Compensation  | 3  | Benefit Factor   | Years of Service   |
|---|--|--|--|
|   | KERS 1.97% if:   | Member does not have 13<br>months credit for 1/1/1998-<br>1/1/1999.  |  |
|   | KERS 2.00% if:   | Member has 13 months credit<br>from 1/1/1998-1/1/1999.   |  |
| Average of the<br>five highest if<br>participation began<br>before 9/1/2008.            | KERS 2.20% if:   | Member has 20 or more<br>years of service, including<br>13 months from 1/1/1998-<br>1/1/1999 and retires by<br>1/1/2009. | Includes earned<br>service, purchased<br>service, prior<br>service, and sick |
|   | CERS 2.20% if:   | Member begins participating prior to 8/1/2004.   | leave service (if<br>the member's<br>employer                                |
|   | CERS 2.00% if:   | Member begins participating<br>on or after 8/1/2004 and<br>before 9/1/2008.  | participates in an<br>approved sick<br>leave program).                       |
| Average of the last<br>complete five if<br>participation began<br>on or after 9/1/2008. | KERS & CERS<br>increasing percent<br>based on service<br>at retirement* plus<br>2.00% for<br>each year of<br>service over 30 if: |  |  |

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

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

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

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

Members participating on or after 1/1/2014 may retire on account of disability provided the member has at least 60 months of service credit. The hypothetical account which includes member contributions, employer contributions and interest credits can be withdrawn from



the System as a lump sum or an annuity equal to the larger of 20% of the member's monthly final rate of pay or the annuitized hypothetical account into a single life annuity option.

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

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

**Cost of Living Adjustment** Monthly retirement allowances are increased July 1 each year by one and one-half percent (1.5%). The Kentucky General Assembly has the authority to increase, suspend or reduce Cost of Living Adjustments. HB 265 of 2012 eliminated the July 1, 2012 and July 1, 2013 COLAs for all retirees. SB 2 of 2013 eliminated all future COLAs unless the State Legislature so authorizes on a biennial basis and either (i) the system is over 100% funded or (ii) the Legislature appropriates sufficient funds to pay the increased liability for the COLA.

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

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

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



# **Summary of Benefit Provisions**

KERS Hazardous, CERS Hazardous & SPRS Systems

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

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

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

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

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

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

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

| Age | Years of Service | Allowance Reduction |
|-----|------------------|---------------------|
| 60  | 5                |                     |
| Any | 25               |                     |

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

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

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



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

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

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

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

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

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

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

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

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

**Interest on Accounts** Active member accounts have been credited with interest on July 1 of each year at 3% compounded annually through June 30, 1981; 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%.



# Statistical





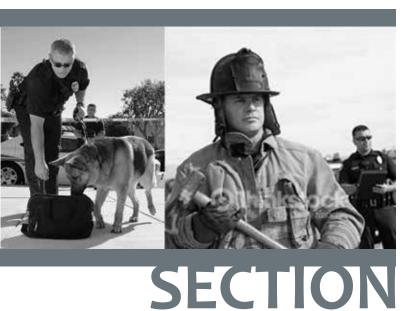


TABLE OF CONTENTS

- 158 FUND STATISTICS
- 160 PARTICIPATING EMPLOYER
- 162 MEMBER MONTHLY BENEFIT
- 163 PLAN NET POSITION
- 159 SCHEDULE OF BENEFIT EXPENSES
- 174 ANALYSIS OF INITIAL RETIREES
- 175 PAYMENT OPTIONS
- 176 EMPLOYER CONTRIBUTION RATES
- 177 RETIRED REEMPLOYED
- 178 INSURANCE CONTRACTS
- 180 PAYMENT BY COUNTIES





#### Kentucky Retirement Systems Membership Totals

| Fiscal Year | Active  | Inactive | Retired | Total   |
|-------------|---------|----------|---------|---------|
| 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 |
| 2014        | 137,138 | 117,039  | 93,946  | 348,123 |

### **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 2009 data 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   |  |
| 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 |  |
| 2014                    | 40,500 | 41,213   | 38,022  | 119,735 |  |

| CERS | Non-l | Haz N | <b>dem</b> | bers | hip |
|------|-------|-------|------------|------|-----|
|      |       |       |            |      |     |

| Fiscal Year | Active | Inactive | Retired | Total   |
|-------------|--------|----------|---------|---------|
| 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 |
| 2014        | 82,494 | 70,231   | 46,112  | 198,837 |



#### **KERS Haz Membership**

| Fiscal Year | Active | Inactive | Retired | Total  |
|-------------|--------|----------|---------|--------|
| 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  |
| 2014        | 4,094  | 3,318    | 2,467   | 9,879  |

### CERS Haz Membership

| Fiscal Year | Active | Inactive | Retired | Total  |
|-------------|--------|----------|---------|--------|
| 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 |
| 2014        | 9,189  | 2,038    | 6,066   | 17,293 |

| SPRS        |        |          |         |       |
|-------------|--------|----------|---------|-------|
| Fiscal Year | Active | Inactive | Retired | Total |
| 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 |
| 2014        | 861    | 239      | 1,279   | 2,379 |



### Principal Participating Employers in KERS

| Participating<br>Employer   | Rank | Covered Employees | % of Total System |
|---|------|-------------------|-------------------|
| Department For<br>Community Based<br>Services                                     | 1    | 4,409             | 9.66%             |
| Department Of Highways  | 2    | 3,988             | 8.74%             |
| Department Of<br>Corrections  | 3    | 3,917             | 8.58%             |
| Judicial Department<br>Administrative Office Of<br>The Courts                     | 4    | 1,317             | 2.89%             |
| Department Of Juvenile<br>Justice   | 5    | 1,296             | 2.84%             |
| Bluegrass ORG   | 6    | 1,103             | 2.42%             |
| Department for<br>Behavioral Health<br>Developmental<br>Intellectual Disabilities | 7    | 1,015             | 2.22%             |
| Department Of Revenue   | 8    | 934               | 2.05%             |
| Kentucky State Police   | 9    | 934               | 2.05%             |
| Northern Kentucky<br>University   | 10   | 925               | 2.03%             |
| All Others  |      | 25,803            | 56.53%            |
| Total   |      | 45,641            | 100%              |

# Schedule of Participating Employers in KERS

| Agency Classification        | Number of Agencies | Number of Employees |
|------------------------------|--------------------|---------------------|
| County Attorneys             | 61                 | 327                 |
| Health Departments           | 60                 | 2,962               |
| Master Commissioner          | 33                 | 79                  |
| Non-P1 State Agencies        | 39                 | 1,394               |
| Other Retirement Systems     | 2                  | 291                 |
| P1 State Agencies            | 139                | 32,401              |
| Regional Mental Health Units | 13                 | 3,643               |
| Universities                 | 7                  | 4,544               |
| Total                        | 354                | 45,641              |



# Schedule of Participating Employers in CERS

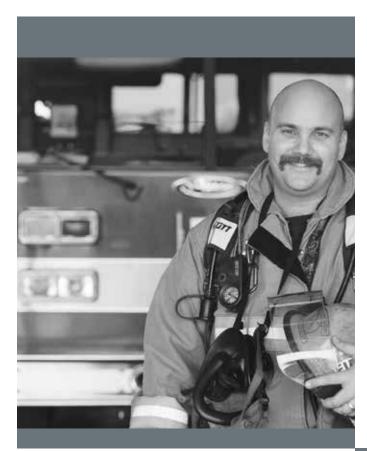
| Agency Classification      | Number of<br>Agencies | Number of<br>Employees |
|----------------------------|-----------------------|------------------------|
| Airport Boards             | 5                     | 510                    |
| Ambulance Services         | 20                    | 400                    |
| Area Development Districts | 14                    | 724                    |
| Boards of Education        | 173                   | 48,201                 |
| Cities                     | 220                   | 10,180                 |
| Community Action Agencies  | 22                    | 2,618                  |
| Conservation Districts     | 47                    | 59                     |
| County Attorneys           | 74                    | 701                    |
| County Clerks              | 16                    | 601                    |
| Development Authorities    | 6                     | 11                     |
| Fire Departments           | 38                    | 805                    |
| Fiscal Courts              | 118                   | 10,999                 |
| Health Departments         | 1                     | 292                    |
| Housing Authorities        | 41                    | 429                    |
| Jailers                    | 2                     | 29                     |
| Libraries                  | 86                    | 1,226                  |
| Other Retirement Systems   | 2                     | 3                      |
| P1 State Agencies          | 4                     | 1,640                  |
| Parks and Recreation       | 7                     | 66                     |
| Planning Commissions       | 16                    | 217                    |
| Police Departments         | 2                     | 11                     |
| Riverport Authorities      | 5                     | 66                     |
| Sanitation Districts       | 9                     | 357                    |
| Sheriff Departments        | 12                    | 827                    |
| Special Districts & Boards | 53                    | 1,406                  |
| Tourist Commissions        | 23                    | 173                    |
| Urban Government Agencies  | 2                     | 6,634                  |
| Utility Boards             | 119                   | 3,879                  |
| Tier 1                     |                       | 61,246                 |
| Tier 2                     |                       | 28,734                 |
| Tier 3                     |                       | 3,084                  |
| Total                      | 1,137                 | 93,064                 |
|                            |                       |                        |

# Schedule of Participating Employers in SPRS

| Kentucky State Police - | 1 | 862 |
|-------------------------|---|-----|
| Uniformed Officers      |   |     |

#### Principal Participating Employers in CERS

| Participating<br>Employer                                     | Rank | Covered<br>Employees | % of Total<br>System |
|---|------|----------------------|----------------------|
| Jefferson County Board<br>Of Education                        | 1    | 6,562                | 7.05%                |
| Louisville Jefferson<br>County Metro<br>Government            | 2    | 5,149                | 5.53%                |
| Fayette County Board Of<br>Education                          | 3    | 1,968                | 2.11%                |
| Judicial Department<br>Administrative Office Of<br>The Courts | 4    | 1,640                | 1.76%                |
| Lexington Fayette Urban<br>County Government                  | 5    | 1,485                | 1.60%                |
| Pike County Board Of<br>Education                             | 6    | 1,107                | 1.19%                |
| Boone County Board Of<br>Education                            | 7    | 1,099                | 1.18%                |
| Bullitt County Board Of<br>Education                          | 8    | 1,045                | 1.12%                |
| Hardin County Board Of<br>Education                           | 9    | 985                  | 1.06%                |
| Warren County Board Of<br>Education                           | 10   | 888                  | 0.95%                |
| All Others  |      | 71,136               | 76.44%               |
| Total   |      | 93,064               | 100%                 |



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

|                             | KERS Non-H            | azardous                   | KERS Haz              | ardous                     |
|-----------------------------|-----------------------|----------------------------|-----------------------|----------------------------|
| Service Credit Range        | Number of<br>Accounts | Average<br>Monthly Benefit | Number of<br>Accounts | Average<br>Monthly Benefit |
| Under 5 Years               | 4,973                 | \$170                      | 674                   | \$197                      |
| 5 or more but less than 10  | 5,380                 | \$412                      | 731                   | \$569                      |
| 10 or more but less than 15 | 4,788                 | \$691                      | 649                   | \$1,018                    |
| 15 or more but less than 20 | 4,070                 | \$1,015                    | 572                   | \$1,534                    |
| 20 or more but less than 25 | 4,510                 | \$1,356                    | 792                   | \$2,014                    |
| 25 or more but less than 30 | 11,006                | \$2,292                    | 146                   | \$2,772                    |
| 30 or more but less than 35 | 6,189                 | \$3,237                    | 56                    | \$3,627                    |
| 35 or more                  | 2,528                 | \$4,556                    | 8                     | \$4,322                    |
| Total                       | 43,444                | \$1,689                    | 3,628                 | \$1,192                    |

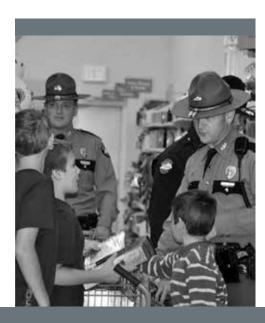
#### Average Monthly Benefit by Length of Service in CERS

|                             | CERS Non-H            | azardous                   | CERS Haz              | ardous                     |
|-----------------------------|-----------------------|----------------------------|-----------------------|----------------------------|
| Service Credit Range        | Number of<br>Accounts | Average<br>Monthly Benefit | Number of<br>Accounts | Average<br>Monthly Benefit |
| Under 5 Years               | 6,499                 | \$156                      | 918                   | \$340                      |
| 5 or more but less than 10  | 9,825                 | \$329                      | 926                   | \$662                      |
| 10 or more but less than 15 | 9,213                 | \$519                      | 727                   | \$1,211                    |
| 15 or more but less than 20 | 7,286                 | \$765                      | 657                   | \$1,724                    |
| 20 or more but less than 25 | 7,611                 | \$990                      | 2,792                 | \$2,415                    |
| 25 or more but less than 30 | 9,280                 | \$1,903                    | 1,168                 | \$3,373                    |
| 30 or more but less than 35 | 2,314                 | \$2,672                    | 383                   | \$4,166                    |
| 35 or more                  | 607                   | \$3,637                    | 90                    | \$5,079                    |
| Total                       | 52,635                | \$915                      | 7,661                 | \$2,046                    |

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

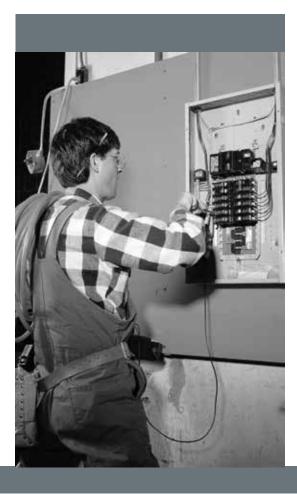
| Service Credit Range        | Number of<br>Accounts | Average<br>Monthly Benefit |
|-----------------------------|-----------------------|----------------------------|
| Under 5 Years               | 110                   | \$495                      |
| 5 or more but less than 10  | 44                    | \$901                      |
| 10 or more but less than 15 | 47                    | \$1,352                    |
| 15 or more but less than 20 | 82                    | \$1,997                    |
| 20 or more but less than 25 | 417                   | \$2,629                    |
| 25 or more but less than 30 | 429                   | \$3,642                    |
| 30 or more but less than 35 | 225                   | \$4,808                    |
| 35 or more                  | 62                    | \$5,866                    |
| Total                       | 1,416                 | \$3,126                    |

This table reflects the Average Monthly Pension Benefit. A single member may have multiple accounts, which contribute to one pension. This table does not reflect dependent child accounts, Qualified Domestic Relations Order (QDRO) accounts or multiple beneficiary accounts.



### Plan Net Position (in Thousands)

| KERS          |               |           |           |           |           |           |
|---------------|---------------|-----------|-----------|-----------|-----------|-----------|
|               | 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   |
| June 30, 2014 | 2,578,290     | 646,905   | 3,225,195 | 561,484   | 433,525   | 995,009   |
| 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 |
| June 30, 2014 | 6,528,147     | 1,878,711 | 8,406,858 | 2,087,002 | 1,030,303 | 3,117,305 |



| 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 |
| June 30, 2014 | 260,974 | 164,958 | 425,932 |

#### 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 |
| June 30, 2014 | 12,015,897 | 4,154,402 | 16,170,299 |



#### KERS Non-Haz Pension Fund

| Additions                            | 2009        | 2010     | 2011      | 2012      | 2013      | 2014      |
|--------------------------------------|-------------|----------|-----------|-----------|-----------|-----------|
| Members' Contributions               | \$108,362   | \$90,780 | \$109,879 | \$96,418  | \$??      | \$92,941  |
| Employers' Contributions             | 112,383     | 144,051  | 185,558   | 211,071   | 280,874   | 296,836   |
| Health Insurance Contributions (HB1) | 404         | 1,799    | 2,441     | 5,337     | 3,344     | 4,546     |
| Net Investment Income                | (867,675)   | 526,209  | 599,790   | 9,789     | 303,011   | 337,174   |
| Total Additions                      | (646,526)   | 762,839  | \$897,668 | 322,615   | 683,973   | 732,246   |
| Deductions                           |             |          |           |           |           |           |
| Benefit Payments                     | 808,513     | 825,627  | 838,372   | 858,151   | 873,906   | 889,937   |
| Refunds                              | 9,127       | 8,887    | 10,931    | 12,004    | 12,907    | 13,627    |
| Administrative Expenses              | 8,102       | 8,424    | 8,558     | 8,776     | 10,719    | 11,145    |
| Capital Project Expenses             | -           | -        | 67        | 8         |           |           |
| Total Deductions                     | 825,742     | 842,938  | 857,928   | 878,939   | 897,532   | 914,709   |
| Total Changes in Plan Net Position   | (1,472,268) | (80,099) | 39,740    | (556,324) | (213,559) | (182,463) |

### KERS Non-Haz Insurance Fund

| Additions                          | 2009      | 2010       | 2011      | 2012      | 2013      | 2014      |
|------------------------------------|-----------|------------|-----------|-----------|-----------|-----------|
| Employers' Contributions           | \$74,434  | \$\$92,679 | \$123,256 | \$146,844 | \$162,191 | \$164,176 |
| Net Investment Income              | (154,894) | 50,765     | 77,225    | (4,803)   | 40,661    | 96,578    |
| Member Drug Reimbursement          | 8,168     | 8,551      | 10,025    | 7,865     | 4,846     | 8         |
| Premiums Rec'd from Retirees       | 12,320    | 13,588     | 15,826    | 15,666    | 14,294    | 918       |
| Total Additions                    | (59,972)  | 165,583    | \$226,332 | \$165,563 | 221,992   | 264,273   |
| Deductions                         |           |            |           |           |           |           |
| Benefit Payments                   | 145,036   | 157,819    | 161,804   | 163,841   | 140,157   | 112,671   |
| Administrative Expenses            | 4,104     | 4,333      | 4,667     | 5,203     | 4,285     | 736       |
| Total Deductions                   | 149,140   | 162,152    | 166,471   | 169,044   | 144,442   | 113,407   |
| Total Changes in Plan Net Position | (209,112) | 3,431      | 59,861    | 169,044   | 77,550    | 150,865   |



#### KERS Haz Pension Fund

| Additions                           | 2009       | 2010     | 2011      | 2012       | 2013     | 2014     |
|-------------------------------------|------------|----------|-----------|------------|----------|----------|
| Member Contributions                | \$12,442   | \$11,110 | \$12,959  | \$11,602   | \$11,467 | \$11,995 |
| Employer Contributions              | 15,843     | 17,658   | 18,085    | 17,367     | 27,334   | 11,670   |
| Health Insurance Contribution (HB1) | 38         | 118      | 241       | 629        | 402      | 551      |
| Net Investment Income               | (84,262)   | 65,588   | 83,492    | (10,286)   | 51,497   | 80,549   |
| Total Additions                     | (55,939)   | 94,474   | \$114,777 | 19,312     | 90,700   | 104,941  |
| Deductions                          |            |          |           |            |          |          |
| Benefit Payments                    | 37,556     | 37,796   | 44,509    | 48,424     | 48,855   | 54,320   |
| Refunds                             | 1,277      | 1,286    | 2,062     | 2,543      | 2,762    | 2,830    |
| Administrative Expenses             | 715        | 737      | 721       | 877        | 733      | 897      |
| Capital Project Expenses            | -          | -        | 6         | -          | -        |          |
| Total Deductions                    | 39,548     | 39,819   | 47,298    | 51,844     | 52,350   | 58,048   |
| Total Changes in Plan Net Position  | \$(95,487) | \$54,655 | \$67,479  | \$(32,532) | \$38,350 | 46,892   |

#### KERS Haz Insurance Fund

| Additions                          | 2009     | 2010     | 2011     | 2012     | 2013     | 2014     |
|------------------------------------|----------|----------|----------|----------|----------|----------|
| Employers' Contributions           | \$20,803 | \$21,835 | \$18,826 | \$23,984 | \$25,144 | \$23,336 |
| Net Investment Income              | (60,641) | 42,406   | 45,205   | 60       | 32,887   | 52,082   |
| Member Drug Reimbursement          | 186      | 319      | 365      | 351      | 243      | 0        |
| Premiums Rec'd from Retirees       | 300      | 835      | 588      | 876      | 895      | 37       |
| Total Additions                    | (39,352) | 65,395   | 64,984   | 25,271   | 59,169   | 76,126   |
| Deductions                         |          |          |          |          |          |          |
| Benefit Payments                   | 10,304   | 13,456   | 15,327   | 13,941   | 16,837   | 15,405   |
| Administrative Expenses            | 144      | 200      | 223      | 335      | 179      | 78       |
| Total Deductions                   | 10,448   | 13,656   | 15,550   | 14,276   | 17,016   | 15,482   |
| Total Changes in Plan Net Position | (49,800) | 51,739   | 49,434   | 10,995   | 42,153   | 60,642   |



| CERS Non-Haz Pension Fund           | k             |           |             |             |           |           |
|-------------------------------------|---------------|-----------|-------------|-------------|-----------|-----------|
| Additions                           | 2009          | 2010      | 2011        | 2012        | 2013      | 2014      |
| Members' Contributions              | \$122,518     | \$106,558 | \$144,861   | \$119,123   | \$120,777 | \$122,459 |
| Employers' Contributions            | 179,286       | 207,076   | 247,968     | 270,664     | 294,914   | 324,231   |
| Health Insurance Contribution (HB1) | 415           | 1,345     | 3,216       | 5,101       | 4,659     | 6,109     |
| Net Investment Income               | (927,090)     | 669,072   | 887,514     | (3,349)     | 579,161   | 893,386   |
| Total Additions                     | (624,871)     | 984,051   | \$1,283,559 | \$391,539   | \$999,511 | 1,348,330 |
| Deductions                          |               |           |             |             |           |           |
| Benefit Payments                    | 451,304       | 470,249   | 494,344     | 524,385     | 553,204   | 582,850   |
| Refunds                             | 10,719        | 10,001    | 11,816      | 12.765      | 13,306    | 14,286    |
| Administrative Expenses             | 13,831        | 14,323    | 14,324      | 16,740      | 17,743    | 18,615    |
| Capital Project Expenses            | -             | -         | 112         | 9           | -         |           |
| Total Deductions                    | 475,854       | 494,571   | 520,596     | 553,899     | 584,253   | 615,751   |
| Total Changes in Plan Net Position  | \$(1,100,725) | \$489,478 | \$762,963   | \$(162,360) | \$415,258 | 732,579   |

#### **CERS Non-Haz Insurance Fund**

| Additions                          | 2009      | 2010      | 2011      | 2012      | 2013      | 2014      |
|------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Additions                          | 2009      | 2010      | 2011      | 2012      | 2013      | 2014      |
| Employer Contributions             | \$123,761 | \$166,032 | \$185,639 | \$164,297 | \$158,212 | \$121,161 |
| Net Investment Income              | (244,148) | 136,528   | 274,743   | (32,992)  | 147,194   | 231,743   |
| Member Drug Reimbursement          | 7,624     | 9,157     | 10,449    | 8,443     | 5,360     | 6         |
| Premiums Rec'd from Retirees       | 14,356    | 16,216    | 18,053    | 17,493    | 16,293    | 1,449     |
| Total Additions                    | (98,407)  | 327,933   | \$488,884 | \$157,241 | 327,059   | 357,064   |
| Deductions                         |           |           |           |           |           |           |
| Benefit Payments                   | 108,995   | 123,133   | 131,945   | 141,694   | 132,489   | 96,804    |
| Administrative Expenses            | 4,053     | 4,469     | 4,763     | 5,545     | 4,431     | 508       |
| Total Deductions                   | 113,048   | 127,602   | 136,708   | 147,239   | 136,920   | 97,312    |
| Total Changes in Plan Net Position | (211,455) | 200,331   | 352,176   | 10,002    | 190,139   | 259,751   |



| CERS Haz Pension Fund               |           |          |           |          |          |          |
|-------------------------------------|-----------|----------|-----------|----------|----------|----------|
| Additions                           | 2009      | 2010     | 2011      | 2012     | 2013     | 2014     |
| Members' Contributions              | \$42,582  | \$37,200 | \$53,918  | \$41,797 | \$42,863 | \$42,631 |
| Employers' Contributions            | 78,151    | 82,887   | 84,595    | 77,311   | 120,140  | 115,240  |
| Health Insurance Contribution (HB1) | 37        | 174      | 1,157     | 811      | 734      | 1,091    |
| Net Investment Income               | (302,748) | 206,073  | 286,688   | (24,724) | 181,171  | 287,816  |
| Total Additions                     | (181,978) | 326,334  | \$426,358 | 95,195   | 344,908  | 447,452  |
| Deductions                          |           |          |           |          |          |          |
| Benefit Payments                    | 138,810   | 136,810  | 167,540   | 169,352  | 179,696  | 189,635  |
| Refunds                             | 2,436     | 1,956    | 2,654     | 3,516    | 3,158    | 2,664    |
| Administrative Expenses             | 1,198     | 1,234    | 1,191     | 1,319    | 1,202    | 1,721    |
| Capital Project Expenses            | -         | -        | 9         | -        |          |          |
| Total Deductions                    | 142,444   | 140,000  | 171,394   | 174,187  | 184,056  | 194,020  |
| Total Changes in Plan Net Position  | (324,422) | 186,334  | 254,964   | (79,992) | 160,852  | 253,431  |
| CERS Haz Insurance Fund             |           |          |           |          |          |          |
| Additions                           | 2009      | 2010     | 2011      | 2012     | 2013     | 2014     |

| Additions                          | 2009      | 2010     | 2011      | 2012     | 2013      | 2014     |
|------------------------------------|-----------|----------|-----------|----------|-----------|----------|
| Employers' Contributions           | \$70,783  | \$82,970 | \$98,203  | \$90,204 | \$84,962  | \$74,265 |
| Net Investment Income              | (123,461) | 67,288   | 139,242   | (16,127) | 79,885    | 124,952  |
| Member Drug Reimbursement          | 628       | 1,493    | 972       | 871      | 562       | 0        |
| Premiums Rec'd from Retirees       | 330       | 508      | 516       | 695      | 657       | 32       |
| Total Additions                    | (51,720)  | 152,259  | \$238,933 | \$75,643 | \$166,066 | 200,101  |
| Deductions                         |           |          |           |          |           |          |
| Benefit Payments                   | 41,017    | 48,321   | 51,831    | 50,155   | 59,941    | 60,843   |
| Administrative Expenses            | 444       | 554      | 580       | 688      | 679       | 275      |
| Total Deductions                   | 41,461    | 48,875   | 52,411    | 50,843   | 60,620    | 61,117   |
| Total Changes in Plan Net Position | (93,181)  | 103,384  | 186,522   | 24,800   | 105,446   | 138,983  |



| SPRS Pension Fund                   |          |         |         |          |         |         |
|-------------------------------------|----------|---------|---------|----------|---------|---------|
| Additions                           | 2009     | 2010    | 2011    | 2012     | 2013    | 2014    |
| Members' Contributions              | \$4,938  | \$4,127 | \$5,225 | \$5,154  | \$4,495 | \$5,005 |
| Employers' Contributions            | 8,186    | 9,489   | 11,920  | 15,040   | 18,501  | 20,279  |
| Health Insurance Contribution (HB1) | 5        | 12      | 31      | 46       | 48      | 70      |
| Net Investment Income               | (51,175) | 40,602  | 44,739  | 43       | 25,954  | 40,291  |
| Total Additions                     | (38,046) | 54,230  | 61,915  | 20,283   | 48,998  | 65,729  |
| Deductions                          |          |         |         |          |         |         |
| Benefit Payments                    | 42,547   | 45,582  | 46,754  | 48,867   | 50,559  | 53,026  |
| Refunds                             | 69       | 144     | 58      | 149      | 31      | 214     |
| Administrative Expenses             | 122      | 130     | 124     | 73       | 184     | 215     |
| Capital Project Expenses            | -        | -       | 1       | -        |         |         |
| Other Expenses                      | -        | -       | -       | -        |         |         |
| Total Deductions                    | 42,738   | 45,856  | 46,937  | 49,089   | 50,774  | 53,454  |
| Total Changes in Plan Net Position  | (80,784) | 8,374   | 14,978  | (28,806) | (1,776) | 12,276  |
| SDDS Insurance Fund                 |          |         |         |          |         |         |

| Additions                          | 2009     | 2010    | 2011     | 2012    | 2013     | 2014     |
|------------------------------------|----------|---------|----------|---------|----------|----------|
| Employer Contributions             | \$7,414  | \$8,369 | \$10,051 | 10,810  | \$16,829 | \$14,498 |
| Net Investment Income              | (28,166) | 13,085  | 24,773   | (1,458) | 12,993   | 20,458   |
| Member Drug Reimbursement          | 229      | 274     | 318      | 279     | 178      | 0        |
| Insurance Appropriation            | -        | -       | -        | -       |          |          |
| Premiums Rec'd from Retirees       | 23       | 16      | 18       | 20      | 23       | 11       |
| Total Additions                    | (20,500) | 21,744  | \$35,160 | \$9,651 | \$30,023 | \$35,012 |
| Deductions                         |          |         |          |         |          |          |
| Benefit Payments                   | 7,476    | 10,769  | 12,172   | 10,791  | 12,546   | 12,688   |
| Administrative Expenses            | 124      | 147     | 179      | 201     | 184      | 58       |
| Total Deductions                   | 7,600    | 10,916  | 12,351   | 10,992  | 12,730   | 12,745   |
| Total Changes in Plan Net Position | 28,100   | 10,828  | 22,809   | (1,341) | 17,293   | 22,267   |

#### **KERS Non-Haz**

|                             | Normal<br>Retirement | Early<br>Retirement | Disability<br>Retirement | Beneficiary<br>Payments |
|-----------------------------|----------------------|---------------------|--------------------------|-------------------------|
| FY 2008-09                  |                      |                     |                          |                         |
| Average Benefit             | \$1,036              | \$1,926             | \$927                    | \$931                   |
| Number of Accounts          | 5,041                | 29,386              | 2,566                    | 861                     |
| Total Monthly Benefits      | \$5,223,184          | \$56,596,178        | \$2,377,856              | \$801,966               |
| % of Total Monthly Benefits | 8.0%                 | 87.1%               | 3.7%                     | 1.2%                    |
| FY 2009-10                  |                      |                     |                          |                         |
| Average Benefit             | \$1,009              | \$1,912             | \$936                    | \$963                   |
| Number of Accounts          | 5,991                | 30,303              | 2,625                    | 813                     |
| Total Monthly Benefits      | \$6,046,047          | \$57,939,304        | \$2,457,461              | \$782,980               |
| % of Total Monthly Benefits | 9.00%                | 86.20%              | 3.60%                    | 1.20%                   |
| FY 2010-11                  |                      |                     |                          |                         |
| Average Benefit             | \$1,008              | \$1,920             | \$974                    | \$1,071                 |
| Number of Accounts          | 6,118                | 30,900              | 2,629                    | 835                     |
| Total Monthly Benefits      | \$6,166,372          | \$59,318,561        | \$2,561,377              | \$894,077               |
| % of Total Monthly Benefits | 8.94%                | 86.04%              | 3.72%                    | 1.30%                   |
| FY 2011-12                  |                      |                     |                          |                         |
| Average Benefit             | \$1,008              | \$1,927             | \$1,029                  | \$925                   |
| Number of Accounts          | 6,218                | 31,580              | 2,626                    | 959                     |
| Total Monthly Benefits      | \$6,269,576          | \$60,879,802        | \$2,702,410              | \$887,236               |
| % of Total Monthly Benefits | 8.86%                | 86.06%              | 3.82%                    | 1.25%                   |
| FY 2012-13                  |                      |                     |                          |                         |
| Average Benefit             | \$1,003              | \$1,915             | \$1,020                  | \$889                   |
| Number of Accounts          | 6,441                | 32,310              | 2,687                    | 962                     |
| Total Monthly Benefits      | \$6,459,840          | \$61,882,399        | \$2,740,491              | \$855,033               |
| % of Total Monthly Benefits | 8.98%                | 86.02%              | 3.81%                    | 1.19%                   |
| FY 2013-14                  |                      |                     |                          |                         |
| Average Benefit             | \$992                | \$1,911             | \$987                    | \$886                   |
| Number of Accounts          | 6,678                | 33,106              | 2,706                    | 954                     |
| Total Monthly Benefits      | \$6,624,472          | \$63,255,779        | \$2,671,749              | \$845,468               |
| % of Total Monthly Benefits | 9.03%                | 86.18%              | 3.64%                    | 1.15%                   |
|                             |                      |                     |                          |                         |



#### **KERS Haz**

|                             | Normal<br>Retirement | Early<br>Retirement | Disability<br>Retirement | Beneficiary<br>Payments |
|-----------------------------|----------------------|---------------------|--------------------------|-------------------------|
| FY 2008-09                  |                      |                     |                          |                         |
| Average Benefit             | \$941                | \$1,517             | \$576                    | \$778                   |
| Number of Accounts          | 1,353                | 1,066               | 173                      | 74                      |
| Total Monthly Benefits      | \$1,272,796          | \$1,617,453         | \$99,607                 | \$57,607                |
| % of Total Monthly Benefits | 41.8%                | 53.1%               | 3.3%                     | 1.8%                    |
| FY 2009-10                  |                      |                     |                          |                         |
| Average Benefit             | \$933                | \$1,489             | \$593                    | 843                     |
| Number of Accounts          | 1,446                | 1,146               | 157                      | 75                      |
| Total Monthly Benefits      | \$1,348,511          | \$1,706,876         | \$93,064                 | \$63,194                |
| % of Total Monthly Benefits | 42.00%               | 53.10%              | 2.90%                    | 2.00%                   |
| FY 2010-11                  |                      |                     |                          |                         |
| Average Benefit             | \$957                | \$1,526             | \$600                    | \$814                   |
| Number of Accounts          | 1,571                | 1,240               | 158                      | 79                      |
| Total Monthly Benefits      | \$1,503,160          | \$1,892,300         | \$94,766                 | \$64,299                |
| % of Total Monthly Benefits | 42.29%               | 53.24%              | 2.66%                    | 1.81%                   |
| FY 2011-12                  |                      |                     |                          |                         |
| Average Benefit             | \$976.67             | \$1,541.49          | \$581                    | \$721                   |
| Number of Accounts          | 1,657                | 1,339               | 180                      | 92                      |
| Total Monthly Benefits      | \$1,618,343          | \$2,064,050         | \$104,644                | \$66,409                |
| % of Total Monthly Benefits | 42.00%               | 53.56%              | 2.72%                    | 1.72%                   |
| FY 2012-13                  |                      |                     |                          |                         |
| Average Benefit             | \$961                | \$1,543             | \$662                    | \$725                   |
| Number of Accounts          | 1,751                | 1,417               | 190                      | 93                      |
| Total Monthly Benefits      | \$1,682,541          | \$2,186,334         | \$125,704                | \$67,440                |
| % of Total Monthly Benefits | 41.42%               | 53.82%              | 3.10%                    | 1.66%                   |
| FY 2013-14                  |                      |                     |                          |                         |
| Average Benefit             | \$971                | \$1,560             | \$649                    | \$749                   |
| Number of Accounts          | 1,851                | 1,497               | 191                      | 89                      |
| Total Monthly Benefits      | \$1,797,900          | \$2,335,190         | \$123,867                | \$66,679                |
| % of Total Monthly Benefits | 41.58%               | 54.01%              | 2.86%                    | 1.54%                   |
|                             |                      |                     |                          |                         |



#### **CERS Non-Haz**

|                             | Normal      | Early        | Disability  | Beneficiary |
|-----------------------------|-------------|--------------|-------------|-------------|
|                             | Retirement  | Retirement   | Retirement  | Payments    |
| FY 2008-09                  |             |              |             |             |
| Average Benefit             | \$547       | \$1,021      | \$804       | \$613       |
| Number of Accounts          | 8,471       | 26,720       | 3,728       | 917         |
| Total Monthly Benefits      | \$4,634,447 | \$27,268,861 | \$2,998,565 | \$561,804   |
| % of Total Monthly Benefits | 13.1%       | 76.9%        | 8.5%        | 1.5%        |
| FY 2009-10                  |             |              |             |             |
| Average Benefit             | \$570       | \$1,022      | \$835       | \$623       |
| Number of Accounts          | 9,418       | 28,747       | 3,951       | 836         |
| Total Monthly Benefits      | \$5,372,501 | \$29,377,417 | \$3,298,478 | \$520,995   |
| % of Total Monthly Benefits | 13.90%      | 76.20%       | 8.60%       | 1.30%       |
| FY 2010-11                  |             |              |             |             |
| Average Benefit             | \$577       | \$1,031      | \$847       | \$651       |
| Number of Accounts          | 10,054      | 30,224       | 4,095       | 873         |
| Total Monthly Benefits      | \$5,802,568 | \$31,149,398 | \$3,469,974 | \$568,188   |
| % of Total Monthly Benefits | 14.16%      | 75.99%       | 8.47%       | 1.38%       |
| FY 2011-12                  |             |              |             |             |
| Average Benefit             | \$587       | \$1,039      | \$870       | \$636       |
| Number of Accounts          | 10,620      | 31,797       | 4,280       | 1,052       |
| Total Monthly Benefits      | \$6,237,369 | \$33,041,035 | \$3,724,859 | \$669,377   |
| % of Total Monthly Benefits | 14.28%      | 75.66%       | 8.53%       | 1.53%       |
| FY 2012-13                  |             |              |             |             |
| Average Benefit             | \$591       | \$1,042      | \$878       | \$625       |
| Number of Accounts          | 11,266      | 33,393       | 4,537       | 1,075       |
| Total Monthly Benefits      | \$6,661,524 | \$34,797,169 | \$3,982,213 | \$672,310   |
| % of Total Monthly Benefits | 14.45%      | 75.46%       | 8.64%       | 1.45%       |
| FY 2012-13                  |             |              |             |             |
| Average Benefit             | \$596       | \$1,042      | \$856       | \$613       |
| Number of Accounts          | 11,885      | 34,911       | 4,729       | 1,11C       |
| Total Monthly Benefits      | \$7,081,048 | \$36,375,607 | \$4,047,035 | \$680,784   |
| % of Total Monthly Benefits | 14.70%      | 75.49%       | 8.40%       | 1.41%       |
|                             |             |              |             |             |







#### **CERS Haz**

|                             | Normal<br>Retirement | Early<br>Retirement | Disability<br>Retirement | Beneficiary<br>Payments |
|-----------------------------|----------------------|---------------------|--------------------------|-------------------------|
| FY 2008-09                  |                      |                     |                          |                         |
| Average Benefit             | \$1,452              | \$2,299             | \$1,014                  | \$1,020                 |
| Number of Accounts          | 1,413                | 3,733               | 634                      | 104                     |
| Total Monthly Benefits      | \$2,052,162          | \$8,581,241         | \$642,604                | \$106,103               |
| % of Total Monthly Benefits | 18.0%                | 75.4%               | 5.7%                     | 0.9%                    |
| FY 2009-10                  |                      |                     |                          |                         |
| Average Benefit             | \$1,427              | \$2,362             | \$1,261                  | \$1,130                 |
| Number of Accounts          | 1,495                | 3,856               | 468                      | 89                      |
| Total Monthly Benefits      | \$2,133,697          | \$9,106,888         | \$590,020                | \$100,562               |
| % of Total Monthly Benefits | 17.90%               | 76.30%              | 5.00%                    | 0.80%                   |
| FY 2010-11                  |                      |                     |                          |                         |
| Average Benefit             | \$1,432              | \$2,410             | \$1,362                  | \$1,153                 |
| Number of Accounts          | 1,643                | 4,082               | 487                      | 90                      |
| Total Monthly Benefits      | \$2,352,710          | \$9,838,311         | \$663,455                | \$103,808               |
| % of Total Monthly Benefits | 18.16%               | 75.92%              | 5.12%                    | 0.80%                   |
| FY 2011-12                  |                      |                     |                          |                         |
| Average Benefit             | \$1,430              | \$2,422             | \$1,300                  | \$1,046                 |
| Number of Accounts          | 1,766                | 4,407               | 662                      | 110                     |
| Total Monthly Benefits      | \$2,526,722          | \$10,673,928        | \$861,223                | \$115,107               |
| % of Total Monthly Benefits | 17.82%               | 75.29%              | 6.07%                    | 0.81%                   |
| FY 2012-13                  |                      |                     |                          |                         |
| Average Benefit             | \$1,433              | \$2,429             | \$1,121                  | \$1,073                 |
| Number of Accounts          | 1,883                | 4,683               | 681                      | 119                     |
| Total Monthly Benefits      | \$2,699,176          | \$11,374,811        | \$763,700                | \$127,689               |
| % of Total Monthly Benefits | 18.04%               | 76.01%              | 5.10%                    | 0.85%                   |
| FY 2013-14                  |                      |                     |                          |                         |
| Average Benefit             | \$1,467              | \$2,437             | \$1,125                  | \$1,008                 |
| Number of Accounts          | 1,974                | 4,873               | 695                      | 119                     |
| Total Monthly Benefits      | \$2,895,353          | \$11,876,578        | \$781,685                | \$119,935               |
| % of Total Monthly Benefits | 18.47%               | 75.77%              | 4.99,%                   | 0.77%                   |

#### **SPRS**

| 511(5                       |                      |                     |                          |                         |
|-----------------------------|----------------------|---------------------|--------------------------|-------------------------|
|                             | Normal<br>Retirement | Early<br>Retirement | Disability<br>Retirement | Beneficiary<br>Payments |
| FY 2008-09                  |                      |                     |                          |                         |
| Average Benefit             | \$3,400              | \$2,985             | \$1,293                  | \$2,025                 |
| Number of Accounts          | 146                  | 978                 | 58                       | 26                      |
| Total Monthly Benefits      | \$496,355            | \$2,919,782         | \$74,971                 | \$52,649                |
| % of Total Monthly Benefits | 14.0%                | 82.4%               | 2.1%                     | 1.5%                    |
| FY 2009-10                  |                      |                     |                          |                         |
| Average Benefit             | \$3,492              | \$3,066             | \$1,467                  | \$2,130                 |
| Number of Accounts          | 147                  | 1,004               | 50                       | 26                      |
| Total Monthly Benefits      | \$513,322            | \$3,078,221         | \$73,354                 | \$55,379                |
| % of Total Monthly Benefits | 13.80%               | 82.70%              | 2.00%                    | 1.50%                   |
| FY 2010-11                  |                      |                     |                          |                         |
| Average Benefit             | \$3,529              | \$3,112             | \$1,494                  | \$2,162                 |
| Number of Accounts          | 146                  | 1,037               | 55                       | 26                      |
| Total Monthly Benefits      | \$515,270            | \$3,226,744         | \$82,184                 | \$56,210                |
| % of Total Monthly Benefits | 13.28%               | 83.15%              | 2.12%                    | 1.45%                   |
| FY 2011-12                  |                      |                     |                          |                         |
| Average Benefit             | \$3,560              | \$3,135             | \$1,372                  | \$2,136                 |
| Number of Accounts          | 150                  | 1,083               | 66                       | 25                      |
| Total Monthly Benefits      | \$534,132            | \$3,396,203         | \$90,562                 | \$53,404                |
| % of Total Monthly Benefits | 13.11%               | 83.36%              | 2.22%                    | 1.31%                   |
| FY 2012-13                  |                      |                     |                          |                         |
| Average Benefit             | \$3,601              | \$3,130             | \$1,320                  | \$2,198                 |
| Number of Accounts          | 149                  | 1,126               | 74                       | 23                      |
| Total Monthly Benefits      | \$536,481            | \$3,524,248         | \$97,681                 | \$50,563                |
| % of Total Monthly Benefits | 12.75%               | 83.73%              | 2.32%                    | 1.20%                   |
| FY 2013-14                  |                      |                     |                          |                         |
| Average Benefit             | \$3,621              | \$3,197             | \$1,346                  | \$2,196                 |
| Number of Accounts          | 146                  | 1,172               | 75                       | 23                      |
| Total Monthly Benefits      | \$528,611            | \$3,747,012         | \$100,974                | \$49,197                |
| % of Total Monthly Benefits | 11.94%               | 84.66%              | 2.28%                    | 1.11%                   |
|                             |                      |                     |                          |                         |



| Analysis of Initial Retirees                   |              |          |              |          |          |
|--|--------------|----------|--------------|----------|----------|
|  | KERS Non-Haz | KERS Haz | CERS Non-Haz | CERS Haz | SPRS     |
| 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<br>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<br>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<br>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<br>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<br>Health Insurance | \$303        | \$433    | \$259        | \$853    | \$994    |
| FY 2013-14                                     |              |          |              |          |          |
| Number of Accounts                             | 2,037        | 245      | 3,529        | 430      | 77       |
| Average Service Credit (months)                | 202          | 165      | 182          | 194      | 260      |
| Average Final Compensation                     | \$46,480     | \$46,595 | \$33,816     | \$57,718 | \$70,009 |
| Average Monthly Benefit                        | \$1,278      | \$1,296  | \$879        | \$2,021  | \$3,322  |
| Average System Payment for<br>Health Insurance | \$534        | \$937    | \$486        | \$1,279  | \$1,378  |

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



#### Payment Options Selected by Retired Members

|                    | Basic        | Social Security<br>Adjustment | Other    | Period<br>Certain | Suvivorship  | Pop Up       | Lump Sum    |
|--------------------|--------------|-------------------------------|----------|-------------------|--------------|--------------|-------------|
| KERS Non-Haz       |              |                               |          |                   |              |              |             |
| Number of Accounts | 14,426       | 3,309                         | 16       | 5,518             | 9,653        | 8,312        | 2,210       |
| Monthly Benefits   | \$22,323,719 | \$5,825,060                   | \$12,534 | \$8,698,542       | \$16,489,955 | \$17,486,337 | \$2,561,321 |
| KERS Haz           |              |                               |          |                   |              |              |             |
| Number of Accounts | 919          | 275                           | 4        | 400               | 778          | 990          | 262         |
| Monthly Benefits   | \$995,786    | \$335,910                     | \$2,414  | \$444,721         | \$896,058    | \$1,383,873  | \$264,874   |
| CERS Non-Haz       |              |                               |          |                   |              |              |             |
| Number of Accounts | 20,894       | 1,955                         | 18       | 7,588             | 10,429       | 8,395        | 3,356       |
| Monthly Benefits   | \$16,237,650 | \$2,568,201                   | \$7,635  | \$6,345,577       | \$10,475,415 | \$10,320,713 | \$2,229,283 |
| CERS Haz           |              |                               |          |                   |              |              |             |
| Number of Accounts | 1,238        | 518                           | 23       | 642               | 1,765        | 2,994        | 481         |
| Monthly Benefits   | \$2,269,796  | \$820,389                     | \$12,108 | \$1,128,871       | \$3,492,084  | \$7,194,654  | \$755,650   |
| SPRS               |              |                               |          |                   |              |              |             |
| Number of Accounts | 144          | 200                           | 1        | 103               | 389          | 557          | 22          |
| Monthly Benefits   | \$434,294    | \$416,029                     | \$893    | \$301,877         | \$1,255,309  | \$1,965,927  | \$51,466    |
| KRS Total          |              |                               |          |                   |              |              |             |
| Number of Accounts | 37,621       | 6,257                         | 62       | 14,251            | 23,014       | 21,248       | 6,331       |
| Monthly Benefits   | \$42,261,245 | \$9,965,589                   | \$35,584 | \$16,919,588      | \$32,608,821 | \$38,351,504 | \$5,862,594 |
|                    |              |                               |          |                   |              |              |             |

The information in this table represents accounts administered by KRS. A single member may have multiple accounts, which contribute to one pension.

# **Employer Contribution Rates**

# In KERS, CERS, and SPRS both the employee and the employer contribute a percentage of creditable compensation to the Systems.

The employee contribution rate is set by state statute. Non-hazardous employees contribute 5% while hazardous duty members contribute 8%. Employees hired on or after September 1, 2008 contribute an additional 1% to health insurance.

Under Kentucky Revised Statutes 61.565, KERS and SPRS employer contribution rates are set by the KRS Board of Trustees based on an annual actuarial valuation. However, KERS and SPRS employer rates are subject to approval by the Kentucky General Assembly through the adoption of the biennial Executive Branch Budget. In recent years, the Kentucky General Assembly has routinely suspended Kentucky Revised Statutes 61.565 in the budget in order to provide an employer contribution rate that is less than the amount recommended by the Board's consulting actuary. The table in the Actuarial Section shows the KERS and SPRS employer contribution rates that were actuarially recommended in the annual valuation without any adjustments (Recommended Rate) and the rate specified by the Executive Branch budget bill for each fiscal year (Budgeted Rate).

The CERS employer contribution rates are also set by the Systems' Board under Kentucky Revised Statutes 61.565 based on an annual actuarial valuation, unless altered by legislation enacted by the Kentucky General Assembly. The CERS employer contribution rates for fiscal year 2008-2009 were reduced from the actuarially recommended rate as a result of the passage of House Bill (HB) 1 during the 2008 Extraordinary Session of the Kentucky General Assembly. Also, during its 2009 Regular Session, the Kentucky General Assembly enacted HB 117, which mandated an extension of the phase-in of insurance contribution rates that had been previously approved by the KRS Board in 2006 from five years to ten years to further mitigate the impact of the application of Governmental Accounting Standards Board Statements 43 and 45 on CERS employer contribution rates for health insurance. The "Recommended Rate" shown for CERS non-hazardous and hazardous plans are the actuarially recommended rates as set forth in the annual valuation. The "Budgeted Rate" shown for the two plans is the rate required by the ten year phase-in mandated in KRS 61.565(6).

| Employer Contri  | ibution Rat | es      |         |         |         |         |
|------------------|-------------|---------|---------|---------|---------|---------|
|                  | 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   | 40,500   | 4,094    | 44,594   | 82,494   | 9,189    | 91,683   | 861      |
| Total Retirees   | 38,022   | 2,467    | 40,489   | 46,112   | 6,066    | 52,178   | 1,279    |
| Reemployed Retirees  | 529      | 46       | 575      | 640      | 480      | 1,120    | 99       |
| % of Reemployed<br>Retirees to Total Actives   | 1.31%    | 1.12%    | 1.29%    | 0.78%    | 5.22%    | 1.22%    | 11.50%   |
| % of Reemployed<br>Retirees to Total<br>Retirees   | 1.39%    | 1.86%    | 1.42%    | 1.39%    | 7.91%    | 2.15%    | 7.74%    |
| Average Age at Initial<br>Retirement   | 50       | 48       | 50       | 52       | 46       | 51       | 47       |
| Months of Service<br>Credit at Initial<br>Retirement   | 349      | 302      | 346      | 313      | 288      | 310      | 335      |
| Final Compensation At<br>Initial Retirement  | \$53,786 | \$46,249 | \$53,327 | \$39,356 | \$55,086 | \$46,097 | \$59,295 |
| Reemployed Retirees<br>Avg. Annualized Salary<br>Earned in Fiscal Year<br>2012-2013 (Second<br>Retirement Account) | \$44,239 | \$38,622 | \$43,790 | \$40,589 | \$51,019 | \$45,059 | \$52,028 |

Analysis of age at retirement, service credit, final compensation, etc. only includes those retirees who have returned to work with a participating agency.

# Insurance Contracts

# The Systems provides medical insurance and other managed care coverage for eligible retired members.

Participation in the insurance program is optional and requires the completion of the proper forms at the time of retirement in order to obtain the insurance coverage. The Systems provides access to health insurance coverage through the Kentucky Employees Group Health Plan (KEHP) for recipients until they reach age 65 and/or become Medicare eligible. After a retired member becomes eligible for Medicare, coverage is available through a Medicare eligible plan offered by the Systems. A retired member's spouse and/or dependents may also be covered on health insurance through the Systems.

#### Insurance Benefits Paid to Retirees & Beneficiaries Participating in a KRS Health Insurance Plan

|  | KERS Non-Haz | KERS Haz    | CERS Non-Haz | CERS Haz    | SPRS        |
|--|--------------|-------------|--------------|-------------|-------------|
| Number   | 29,903       | 2,365       | 31,450       | 6,663       | 1,518       |
| Average Service Credit (Months)                    | 311          | 266         | 258          | 281         | 328         |
| Avg Monthly System Payment for<br>Health Insurance | \$366        | \$700       | \$303        | \$959       | \$911       |
| Avg Monthly Member Payment for<br>Health Insurance | \$67         | \$48        | \$69         | \$27        | \$10        |
| Total Monthly Payment for<br>Health Insurance      | \$12,009,741 | \$1,472,404 | \$10,861,450 | \$5,416,515 | \$1,101,274 |

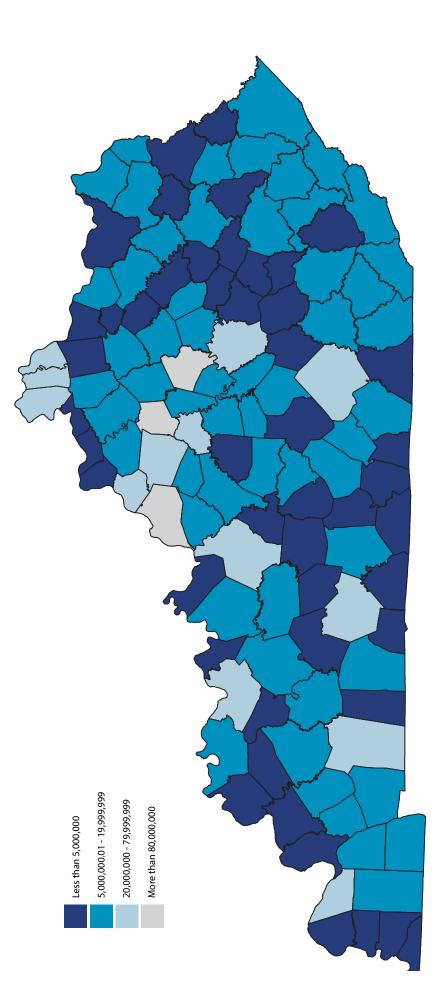
| Insurance Contracts by Type   |        |        |        |        |        |        |
|-------------------------------|--------|--------|--------|--------|--------|--------|
| KERS Non-Haz                  | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   |
| KEHP Parent Plus              | 762    | 722    | 732    | 734    | 618    | 506    |
| KEHP Couple/Family            | 2,621  | 1,971  | 2,155  | 1,917  | 1,276  | 797    |
| KEHP Single                   | 10,635 | 10,420 | 10,321 | 9,764  | 9,364  | 9,491  |
| Medicare without Prescription | 1,920  | 1,831  | 1,821  | 1,721  | 1,474  | 1,370  |
| Medicare with Prescription    | 13,231 | 13,765 | 13,988 | 15,015 | 16,834 | 17,738 |
| KERS Haz                      |        |        |        |        |        |        |
| KEHP Parent Plus              | 74     | 66     | 75     | 93     | 106    | 110    |
| KEHP Couple/Family            | 502    | 453    | 521    | 517    | 451    | 448    |
| KEHP Single                   | 823    | 599    | 615    | 645    | 625    | 647    |
| Medicare without Prescription | 88     | 63     | 60     | 67     | 60     | 56     |
| Medicare with Prescription    | 763    | 525    | 570    | 751    | 985    | 1104   |



| Insurance Contracts by Type   |        |        |        |        |        |        |
|-------------------------------|--------|--------|--------|--------|--------|--------|
| CERS Non-Haz                  | 2009   | 2010   | 2011   | 2012   | 2013   | 2014   |
| KEHP Parent Plus              | 335    | 342    | 351    | 383    | 340    | 278    |
| KEHP Couple/Family            | 1,456  | 1,369  | 1,552  | 1,317  | 857    | 546    |
| KEHP Single                   | 7,609  | 7,692  | 8,013  | 7,972  | 7,652  | 7,843  |
| Medicare without Prescription | 3,110  | 3,106  | 3,167  | 3,119  | 2,707  | 2,583  |
| Medicare with Prescription    | 13,583 | 14,477 | 15,100 | 16,355 | 18,824 | 20,200 |
| CERS Haz                      |        |        |        |        |        |        |
| KEHP Parent Plus              | 245    | 239    | 253    | 310    | 400    | 432    |
| KEHP Couple/Family            | 2,041  | 2,062  | 2,156  | 2,237  | 2,155  | 2,184  |
| KEHP Single                   | 1,404  | 1,274  | 1,310  | 1,385  | 1,425  | 1,447  |
| Medicare without Prescription | 80     | 58     | 58     | 73     | 79     | 89     |
| Medicare with Prescription    | 1,518  | 1,438  | 1,527  | 1,853  | 2,324  | 2,510  |
| SPRS                          |        |        |        |        |        |        |
| KEHP Parent Plus              | 22     | 47     | 52     | 62     | 76     | 78     |
| KEHP Couple/Family            | 311    | 462    | 474    | 444    | 421    | 444    |
| KEHP Single                   | 221    | 264    | 278    | 291    | 283    | 263    |
| Medicare without Prescription | 9      | 12     | 14     | 15     | 20     | 20     |
| Medicare with Prescription    | 418    | 467    | 499    | 581    | 682    | 712    |
| KRS Total                     |        |        |        |        |        |        |
| KEHP Parent Plus              | 1,438  | 1,416  | 1,463  | 1,582  | 1,540  | 1,404  |
| KEHP Couple/Family            | 6,931  | 6,317  | 6,858  | 6,432  | 5,160  | 4,419  |
| KEHP Single                   | 20,692 | 20,249 | 20,537 | 20,057 | 19,349 | 19,691 |
| Medicare without Prescription | 5,207  | 5,070  | 5,120  | 4,995  | 4,340  | 4,118  |
| Medicare with Prescription    |        |        |        |        |        |        |

### 2014 Total Fiscal Year Pension Benefits by County

| County       | Payees | Total         | County     | Payees | Total         | County     | Payees | Tota         |
|--------------|--------|---------------|------------|--------|---------------|------------|--------|--------------|
| Adair        | 423    | \$6,336,619   | Grant      | 537    | \$8,965,710   | Mclean     | 270    | \$3,465,659  |
| Allen        | 357    | \$4,045,686   | Graves     | 764    | \$10,799,675  | Meade      | 367    | \$4,750,73   |
| Anderson     | 1,246  | \$27,686,314  | Grayson    | 628    | \$8,481,884   | Menifee    | 211    | \$2,620,734  |
| Ballard      | 201    | \$2,507,023   | Green      | 240    | \$3,247,260   | Mercer     | 663    | \$10,848,997 |
| Barren       | 919    | \$13,154,068  | Greenup    | 549    | \$6,618,197   | Metcalfe   | 291    | \$3,083,648  |
| Bath         | 330    | \$4,636,960   | Hancock    | 203    | \$2,296,719   | Monroe     | 213    | \$2,341,876  |
| Bell         | 639    | \$8,993,313   | Hardin     | 1,797  | \$26,819,314  | Montgomery | 556    | \$7,672,319  |
| Boone        | 1,453  | \$25,847,617  | Harlan     | 545    | \$7,812,839   | Morgan     | 547    | \$8,038,98   |
| Bourbon      | 475    | \$6,880,493   | Harrison   | 416    | \$5,442,298   | Muhlenberg | 590    | \$6,332,07   |
| Boyd         | 884    | \$13,695,210  | Hart       | 290    | \$3,789,252   | Nelson     | 858    | \$13,530,208 |
| Boyle        | 813    | \$12,967,586  | Henderson  | 930    | \$14,095,405  | Nicholas   | 188    | \$2,207,40   |
| Bracken      | 204    | \$2,384,571   | Henry      | 881    | \$17,313,215  | Ohio       | 550    | \$5,389,37   |
| Breathitt    | 429    | \$5,943,594   | Hickman    | 108    | \$1,539,428   | Oldham     | 1,171  | \$21,409,38  |
| Breckinridge | 387    | \$5,108,502   | Hopkins    | 1,053  | \$14,330,819  | Owen       | 517    | \$10,638,77  |
| Bullitt      | 1,210  | \$19,328,202  | Jackson    | 277    | \$3,378,655   | Owsley     | 189    | \$2,466,06   |
| Butler       | 295    | \$3,544,952   | Jefferson  | 15,149 | \$289,349,458 | Pendleton  | 290    | \$4,369,39   |
| Caldwell     | 480    | \$6,389,368   | Jessamine  | 860    | \$13,688,422  | Perry      | 680    | \$9,171,32   |
| Calloway     | 961    | \$11,812,240  | Johnson    | 570    | \$7,959,191   | Pike       | 1,086  | \$14,611,09  |
| Campbell     | 1,327  | \$22,575,080  | Kenton     | 1,964  | \$36,510,327  | Powell     | 336    | \$4,178,53   |
| Carlisle     | 116    | \$1,454,260   | Knott      | 383    | \$5,393,684   | Pulaski    | 2,055  | \$31,214,49  |
| Carroll      | 300    | \$4,081,928   | Knox       | 499    | \$7,024,233   | Robertson  | 75     | \$934,12     |
| Carter       | 727    | \$8,323,028   | Larue      | 327    | \$4,583,868   | Rockcastle | 349    | \$4,416,08   |
| Casey        | 316    | \$3,831,313   | Laurel     | 1,078  | \$16,552,519  | Rowan      | 832    | \$12,120,4   |
| Christian    | 1,463  | \$22,870,547  | Lawrence   | 285    | \$3,286,371   | Russell    | 508    | \$6,441,46   |
| Clark        | 714    | \$10,856,694  | Lee        | 208    | \$2,775,831   | Scott      | 1,065  | \$19,221,37  |
| Clay         | 518    | \$6,736,063   | Leslie     | 220    | \$3,020,281   | Shelby     | 1,556  | \$33,310,76  |
| Clinton      | 230    | \$2,576,757   | Letcher    | 527    | \$6,416,789   | Simpson    | 246    | \$2,503,71   |
| Crittenden   | 215    | \$2,487,272   | Lewis      | 296    | \$3,250,524   | Spencer    | 437    | \$7,894,29   |
| Cumberland   | 175    | \$2,266,364   | Lincoln    | 595    | \$6,829,983   | Taylor     | 567    | \$7,425,99   |
| Daviess      | 2,245  | \$35,883,786  | Livingston | 229    | \$3,389,426   | Todd       | 253    | \$2,916,04   |
| Edmonson     | 193    | \$2,433,737   | Logan      | 543    | \$6,663,545   | Trigg      | 495    | \$6,830,81   |
| Elliott      | 167    | \$1,912,389   | Lyon       | 331    | \$5,427,703   | Trimble    | 250    | \$3,297,33   |
| Estill       | 337    | \$4,142,489   | Madison    | 2,095  | \$30,596,360  | Union      | 318    | \$3,356,92   |
| Fayette      | 4,858  | \$97,289,271  | Magoffin   | 325    | \$4,074,854   | Warren     | 2,500  | \$39,141,90  |
| Fleming      | 403    | \$6,594,171   | Marion     | 489    | \$6,016,392   | Washington | 298    | \$4,276,04   |
| Floyd        | 792    | \$11,576,658  | Marshall   | 766    | \$10,041,357  | Wayne      | 473    | \$6,133,69   |
| Franklin     | 6,630  | \$180,723,291 | Martin     | 224    | \$2,265,171   | Webster    | 317    | \$3,747,08   |
| Fulton       | 159    | \$1,676,279   | Mason      | 359    | \$5,374,167   | Whitley    | 920    | \$12,053,38  |
| Gallatin     | 118    | \$1,837,012   | Mccracken  | 1,408  | \$23,339,196  | Wolfe      | 304    | \$4,370,36   |
| Garrard      | 385    | \$5,393,728   | Mccreary   | 349    | \$3,327,965   | Woodford   | 871    | \$19,215,07  |



Pension Benefits paid to retirees and beneficiaries of Kentucky Retirement Systems have a wide ranging impact on the state's economic health. In fiscal year 2014, KRS paid **more than \$1.7 billion** to its recipients. More than 94 percent of these recipients live in Kentucky. Not only do these dollars impact those receiving a benefit, but according to the National Institute of Retirement Security (NIRS), **each \$1.00 paid out in pension benefits supported \$1.67 in total economic activity in Kentucky**. As you can see in the chart, each county in the Commonwealth is impacted by pension benefits, and in an unsteady economy, the consistent addition of pension funds into the economy is a stabilizing element.

|                  | :       |                  |  |
|------------------|---------|------------------|--|
| \$1,724,320,537* | 100.00% | 103,902          | Grand Total                              |
| \$95,499,855     | 5.54%   | 6,249            | Out of State                             |
| \$1,628,820,682  | 94.46%  | 97,653           | Kentucky Total                           |
| Payments         | %       | Payees           |  |
|                  |         | ∕ear<br>∕ayments | Total Fiscal Year<br>Retirement Payments |

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