Annual Comprehensive Financial Report



Photo, front cover: Overview of Frankfort, KY, dry brush stylized.

TABLE OF CONTENTS

INTRODUCTION

- 5 Letter of Transmittal
- 8 Governance
- 9 Agency Structure
- 10 Professional Awards
- 11 Pension Benefits by County
- 12 Fiduciary Net Position Highlights

FINANCIAL

- 14 Report of Independent Auditors
- 17 Management's Discussion & Analysis
- 22 Basic Financial Statements
- 22 Combining Statement of Fiduciary Net Position
- 23 Combining Statement of Changes In Fiduciary Net Position
- 24 Note A. Summary of Significant Accounting Policies
- 26 Note B. Description & Contribution Information
- 31 Note C. Cash, Short-Term Investments & Securities Lending Collateral
- 32 Note D. Investments
- 47 Note E. Securities Lending Transactions
- 48 Note F. Risk of Loss
- 48 Note G. Contingencies
- 48 Note H. Income Tax Status
- 49 Note I. GASB 67 and GASB 74 Valuations
- 55 Note J. Legislation
- 57 Note K. Litigation
- 59 Note L. Reciprocity Agreement
- 60 Note M. Reimbursement Of Retired–Reemployed and Active Member Health Insurance
- 61 Note N. General Fund Appropriations
- 61 Note O. Prisma Daniel Boone Fund Adjustment
- 61 Note P. Subsequent Events
- 62 Note Q. Related Party

REQUIRED SUPPLEMENTARY INFORMATION

- 64 Schedule of Employers' Net Pension Liability
- 65 Schedule of Changes in Employers' Total Pension Liability
- 68 Notes to Schedule of Employers' Contributions
- 69 Schedule of Employers' Contribution Pension
- 71 Schedule of Employers' Net OPEB Liability
- 72 Schedule of Changes in Employers' Net OPEB Liability
- 75 Notes to Schedule of Employers' OPEB Contribution
- 76 Schedule of Employers' OPEB Contributions
- 78 Money Weighted Rates of Return
- 79 Schedule of Administrative Expenses
- 79 Schedule of Direct Investment Expenses
- 79 Schedule of Professional Consultant Fees
- 80 Report on Internal Control

TABLE OF CONTENTS

INVESTMENTS

83 Investment Overview **Investment Strategies** 85 86 **Investment Objectives** Investment Results 87 88 Benchmarks 89 Long-Term Results Public Equity 91 Core Fixed Income 93 **Specialty Credit** 95 97 Private Equity 97 Real Estate 98 Real Return Cash 98

Additional Schedules

99

ACTUARIAL

106 Certification of Actuarial Results **Summary of Actuarial Assumptions** 110 Summary of Actuarial Valuation 116 Results Recommended Employer 117 **Contribution Rates** 119 Summary of Actuarial Unfunded Liabilities 122 Solvency Test Member Valuation 125

KERS & SPRS Plans

127

Summary of Benefit Provisions

Fiduciary Net Position 137 138 Changes in Fiduciary Net Position Schedule of Benefit Expenses 144 148 Active Refunds 149 Analysis of Initial Retirees 150 **Payment Options** 151 **Employer Contribution Rates** 152 **Insurance Contracts**

Participating Employers

Member Monthly Benefit

Plan Statistics

Glossary

133

135

136

153

STATISTICAL

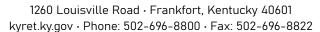
INTRODUCTION TABLE OF CONTENTS

- 5 LETTER OF TRANSMITTAL
- 8 GOVERNANCE
- 9 AGENCY STRUCTURE
- 10 PROFESSIONAL AWARDS
- 11 PENSION BENEFITS BY COUNTY
- 12 FIDUCIARY NET POSITION HIGHLIGHTS



KENTUCKY PUBLIC PENSIONS AUTHORITY

Ryan Barrow, Executive Director





To our Members, Benefit Recipients, Employers and the Board of Trustees

December 5, 2024

On behalf of the Kentucky Public Pensions Authority (KPPA) we are honored to present the Annual Comprehensive Financial Report (ACFR) of the Kentucky Retirement Systems (KRS), a component unit of the Commonwealth of Kentucky, for the Fiscal Year Ended (FYE) June 30, 2024.

Responsibility for the accuracy, completeness, and fairness of the information presented rests ultimately with KPPA management which, along with the Executive Director and staff, assist the KPPA Board in its responsibilities. Because the cost of internal control should not exceed anticipated benefits, KPPA relies on a comprehensive framework of internal controls to provide reasonable, rather than absolute, assurance that the financial statements are free of any material misstatements.

Blue & Co. LLC has issued an unmodified ("clean") opinion on the KRS financial statements for the FYE June 30, 2024. The Independent Auditors' report is located in the Financial Section of this report.

The Management's Discussion and Analysis (MD&A) is also located in the Financial Section of this report. The MD&A provides an analytical overview of the financial statements. MD&A complements this letter of transmittal and should be read in conjunction with it.

KPPA is the special-purpose government responsible for the day-to-day administration of the County Employees Retirement System (CERS) and the Kentucky Retirement Systems (KRS), comprising the Kentucky Employees Retirement System (KERS) and the State Police Retirement System (SPRS).

Prior to 2021, all three systems were governed by a single Board of Trustees. This Board, management, and staff were all referred to as the Kentucky Retirement Systems (KRS). Under this single Board of Trustees, KRS issued one ACFR, including all three systems and their related pension and insurance trust plans.

Effective April 1, 2021, the KRS Board of Trustees was modified in statute to become three boards:

- 1. A new nine-member Board of Trustees to oversee CERS (the CERS Board).
- 2. A reconstituted nine-member Board of Trustees, retaining the KRS name, to oversee KERS and SPRS (the KRS Board).
- 3. A new eight-member Board to oversee the professional employees who provide administrative support, investment management, and conduct other activities on behalf of the CERS and KRS Boards. These employees are part of the Kentucky Public Pensions Authority (KPPA) and the board is referred to as the KPPA Board. The KPPA Board is composed of four CERS trustees and four KRS trustees, as defined by state statute.

For these past three fiscal years, KPPA has continued to issue one ACFR including all three systems and their related pension and OPEB plans.

Beginning with FYE 2024, KPPA is producing separate ACFRs for CERS and KRS. Supported by research and recommendations from KPPA management, this aligns with guidance from the Government Accounting Standards Board (GASB) and authority under state statute. After considering this information, the Boards of Trustees for CERS and KRS have chosen to present separate ACFRs.

KPPA will continue to produce a single Summary Annual Financial Report (SAFR) that provides an overview of information in the CERS and KRS ACFRs, as well as insights into the combined systems.

This approach aims to enhance transparency and reporting by providing information relevant to each system's members, the public and stakeholders. KPPA believes separating the financial reporting for CERS and KRS, while also providing a combined high-level summary best achieves that goal.

From the Desk of Ryan Barrow KPPA Executive Director

Ratings Boost

In September, Moody's Ratings upgraded Kentucky's credit rating to Aa2 from Aa3. Several factors directly influence credit ratings on state and local municipal debt, with the health of public pension systems being a significant consideration. This has improved in Kentucky in recent years due to the boards adopting actuarial assumptions that more accurately reflect the systems' conditions, the General Assembly's commitment to fully funding pension contributions and allocating additional money to pay down the unfunded liabilities of KERS Nonhazardous and SPRS, and strong investment returns.

All three major ratings agencies covering Kentucky, specifically Moody's, Standard & Poor's, and Fitch Ratings have taken note of the progress. Alongside positive economic developments across the state, a historically high rainyday fund and improvements in public pension funding prompted all three agencies to recently raise their rating on the state's debt. In May of last year, Fitch Ratings upgraded Kentucky's credit rating to AA from AA-. In June 2023, S&P Global Ratings upgraded Kentucky's credit rating to A+ from A.

Higher credit ratings not only offer an independent assessment of the Commonwealth's financial situation, but they also lower the cost of capital, allowing the state to allocate its resources more effectively.

KPPA Strategic Plan

The strategic planning process has entered an exciting new phase. Small groups of KPPA employees and management have begun meeting to discuss specific business areas, how those areas are working now, and how they could be enhanced.

In March 2023, KPPA selected Provaliant Retirement LLC to help develop the agency's first strategic plan since 2009. In June 2024, KPPA published a strategic plan summary that identified four key areas of focus: organizational excellence, customer service delivery, infrastructure and key resources, and governance. A summary of the plan is on our website, kyret.ky.gov.

Building on those four key focus areas, KPPA has established small committees examining specific business practices. To date, KPPA has committees addressing quality assurance, process documentation, member presentations and surveys. Each committee will work for several months to compare current practices with industry standards, make recommendations for enhancements and implement the approved changes.

The strategic planning and enhancement process are expected to be completed by 2028.

An Eye to the Future

By 2049, our actuarial target is to achieve a fully funded pension system, a crucial milestone that reflects our timeline to meeting financial commitments. While we acknowledge that there is still much work ahead to reach this objective, we are making significant strides on our journey. Through diligent financial management and collaborative efforts among stakeholders, we are steadily improving our funding status. Each step we take brings us closer to ensuring the long-term stability and security of the pension system for current and future recipients.

From the Desk of John Chilton KRS Chief Executive Officer

The effects of additional funding from the Kentucky General Assembly continued to benefit the KERS Nonhazardous and SPRS pension plans in FY 2024. The past two biennial budgets passed by the Legislature included \$1.14 billion in additional allocations to pay down the unfunded liabilities of those two pensions. In the most recent session, legislators approved House Bill 1, which allocates an additional \$100 million for the KERS Nonhazardous pension plan (\$50 million each in FYs 2025 and 2026) and an additional \$50 million for the SPRS pension plan (\$25 million each in FYs 2025 and 2026).

Another bill, House Bill 6, allocates an additional \$250 million each in FYs 2025 and 2026 to pay down the KERS Nonhazardous pension's unfunded liability.

This is all over and above the money allocated to fund the full actuarially recommended contributions for all KERS and SPRS pension plans.

The attention paid by the General Assembly to the KERS Nonhazardous and SPRS pension plans is greatly appreciated and is paying dividends. The funded ratio for the KERS Nonhazardous pension plan increased to 24.8% at the end of FY 2024, up from 21.7% at the end of FY 2023. The pension plan reached a funded ratio low of 12.8% in FY 2018.

The SPRS pension plan, meanwhile, reached a funded level of 56.8% as of FYE 2024, up from 54.2% at the end of the last fiscal year and up substantially from the low of 26.4% at the end of FY 2017.

All pension plans are on track to be fully funded by 2049.

KPPA began posting quarterly proxy voting reports to its website in FY 2024. These reports show how investment managers voted on corporate governance proposals on behalf of the systems operated by KPPA. These reports can be found on the Proxy Voting Reports page in the Investments section of KPPA's website kyret.ky.gov.

The KRS board continued this past fiscal year to monitor ongoing litigation in anticipation of resolving several longstanding cases.

And the KRS Investment Committee worked with the KPPA Office of Investments to monitor the KERS and SPRS investment portfolios. As always, the goal is to maximize investment returns while minimizing risk. The KRS pension and insurance portfolios returned an average of 10.6%, besting the median return of an index of large public pension funds. The median return for the Wilshire Trust Universe Comparison Service (TUCS) peer group of public pension funds with more than \$1 billion in assets was 10.5% for FY 2024. This is the second consecutive year that KRS pension and insurance portfolio returns have neared or exceeded 10%.

<u>Acknowledgments</u>

The preparation of this report has been a collaborative effort of KPPA Executive Management and the Accounting Division, Communications Division, Office of Investments, and the KRS CEO. The contents have been reviewed by the Internal Audit Division. KPPA is responsible for all the information in the report and confidently presents it as a basis for understanding the stewardship of the system.

Respectfully submitted,



Ryan Barrow KPPA Executive Director



Michael B. Lamb, CPA KPPA Chief Financial Officer

GOVERNANCE

As of December 5, 2024

The Kentucky Retirement Systems (KRS) is governed by a nine member board of trustees, consisting of three elected members and six gubernatorial appointees serving four-year terms. Two of the elected members represent the Kentucky Employees Retirement System (KERS) and one elected member represents the State Police Retirement System (SPRS). KRS has four representatives on the KPPA Board in addition to employing a Chief Executive Officer who serves as a legislative and executive advisor and a General Counsel who provides legal services.

KRS BOARD OF TRUSTEES

Lynn Hampton, Chair C. Prewitt Lane, Vice Chair General Counsel: Dentons Bingham Greenebaum Three (3) Elected Trustees Six (6) Appointed by Governor

LEADERSHIP: Every April, the trustees elect a Chair and Vice Chair and affirm who will serve on the KPPA Board in compliance with state law.



Lynn Hampton Chair Term ends June 17, 2026



C. Prewitt Lane Vice Chair Term ends June 17, 2027



John E. Chilton Chief Executive Officer

CHIEF EXECUTIVE
OFFICER (CEO):
The CEO works with the
trustees and KPPA staff to
carry out the statutory
provisions of the systems.

ELECTED BY MEMBERSHIP: Every four years, two eligible KERS members and one eligible SPRS member are elected to serve on the Board of Trustees.



Keith Peercy Term ends March 31, 2027 Elected by SPRS



Dr. Crystal Miller Term ends March 31, 2026 Elected by KERS



David Adkins Term ends March 31, 2026 Elected by KERS

KPPA BOARD: By law, the KRS Board Chair and Investment Committee Chair serve on this Board. The KRS Chair also appoints one elected trustee and one appointed trustee to the KPPA Board.

APPOINTED BY GOVERNOR: The Governor appoints six individuals to serve on the Board of Trustees.



Pamela F. Thompson Term ends June 17, 2027



Ramsey Bova Term ends June 17, 2026



Mary G. Eaves Term ends June 21, 2027

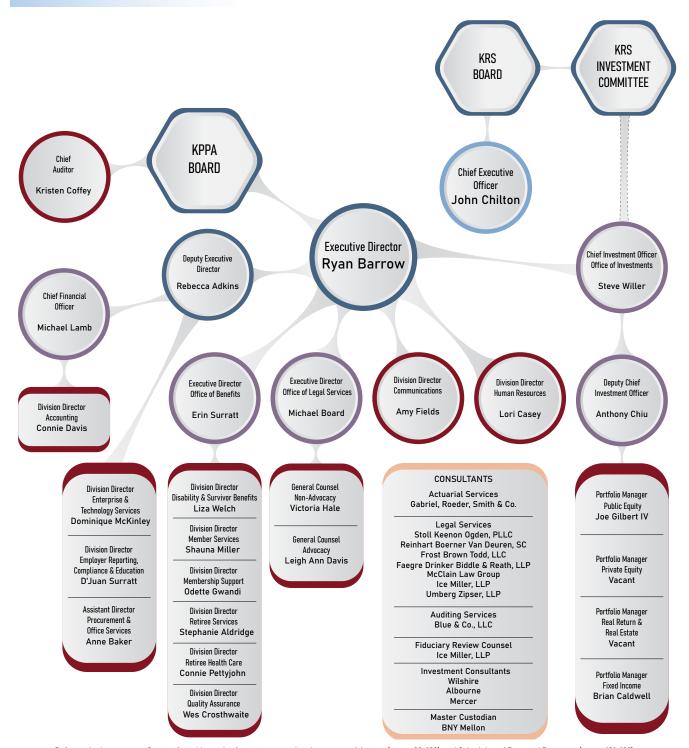


William Summers V Term ends June 17, 2026

AGENCY STRUCTURE

As of December 5, 2024

The Kentucky Public Pensions Authority (KPPA) oversees the operations of the Kentucky Employees Retirement System (KERS) and State Police Retirement System (SPRS) by providing administrative support, investment management, and conducting daily activities on behalf of the Kentucky Retirement Systems (KRS) Board of Trustees and KPPA Board. KPPA is led by an Executive Director who is appointed by the KPPA Board to work with the KRS Chief Executive Officer to carry out the statutory provisions of the systems.



Refer to the Investments Section for additional information regarding Investment Advisors (pages 99-100) and Schedules of Fees and Expenses (pages 101-103).

Professional Awards

CERTIFICATE OF ACHIEVEMENT FOR EXCELLENCE IN FINANCIAL REPORTING

The Government Finance Officers Association (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Kentucky Public Pensions Authority* for its Annual Comprehensive Financial Report for the Fiscal Year ended June 30, 2023. 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 is the 25th award earned by Kentucky Public Pensions Authority (formerly the Kentucky Retirement Systems). 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 2024 report will continue to meet the Certificate of Achievement Program's requirements, and we will be submitting it to the GFOA for their consideration.



Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Kentucky Public Pensions Authority

For its Annual Comprehensive Financial Report For the Fiscal Year Ended

June 30, 2023

Christopher P. Morrill

Executive Director/CEO

PUBLIC PENSIONS STANDARDS AWARD FOR FUNDING AND ADMINISTRATION

The Public Pension Coordinating Council awarded the Public Pensions Standards Award for Funding and Administration to the Kentucky Retirement Systems (KRS) for 2024. This is the second award earned by KRS.

The Public Pension Coordinating Council established the Public Pension Standards to reflect expectations for public retirement system management, administration, and funding. The Standards serve as a benchmark to measure public defined benefit plans. The Award for Funding and Administration is a distinguished national award recognizing pension programs meeting professional standards for plan design and administration as set forth in the Public Pension Standards. This award is valid for a period of one year. We believe KRS will continue to meet these standards, and we will be applying for the award next year.



Public Pension Coordinating Council

Public Pension Standards Award For Funding and Administration 2024

Presented to

Kentucky Retirement Systems

In recognition of meeting professional standards for plan funding and administration as set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of State Retirement Administrators (NASRA) National Conference on Public Employee Retirement Systems (NCPERS) National Council on Teacher Retirement (NCTR)

> Alan H. Winkle Program Administrator

*Beginning with Fiscal Year 2024, two separate financial statement audits will be conducted for the County Employees Retirement System and Kentucky Retirement Systems. As a result, KPPA will issue two separate Annual Comprehensive Financial Reports on behalf of the respective Boards of Trustees. The GFOA Award is included in both ACFRs this Fiscal Year, however, the award will be based on the individual reports prospectively.

Pension Benefits by County

	2024 To	tal Fiscal Yea	ar KRS Pe	nsion Be	enefits Paid by	y County (in	whole \$)
County	Payees*	Total	County	Payees*	Total	County	Payees*	Total
Adair	258	\$5,233,757	Grant	237	\$5,065,058	McLean	113	\$2,423,622
Allen	168	2,896,237	Graves	370	7,071,404	Meade	139	2,124,446
Anderson	1,106	30,163,141	Grayson	260	4,750,221	Menifee	125	2,366,828
Ballard	70	1,349,366	Green	133	2,797,976	Mercer	474	10,670,417
Barren	454	8,064,330	Greenup	219	4,026,940	Metcalfe	122	1,820,442
Bath	188	4,033,031	Hancock	52	888,974	Monroe	104	1,938,858
Bell	289	5,822,644	Hardin	864	16,284,864	Montgomery	289	6,023,948
Boone	509	10,237,281	Harlan	286	5,848,488	Morgan	470	9,206,856
Bourbon	195	3,907,805	Harrison	179	3,496,959	Muhlenberg	346	6,011,078
Boyd	273	5,970,819	Hart	140	2,841,806	Nelson	397	8,266,415
Boyle	476	9,224,119	Henderson	304	5,455,041	Nicholas	89	1,777,954
Bracken	93	1,599,099	Henry	608	15,351,750	Ohio	225	3,698,726
Breathitt	286	5,594,827	Hickman	49	883,194	Oldham	636	13,332,079
Breckinridge	189	3,288,729	Hopkins	564	10,131,863	Owen	361	9,201,676
Bullitt	380	7,383,568	Jackson	161	2,922,666	Owsley	109	1,835,968
Butler	132	2,211,789	Jefferson	4,919	100,199,030	Pendleton	127	2,450,351
Caldwell	301	5,743,674	Jessamine	474	10,110,208	Perry	355	7,159,855
Calloway	639	9,171,638	Johnson	314	5,866,476	Pike	457	9,926,423
Campbell	556	10,084,760	Kenton	628	13,287,974	Powell	160	2,649,590
Carlisle	51	979,069	Knott	240	4,993,697	Pulaski	1,360	26,350,846
Carroll	150	2,792,547	Knox	245	5,411,973	Robertson	43	656,941
Carter	386	7,000,689	LaRue	170	3,463,969	Rockcastle	193	3,936,362
Casey	150	2,915,479	Laurel	568	13,513,575	Rowan	594	11,069,094
Christian	757	14,295,707	Lawrence	125	2,377,169	Russell	286	5,148,724
Clark	363	6,779,367	Lee	112	2,091,649	Scott	651	16,602,997
Clay	265	5,606,818	Leslie	126	2,705,974	Shelby	1,109	29,746,376
Clinton	132	2,540,152	Letcher	232	4,623,963	Simpson	89	1,453,087
Crittenden	128	2,387,901	Lewis	111	1,884,334	Spencer	218	4,685,820
Cumberland	95	1,620,068	Lincoln	285	5,114,464	Taylor	244	4,757,587
Daviess	800	14,284,924	Livingston	118	2,551,088	Todd	102	1,740,586
Edmonson	86	1,210,507	Logan	212	4,104,082	Trigg	317	5,569,098
Elliott	119	2,065,762	Lyon	240	5,469,850	Trimble	161	3,049,471
Estill	209	3,688,367	Madison	1,477	25,755,941	Union	94	1,413,899
Fayette	2,970	74,815,212	Magoffin	162	3,373,750	Warren	1,518	26,744,981
Fleming	228	5,231,966	Marion	203	3,632,637	Washington	152	3,626,225
Floyd	462	9,024,187	Marshall	403	6,207,293	Wayne	276	5,109,931
Franklin	5,554	174,152,108	Martin	72	1,182,866	Webster	122	2,072,266
Fulton	61	1,114,939	Mason	143	3,016,781	Whitley	532	10,960,475
Gallatin	49	968,794	McCracken	525	11,007,269	Wolfe	189	4,246,861
Garrard	215	\$3,778,209		173	\$2,402,326	Woodford	701	\$20,602,421

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 2024, KRS paid over \$1.17 billion to its recipients. The majority, 92.97%, of these payments are issued to Kentucky residents. Each county in the Commonwealth received at least \$656,000 from KRS, providing a stabilizing element for all local economies.

Total Retirement Payments For the Period ended June 30, 2024 (in Whole \$)											
	Payees	%	Payments Payments								
Kentucky	50,544	92.97%	1,093,828,507								
Out of State	4,863	7.03%	82,646,494								
Grand Total	irand Total 55,407 100.00% \$1,176,475,001										

^{*}This table represents all payees receiving a monthly payment, retirement eligible refund, or actuarial refund during the fiscal year.

Fiduciary Net Position Highlights

			KRS Fid	uciary N	et Position	ո* (\$ in TI	nousand	s)		
	KERS Nonhazardous KERS Hazardous							KRS		
Year	Pension	Insurance	Total	Pension	Insurance	Total	Pension	Insurance	Total	Total
2015	\$2,327,782	\$665,639	\$2,993,421	\$552,468	\$439,113	\$991,581	\$247,229	\$164,714	\$411,943	\$4,396,945
2016	1,980,292	668,318	2,648,610	527,880	437,397	965,277	218,013	160,949	378,962	3,992,849
2017	2,092,781	781,406	2,874,187	605,921	484,442	1,090,363	256,383	178,191	434,574	4,399,124
2018	2,048,890	846,762	2,895,652	651,173	513,384	1,164,557	268,425	189,994	458,419	4,518,628
2019	2,286,625	942,136	3,228,761	687,877	527,108	1,214,985	287,242	200,128	487,370	4,931,116
2020	2,362,231	1,006,498	3,368,729	697,366	514,740	1,212,106	295,044	200,245	495,289	5,076,124
2021	3,085,014	1,353,123	4,438,137	874,928	624,889	1,499,817	357,660	246,004	603,664	6,541,618
2022	3,076,743	1,301,522	4,378,265	819,237	579,902	1,399,139	552,926	230,015	782,941	6,560,345
2023	3,607,206	1,465,489	5,072,695	902,567	616,322	1,518,889	592,826	246,797	839,623	7,431,207
2024	\$4,297,571	\$1,692,094	\$5,989,665	\$1,029,921	\$667,917	\$1,697,838	\$653,216	\$272,091	\$925,307	\$8,612,810

^{*}The Fiduciary Net Positions are the resources accumulated and held in trust to pay benefits.

FINANCIAL TABLE OF CONTENTS

- 14 REPORT OF INDEPENDENT AUDITORS
- 17 MANAGEMENT'S DISCUSSION & ANALYSIS
- 22 BASIC FINANCIAL STATEMENTS
- 22 COMBINING STATEMENT OF FIDUCIARY NET POSITION
- 23 COMBINING STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
- 24 NOTE A. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES
- 26 NOTE B. DESCRIPTION & CONTRIBUTION INFORMATION
- 31 NOTE C. CASH, SHORT-TERM INVESTMENTS & SECURITIES LENDING COLLATERAL
- 32 NOTE D. INVESTMENTS
- 47 NOTE E. SECURITIES LENDING TRANSACTIONS
- 48 NOTE F. RISK OF LOSS
- 48 NOTE G. CONTINGENCIES
- 48 NOTE H. INCOME TAX STATUS
- 49 NOTE I. GASB 67 AND GASB 74 VALUATIONS
- 55 NOTE J. LEGISLATION
- 57 NOTE K. LITIGATION
- 59 NOTE L. RECIPROCITY AGREEMENT
- 60 NOTE M. REIMBURSEMENT OF RETIRED-REEMPLOYED AND ACTIVE MEMBER HEALTH INSURANCE
- 61 NOTE N. GENERAL FUND APPROPRIATIONS
- 61 NOTE O. PRISMA DANIEL BOONE FUND ADJUSTMENT
- 61 NOTE P. SUBSEQUENT EVENTS
- 62 NOTE Q. RELATED PARTY



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REPORT OF INDEPENDENT AUDITORS

To the Members Kentucky Retirement Systems Frankfort, Kentucky

Report on the Audit of Financial Statements

Opinion

We have audited the accompanying financial statements of Kentucky Retirement Systems (KRS), a component unit of the Commonwealth of Kentucky, as of and for the year ended June 30, 2024, and the related notes to the financial statements, which collectively comprise KRS's financial statements as listed in the table of contents.

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of KRS, as of June 30, 2024, and the changes in fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audit in accordance with 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. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of KRS and to meet our other ethical responsibilities in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Financial Statements

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

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about KRS's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

REPORT OF INDEPENDENT AUDITORS (Continued)

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with generally accepted auditing standards and Government Auditing Standards will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgement made by a reasonable user based on the financial statements.

In performing an audit in accordance with generally accepted auditing standards and Government Auditing Standards, we:

- Exercise professional judgement and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit 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 KRS's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgement, there are conditions or events, considered in the aggregate, that raise substantial doubt about KRS's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 17 through 21, and the defined benefit pension plan and other postemployment benefit plan supplemental schedules on pages 64 through 79, be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing

REPORT OF INDEPENDENT AUDITORS (Continued)

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 financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming opinion on the financial statements that collectively comprise KRS's basic financial statements. The accompanying schedules of administrative expense, direct investment expenses, and professional consultant fees are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the schedules of administrative expense, direct investment expenses, and professional consultant fees are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

The introductory, investment, actuarial and statistical sections have not been subjected to auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated December 5, 2024, on our consideration of KRS'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 solely 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 effectiveness of KRS's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering KRS's internal control over financial reporting and compliance.

Blue & Co., LLC

Lexington, Kentucky December 5, 2024

INTRODUCTION

Management's Discussion and Analysis (MD&A) provides insight into the financial performance of KRS for the fiscal year ended June 30, 2024. It is meant to be read in the context of the accompanying Letter of Transmittal in the Introduction, the Basic Financial Statements and the Notes to those statements, the Required Supplementary Information (RSI), and additional material following this section. Together, this information provides a comprehensive picture of KRS' financial position.

KRS comprises the Kentucky Employee Retirement System (KERS), and the State Police Retirement System (SPRS). KERS includes hazardous and nonhazardous defined benefit pension and OPEB plans for Kentucky state employees. SPRS is a single employer system providing benefits to Kentucky State Police troopers. Governance of both KERS and SPRS is vested with the nine-member KRS Board of Trustees (the KRS Board). Daily system activities, including investment management, benefits counseling, legal services, accounting, and payroll functions, are performed by a staff of professional employees of the Kentucky Public Pensions Authority (KPPA), which is the special-purpose government responsible for the administration of KRS.

FINANCIAL HIGHLIGHTS AND ANALYSIS

The following are the Condensed Comparative Statements of Fiduciary Net Position and Condensed Comparative Statements of Changes in Fiduciary Net Position of KRS for the fiscal years ended June 30, 2024, and 2023:

Condensed Summary of Fiduciary Net Position As of June 30											
	KRS TOTAL	KRS TOTAL									
	2024	2023	CHANGE	% CHANGE							
ASSETS											
Cash, Short-term Investments, and Receivables	\$615	\$1,256	\$(641)	(51.04%)							
Investments, at fair value	8,322	6,413	1,909	29.77%							
TOTAL ASSETS	8,937	7,669	1,268	16.53%							
TOTAL LIABILITIES	324	238	86	36.13%							
FIDUCIARY NET POSITION	\$8,613	\$7,431	\$1,182	15.91%							

Condensed Sumr	Condensed Summary of Changes in Fiduciary Net Position											
	As of June 30	0										
	KRS TOTAL	KRS TOTAL										
	2024	2023	CHANGE	% CHANGE								
ADDITIONS												
Member Contributions	\$137	\$117	\$20	17.09%								
Employer Contributions	369	320	49	15.31%								
Actuarially Accrued Liability Contributions (AALC)	987	986	1	0.10%								
General Fund Appropriations	240	240	-	0.00%								
Total Contributions	1,733	1,663	70	4.21%								
Net Investment Income (Loss)	776	541	235	43.44%								
Other Additions	10	5	5	100.00%								
TOTAL ADDITIONS	2,519	2,209	310	14.03%								
DEDUCTIONS												
Benefits and Refunds	1,192	1,182	10	0.85%								
Other Deductions	145	156	(11)	(7.05)%								
TOTAL DEDUCTIONS	1,337	1,338	(1)	(0.07)%								
NET INCREASE (DECREASE)	1,182	871	311	35.71%								
FIDUCIARY NET POSITION												
BEGINNING OF THE PERIOD	7,431	6,560	871	13.28%								
END OF PERIOD	\$8,613	\$7,431	\$1,182	15.91%								

Fiduciary Net Position

The Fiduciary Net Position of KRS was \$7,431 at the beginning of the fiscal year and increased by 15.91% to \$8,613 as of June 30, 2024. The \$1,182 increase is primarily attributable to the appreciation of the fair value of investments. and continued AALC payments and additional funding from the Kentucky General Assembly.

Contributions

Total contributions reported for fiscal year 2024 were \$1,733 compared to \$1,663 in fiscal year 2023, an increase of 4.21% or \$70. This increase was driven by an increase in covered payroll for all plans, as the employer contribution rates remained constant from year to year.

Investments

The KRS pension and insurance portfolios investment returns averaged 10.6% for the fiscal year ended June 30. 2024, compared to 8.8% for the fiscal year ended June 30, 2023. This was due to the Core Fixed Income, Specialty Credit, and Real Return portfolios significantly outpacing their benchmarks, and sizable returns in the Public Equity portfolio. See investment results beginning on page 87 of the investment section.

The fair value of investments, as of June 30, 2024, were \$8,322, an increase of \$1,909 from the prior year, and net investment income was \$776 for the current fiscal year, compared to \$541 for the prior fiscal year.

Investment returns are reported net of fees and investment expenses, including carried interest. Investment fees and expenses totaled \$65 for fiscal year 2024 compared to \$48 in the prior fiscal year.

	1-year return		Fair Value of Investments		Investment fees & expenses			Net Investment Income			
	2024	2023	2024	2023	change	2024	2023	change	2024	2023	change
PENSION											
KERS Nonhazardous	9.5%	7.0%	\$4,100	\$2,964	\$1,136	\$29	\$20	\$9	\$356	\$220	\$136
KERS Hazardous	11.1%	9.5%	1,008	830	178	9	7	2	102	77	25
SPRS	9.6%	7.6%	635	469	166	4	3	1	57	41	16
INSURANCE											
KERS Nonhazardous	11.1%	9.9%	1,649	1,311	338	13	11	3	167	128	39
KERS Hazardous	11.2%	9.3%	662	599	63	7	5	2	67	53	14
SPRS	11.0%	9.5%	268	240	28	3	2	1	27	21	6
AVERAGE / TOTAL	10.6%	8.8%	\$8,322	\$6,413	\$1,909	\$65	\$48	\$18	\$776	\$540	\$236

Asset allocation is the primary driver of long-term investment performance and is designed to achieve an optimal long-term asset mix. The investment policy statement (IPS) of the KRS board has established the following asset allocation guidelines as of June 30, 2024. See also the investment overview beginning on page 83 of the investment section.

	KERS Non	hazardous Pen Pension Plans		KERS Ha	ERS Hazardous Pension & all KRS Insurance Plans		
Asset Class	Target	Minimum	Maximum	Target	Minimum	Maximum	
Public Equity	30%	20%	40%	40%	2%	50%	
Private Equity	6%	3%	9%	8%	4%	12%	
Core Fixed Income	27%	22%	35%	10%	8%	15%	
Specialty Credit	20%	15%	25%	25%	20%	30%	
Cash	2%	0%	5%	2%	0%	5%	
Real Estate	5%	3%	7%	7%	4%	10%	
Real Return	10%	7%	13%	8%	5%	11%	
	100%			100%			

Deductions

Benefits and refunds paid for fiscal year 2024 totaled \$1,192 compared to \$1,182 in fiscal year 2023, a 0.85% increase, due to the slight increase in retired membership of the systems.

ACTUARIAL HIGHLIGHTS

The actuarial accrued liability (AAL) is the measure of the cost of benefits that have been earned to date, but not yet paid, and is calculated using the entry age normal cost method (EANC) as required by state statute. The difference in value between the AAL and the actuarial value of assets is defined as the unfunded actuarial accrued liability (UAAL).

The UAAL for KRS, from the June 30, 2024, actuarial valuation, is \$13,564 for fiscal year ended June 30, 2024, compared to \$13,813 for fiscal year ended June 30, 2023, a decrease of \$249. The UAAL for the Pension Plans decreased by \$261 due to the increase in the fair value of the assets related to favorable market conditions, an increase in covered payroll, and the \$240 in general fund appropriation during fiscal year 2024. The UAAL for the Insurance Plans increased by \$12, due to static contribution rates for fiscal year 2024.

	Schedule of Unfunded Actuarial Accrued Liability (UAAL) As of June 30												
KERS Nonhazardous KERS Hazardous SPRS													
	Pens	sion	Insur	ance	Pen	sion	Insur	ance	Pens	sion	Insura	ance	
	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	
Actuarial Accrued												,	
Liability (AAL)	\$16,648	\$16,304	\$2,095	\$1,877	\$1,443	\$1,363	\$380	\$364	\$1,112	\$1,092	\$251	\$244	
Actuarial Value of Assets	4,122	3,552	1,712	1,533	985	891	652	620	631	590	263	245	
Unfunded Actuarial													
Accrued Liability (UAAL)	\$12,526	\$12,752	\$383	\$344	\$458	\$472	(\$272)	(\$256)	\$481	\$502	(\$12)	(\$1)	
Funded Ratio	24.76%	21.79%	81.72%	81.67%	68.26%	65.37%	171.58%	170.33%	56.74%	54.03%	104.78%	100.41%	

Please refer to Note I and the RSI of the Financial Section, as well as the Actuarial Section for more analysis of the funding status, asset values, actuarial assumptions, and actuarially determined employer contributions.

INFORMATION REQUESTS

This financial report is designed to provide a general overview of KRS' financial position. Questions concerning any of the information provided in this report or requests for additional information should be directed to:

ATTN: Director of Accounting Kentucky Public Pensions Authority 1260 Louisville Road Frankfort, KY 40601

Basic Financial Statements

lacksquare	Combining Statement of Fiduciary Net Position As of June 30, 2024 (\$ in Thousands)											
75 01 0 dile 00, 2024 (\$\pi 11 1110 dodile		Pension			Insurance		KRS					
	KERS	KERS	SPRS	KERS	KERS	SPRS	Total					
ASSETS	Nonhazardous	Hazardous		Nonhazardous	Hazardous		2024					
CASH AND SHORT-TERM INVESTM	ENTS											
Cash Deposits	\$268	\$27	\$29	\$100	\$23	\$18	\$465					
Short-term Investments	254,633	49,952	38,006	68,261	20,702	9,876	441,430					
Total Cash and Short-term												
Investments	254,901	49,979	38,035	68,361	20,725	9,894	441,895					
RECEIVABLES												
Accounts Receivable	93,357	4,965	2,498	14,426	462	918	116,626					
Accounts Receivable - Investments	30,542	5,671	4,925	10,444	3,303	1,492	56,377					
Total Receivables	123,899	10,636	7,423	24,870		2,410	173,003					
INVESTMENTS, AT FAIR VALUE	.,	.,	, -	,	.,	, -	.,,,,,,					
Core Fixed Income	1,096,029	115,245	166,303	189,154	75,625	29,762	1,672,118					
Public Equities	1,347,282	431,605	205,635	708,372	284,692	114,446	3,092,032					
Private Equities	194,862	66,044	31,411	111,418	48,804	21,728	474,267					
Specialty Credit	785,092	229,560	123,774	375,074	151,347	61,598	1,726,445					
Derivatives	(73)	9	(9)) 10	(3)	3	(63)					
Real Return	349,425	79,738	56,205	135,580	45,489	18,475	684,912					
Real Estate	217,911	58,902	35,155	95,993	42,344	16,169	466,474					
Securities Lending Collateral	109,246	26,629	16,923	33,811	13,516	5,449	205,574					
Total Investments, at Fair Value	4,099,774	1,007,732	635,397	1,649,412	661,814	267,630	8,321,759					
Total Assets	4,478,574	1,068,347	680,855	1,742,643	686,304	279,934	8,936,657					
LIABILITIES												
Accounts Payable	4,455	988	113	132	2	1	5,691					
Accounts Payable - Investments	67,302	10,809	10,603	16,606	4,869	2,393	112,582					
Securities Lending Collateral	109,246	26,629	16,923	33,811	13,516	5,449	205,574					
Total Liabilities	181,003	38,426	27,639	50,549	18,387	7,843	323,847					
Total Fiduciary Net Position Restricted for Benefits	\$4,297,571	\$1,029,921	\$653,216	\$1,692,094	\$667,917	\$272,091	\$8,612,810					

See accompanying notes which are an integral part of these combining financial statements.

Note: The displayed fair values include investable assets held by each Plan and its associated contributions, payables, equipment and intangible assets; unlike those found in the Investment Section, which include only those investable assets held by each Plan.

For the fiscal year ended June 30	υ, 2024 (Ψ III TIIOU	isaiius)					
	Р	ension			Insurance		KRS
	KERS	KERS	SPRS	KERS	KERS	SPRS	Total
	Nonhazardous I	lazardous		Nonhazardous	Hazardous		2024
ADDITIONS							
Member Contributions	\$96,597	\$21,560	\$5,691	\$10,682	\$2,070	\$395	\$136,99
Employer Contributions	156,032	89,899	61,998	48,846	1,910	10,163	368,848
Actuarially Accrued Liability Contributions	899,663	-	_	87,782	-	-	987,445
General Fund Appropriations	240,000	-	-	-	-	-	240,000
Other Additions	-	-	-	8,444	651	390	9,485
Total Contributions & Other Additions	1,392,292	111,459	67,689	155,754	4,631	10,948	1,742,77
INVESTMENT INCOME		<u> </u>		,		<u> </u>	
Net Appreciation (Depreciation)							
in FV of Investments	243,618	76,073	38,386	123,287	51,737	20,310	553,41
Interest/Dividends	137,373	33,477	21,885	55,349	21,973	8,932	278,989
Securities Lending Income	4,235	1,169	744	1,583	551	242	8,524
Less: Investment Expense	19,394	5,797	2,666	9,243	4,573	1,818	43,49
Less: Performance Fees	6,006	1,724	620	2,860	1,766	616	13,592
Less: Securities Lending Fees, Expenses, and Rebates	3,808	1,059	671	1,402	487	214	7,64
Net Investment Income (loss)	356,018	102,139	57,058	166,714	67,435	26,836	776,200
Total Additions	1,748,310	213,598	124,747	322,468	72,066	37,784	2,518,973
DEDUCTIONS							
Benefit Payments	1,032,124	80,528	63,823	-	-	-	1,176,475
Refunds	11,693	4,133	220	-	-	-	16,046
Administrative Expenses	14,128	1,583	314	734	117	71	16,947
Healthcare Expenses	-	-	-	95,129	20,354	12,419	127,902
Total Deductions	1,057,945	86,244	64,357	95,863	20,471	12,490	1,337,370
Net Increase (Decrease) in Fiduciary Net Position Restricted for Benefits	690,365	127,354	60,390	226,605	51,595	25,294	1,181,603
Total Fiduciary Net Position Restricted for Benefits							. ,
Beginning of Period	3,607,206	902,567	592,826	1,465,489	616,322	246,797	7,431,20
End of Period	\$4,297,571	\$1,029,921	\$653,216	\$1,692,094	\$667,917	\$272,091	\$8,612,810

NOTE A. Summary of Significant Accounting Policies

Basis of Accounting

KRS's combining financial statements are prepared using the accrual basis of accounting. Member contributions are recognized in the period in which contributions are due. Employer contributions 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 the terms of the plan. Premium payments are recognized when due and payable in accordance with the insurance terms of the plan. Administrative and investment expenses are recognized when incurred. The net position represents the assets of the system available to pay pension benefits for retirees, active and inactive members, and health care premiums for current and future retirees.

Method Used to Value Investments

Investments are reported at fair value. Fair value is the price that would be received upon selling an asset or the amount 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 Investments 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 dividend date. Gain (loss) on investments includes gains and losses on investments bought and sold as well as held during the fiscal year. Investment returns are recorded in all plans net of investment fees.

Investment Unitization

Within the plan accounting structure there are two primary types of accounts: Plan Accounts and Pool Accounts. Plan Accounts are the owners of the investment pool. An account is established for each plan and these accounts hold Units of Participation that represent the plan's invested value of the investment pool. Pool Accounts are accounts that hold the assets of the investment pool where all investment related activity and earnings occur. The pooled accounts are the investment strategies of the pool. Units of Participation are bought and sold as each plan contributes or withdraws cash or assets from the investment pool. The investment pool earnings are then allocated to plans utilizing a cost distribution method that allows for fluctuating prices experienced in capital markets. This involves earnings allocated to the plan accounts with an increase or decrease in cost on the Unit of Participation Holdings of the plan accounts. Correspondingly, the price of the Unit of Participation Holdings is updated to reflect change in fair value in the investment pool. Earnings are allocated based on the daily weighted average of Master Trust Units held by each plan account during each monthly earnings period. This method is commonly used when plans make multiple contributions or withdrawals from the investment pool throughout the month as it eliminates allocation distortion due to large end of month cash flows.

Estimates

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

Capital/Intangible Assets

Equipment and computer software costing more than \$3,000 are valued at historical cost, capitalized when put into service, and depreciated or amortized using the straight-line method over the estimated useful life of the assets, ranging from three to ten years. Improvements, which increase the useful life of the asset, are capitalized. Maintenance and repairs are charged as an expense when incurred. As of June 30, 2023, all capital/intangible assets were fully depreciated and or amortized. No additional capital/intangible assets have been capitalized since that date.

Accounts Receivable

Accounts Receivable consist of amounts due from employers. Management considers accounts 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.

The Investment Accounts Receivable and Investment Accounts Payable consist of investment management earnings and fee accruals, as well as all buys and sells of securities which have not closed as of the reporting date.

Benefits

Benefits are recognized when due and payable in accordance with the terms of the plan.

Expense Allocation

Administrative expenses are allocated to the system based on a hybrid allocation developed by management in conjunction with the KRS Board. The hybrid allocation is based on a combination of plan membership and direct plan expenses. All investment related 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 on July 1, 1956, pursuant to Kentucky Revised Statutes 61.515. SPRS was created by the Kentucky General Assembly on July 1, 1958, pursuant to Kentucky Revised Statutes 16.510. Six of the nine trustees are appointed by the Governor. The administrative budget of KPPA, which incorporates KRS administrative cost is subject to approval by the Kentucky General Assembly. KRS employer contribution rates are set by statute and subject to legislative approval. The methods used to determine the employer rates for KRS (KERS and SPRS) are specified in Kentucky Revised Statutes 61.565.

Perimeter Park West, Incorporated (PPW) is a legally separate entity functioning as a real estate holding company for the offices used by KPPA. PPW is governed by a three-member board selected by its sole shareholder, KRS.

Recent Accounting Pronouncements

GASB Statement Number 100, Accounting Changes and Error Corrections - an amendment of GASB Statement No. 62. The requirements of this Statement will take effect for financial statements starting with the fiscal year that ends June 30, 2024. KRS had no Accounting Changes or Error Corrections for fiscal year June 30, 2024.

GASB Statement Number 101, Compensated Absences. The requirements of the Statement will take effect for financial statements starting with the fiscal year that ends December 31, 2024. Management is evaluating the impact of the Statement to the financial report.

GASB Statement Number 102, Certain Risk Disclosures. The requirements of the Statement will take effect for financial statements for fiscal years beginning after June 15, 2024. Management is evaluating the impact of the Statement to the financial report.

GASB Statement Number 103, Financial Reporting Model Improvements. The requirements of the Statement are effective for fiscal years beginning after June 15, 2025, and all reporting periods thereafter. Management is evaluating the impact of the Statement to the financial report.

Note B. Description & Contribution Information

KRS - Kentucky Employees Retirement System

KRS comprises the Kentucky Employees Retirement System (KERS) and the State Police Retirement System (SPRS), and for financial reporting purposes, is composed of six Plans - three defined benefit pension Plans, and three OPEB plans, as discussed below. Each of the Pension and OPEB Plans are legally separated with benefits only eligible to be paid for each of the respective membership groups.

KERS was established by Kentucky Revised Statutes 61.515, to provide retirement, disability, and death benefits to system members. KERS, for financial reporting purposes, is composed of two pension Plans - KERS Nonhazardous Plan and KERS Hazardous Plan, and two corresponding OPEB Plans. The KERS Nonhazardous Plan was established to provide retirement benefits to all regular full-time members employed in positions of any state department, board, or agency directed by Executive Order to participate in KERS. The membership of the KERS Hazardous Plan includes employees whose position is considered hazardous with principal job duties including, but are not limited to, active law enforcement, probation and parole officer, detective, pilots, paramedics, and emergency medical technicians, with duties that require frequent exposure to a high degree of danger and also require a high degree of physical condition.

SPRS is a single employer defined benefit pension Plan that was established by Kentucky Revised Statutes 16.510 to provide retirement benefits to all full-time state troopers employed in positions by the Kentucky State Police, and all positions are considered Hazardous. SPRS, for financial reporting purposes, is composed of the retirement Plan, and a corresponding OPEB Plan.

The OPEB Plans are part of the Kentucky Retirement Systems Insurance Trust Fund (Insurance Fund), established by Kentucky Revised Statutes 61.701 for eligible members receiving benefits from KERS Nonhazardous, KERS Hazardous, and SPRS. The Insurance Fund was created for the purpose of providing a trust separate from the retirement trusts, and for the purpose of providing hospital and medical insurance benefits.

The responsibility of the Plans within KRS is vested in the KRS Board. The KRS Board consists of nine 9 members. Six trustees are appointed by the governor and three are elected. Of the elected trustees, two are elected by KERS members and one is elected by SPRS members. Active, inactive and retired members of the appropriate system are invited to participate in the election of trustees. Of the six appointed trustees, three must have investment experience and three must have retirement experience as defined by statute. All appointments by the governor are subject to Senate confirmation. The two trustees elected by the KERS membership must be members of or retired from KERS. The one trustee elected by the SPRS membership must be a member of or retired from SPRS.

Employer Contributions

For the fiscal year ended June 30, 2024, there were 329 participating employers in KERS, and SPRS is a single employer plan. The Commonwealth is required to contribute at an actuarially determined rates for KERS and SPRS pensions and insurance. The KRS Board recommends the rates each year following the annual actuarial valuation, but the rates are set by the legislature within the budget bill for each biennium. The contribution rates from July 1, 2023, through June 30, 2024, were set within HB 1, passed in the 2022 Regular Legislative Session, for KERS Nonhazardous, KERS Hazardous and SPRS employers.

The KERS Nonhazardous employer contribution rate shall include, (1) the normal cost contribution and (2) the prorated amount of the actuarially accrued liability assigned to each individual nonhazardous employer in accordance with Kentucky Revised Statutes 61.565(1)(d). Each employer pays the normal cost as a percentage of reported payroll plus a flat amount to cover the employer-specific actuarially accrued liability contribution for the fiscal year as determined by the annual valuation.

Per Kentucky Revised Statutes 61.565 and 16.645(18), normal contribution and past service contribution rates shall be determined by the KRS Board on the basis of the last annual valuation preceding July 1 of a new biennium. The KRS 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 KRS 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, 2024, participating employers of KERS Nonhazardous, KERS Hazardous and SPRS contributed a percentage of each employee's creditable compensation. The actuarially determined rates set

by the KRS Board for the fiscal year is a percentage of each employee's creditable compensation. Administrative costs are financed through employer contributions and investment earnings.

Contribution Rate Breakdown by Plan As of June 30, 2024 **Combined Total Pension** Insurance **Actuarially Employer** Actuarially **Employer Employer** Actuarially Contribution Recommended Contribution Recommended Contribution Recommended Rates Plan Rates Rates Rates Rates Rates KERS Nonhazardous * 2.15% 7.82% 7.74% 1.86% 9.97% 9.60% KERS Hazardous 31.82% 0.00% 0.00% 31.82% 30.12% 30.12% SPRS 85.32% 85.39% 14.11% 3.68% 99.43% 89.07%

Benefit Tiers:

As of June 30, 2024, the date of the most recent actuarial valuation, membership consisted of:

	Membership as of June	30, 2024 (in Who	ole \$)	
Item	KERS Nonhazardous	KERS Hazardous	SPRS	KRS Total
Members	143,975	19,448	3,357	166,780
Active Membership	33,135	4,910	872	38,917
Tier 1	11,933	1,075	310	13,318
Tier 2	4,766	720	180	5,666
Tier 3	16,436	3,115	382	19,933
Average Annual Salary	\$57,357	\$62,496	\$84,054	\$-
Average Age	45.5	39.9	37.4	-
Retired Membership	52,686	5,084	1,736	59,506
Tier 1	51,993	4,994	1,732	58,719
Tier 2	604	75	1	680
Tier 3	89	15	3	107
Average Annual Benefit	\$21,131	\$16,287	\$39,596	\$-
Average Age	71.2	66.5	65.0	-
Inactive Members	58,154	9,454	749	68,357
Tier 1	32,334	2,282	269	34,885
Tier 2	9,800	1,625	133	11,558
Tier 3	16,020	5,547	347	21,914

^{*} House Bill 8 passed during the 2021 legislative session required, beginning July 1, 2021, the KERS Nonhazardous employers pay the normal cost for all employees plus a flat amount which is equal to their assigned percentage of the annual dollar amount that is sufficient to amortize the total unfunded actuarial accrued liability of the system over a closed period. The percentage is based on the liability that was attributable to the agency as of June 30, 2019.

TIER 1:

Tier 1 plan members who began participating prior to September 1, 2008, are required to contribute 5% (Nonhazardous) or 8% (Hazardous) of their annual creditable compensation. These members are classified in the Tier 1 structure of benefits. Interest is paid each June 30 on members' accounts at a rate of 2.5%. If a member terminates employment and applies to take a refund, the member is entitled to a full refund of contributions and interest.

TIER 2:

Tier 2 plan members, who began participating on or after September 1, 2008, and before January 1, 2014, are required to contribute 5% (Nonhazardous) or 8% (Hazardous) of their annual creditable compensation. Further, members also contribute an additional 1% which is deposited to an account created for payment of health insurance benefits under 26 USC Section 401(h) in the Insurance Fund (see Kentucky Administrative Regulation (KAR) 105 KAR 1:420). These members are classified in the Tier 2 structure of benefits. Interest is paid each June 30 on members' accounts as of the June 30 of the previous year 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% Health Insurance Contribution (HIC) to the 401(h) account is non-refundable and is forfeited.

TIER 3:

Tier 3 plan members, who began participating on or after January 1, 2014, are 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 contribute 5% (Nonhazardous) or 8% (Hazardous) of their monthly creditable compensation which is deposited into their account, and an additional 1% which is deposited to an account created for payment of health insurance benefits under 26 USC Section 401(h) in the Insurance Fund (see 105 KAR1:420), which is not refundable. Tier 3 member accounts are also credited with an employer pay credit in the amount of 4% (Nonhazardous) or 7.5% (Hazardous) of the member's monthly creditable compensation. The employer pay credit amount is deducted from the total employer contribution rate paid on the member's monthly creditable compensation. If a vested (60 months of service) member terminates employment and applies to take a refund, the member is entitled to the members contributions (less HIC) plus employer pay credit plus interest (for both employee contributions and employer pay). If a non-vested (less than 60 months) member terminates employment and applies to take a refund, the member is entitled to receive employee contributions (less HIC) plus interest (on employee contributions only).

Interest is also paid into the Tier 3 member's account. The account currently earns 4% interest credit on the member's accumulated account balance as of June 30 of the previous year. The member's account may be credited with additional interest if the plan's five-year Geometric Average Net Investment Return (GANIR) exceeded 4%. If the member was actively employed and participating in the fiscal year, and if KRS's GANIR for the previous five years exceeds 4%, then the member's account will be credited with 75% of the amount of the returns over 4% on the account balance as of June 30 of the previous year (Upside Sharing Interest). It is possible that one plan in KRS may get an Upside Sharing Interest, while another may not.

Upside Sharing Interest

Upside Sharing Interest is credited to both the member contribution balance and employer pay credit balance. Upside Sharing Interest is an additional interest credit. Member accounts automatically earn 4% interest annually. The GANIR is calculated on an individual plan basis.

The chart that follows shows the interest calculated on the members' balances as of June 30, 2023, and credited to each member's account on June 30, 2024.

(A-B) =	C x 75% =	D then B + D) = Interest	(\$ in Thousa	nds)	
	Α	В	C	D		
Plan	5-Year Geometric Average Return	Less Guarantee Rate of 4%	Upside Sharing Interest	Upside Sharing Interest X 75% = Upside Gain	Interest Rate Earned (4% + Upside)	Total Interest Credited to Member Accounts
KERS Nonhazardous	6.39%	4.00%	2.39%	1.79%	5.79%	\$13,424
KERS Hazardous	7.47%	4.00%	3.47%	2.60%	6.60%	\$4,668
SPRS	6.87%	4.00%	2.87%	2.15%	6.15%	\$791

Insurance Fund Description

Eligible non-Medicare retirees are covered by the Department of Employee Insurance (DEI) plans, eligible Medicare retirees are covered through contracts with Humana through a Medicare Advantage Plan. 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, 2024, insurance premiums withheld from benefit payments for KRS's members were \$15.8 million and \$1.2 million for KERS Nonhazardous and Hazardous, respectively; and \$0.4 million for SPRS.

Retiree Medical Insurance Coverage (by Plan Count) As of June 30, 2024					
	Single	Couple/ Family	Parent	Medicare Without Prescription	Medicare With Prescription
KERS Nonhazardous	6,334	473	395	939	22,947
KERS Hazardous	621	462	108	66	1,843
SPRS	239	415	79	16	1,019
Total	7,194	1,350	582	1,021	25,809

Note: Medical Insurance coverage is provided based on the member's initial participation date and length of service. Members receive either a percentage or dollar amount for insurance coverage. The counts are the number of medical plans contracted with the Department of Employee Insurance or Medicare vendor and are not representative of the number of persons.

The amount of benefit paid by the Insurance Fund is based on years of service. For members who began participating prior to July 1, 2003, a percentage of the contribution rate is paid based on years of service with 100% of the contribution rate being paid with 20 years of service.

For members participating prior to July 1, 2003, years of service and respective percentages of the maximum benefit are as follows:

Portion Paid by Insurance Fund As of June 30, 2024	
Years of Service	Paid by Insurance Fund (%)
20+ years	100.00%
15-19 years	75.00%
10-14 years	50.00%
4-9 years	25.00%
Less than 4 years	0.00%

Since the passage of House Bill 290 (2004 Kentucky General Assembly), medical insurance benefits have been calculated differently for members who began participating on or after July 1, 2003. Once members reach a minimum vesting period of 10 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. 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, which is currently 1.5%, based upon Kentucky Revised Statutes.

House Bill 1 (2008 Kentucky General Assembly) changed the minimum vesting requirement for participation in the health insurance plan to 15 years for members whose participation began on or after September 1, 2008. This benefit is not protected under the inviolable contract provisions of Kentucky Revised Statutes 16.652, and 61.692. The Kentucky General Assembly reserves the right to suspend or reduce this benefit if, in its judgment, the welfare of the Commonwealth so demands.

The amount of benefit paid by the Insurance Fund is based on years of service. For members participating on or after July 1, 2003, the dollar amounts of the benefit per year of service are as follows:

Dollar Contribution for Fiscal Year 2024 For Member participation date on or after July 1, 2003			
	(in Whole \$)		
KERS Nonhazardous	\$14.41		
KERS Hazardous	\$21.62		
SPRS	\$21.62		

The Insurance Plan pays 100% of the contribution rate for hospital and medical insurance premiums for the spouse and dependents of members who die as a direct result of an act in the line of duty or from a duty-related injury.

Cost of Living Adjustment (COLA)

Prior to July 1, 2009, COLAs were provided to retirees annually equal to the percentage increase in the annual average of the consumer price index (CPI) for all urban consumers for the most recent calendar year, not to exceed 5% in any plan year. After July 1, 2009, the COLAs were to be limited to 1.50%.

In 2013, the General Assembly created a new law to govern how COLAs will be granted. Language included in Senate Bill 2 during the 2013 Regular Session states COLAs will only be granted in the future if the KRS Board determine that assets of the Systems are greater than 100% of the actuarial liabilities and legislation authorizes the use of surplus funds for the COLA; or the General Assembly fully prefunds the COLA or directs the payment of funds in the year the COLA is provided. The granting of COLAs for the KERS and SPRS membership is covered under Kentucky Revised Statutes 61.691. No COLA has been granted since July 1, 2011.

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 must be reported as assets on the financial statements. The non-cash collateral is not reported because the securities received as collateral are unable to be pledged or sold unless the borrower defaults. In accordance with GASB No. 28, KRS classifies certain other investments, not related to the securities lending program, as short-term. Cash and short-term investments consist of the following:

Cash, Short-Term Investments, & Securities Lend	ing Collateral	
As of June 30, 2024 (\$ in Thousands)		
KERS Nonhazardous	Pension	Insurance
Cash	\$268	\$100
Short-Term Investments	254,633	68,261
Securities Lending Collateral Invested	109,246	33,811
Total	\$364,147	\$102,172
KERS Hazardous	Pension	Insurance
Cash	\$27	\$23
Short-Term Investments	49,952	20,702
Securities Lending Collateral Invested	26,629	13,516
Total	\$76,608	\$34,241
SPRS	Pension	Insurance
Cash	\$29	\$18
Short-Term Investments	38,006	9,876
Securities Lending Collateral Invested	16,923	5,449
Total	\$54,958	\$15,343

Note D. Investments

Kentucky Revised Statutes 61.650 specifically state that the KRS Board shall have the full and exclusive power to invest and reinvest the funds of the Plan(s) they govern. In addition, Kentucky Revised Statutes 61.645 require three (3) members of the KRS Board to have at least ten (10) years of investment experience as defined by the statutes. The KRS Board is required to establish an Investment Committee who is specifically charged with implementing the investment policies adopted by the KRS Board and to act on behalf of the KRS Board of Trustees on all investment-related matters. The KRS Board and the Investment Committee members are required to discharge their duty to invest the funds of the Plans in accordance with the "Prudent Person Rule" as set forth in Kentucky Revised Statutes 61.650 and to manage those funds consistent with the long-term nature of the trusts and solely in the interest of the members and beneficiaries. All internal Investment Staff, and investment consultants must adhere to the Code of Ethics and Standards of Professional Conduct of the CFA Institute and all Board Trustees must adhere to the Code of Conduct for Members of a Pension Scheme Governing Body of the CFA Institute. The KRS Board is authorized to adopt policies. The KRS Board has adopted an Investment Policy Statement (IPS) which defines the framework for investing the assets of the Plans. The IPS is intended to provide general principles for establishing the investment goals of the Plans, the allocation of assets, employment of outside asset management, and monitoring the results of the respective Plans. A copy of the KRS Board's IPS can be found at kyret.ky.gov. By statutes, the KRS Board, through adopted written policies, shall maintain ownership and control over its assets held in its unitized managed custodial account. Additionally, the Investment Committee establishes specific investment quidelines that are summarized below and are included in the Investment Management Agreement (IMA) for each investment management firm.

Equity

Public Equity

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 (ETFs); or any other type of security contained in a manager's benchmark. Each individual equity account has a comprehensive set of investment guidelines, which contains a listing of permissible investments, portfolio restrictions, and standards of performance.

Private Equity

Subject to the specific approval of the Investment Committee, Private Equity investments may be made for the purpose of creating a diversified portfolio of alternative investments under the Equity umbrella. Private Equity investments are expected to achieve attractive risk-adjusted returns and, by definition, possess a higher degree of risk with a higher return potential than traditional investments. Accordingly, total rates of return from Private Equity investments are expected to be greater than those that might be obtained from conventional public equity or debt investments. Certain investments in this category are public market securities (ETFs) with the most similar risk/return characteristics as a short-term proxy for private asset classes.

Fixed Income

Core Fixed Income

The Core Fixed Income accounts may include, but are not limited to, the following securities: U.S. government and agency bonds; investment grade U.S. corporate credit; investment grade non-U.S. corporate credit; mortgages, including residential mortgage-backed securities; commercial mortgage-backed securities and whole loans; asset-backed securities; and, asset class relevant ETFs.

Specialty Credit

The Specialty Credit accounts may include, but are not limited to, the following types of securities and investments: non-investment grade U.S. corporate credit including both bonds and bank loans; non-investment grade non-U.S. corporate credit including bonds and bank loans; private debt; municipal bonds; non-U.S. sovereign debt; mortgages, including residential mortgage-backed securities; commercial mortgage backed securities and whole loans; asset-backed securities and emerging market debt (EMD), including both sovereign EMD and corporate EMD; and asset class relevant ETFs. Each individual Specialty Credit account shall have a comprehensive set of investment guidelines which contains a listing of permissible investments, portfolio restrictions, risk parameters, and standards of performance for the account.

Cash and 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 funds (STIFs), money market funds or instruments (including, but not limited to certificates of deposit, bank notes, deposit notes, bankers' acceptance 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 397 days.

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.

Inflation Protected

Real Estate and Real Return

Subject to the specific approval of the corresponding Investment Committee, investments may be made to create a diversified portfolio of alternative investments. Investments are made in equity and debt real estate for the purpose of achieving the highest total rate of return possible consistent with a prudent level of risk. There may also be investments in this category that are public markets securities, such as ETFs, with similar risk/return characteristics as a short-term proxy. The purpose of the Real Return investments are to identify strategies that provide both favorable stand-alone risk-adjusted returns as well as the benefit of hedging inflation for the broader plans.

Investment Expenses

In accordance with GASB Statement No. 67 and No. 74, Financial Reporting for Pension Plans and Other Postemployment Benefit Plans other than Pension Plans, management has exercised professional judgment to report investment expenses. It is not cost-beneficial to separate certain investment expenses from either the related investment income or the general administrative expenses. In fiscal year 2015, management changed Private Equity investment fees from a gross basis to a net basis. The KRS Board made the decision to enhance transparency reporting. Prior to 2015, the majority of the trusts' Private Equity investment fees were netted against investment activity which is the standard used within the Private Equity sector. Trusts' net investment income has always included these fees regardless of the reporting method used. During the 2017 Regular Session of the Kentucky General Assembly, legislators passed SB 2 which requires the reporting of all investment fees and expenses. Management continues to work with managers to enhance fee and expense reporting.

Derivatives

Derivative instruments are financial contracts that have various effective dates and maturity dates and whose values depend on the values of one or more underlying assets, reference rates, or financial indices. External managers and Investment Staff are permitted to invest in derivative securities, or strategies which make use of derivative investments, for exposure, cost efficiency and risk management purposes, if such investments do not cause the portfolio to be leveraged beyond a 100% invested position. Any derivative security shall be sufficiently liquid that it can be expected to be sold at, or near, its most recently quoted market price. Examples of such derivatives include, but are not limited to the following securities: foreign currency forward contracts; futures; options; and swaps.

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

In accordance with GASB Statement No. 53, Accounting and Financial Reporting for Derivative Instruments, KRS provides additional disclosure regarding its derivatives. The charts included represent the derivatives by types as of June 30, 2024. The chart shows the change in fair value of derivative types as well as the current fair value and notional value. The notional value is the reference amount of the underlying asset times its current spot price. The Plans hold investments in options, commitments, futures, and forward foreign exchange contracts.

KERS Pension and Insurance Derivative Instruments - GASB 53 As of June 30, 2024 (\$ in Thousands) Derivatives (by Type) Net Appreciation (Depreciation) in Fair Value Classification Fair Value Notional **KERS Nonhazardous - Pension** \$48 \$45 FX Spots and Forwards Investment (118)29,760 **Futures** 1,924 Investment Commits and Options Investment Swaps Investment **KERS Nonhazardous - Insurance** FX Spots and Forwards \$30 Investment \$28 458 5,132 **Futures** Investment (18)Commits and Options Investment Swaps Investment **KERS Hazardous - Pension** FX Spots and Forwards \$24 Investment \$22 **Futures** 291 Investment (13)2,576 Commits and Options Investment Swaps Investment **KERS Hazardous - Insurance** FX Spots and Forwards \$-Investment \$1 **Futures** 198 Investment (4) 2,679 Commits and Options Investment Swaps Investment

SPRS Pension and Insurance Derivative Instruments - GASB 53 As of June 30, 2024 (\$ in Thousands)					
Derivatives (by Type)	Net Appreciation (Depreciation) in Fair Value	Classification	Fair Value	Notional	
SPRS Pension					
FX Spots and Forwards	\$10	Investment	\$9	-	
Futures	323	Investment	(18)	4,453	
Commits and Options	-	Investment	-	-	
Swaps	-	Investment	-	-	
SPRS Insurance					
FX Spots and Forwards	\$7	Investment	\$6	-	
Futures	74	Investment	(3)	701	
Commits and Options	-	Investment	-	-	
Swaps	-	Investment	-	_	

Derivative Instruments Subject to Counterparty Credit Risk - GASB 53 As of June 30, 2024 **KERS KERS Haz Haz INS SPRS** SPRS INS **KERS KERS INS** Percentage Percentage Percentage Percentage Percentage Percentage of Net of Net **S&P** of Net of Net of Net of Net Counterparty Ratings **Exposure Exposure Exposure Exposure Exposure Exposure** Australia & New Zealand Banking Group Ltd 0.66% 1.21% 0.33% 0.05% 0.14% 0.27% AA-The Bank of America A-0.11% 0.14% 0.04% 0.05% 0.02% 0.02% The Bank of New York Mellon Corp Α 0.30% 0.60% 0.14% 0.07% 0.06% 0.13% BBB+ Barclays PLC 1.04% 1.91% 0.50% 0.10% 0.21% 0.43% Brown Brothers Harriman & Co NR 0.09% 0.15% 0.03% 0.05% 0.01% 0.02% Canadian Imperial Bank of Commerce A+ 1.45% 2.65% 0.70% 0.12% 0.30% 0.60% BBB+ 1.89% 0.51% 0.08% 0.21% Citigroup Inc 1.04% 0.43% The Goldman Sachs Group Inc BBB+ 0.75% 1.38% 0.37% 0.07% 0.15% 0.31% A-HSBS Holding PLC 1.52% 3.40% 0.74% 0.16% 0.31% 0.77% JPMorgan Chase & Co 0.54% 1.02% 0.25% 0.11% 0.11% 0.22% A-Morgan Stanley A-0.93% 1.70% 0.46% 0.07% 0.19% 0.39% Royal Bank of Canada AA-1.96% 0.49% 0.09% 0.44% 1.00% 0.21% State Street Corp Α 1.12% 2.06% 0.54% 0.11% 0.23% 0.46% The Toronto-Dominion Bank AA-0.04% 0.09% 0.01% 0.03% 0.01% 0.01% UBS Group AG 0.17% A-0.87% 2.19% 0.41% 0.18% 0.48% Westpac Banking Corp AA-0.03% 0.05% 0.01% 0.02% 0.00% 0.01% TOTAL 11.49% 22.40% 5.53% 1.36% 2.33% 4.99%

Custodial Credit Risk for Deposits

Custodial credit risk for deposits is the risk that may occur as a result of a financial institution's failure, whereby KRS deposits may not be returned. All non-investment related bank balances are held by JP Morgan Chase and each individual account is insured by the Federal Deposit Insurance Corporation (FDIC). None of these balances were exposed to custodial credit risk as they were either insured or collateralized at required levels.

Custodial Credit Risk for Deposits - GASB 40	
As of June 30, 2024 (\$ in Thousands)	
KERS Nonhazardous Pension	\$982
KERS Nonhazardous Insurance	100
KERS Hazardous Pension	26
KERS Hazardous Insurance	24
SPRS Pension	41
SPRS Insurance	19
Clearing	246
Excess Benefit	\$-
Note: All the above balances are held at JPM Chase	

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 an investment or collateral securities that are in the possession of an outside party. As of June 30, 2024, the currencies in the chart below were uninsured and unregistered, with securities held by the counterparty or by its trust department or agent but not in KERS's or SPRS's name. Below are total cash and securities held by Global Managers and consist of various currencies.

Custodial Credit Risk for Investments - GASB 40 As of June 30, 2024 (\$ in Thousands)			
KERS			
KERS Nonhazardous Pension Foreign Currency	\$354,933		
KERS Nonhazardous Insurance Foreign Currency	204,865		
KERS Hazardous Pension Foreign Currency	119,039		
KERS Hazardous Insurance Foreign Currency	79,907		
SPRS			
SPRS Pension Foreign Currency	59,555		
SPRS Insurance Foreign Currency	\$34,375		

Investment Summary - GASB 40 As of June 30, 2024 (\$ in Thousands)

	Pension			Insurance		
Investment Summary - GASB 40	KERS	KERS	SPRS	KERS	KERS	SPRS
As of June 30, 2024 (\$ in Thousands)	Nonhazardous	Hazardous		Nonhazardous	Hazardous	
Туре		Fair Value			Fair Value	
Core Fixed Income	\$1,096,029	\$115,245	\$166,303	\$189,154	\$75,625	\$29,762
Public Equities	1,347,282	431,605	205,635	708,372	284,692	114,446
Private Equities	194,862	66,044	31,411	111,418	48,804	21,728
Specialty Credit	785,092	229,560	123,774	375,074	151,347	61,598
Derivatives	(73)	9	(9)	10	(3)	3
Real Return	349,425	79,738	56,205	135,580	45,489	18,475
Real Estate	217,911	58,902	35,155	95,993	42,344	16,169
Short-Term Investments	254,633	49,952	38,006	68,261	20,702	9,876
Accounts Receivable (Payable), Net	(36,760)	(5,138)	(5,678)	(6,162)	(1,566)	(901)
Total	\$4,208,401	\$1,025,917	\$650,802	\$1,677,700	\$667,434	\$271,156

Credit Risk Debt Securities

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The debt security portfolios are managed by the Investment Staff and by external investment management firms. All portfolio managers are required by the KRS IPS 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 Plans' debt securities portfolios are managed using the following guidelines adopted by the KRS Board:

- Bonds, notes, or other obligations issued or guaranteed by the U.S. Government, its agencies or instrumentalities are permissible investments and may be held without restrictions.
- The duration of the core fixed income portfolios combined shall not vary from that of the system's Fixed Income Index by more than +/- 25% duration as measured by effective duration, modified duration or dollar duration except when the system's Investment Committee has determined a target duration to be used for an interim basis.
- The amount invested in the debt of a single corporation shall not exceed 5% of the total fair value of KRS' assets.
- No public Fixed Income manager shall invest more than 5% of the fair value of assets held in any single issue Short-Term instrument with the exception of U.S. Government issued, guaranteed or agency obligations.

As of June 30, 2024, the portfolio had \$559.5 million in debt securities rated below BBB- which does not include not rated (NR).

Debt Securities - GASB 40	· · · · · · · · · · · · · · · · · · ·					
As of June 30, 2024 (\$ in Thou	isands)	Pension			Insurance	
	KERS	KERS	SPRS	KERS	KERS	SPRS
Туре	Nonhazardous	Hazardous		Nonhazardous	Hazardous	
AAA	\$59,615	\$7,367	\$9,189	\$12,282	\$4,295	\$2,011
AA+	2,945	504	474	651	154	123
AA	3,776	735	620	1,108	242	214
AA-	5,006	729	788	1,126	331	200
A+	17,622	1,923	2,680	3,241	1,253	503
A	19,049	2,165	2,913	3,536	1,314	576
A-	41,692	4,458	6,336	7,168	2,817	1,137
BBB+	52,907	6,052	8,097	9,693	3,621	1,557
BBB	38,273	5,233	5,961	8,884	2,805	1,419
BBB-	46,334	10,425	7,787	16,803	3,683	2,467
BB+	31,438	9,490	6,042	15,826	3,246	2,002
BB	45,057	13,652	8,740	24,088	5,440	2,562
BB-	45,881	13,780	8,877	24,407	5,541	2,569
B+	32,362	9,864	6,103	18,090	3,970	1,893
В	43,960	13,236	8,046	24,893	5,546	2,418
B-	34,468	10,197	6,424	19,013	4,371	1,829
CCC+	15,030	4,358	2,977	7,817	1,885	794
CCC	4,165	1,235	832	2,209	514	238
CCC-	827	235	167	438	109	44
D	134	41	22	95	20	9
NR	861,190	175,299	123,788	274,974	142,639	52,586
Total Credit Risk Debt Securities	1,401,731	290,978	216,863	476,342	193,796	77,151
Government Agencies	9,360	1,283	1,462	2,268	718	393
Government Mortgage-Backed Securities	196,411	21,114	29,866	35,246	13,832	5,596
Government Issued Commercial Mortgage Backed	2,315	243	351	499	199	78
Government Collateralized Mortgage Obligations	5,222	934	846	1,403	340	264
Government Bonds	266,082	30,253	40,689	48,470	18,087	7,878
Total	\$1,881,121	\$344,805	\$290,077	\$564,228	\$226,972	\$91,360

Note: These ratings are based on Standard & Poor's (S&P) Global Ratings. Where S&P ratings are unavailable, equivalent Moody's Ratings are used as proxies.

Differences due to rounding.

Government Agencies, Government Mortgage-Backed Securities, Government Issued Commercial Mortgage Backed and Government Bonds are highly rated securities since they are backed by the US Government.

The NR reported indicates a rating has not been assigned.

Concentration of Credit Risk Debt Securities

Concentration of credit risk is the risk of loss attributed to the magnitude of an entity's exposure in a single issuer. The total debt securities portfolio is managed using the following general guidelines adopted by the KRS Board: bonds, notes, or other obligations issued or guaranteed by the U.S. Government, its agencies, or instrumentalities are permissible investments and may be held without restrictions. The amount invested in the debt of a single issuer shall not exceed 5% of the total fair value of the Plans' fixed income assets.

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 and can be measured using two methodologies: effective or 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.

Below are the fair values and modified durations for the combined fixed income securities.

Interest Rate Risk - Modified Duration - GASB 40									
As of June 30, 2024 (\$ in Thous	ands)								
			Insurance						
TYPE	Fair Value	Weighted Avg Modified Duration	Fair Value	Weighted Avg Modified Duration	Fair Value	Weighted Avg Modified Duration	Fair Value	Weighted Avg Modified Duration	
KERS	Nonhaz	ardous	Haza	rdous	Nonhaz	zardous	Hazar	dous	
Asset Backed Securities	\$57,829	2.71	\$7,819	2.62	\$13,749	2.40	\$4,517	2.51	
Financial Institutions	113,300	3.96	22,977	3.06	40,455	2.99	10,375	3.54	
Collateralized Mortgage Obligations	12,346	4.69	1,982	3.27	2,898	3.31	765	4.69	
Commercial Mortgage Backed Securities	8,840	4.12	1,367	3.85	2,216	3.90	635	4.15	
Corporate Bonds - Industrial	305,027	4.37	75,630	3.66	132,021	3.56	31,606	3.94	
Corporate Bonds - Utilities	52,742	5.12	7,496	4.75	13,167	4.68	4,294	4.91	
Agencies	9,360	4.85	1,283	4.61	2,268	4.56	718	4.75	
Government Bonds - Sovereign Debt	2,652	10.64	410	8.98	674	9.95	191	11.45	
Mortgage Back Securities Pass-through - Not CMO's	196,411	6.12	21,114	6.11	35,246	6.08	13,832	6.08	
Local Authorities - Municipal Bonds	12,258	7.42	2,219	8.48	3,304	8.31	800	7.14	
Supranational - Multi-National Bonds	590	2.51	289	2.51	378	2.60	16	2.60	
Treasuries	266,082	6.93	30,253	6.81	48,470	6.93	18,087	7.04	
Unclassified	843,684	0.08	171,966	0.13	269,382	0.15	141,136	0.05	
Total	\$1,881,121	2.97	\$344,805	2.32	\$564,228	2.50	\$226,972	1.96	

Interest Rate Risk - Modified Duration - GASB 40 As of June 30, 2024 (\$ in Thousands)								
SPRS	Pens	sion	Insurance					
ТҮРЕ	Fair Value	Weighted Avg Modified Duration	Fair Value	Weighted Avg Modified Duration				
Asset Backed Securities	\$8,904	2.71	\$1,901	2.55				
Financial Institutions	18,725	3.88	4,743	3.43				
Collateralized Mortgage Obligations	1,968	4.49	533	2.93				
Commercial Mortgage Backed Securities	1,402	4.09	398	3.83				
Corporate Bonds - Industrial	55,109	4.27	15,276	3.88				
Corporate Bonds - Utilities	8,427	5.07	1,867	4.82				
Agencies	1,462	4.82	393	4.49				
Government Bonds - Sovereign Debt	421	10.41	121	9.49				
Mortgage Back Securities Pass-through - Not CMO's	29,866	6.12	5,596	6.08				
Local Authorities - Municipal Bonds	1,989	7.59	621	8.61				
Supranational - Multi-National Bonds	121	2.51	86	2.60				
Treasuries	40,689	6.92	7,877	6.88				
Unclassified	120,994	0.09	51,948	0.08				
Total	\$290,077	3.07	\$91,360	2.21				

Foreign Currency Risk

Foreign currency risk is the risk that occurs if exchange rates adversely affect the value of a non-U.S. dollar based investment or deposit within the portfolios. Currency risk exposure, or exchange rate risk, primarily resides with the portfolios Non-U.S. equity holdings, but also affects other asset classes. KRS doesn't 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 Fair Value of Investments on the combining financial statements.

Foreign Currency Risk - GAS						
As of June 30, 2024 (\$ in Tho	usands)	Danaian			la a company	
	KERS	Pension KERS	SPRS	KERS	Insurance KERS	SPRS
			SFRS			SFRS
Acceptable of Dellan	Nonhazardous	Hazardous	#0.000	Nonhazardous	Hazardous	04.400
Australian Dollar	\$11,788	\$4,002	\$2,008	\$7,040	\$2,460	\$1,138
Brazilian Real	6,103	2,088	1,043	3,708	1,282	602
Canadian Dollar	14,075	4,683	2,375	8,192	2,984	1,298
Czech Koruna	5	2	1	4	2	1 224
Danish Krone	13,996	4,598	2,348	8,312	3,103	1,301
Egyptian Pound	141	46	24	64	24	10
Euro	108,691	37,343	18,054	58,201	26,169	11,205
Hong Kong Dollar	24,431	8,026	4,099	14,390	5,372	2,252
Hungarian Forint	1,737	571	291	981	366	153
Indian Rupee	11,488	3,836	1,942	6,539	2,364	1,040
Indonesian Rupiah	6,146	2,178	1,068	3,572	1,130	602
Israeli Shekel	1,232	405	207	730	272	114
Japanese Yen	44,722	14,799	7,528	26,684	9,826	4,205
Malaysian Ringgit	383	188	79	236	10	53
Mexican Peso	1,596	551	274	969	329	159
New Taiwan Dollar	17,081	5,612	2,866	9,873	3,687	1,545
New Zealand Dollar	(708)	(348)	(145)	(454)	(20)	(103)
Norwegian Krone	1,154	532	229	708	70	152
Philippine Peso	539	264	110	345	15	78
Pound Sterling	38,318	12,590	6,430	22,909	8,549	3,586
Singapore Dollar	1,084	242	156	681	400	76
South African Rand	2,046	672	343	1,225	457	192
South Korean Won	12,361	4,162	2,098	7,759	2,769	1,241
Swedish Krona	5,928	1,947	994	3,666	1,369	574
Swiss Franc	25,319	8,317	4,248	15,410	5,753	2,412
Thai Baht	3,319	1,090	557	1,930	721	302
Turkish Lira	1,437	472	241	860	321	135
UAE Dirham	521	171	87	331	123	52
Total Foreign Investment Securities	354,933	119,039	59,555	204,865	79,907	34,375
U.S. Dollar	3,853,468	906,878	591,247	1,472,835	587,527	236,781
Total Investment Securities	\$4,208,401	\$1,025,917	\$650,802	\$1,677,700	\$667,434	\$271,156

Fair Value Measurement and Applications (GASB 72)

In accordance with GASB Statement No. 72, Fair Value Measurement and Application, KRS provides this additional disclosure regarding the fair value of its Pension and Insurance investments. KRS categorizes its fair value measurements within the fair value hierarchy established by GAAP.

KRS defined the Fair Value Hierarchy and Levels as follows:

Level 1

Quoted prices (unadjusted) in an active market for identical assets or liabilities that KRS has the ability to access at the measurement date (e.g., prices derived from NYSE, NASDAQ, Chicago Board of Trade, and Pink Sheets). Debt and equity securities classified in Level 1 of the fair value hierarchy are valued using quoted prices (unadjusted) in an active market for identical assets or liabilities that KRS has the ability to access at the measurement date.

Level 2

Inputs (other than quoted prices included within Level 1) that are observable for an asset or liability, either directly or indirectly. These inputs can include matrix pricing, market corroborated pricing and inputs such as yield curves and indices.

Level 3

Unobservable inputs for an asset or liability, which generally results in using the best information available for the valuation of the assets or liabilities being reported.

Net Asset Value (NAV)

The remaining investments not categorized under the fair value hierarchy are shown at net asset value (NAV). These are investments in non-governmental entities for which a readily determinable fair value is not available, such as member units or an ownership interest in partners' capital to which a proportionate share of net assets is attributed.

As of June 30, 2024 (\$ in Thousands) KERS Nonhazardous SPRS **KERS Hazardous** Total Total Total Level Level Level Fair **Asset Type** 1 2 3 Fair Value 2 3 Fair Value 1 2 3 Value 1 **Public Equity Emerging Markets** \$55,743 \$-\$55,743 \$18,312 \$18,312 \$9,353 \$9,353 **US** Equity 828.448 828,448 264.683 264,683 126,498 126,498 Non-US Equity 336,028 336,028 110,388 110,388 56,380 56,380 **Total Public Equity** 1,220,219 1,220,219 393.383 393,383 192,231 192,231 **Fixed Income** 2,557 2,557 269 269 388 388 Agencies 7,541 Asset-Backed 48,854 48.854 6,877 6,877 7,541 Bank & Finance 57,226 142,064 7,829 9,026 14,210 23,236 84,838 27,120 34,949 Cash & Cash 592 Equivalent 4,049 (149)3,900 426 (18)408 615 (23)Corporate 359,667 361,956 248 721,871 38,218 80,070 89 118,377 54,606 64,477 44 119,127 Healthcare 18,381 18,381 2,931 2,931 2,985 2,985 Insurance 4.337 4,337 587 587 684 684 Municipals 10,439 10,439 1,619 1,619 1,656 1,656 13,055 4,203 2,374 Sovereign Debt 13.055 4,203 2,374 **US Government** 262.723 203,148 465,871 28.024 21,824 49,848 39.919 30,888 70,807 **Total Fixed Income** 626,439 719,804 85,086 1,431,329 66,668 126,191 27,209 220,068 95,140 119,996 14,254 229,390 Derivatives **Futures** (118)(118)(13)(13)(18)(18)44 22 9 9 Foreign Exchange 44 22 **Total Derivatives** (74)(74)9 9 (9) (9) 15,583 **Private Equity ETFs** 45.337 45.337 9.331 9.331 15.583 **Real Estate ETFs** 29,277 29,277 11,711 11,711 3,904 3,904 Real Return 275,294 275,305 62,494 3 62,497 41,291 41,292 Total Investments at Fair Value 2,196,492 719,804 85,097 3,001,393 543.596 126,191 27.212 696,999 348,140 119.996 14.255 482,391 Investments Measured at NAV Specialty Credit 65,060 475,127 130,638 Private Equity 149,949 56,799 15,969 Real Estate 188.932 47,310 31,291 Real Return 76.480 17,755 15,266 Fixed Income 41,214 6,254 4,334 Non US Equity 14,657 134,559 40,684 **Emerging Markets** 897 295 150 **US** Equity 6,972 2,517 1,291 **Total Investments** Measured at NAV 1,074,130 300,332 149,938 Cash and Accruals 132,878 28,586 18,473

Fair Value Measurements and Application (GASB 72) Pension

Note: The fair value hierarchies do not reflect cash and accruals thus totals differ from the Investment Summaries.

\$85,097 \$4,208,401 \$543,596 \$126,191

Note: Cash Equivalents include publicly traded investment grade corporate bonds; variable rate demand notes; government and agency bonds; mortgages; municipal bonds; Short Term Investment Funds (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.

\$27,212 \$1,025,917 \$348,140 \$119,996

\$14,255 \$650,802

Total Investments

\$2.196.492 \$719.804

The investments measured at net asset value (NAV) are presented in the chart below:

Unfunded e Commitments		Redemption Notice								
				Unfunded Commitments	Redemption Frequency	Redemption Notice Period	Fair Value	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
7 \$118,104	Daily - Quarterly		\$130,638	\$30,951	Daily - Quarterly	90 Days	\$65,060	\$11,938	Daily - Quarterly	90 Days
2 35,507			47,310	10,262			31,291	4,285		
0 41,533	Daily	30 - 60 Days	17,755	3,858	Daily	30 - 60 Days	15,266	10,741	Daily	30 - 60 Days
9 32,500			56,799	13,965			15,969	3,950		
4 -	Daily		4,334	-	Daily		6,254	-	Daily	
9 -	Daily		40,684	-	Daily		14,657	-	Daily	
7 -	Daily		295	-	Daily		150	-	Daily	
2 -	Daily		2,517	-	Daily		1,291	-	Daily	
	2 35,507 0 41,533 9 32,500 4 - 9 -	2 35,507 0 41,533 Daily 9 32,500 4 - Daily 9 - Daily 7 - Daily	2 35,507 0 41,533 Daily 30 - 60 Days 9 32,500 4 - Daily 9 - Daily 7 - Daily	2 35,507 47,310 0 41,533 Daily 30 - 60 Days 17,755 9 32,500 56,799 4 - Daily 4,334 9 - Daily 40,684 7 - Daily 295	2 35,507 47,310 10,262 0 41,533 Daily 30 - 60 Days 17,755 3,858 9 32,500 56,799 13,965 4 - Daily 4,334 - 9 - Daily 40,684 -	2 35,507 47,310 10,262 0 41,533 Daily 30 - 60 Days 17,755 3,858 Daily 9 32,500 56,799 13,965 4 - Daily 4,334 - Daily 9 - Daily 40,684 - Daily 7 - Daily 295 - Daily	2 35,507 47,310 10,262 0 41,533 Daily 30 - 60 Days 17,755 3,858 Daily 30 - 60 Days 9 32,500 56,799 13,965 4 - Daily 4,334 - Daily 9 - Daily 40,684 - Daily 7 - Daily 295 - Daily	2 35,507 47,310 10,262 31,291 0 41,533 Daily 30 - 60 Days 17,755 3,858 Daily 30 - 60 Days 15,266 9 32,500 56,799 13,965 15,969 4 - Daily 4,334 - Daily 6,254 9 - Daily 40,684 - Daily 14,657 7 - Daily 295 - Daily 150	2 35,507 47,310 10,262 31,291 4,285 0 41,533 Daily 30 - 60 Days 17,755 3,858 Daily 30 - 60 Days 15,266 10,741 9 32,500 56,799 13,965 15,969 3,950 4 - Daily 4,334 - Daily 6,254 - 9 - Daily 40,684 - Daily 14,657 - 7 - Daily 295 - Daily 150 -	2 35,507 47,310 10,262 31,291 4,285 0 41,533 Daily 30 - 60 Days 17,755 3,858 Daily 30 - 60 Days 15,266 10,741 Daily 9 32,500 56,799 13,965 15,969 3,950 4 - Daily 4,334 - Daily 6,254 - Daily 9 - Daily 40,684 - Daily 14,657 - Daily 7 - Daily 295 - Daily 150 - Daily

⁽¹⁾ This type includes 12 high yield specialty credit managers with multiple strategies. These managers may invest in U.S. or non-U.S. investment grade corporate credit, U.S. or non U.S. non-investment grade corporate credit, including both bonds and bank loans, municipal bonds, non-U.S. sovereign debt, mortgages including residential mortgage backed securities, commercial mortgage backed securities and whole loans, asset-backed securities and emerging market debt.

⁽²⁾ This type includes 12 real estate funds that invest primarily in U.S. commercial real estate; however, there is one manager who invests solely in non-U.S. commercial real estate. The fair value of the investments have been determined using the NAV per share of the Plan's ownership interest and in the partners' capital. Distributions from each fund will be received as the underlying investments of the funds are liquidated. It is expected that the funds will be liquidated over the next 7 to 10 years. Because it is not probable that any individual investment will be sold, the fair value of each individual investment has been determined using the NAV per share of the Plan's ownership interest in the partners' capital. Due to restrictions in the contract, redemptions are not likely until the assets of the fund are liquidated.

⁽³⁾ This type includes 15 real return managers that invest in multiple strategies such as infrastructure, agriculture, royalties, commodities, and natural resources. These investments are intended to provide both favorable risk-adjusted returns and correlation with inflation to help with the hedging of inflation for the broader plan. This group of managers also includes any hedge fund managers remaining in the portfolio which have all been terminated and are only awaiting payouts.

⁽⁴⁾ This type includes 30 managers with multiple strategies. These investments cannot be redeemed. Instead, the investments are distributed throughout the life of the investment. Distributions are received through the liquidation of the underlying assets of the fund. It is expected that each fund will remain invested for a period of 5 to 10 years. It is probable that all of the investments in this type will be sold at an amount different from the NAV per share of the Plan's ownership interest in partners' capital. Therefore, the fair values of the investment in this asset class have been determined using recent observable transaction information.

⁽⁵⁾ This type includes short-term commingled investment instruments issued by the US Government, Federal agencies, sponsored agencies or sponsored corporations.

Fair Value Measurements and Application (GASB 72) Insurance As of June 30, 2024 (\$ in Thousands) **KERS Nonhazardous KERS Hazardous** Total SPRS Total Level Level Level 2 1 Fair Value 3 Fair Value **Asset Type** Fair Value **Public Equity Emerging Markets** \$33,046 \$-\$33,046 \$12,338 \$12,338 \$5,172 \$5,172 \$-\$-430,420 **US** Equity 430,420 173,241 173,241 69,627 69,627 Non-US Equity 199,688 199,688 74,552 31,251 31,251 _ 74,552 _ Total Public 260,131 260,131 663.154 663.154 106.050 106.050 Equity **Fixed Income** Agencies 517 517 207 207 82 82 12,121 12,121 3,864 3,864 1,639 1,639 Asset-Backed Bank & Finance 12,185 51,729 63,914 3,939 10.328 14,267 1,916 5,037 6,953 Cash & Cash Equivalent 775 36 811 310 311 122 8 130 137,861 35,309 60,364 23,965 16,824 Corporate 120 198,345 18 59,292 9,472 16 26,312 Healthcare 4,818 4,818 1,433 1,433 692 692 Insurance 945 945 316 316 148 148 2,524 Municipals 2,524 710 710 455 455 Sovereign Debt 5,627 5,627 631 631 1,200 1,200 **US Government** 36,645 82,384 14,390 32,452 5,817 13,057 45,739 18,062 7,240 Total Fixed 106,878 213,279 51,849 372,006 42,337 60,800 10,346 113,483 16,834 28,781 5,053 50,668 Income Derivatives Futures (18)(18)(4) (3) (3) (4) Foreign Exchange 27 -27 1 _ 1 6 6 Total Derivatives 9 9 (3) (3) 3 3 **Private Equity ETFs** 35,412 35,412 Real Estate ETFs 19,511 19,511 Real Return 96,994 3 96,997 31,070 31,072 12,614 12,615 Total Investments at Fair Value 921,958 213,279 51,852 1,187,089 333,535 60,800 10,348 404,683 135,501 28,781 5,054 169,336 Investments Measured at NAV Specialty Credit 202,578 116,054 41,860 Private Equity 76,358 48,804 21,728 Real Estate 76,688 42,344 16,169 Real Return 39,456 14,727 5,976 Fixed Income 2,310 909 5.778 Non US Equity 49,280 26,088 9,035 **Emerging Markets** 192 80 513 **US** Equity 4,271 1,754 709 Investments

\$51,852\$1,677,700 \$333,535 Note: The fair value hierarchies do not reflect cash and accruals thus totals differ from the Investment Summaries.

454,922

35,689

Note: Cash Equivalents include publicly traded investment grade corporate bonds; variable rate demand notes; government and agency bonds; mortgages; municipal bonds; Short Term Investment Funds (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.

\$60,800

252,273

10,478

\$10,348 \$667,434 \$135,501

\$28,781

96,466

5,354

\$5,054 \$271,156

Measured at NAV

\$921,958 \$213,279

Cash and Accruals

Total

The investments measured at net asset value (NAV) are presented in the chart below:

Fair Value Measurements and Application (GASB 72) Insurance As of June 30, 2024 (\$ in Thousands)

		KERS Nor	nhazardous			KERS H	Hazardous SPRS					
Asset Type	Fair Value	Unfunded		Redemption Notice Period	Fair	Unfunded Commitments			Fair	Unfunded		Redemption Notice Period
Specialty Credit (1)	\$202,578	\$49,943	Daily - Quarterly	90 Days	\$116,054	\$14,100	Daily - Quarterly	90 Days	\$41,860	\$7,062	Daily - Quarterly	90 Days
Real Estate (2)	76,688	11,870			42,344	8,868			16,169	3,389		
Real Return (3)	39,456	23,861	Daily	30 - 60 Days	14,727	2,969	Daily	30 - 60 Days	5,976	1,767	Daily	30 - 60 Days
Private Equity (4)	76,358	17,996			48,804	11,132			21,728	5,232		
Fixed Income (5)	5,778	-	Daily		2,310	-	Daily		909	-	Daily	
Non US Equity (5)	49,280	-	Daily		26,088	-	Daily		9,035	-	Daily	
Emerging Markets (5)	513	-	Daily		192	-	Daily		80	-	Daily	
US Equity (5)	4,271	-	Daily		1,754	-	Daily		709	-	Daily	
Total Investments Measured at NAV	\$454,922	\$103,670			\$252,273	\$37,069		 	\$96,466	\$17,450		

⁽¹⁾ This type includes 12 high yield specialty credit managers with multiple strategies. These managers may invest in U.S. or non-U.S. investment grade corporate credit, U.S. or non U.S. non-investment grade corporate credit, including both bonds and bank loans, municipal bonds, non-U.S. sovereign debt, mortgages including residential mortgage backed securities, commercial mortgage backed securities and whole loans, asset-backed securities and emerging market debt.

⁽²⁾ This type includes 12 real estate funds that invest primarily in U.S. commercial real estate; however, there is one manager who invests solely in non-U.S. commercial real estate. The fair value of the investments have been determined using the NAV per share of the Plan's ownership interest and in the partners' capital. Distributions from each fund will be received as the underlying investments of the funds are liquidated. It is expected that the funds will be liquidated over the next 7 to 10 years. Because it is not probable that any individual investment will be sold, the fair value of each individual investment has been determined using the NAV per share of the Plan's ownership interest in the partners' capital. Due to restrictions in the contract, redemptions are not likely until the assets of the fund are liquidated.

⁽³⁾ This type includes 15 real return managers that invest in multiple strategies such as infrastructure, agriculture, royalties, commodities, and natural resources. These investments are intended to provide both favorable risk-adjusted returns and correlation with inflation to help with the hedging of inflation for the broader plan. This group of managers also includes any hedge fund managers remaining in the portfolio which have all been terminated and are only awaiting payouts.

⁽⁴⁾ This type includes 33 managers with multiple strategies. These investments cannot be redeemed. Instead, the investments are distributed throughout the life of the investment. Distributions are received through the liquidation of the underlying assets of the fund. It is expected that each fund will remain invested for a period of 5 to 10 years. It is probable that all of the investments in this type will be sold at an amount different from the NAV per share of the Plan's ownership interest in partners' capital. Therefore, the fair values of the investment in this asset class have been determined using recent observable transaction information.

⁽⁵⁾ This type includes short-term commingled investment instruments issued by the US Government, Federal agencies, sponsored agencies or sponsored corporations.

Money-Weighted Rates of Return

In accordance with GASB Statement No. 67, Financial Reporting for Pension Plans, and GASB Statement No. 74, Financial Reporting for Post-Employment Benefit Plans Other than Pension Plans, KRS provides this additional disclosure regarding its money-weighted rate of return for the period of June 30, 2024. The money-weighted rate of return is a method of calculating period-by-period returns on the Pension and Insurance Plans' investments that adjusts for the changing amounts actually invested. For the purposes of this statement, money-weighted rate of return is calculated as the internal rate of return on investments, net of investment expenses, then adjusted for the changing amounts actually invested.

Money-Weighted Rates of Return As of June 30, 2024								
	Pension			Insurance				
	KERS Nonhazardous	KERS Hazardous	SPRS	KERS Nonhazardous	KERS Hazardous	SPRS		
2024	9.58	% 11.17%	9.64%	11.14%	11.12%	11.01%		

Note E. Securities Lending Transactions

Kentucky Revised Statutes 61.650 and 386.020(2) permit the Systems to lend their securities to broker-dealers and other entities. KRS utilizes a securities lending program to temporarily lend securities to qualified agents in exchange for 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. The types of securities lent include U.S. Treasuries, U.S. Agencies, U.S. Corporate Bonds, U.S. Equities, Global Fixed Income Securities, and Global Equities Securities. Securities Lending transactions are accounted for in accordance with GASB 28. The net earnings for KERS (Pension and Insurance combined) and SPRS (Pension and Insurance combined) was \$0.8 million and \$0.1 million, respectively.

The IPS does not address any restrictions on the amount of loans that can be made. As of June 30, 2024, KRS had no credit risk exposure to borrowers because the collateral amounts received exceeded the amounts out on loan. The contracts with the custodial bank 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. BNY Mellon invests cash collateral as permitted by state statute and KRS Board policy. The agent, BNY Mellon, 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 BNY Mellon, emphasizing capital preservation, liquidity, and credit quality.

Cash collateral is invested in guaranteed, short-term obligations of the U.S. government, select government agencies and repurchase agreements with qualified agents. KRS cannot pledge or sell collateral securities received unless the borrower defaults. BNY Mellon as the lending agent also indemnifies KRS from any financial loss associated with a borrower's default and collateral inadequacy.

As of June 30, 2024, the average days to maturity for loans was one day, and the weighted average investment maturity of cash collateral investments was one day. The trusts had no credit risk exposure to borrowers because the amounts owed to borrowers exceeded the amounts the borrowers owed the trust, and no losses resulted during the period.

Security lending programs can entail interest rate risk and credit risk. KRS minimizes interest rate risk by limiting the term of cash collateral investments to several days. The credit risk is controlled by investing cash collateral in securities with qualities similar to the credit worthiness of lent securities.

As of June 30, 2024, the cash collateral received for the securities on loan for the KERS and SPRS Plans was \$183.2 million and \$22.4 million, respectively. The securities non-cash collateral received a total of \$78.5 million and \$9.6 million, respectively. The collateral volume of the total underlying securities was \$261.7 million for KERS and \$32.0 million for SPRS.

Securities Lending Cash Collateral As of June 30, 2024 (\$ in Thousands)								
KERS Nonhazardous		KERS H	azardous	SF	PRS	KRS Total		
Pension	Insurance	Pension	Insurance	Pension	Insurance	2023		
\$109,246	\$33,811	\$26,629	\$13,516	\$16,923	\$5,449	\$205,574		

Note F. Risk of Loss

KRS and KPPA are 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 Office of Claims and Appeals is vested with full power and authority to investigate, hear proof, and 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 \$250,000 for a single claim and \$400,000 in aggregate per occurrence. Awards and a pro rata share of the operating cost of the Office of Claims and Appeals are paid from the fund of the agency having a claim or claims before the Office of Claims and Appeals.

Claims against the KRS Board and the KPPA Board, or any of its staff as a result of an actual or alleged breach of fiduciary duty, are self-insured effective May 26, 2019.

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. All medical expenses related to a work injury or illness are paid based upon appropriate statutory and regulatory reductions, 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 involved in litigation concerning the right of participants, or their beneficiaries, to receive benefits. KRS does not anticipate any material losses for the Systems as a result of the contingent liabilities. KRS is involved in other litigation; therefore, please see Note K. Litigation, for further information.

Note H. Income Tax Status

The Internal Revenue Service (IRS) has ruled that KERS and SPRS qualify under Section 401(a) of the Internal Revenue Code are, generally, not subject to tax. KERS and SPRS are subject to income tax on any unrelated business income (UBI).

Note I. Financial Report for (GASB 67) Pension

Plans and (GASB 74) Postemployment Benefit Plans

The following details actuarial information and assumptions utilized in determining the unfunded (overfunded) actuarial accrued liabilities for KRS. Please note that calculations for Total Pension Liability (TPL), net fiduciary position, Net Pension Liability (NPL), total OPEB liability, net OPEB fiduciary position, and Net OPEB Liability (NOL) are reported in the Plans' Required Supplementary Information (RSI) beginning on page 64 are based on June 30, 2023, actuarial valuations, rolled forward to June 30, 2024. The prior year valuations are used as the basis for the roll forward method and are applied to complete the current year pension and OPEB valuations as of the measurement date, June 30, 2024, in accordance with GASB *Statement No.67*, paragraph 37, and GASB *Statement No. 74*, paragraph 41.

Financial Report for Pension Plan (GASB 67)

Basis of Calculations

The Systems' actuary Gabriel, Roeder, Smith & Co.(GRS) completed reports by plan in compliance with GASB Statement No. 67 Financial Reporting for Pension Plans. The TPL, NPL, and sensitivity information are based on an actuarial valuation date of June 30, 2023. The TPL was rolled forward from the valuation date to the Plans' fiscal year ended June 30, 2024, using generally accepted actuarial principles. Information disclosed for years prior to June 30, 2017, were prepared by the prior actuary. GRS will provide separate reports at a later date with additional accounting information determined in accordance with GASB Statement No. 68, Accounting and Financial Reporting for Pensions.

Assumptions

Below is a summary of the principal assumptions used for the June 30, 2023, actuarial valuation:

- Investment Return 6.25% for KERS Hazardous, 5.25% for KERS Nonhazardous and SPRS.
- Inflation 2.50% for all plans.
- Salary Increases 3.30% to 15.30% for KERS Nonhazardous, 3.55% to 20.05% for KERS Hazardous, and 3.55% to 16.05% for SPRS, varies by service.
- Payroll Growth 0% for all plans.
- Mortality System-specific mortality table based on mortality experience from 2013-2022, projected with the ultimate rates from MP-2020 mortality improvement scale using a base year of 2023.

Plan Provisions

There have been no assumption, method or plan provision changes that would materially impact the total pension liability since June 30, 2023. It is our opinion that these procedures for determining the information contained in these reports are reasonable, appropriate, and comply with applicable requirements under GASB No. 67.

Discount Rate

Single discount rates of 5.25% for the KERS Nonhazardous plan, 6.25% for the KERS Hazardous plan, and 5.25% for SPRS were used to measure the total pension liability for the fiscal year ended June 30, 2024. These single discount rates were based on the expected rate of return on pension plan investments for each plan. Based on the stated assumptions and the projection of cash flows as of each fiscal year ended, the pension plans' fiduciary net position and future contributions were projected to be sufficient to finance all the future benefit payments of the current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of the projected benefit payments to determine the total pension liability for each plan.

The projection of cash flows used to determine the single discount rate must include an assumption regarding actual employer contributions made each future year. Future contributions are projected assuming that the entire actuarially determined employer contribution is received by each plan each future year, calculated in accordance with the current funding policy.

Additional health care contributions (IRC 401(h) Subaccount)

Based on guidance issued by GASB in connection with GASB Statement No. 74, the 1% of pay member contributions for Tier 2 and Tier 3 members to a 401(h) subaccount is considered an OPEB asset. As a result, the reported fiduciary net positions as of June 30, 2017, and later are net of the 401(h) asset balance.

Additional Disclosures

These reports are based upon information furnished to us by the Kentucky Public Pensions Authority (KPPA), which includes benefit provisions, membership information, and financial data. We did not audit this data and information, but we did apply a number of tests and concluded that it was reasonable and consistent. GRS is not responsible for the accuracy or completeness of the information provided by KPPA. Please see the "Actuarial Valuation Report as of June 30, 2023," for additional discussion of the nature of the actuarial calculations and more information related to participant data, economic and demographic assumptions, and benefit provisions. These reports should be considered together as a complete report for the fiscal year ended June 30, 2024.

Financial Reporting for Postemployment Benefit Plans (GASB 74)

GRS completed reports by plan in compliance with GASB Statement No. 74, Financial Reporting for Postemployment Benefit Plans Other than Pension Plans for the fiscal year ended June 30, 2024. GRS will provide separate reports at a later date with additional accounting information determined in accordance with GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions.

Basis of Calculations

The total OPEB liability, net OPEB liability (NOL), and sensitivity information are based on an actuarial valuation date of June 30, 2023. The total OPEB liability was rolled forward from the valuation date to the plan's fiscal year ended June 30, 2024, using generally accepted actuarial principles.

Assumptions

The discount rates used to calculate the total OPEB liability increased for each plan since the prior year (see further discussion on the calculation of the single discount rates later in this section). The assumed increase in future health care cost, or trend assumption, was reviewed during the June 30, 2023, valuation process and was updated to better reflect the plan's anticipated long-term healthcare costs increases. In general, the updated assumption is assuming higher future increases in pre-Medicare healthcare costs.

The Total OPEB Liability as of June 30, 2024, is determined using these updated assumptions. It is GRS' opinion that these procedures are reasonable and appropriate, and comply with applicable requirements under GASB No. 74.

Below is a summary of the principal assumptions used for the June 30, 2023, actuarial valuation:

- Investment Return 6.50% for all plans.
- Inflation 2.50% for all plans.
- Salary Increases 3.30% to 15.30% for KERS Nonhazardous, 3.55% to 20.05% for KERS Hazardous, 3.55% to 16.05% for SPRS, varies by service.
- Payroll Growth 0.00% for all plans.
- Mortality System-specific mortality table based on mortality experience from 2013-2022, projected with the ultimate rates from MP-2020 mortality improvement scale using a base year of 2023.
- Health Care Trend Rates:
 - Pre-65 Initial trend starting at 6.80% on January 1, 2025, and gradually decreasing to an ultimate trend rate of 4.05% over a period of 13 years. The 2024 premiums were known at the time of the valuation and were incorporated into the liability measurement.
 - Post-65 Initial trend starting at 8.50% on January 1,2025, and gradually decreasing to an ultimate trend rate of 4.05% over a period of 11 years. The 2024 premiums were known at the time of the valuation and were incorporated into the liability measurement.

Plan Provisions

There have been no plan provision changes that would materially impact the total OPEB liability since June 30, 2023.

Implicit Employer Subsidy for non-Medicare retirees

The fully-insured premiums paid for the Kentucky Employees' Health Plan are blended rates based on the combined experience of active and retired members. Because the average cost of providing health care benefits to retirees under age 65 is higher than the average cost of providing health care benefits to active employees, there is an implicit employer subsidy for the non-Medicare eligible retirees. GASB No. 74 requires that the liability associated with this implicit subsidy be included in the calculation of the Total OPEB Liability.

Discount Rates

The following single discount rates were used to measure the total OPEB liability for the fiscal year ended June 30, 2024.

PLAN	FISCAL YEAR 2024	FISCAL YEAR 2023	CHANGE IN RATE
KERS Nonhazardous	6.00%	5.94%	0.06%
KERS Hazardous	5.99%	5.94%	0.05%
SPRS	6.08%	6.02%	0.06%

The single discount rates are based on the expected rate of return on OPEB plan investments of 6.50% and a municipal bond rate of 3.97%, as reported in Fidelity Index's "20-Year Municipal GO AA Index" as of June 30, 2024.

Based on the stated assumptions and the projection of cash flows as of each fiscal year ended, the plan's fiduciary net position and future contributions were projected to be sufficient to finance the future benefit payments of the current plan members. Therefore, the long-term expected rate of return on insurance plan investments was applied to all periods of the projected benefit payments paid from the retirement system. However, the cost associated with the implicit employer subsidy is not currently being included in the calculation of the plan's actuarial determined contributions, and it is our understanding that any cost associated with the implicit subsidy will not be paid out of the plan's trust. Therefore, the municipal bond rate was applied to future expected benefit payments associated with the implicit subsidy.

The projection of cash flows used to determine the single discount rate must include an assumption regarding actual employer contributions made each future year. Future contributions are projected assuming that the entire actuarially determined employer contribution is received by each plan each future year, calculated in accordance with the current funding policy.

Additional health care contributions (IRC 401(h) Subaccount)

Based on guidance issued by GASB in connection with GASB Statement No. 74, the 1% of pay member contributions for Tier 2 and Tier 3 members to a 401(h) subaccount is considered an OPEB asset. As a result, the reported fiduciary net position includes these 401(h) assets. Additionally, these member contributions and associated investment income and administrative expenses are included in the reconciliation of the fiduciary net position.

Additional Disclosures¹

The reports are based upon information furnished to GRS by the KPPA, which includes benefit provisions, membership information, and financial data. GRS did not audit this data and information, but GRS applied a number of tests and concluded that it was reasonable and consistent. GRS is not responsible for the accuracy or completeness of the information provided by KPPA. Please see the "Actuarial Valuation Report as of June 30, 2023," for additional discussion of the nature of the actuarial calculations and more information related to participant data, economic and demographic assumptions, and benefit provisions. These reports should be considered together as a complete report for the fiscal year ended June 30, 2024.

¹ Note: Data and information regarding GASB 67 and GASB 74 reporting was provided by GRS Retirement Consulting.

Target Asset Allocation

The long-term (10-year) expected rates of return were determined by using a building block method in which best estimated ranges of expected future real rates of return were developed for each asset class. The ranges were combined by weighting the expected future real rate of return by the target asset allocation percentage. The target allocation and best estimates of arithmetic real rate of return for each major asset class are summarized in the tables on the following page.

Target Asset Allocation - Pension As of June 30, 2024			
Asset Class	KERS Nonhazardous and SPRS Pension Plans Target Allocation	KERS Hazardous and KRS Insurance Plans Target Allocation	Long-Term Expected Real Rate of Return
Equity			
Public Equity	40.00%	30.00%	4.15%
Private Equity	8.00%	6.00%	9.10%
Fixed Income			
Core Fixed Income	10.00%	27.00%	2.85%
Specialty Credit	25.00%	20.00%	3.82%
Cash	2.00%	2.00%	1.70%
Inflation Protected			
Real Estate	7.00%	5.00%	4.90%
Real Return	8.00%	10.00%	5.35%
Total	100.00%	100.00%	

NOTE: Minor deviations are expected between the actuarial assumed rate of return and the expected rate of return reported in the above charts. The actuarial assumed rates of return are based on a review of economic assumptions completed periodically as warranted but not longer than every 2 years; whereas, the expected rate of return is calculated annually for GASB purposes by taking the current asset allocation and applying the most relevant long term market expectations (March 2024) for each asset class.

Sensitivity of the NPL to Changes in the Discount Rate Fiscal Year 2024 As of June 30, 2024 (\$ in Thousands) SPRS **KERS KERS** Nonhazardous Hazardous Current 5.25% Current 6.25% Current 5.25% 1% Decrease \$13,948,313 \$541,741 \$587,581 **Current Discount Rate** 12,049,666 373,761 449,842 1% Increase \$10,476,712 \$238,565 \$336,576

Sensitivity of the Net OPEB Rate		he Discount Rate and He	althcare Trend
As of June 30, 2024 (\$ in Tho	KERS	KERS	SPRS
	Nonhazardous	Hazardous	Or ne
	Single 6.00%	Single 5.99%	Single 6.089
Sensitivity of the Net OPEB Liability to	Changes in the Discount Rate		
1% Decrease	\$999,036	\$(181,350)	\$34,067
Single Discount Rate	723,049	(235,131)	3,642
1% Increase	\$489,746	\$(279,694)	\$(21,916)
Sensitivity of the Net OPEB Liability to	Changes in the Current Healthca	re Cost Trend Rate	
1% Decrease	\$536,314	\$(266,478)	\$(18,176)
Current Healthcare Cost Trend			
Rate	723,049	(235,131)	3,642
1% Increase	\$939,316	\$(198,505)	\$29,059

Development of Single Discount Rate for OPEB As of June 30, 2024								
	KERS	KERS	SPRS					
	Nonhazardous	Hazardous						
2024								
Single Discount Rate	6.00%	5.99%	6.08%					
Long-Term Expected Rate of Return	6.50%	6.50%	6.50%					
Long-Term Municipal Bond Rate (1)	3.97%	3.97%	3.97%					

Note: 1. Fixed-income municipal bonds with 20 years to maturity that include only federally tax-exempt municipal bonds as reported in Fidelity Index's "20-Year Municipal GO AA Index" as of June 30, 2024.

Schedule of Employers' NPL - KERS Nonhazardous As of June 30, 2024 (\$ in Thousands)							
Total Pension Liability (TPL)	\$16,273,602						
Plan Fiduciary Net Position	\$4,223,936						
Net Pension Liability	\$12,049,666						
Ratio of Plan Fiduciary Net Position to TPL	25.96%						
Covered Payroll (1)	\$1,912,421						
Net Pension Liability as a Percentage of Covered Payroll	630.07%						

Schedule of Employers' NPL - KERS Hazardous As of June 30, 2024 (\$ in Thousands) Total Pension Liability (TPL) Plan Fiduciary Net Position \$1,393,651 Plan Fiduciary Net Position \$1,019,890 Net Pension Liability \$373,761 Ratio of Plan Fiduciary Net Position to TPL 73.18% Covered Payroll (1) \$279,218 Net Pension Liability as a Percentage of Covered Payroll 133.86%

Schedule of Employer's NPL - SPRS	
As of June 30, 2024 (\$ in Thousands)	
Total Pension Liability (TPL)	\$1,101,632
Plan Fiduciary Net Position	\$651,790
Net Pension Liability	\$449,842
Ratio of Plan Fiduciary Net Position to TPL	59.17%
Covered Payroll (1)	\$71,964
Net Pension Liability as a Percentage of Covered Payroll	625.09%
(1) Based on derived compensation using the provided employer contribution information for fiscal years 2017 and later.	

Schedule of the Employers' Net OPEB Liability As of June 30, 2024(\$ in Thousands)

			Plan Fiduciary						
				Net Position as		Net OPEB			
				a Percentage of		Liability as a			
	Total OPEB	Plan Fiduciary	Net OPEB	the Total OPEB	Covered	Percentage of			
	Liability	Net Position	Liebility//Accet	Asset) Liability Payroll Covered Pa					
	Liability	Net Position	Liability/(Asset)	Liability	Payroli	Covered Payroll			
KERS Nonhazardous (1)		\$1,765,729	, ,	70.95%	\$1,923,825				
KERS Nonhazardous ⁽¹⁾ KERS Hazardous ⁽²⁾	\$2,488,778		\$723,049			37.58%			

⁽¹⁾ Covered Payroll is based on derived compensation using the provided employer contribution information.

⁽²⁾ Covered Payroll is based on derived compensation using the provided employer contribution information. For 2021, 2022, 2023, and 2024, derived compensation based on pension contribution information, as there were no required employer contributions for the Insurance Plans for FYE 2021, FYE 2022, FYE 2023, and FYE 2024.

Note J. Legislation

2024 Regular Session

The 2024 Regular Session of the Kentucky General Assembly adjourned on Monday, April 15, 2024. Highlights from the Session include the following:

BILLS OF DIRECT INTEREST TO KRS MEMBERS AND RETIREES

House Bill 99: The KPPA Housekeeping bill

House Bill 99 amends various sections of Kentucky Revised Statutes Chapters 16, 61, and 78 to make technical and housekeeping changes relating to administration of the systems, including renaming the position of internal auditor to Chief Auditor, providing that the death benefit of \$5,000 payable to a beneficiary of the member is not subject to garnishment, unless the beneficiary is the member's estate or there is an overpayment of benefits or outstanding balance owed to the system, makes modifications to the initial disability application review process, and other technical changes. "Housekeeping bill" is a slang term for typically noncontroversial legislation that "cleans up" statutes by clarifying their language or otherwise updating their content to align with changes in relevant federal or state law.

House Bill 1: The "Rainy Day Fund" Appropriations bill

House Bill 1 allocates money from the Budget Reserve Trust Fund Account, commonly known as the state's "Rainy Day Fund," to be applied to the unfunded liability of the Kentucky Employees Retirement System (KERS) Nonhazardous Pension Plan and the State Police Retirement System (SPRS) (\$50 million and \$25 million each fiscal year, 2025 and 2026 respectively).

House Bill 6: The State Executive Branch Budget bill

House Bill 6 is the State/Executive Branch budget bill for the biennium beginning July 1, 2024, through June 30, 2026. The budget includes the full actuarially determined employer contribution for the KERS and SPRS plans, and it allocates an additional \$250 million in each fiscal year to be paid toward the unfunded liability of the KERS Nonhazardous Pension Plan.

Neither House Bill 1 nor House Bill 6 contain a cost-of-living adjustment (COLA) or other form of supplemental payment (such as a "13th check") for retirees. This means there were no budget bills that contained a COLA or other form of supplemental payment for retirees in any of the KRS systems administered by KPPA.

House Bill 277: Transfer Louisville and Jefferson County Public Defender Corporation employees to KERS

House Bill 277: transfers employees of the Louisville and Jefferson County Public Defender Corporation to the Department of Public Advocacy (DPA) in the state personnel system, effective July 1, 2024. Employees that transfer to DPA will participate in KERS and their retirement tier will be determined based on the earlier of the membership date in a state-administered retirement system or the employment begin date with the Corporation.

Senate Bill 299: Move the Horse Racing Commission to a quasi-governmental agency called the Kentucky Horse Racing and Gaming Corporation (HRGC) and abolish the Charitable Gaming Commission and merge it under the HRGC

Senate Bill 299 moves the Horse Racing Commission to a quasi-agency called the Kentucky Horse Racing and Gaming Corporation (HRGC), effective July 1, 2024. The following year, on July 1, 2025, the Charitable Gaming Commission will be abolished and merged under the HRGC. All eligible employees of the corporation will participate in the Kentucky Employees Retirement System (KERS) effective July 1, 2024. Current Horse Racing Commission employees will continue to participate in KERS under the new KHRGC, without interruption.

House Bill 635: Actuarial analysis assumptions and methods

House Bill 635 implements additional reporting requirements for actuarial analyses and expands the required supporting documentation and explanations of findings for fiscal and corrections impact statements.

State Senate Confirms Gubernatorial Appointments to the KRS Board

State law requires that gubernatorial appointments to the KRS Board of Trustees receive Senate approval. On April 15, three (3) Senate Resolutions confirming Governor Andy Beshear's recent appointments to the KRS Board were unanimously adopted by a vote of 38-0:

- 1. **Senate Resolution 309**, sponsored by Senator Julie Raque Adams, confirmed the appointment of Mary G. Eaves to the KRS Board of Trustees for a term expiring June 21, 2027;
- 2. **Senate Resolution 310**, sponsored by Senator Julie Raque Adams, confirmed the reappointment of Caswell Prewitt Lane to the KRS Board of Trustees for a term expiring June 17, 2027; and
- 3. **Senate Resolution 313**, sponsored by Senator Julie Raque Adams, confirmed the reappointment of Pamela Fettig Thompson to the KRS Board of Trustees for a term expiring June 17, 2027.

The Resolutions only required Senate confirmation and did not need to be adopted in the House.

Note K. Litigation

Seven Counties

Seven Counties Services, Inc. (Seven Counties) filed for Chapter 11 bankruptcy in the United States Bankruptcy Court for the Western District of Kentucky (the Bankruptcy Court) in April 2013. Seven Counties provides mental health services for the Cabinet for Health and Family Services for the greater Louisville, Kentucky area and surrounding counties. Seven Counties participated in KERS for approximately twenty-five years. Seven Counties identified KERS as a creditor with a primary objective of discharging its continuing obligation to remit retirement contributions for approximately 1,300 employees and to terminate its participation in KERS. If Seven Counties is successful in discharging its obligations to KERS, the estimated member pension and insurance actuarial accrued liability is in the range of \$145 to \$150 million.

KERS opposed Seven Counties' attempt to discharge its obligations and terminate its participation. KERS asserted that Seven Counties is a Governmental Unit properly participating in KERS by Executive Order issued in 1978 and thus ineligible for Chapter 11 relief. Consequently, Seven Counties would remain statutorily obligated to continue participation and remit contributions. On May 30, 2014, the Bankruptcy Court held that Seven Counties was not a Governmental Unit and could move forward with its Chapter 11 bankruptcy case. The Bankruptcy Court further held that Seven Counties' statutory obligation to participate in and remit contributions to KERS was a "contract" eligible for rejection. KRS appealed this decision.

On August 24, 2018, the U.S. Court of Appeals for the Sixth Circuit (the Sixth Circuit) issued a two to one Opinion affirming the decision that Seven Counties is eligible to file for bankruptcy under Chapter 11. However, the Sixth Circuit went on to state, "lacking state court precedent characterizing the nature of the relationship between Seven Counties and KERS, we certify that question to the Kentucky Supreme Court." KERS filed a petition to have the Opinion Reheard En Banc by the entire Sixth Circuit. On October 5, 2018, the Sixth Circuit issued an order holding the petition in abeyance pending a response from the Kentucky Supreme Court on the certified question of law. On November 1, 2018, the Supreme Court of Kentucky issued an Order granting certification of the question. The certified question of law was briefed by the parties and oral arguments were held before the Supreme Court of Kentucky on March 6, 2019. On August 29, 2019, the Supreme Court of Kentucky ruled that Seven Counties' participation in and its contributions to KERS are based on a statutory obligation. The Supreme Court of Kentucky's ruling was forwarded to the Sixth Circuit for further consideration.

On July 20, 2020, the Sixth Circuit Court of Appeals issued an Opinion stating that they affirmed their previous determination that Seven Counties was eligible to file a Chapter 11 bankruptcy case. The Sixth Circuit also reversed the conclusion that Seven Counties can reject its obligation to participate as an executory contract and that Seven Counties need not maintain its statutory contribution obligation during the pendency of the bankruptcy. The Sixth Circuit dismissed Seven Counties' cross appeal and remanded the case for further proceedings consistent with the opinion. KERS again filed a petition to have the Opinion regarding Seven Counties' ability to file a Chapter 11 bankruptcy Reheard En Banc by the entire Sixth Circuit. This petition was denied in an Order dated September 11, 2020. The case was remanded back to the Bankruptcy Court.

The parties were able to stipulate to the principal amount of Seven Counties unpaid employer contributions for the post-petition time-frame of April 6, 2014, through February 5, 2015. A limited hearing occurred in February 2022 regarding whether interest is applicable to the stipulated amount. The Bankruptcy Court entered an order that set the amount of the contributions, but did not order Seven Counties to pay that amount. The order was silent regarding the application of interest. Both Seven Counties and KERS appealed the Bankruptcy Court's order to the United States District Court where it will be joined with the pending appeal of the confirmation of Seven Counties' reorganization plan.

The United States District Court refused to hear the appeals stating that the Bankruptcy Court's order was not final and appealable. That left KERS in a position where no relief was possible; the Bankruptcy Court would not enter an order requiring payment, and the District Court would not hear an appeal. This forced KERS to once again appeal the United States Court of Appeals for the Sixth Circuit. The matter is now fully briefed before that court and parties are awaiting oral arguments.

The Sixth Circuit Court of Appeals agreed with the District Court, ruling that the Bankruptcy Court order was not final and appealable. The Sixth Circuit did however instruct the Bankruptcy Court that it had construed the 2020 ruling too narrowly and returned the case to the Bankruptcy Court for "expeditious resolution of the remaining issues." KRS has moved the Bankruptcy Court to resolve the issue of ordering Seven Counties to pay the stipulated amount and to allow KRS to pursue collecting contributions from February 2015 forward outside of the Bankruptcy Court. These motions are pending.

Mayberry

In December 2017, certain members and beneficiaries of the Kentucky Retirement Systems filed litigation (Mayberry et al v. KKR et al) against certain Hedge Fund Sellers, Investment, Actuarial and Fiduciary Advisors, Annual Report Certifiers, and certain (past and present) Kentucky Retirement Systems' Trustees and Officers in Franklin Circuit Court. The litigation alleges (in summary) that actuarial assumptions, fees, statements and disclosures harmed the financial status of the Retirement Systems. While Kentucky Retirement Systems is designated a "Defendant," that designation is a technical formality in so much as Kentucky Retirement Systems is a "nominal defendant." On April 20, 2018, the Kentucky Retirement Systems and the plaintiffs filed a joint notice with the Court advising that Kentucky Retirement Systems does not intend to challenge its status as a "nominal defendant." Since then, the Franklin Circuit Court ruled on various Defendants' Motions to Dismiss, denying nearly all of them. On January 10, 2019, KKR, Henry Kravis and George Roberts (collectively, "KKR Parties") amended their Answer to assert cross claims against Kentucky Retirement Systems. Certain Officer and Trustee Defendants appealed the denial of their Motion to Dismiss on immunity grounds to the Court of Appeals, and that appeal was transferred to the Kentucky Supreme Court. The hedge fund defendants filed a Petition for Writ of Prohibition in the Court of Appeals, arguing the Plaintiffs lacked standing to bring the action. That Petition was granted on April 23, 2019. Plaintiffs promptly appealed the Court of Appeals' decision to the Supreme Court of Kentucky. On July 9, 2020, the Supreme Court of Kentucky issued an Opinion stating that the plaintiffs, as beneficiaries of a defined-benefit plan who have received all of their vested benefits so far and are legally entitled to receive their benefits for the rest of their lives, do not have a concrete stake in this case and therefore lack standing to bring this claim. The case was remanded to the circuit court with directions to dismiss the complaint. Thereafter, plaintiffs filed a motion seeking to amend their complaint to add parties (Tier 3 members of the Retirement Systems) and claims that would purportedly correct the standing defect identified by the Supreme Court of Kentucky. Furthermore, the Attorney General of the Commonwealth of Kentucky sought leave to intervene in this action through a motion filed July 20, 2020, and an Intervening Complaint on July 22, 2020. The Defendants filed motions seeking to have the case dismissed. On December 28, 2020, Franklin Circuit Court issued an Order dismissing the Complaint filed by the Plaintiffs, denied Plaintiffs' Motion to file a Second Amended Complaint, and granted the Office of the Attorney General's Motion to Intervene. A variety of additional motions and pleadings were filed, including an original action by the Tier 3 Group. This original action is still in the initial stages and is pending with Franklin Circuit Court. (Tia Taylor, et al. v KKR & Co. L.P., et al.) On January 12, 2021, Franklin Circuit Court issued a scheduling Order granting the Attorney General until February 1, 2021 to file an Amended Intervening Complaint, granting the Tier 3 Group until February 11, 2021 to file a Motion to Intervene in this action. Additional extension orders were granted for the Attorney General intervention. The Attorney General filed an Amended Complaint on May 24, 2021. On June 14, 2021, the Tier 3 Group's Motion to Intervene in the Attorney General action was denied. In the spring of 2022, Franklin Circuit Judge Phillip Shepherd recused and this matter was assigned to Judge Thomas Wingate.

Following the Attorney General's intervention, the Defendant's challenged the intervention as beyond the scope of the remand from the Supreme Court in July of 2020. Franklin Circuit Court denied that motion and the matter was on appeal when this case was assigned to Judge Thomas Wingate. Judge Wingate placed the matter in abeyance pending a decision on whether the Attorney General's intervention was proper. The Court of Appeals held that the Attorney General should not have been allowed to intervene and the Attorney General is currently seeking Discretionary Review by the Supreme Court.

Simultaneously with his intervention, the Attorney General filed a separate, stand-alone case with an identical complaint to protect against the possibility that his intervention would be deemed improper. The Defendants filed motions to dismiss the Attorney General's stand-alone case based on various legal theories. Franklin Circuit Court denied the majority of these motions but granted the motions to dismiss on behalf of R.V. Kuhns and Cavanaugh Macdonald, KRS' actuary and investment consultant during the relevant timeframe. This case is still proceeding.

A number of related cases have also developed based on issues raised in the above referenced Mayberry action. There has been an action filed by a number of the Trustees and Officers named in Mayberry seeking reimbursement by Kentucky Retirement Systems of legal fees. Kentucky Retirement Systems has also filed an action against Hallmark Specialty Insurance seeking a declaratory judgment that Hallmark has a duty to defend and indemnify Kentucky Retirement Systems in the Mayberry action. Two of the hedge fund Defendants in the Mayberry action have also filed an action in the United States District Court for the Eastern District of Kentucky naming individual members of the former KRS Board of Trustees as Defendants. This action is seeking a judgment declaring that the Trustees violated Plaintiffs' right to due process as well as an award of costs and attorneys' fees. Three actions have also been filed in Delaware regarding the Mayberry action. One filed by Prisma Capital Partners and one filed by Blackstone Alternative Asset Management allege breaches of warranties, representations and more relating to the Subscription Agreements signed by the Kentucky Retirement Systems. The third was filed by Prisma Capital Partners against the Daniel Boone Fund, LLC. Additionally, an action has been filed by PAAMCO against Kentucky Retirement Systems in California also alleging breaches of warranties, representations and more relating to the Subscription Agreements signed by the Kentucky Retirement Systems. Finally, on August 2, 2021, Blackstone Alternative Asset Management, L.P. (BAAM) filed an action against the Kentucky Public Pensions Authority, the Board of Trustees of the Kentucky Retirement Systems, the Board of Trustees of the County Employees Retirement System, the Kentucky Retirement Systems Insurance Fund, and the Kentucky Retirement Systems Pension Fund (collectively "Defendants") for breach of contract. The Defendants filed a Motion to Dismiss on September 8, 2021. The last of these additional actions, the suit filed by BAAM, was dismissed by Franklin Circuit Court. The Court of Appeals upheld the dismissal, and BAAM is seeking Discretionary Review by the Supreme Court. The rest of these cases remain active in various stages of litigation.

Bayhills

In 2018, Kentucky Retirement Systems sued Bayhills for breach of contract seeking to terminate Bayhills as investment managers. Kentucky Retirement Systems filed the suit in Franklin Circuit Court, but Bayhills removed it to federal district court. Kentucky Retirement Systems successfully had the case remanded back to state court. The case is now pending before Franklin Circuit Court. The Court entered an injunction preventing Bayhills from paying themselves management and other fees during the litigation. Bayhills has appealed this ruling to the Court of Appeals. The Court of Appeals and the Kentucky Supreme Court denied Bayhills their requested relief on appeal. Litigation is still ongoing.

Mountain Comprehensive Care Center & Adanta

In 2022, Mountain Comprehensive Care Center and Adanta filed separate suits challenging the actuarially accrued liability assigned these two entities via the process outlined in KRS 61.565, known as House Bill 8 from the 2021 Regular Session of the Kentucky General Assembly. The suits challenge not only the liability assigned to them, but they challenge the constitutionality of the statutory scheme. This litigation is ongoing.

James Redwine, David Campbell, & Michael Steward

Three complaints were filed against the Kentucky Retirement Systems (KRS) on behalf of specific named plaintiffs and others similarly situated based on the same facts that gave rise to the former River City Fraternal Order of Police (FOP) complaint. KPPA was aware that the River City FOP case impacted more individuals than the named plaintiffs and had been working on legislative and regulatory solutions. Legislation passed by the 2022 General Assembly allows individuals negatively impacted by the Medicare Secondary Payer Act to receive their health insurance through the Kentucky Employees Health Plan, and KPPA has promulgated a regulation to reimburse those individuals who had to pay for health insurance consistent with the Sixth Circuit Opinion. In addition to the MSPA issue, these three complaints allege that requiring Medicare eligible members to pay for Medicare Part B violates their right to "free" health insurance under their inviolable contract.

These suits are identical to two suits filed against the County Employees Retirement System (CERS). The cases against KRS are being held in abeyance pending the outcome of the class certification issue in the CERS cases.

Note L. Reciprocity Agreement

In accordance with Kentucky Revised Statutes 61.702, KRS has reciprocity agreements with County Employees Retirement System (CERS), Teachers' Retirement System of Kentucky (TRS) and Judicial Form Retirement System (JFRS) for the payment of insurance benefits for those members who have creditable service in KERS, SPRS and CERS, TRS and/or JFRS systems.

Note M. Reimbursement of Retired Re-Employed Health Insurance, Active Member Health Insurance Contributions, and Retired Re-Employed Employer Contributions

Reimbursement of Retired Re-Employed Health Insurance

If a retiree is re-employed 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. Exceptions for retired members who re-employ as a police officer, sheriff or school resource officer exist which may exempt employers from paying employer contributions and health insurance reimbursements if certain requirements are met. For the fiscal year ended June 30, 2024, the reimbursement totaled \$9.4 million. Please see the chart below for the breakdown.

Active Member Health Insurance Contributions

For new plan participants after August 31, 2008, an active member contribution of 1% in addition to the member pension contribution is required. This 1% is applicable to all Nonhazardous and Hazardous Plans, and reported in the Insurance Plans. For the fiscal year ended June 30, 2024, members paid into the Insurance Plans \$13.1 million. Please see the chart below for the breakdown.

Retired Re-Employed Employer Contributions

Employers are required to report employer contributions on retired members who are employed in a regular full-time position. These members are referred to as retired re-employed members. These are reported within the employer contributions on the financial statements. Exceptions for retired members who re-employ as a police officer, sheriff or school resource officer exist which may exempt employers from paying employer contributions and health insurance reimbursements if certain requirements are met.

Retired Reemployed Healthcare Contributions As of June 30, 2024 (\$ in	KERS	KERS	SPRS	KRS Total
Thousands)	Nonhazardous	Hazardous		
Amount	\$7,484	\$1,865	\$5	\$9,354

Member Health Insurance Contributions As of	KERS	KERS	SPRS	KRS Total
June 30, 2024 (\$ in Thousands)	Nonhazardous	Hazardous		
Amount	\$10,585	\$2,086	\$396	\$13,067

Note N. General Fund Appropriations

During the 2022 Regular Session of the Kentucky General Assembly, HB1 allocated an additional \$485 million in general fund dollars to the KERS Nonhazardous Plan and the SPRS Plan. This amount included \$215 million in FY 2021-2022 for the SPRS Pension Plan to be applied to the unfunded liability, which immediately lowered the SPRS contribution rate from 146.06% to 99.43% for the 2022-2023 fiscal year. The rest of the \$485 million consisted of \$135 million in each fiscal year of the biennium (2023 and 2024) for the KERS Nonhazardous Pension Plan to be applied to the unfunded liability. Also, House Bill 604 allocated \$105 million in fiscal year 2023 and fiscal year 2024 to be applied to the unfunded liability of the KERS Nonhazardous Pension Plan.

	General Fund Appropriations (\$ in Thousands)										
	KERS										
Fiscal Year	Nonhazardous	SPRS	KRS Total								
2021-2022	\$-	\$215,000	\$215,000								
2022-2023	\$240,000	\$-	\$240,000								
2023-2024	\$240,000	\$-	\$240,000								
Total	\$480,000	\$215,000	\$695,000								

Note O. Prisma Daniel Boone Fund

The funds invested with Prisma Daniel Boone Fund continue to be held in a contingency reserve to cover potential obligations arising from the Mayberry Action (see Note K for details of Mayberry Case). The total reported in reserve as of June 30, 2024, is \$25.8 million for the Pension Plans and \$12.9 million for the Insurance Plan. This is based on the May 31, 2024, report because Absolute Return managers are reported on a one month lag.

Note P. Subsequent Events

Management has evaluated the period June 30, 2024, to December 5, 2024, (the date the combining financial statements were available to be issued) for items requiring recognition or disclosure in the combining financial statements.

Note Q. Related Party

KPPA is the special-purpose government responsible for the day-to-day administration of KRS and the County Employees Retirement System (CERS).

Kentucky Revised Statute 61.505 11(a) requires all expenses incurred by or on behalf of KPPA to be prorated, assigned, or allocated to the Systems that KPPA administers. KPPA works closely with the KRS and CERS Boards of Trustees to develop an allocation method that takes into consideration membership, assets under management, system specific costs, and statutory requirements.

The expenses incurred by KPPA on behalf of Systems are administrative costs which include salaries and benefits of professional employees providing investment management, benefits counseling, legal services, information technology services, accounting, and payroll functions. In addition, administrative costs include operational payments for hardware, software, utilities, rent, as well as contract and consulting costs with legal, audit and actuarial service providers. The administrative budget of KPPA is funded with restricted funds of KRS and CERS and is subject to approval by the Kentucky General Assembly through the biennial budget process.

Total Administrative costs incurred by KPPA for the fiscal year ended June 30, 2024, were \$47.3 million, of which \$16.9 million was allocated to KRS based on the hybrid allocation developed by the KPPA Board, the KRS Board, and the CERS Board.

REQUIRED SUPPLEMENTARY INFORMATION INCLUDING GASB 67 AND 74

64 Schedule of Employers' Net Pension Liability 65 Schedule of Changes in Employers' Total Pension Liability 68 Notes to Schedule of Employers' Contributions Schedule of Employers' Contribution Pension 69 71 Schedule of Employers' Net OPEB Liability 72 Schedule of Changes in Employers' Net OPEB Liability 75 Notes to Schedule of Employers' OPEB Contribution 76 Schedule of Employers' OPEB Contributions 78 Money Weighted Rates of Return Schedule of Administrative Expenses 79 79 Schedule of Direct Investment Expenses 79 Schedule of Professional Consultant Fees 80 Report on Internal Control

Schedule of Employers' NPL - KERS Nonhazardous Pension As of June 30 (\$ in Thousands)

						Net Pension
						Liability as a
				Ratio of Plan		Percentage of
	Total Pension	Plan Fiduciary	Net Pension	Fiduciary Net	Covered	Covered
Year	Liability (TPL)	Net Position	Liability	Position to TPL	Payroll (1)	Payroll
2024	\$16,273,602	\$4,223,936	\$12,049,666	25.96%	\$1,912,421	630.07%
2023	15,858,669	3,539,943	12,318,726	22.32%	1,648,318	747.35%
2022	16,281,188	3,013,845	13,267,343	18.51%	1,432,960	925.87%
2021	16,335,657	3,018,660	13,316,997	18.48%	1,441,337	923.93%
2020	16,472,733	2,308,080	14,164,653	14.01%	1,476,156	959.56%
2019	16,356,674	2,233,672	14,123,002	13.66%	1,485,854	950.50%
2018	15,608,221	2,004,446	13,603,775	12.84%	1,509,955	900.94%
2017	15,445,206	2,056,870	13,388,336	13.32%	1,602,396	835.52%
2016	13,379,781	1,980,292	11,399,489	14.80%	1,631,025	698.92%
2015	\$12,359,673	\$2,327,783	\$10,031,890	18.83%	\$1,544,234	649.64%

⁽¹⁾ Based on derived compensation using the provided employer contribution information for fiscal years 2017 and later.

Schedule of Employers' NPL - KERS Hazardous Pension As of June 30 (\$ in Thousands)

						Net Pension
						Liability as a
				Ratio of Plan		Percentage of
	Total Pension	Plan Fiduciary	Net Pension	Fiduciary Net	Covered	Covered
Year	Liability (TPL)	Net Position	Liability	Position to TPL	Payroll (1)	Payroll
2024	\$1,393,651	\$1,019,890	\$373,761	73.18%	\$279,218	133.86%
2023	1,316,521	893,533	422,988	67.87%	223,922	188.90%
2022	1,318,494	810,978	507,516	61.51%	188,648	269.03%
2021	1,311,767	866,140	445,627	66.03%	172,725	258.00%
2020	1,251,027	690,350	560,677	55.18%	171,840	326.28%
2019	1,227,226	680,932	546,294	55.49%	160,600	340.16%
2018	1,150,610	645,485	505,125	56.10%	152,936	330.29%
2017	1,098,630	601,529	497,101	54.75%	178,511	278.47%
2016	919,517	527,879	391,638	57.41%	158,828	246.58%
2015	\$895,433	\$552,468	\$342,965	61.70%	\$128,680	266.53%

⁽¹⁾ Based on derived compensation using the provided employer contribution information for fiscal years 2017 and later.

Schedule of Employer's NPL - SPRS Pension As of June 30 (\$ in Thousands)

							Net Pension
							Liability as a
					Ratio of Plan		Percentage of
	1	Total Pension	Plan Fiduciary	Net Pension	Fiduciary Net	Covered	Covered
Yea	r L	iability (TPL)	Net Position	Liability	Position to TPL	Payroll (1)	Payroll
202	24	\$1,101,632	\$651,790	\$449,842	59.17%	\$71,964	625.09%
202	23	1,039,813	591,514	448,299	56.89%	65,693	682.42%
202	22	1,057,752	551,699	506,053	52.16%	48,061	1,052.94%
202	21	1,055,824	356,346	699,478	33.75%	47,873	1,461.11%
202	20	1,049,237	293,949	755,288	28.02%	49,019	1,540.81%
201	19	1,035,000	286,165	748,835	27.65%	49,515	1,512.34%
201	18	969,622	267,572	702,050	27.60%	50,346	1,394.45%
201	17	943,271	255,737	687,534	27.11%	54,065	1,271.68%
201	16	795,421	218,012	577,409	27.41%	46,685	1,236.82%
201	15	\$734,156	\$247,228	\$486,928	33.68%	\$45,765	1,063.97%
(4) -							

⁽¹⁾ Based on derived compensation using the provided employer contribution information for fiscal years 2017 and later.

2004									
2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
\$184,567	\$163,563	\$165,616	\$171,472	\$179,702	\$184,988	\$195,681	\$143,858	\$139,631	\$143,847
805,180	827,579	830,440	838,084	832,178	793,163	785,123	870,725	891,897	859,509
-	2,024	-	2,091	-	-	9,624	-		-
469,003	310,954	(15,034)	(130,268)	115,515	70,529	153,565	(134,379)	-	30,958
-	(691,088)	-	-	-	700,464	-	2,145,530	923,999	694,592
(1,043,817)	(1,035,551)	(1,035,491)	(1,018,455)	(1,011,336)	(1,000,691)	(980,978)	(960,309)	(935,419)	(919,343)
414,933	(422,519)	(54,469)	(137,076)	116,059	748,453	163,015	2,065,425	1,020,108	809,563
15,858,669	16,281,188	16,335,657	16,472,733	16,356,674	15,608,221	15,445,206	13,379,781	12,359,673	11,550,110
\$16,273,602	\$15,858,669	\$16,281,188	\$16,335,657	\$16,472,733	\$16,356,674	\$15,608,221	\$15,445,206	\$13,379,781	\$12,359,673
1,295,695	\$1,275,007	\$1,116,869	\$1,134,232	\$948,592	\$1,035,462	\$689,143	\$757,121	\$513,084	\$521,691
96,615	84,579	89,607	90,202	96,594	93,759	104,972	100,543	106,494	104,606
(11,693)	(11,847)	(12,116)	(8,953)	(11,523)	(12,342)	(13,603)	(11,819)	(12,130)	(13,552)
(1,032,124)	(1,023,704)	(1,023,375)	(1,009,502)	(999,813)	(988,349)	(967,375)	(948,490)	(923,288)	(905,791)
349,628	215,880	(162,461)	516,223	52,499	112,371	144,881	220,985	(20,663)	44,570
(14,128)	(13,817)	(13,339)	(11,622)	(11,941)	(11,712)	(10,692)	(10,957)	(10,989)	(10,474)
-	-	-	-	-	37 (5)	301 (5)	(30,805) (4)		8,442
683,993	526,098	(4,815)	710,580	74,408	229,226	(52,373)	76,578	(347,491)	(250,508)
3,539,943	3,013,845	3,018,660	2,308,080	2,233,672	2,004,446	2,056,870	1,980,292	2,327,783	2,578,291
-	-	-	-	-	-	(51)	-		-
4,223,936	3,539,943	3,013,845	3,018,660	2,308,080	2,233,672	2,004,446	2,056,870	1,980,292	2,327,783
12,049,666	\$12,318,726	\$13,267,343	\$13,316,997	\$14,164,653	\$14,123,002	\$13,603,775	\$13,388,336	\$11,399,489	\$10,031,890
25.96%	22.32%	18.51%	ú 18.48%	14.01%	ú 13.66%	12.84%	13.32%	14.80%	18.839
\$1,912,421	\$1,648,318	\$1,432,960	\$1,441,337	\$1,476,156	\$1,485,854	\$1,509,955	\$1,602,396	\$1,631,025	\$1,544,234
	805,180 - 469,003 - (1,043,817) 414,933 15,858,669 \$16,273,602 1,295,695 96,615 (11,693) (1,032,124) 349,628 (14,128) - 683,993 3,539,943 - 4,223,936 \$12,049,666	805,180 827,579 - 2,024 469,003 310,954 - (691,088) (1,043,817) (1,035,551) 414,933 (422,519) 15,858,669 16,281,188 \$16,273,602 \$15,858,669 1,295,695 \$1,275,007 96,615 84,579 (11,693) (11,847) (1,032,124) (1,023,704) 349,628 215,880 (14,128) (13,817) 683,993 526,098 3,539,943 3,013,845 4,223,936 3,539,943 \$12,049,666 \$12,318,726	805,180 827,579 830,440 - 2,024 - 469,003 310,954 (15,034) - (691,088) - (1,043,817) (1,035,551) (1,035,491) 414,933 (422,519) (54,469) 15,858,669 16,281,188 16,335,657 \$16,273,602 \$15,858,669 \$16,281,188 1,295,695 \$1,275,007 \$1,116,869 96,615 84,579 89,607 (11,693) (11,847) (12,116) (1,032,124) (1,023,704) (1,023,375) 349,628 215,880 (162,461) (14,128) (13,817) (13,339) - - - 683,993 526,098 (4,815) 3,539,943 3,013,845 3,018,660 - - - 4,223,936 3,539,943 3,013,845 \$12,049,666 \$12,318,726 \$13,267,343	805,180 827,579 830,440 838,084 - 2,024 - 2,091 469,003 310,954 (15,034) (130,268) - (691,088) - - (1,043,817) (1,035,551) (1,035,491) (1,018,455) 414,933 (422,519) (54,469) (137,076) 15,858,669 16,281,188 16,335,657 16,472,733 \$16,273,602 \$15,858,669 \$16,281,188 \$16,335,657 1,295,695 \$1,275,007 \$1,116,869 \$1,134,232 96,615 84,579 89,607 90,202 (11,693) (11,847) (12,116) (8,953) (1,032,124) (1,023,704) (1,023,375) (1,009,502) 349,628 215,880 (162,461) 516,223 (14,128) (13,817) (13,339) (11,622) - - - - 683,993 526,098 (4,815) 710,580 3,539,943 3,013,845 3,018,660 2,308,080 - - - - 4,223	805,180 827,579 830,440 838,084 832,178 - 2,024 - 2,091 - 469,003 310,954 (15,034) (130,268) 115,515 - (691,088) - - - (1,043,817) (1,035,551) (1,035,491) (1,018,455) (1,011,336) 414,933 (422,519) (54,469) (137,076) 116,059 15,858,669 16,281,188 16,335,657 16,472,733 16,356,674 \$16,273,602 \$15,858,669 \$16,281,188 \$16,335,657 \$16,472,733 1,295,695 \$1,275,007 \$1,116,869 \$1,134,232 \$948,592 96,615 84,579 89,607 90,202 96,594 (11,693) (11,847) (12,116) (8,953) (11,523) (1,032,124) (1,023,704) (1,023,375) (1,009,502) (999,813) 349,628 215,880 (162,461) 516,223 52,499 (14,128) (13,817) (13,339) (11,622) (11,941) - - - - -	805,180 827,579 830,440 838,084 832,178 793,163 - 2,024 - 2,091 - - 469,003 310,954 (15,034) (130,268) 115,515 70,529 - (691,088) - - - 700,464 (1,043,817) (1,035,551) (1,035,491) (1,018,455) (1,011,336) (1,000,691) 414,933 (422,519) (54,469) (137,076) 116,059 748,453 15,858,669 16,281,188 16,335,657 16,472,733 16,356,674 15,608,221 \$16,273,602 \$15,858,669 \$16,281,188 \$16,335,657 \$16,472,733 \$16,356,674 15,608,221 \$1,295,695 \$1,275,007 \$1,116,869 \$1,134,232 \$948,592 \$1,035,462 96,615 84,579 89,607 90,202 96,594 93,759 (11,693) (11,847) (12,116) (8,953) (11,523) (12,342) (1,032,124) (1,023,704) (1,023,375) (1,009,502)	805,180 827,579 830,440 838,084 832,178 793,163 785,123 - 2,024 - 2,091 - - 9,624 469,003 310,954 (15,034) (130,268) 115,515 70,529 153,565 - (691,088) - - - 700,464 - (1,043,817) (1,035,551) (1,035,491) (1,018,455) (1,011,336) (1,000,691) (980,978) 414,933 (422,519) (54,469) (137,076) 116,059 748,453 163,015 15,858,669 16,281,188 16,335,657 16,472,733 16,356,674 15,608,221 15,445,206 \$16,273,602 \$15,858,669 \$16,281,188 \$16,335,657 \$16,472,733 \$16,356,674 \$15,608,221 \$15,608,221 1,295,695 \$1,275,007 \$1,116,869 \$1,134,232 \$948,592 \$1,035,462 \$689,143 96,615 84,579 89,607 90,202 96,594 93,759 104,972 (11,693)	805,180 827,579 830,440 838,084 832,178 793,163 785,123 870,725 - 2,024 - 2,091 - 70,529 153,565 (134,379) - (691,088) - 70,70,464 - 2,145,530 (1,043,817) (1,035,551) (1,035,491) (1,018,455) (1,011,336) (1,000,691) (980,978) (960,309) 414,933 (422,519) (54,469) (137,076) 116,059 748,453 163,015 2,065,425 15,858,669 16,281,188 16,335,657 16,472,733 16,356,674 15,608,221 15,445,206 13,379,781 (1,023,760) \$11,845 \$16,273,602 \$15,858,669 \$16,281,188 \$16,335,657 \$16,472,733 \$16,356,674 \$15,608,221 \$15,445,206 13,379,781 (1,035,491) (1,044,913) (805,180 827,579 830,440 838,084 832,178 793,163 785,123 870,725 891,897 - 2,024 - 2,091 - - 9,624 - - 469,003 310,954 (15,034) (130,268) 115,515 70,529 153,565 (134,379) - - (691,088) - - - 700,464 - 2,145,530 923,999 (1,043,877) (1,035,551) (1,035,491) (1,018,455) (1,011,336) (1,000,691) (980,978) (960,309) (935,419) 414,933 (422,519) (54,469) (137,076) 116,059 748,453 163,015 2,065,425 1,020,108 15,858,669 16,281,188 16,335,657 16,472,733 16,356,674 15,608,221 15,445,206 13,379,781 12,359,673 1,295,695 \$1,275,007 \$1,116,869 \$1,134,232 \$948,592 \$1,035,462 \$689,143 \$757,121 \$513,084 96,615 \$4,579 \$89,607 </td

⁽¹⁾ Does not include 401(h) assets for fiscal years 2017 and later. 401(h) assets totaled \$73,635,000 as of June 30, 2024.

⁽²⁾ Does not include 401(h) contributions or associated investment income for fiscal year 2017 and later. For fiscal year 2024 401(h) contributions equaled \$(18,000); and associated investment return equaled \$6,390,000.

⁽³⁾ Based on derived compensation using the provided employer contribution information for fiscal years 2017 and later.

⁽⁴⁾ Adjustment due to 401(h) plan asset balance being considered an OPEB asset under GASB 74 for fiscal years 2017 and later.

⁽⁵⁾ Northern Trust Settlement.

Total Pension Liability (TPL)	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
Service Cost	\$32,732	\$26,852	\$26,885	\$28,450	\$25,568	\$27,117	\$28,641	\$21,081	\$20,751	\$18,729
Interest	79,637	79,822	79,422	75,743	74,357	69,657	66,536	66,589	64,851	61,005
Benefit Changes	-	-	-	26	-	-	705	-	-	-
Difference between Expected and Actual Experience	49,423	(1,773)	(17,557)	34,789	(1,095)	1,395	24,215	26,902	_	6,067
Changes of Assumptions	-	(24,197)	-	-	-	50,658	-	127,878	-	52,165
Benefit Payments	(84,662)	(82,677)	(82,023)	(78,268)	(75,029)	(72,211)	(68,117)	(63,338)	(61,518)	(59,383)
Net Change in TPL	77,130	(1,973)	6,727	60,740	23,801	76,616	51,980	179,112	24,084	78,583
TPL – Beginning	1,316,521	1,318,494	1,311,767	1,251,027	1,227,226	1,150,610	1,098,630	919,517	895,433	816,850
TPL – Ending (a)	\$1,393,651	\$1,316,521	\$1,318,494	\$1,311,767	\$1,251,027	\$1,227,226	\$1,150,610	\$1,098,630	\$919,517	\$895,433
Plan Fiduciary Net Position (1)										
Contributions – Employer	\$89,899	\$72,807	\$59,055	\$62,200	\$59,115	\$55,259	\$43,661	\$52,974	\$23,759	\$28,536
Contributions - Member (2)	21,568	17,459	20,588	19,961	19,769	17,118	17,891	17,524	15,739	13,207
Refunds of Contributions	(4,133)	(4,041)	(4,976)	(4,380)	(3,168)	(2,684)	(2,501)	(2,106)	(2,211)	(2,610)
Retirement Benefit	(80,529)	(78,636)	(77,047)	(73,888)	(71,861)	(69,527)	(65,616)	(61,231)	(59,306)	(56,773)
Net Investment Income (2)	101,135	76,479	(51,317)	173,152	6,739	36,380	51,467	70,994	(1,653)	8,701
Administrative Expense	(1,583)	(1,513)	(1,465)	(1,255)	(1,176)	(1,103)	(975)	(919)	(916)	(844)
Other	-	-	-	-	-	4 (5)	33 (5)	(3,586) (4)	-	767
Net Change in Plan Fiduciary Net Position	126,357	82,555	(55,162)	175,790	9,418	35,447	43,960	73,650	(24,588)	(9,016)
Plan Fiduciary Net Position – Beginning	893,533	810,978	866,140	690,350	680,932	645,485	601,529	527,879	552,468	561,484
Prior Year Adjustment	-	-	-	-	-	-	(4)	-	-	-
Fiduciary Net Position – Ending (b)	1,019,890	893,533	810,978	866,140	690,350	680,932	645,485	601,529	527,879	552,468
Net Pension Liability – Ending (a) – (b)	\$373,761	\$422,988	\$507,516	\$445,627	\$560,677	\$546,294	\$505,125	\$497,101	\$391,638	\$342,965
Plan Fiduciary Net Position as a										
Percentage	73.18%	67.87%	61.51%	66.03%	55.18%	55.49%	56.10%	54.75%	57.41%	61.70
Covered Payroll (3)	\$279,218	\$223,922	\$188,648	\$172,725	\$171,840	\$160,600	\$152,936	\$178,511	\$158,828	\$128,680

⁽¹⁾ Does not include 401(h) assets for fiscal years 2017 and later. 401(h) assets totaled \$10,031,000 as of June 30, 2024.

⁽²⁾ Does not include 401(h) contributions or associated investment income for fiscal years 2017 and later. For fiscal years 2024, 401(h) contributions equaled \$(8,000); and associated investment return equaled \$1,005,000.

⁽³⁾ Based on derived compensation using the provided employer contribution information for fiscal years 2017 and later.

⁽⁴⁾ Adjustment due to 401(h) plan asset balance being considered an OPEB asset under GASB 74 for fiscal years 2017 and later.

⁽⁵⁾ Northern Trust Settlement.

As of June 30 (\$ in Thousand	s)									
Total Pension Liability (TPL)	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
Service Cost	\$18,243	\$13,229	\$12,158	\$12,530	\$13,192	\$11,726	\$11,890	\$8,297	\$8,402	\$7,695
Interest	52,909	53,853	53,740	53,417	52,697	49,301	47,978	51,769	52,951	50,661
Benefit Changes	-	-	3,130	35	-	-	184	-	-	-
Difference between Expected and Actual										
Experience	54,711	10,204	(2,700)	4,127	10,859	20,952	25,126	8,143	-	9,331
Changes of Assumptions	-	(31,255)	-	0	-	44,510	-	136,602	56,191	40,201
Benefit Payments	(64,044)	(63,970)	(64,400)	(63,522)	(62,511)	(61,111)	(58,827)	(56,960)	(56,279)	(54,850)
Net Change in TPL	61,819	(17,939)	1,928	6,587	14,237	65,378	26,351	147,850	61,265	53,038
TPL - Beginning	1,039,813	1,057,752	1,055,824	1,049,237	1,035,000	969,622	943,271	795,421	734,156	681,118
TPL – Ending (a)	\$1,101,632	\$1,039,813	\$1,057,752	\$1,055,824	\$1,049,237	\$1,035,000	\$969,622	\$943,271	\$795,421	\$734,156
Plan Fiduciary Net Position (1)										
Contributions – Employer	\$61,998	\$58,120	\$277,341	\$59,650	\$59,453	\$60,048	\$46,877	\$63,239	\$25,822	\$31,990
Contributions - Member (2)	5,703	5,250	4,773	4,752	4,767	5,062	5,522	5,348	5,263	5,244
Refunds of Contributions	(221)	(166)	(280)	(273)	(88)	(162)	(22)	(26)	(11)	(85)
Retirement Benefit	(63,823)	(63,804)	(64,120)	(63,249)	(62,423)	(60,949)	(58,805)	(56,934)	(56,268)	(54,765)
Net Investment Income (2)	56,933	40,708	(22,088)	61,729	6,341	14,816	18,437	26,795	(3,843)	3,426
Administrative Expense	(314)	(293)	(273)	(212)	(266)	(225)	(194)	(181)	(178)	(201)
Other	-	-	-	-	-	3 (5)	21 (5)	(517) (4)	-	645
Net Change in Plan Fiduciary Net										
Position	60,276	39,815	195,353	62,397	7,784	18,593	11,836	37,724	(29,215)	(13,746)
Plan Fiduciary Net Position –										
Beginning	591,514	551,699	356,346	293,949	286,165	267,572	255,737	218,012	247,228	260,974
Prior Year Adjustment	-	-	-	-	-	-	(1)	-	-	-
Plan Fiduciary Net Position – Ending	CE4 700	E04 E44	EE4 600	256 246	202.040	206 465	267 572	255 727	248 042	247 220
(b)	651,790	591,514	551,699	356,346	293,949	286,165	267,572	255,737	218,012	247,228
Net Pension Liability – Ending (a) – (b)	\$449,842	\$448,299	\$506,053	\$699,478	\$755,288	\$748,835	\$702,050	\$687,534	\$577,409	\$486,928
Plan Fiduciary Net Position as a Percentage	59.17%	56.89%	52.16%	33.75%	28.02%	27.65%	27.60%	27.11%	27.41%	33.68%
Covered Payroll (3)	\$71,964	\$65,693	\$48,061	\$47,873	\$49,019	\$49,515	\$50,346	\$54,065	\$46,685	\$45,765
Net Pension Liability as a Percentage of Covered Payroll	625.09%	682.42%	1,052.94%				1,394.45%	1,271.68%	1,236.82%	1,063.97%

⁽¹⁾ Does not include 401(h) assets for fiscal years 2017 and later. 401(h) assets totaled \$1,426,000 as of June 30, 2024.

⁽²⁾ Does not include 401(h) contributions or associated investment income for fiscal years 2017 and later. For fiscal year 2024, 401(h) contributions equaled (\$12,000); and associated investment return equaled \$126,000.

⁽³⁾ Based on derived compensation using the provided employer contribution information for fiscal years 2017 and later.

⁽⁴⁾ Adjustment due to 401(h) plan asset balance being considered an OPEB asset under GASB 74 for fiscal years 2017 and later.

⁽⁵⁾ Northern Trust Settlement.

Notes to Schedule of Employers' Contributions

The actuarially determined contributions effective for fiscal year ended June 30, 2024 that are documented in the schedules on the following pages, were calculated as of June 30, 2021. Based on the June 30, 2021, actuarial valuation report, the actuarial methods and assumptions used to calculate these contribution rates are below:

Notes to Schedule of Employer	s' Contribution		
	KERS	KERS	SPRS
ltem	Nonhazardous	Hazardous	
Determined by the Actuarial Valuation as of:	June 30, 2021	June 30, 2021	June 30, 2021
Actuarial Cost Method:	Entry Age Normal	Entry Age Normal	Entry Age Normal
Asset Valuation Method:	the market value of assets and the market value of asset the expected actuarial value of and the expected actuarial		20% of the difference between the market value of assets and the expected actuarial value of assets is recognized
Amortization Method:	Level Percent of Pay	Level Percent of Pay	Level Percent of Pay
Amortization Period:	30-year closed period at June 30, 2019, Gains/losses incurring after 2019 will be amortized over separate closed 20-year amortization bases	30-year closed period at June 30, 2019, Gains/losses incurring after 2019 will be amortized over separate closed 20-year amortization bases	30-year closed period at June 30, 2019, Gains/losses incurring after 2019 will be amortized over separate closed 20-year amortization bases
Payroll Growth	0.00%	0.00%	0.00%
Investment Return:	5.25%	6.25%	5.25%
Inflation:	2.30%	2.30%	2.30%
Salary Increase:	3.30% to 15.30%, varies by service	3.55% to 20.05%, varies by service	3.55% to 16.05%, varies by service
Mortality:	System-specific mortality table based on mortality experience from 2013-2018, projected with the ultimate rates from MP- 2014 mortality improvement scale using a base year of 2019	System-specific mortality table based on mortality experience from 2013-2018, projected with the ultimate rates from MP-2014 mortality improvement scale using a base year of 2019	System-specific mortality table based on mortality experience from 2013-2018, projected with the ultimate rates from MP-2014 mortality improvement scale using a base year of 2019

Schedule of Employers' Contribution

Schedule of Employers' Contributions Pension - KERS Nonhazardous As of June 30 (\$ in Thousands)

Fiscal Year Ending	Actuarially Determined Contribution ⁽¹⁾	Total Employer Contribution	Contribution Deficiency (Excess)	Covered Payroll ⁽²⁾	Actual Contributions as a Percentage of Covered Payroll
2024	\$1,055,571	\$1,295,695	\$(240,124)	\$1,912,421	67.75%
2023	1,034,918	1,275,007	(240,089)	1,648,318	77.35%
2022	1,048,861	1,116,869	(68,008)	1,432,960	77.94%
2021	1,056,211	1,134,232	(78,021)	1,441,337	78.69%
2020	1,048,513	948,592	99,921	1,476,156	64.26%
2019	1,055,402	1,035,462	19,940	1,485,854	69.69%
2018	633,879	689,143	(55,264)	1,509,955	45.64%
2017	623,813	757,121	(133,308)	1,602,396	47.25%
2016	512,670	513,084	(414)	1,631,025	31.46%
2015	\$520,948	\$521,691	\$(743)	\$1,544,234	33.78%

⁽¹⁾ Actuarially determined contribution for fiscal year ending 2024 is based on the contribution rate calculated with the June 30, 2021, actuarial valuation.

Schedule of Employers' Contributions Pension - KERS Hazardous As of June 30 (\$ in Thousands)

Fiscal Year Ending	Actuarially Determined Contribution (1)	Total Employer Contribution	Contribution Deficiency (Excess)	Covered Payroll ⁽²⁾	Actual Contributions as a Percentage of Covered Payroll
2024	\$89,897	\$89,899	\$(2)	\$279,218	32.20%
2023	72,778	72,807	(29)	223,922	32.51%
2022	59,052	59,055	(3)	188,648	31.30%
2021	62,181	62,200	(19)	172,725	36.01%
2020	59,096	59,115	(19)	171,840	34.40%
2019	55,230	55,259	(29)	160,600	34.41%
2018	31,321	43,661	(12,340)	152,936	28.55%
2017	37,630	52,974	(15,344)	178,511	29.68%
2016	23,690	23,759	(69)	158,828	14.96%
2015	\$28,374	\$28,536	\$(162)	\$128,680	22.18%

⁽¹⁾ Actuarially determined contribution for fiscal year ending 2024 is based on the contribution rate calculated with the June 30, 2021, actuarial

⁽²⁾ Based on derived compensation using the provided employer contribution information for fiscal year ended 2017, and later.

⁽²⁾ Based on derived compensation using the provided employer contribution information for fiscal year ended 2017, and later.

Schedule of Employer's Contributions Pension - SPRS As of June 30 (\$ in Thousands)

Fiscal Year Ending	Actuarially Determined Contribution (1)	Total Employer Contribution	Contribution Deficiency (Excess)	Covered Payroll ⁽²⁾	Actual Contributions as a Percentage of Covered Payroll
2024	\$61,998	\$61,998	\$-	\$71,964	86.15%
2023	58,120	58,120	-	65,693	88.47%
2022	62,341	277,341	(215,000)	48,061	577.06%
2021	59,263	59,650	(387)	47,873	124.60%
2020	58,358	59,453	(1,095)	49,019	121.29%
2019	58,948	60,048	(1,100)	49,515	121.27%
2018	36,033	46,877	(10,844)	50,346	93.11%
2017	35,937	63,240	(27,303)	54,065	116.97%
2016	25,723	25,822	(99)	46,685	55.31%
2015	\$31,444	\$31,990	\$(546)	\$45,765	69.90%

⁽¹⁾ Actuarially determined contribution for fiscal year ending 2024 is based on the contribution rate calculated with the June 30, 2021, actuarial valuation.

⁽²⁾ Based on derived compensation using the provided employer contribution information for fiscal years ended 2017, and later.

Schedule of Employers' Net OBEP Liability

Schedule of the Employers' Net OPEB Liability - KERS Nonhazardous As of June 30 (\$ in Thousands)

	Year	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability/(Asset)	Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	Covered Payroll ⁽¹⁾	Net OPEB Liability as a Percentage of Covered Payroll
2024		\$2,488,778	\$1,765,729	\$723,049	70.95%	\$1,923,825	37.58%
2023		2,317,344	1,532,752	784,592	66.14%	1,653,492	47.45%
2022		3,576,530	1,364,419	2,212,111	38.15%	1,437,132	153.93%
2021		3,698,804	1,419,477	2,279,327	38.38%	1,452,345	156.94%
2020		3,599,557	1,060,649	2,538,908	29.47%	1,482,431	171.27%
2019		3,217,985	995,089	2,222,896	30.92%	1,515,953	146.63%
2018		3,262,117	891,205	2,370,912	27.32%	1,573,898	150.64%
2017		\$3,353,332	\$817,370	\$2,535,962	24.37%	\$1,593,097	159.18%

⁽¹⁾ Based on derived compensation using the provided employer contribution information. This table is intended to show information for ten years; additional year's information will be displayed as it becomes available.

Schedule of the Employers' Net OPEB Liability - KERS Hazardous As of June 30 (\$ in Thousands)

To or our out (4 in thou						
Year	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability/(Asset)	Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	Covered Payroll (1)	Net OPEB Liability as a Percentage of Covered Payroll
2024	\$442,817	\$677,948	\$ (235,131)	153.10%	\$279,218	(84.21)%
2023	417,361	625,356	(207,995)	149.84%	223,922	(92.89)%
2022	595,789	588,162	7,627	98.72%	188,648	4.04%
2021	622,152	633,677	7 (11,525)	101.85%	172,725	(6.67)%
2020	564,524	521,75	42,769	92.42%	182,209	23.47%
2019	507,204	534,053	3 (26,849)	105.29%	151,448	(17.73)%
2018	485,904	519,072	2 (33,168)	106.83%	190,317	(17.43)%
2017	\$494,869	\$488,838	\$6,031	98.78%	\$171,087	3.53%

⁽¹⁾ Based on derived compensation using the provided employer contribution information. For 2021, 2022, 2023, and 2024 derived compensation based on pension contribution information, as there were no required employer contributions for the Insurance Plan for FYE 2021, FYE 2022, FYE 2023, and FYE 2024. This table is intended to show information for ten years; additional year's information will be displayed as it becomes available.

Schedule of the Employer's Net OPEB Liability - SPRS As of June 30 (\$ in Thousands)

Ye	Total OPEB ar Liability	Plan Fiduciary Net Position	Net OPEB Liability/(Asset)	Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	Covered Payroll (1)	Net OPEB Liability as a Percentage of Covered Payroll
2024	\$277,159	\$273,517	\$3,642	98.69%	\$71,992	5.06%
2023	263,450	248,109	15,341	94.18%	65,830	23.30%
2022	351,453	231,242	120,211	65.80%	48,600	247.35%
2021	364,899	247,318	117,581	67.78%	47,155	249.35%
2020	339,942	201,340	138,602	59.23%	48,231	287.37%
2019	312,553	201,206	111,347	64.38%	48,780	228.26%
2018	301,012	190,847	110,165	63.40%	50,064	220.05%
2017	\$313,234	\$178,838	\$134,396	57.09%	\$48,873	274.99%

⁽¹⁾ Based on derived compensation using the provided employer contribution information. This table is intended to show information for ten years; additional year's information will be displayed as it becomes available.

Schedule of Changes in Net OPEB Liability

Schedule of Changes in Employers' Net OPEB Liability - KERS Nonhazardous As of June 30 (\$ in Thousands)								
As of June 30 (\$ in Thou	2024	2023	2022	2021	2020	2019	2018	2017
Total OPEB Liability								
Service Cost	\$44,779	\$43,199	\$62,548	\$58,831	\$59,600	\$61,345	\$66,360	\$46,992
Interest	134,251	200,910	190,531	191,624	179,811	186,820	191,178	192,911
Benefit Changes	-	3,209	21,884	1,382	-	-	1,865	-
Difference between Expected and Actual Experience	80,456	(1,440,201)	(37,249)	(231,631)	288,235	(302,189)	(191,147)	(3,921)
Changes of Assumptions	26,413	61,925	(206,907)		13,767	158,004	(11,235)	414,835
Benefit Payments (1) (2)	(114,465)	(128,228)	(153,081)		(159,841)	(148,112)	(148,236)	(139,601)
Net Change in Total OPEB	(111,100)	(120,220)	(100,001)	(111,110)	(100,011)	(110,112)	(110,200)	(100,001
Liability	171,434	(1,259,186)	(122,274)	99,247	381,572	(44,132)	(91,215)	511,216
Total OPEB Liability - Beginning	2,317,344	3,576,530	3,698,804	3,599,557	3,217,985	3,262,117	3,353,332	2,842,116
Total OPEB Liability - Ending (a)	\$2,488,778	\$2,317,344	\$3,576,530	\$3,698,804	\$3,599,557	\$3,217,985	\$3,262,117	\$3,353,332
Plan Fiduciary Net Position								
Contributions – Employer (2)(5)	\$164,480	\$156,543	\$181,294	\$223,661	\$208,300	\$201,155	\$152,985	\$162,636
Contributions – Member	10,585	8,358	6,547	6,318	6,128	5,963	5,786	5,156
Benefit Payments (1) (2)	(114,465)	(128,228)	(153,081)	(141,143)	(159,841)	(148,112)	(148,236)	(139,601
OPEB Plan Net Investment Income	173,104	132,431	(88,998)	270,811	11,820	45,749	64,028	94,239
OPEB Plan Administrative	(727)	(771)	(820)	(819)	(847)	(875)	(760)	(961
Expense Other (4)	(121)	(771)	(820)	(619)	(047)	(673)	32	(861)
Net Change in Plan Fiduciary Net Position	232,977	168,333	(55,058)	358,828	65,560	103,884	73,835	121,569
Plan Fiduciary Net Position – Beginning	1,532,752	1,364,419	1,419,477	1,060,649	995,089	891,205	817,370	695,801
Plan Fiduciary Net Position – Ending (b)	1,765,729	1,532,752	1,364,419	1,419,477	1,060,649	995,089	891,205	817,370
Net OPEB Liability – Ending								
(a) – (b)	\$723,049	\$784,592	\$2,212,111	\$2,279,327	\$2,538,908	\$2,222,896	\$2,370,912	\$2,535,962
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	70.95%	66.14%	6 38.15%	% 38.38%	6 29.47%	5 30.92%	6 27.32%	6 24.37°
Covered Payroll (3)	\$1,923,825	\$1,653,492	\$1,437,132	\$1,452,345	\$1,482,431	\$1,515,953	\$1,573,898	\$1,593,097
Net OPEB Liability as a Percentage of Covered Payroll (1) Benefit payments are offset by in	37.58%				•			

⁽¹⁾ Benefit payments are offset by insurance premiums received from retirees, Medicare Drug Reimbursements, and Humana Gain Share Payments (in applicable years).

This table is intended to show information for ten years; additional year's information will be displayed as it becomes available.

⁽²⁾ Employer contributions and benefit payments include expected benefits due to the implicit subsidy for members under age 65, equal to \$27,851,763 for fiscal year 2024.

⁽³⁾ Based on derived compensation using the provided employer contribution information.

⁽⁴⁾ Northern Trust Settlement.

As of June 30 (\$ in Thousan	<u> </u>	0000	0000	0004	0000	0040	0040	0047
	2024	2023	2022	2021	2020	2019	2018	2017
Total OPEB Liability								
Service Cost	\$8,128	\$9,435	\$14,474	\$13,633	\$11,548	\$12,337	\$12,893	\$8,002
Interest on Total OPEB liability	24,181	32,737	30,599	29,254	28,101	27,990	28,500	27,591
Benefit Changes		-	10,289	48	-	-	167	
Difference between Expected and Actual Experience	7,970	(198,459)	(12,515)	(6,402)	27,668	(30,947)	(31,240)	(1,029)
Assumption Changes	5,719	(1,820)	(46,406)	42,022	11,428	31,687	(581)	89,401
Benefit Payments (1) (2)	(20,542)	(20,321)	(22,804)	(20,927)	(21,425)	(19,767)	(18,704)	(16,618)
Net Change in Total OPEB Liability	25,456	(178,428)	(26,363)	57,628	57,320	21,300	(8,965)	107,347
Total OPEB Liability - Beginning	417,361	595,789	622,152	564,524	507,204	485,904	494,869	387,522
Total OPEB Liability - Ending (a)	\$442,817	\$417,361	\$595,789	\$622,152	\$564,524	\$507,204	\$485,904	\$494,869
Plan Fiduciary Net Position								
Contributions – Employer (2)	\$2,725	\$2,282	\$4,116	\$3,556	\$7,441	\$5,556	\$5,165	\$4,579
Contributions – Member	2,086	1,584	1,227	1,167	1,105	934	909	811
Benefit Payments (1) (2)	(20,542)	(20,321)	(22,804)	(20,927)	(21,425)	(19,767)	(18,704)	(16,618)
OPEB Plan Net Investment Income	68,440	53,772	(27,929)	128,244	704	28,373	42,950	59,614
OPEB Plan Administrative Expense	(117)	(123)	(125)	(118)	(123)	(117)	(104)	(105)
Other (4)	-	-	-	-	0	2	18	-
Net Change in Plan Fiduciary Net Position	52,592	37,194	(45,515)	111,922	(12,298)	14,981	30,234	48,281
Plan Fiduciary Net Position – Beginning	625,356	588,162	633,677	521,755	534,053	519,072	488,838	440,557
Plan Fiduciary Net Position – Ending								
(b)	677,948	625,356	588,162	633,677	521,755	534,053	519,072	488,838
Net OPEB Liability – Ending (a) – (b)	\$(235,131)	\$(207,995)	\$7,627	\$(11,525)	\$42,769	\$(26,849)	\$(33,168)	\$6,031
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	153.10%	149.84%	98.72%	101.85%	92.42%	105.29%	106.83%	98.78%
Covered Payroll (3)	\$279,218	\$223,922	\$188,648	\$172,725	\$182,209	\$151,448	\$190,317	\$171,087
Net OPEB Liability as a Percentage of Covered Employee Payroll	(84.21)%	(92.89)%	4.04%	6.67)%	23.47%	(17.73)%	(17.43)%	3.53

⁽¹⁾ Benefit payments are offset by insurance premiums received from retirees, Medicare Drug Reimbursements, and Humana Gain Share Payments (in applicable years).

This table is intended to show information for ten years; additional year's information will be displayed as it becomes available.

⁽²⁾ Employer contributions and benefit payments include expected benefits due to the implicit subsidy for members under age 65, equal to \$814,756 for fiscal year 2024.

⁽³⁾ Based on derived compensation using the provided employer contribution information. For 2021, 2022, 2023, and 2024, derived compensation based on pension contribution information, as there were no required employer contributions for the Insurance Plan for FYE 2021, FYE 2022, FYE 2023, and FYE 2024.

⁽⁴⁾ Northern Trust Settlement.

Schedule of Changes in Employer's Net OPEB Liability - SPRS										
As of June 30 (\$ in Thousands)										
	2024	2023	2022	2021	2020	2019	2018	2017		
Total OBEP Liability										
Service Cost	\$4,115	\$4,092	\$5,605	\$5,218	\$5,389	\$4,816	\$6,087	\$4,147		
Interest on Total OPEB liability	15,508	19,608	18,592	17,984	17,600	17,724	18,432	17,993		
Benefit Changes	-	-	4,975	101	-	-	34	-		
Difference between Expected and Actual										
Experience	1,360	(98,425)	(5,952)	(6,318)	13,810	(14,295)	(23,320)	(573)		
Assumption Changes	4,394	404	(21,937)	21,784	4,578	16,483	(358)	57,312		
Benefit Payments (1)(2)	(11,668)	(13,682)	(14,729)	(13,812)	(13,988)	(13,187)	(13,097)	(12,123)		
Net Change in Total OPEB Liability	13,709	(88,003)	(13,446)	24,957	27,389	11,541	(12,222)	66,756		
Total OPEB Liability - Beginning	263,450	351,453	364,899	339,942	312,553	301,012	313,234	246,478		
Total OPEB Liability - Ending (a)	\$277,159	\$263,450	\$351,453	\$364,899	\$339,942	\$312,553	\$301,012	\$313,234		
Plan Fiduciary Net Position										
Contributions – Employer (2)	\$9,788	\$8,755	\$9,343	\$9,381	\$12,873	\$12,623	\$8,535	\$7,862		
Contributions – Member	396	348	230	209	196	176	155	131		
Benefit Payments (1)(2)	(11,668)	(13,682)	(14,729)	(13,812)	(13,988)	(13,187)	(13,097)	(12,123)		
OPEB Plan Net Investment Income	26,963	21,520	(10,847)	50,289	1,124	10,815	16,470	21,627		
OPEB Plan Administrative Expense	(71)	(74)	(73)	(89)	(71)	(69)	(62)	(66)		
Other (4)	-	-	-	-	-	1	8	-		
Net Change in Plan Fiduciary Net Position	25,408	16,867	(16,076)	45,978	134	10,359	12,009	17,431		
Plan Fiduciary Net Position – Beginning	248,109	231,242	247,318	201,340	201,206	190,847	178,838	161,407		
Plan Fiduciary Net Position – Ending (b)	273,517	248,109	231,242	247,318	201,340	201,206	190,847	178,838		
Net OPEB Liability – Ending (a) – (b)	\$3,642	\$15,341	\$120,211	\$117,581	\$138,602	\$111,347	\$110,165	\$134,396		
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	98.69%	94.18%	65.80%	67.78%	59.23%	64.38%	63.40%	57.09%		
Covered Payroll (3)	\$71,992	\$65,830	\$48,600	\$47,155	\$48,231	\$48,780	\$50,064	\$48,873		
Net OPEB Liability as a Percentage of Covered										

Net OPEB Liability as a Percentage of Covered Payroll

5.06% 23.30% 247.35% 249.35% 287.37% 228.26% 220.05% 274.99%

This table is intended to show information for ten years; additional year's information will be displayed as it becomes available.

⁽¹⁾ Benefit payments are offset by insurance premiums received from retirees, Medicare Drug Reimbursements, and Humana Gain Share Payments (in applicable years).

⁽²⁾ Employer contributions and benefit payments include expected benefits due to the implicit subsidy for members under age 65, equal to (\$374,879) for fiscal year 2024.

⁽³⁾ Based on derived compensation using the provided employer contribution information.

⁽⁴⁾ Northern Trust Settlement.

Notes to Schedule of Employers' Contributions

The actuarially determined contributions effective for fiscal year ended June 30, 2024, that are documented in the following schedule were calculated as of June 30, 2021. Based on the June 30, 2021, actuarial valuation report, the actuarial methods and assumptions used to calculate the required contributions follow.

Notes to Schedule of E	mployers' OPEB Contribu	itions	
	KERS	KERS	SPRS
Item	Nonhazardous	Hazardous	
Determined by the Actuarial			
Valuation as of:	June 30, 2021	June 30, 2021	June 30, 2021
Actuarial Cost Method:	Entry Age Normal	Entry Age Normal	Entry Age Normal
	20% of the difference between	20% of the difference between	20% of the difference between
	the market value of assets and	the market value of assets and	the market value of assets and
	the expected actuarial value of	the expected actuarial value of	the expected actuarial value of
Asset Valuation Method:	assets is recognized.	assets is recognized.	assets is recognized.
Amortization Method:	Level Percent of Pay	Level Percent of Pay	Level Percent of Pay
	30-year closed period at June	30-year closed period at June	30-year closed period at June
	30, 2019 Gains/losses incurring	30, 2019 Gains/losses incurring	30, 2019 Gains/losses incurring
	after 2019 will be amortized	after 2019 will be amortized	after 2019 will be amortized
Amandination David	over separate closed 20-year	over separate closed 20-year	over separate closed 20-year
Amortization Period:	amortization bases.	amortization bases.	amortization bases.
Payroll Growth Rate:	0.00%	0.00%	0.00%
Investment Return:	6.25%	6.25%	6.25%
Inflation:	2.30%	2.30%	2.30%
Salary Increase:	3.30% to 15.30%, varies by service.	3.55% to 20.05%, varies by service.	3.55% to 16.05%, varies by service.
	System-specific mortality table	System-specific mortality table	System-specific mortality table
	based on mortality experience	based on mortality experience	based on mortality experience
	from 2013-2018, projected with	from 2013-2018, projected with	from 2013-2018, projected with
	the ultimate rates from MP-2014	the ultimate rates from MP-2014	the ultimate rates from MP-2014
RA a ust a liste or	mortality improvement scale	mortality improvement scale	mortality improvement scale
Mortality:	using a base year of 2019.	using a base year of 2019.	using a base year of 2019.
Healthcare Trend Rates:		1 111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	Initial trend starting at 6.30% at	Initial trend starting at 6.30% at	Initial trend starting at 6.30% at
	January 1, 2023 and gradually	January 1, 2023 and gradually	January 1, 2023 and gradually
	decreasing to an ultimate trend rate of 4.05% over a period of	decreasing to an ultimate trend rate of 4.05% over a period of	decreasing to an ultimate trend rate of 4.05% over a period of
	13 years. The 2022 premiums	13 years. The 2022 premiums	13 years. The 2022 premiums
	were known at the time of the	were known at the time of the	were known at the time of the
	valuation and were incorporated	valuation and were incorporated	valuation and were incorporated
Pre-65	into the liability measurement.	into the liability measurement.	into the liability measurement.
	Initial trend starting at 6.30% at	Initial trend starting at 6.30% at	Initial trend starting at 6.30% at
	January 1, 2023 and gradually	January 1, 2023 and gradually	January 1, 2023 and gradually
	decreasing to an ultimate trend	decreasing to an ultimate trend	decreasing to an ultimate trend
	rate of 4.05% over a period of	rate of 4.05% over a period of	rate of 4.05% over a period of
	13 years. The 2022 premiums	13 years. The 2022 premiums	13 years. The 2022 premiums
	were known at the time of the	were known at the time of the	were known at the time of the
Poot 65	valuation and were incorporated	valuation and were incorporated	valuation and were incorporated
Post-65	into the liability measurement.	into the liability measurement.	into the liability measurement.

Schedule of Employers' OPEB Contributions

Schedule of Employers' OPEB Contributions - KERS Nonhazardous As of June 30 (\$ in Thousands)

Fiscal Year Ending (1)	Actuarially Determined Contribution ⁽²⁾	Total Employer Contribution (3)	Contribution Deficiency (Excess)	Covered Payroll	Actual Contributions as a Percentage of Covered Payroll
2024	\$129,764	\$136,628	\$(6,864)	\$1,923,825	7.10%
2023	123,952	129,108	(5,156)	1,653,492	7.81%
2022	135,809	140,694	(4,885)	1,437,132	9.79%
2021	161,936	186,676	(24,740)	1,452,345	12.85%
2020	183,821	175,007	8,814	1,482,431	11.81%
2019	187,978	178,964	9,014	1,515,953	11.81%
2018	132,365	136,419	(4,054)	1,573,898	8.67%
2017	133,024	152,356	(19,332)	1,593,097	9.56%
2016	121,899	135,816	(13,917)	1,529,249	8.88%
2015	\$130,455	\$135,940	(5,485)	\$1,544,234	8.80%

⁽¹⁾ Data for years prior to 2018 is based on contribution data provided in the 2017 ACFR, based on calculations provided by the prior actuary.

Schedule of Employers' OPEB Contributions - KERS Hazardous As of June 30 (\$ in Thousands)

Fiscal Year Ending (1)	Actuarially Determined Contribution (2)	Total Employer Contribution (3)	Contribution Deficiency (Excess)	Covered Payroll	
2024	\$-	\$1,910	\$(1,910)	\$279,218	0.68%
2023	-	1,489	(1,489)	223,922	0.66%
2022	-	1,281	(1,281)	188,648	0.68%
2021	-	1,300	(1,300)	172,725	0.75%
2020	4,482	5,776	(1,294)	182,209	3.17%
2019	3,726	4,970	(1,244)	151,448	3.28%
2018	2,550	5,288	(2,738)	190,317	2.78%
2017	4,688	5,620	(932)	171,087	3.28%
2016	9,186	16,766	(7,580)	147,563	11.36%
2015	\$13,152	\$14,882	\$(1,730)	\$128,680	11.57%

⁽¹⁾ Data for years prior to 2018 is based on contribution data provided in the 2017 ACFR, based on calculations provided by the prior actuary.

⁽²⁾ Actuarially determined contribution for fiscal year ended 2024 is based on the contribution rate calculated with the June 30, 2021, actuarial valuation.

⁽³⁾ Employer contributions do not include the expected implicit subsidy included in the Schedule of Changes in Employer's Net OPEB Liability - KERS Nonhazardous.

⁽⁴⁾ Based on derived compensation using the provided employer contribution information.

⁽²⁾ Actuarially determined contribution for fiscal year ended 2024 is based on the contribution rate calculated with the June 30, 2021, actuarial valuation.

⁽⁹⁾ Employer contributions do not include the expected implicit subsidy included in the Schedule of Changes in Employer's Net OPEB Liability

⁻ KERS Hazardous.

⁽⁴⁾ Based on derived compensation using the provided employer contribution information. For 2021, 2022, 2023, and 2024, derived compensation based on pension contribution information as there were no required employer contributions for the Insurance Plan for FYE 2021, FYE 2022, FYE 2023, and FYE 2024.

Schedule of Employer's OPEB Contributions - SPRS As of June 30 (\$ in Thousands)

Fiscal Year Ending ⁽¹⁾	Actuarially Determined Contribution ⁽²⁾	Total Employer Contribution (3)	Contribution Deficiency (Excess)	Covered Payroll (4)	Actual Contributions as a Percentage of Covered Payroll
2024	\$10,158	\$10,163	\$(5)	\$71,992	14.12%
2023	9,289	9,289	-	65,830	14.11%
2022	8,782	8,782	-	48,600	18.07%
2021	9,285	9,285	-	47,155	19.69%
2020	13,133	13,133	-	48,231	27.23%
2019	13,283	13,288	(5)	48,780	27.24%
2018	9,062	9,397	(335)	50,064	18.77%
2017	9,222	9,222	-	48,873	18.87%
2016	8,553	10,237	(1,684)	45,551	22.47%
2015	\$9,890	\$10,382	(492)	\$45,765	22.69%

⁽¹⁾ Data for years prior to 2018 is based on contribution data provided in the 2017 ACFR, based on calculations provided by the prior actuary.
(2) Actuarially determined contribution for fiscal year ended 2024 is based on the contribution rate calculated with the June 30, 2021, actuarial valuation.

⁽³⁾ Employer contributions do not include the expected implicit subsidy included in the Schedule of Changes in Employer's Net OPEB Liability - SPRS.

⁽⁴⁾ Based on derived compensation using the provided employer contribution information

Money-Weighted Rates of Return

In accordance with GASB, KRS provides this additional disclosure regarding the money-weighted rate of return for the Pension and Insurance Plans. The money-weighted rate of return is a method of calculating period-by-period returns on 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, net of investment expenses, adjusted for the changing amounts actually invested.

See below for the money-weighted rates of return for multiple periods including fiscal year June 30, 2024, as calculated by the custodian bank, BNY Mellon:

Money - Weigh	nted Rates of Retur	n As of June	30			
	KERS	KERS	SPRS	KERS	KERS	SPRS
	Nonhazardous	Hazardous		Nonhazardous	Hazardous	
		Pension			Insurance	
2024	9.58%	11.17%	9.64%	11.14%	11.12%	11.01%
2023	7.07%	9.46%	7.53%	9.89%	9.26%	9.44%
2022	(5.29)%	(5.94)%	(5.80)%	(6.22)%	(4.43)%	(4.43)%
2021	22.53%	25.21%	21.70%	25.16%	24.99%	25.36%
2020	2.35%	0.96%	2.21%	0.98%	0.21%	0.64%
2019	5.77%	5.68%	5.67%	5.04%	5.56%	5.73%
2018	7.63%	8.69%	7.68%	7.95%	8.93%	9.39%
2017	12.08%	13.45%	12.50%	13.77%	13.75%	13.69%
2016	(0.97)%	(0.33)%	(1.76)%	N/A	N/A	N/A
2015	2.30%	1.84%	1.80%	N/A	N/A	N/A

Note: This table is intended to show information for ten years; additional year's information will be displayed as it becomes available.

Schedule of Administrative Expenses

KPPA provides administrative support for KRS, and the County Employees Retirement System (CERS). Kentucky Revised Statute 61.505 11(a) requires all expenses incurred by KPPA on behalf of the Systems be prorated, assigned, or allocated to the Systems. KPPA works closely with the KRS and CERS Boards of Trustees to develop an allocation method that takes into consideration membership, assets under management, system specific costs, and statutory requirements. Total administrative costs incurred by KPPA for the fiscal year ended June 30, 2024, were \$47.3 million, of which \$16.9 million was allocated to KRS based on the hybrid allocation developed by the KPPA Board, the KRS Board, and the CERS Board.

Schedule of Administrative Expenses As of June 30, 2024 (\$ in Thousands)	
As of Julie 30, 2024 (# III Thousands)	2024
Salaries	\$6,533
Benefits	6,167
Professional Services	1,345
Information Technology	1181
Communications	282
Office & Equipment Rent	367
Travel/Conferences	43
Other Operating Expenses	107
Insurance Plans' Administration	922
Total Administrative Expenses	\$16,947

Schedule of Direct Investment Expenses

Schedule of Direct Investment As of June 30, 2024 (\$ in Thou	<u>-</u>					
		Pension			Insurance	
	KER	S	SPRS	KER	S	SPRS
	Nonhazardous	Hazardous		Nonhazardous	Hazardous	
Security Lending Fees						
Securities Lending Fees, Expenses, and Rebates	\$3,808	\$1,059	\$671	\$1,402	\$487	\$214
Total Security Lending	3,808	1,059	671	1,402	487	214
Contractual Services						
Investment Management	18,759	5,641	2,566	8,913	4,439	1,764
Security Custody	397	97	62	2 234	94	38
Investment Consultant	238	59	38	3 96	40	16
Performance Fees	6,006	1,724	620	2,860	1,766	616
Total Contractual Services	\$25,400	\$7,521	\$3,286	\$12,103	\$6,339	\$2,434

Schedule of Professional Consultant Fees

Schedule of Professional Consultant Fees As of June 30, 2024 (\$ in Thousands)	
	2024
Actuarial Services	\$146
Medical Review Services	500
Audit Services	83
Legal Counsel	509
Miscellaneous	107
Total	\$1,345



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REPORT OF INDEPENDENT AUDITORS 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

To the Members 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 financial statements of Kentucky Retirement Systems (KRS), as of and for the year ended June 30, 2024, and the related notes to the financial statements, which collectively comprise the KRS basic financial statements, and have issued our report thereon dated December 5, 2024.

Report on Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the KRS's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the KRS's internal control. Accordingly, we do not express an opinion on the effectiveness of the KRS's 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. 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 or significant deficiencies may exist that have not been identified.

REPORT OF INDEPENDENT AUDITORS 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 (Continued)

Report on Compliance and Other Matters

As part of obtaining reasonable assurance about whether the KRS's financial statements are free from 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 financial statements. 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 KRS's internal control or on compliance. This report is an integral part of an audit performed in accordance with Government Auditing Standards in considering KRS's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Blue & Co., LLC

Lexington, Kentucky December 5, 2024

INVESTMENTS TABLE OF CONTENTS

- 83 INVESTMENT OVERVIEW
- 85 INVESTMENT STRATEGIES
- 86 INVESTMENT OBJECTIVES
- 87 INVESTMENT RESULTS
- 88 BENCHMARKS
- 89 LONG-TERM RESULTS
- 91 PUBLIC EQUITY
- 93 CORE FIXED INCOME
- 95 SPECIALTY CREDIT
- 97 PRIVATE EQUITY
- 97 REAL ESTATE
- 98 REAL RETURN
- 98 CASH
- 99 ADDITIONAL SCHEDULES

Investment Overview

This section of the report was compiled by Investment Staff using information provided by Wilshire Associates and the Bank of New York Mellon. Except otherwise noted, investment returns are based on investment asset fair value and calculated using time-weighted return calculation methodologies.

Investment returns play an important role in terms of funding status of the Plans and continued funding of operations. The Investment Committee and the Board of Trustees are committed to maximizing the long-term total rate of return on investments, given the appropriate level of risk, for the sole benefit of the members in the Plans. The overall investment performance goal is to achieve an annualized rate of return which, when combined with employee and employer contributions, will meet or exceed the benefits and administrative funding requirements (see Investment Objectives later in this section).

Investments are managed by professional investment management firms and the Investment Staff based upon statutory investment authority and the investment policies adopted by the KRS Investment Committee and ratified by the KRS Board of Trustees. The Investment Staff is responsible for the administration of the investment assets of KRS and assists the Investment Committee in the formulation and implementation of investment policies and long-term investment strategy.

Asset Allocation and Diversification

The Trustees recognize that asset allocation is the primary driver of long-term investment performance and therefore review asset allocation on a regular basis. Asset allocation is a process designed to construct an optimal long-term asset mix that achieves a specific set of investment objectives. The Investment Policy Statement (IPS) establishes the Plans' asset allocation policies which are designed to meet those objectives.

The asset allocation policies are adopted to provide for diversification of assets in an effort to maximize the longterm returns on investments consistent with prudent levels of market and economic risks. Of all the components of investment strategy formulation, the determination of asset allocation policies are the most important decision.

Risk is further diversified through active and passive management using multiple investment management firms and Investment Staff with a variety of investment styles. The total investment performance is not dependent upon the outcome of just one particular investment style or manager.

Investment Staff develops specific contractual investment guidelines for each external manager and each internally managed account that control the risk of high concentrations in a particular sector, industry, or security.

Diversification of the assets among various asset classes, investment management styles, and individual securities mitigates risks and enhances the potential of the investment portfolios to achieve their respective long-term objectives.

The following tables show each Plans' asset allocation targets as specified in the Investment Policy Statement and the actual asset allocation of the Plans as of June 30, 2024.

PS Target Allocation vs. Actual Asset Allocation									
As of June 30, 2024									
Pension	Public Equity	Private Equity	Core Fixed Income	Specialty Credit	Cash	Real Estate	Real Return	Total Plan	
KERS Nonhazardous Policy Target Asset Allocation	30.00%	6.00%	27.00%	20.00%	2.00%	5.00%	10.00%	100.00%	
KERS Nonhazardous Actual Asset Allocation	32.44%	4.64%	26.33%	18.84%	4.20%	5.19%		100.00%	
KERS Hazardous Policy Target Asset Allocation	40.00%	8.00%	10.00%	25.00%	2.00%	7.00%	8.00%	100.00%	
KERS Hazardous Actual Asset Allocation	42.66%	6.44%	11.36%	22.57%	3.39%	5.75%	7.83%	100.00%	
SPRS Policy Target Asset Allocation	30.00%	6.00%	27.00%	20.00%	2.00%	5.00%	10.00%	100.00%	
SPRS Actual Asset Allocation	32.07%	4.85%	25.83%	19.25%	3.90%	5.41%	8.69%	100.00%	

Insurance	Public Equity	Private Equity	Core Fixed Income	Specialty Credit	Cash	Real Estate	Real Return	Total Plan
KERS Nonhazardous Policy Target Asset Allocation	40.00%	8.00%	10.00%	25.00%	2.00%	7.00%	8.00%	100.00%
KERS Nonhazardous Actual Asset Allocation	42.85%	6.66%	11.44%	22.60%	2.58%	5.73%	8.14%	100.00%
VEDO II								
KERS Hazardous Policy Target Asset Allocation	40.00%	8.00%	10.00%	25.00%	2.00%	7.00%	8.00%	100.00%
KERS Hazardous Actual Asset Allocation	43.27%	7.31%	11.50%	22.85%	1.86%	6.34%	6.87%	100.00%
SPRS Policy Target Asset Allocation	40.00%	8.00%	10.00%	25.00%	2.00%	7.00%	8.00%	100.00%
SPRS Actual Asset Allocation	42.83%	8.01%	11.14%	22.83%	2.37%	5.96%	6.86%	100.00%

NOTE: The actual asset allocations are calculated by taking the fair value of each asset class as a percentage of total portfolio for the plans combined.

Investment Strategies

Diversification

The Pension and Insurance portfolios are diversified on several levels, including by asset class. Asset allocations are evaluated on a periodic basis and represent an efficient allocation to maximize returns and minimize risks at a level appropriate for each Plan. The individual asset classes are diversified through the use of multiple portfolios that are managed by the Investment Staff and external Investment Managers. Each Investment Manager is afforded discretion to diversify its portfolio(s) within the parameters established by their contractual guidelines and in accordance with the KRS IPS.

Rebalancing

Proper implementation of the investment policy requires that a periodic adjustment, or rebalancing, of assets be made to ensure conformance with the IPS target levels. Such rebalancing is necessary to reflect sizable cash flows and performance imbalances among asset classes and individual investment portfolios. Should the actual portfolio rate fall outside of the IPS indicated range for a particular asset class, Investment Staff will direct rebalancing transactions to reallocate assets from the over-allocated asset class to the under-allocated asset class.

Performance Review

At least quarterly, the Investment Committee, reviews the performance of the portfolios to determine compliance with the IPS. The Investment Committee also reviews a report created and presented by the Compliance Officer. The Compliance Officer performs tests daily, monthly, and quarterly to assure compliance with the restrictions imposed by the IPS.

Investment Consulting

The Board employs qualified independent industry leading external consultants to assist in asset allocation studies, asset allocation recommendations, manager searches and other investment related consulting functions. Consultants also provide performance reports covering both the internally and externally managed assets.

Investment Objectives

The Trustees recognize that as long-term investors, the primary aim is that the portfolios meet their performance objectives in the long-term while understanding that this may not necessarily occur in the short-term. The overall investment performance goal is to achieve an annualized rate of return which, when combined with employee and employer contributions, will meet or exceed the benefits and administrative funding requirements. The following descriptions represent general standards of measurement that will be used as guidelines for the various classes of investments and managers of the Plans.

Public Asset Class Allocations

Short-term: For periods less than five years or a full market cycle, the Asset Class Allocation should exceed the returns of the appropriate Index.

Intermediate & Long-term: For periods greater than five years or a full market cycle, the Asset Class Allocation should exceed the appropriate Index, compare favorably on a risk-adjusted basis, and generate returns that rank above the median return of a relevant peer group. Volatility, as measured by the standard deviation of monthly returns, should be comparable to the Index.

Individual Public Security Portfolios

Short-term: For periods less than five years or a full market cycle, individual portfolios should exceed the returns of their market goal or benchmark.

Intermediate & Long-term: For periods greater than five years or a full market cycle, individual portfolios should exceed the return of their market goal or benchmark, compare favorably on a risk-adjusted basis, and generate returns that rank above the median return of a relevant peer group. Volatility, as measured by the standard deviation of monthly returns, should be comparable to the benchmark.

Alternative Assets

Private Equity

The Private Equity portfolio seeks long-term annualized net returns that exceed public equity investments (as represented by the Russell 3000 Index lagged 1 calendar quarter) by three percent.

Real Estate

The Real Estate portfolio seeks long-term annualized net returns that exceed the National Council of Real Estate Investment Fiduciaries Open End Diversified Core Equity Index lagged 1 calendar quarter.

Real Return

The Real Return portfolio seeks long term annualized net returns that exceed CPI + 300 basis points.

Investment Results

For this report, total return information has been reported net of fees and expenses with audited data. All rates of return are calculated using time-weighted rates of return.

Fiscal Year 2024 Results

Please see the tables below for the net returns reported for the fiscal year ended June 30, 2024.

Net Returns	As of June	30, 2024 (\$ in Tho	usands)						
			1 Ye	ar	3 Yea	ars	5 Yea	ars	10 Ye	ears
Pension	Fair Value	% of Total	Plan	Index	Plan	Index	Plan	Index	Plan	Index
KERS										
Nonhazardous	4,208,402	71.51%	9.50%	10.11%	3.55%	3.91%	6.86%	6.48%	6.08%	5.98%
KERS										
Hazardous	1,025,916	17.43%	11.12%	12.40%	4.58%	5.01%	7.65%	7.84%	6.71%	6.70%
SPRS	650,802	11.06%	9.62%	10.11%	3.99%	3.91%	6.95%	6.48%	6.04%	5.92%
Total	\$5,885,120	100.00%	9.80%	10.51%	3.79%	4.03%	7.02%	6.56%	6.21%	6.02%

Insurance			Plan	Index	Plan	Index	Plan	Index	Plan	Index
KERS Nonhazardous	1,677,700	64.13%	11.07%	12.40%	4.63%	5.15%	7.68%	7.72%	6.54%	6.70%
KERS Hazardous	667,434	25.51%	11.15%	12.40%	5.06%	5.15%	7.75%	7.63%	6.79%	6.68%
SPRS	271,156	10.36%	11.02%	12.40%	5.09%	5.15%	7.92%	7.63%	6.97%	6.70%
Total	\$2,616,290	100.00%	11.08%	12.40%	4.80%	5.15%	7.72%	7.72%	6.67%	6.70%

Benchmarks

KRS overall performance is measured relative to asset class benchmarks. The benchmark is calculated using a weighted average methodology that is consistent with the CFA Institute Global Investment Performance Standards (GIPS®). It is the product of the various component weights (i.e., asset classes' percentages) by their respective performance (returns). The various asset class benchmarks are shown below:

Benchmarks and Allocation Guidelines			
As of June 30, 2024			
Index	Asset Class	KERS Nonhazardous/ SPRS Pension	KERS Hazardous Pension/All Insurance
Equity			
MSCI ACWI	Public Equity	30.00%	40.00%
Russell 3000 + 300 bps (lagged one quarter)	Private Equity	6.00%	8.00%
Fixed Income			
Bloomberg US Aggregate	Core Fixed Income	27.00%	10.00%
50% Bloomberg US Corporate High Yield/50% Morningstar LSTA			
Leveraged Loan	Specialty Credit	20.00%	25.00%
FTSE 3-mos Treasury Bill	Cash	2.00%	2.00%
Inflation Protected			
NCREIF ODCE (one quarter lagged)	Real Estate	5.00%	7.00%
US CPI + 3%	Real Return	10.00%	8.00%

Note: 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 Investment Staff as the neutral position consistent with the investment mandate and status. Investment Staff and our Consultant recommend the indices and benchmarks, which are reviewed and approved by the Investment Committee and ratified by the KRS Board.

Long-Term Results

The chart below displays the growth of \$1,000 over the course of 10 years given the performance of the portfolios compared to the benchmark and the actuarial assumed rate of return. As of June 30, 2024, the actuarial assumed rate of return for KERS Nonhazardous and SPRS Pension Plans was 5.25% and 6.25% for all other Plans.

Since June 30, 2015, fiscal year returns have ranged from minimum returns of (5.19)%, (5.95)%, and (4.63)% in KERS Nonhazardous, KERS Hazardous, and SPRS, respectively in fiscal year 2022 to maximum returns of 22.56%, 25.21%, and 21.70%, respectively, in fiscal year 2021. For fiscal year 2024, the annualized total net returns of each Plan exceeded their respective actuarially assumed rates of return. Translating these returns into dollars, a beginning balance of \$1,000 in fiscal year 2015 would have a balance of \$1,805 for the KERS Nonhazardous Pension Plan in fiscal year 2024. The KERS Nonhazardous annualized benchmark would have a balance of \$1,797.

Pension Plan Growth As of June 30 (in Whole 9	\$)										
AS OF GUILE OF (III WHOLE)	Ψ)	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
KERS Nonhazardous Plan		2.38%	(0.68)%	12.09%	7.50%	5.73%	2.36%	22.56%	(5.19)%	6.96%	9.50%
Performance BM		2.73%	0.71%	11.92%	6.84%	6.13%	1.18%	20.60%	(4.79)%	7.02%	10.11%
Actuarial Assumed ROR		7.75%	7.50%	6.75%	5.25%	5.25%	5.25%	5.25%	5.25%	5.25%	5.25%
Actual Performance	\$ 1,000 \$	5 1,024	\$ 1,017	\$ 1,140	\$ 1,225	\$ 1,295	\$ 1,326	\$ 1,625	\$ 1,541	\$ 1,648	\$ 1,805
Performance Benchmark	1,000	1,027	1,035	1,158	1,237	1,313	1,328	1,602	1,525	1,632	1,797
Actuarial Assumed ROR	\$ 1,000 \$	3 1,078	\$ 1,158	\$ 1,236	\$ 1,301	\$ 1,370	\$ 1,442	\$ 1,517	\$ 1,597	\$ 1,681	\$ 1,769
KERS Hazardous Plan		1.87%	(0.24)%	13.44%	8.68%	5.68%	0.95%	25.21%	(5.95)%	9.46%	11.12%
Performance BM		2.38%	(0.61)%	13.58%	7.04%	6.37%	0.16%	25.74%	(5.22)%	8.70%	12.40%
Actuarial Assumed ROR		7.75%	7.50%	7.50%	6.25%	6.25%	6.25%	6.25%	6.25%	6.25%	6.25%
Actual Performance	\$ 1,000 \$	3 1,019	\$ 1,016	\$ 1,153	\$ 1,253	\$ 1,324	\$ 1,337	\$ 1,674	\$ 1,574	\$ 1,723	\$ 1,915
Performance Benchmark	1,000	1,024	1,018	1,156	1,237	1,316	1,318	1,657	1,571	1,707	1,919
Actuarial Assumed ROR	\$ 1,000 \$	1,078	\$ 1,158	\$ 1,245	\$ 1,323	\$ 1,406	\$ 1,494	\$ 1,587	\$ 1,686	\$ 1,791	\$ 1,903
SPRS Plan		1.87%	(1.49)%	12.50%	7.65%	5.71%	2.21%	21.70%	(4.63)%	7.58%	9.62%
Performance BM		2.35%	(0.31)%	12.61%	6.84%	6.13%	1.18%	20.60%	(4.79)%	7.02%	10.11%
Actuarial Assumed ROR		7.75%	7.50%	6.75%	5.25%	5.25%	5.25%	5.25%	5.25%	5.25%	5.25%
Actual Performance	\$ 1,000\$	1,019	\$ 1,004	\$ 1,129	\$ 1,215	\$ 1,285	\$ 1,313	\$ 1,598	\$ 1,524	\$ 1,640	\$ 1,797
Performance Benchmark	1,000	1,024	1,020	1,149	1,228	1,303	1,318	1,590	1,514	1,620	1,784
Actuarial Assumed ROR	\$ 1,000\$	1,078	\$ 1,158	\$ 1,236	\$ 1,301	\$ 1,370	\$ 1,442	\$ 1,517	\$ 1,597	\$ 1,681	\$ 1,769

The chart below shows theoretical annual returns for the Insurance portfolio since June 30, 2015, fiscal year returns have ranged from minimum returns of (6.15)%, (4.53)%, and (4.50)% in KERS Nonhazardous, KERS Hazardous, and SPRS, respectfully in fiscal year 2022 to maximum returns of 25.16%, 24.97%, and 25.34%, respectfully, in fiscal year 2021. As of June 30, 2024, the KERS Insurance portfolio earned 11.07% versus the KERS annualized benchmark return of 12.40%. The chart below indicates that with a beginning balance of \$1,000 in fiscal year 2015, the KERS Insurance portfolio would have a balance of \$1,883 compared to the actuarially assumed rate of return balance of \$1,905 and the annualized benchmark return would have a balance of \$1,939 at the end of the 10-year period.

Insurance Plan Gro	wth										
As of June 30 (in V	Vhole \$)										
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
KERS Nonhazardous Plan		1.44%	(0.50)%	13.78%	7.96%	4.95%	0.97%	25.16%	(6.15)%	9.87%	11.07%
Performance BM		2.40%	(0.56)%	13.89%	7.04%	6.10%	0.35%	24.35%	(3.44)%	8.70%	12.40%
Actuarial Assumed ROR		7.75%	7.50%	7.50%	6.25%	6.25%	6.25%	6.25%	6.25%	6.25%	6.35%
Actual Performance	\$ 1,000 \$	\$ 1,014	\$ 1,009	\$ 1,148	\$ 1,240	\$ 1,301	\$ 1,314	\$ 1,644	\$ 1,543	\$ 1,696	\$ 1,883
Performance Benchmark	1,000	1,024	1,018	1,160	1,241	1,317	1,322	1,644	1,587	1,725	1,939
Actuarial Assumed ROR	\$ 1,000 \$	\$ 1,078	\$ 1,158	\$ 1,245	\$ 1,323	\$ 1,406	\$ 1,494	\$ 1,587	\$ 1,686	\$ 1,791	\$ 1,905
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KERS Hazardous Plan		1.82%	(0.25)%	13.76%	8.88%	5.61%	0.20%	24.97%	(4.53)%	9.29%	11.15%
Performance BM		2.56%	(0.38)%	13.73%	7.04%	6.25%	(0.40)%	24.76%	(4.85)%	8.70%	12.40%
Actuarial Assumed ROR		7.75%	7.50%	7.50%	6.25%	6.25%	6.25%	6.25%	6.25%	6.25%	6.35%
Actual Performance	\$ 1,000 \$	\$ 1,018	\$ 1,016	\$ 1,155	\$ 1,258	\$ 1,329	\$ 1,331	\$ 1,664	\$ 1,588	\$ 1,736	\$ 1,929
Performance Benchmark	1,000	1,026	1,022	1,162	1,244	1,322	1,316	1,642	1,562	1,698	1,909
Actuarial Assumed ROR	\$ 1,000 \$	\$ 1,078	\$ 1,158	\$ 1,245	\$ 1,323	\$ 1,406	\$ 1,494	\$ 1,587	\$ 1,686	\$ 1,791	\$ 1,905
SPRS Plan		1.90%	0.01%	13.70%	9.34%	5.74%	0.65%	25.34%	(4.50)%	9.46%	11.02%
Performance BM		2.75%	(0.22)%	13.61%	7.04%	6.25%	(0.40)%	24.76%	(3.44)%	8.70%	12.40%
Actuarial Assumed ROR		7.75%	7.50%	7.50%	6.25%	6.25%	6.25%	6.25%	6.25%	6.25%	6.35%
Actual Performance	\$ 1,000 \$	£ 1 010	\$ 1,019	\$ 1,159	\$ 1,267	\$ 1,340	\$ 1,348	\$ 1,690	\$ 1,614	\$ 1,767	\$ 1,961
Performance Benchmark	1,000	1,028	1,025	1,165	1,247	1,325	1,346	1,646	1,589	1,728	1,942
Actuarial Assumed ROR	\$ 1,000		\$ 1,158	\$ 1,245	\$ 1,323		\$ 1,494		\$ 1,686	\$ 1,720	\$ 1,905
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Public Equity

For the fiscal year, the KERS Pension Nonhazardous and Hazardous, and SPRS Pension Public Equity portfolios returned 17.22%, 17.05%, and 16.89%, respectively. The plans underperformed the benchmark return of 19.38%. The KERS Insurance Nonhazardous and Hazardous, and SPRS Insurance Public Equity portfolios also underperformed the benchmark, returning 16.95%, 16.94%, and 16.97%, respectively. Relative underperformance was primarily a result of positioning. Given the market fundamentals, the portfolios were allocated more heavily towards international markets during the beginning of the fiscal year than the benchmark. Further, during the period, markets were exceptionally narrow, especially within the domestic marketplace, creating a headwind for diversified investors.

During the 12 months ended June 30, 2024, the KERS Pension Nonhazardous and Hazardous U.S. equity portfolios returned 22.13% and 21.87%, versus the Russell 3000 return of 23.12%. The SPRS U.S. equity portion of the portfolio trailed the benchmark by 139bps, gaining 21.73%. During the same period, the KERS Nonhazardous, KERS Hazardous, and SPRS Insurance U.S. equity portfolios returned 21.86%, 21.83%, and 21.85%, respectively. Most individual investment mandates provided both solid absolute and relative performance. However, positioning slightly smaller in terms of market cap and anchoring more core in nature created headwinds for the portfolios, as both large caps and growth outperformed.

For the fiscal year, the KERS Pension Nonhazardous Non-U.S. equity mandates combined to underperform the MSCI ACWI Ex-US Index by 166bps (9.91% versus 11.57%), while the KERS Hazardous Non-U.S. equity portion of the portfolio returned 9.97%. The KERS Insurance Nonhazardous and Hazardous international portfolios returned 9.97% and 9.87%, respectively. Both the SPRS Pension and Insurance Non-U.S. equity portfolios returned 9.83%, underperforming the benchmark by 174bps. Within the international book, individual strategies struggled in relative terms. The correlation breakdown between earnings and stock prices made it difficult for active managers to distinguish themselves from the benchmark. Also, allocation created difficulties as growth style biased strategies faced a headwind, the opposite of their domestic counterparts.

Return on Public Eq As of June 30, 2024	uity								
	Inception Date	1 Ye	ar	3 Yea	ars	5 Yea	ars	10 Ye	ars
Pension	4/1/1984	Plan	Index	Plan	Index	Plan	Index	Plan	Index
KERS Nonhazardous		17.22%	19.38%	4.23%	4.91%	10.23%	10.39%	8.19%	8.14%
KERS Hazardous		17.05%	19.38%	4.21%	4.91%	10.19%	10.39%	8.05%	8.14%
SPRS		16.89%	19.38%	4.17%	4.91%	10.21%	10.39%	7.90%	8.14%
Insurance	7/1/1992								
KERS Nonhazardous		16.95%	19.38%	4.22%	4.90%	10.23%	10.36%	8.24%	8.14%
KERS Hazardous		16.94%	19.38%	4.16%	4.90%	10.19%	10.36%	8.16%	8.14%
SPRS		16.97%	19.38%	4.09%	4.90%	10.16%	10.36%	8.14%	8.14%

Top 10 Public Equity Holdings As of June 30, 2024 (\$ in Thousands)

KERS Nonhazardous Pension

Company	Shares	Fair Value
MSCI WORLD EX-US INDEX FUND A	4,399,032	\$128,341
MICROSOFT CORP	103,799	46,393
NVIDIA CORP	352,207	43,512
APPLE INC	205,488	43,280
ISHARES CORE S&P MIDCAP ETF	560,980	32,828
ALPHABET INC	159,877	29,198
AMAZON.COM INC	138,436	26,753
LAZARD EMERG MKT EQY-INST	1,138,900	21,172
META PLATFORMS INC	33,374	16,828
BERKSHIRE HATHAWAY INC	30,226	12,296
Total	7,122,319	\$400,601

Top 10 Public Equity Holdings As of June 30, 2024 (\$ in Thousands)

KERS Nonhazardous Insurance

1100	
Shares	Fair Value
1,432,874	\$45,957
44,820	20,032
340,602	19,932
148,339	18,326
86,923	18,308
674,625	12,541
55,226	10,673
13,215	6,664
35,423	6,452
29,469	5,405
2,861,516	\$164,290
	Shares 1,432,874 44,820 340,602 148,339 86,923 674,625 55,226 13,215 35,423 29,469

Top 10 Public Equity Holdings As of June 30, 2024 (\$ in Thousands)

KERS Hazardous Pension

Company	Shares	Fair Value
MICROSOFT CORP	27,696	\$12,379
ISHARES CORE S&P MIDCAP ETF	211,034	12,350
NVIDIA CORP	91,664	11,324
APPLE INC	53,713	11,313
LAZARD EMERG MKT EQY-INST	374,138	6,955
AMAZON.COM INC	34,126	6,595
META PLATFORMS INC	8,166	4,118
ALPHABET INC	21,889	3,987
ALPHABET INC	18,211	3,340
BERKSHIRE HATHAWAY INC	6,746	2,744
Total	847,383	\$75,105

Top 10 Public Equity Holdings As of June 30, 2024 (\$ in Thousands)

KERS Hazardous Insurance

Company	Shares	Fair Value
ISHARES CORE S&P MIDCAP ETF	140,725	\$8,235
MICROSOFT CORP	17,842	7,974
NVIDIA CORP	59,051	7,295
APPLE INC	34,602	7,288
LAZARD EMERG MKT EQY-INST	251,868	4,682
AMAZON.COM INC	21,984	4,248
META PLATFORMS INC	5,261	2,653
ALPHABET INC	14,101	2,569
ALPHABET INC	11,732	2,152
BERKSHIRE HATHAWAY INC	4,346	1,768
Total	561,512	\$48,864

Top 10 Public Equity Holdings As of June 30, 2024 (\$ in Thousands)

SPRS Pension

Company	Shares	Fair Value
ISHARES CORE S&P MIDCAP ETF	110,556	\$6,470
MICROSOFT CORP	12,724	5,687
NVIDIA CORP	42,112	5,202
APPLE INC	24,676	5,197
LAZARD EMERG MKT EQY-INST	191,090	3,552
AMAZON.COM INC	15,678	3,030
META PLATFORMS INC	3,752	1,892
ALPHABET INC	10,056	1,832
ALPHABET INC	8,366	1,534
BERKSHIRE HATHAWAY INC	3,099	1,261
Total	422,109	\$35,657
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Top 10 Public Equity Holdings As of June 30, 2024 (\$ in Thousands)

SPRS Insurance

Shares	Fair Value
56,965	\$3,334
7,149	3,195
23,660	2,923
13,864	2,920
105,578	1,963
8,808	1,702
2,108	1,063
5,650	1,029
4,700	862
1,741	708
230,223	\$19,699
	56,965 7,149 23,660 13,864 105,578 8,808 2,108 5,650 4,700 1,741

A complete list of holdings is located at https://kyret.ky.gov/Investments/Investments-Library/Pages/Investments-Holdings.aspx.

Core Fixed Income

For the fiscal year, the Pension Core Fixed Income KERS Nonhazardous, Hazardous and SPRS portfolios returned 5.14%, 5.00% and 5.11%, respectively, outperforming the Bloomberg U.S. Aggregate benchmark with a return of 2.63%. For the Insurance Core Fixed Income, KERS Nonhazardous, Hazardous and SPRS portfolios returned 4.86%, 4.99% and 4.99%, respectively, also outperforming the benchmark. Relative outperformance was driven by the shorter duration profile and tactical allocation to front end investment grade credit as rates rose and credit spreads tightened during the first six months of the fiscal year.

Return on Core Fixed Income									
As of June 30, 2024									
	Inception Date	1 Ye	ar	3 Ye	ars	5 Yea	ırs	10 Ye	ars
Pension	7/1/2013	Plan	Index	Plan	Index	Plan	Index	Plan	Index
KERS Nonhazardous		5.14%	2.63%	0.24%	-3.02%	1.93%	-0.23%	N/A	1.35
KERS Hazardous		5.00%	2.63%	0.21%	-3.02%	1.89%	-0.23%	N/A	1.35
SPRS		5.11%	2.63%	0.30%	-3.02%	1.96%	-0.23%	N/A	1.35
Insurance	7/1/2013								
KERS Nonhazardous		4.86%	2.63%	0.05%	-3.02%	1.71%	-0.23%	N/A	1.35
KERS Hazardous		4.99%	2.63%	0.09%	-3.02%	1.71%	-0.23%	N/A	1.35
SPRS		4.99%	2.63%	0.09%	-3.02%	1.72%	-0.23%	N/A	1.35

Note: Current Pension and Insurance benchmark is Bloomberg US Aggregate. Current Pension and Insurance benchmark is Bloomberg US Aggregate.

Top 10 Core Fixed Income Holdings As of June 30, 2024 (\$ in Thousands)

KERS Nonhazardous Pension

Issuer	Shares	Fair Value
ISHARES CORE U.S. AGGREGATE	3,683,180	\$357,526
U S TREASURY NOTE	186,834,016	182,054
U S TREASURY BOND	84,745,231	75,981
JPMORGAN CHASE & CO	6,505,064	6,282
FHLMC POOL #SD-5297	4,584,404	4,657
NEXTERA ENERGY CAPITAL		
HOLDING	4,480,391	4,490
COMMIT TO PUR GNMA II JUMBOS	4,532,116	4,279
FHLMC POOL #SI-2096	5,004,519	4,124
U S TREASURY BILL	4,051,810	4,050
SOUTHERN CALIFORNIA EDISON		
CO	3,940,149	3,757
Total	308,360,880	\$647,200

Top 10 Core Fixed Income Holdings As of June 30, 2024 (\$ in Thousands)

KERS Nonhazardous Insurance

NENS Normazardous insurance				
Issuer	Shares	Fair Value		
ISHARES CORE U.S. AGGREGATE	612,711	\$59,476		
U S TREASURY NOTE	2,194,682	1,942		
U S TREASURY NOTE	1,357,560	1,386		
U S TREASURY BOND	1,275,827	1,286		
U S TREASURY NOTE	1,286,072	1,284		
U S TREASURY NOTE	1,408,788	1,270		
U S TREASURY BOND	1,232,049	1,200		
U S TREASURY NOTE	1,155,206	1,162		
U S TREASURY NOTE	1,124,469	1,133		
U S TREASURY NOTE	1,193,395	1,101		
Total	12,840,759	\$71,240		

Top 10 Core Fixed Income Holdings As of June 30, 2024 (\$ in Thousands)

KERS Hazardous Pension

Issuer	Shares	Fair Value
ISHARES CORE U.S. AGGREGATE	387,277	\$37,593
U S TREASURY BOND	931,497	939
U S TREASURY NOTE	898,735	904
U S TREASURY NOTE	838,305	856
U S TREASURY BOND	842,966	821
U S TREASURY NOTE	738,119	746
U S TREASURY NOTE	732,810	732
U S TREASURY NOTE	686,148	690
U S TREASURY NOTE	699,486	631
U S TREASURY NOTE	669,487	617
Total	7,424,830	\$44,529

Top 10 Core Fixed Income Holdings As of June 30, 2024 (\$ in Thousands)

KERS Hazardous Insurance

Issuer	Shares	Fair Value
ISHARES CORE U.S. AGGREGATE	244,965	\$23,779
U S TREASURY NOTE	877,446	775
U S TREASURY NOTE	542,760	552
U S TREASURY NOTE	514,178	513
U S TREASURY BOND	510,082	511
U S TREASURY NOTE	563,241	502
U S TREASURY BOND	492,580	472
U S TREASURY NOTE	461,858	463
U S TREASURY NOTE	449,569	445
U S TREASURY NOTE	477,126	439
Total	5,133,805	\$28,451

Top 10 Core Fixed Income Holdings As of June 30, 2024 (\$ in Thousands)

SPRS Pension

Issuer	Shares	Fair Value
ISHARES CORE U.S. AGGREGATE	558,856	\$54,248
U S TREASURY BOND	1,344,189	1,355
U S TREASURY NOTE	1,296,912	1,305
U S TREASURY NOTE	1,209,708	1,236
U S TREASURY BOND	1,216,435	1,185
U S TREASURY NOTE	1,065,136	1,077
U S TREASURY NOTE	1,057,475	1,056
U S TREASURY NOTE	990,140	995
U S TREASURY NOTE	1,009,388	910
U S TREASURY NOTE	966,097	891
Total	10,714,336	\$64,258

Top 10 Core Fixed Income Holdings As of June 30, 2024 (\$ in Thousands)

SPRS insurance		
Issuer	Shares	Fair Value
ISHARES CORE U.S. AGGREGATE	96,406	\$9,358
U S TREASURY NOTE	345,318	306
U S TREASURY NOTE	213,602	218
U S TREASURY BOND	200,742	202
U S TREASURY NOTE	202,354	202
U S TREASURY NOTE	221,663	200
U S TREASURY BOND	193,854	189
U S TREASURY NOTE	181,764	183
U S TREASURY NOTE	176,927	178
U S TREASURY NOTE	187,772	173
Total	2,020,402	\$11,209

Note: A complete list of holdings is located at https://kyret.ky.gov/Investments/Investments-Library/Pages/Investments-Holdings.aspx.

Specialty Credit

For the fiscal year, the Pension Specialty Credit KERS Nonhazardous, Hazardous and SPRS portfolios returned 12.98%, 12.96% and 12.83%, respectively, outperforming the custom benchmark which returned 10.81%. For the Insurance Specialty Credit, KERS Nonhazardous, Hazardous and SPRS portfolios returned 12.89%, 14.37% and 13.60%, respectively, also outperforming the benchmark. Outperformance was a result of credit spreads continuing to tighten as well as an increase in interest rates as the majority of holdings in the private sector is floating rate.

Return on Specialty (As of June 30, 2024	Credit								
	Inception Date	1 Ye	ear	3 Ye	ars	5 Yea	ars	10 Ye	ars
Pension	7/1/2017	Plan	Index	Plan	Index	Plan	Index	Plan	Index
KERS Nonhazardous		12.98%	10.81%	7.38%	3.92%	7.74%	4.76%	6.40%	N/A
KERS Hazardous		12.96%	10.81%	7.70%	3.92%	7.64%	4.76%	6.31%	N/A
SPRS		12.83%	10.81%	7.06%	3.92%	7.26%	4.76%	6.17%	N/A
Insurance	7/1/2017								
KERS Nonhazardous		12.89%	10.81%	7.77%	3.92%	7.47%	4.76%	6.21%	N/A
KERS Hazardous		14.37%	10.81%	8.90%	3.92%	8.26%	4.76%	6.61%	N/A
SPRS		13.60%	10.81%	8.32%	3.92%	7.91%	4.76%	6.43%	N/A

Note: Current Pension and Insurance benchmark is 50% Bloomberg US Corporate High Yield/50% Morningstar LSTA Leveraged Loan. Plan returns are reported gross of fees.

Top 10 Specialty Credit Holdings As of June 30, 2024 (\$ in Thousands)

KERS Nonhazardous Pension

Issuer	Fair Value
CCO HOLDINGS LLC / CCO HO 144A	\$3,450
CAESARS ENTERTAINMENT INC 144A	3,388
TENET HEALTHCARE CORP	2,749
TRANSDIGM INC 144A	2,672
CLOUD SOFTWARE GROUP INC 144A	2,645
ALLIANT HOLDINGS INTERMED 144A	2,535
OLYMPUS WATER US HOLDING 144A	2,113
CLEAR CHANNEL OUTDOOR HOL 144A	1,921
EQM MIDSTREAM PARTNERS LP 144A	1,914
VISTRA OPERATIONS CO LLC 144A	1,884
Total	\$25,271

Top 10 Specialty Credit Holdings As of June 30, 2024 (\$ in Thousands)

KERS Hazardous Pension

112113 1142414345 1 31131311				
Issuer	Fair Value			
SPDR BLOOMBERG SHORT TERM HI	\$443			
CLOUD SOFTWARE GROUP INC 144A	338			
MEDLINE BORROWER LP 144A	290			
ARAMARK 3/24 B8 TL	289			
ARDAGH METAL PACKAGING FI 144A	255			
CLEARWAY ENERGY OPERATING 144A	255			
HUDBAY MINERALS INC 144A	253			
TRANSDIGM INC 144A	249			
AECOM 4/24 TLB	246			
SELECT MEDICAL CORP 144A	237			
Total	\$2.855			

Top 10 Specialty Credit Holdings As of June 30, 2024 (\$ in Thousands)

SPRS Pension

Issuer	Fair Value
CLOUD SOFTWARE GROUP INC 144A	\$248
SPDR BLOOMBERG SHORT TERM HI	235
MEDLINE BORROWER LP 144A	211
CLEARWAY ENERGY OPERATING 144A	186
ARDAGH METAL PACKAGING FI 144A	184
HUDBAY MINERALS INC 144A	184
TRANSDIGM INC 144A	183
SELECT MEDICAL CORP 144A	174
ZOOMINFO TECHNOLOGIES LLC 144A	170
DISH NETWORK CORP 144A	169
Total	\$1,944

Top 10 Specialty Credit Holdings As of June 30, 2024 (\$ in Thousands)

KERS Nonhazardous Insurance

Issuer	Fair Value
CLOUD SOFTWARE GROUP INC 144A	\$610
SPDR BLOOMBERG SHORT TERM HI	556
MEDLINE BORROWER LP 144A	521
ASURION 12/20 B8 COV-LITE TL	504
TRANSDIGM INC 144A	471
INTERNATIONAL GAME TECHNO 144A	468
ARDAGH METAL PACKAGING FI 144A	467
CLEARWAY ENERGY OPERATING 144A	466
LADDER CAPITAL FINANCE HO 144A	454
VISTRA OPERATIONS CO LLC 144A	448
Total	\$4,965

Top 10 Specialty Credit Holdings As of June 30, 2024 (\$ in Thousands)

KERS Hazardous Insurance

Issuer	Fair Value
CLOUD SOFTWARE GROUP INC 144A	\$149
MEDLINE BORROWER LP 144A	129
SPDR BLOOMBERG SHORT TERM HI	117
ARDAGH METAL PACKAGING FI 144A	116
TRANSDIGM INC 144A	115
CLEARWAY ENERGY OPERATING 144A	115
LADDER CAPITAL FINANCE HO 144A	114
VISTRA OPERATIONS CO LLC 144A	110
SELECT MEDICAL CORP 144A	108
HUDBAY MINERALS INC 144A	108
Total	\$1,181

Top 10 Specialty Credit Holdings As of June 30, 2024 (\$ in Th<u>ousands)</u>

SPRS Insurance

Issuer	Fair Value
ARAMARK 3/24 B8 TL	\$84
AECOM 4/24 TLB	67
BURGER KING/RESTAURANT BRANDS	66
CLOUD SOFTWARE GROUP INC 144A	62
HERTZ 6/21 TLB	55
MEDLINE INDUSTRIES/MOZART 6/24	54
MEDLINE BORROWER LP 144A	53
HCA INC	50
SPDR BLOOMBERG SHORT TERM HI	49
U S TREASURY NOTE	48
Total	\$588

Note: A complete list of holdings is located at https://kyret.ky.gov/Investments/Investments-Library/Pages/Investments-Holdings.aspx.

Private Equity

For the fiscal year, the Pension Private Equity portfolio posted gross returns ranging from 2.06% for KERS Nonhazardous to 7.83% for SPRS, while the Insurance Private Equity portfolio gross returns ranged from 7.09% for SPRS to 8.45% for KERS Nonhazardous. The comparative benchmark for all plans was 3.77% for the fiscal year. The Investment Committee acknowledges the difficulty in assessing short-term performance for Private Equity. Performance is typically based on quarterly estimates of each underlying business's value and managers are often slow to mark valuations up or down. This can distort relative performance against a public market benchmark during periods when the index moves dramatically. A better indication of program performance would be the mid-to longer-term time periods because more underlying company holdings have likely transacted at a specific (rather than estimated) valuation. The below chart provides the gross returns for the longer term time periods.

	Inception Date	1 Ye	ar	3 Yea	ars	5 Yea	ars	10 Ye	ars
Pension	7/1/2002	Plan	Index	Plan	Index	Plan	Index	Plan	Index
KERS Nonhazardous		2.06%	3.77%	1.34%	7.82%	11.56%	12.28%	10.17%	15.46%
KERS Hazardous		5.68%	3.77%	11.23%	7.82%	15.08%	12.28%	12.99%	15.46%
SPRS		7.83%	3.77%	7.92%	7.82%	15.34%	12.28%	12.30%	15.46%
Insurance	7/1/2002								
KERS Nonhazardous		8.45%	3.77%	18.09%	7.82%	17.41%	12.28%	13.65%	15.46%
KERS Hazardous		7.63%	3.77%	14.34%	7.82%	14.69%	12.28%	13.88%	15.46%
SPRS		7.09%	3.77%	14.59%	7.82%	15.31%	12.28%	14.16%	15.46%

Russell 3000 + 3%, lagged 1 quarter

Real Estate

For the fiscal year, the Pension and Insurance Real Estate portfolios saw gross returns ranging from (9.80)% in the KERS Hazardous insurance plan to (8.40)% in the KERS Nonhazardous pension plan, exceeding the benchmark return of (12.0)% by all plans.

Return on Real Estate As of June 30, 2024									
	Inception Date	1 Ye	ar	3 Yea	ars	5 Yea	ars	10 Ye	ars
Pension	7/1/1984	Plan	Index	Plan	Index	Plan	Index	Plan	Index
KERS Nonhazardous		(8.40)%	(12.00)%	5.75%	2.47%	7.51%	2.56%	7.59%	5.82%
KERS Hazardous		(9.24)%	(12.00)%	4.85%	2.47%	6.66%	2.56%	7.77%	5.82%
SPRS		(9.07)%	(12.00)%	5.01%	2.47%	6.79%	2.56%	7.75%	5.82%
Insurance	5/1/2009								
KERS Nonhazardous		(8.61)%	(12.00)%	4.57%	2.47%	6.56%	2.56%	7.72%	5.82%
KERS Hazardous		(9.80)%	(12.00)%	4.03%	2.47%	6.22%	2.56%	7.55%	5.82%
SPRS		(9.78)%	(12.00)%	4.05%	2.47%	6.24%	2.56%	7.55%	5.82%

Note: Current Pension and Insurance benchmark is the National Council of Real Estate Investment Fiduciaries Open End Diversified Core Equity (NCREIFODCE) Index, lagged 1 quarter. Plan returns are reported gross of fees.

Real Return

For the fiscal year, the Pension and Insurance Real Return portfolio returns ranged from 13.71% (gross) in the SPRS insurance plan to 17.56% (gross) in the KERS Nonhazardous pension plan. All plan returns exceeded the benchmark return of 6.27%. The below chart provides returns for longer time periods for each plan.

Return on Real Return As of June 30, 2024									
	Inception Date	1 Ye	ar	3 Yea	ars	5 Yea	ars	10 Ye	ars
Pension	7/1/2011	Plan	Index	Plan	Index	Plan	Index	Plan	Index
KERS Nonhazardous		17.56%	6.27%	11.70%	7.11%	10.36%	6.70%	6.17%	4.12%
KERS Hazardous		15.72%	6.27%	10.45%	7.11%	9.00%	6.70%	5.58%	4.12%
SPRS		14.54%	6.27%	10.86%	7.11%	9.16%	6.70%	5.58%	4.12%
Insurance	7/1/2011								
KERS Nonhazardous		14.52%	6.27%	10.29%	6.77%	9.61%	6.72%	5.75%	4.18%
KERS Hazardous		14.04%	6.27%	8.92%	6.77%	8.30%	6.72%	5.12%	4.18%
SPRS		13.71%	6.27%	9.02%	6.77%	8.26%	6.72%	5.11%	4.18%
Note: Current Pension and Insura	nce benchmark is	US CPI + 3%	6. Plan retu	rns are rep	orted gross	of fees.			

Cash

For the fiscal year, the Pension Cash KERS Nonhazardous, Hazardous and SPRS portfolios each returned 5.33% underperforming the FTSE 3-Month US Treasury Bill benchmark which returned 5.64%. For the Insurance Cash, KERS Nonhazardous, Hazardous and SPRS portfolios each returned 5.35% also underperforming the benchmark by 0.29%.

Return on Cash As of June 30, 2024	1								
	Inception Date	1 Ye	ar	3 Yea	ars	5 Ye	ars	10 Ye	ars
Pension	1/1/1988	Plan	Index	Plan	Index	Plan	Index	Plan	Index
KERS Nonhazardous		5.33%	5.64%	2.96%	3.17%	2.18%	2.22%	1.66%	1.53%
KERS Hazardous		5.33%	5.64%	2.96%	3.17%	2.18%	2.22%	1.66%	1.53%
SPRS		5.33%	5.64%	2.96%	3.17%	2.18%	2.22%	1.66%	1.53%
Insurance	7/1/1992								
KERS Nonhazardous		5.35%	5.64%	2.96%	3.17%	2.08%	2.22%	1.54%	1.53%
KERS Hazardous		5.35%	5.64%	2.96%	3.17%	2.08%	2.22%	1.54%	1.53%
SPRS		5.35%	5.64%	2.96%	3.17%	2.08%	2.22%	1.54%	1.53%

Note: Current Pension and Insurance benchmarks are Global Equity: MSCI ACWI; US Equity: Russell 3000; Non-US Equity: MSCI ACWI Ex-US. Plan returns are reported gross of fees.

Additional Schedules

The following schedules contain information on the assets under management for each firm KRS employs and assets managed by Investment Staff, external investment-related expenses, commissions paid, and portfolio summaries for each of the Pension and Insurance Plans for the fiscal year ended June 30, 2024.

As of June 30, 2024 (\$ in T	iiousaiius)						
		Pension			Insurance		
	KERS	KERS	SPRS	KERS	KERS	SPRS	KRS
Advisor/Asset Class		Hazardous			Hazardous		Total
Core Fixed Income	\$1,285,074	\$151,279	\$193,483	\$235,110	\$89,150	\$36,610	\$1,990,706
Lord Abbett & Co.	550	58	84	119	48	19	878
Loomis, Sayles & Company Core	357,744	37,616	54,281	60,389	24,144	9,502	543,676
NISA Investment Advisors	392,157	41,234	59,503	71,908	28,749	11,314	604,865
Internally Managed by KPPA	534,623	72,371	79,615	102,694	36,209	15,775	841,287
Private Equity	\$181,975	\$63,224	\$30,418	\$107,909	\$45,408	\$20,455	\$449,389
Ares	-	1,225	386	-	784	488	2,883
Bay Hills	55,121	9,981	4,577	3,818	4,944	2,754	81,195
Black Diamond	-	3,609	1,138	-	3,006	1,871	9,624
Blackstone	7	845	-	1	860	410	2,123
Crestview	9,194	2,989	1,181	637	1,497	878	16,376
CVC	-	1,359	429	-	855	532	3,175
DAG Ventures	9,096	1,151	599	630	302	134	11,912
Harvest Partners	-	1,811	36	4,690	2,990	1,189	10,716
H.I.G.	1,004	916	197	69	784	411	3,381
Horsley Bridge	28,443	3,597	1,872	1,970	938	417	37,237
Kayne Anderson	-	1,721	-	5,136	3,133	1,214	11,204
Keyhaven	3,023	1,285	483	209	851	512	6,363
Leonard Green	304	2,971	20	3,442	4,483	1,949	13,169
Levine Leichtman	-	2,751	36	7,863	4,869	1,903	17,422
Middle Ground	17,354	7,711	1,997	24,967	5,257	2,069	59,355
New State	1,508	434	174	647	305	119	3,187
Strategic Value Partners	10,414	5,687	1,198	13,327	4,609	1,411	36,646
Triton	-	1,019	321	-	652	406	2,398
Vista	762	2,747	50	4,741	4,289	1,788	14,377
Internally Managed by KPPA	45,745	9,415	15,724	35,762	-	-	106,646
Public Equity	\$1,365,158	\$437,656	\$208,715	\$718,838	\$288,762	\$116,124	\$3,135,253
American Century Investments	77,532	25,470	13,009	45,712	17,066	7,154	185,943
Axiom	18,586	6,106	3,119	11,138	4,158	1,743	44,850
BlackRock	128,328	38,638	13,612	45,951	24,843	8,513	259,885
Franklin Templeton	61,516	20,209	10,322	36,708	13,705	5,745	148,205
JP Morgan Emerging Markets	25,040	8,226	4,201	14,886	5,558	2,330	60,241
Lazard Asset Management	91,631	30,102	15,374	54,306	20,275	8,499	220,187
LSV Asset Management	95,600	31,405	16,040	56,773	21,196	8,885	229,899
Next Century	18,583	6,991	3,662	11,187	4,622	1,871	46,916
Northern Trust	47,098	17,717	9,282	28,133	11,624	4,705	118,559
Pzena Emerging Markets	31,553	10,365	5,294	18,645	6,961	2,918	75,736
River Road Asset Management	47,420	17,839	9,345	30,251	12,499	5,059	122,413
Westfield Capital	60,761	22,857	11,975	39,560	16,345	6,616	158,114
Internally Managed by KPPA	661,510	201,731	93,480	325,588	129,910	52,086	1,464,305
Real Estate	\$218,209	\$58,871	\$35,140	\$96,043	\$42,227	\$16,125	\$466,615
Barings Real Estate	14,200	3,884	1,642	4,626	3,460	1,323	29,135
Fundamental Partners	9,753	2,668	1,128	3,177	2,376	908	20,010

Harrison Street	67,681	12,037	16,927	35,634	11,624	4,452	148,355
Lubert-Adler	1,607	1,206	461	1,321	989	375	5,959
Mesa West	8,158	3,821	1,240	820	613	234	14,886
Patron	2,774	759	321	5,990	5,033	1,891	16,768
Prologis	53,416	14,612	6,176	16,059	12,010	4,591	106,864
Rubenstein	0	323	116	339	254	96	1,128
Stockbridge	24,959	4,969	2,407	7,728	5,451	2,089	47,603
Walton Street	4,206	1,221	413	632	417	166	7,055
Internally Managed by KPPA	31,455	13,371	4,309	19,717	-	-	68,852
Real Return	\$351,337	\$79,593	\$56,449	\$135,281	\$45,320	\$18,428	\$686,408
AMERRA	0	2,964	1,500	3,144	2,549	958	11,115
Arctos	13,082	335	3,354	7,715	336	335	25,157
BTG Pactual	0	1,426	660	1,657	1,123	426	5,292
IFM	12,201	3,758	1,457	5,338	3,003	1,012	26,769
Maritime Partners	29,823	3,242	5,835	12,893	2,482	1,297	55,572
Prisma	18,812	4,908	2,037	6,740	4,475	1,678	38,650
Saba Capital	47,949	7,992	7,991	9,590	5,328	1,066	79,916
Tortoise	57,403	14,378	5,741	16,969	7,760	3,029	105,280
Internally Managed by KPPA	172,067	40,590	27,874	71,235	18,264	8,627	338,657
Specialty Credit	\$792,754	\$231,540	\$125,292	\$379,231	\$152,514	\$61,910	\$1,743,241
Adams Street	54,925	16,056	6,699	22,765	11,561	4,557	116,563
Arrowmark	101,710	31,533	12,563	50,213	31,215	11,527	238,761
Blue Torch	28,404	8,534	3,521	12,015	6,316	2,447	61,237
Benefit Street Partners	18,726	6,726	1,739	10,461	6,317	2,274	46,243
CapitalSpring	16,062	5,769	1,491	7,884	4,761	1,714	37,681
Cerberus	29,513	10,600	2,740	14,485	8,747	3,149	69,234
Columbia Threadneedle Investments	170,117	48,243	34,585	85,062	21,323	8,672	368,002
Manulife Investment Management	38,825	19,021	7,965	24,032	1,035	5,447	96,325
Marathon Asset Management	139,745	23,610	12,617	37,253	22,291	7,696	243,212
Shenkman Capital Management	120,702	37,346	19,855	74,034	15,504	6,571	274,012
Waterfall Asset Management	51,012	15,836	19,381	28,623	15,954	5,159	135,965
White Oak Global Advisors	23,013	8,266	2,136	12,404	7,490	2,697	56,006
Other	\$13,894	\$3,754	\$1,305	\$5,288	\$4,053	\$1,504	\$29,798
Total Assets Under Management	\$4,208,401	\$1,025,917	\$650,802	\$1,677,700	\$667,434	\$271,156	\$8,501,410

External Investment Expenses - Pension Asset Class/Type Breakdown

For the fiscal year ended June 30, 2024 (\$ in Thousands)

	Public	Private	Fixed	Specialty				
KERS Nonhazardous	Equity	Equity	Income	Credit	Cash	Real Return	Real Estate	Total
Investment Advisory Fees	\$2,137	\$387	\$625	\$3,881	\$-	\$873	\$1,417	\$9,320
Performance/Incentive Fees	-	492	34	6,526	-	(66)	(979)	6,007
Securities Lending Fees	27	-	25	17	-	6	-	75
Securities Lending Fee Rebate	1,804	-	952	786	-	191	-	3,733
Miscellaneous Fees & Expenses	40	506	52	7,233	-	392	854	9,077
Administration	-	-	-	-	361	-	-	361
Consultant Fees	-	-	-	-	238	-	-	238
Custodial Fees	-	-	-	-	397	-	-	397
	\$4,008	\$1,385	\$1,688	\$18,443	\$996	\$1,396	\$1,292	\$29,208

	Public	Private	Fixed	Specialty				
KERS Hazardous	Equity	Equity	Income	Credit	Cash	Real Return	Real Estate	Total
Investment Advisory Fees	\$731	\$306	\$83	\$1,110	\$-	\$202	\$380	\$2,812
Performance/Incentive Fees	-	191	4	1,807	-	(9)	(269)	1,724
Securities Lending Fees	9	-	3	5	-	2	-	19
Securities Lending Fee								
Rebate	636	-	117	239	-	48	-	1,040
Miscellaneous	13	240	6	2,174	-	65	238	2,736
Administration	-	-	-	-	93	-	-	93
Consultant Fees	-	-	-	-	59	-	-	59
Custodial Fees	-	-	-	-	97	-	-	97
	\$1,389	\$737	\$213	\$5,335	\$249	\$308	\$348	\$8,580

	Public	Private	Fixed	Specialty				
SPRS	Equity	Equity	Income	Credit	Cash	Real Return	Real Estate	Total
Investment Advisory Fees	\$382	\$68	\$101	\$525	\$-	\$209	\$223	\$1,508
Performance/Incentive Fees	-	26	5	739	-	(36)	(114)	620
Securities Lending Fees	5	-	4	3	-	1	-	13
Securities Lending Fee								
Rebate	329	-	151	159	-	19	-	658
Miscellaneous Fees &								
Expenses	6	68	8	834	-	80	100	1,096
Administration	-	-	-	-	(38)	-	-	(38)
Consultant Fees	-	-	-	-	38	-	-	38
Custodial Fees	-	-	-	-	62	-	-	62
	\$722	\$162	\$269	\$2,260	\$62	\$273	\$209	\$3,957

NOTE: Miscellaneous expenses include Partnership Expenses, Commissions on Future Contracts, Fee for Long balance, and etc.

The Governmental Accounting Standards Board recognizes that it may not be possible or cost-beneficial to separate certain investment 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 Investment staff.

External Investment Expenses - Insurance Asset Class/Type Breakdown For the fiscal year ended June 30, 2024 (\$ in Thousands) **Public Private Fixed** Specialty **KERS Nonhazardous Equity Equity** Income Credit Cash Real Return Real Estate **Total** Investment Advisory Fees \$1,286 \$478 \$132 \$1,734 \$-\$505 \$580 \$4,715 448 8 2,753 (296)2,860 Performance/Incentive Fees (53)Securities Lending Fees 6 10 32 1/ 2

	\$1,999	\$1,364	\$346	\$8,134	\$387	\$709	\$566	\$13,505
Custodial Fees		-	-	-	234	-	-	234
Consultant Fees	-	-	-	-	96	-	-	96
Administration	-	-	-	-	57	-	-	57
Miscellaneous Fees & Expenses	21	438	11	3,197	-	192	282	4,141
Securities Lending Fee Rebate	678	-	189	440	<u>-</u>	63	-	1,370
Securities Lending Fees	14	-	О	10	-		-	32

KERS Hazardous	Public Equity	Private Equity	Fixed Income	Specialty Credit	Cash I	Real Return	Real Estate	Total
Investment Advisory Fees	\$501	\$314	\$54	\$828	\$-	\$155	\$356	\$2,208
Performance/Incentive Fees	-	349	3	1,641	-	(6)	(221)	1,766
Securities Lending Fees	6	-	2	2	-	1	-	11
Securities Lending Fee								
Rebate	275	-	76	96	-	29	-	476
Miscellaneous Fees &								
Expenses	8	210	4	1,612	-	53	211	2,098
Administration	-	-	-	-	133	-	-	133
Consultant Fees	-	-	-	-	40	-	-	40
Custodial Fees	-	-	-	-	94	-	-	94
	\$790	\$873	\$139	\$4,179	\$267	\$232	\$346	\$6,826

	Public	Private	Fixed	Specialty				
SPRS	Equity	Equity	Income	Credit	Cash I	Real Return	Real Estate	Total
Investment Advisory Fees	\$207	\$135	\$21	\$313	\$-	\$66	\$135	\$877
Performance/Incentive Fees	-	109	1	595	-	(5)	(84)	616
Securities Lending Fees	3	-	1	1	-	0	-	5
Securities Lending Fee								
Rebate	112	-	30	56	-	11	-	209
Miscellaneous	3	99	2	631	-	24	81	840
Administration	-	-	-	-	47	-	-	47
Consultant Fees	-	-	-	-	16	-	-	16
Custodial Fees	-	-	-	-	38	-	-	38
	\$325	\$343	\$55	\$1,596	\$101	\$96	\$132	\$2,648

NOTE: Miscellaneous expenses include Partnership Expenses, Commissions on Future Contracts, Fee for Long balance, and etc.

The Governmental Accounting Standards Board recognizes that it may not be possible or cost-beneficial to separate certain investment 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 Investment Staff.

External Expenses							
For the fiscal year ended June 30, 2024 (\$ in Thousands)	KERS Nonha	zardous	KERS Haza	ardous	SPRS		
Expense	Fees Paid	Share of Total	Fees Paid	Share of Total	Fees Paid	Share of Total	
Portfolio Management							
Pension Plans	\$24,765	57.98%	\$7,365	47.81%	\$3,186	48.24%	
Insurance Plans	11,773	27.56%	6,205	40.28%	2,380	36.03%	
Securities Lending							
Pension Plans	3,808	8.92%	1,059	6.87%	671	10.16%	
Insurance Plans	1,402	3.28%	487	3.16%	214	3.24%	
Custody							
Pension Plans	397	0.93%	97	0.63%	62	0.94%	
Insurance Plans	234	0.55%	94	0.61%	38	0.58%	
Consultant							
Pension Plans	238	0.56%	59	0.38%	38	0.57%	
Insurance Plans	96	0.22%	40	0.26%	16	0.24%	
Total Pension Plans	29,208	68.38%	8,580	55.69%	3,957	59.91%	
Total Insurance Plans	13,505	31.62%	6,826	44.31%	2,648	40.09%	
Total Expenses	\$42,713	100.00%	\$15,406	100.00%	\$6,605	100.00%	

Schedule of Commissions Paid (in whole \$)			
For the fiscal year ended June 30, 2024			
KERS Nonhazardous			
Assets	Total Shares	Commissions Paid	Price per Share
U.S. Equities	7,722,670	\$146,262	0.0189
Non U.S. Equities	65,155,947	\$312,594	0.0048
Total	72,878,617	\$458,857	0.0063
KERS Hazardous			
Assets	Total Shares	Commissions Paid	Price per Share
U.S. Equities	2,841,637	\$52,825	0.0186
Non U.S. Equities	22,257,495	\$107,030	0.0048
Total	25,099,133	\$159,855	0.0064
SPRS			
Assets	Total Shares	Commissions Paid	Price per Share
U.S. Equities	1,335,111	\$25,991	0.0195
Non U.S. Equities	10,672,576	\$51,151	0.0048
Total	12,007,687	\$77,142	0.0064

	KERS Non	hazardous	KERS H	azardous	SPF	RS	Total		
Pension Plans	Fair Value	% of Total FV	Fair Value	% of Total FV	Fair Value	% of Total FV	Fair Value	% of Total FV	
Equity									
Public Equity	\$1,365,159	32.44%	437,656	42.66%	208,715	32.07%	\$2,011,530	34.18%	
Private Equity	195,286	4.64%	66,130	6.44%	31,552	4.85%	\$292,968	4.98%	
Fixed Income									
Core Fixed Income	1,108,019	26.33%	116,505	11.36%	168,122	25.83%	\$1,392,646	23.66%	
Specialty Credit	792,754	18.84%	231,541	22.57%	125,292	19.25%	\$1,149,587	19.53%	
Cash	176,951	4.20%	34,749	3.39%	25,345	3.90%	\$237,045	4.03%	
Inflation Protected									
Real Estate	218,209	5.19%	59,021	5.75%	35,194	5.41%	\$312,424	5.31%	
Real Return	352,023	8.36%	80,315	7.83%	56,582	8.69%	\$488,920	8.31%	
TOTAL PORTFOLIO	\$4,208,401		\$1,025,917		\$650,802		\$5,885,120		

	KERS Non	hazardous	KERS Ha	azardous	SPF	RS	Total		
						% of Total		% of Total	
Insurance Plans	Fair Value	% of Total FV	Fair Value	% of Total FV	Fair Value	FV	Fair Value	FV	
Equity									
Public Equity	\$718,838	42.85%	\$288,762	43.27%	\$116,124	42.83%	\$1,123,724	42.95%	
Private Equity	\$111,770	6.66%	\$48,804	7.31%	\$21,728	8.01%	\$182,302	6.97%	
Fixed Income									
Core Fixed Income	\$191,909	11.44%	\$76,727	11.50%	\$30,196	11.14%	\$298,832	11.42%	
Specialty Credit	\$379,231	22.60%	\$152,514	22.85%	\$61,910	22.83%	\$593,655	22.69%	
Cash	\$43,201	2.58%	\$12,423	1.86%	\$6,414	2.37%	\$62,038	2.37%	
Inflation Protected									
Real Estate	\$96,199	5.73%	\$42,344	6.34%	\$16,169	5.96%	\$154,712	5.91%	
Real Return	\$136,552	8.14%	\$45,860	6.87%	\$18,615	6.86%	\$201,027	7.69%	
TOTAL PORTFOLIO	\$1,677,700		\$667,434		\$271,156		\$2,616,290		

ACTUARIAL TABLE OF CONTENTS

- 106 CERTIFICATION OF ACTUARIAL RESULTS
- 110 SUMMARY OF ACTUARIAL ASSUMPTIONS
- 116 SUMMARY OF ACTUARIAL VALUATION RESULTS
- 117 RECOMMENDED EMPLOYER CONTRIBUTION RATES
- 119 SUMMARY OF ACTUARIAL UNFUNDED LIABILITIES
- 122 SOLVENCY TEST
- 125 MEMBER VALUATION
- 127 SUMMARY OF BENEFIT PROVISIONS KERS & SPRS PLANS



Certification of Actuarial Results

Re: Certification for the Actuarial Results as of June 30, 2024.

Dear Board of Trustees:

Actuarial valuations are prepared annually as of June 30, for the Kentucky Employees Retirement System (KERS) and the State Police Retirement System (SPRS). These reports describe the current actuarial condition of the Systems and document the calculated employer contribution requirements as well as the changes in the financial condition since the prior actuarial valuation.

The results of the actuarial valuation for KERS and SPRS, including the calculated employer contribution requirement, will be used by the Board of Trustees of the Kentucky Retirement Systems (KRS) and stakeholders for informational purposes only as the employer contribution rate for the fiscal years ended June 30, 2025 and June 30, 2026 were certified in the June 30, 2023 actuarial valuation, which was adopted by the Board and incorporated in the Commonwealth's budget for the biennium period.

These contributions are calculated based on the membership data and plan assets as of June 30, 2024. These calculations are also based on the benefit provisions in effect as of June 30, 2024.

FINANCING OBJECTIVES AND FUNDING POLICY

The Kentucky Public Pensions Authority (KPPA) administers pension and health insurance funds to provide for monthly retirement income and retiree health insurance benefits. The total employer contribution requirement is composed of a contribution to each respective fund.

The employer contribution for KERS and SPRS is determined in accordance with Section 61.565 of Kentucky Statute. As specified by the Statute, the employer contribution is composed of a normal cost contribution and an actuarial accrued liability contribution. The actuarial accrued liability contribution is calculated by amortizing the unfunded accrued liability as of June 30, 2019 over a closed 30-year amortization period (25 years remaining as of June 30, 2024). Gains and losses incurring in years after June 30, 2019 are amortized as separate, closed 20-year amortization bases.

If the contributions made are equal to the Actuarially Determined Contribution (ADC), and if all actuarial assumptions are met, there will not be an unfunded accrued liability at the end of the 25-year period remaining from the original closed 30-year amortization base. Accordingly, the ADC under the funding policy can be considered a "Reasonable Actuarially Determined Contribution" as required by the Actuarial Standards of Practice.

House Bill 8 passed during the 2021 legislative session and changed how employer contributions are allocated and collected from the participating employers in the KERS nonhazardous fund. Each employer will pay a normal cost contribution on the payroll of their covered employees and contribute to the fund an allocated share of the cost required to amortize the unfunded liability.



HB 1 and HB 604 were enacted in the 2022 legislative session and provided an additional \$240 million in appropriations to finance the unfunded actuarial accrued liability of the KERS nonhazardous retirement fund in FY 2024. The previous year's valuation reflected the appropriations for FY 2024 in the calculated contribution requirement.

HB 1 and HB 6 were enacted in the 2024 legislative session and provided an additional \$300 million in appropriations to finance the unfunded actuarial accrued liability of the KERS nonhazardous retirement fund in FY 2025 and FY 2026. HB 1 also provided an additional \$25 million to finance the unfunded actuarial accrued liability of the SPRS retirement fund in FY 2025 and FY 2026. The appropriations for FY 2025 have been reflected in the contribution requirement in this year's valuation. The appropriations for FY 2026 will be reflected in the contribution requirement in next year's valuation.

PROGRESS TOWARD REALIZATION OF FINANCING OBJECTIVES

The funded ratio (the ratio of the actuarial value of assets to the actuarial accrued liability) is a standard measure of a plan's funded status. In the absence of benefit improvements, assumption changes, or actuarial losses, it should increase over time, until it reaches at least 100%. As of June 30, 2024, the funded ratios for the pension and health insurance plans are as follows:

Funding Lev	Funding Level As of June 30											
	2024		2023		2022		2021		2020		2019	
System	Pension	Insurance	Pension	Insurance	Pension	Insurance	Pension	Insurance	Pension	Insurance	Pension	Insurance
KERS												
Nonhazardous	24.8%	81.7%	21.8%	81.7%	18.5%	79.1%	16.8%	50.2%	14.2%	42.7%	13.4%	36.3%
KERS												
Hazardous	68.3%	171.9%	65.4%	170.4%	63.2%	172.2%	60.4%	135.5%	55.3%	126.0%	54.8%	123.1%
SPRS	56.7%	104.9%	54.0%	100.5%	52.5%	100.6%	30.7%	82.0%	28.1%	75.0%	27.0%	71.3%

ASSUMPTIONS AND METHODS

The Boards of Trustees, in consultation with the actuary, set the actuarial assumptions and methods used in the actuarial valuation. In general, the assumptions used in the June 30, 2024 actuarial valuations were adopted for first use in the June 30, 2023 actuarial valuations and are based on the experience study conducted through June 30, 2022.

In our opinion, all the assumptions and methods used for funding purposes adopted by the Board's Trustees satisfy the requirements in the Actuarial Standards of Practice that are applicable for actuarial valuations of public retirement systems.

It is also our opinion that the actuarial assumptions used to perform these valuations are internally consistent and reasonably reflect the anticipated future experience of the Systems. The results of the actuarial valuation



are dependent on the actuarial assumptions used. Actual results can, and almost certainly will, differ as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution requirements, and funding periods. The actuarial calculations are intended to provide information for rational decision making.

ADDITIONAL DISCLOSURES

The benefit structure is outlined in this section of the annual report. GRS prepared the following schedules in the actuarial section: Summary of Actuarial Valuation Results, Recommended Employer Contribution Rates, Summary of Actuarial Unfunded Liabilities, the Solvency Test, the Summary of Active Member Valuation Data, the Summary of Retired Member Valuation Data, Summary of the Assumptions and Methods, and the Summary of the Benefit Provisions.

In addition, GRS prepared the following schedules in the financial section in accordance with GASB Statement No. 67: Net Pension Liability Schedule, Discount Rate Sensitivity Analysis, Schedule of Changes in the Employers' Net Pension Liability, Schedule of Employers' Net Pension Liability, and the Schedule of Employers' Contributions.

DATA

Member data for retired, active and inactive members was supplied as of June 30, 2024, by KPPA staff. The staff also supplied asset information as of June 30, 2024. We did not audit this data, but we did apply a number of tests to the data, and we concluded that it was reasonable and consistent with the prior year's data. GRS is not responsible for the accuracy or completeness of the information provided to us by KPPA.

CERTIFICATION

We certify that the information presented herein is accurate and fairly portrays the actuarial position of the Retirement Systems as of June 30, 2024. All of our work conforms with generally accepted actuarial principles and practices, and in conformity with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of Kentucky Code of Laws and, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board.

To the best of our knowledge, this report is complete and accurate and is in accordance with generally recognized actuarial practices and methods. Mr. White and Ms. Shaw are Enrolled Actuaries. All three of the undersigned are members of the American Academy of Actuaries and meet all of the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. In addition, all three are independent of KPPA and are experienced in performing valuations for large public retirement systems. This communication shall not be construed to provide tax advice, legal advice or investment advice.

Sincerely,



Gabriel, Roeder, Smith & Co.

Daniel J. White, FSA, EA, MAAA

Senior Consultant

Sainel T Wale

Janie Shaw, ASA, EA, MAAA

Consultant

Kuzsi Kiesel

Krysti Kiesel, ASA, MAAA

Consultant

Summary of Actuarial Assumptions

The results of the actuarial valuation are based upon the assumptions and funding policies adopted by the Boards 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. In general, the assumptions and methods used in the June 30, 2024 valuation are based on the most recent actuarial experience study performed as of June 30, 2022, submitted, and adopted by the Board in June 2023.

- 1. Actuarial Cost Method: The actuarial valuation was prepared using the entry age normal cost (EANC) method as required by state statute. Under this method, the present value of future benefits is determined for each member and allocated equitably as a level percentage of payroll from the member's entry age into the plan to the assumed age of exit from the plan. The portion of the present value of future benefits allocated to the current valuation year is called the normal cost. The portion of the present value of future benefits allocated to prior years of service is called the actuarial accrued liability. The unfunded actuarial accrued liability represents the difference between the actuarial accrued liability and the actuarial value of assets as of the valuation date. Relative to the pension fund and the insurance fund, an employer contribution has been established to pay for both the normal cost and the amount needed to amortize the unfunded actuarial accrued liability (UAAL).
- 2. UAAL Amortization Method: Effective for the June 30, 2019 valuation, the actuarial accrued liability contribution is calculated by amortizing the unfunded accrued liability as of June 30, 2019 over a closed 30-year amortization period. Gains and losses incurring in future years are amortized as separated closed 20-year amortization bases. This amortization cost is calculated using a 0.00% payroll growth assumption for the KERS and SPRS Funds. Effective for fiscal years ended June 30, 2022 and later, the amortization cost for the KERS Nonhazardous funds is allocated amongst employers as a dollar amount based on the employers' actuarial accrued liability as of June 30, 2019. The amortization cost for the remaining funds is divided by covered payroll and included in the contribution rate, payable by employers as a percentage of pay.
- 3. Asset Valuation Method: The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the investment return assumption. The amount recognized each year is 20% of the difference between market value and expected market value.
- **4. Retiree Insurance Funding Policy:** Effective for the June 30, 2019 valuation, the actuarial accrued liability contribution is calculated by amortizing the unfunded accrued liability as of June 30, 2019, over a closed 30-year amortization period. Gains and losses incurring in future years are amortized as separated closed 20-year amortization bases. This amortization cost is calculated using a 0.00% payroll growth assumption for the KERS and SPRS Funds. Effective for fiscal years ended June 30, 2022 and later, the amortization cost for the KERS Nonhazardous funds is allocated amongst employers as a dollar amount based on the employers' actuarial accrued liability as of June 30, 2019. The amortization cost for the remaining funds is divided by covered payroll and included in the contribution rate, payable by employers as a percentage of pay.
- **5. Investment Return Assumption:** The future investment earnings of plan assets are assumed to accumulate at a rate of 6.50% per annum for all Insurance Systems. This rate consists of a 2.50% price inflation component and a 4.00% real rate of return component. The assumed rate of return for the KERS Hazardous pension fund is 6.25% and consists of a 2.50% inflationary component and a 3.75% real rate of return component. The assumed rate of return for the KERS Nonhazardous pension fund and the SPRS pension fund is 5.25% and consist of a 2.50% inflationary component and a 2.75% real rate of return component. This assumption was adopted in 2023.
- **6. Salary Increase Assumptions:** Active member salaries are assumed to increase at the rates provided in Table 1. The rates include a price inflation and productivity component, and an additional increase due to promotion based upon plan experience. The price inflation component is 2.50% for all plans and the productivity component is 0.80% for the nonhazardous system and 1.05% for the hazardous system. This assumption was adopted in 2023.

Table 1. Salary I	ncrease Assumptions			
Service		KERS Nonhazardous	KERS Hazardous	SPRS
0		15.30%	20.05%	16.05%
1		6.80%	7.55%	8.55%
2		6.05%	6.55%	7.55%
3		5.80%	6.55%	5.55%
4		5.30%	5.55%	5.55%
5		4.80%	5.05%	5.55%
6		4.55%	4.55%	5.55%
7		4.30%	4.05%	4.55%
8		4.05%	4.05%	4.55%
9		3.80%	3.55%	3.55%
10		3.80%	3.55%	3.55%
11		3.30%	3.55%	3.55%
12		3.30%	3.55%	3.55%
13		3.30%	3.55%	3.55%
14		3.30%	3.55%	3.55%
15		3.30%	3.55%	3.55%
16+		3.30%	3.55%	3.55%

- 7. Payroll Growth Assumption: For purposes of determining the amortization cost to finance the unfunded actuarial accrued liability, the active member payroll (or amortization payments for the KERS Nonhazardous fund) is assumed to increase at a rate of 0.00% per annum. This assumption was adopted in 2017.
- **8. Retiree Cost of Living Adjustments (COLA):** SB2 only allows the Cost of Living Adjustments (COLAs) to be awarded on a biennial basis if the State Legislature so authorizes and either (i) the system is over 100% funded or (ii) the Legislature appropriates sufficient funds to pay the increased liability for the COLA.

9. Health Care Cost Trend Rate:

The costs for retiree medical premiums are assumed to increase according to the assumptions provided in Table 2.

Table 2: Health Care Cost Trend Rate (See footnotes 1-2)									
Year	Non-Medicare Plans (1)	Medicare Plans (1)	Dollar Contribution (2)						
2026	7.10%	8.00%	1.50%						
2027	7.00%	8.00%	1.50%						
2028	6.80%	8.00%	1.50%						
2029	6.60%	7.50%	1.50%						
2030	6.40%	7.00%	1.50%						
2031	6.20%	6.50%	1.50%						
2032	6.00%	6.00%	1.50%						
2033	5.80%	5.50%	1.50%						
2034	5.60%	5.00%	1.50%						
2035	5.40%	4.50%	1.50%						
2036	5.20%	4.25%	1.50%						
2037	5.00%	4.25%	1.50%						
2038	4.75%	4.25%	1.50%						
2039	4.50%	4.25%	1.50%						
2040+	4.25%	4.25%	1.50%						

⁽¹⁾ All increases are assumed to occur on January 1. The 2025 premiums were known at the time of the June 30, 2024, valuation and were incorporated into the liability measurement.

⁽²⁾ Applies to members participating on or after July 1, 2003. All increases are assumed to occur on July 1.

10. Retirement Rate Assumptions:

The probability, or the likelihood, that a member will retire at a specified age or level of service is provided in Table 3. These assumptions were adopted in 2023.

		Nonhazaro	lous			Hazardous				
	Normal R	etirement	Early Ret	irement ⁽¹⁾		Members pa before 9/		Members participating between 9/1/2008 and	Members participating after	
Age	Male	Female	Male	Female	Service	Age 55-61	Age 62+	1/1/2014(3)	1/1/2014(3)	
Under 45	20.00%	33.00%			5	10.00%	35.00%			
45	21.00%	33.00%			6	10.00%	35.00%			
46	22.00%	33.00%			7	10.00%	35.00%			
47	23.00%	33.00%			8	10.00%	35.00%			
48	24.00%	33.00%			9	10.00%	35.00%			
49	25.00%	33.00%			10	10.00%	35.00%			
50	26.00%	33.00%			11	10.00%	35.00%			
51	27.00%	33.00%			12	10.00%	35.00%			
52	28.00%	33.00%			13	10.00%	35.00%			
53	29.00%	33.00%			14	10.00%	35.00%			
54	30.00%	33.00%			15	10.00%	35.00%			
55	30.00%	33.00%	5.00%	5.00%	16	10.00%	35.00%			
56	30.00%	33.00%	5.00%	5.00%	17	10.00%	35.00%			
57	30.00%	33.00%	5.00%	5.00%	18	10.00%	35.00%			
58	30.00%	33.00%	5.00%	5.00%	19	10.00%	35.00%			
59	30.00%	33.00%	5.00%	5.00%	20	50.00%	50.00%			
60	30.00%	33.00%	5.00%	8.00%	21	32.00%	32.00%			
61	30.00%	33.00%	8.00%	9.00%	22	32.00%	32.00%			
62	35.00%	35.00%	15.00%	20.00%	23	32.00%	32.00%			
63	30.00%	33.00%	15.00%	18.00%	24	32.00%	32.00%			
64	30.00%	33.00%	15.00%	16.00%	25	32.00%	32.00%	25.60%	16.00%	
65	30.00%	33.00%			26	32.00%	32.00%	25.60%	16.00%	
66	30.00%	33.00%			27	32.00%	32.00%	25.60%	16.00%	
67	30.00%	33.00%			28	32.00%	32.00%	25.60%	16.00%	
68	30.00%	33.00%		İ	29	32.00%	32.00%	25.60%	16.00%	
69	30.00%	33.00%			30+	32.00%	32.00%	25.60%	100.00%	
70	30.00%	33.00%					<u> </u>			
71	30.00%	33.00%							1	
72	30.00%	33.00%							1	
73	30.00%	33.00%					1			
74	30.00%	33.00%					1			
75	100.00%	100.00%								

⁽¹⁾ The annual rate of retirement is 12% for male members and 14% for female members with 25-26 years of service.

Nonhazardous System: There is a 1% increase in the first two years a member becomes eligible under the age of 65. For members hired after 7/1/2003, the rates shown above are multiplied by 80% if the member is under age 65 to reflect the different retiree health insurance benefit.

Hazardous System: For members hired after 7/1/2003 and prior to 9/1/2008, the rates shown above are multiplied by 80% if the member is under age 65 to reflect the different retiree health insurance benefit.

⁽²⁾ The annual rate of retirement is 100% at age 65.

⁽³⁾ The annual rate of retirement is 100% at age 60.

Table 3c: Retirement Rate Assumptions SPRS (See footnotes 1 - 2)

	Hazardous						
Service	Members Participating before 9/1/2008 ⁽¹⁾	Members participating between 9/1/2008 and 1/1/2014 ⁽²⁾	Members participating after 1/1/2014 ⁽²⁾				
20	22.00%						
21	22.00%						
22	22.00%						
23	28.00%						
24	28.00%						
25	28.00%	17.60%	16.00%				
26	28.00%	17.60%	16.00%				
27	28.00%	17.60%	16.00%				
28	44.00%	22.40%	16.00%				
29	44.00%	22.40%	16.00%				
30	44.00%	22.40%	100.00%				
31	58.00%	22.40%					
32	58.00%	22.40%					
33	58.00%	35.20%					
34	58.00%	35.20%					
35	58.00%	35.20%					
36	58.00%	46.40%					
37	58.00%	46.40%					
38	58.00%	46.40%					
39	58.00%	46.40%					
40+	58.00%	46.40%					

⁽¹⁾ The annual rate of service retirement is100% at age 55.

For members hired after 7/1/2003 and prior to 9/1/2008, the rates shown above are multiplied by 80% if the member is under age 55 to reflect the different retiree health insurance benefit.

⁽²⁾ The annual rate of service retirement is 100% at age 60.

11. Mortality Assumptions: Pre-retirement mortality: PUB-2010 General Mortality table, for the Nonhazardous Systems, and the PUB-2010 Public Safety Mortality table for the Hazardous Systems, projected with the ultimate rates from the MP-2020 mortality improvement scale using a base year of 2010.

Post-retirement mortality (non-disabled): System-specific mortality table based on mortality experience from 2013-2022, projected with the ultimate rates from MP-2020 mortality improvement scale using a base year of 2023.

Table 4a provides the life expectancy for a non-disabled retiree in future years based on the assumption with full generational projection.

Post-retirement mortality (disabled): PUB-2010 Disabled Mortality table, with rates multiplied by 150% for both male and female rates, projected with the ultimate rates from the MP-2020 mortality improvement scale using a base year of 2010.

These mortality assumptions were adopted in 2023. Table 4b provides sample annual rates of mortality in the base year of each table (2023 for the retired member mortality rates and 2010 for the active member and disabled member mortality rates).

Table 4a: Life Expectancy for an Age 65 Retiree in Years										
Year of Retirement										
Gender	2025	2030	2035	2040	2045					
Male	19.8	20.2	20.6	21.0	21.3					
Female	22.4	22.7	23.1	23.4	23.7					

	Active Mem	ber Mortality	Active Mem	ber Mortality				
	Nonha	zardous	Haza	ardous	Retired Men	nber Mortality	Disabled Mei	nber Mortality
Age	Males	Females	Males	Females	Males	Females	Males	Females
20	0.04%	0.01%	0.04%	0.02%	0.03%	0.01%	0.62%	0.35%
22	0.03%	0.01%	0.04%	0.02%	0.03%	0.01%	0.53%	0.29%
32	0.04%	0.02%	0.04%	0.03%	0.04%	0.02%	0.59%	0.46%
42	0.08%	0.04%	0.07%	0.06%	0.07%	0.04%	1.14%	1.13%
52	0.18%	0.10%	0.14%	0.10%	0.32%	0.21%	2.73%	2.38%
62	0.37%	0.22%	0.32%	0.19%	0.94%	0.55%	4.02%	3.08%
72	0.84%	0.60%	0.98%	0.60%	2.38%	1.48%	6.52%	4.86%

12. Withdrawal Rates: The probability, or likelihood, of active members terminating employment prior to retirement is provided in Table 5. The rates below include the pre-retirement mortality rates described in item #11. These assumptions were adopted in 2023.

	KERS Nonhazardous	KERS Hazardous		SPRS
ears of Service			Years of Service	
1	22.00%	32.50%	1	15.00%
2	18.10%	25.58%	2	5.30%
3	14.73%	19.66%	3	4.14%
4	12.77%	16.19%	4	3.47%
5	11.37%	13.73%	5	2.98%
6	10.29%	11.82%	6	2.61%
7	9.41%	10.26%	7	2.30%
8	8.66%	8.93%	8	2.05%
9	8.01%	7.79%	9	1.83%
10	7.44%	6.79%	10	1.63%
11	6.93%	5.89%	11	1.45%
12	6.47%	5.07%	12	1.29%
13	6.04%	4.33%	13	1.14%
14	5.65%	3.64%	14	1.01%
15	5.29%	3.00%	15	0.88%
16	4.96%	2.42%	16	0.77%
17	4.64%	1.86%	17	0.66%
18	4.36%	1.34%	18	0.56%
19	4.07%	0.86%	19	0.46%
20	3.82%	0.39%	20	0.37%
21	3.56%	0.00%	21	0.00%
22	3.32%	0.00%	22	0.00%
23	3.10%	0.00%	23	0.00%
24	2.88%	0.00%	24	0.00%
25	2.67%	0.00%	25	0.00%
26+	0.00%	0.00%	26+	0.00%

13. Rates of Disablement: KERS/SPRS provide disability benefits for those individuals meeting specific qualifications established by state law. This assumption provides the probability, or likelihood, that a member will become disabled during the course of employment for various age levels. These assumptions were adopted in 2023.

Table 6: Sample Rates of Disablement										
	KERS Nonhazardous	KERS Hazardous	SPRS							
Nearest Age	Probability	Probability	Probability							
20	0.03%	0.05%	0.05%							
30	0.05%	0.08%	0.09%							
40	0.11%	0.18%	0.20%							
50	0.31%	0.50%	0.56%							
60	0.80%	1.32%	1.46%							

14. Assumption Changes Since Prior Valuation: In conjunction with the review of the healthcare per capita claims cost, the assumed increase in future healthcare costs, or trend assumption, is reviewed on an annual basis. The trend assumption for the non-Medicare Plans was increased during the select period and the ultimate trend assumption was increased for all plans as a result of this review.

Summary of Actuarial Valuation Results

		KERS	
	KERS Nonhazardous	Hazardous	SPRS
Recommended Contribution Rate (FY 2026)			
Pension Fund Contribution	6.85%	20.68%	57.91%
Insurance Fund Contribution	1.14%	0.00%	1.46%
Actuarially Determined Employer Contributions Rate ⁽¹⁾ , payable as a percentage of payroll	7.99%	20.68%	59.37%
Amortization Cost to be Allocated, if applicable	\$865,810,060	N/A	N/A
Funded Status as of Valuation Date As	of June 30, 2024 (in Who	ole \$)	
Pension Fund			
Actuarial Liability	\$16,647,892,788	\$1,442,618,733	\$1,112,310,302
Actuarial Value of Assets	4,122,268,538	985,075,014	631,185,635
Unfunded Liability on Actuarial Value of Assets	12,525,624,250	457,543,719	481,124,667
Funding Ratio on Actuarial Value of Assets	24.76%	68.28%	56.75%
Market Value of Assets	4,223,935,798	1,019,889,950	651,789,660
Unfunded Liability on Market Value of Assets	\$12,423,956,990	\$422,728,783	\$460,520,642
Funding Ratio on Market Value of Assets	25.37%	70.70%	58.60%
Insurance Fund			
Actuarial Liability	\$2,094,743,197	\$379,567,892	\$251,177,950
Actuarial Value of Assets	1,712,043,266	652,348,960	263,368,832
Unfunded Liability on Actuarial Value of Assets	382,699,931	(272,781,068)	(12,190,882
Funding Ratio on Actuarial Value of Assets	81.73%	171.87%	104.85%
Market Value of Assets	1,765,729,242	677,948,093	273,516,528
Unfunded Liability on Market Value of Assets	\$329,013,955	\$(298,380,201)	\$(22,338,578
Funding Ratio on Market Value of Assets	84.29%	178.61%	108.89%
Member Data (See Footnotes)			
Number of Active Members	32,455	4,154	872
Total Annual Payroll (Active Members) ⁽²⁾	\$1,861,521,817	\$259,606,371	\$73,294,873
Average Annual Pay (Active Members)	\$57,357	\$62,496	\$84,054
Number of Retired Members & Beneficiaries	48,474	4,934	1,670
Average Annual Retirement Allowance	\$20,305	\$15,451	\$37,364
Number of Vested Inactive Members	30,641	2,343	345
Number of Inactive Members Due a Refund	26,113	6,637	40:

⁽¹⁾ For the KERS Nonhazardous fund, contribution rate includes the normal cost portion of the contribution requirement only. Amortization cost will be allocated to employers as a dollar amount.

⁽²⁾ 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 ended June 30, 2024.

Recommended Employer Contribution Rates

KERS Plans

The contribution rates for KERS Nonhazardous and KERS Hazardous shown in the tables below are the full funding rates presented by the actuary for 2014 through 2023 annual valuations. However, actual employer contributions were less than the recommended rates for years 2009 through 2014. SB 2 (2013 Legislative Regular Session) required full funding starting in fiscal year 2015. HB 265 from the 2018 legislative session reduced the employer contribution rate for KERS quasi-governmental agencies to the fiscal year 2018 rate for fiscal year 2019, which was 49.47%. The 2019 Special Legislative Session HB 1 sets the employer contribution rate at 49.47%, retroactive to July 1, 2019, for fiscal year 2020 for KERS quasi-governmental agencies. House Bill 8 passed during the 2021 legislative session and changed how employer contributions are allocated and collected from the participating employers in the KERS Nonhazardous Fund. Each employer will pay a normal cost contribution on the payroll of their covered employees and contribute to the fund an allocated share of the cost required to amortize the unfunded liability.

	Recommended Employer Contribution Rates As of June 30										
KERS No	onhazardoi	us Employers	3								
Valuation Date	Applicable Fiscal Year	Pension Fund Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Contribution					
2015	2016-2017	3.60%	35.33%	38.93%	8.35%	47.28%					
2016	2017-2018	4.93%	37.05%	41.98%	8.41%	50.39%					
2017	2018-2019	8.17%	62.86%	71.03%	12.40%	83.43%					
2018	2019-2020	7.98%	66.56%	74.54%	10.65%	85.19%					
2019	2020-2021	7.99%	65.29%	73.28%	11.15%	84.43%					
Valuation Date	Applicable Fiscal Year	Pension Fund Normal Cost	Insurance Fund: Normal Cost	Normal Cost Contribution	Amortization Cost	to be Allocated					
2020	2021-2022	7.90%	2.20%	10.10%	\$1,039,8	49,248					
2021	2022-2023	7.82%	2.15%	9.97%	\$994,42	1,476					
2022	2023-2024	7.74%	1.86%	9.60%	\$905,89	2,818					
2023	2024-2025	6.99%	1.45%	8.44%	\$856,56	1,041					
2024	2025-2026	6.85%	1.14%	7.99%	\$865,81	0,060					

KERS H	azardous E	mployers				
Valuation Date	Applicable Fiscal Year	Pension Fund Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Contribution
2015	2016-2017	6.93%	14.15%	21.08%	2.74%	23.82%
2016	2017-2018	6.44%	14.04%	20.48%	1.34%	21.82%
2017	2018-2019	9.67%	24.72%	34.39%	2.46%	36.85%
2018	2019-2020	9.24%	25.18%	34.42%	0.00%	34.42%
2019	2020-2021	9.21%	26.79%	36.00%	0.00%	36.00%
2020	2021-2022	8.84%	24.59%	33.43%	0.00%	33.43%
2021	2022-2023	8.78%	23.04%	31.82%	0.00%	31.82%
2022	2023-2024	8.60%	21.52%	30.12%	0.00%	30.12%
2023	2024-2025	7.71%	16.03%	23.74%	0.00%	23.74%
2024	2025-2026	7.57%	13.11%	20.68%	0.00%	20.68%

The contribution rates for KERS Nonhazardous and KERS Hazardous shown in the above tables are the full funding rates presented by the actuary in the 2015 through 2024 annual valuations. HB 265 (passed during the 2018 legislative session), HB 1 (passed during the 2019 special legislative session), and HB 352 (passed during the 2020 legislative session) reduced the FYE 2019-2021 employer contribution rate to 49.47% for Regional Mental Health/Mental Retardation Boards, Local and District Health Departments, State Universities, Community Colleges and any other agencies eligible to voluntarily cease participating in the KERS Nonhazardous fund. HB 8 (passed during the 2021 legislative session) changed how employer contributions are allocated and collected amongst employers in the KERS Nonhazardous fund effective for FYE2022. The normal cost is collected as a percentage of covered payroll and the amortization cost is allocated to employers as a dollar amount based on their accrued liability as of June 30, 2019. Amortization cost shown above reflects the amortization required as of the valuation date and does not reflect any adjustment for the cessation of any employers after the valuation date.

SPRS Plans

The contribution rates for SPRS shown in the below tables are the full funding rates presented by the actuary in the 2014 through 2023 annual valuations. However, the actual employer contribution rates have been less than those shown below. As a result of HB1 passed in 2008 the statute called for an employer contribution rate at an increasing percentage of the full funding rates. SB2 (2013 Regular Legislative Session) eliminated this phase-in beginning with the June 30, 2013, actuarial valuation.

Recommended Employer Contribution Rates As of June 30

SPRS Employers

Valuation Date	Applicable Fiscal Year	Pension Fund Normal Cost	Pension Fund: Payment on Unfunded Liability	Pension Fund Contribution	Insurance Fund Contribution	Recommended Employer Contribution
2015	2016-2017	8.77%	57.70%	66.47%	18.87%	85.34%
2016	2017-2018	11.16%	60.41%	71.57%	18.10%	89.67%
2017	2018-2019	16.21%	102.84%	119.05%	27.23%	146.28%
2018	2019-2020	15.81%	104.73%	120.54%	19.50%	140.04%
2019	2020-2021	19.39%	104.40%	123.79%	19.69%	143.48%
2020	2021-2022	19.04%	108.95%	127.99%	18.07%	146.06%
2021	2022-2023	18.60%	66.72%	85.32%	14.11%	99.43%
2022	2023-2024	19.49%	65.90%	85.39%	3.68%	89.07%
2023	2024-2025	19.41%	46.38%	65.79%	2.31%	68.10%
2024	2025-2026	19.76%	38.15%	57.91%	1.46%	59.37%

The contribution rates for SPRS shown in the above tables are the full funding rates presented by the actuary in the 2015 through 2024 annual valuations.

Summary of Actuarial Unfunded Liabilities

Summary of Actuarial Unfunded Liabilities As of June 30 (\$ in Thousands)

KERS Nonhazardous Pension Plan

Valuation Date	Actuarial Liability	Value of Assets Unfunded Actuarial Liabilities		Funding Level			
		Actuarial	Market	Actuarial	Market	Actuarial	Market
2015	\$12,359,673	\$2,350,990	\$2,307,858	\$10,008,683	\$10,051,815	19.02%	18.67%
2016	13,224,698	2,112,287	1,953,422	11,112,412	11,271,276	15.97%	14.77%
2017	15,591,641	2,123,623	2,056,870	13,468,018	13,534,771	13.62%	13.19%
2018	15,675,232	2,019,278	2,004,446	13,655,954	13,670,786	12.88%	12.79%
2019	16,466,427	2,206,280	2,233,672	14,260,147	14,232,755	13.40%	13.57%
2020	16,348,962	2,323,298	2,308,080	14,025,663	14,040,882	14.21%	14.12%
2021	16,321,373	2,735,876	3,018,660	13,585,497	13,302,713	16.76%	18.50%
2022	16,576,631	3,065,263	3,013,845	13,511,368	13,562,786	18.49%	18.18%
2023	16,304,277	3,552,471	3,539,942	12,751,806	12,764,335	21.79%	21.71%
2024	\$16,647,893	\$4,122,269	\$4,223,936	\$12,525,624	\$12,423,957	24.76%	25.37%

Valuation Date	Actuarial	Vol	us of Assets	Hatiraded Astronia	Liabilitiaa	Eundin	m I aval
valuation Date	Liability	Value of Assets Actuarial Market		Unfunded Actuarial Liabilities		Funding Level	
		Actuariai	Market	Actuarial	Market	Actuarial	Market
2015	\$2,413,705	\$695,018	\$687,684	\$1,718,687	\$1,726,021	28.79%	28.49%
2016	2,456,678	743,270	695,189	1,713,408	1,761,489	30.26%	28.30%
2017	2,683,496	823,918	817,370	1,859,578	1,866,126	30.70%	30.46%
2018	2,435,506	887,121	891,205	1,548,385	1,544,301	36.42%	36.59%
2019	2,733,065	991,427	995,089	1,741,639	1,737,977	36.28%	36.41%
2020	2,564,788	1,095,959	1,060,649	1,468,829	1,504,139	42.73%	41.35%
2021	2,574,112	1,291,472	1,419,477	1,282,640	1,154,634	50.17%	55.14%
2022	1,782,386	1,409,553	1,364,419	372,833	417,967	79.08%	76.55%
2023	1,877,109	1,532,895	1,532,752	344,214	344,357	81.66%	81.65%
2024	\$2,094,743	\$1,712,043	\$1,765,729	\$382,700	\$329,014	81.73%	84.29%

ous Pension	Plan						
Actuarial Liability	Valı	ue of Assets	Unfunded Actuaria	l Liabilities	Funding Level		
	Actuarial	Market	Actuarial	Market	Actuarial	Market	
\$895,433	\$556,688	\$550,120	\$338,746	\$345,313	62.17%	61.44%	
936,706	559,487	524,679	377,219	412,027	59.73%	56.01%	
1,121,420	607,159	601,529	514,261	519,891	54.14%	53.64%	
1,151,923	639,262	645,485	512,661	506,438	55.50%	56.04%	
1,226,195	671,647	680,932	554,548	545,262	54.77%	55.53%	
1,283,770	709,587	690,350	574,183	593,420	55.27%	53.78%	
1,295,243	782,496	866,141	512,747	429,102	60.41%	66.87%	
1,316,825	832,436	810,978	484,389	505,847	63.22%	61.59%	
1,363,037	891,460	893,534	471,577	469,503	65.40%	65.55%	
\$1,442,619	\$985,075	\$1,019,890	\$457,544	\$422,729	68.28%	70.70%	
	\$895,433 936,706 1,121,420 1,151,923 1,226,195 1,283,770 1,295,243 1,316,825 1,363,037	Liability Value Actuarial \$895,433 \$556,688 936,706 559,487 1,121,420 607,159 1,151,923 639,262 1,226,195 671,647 1,283,770 709,587 1,295,243 782,496 1,316,825 832,436 1,363,037 891,460	Actuarial Liability Value of Assets Actuarial Market \$895,433 \$556,688 \$550,120 936,706 559,487 524,679 1,121,420 607,159 601,529 1,151,923 639,262 645,485 1,226,195 671,647 680,932 1,283,770 709,587 690,350 1,295,243 782,496 866,141 1,316,825 832,436 810,978 1,363,037 891,460 893,534	Actuarial Liability Value of Assets Unfunded Actuaria Actuarial Market Actuarial \$895,433 \$556,688 \$550,120 \$338,746 936,706 559,487 524,679 377,219 1,121,420 607,159 601,529 514,261 1,151,923 639,262 645,485 512,661 1,226,195 671,647 680,932 554,548 1,283,770 709,587 690,350 574,183 1,295,243 782,496 866,141 512,747 1,316,825 832,436 810,978 484,389 1,363,037 891,460 893,534 471,577	Actuarial Liability Value of Assets Unfunded Actuarial Liabilities Actuarial Market Actuarial Market \$895,433 \$556,688 \$550,120 \$338,746 \$345,313 936,706 559,487 524,679 377,219 412,027 1,121,420 607,159 601,529 514,261 519,891 1,151,923 639,262 645,485 512,661 506,438 1,226,195 671,647 680,932 554,548 545,262 1,283,770 709,587 690,350 574,183 593,420 1,295,243 782,496 866,141 512,747 429,102 1,316,825 832,436 810,978 484,389 505,847 1,363,037 891,460 893,534 471,577 469,503	Actuarial Liability Value of Assets Unfunded Actuarial Liabilities Funding Actuarial Market Actuarial Market Actuarial Market Actuarial \$895,433 \$556,688 \$550,120 \$338,746 \$345,313 62.17% 936,706 559,487 524,679 377,219 412,027 59.73% 1,121,420 607,159 601,529 514,261 519,891 54.14% 1,151,923 639,262 645,485 512,661 506,438 55.50% 1,226,195 671,647 680,932 554,548 545,262 54.77% 1,283,770 709,587 690,350 574,183 593,420 55.27% 1,295,243 782,496 866,141 512,747 429,102 60.41% 1,316,825 832,436 810,978 484,389 505,847 63.22% 1,363,037 891,460 893,534 471,577 469,503 65.40%	

KERS Hazardo	KERS Hazardous Insurance Plan											
Valuation Date	Actuarial Liability	Valu	Value of Assets Unfunded Actuarial Liabilities				ıg Level					
		Actuarial	Market	Actuarial	Market	Actuarial	Market					
2015	\$374,904	\$451,514	\$441,626	(76,610)	(66,722)	120.43%	117.80%					
2016	377,745	473,160	440,596	(95,415)	(62,851)	125.26%	116.64%					
2017	419,440	493,458	488,838	(74,019)	(69,399)	117.65%	116.55%					
2018	393,481	511,441	519,072	(117,961)	(125,592)	129.98%	131.92%					
2019	426,705	525,315	534,053	(98,610)	(107,348)	123.11%	125.16%					
2020	427,977	539,251	521,755	(111,275)	(93,778)	126.00%	121.91%					
2021	424,456	575,025	633,677	(150,569)	(209,221)	135.47%	149.29%					
2022	347,044	597,701	588,162	(250,657)	(241,118)	172.23%	169.48%					
2023	363,512	619,519	625,356	(256,007)	(261,844)	170.43%	172.03%					
2024	\$379,568	\$652,349	\$677,948	\$(272,781)	\$(298,380)	171.87%	178.61%					

Summary of Actuarial Unfunded Liabilities As of June 30 (\$ in Thousands) SPRS Pension Plan

Valuation Date	Actuarial Liability	Value of Assets		Unfunded Actuarial Liability		Fundin	a Level
		Actuarial	Market	Actuarial	Market	Actuarial	Market
2015	\$734,156	\$248,388	\$246,968	\$485,769	\$487,188	33.83%	33.64%
2016	775,160	234,568	217,594	540,593	557,566	30.26%	28.07%
2017	967,145	261,320	255,737	705,824	711,408	27.02%	26.44%
2018	989,528	268,259	267,572	721,269	721,956	27.11%	27.04%
2019	1,045,318	282,162	286,165	763,156	759,153	26.99%	27.38%
2020	1,053,157	296,126	293,949	757,031	759,208	28.12%	27.91%
2021	1,053,260	323,250	356,346	730,009	696,914	30.69%	33.83%
2022	1,067,447	559,973	551,699	507,474	515,748	52.46%	51.68%
2023	1,091,795	589,848	591,514	501,947	500,281	54.03%	54.18%
2024	\$1,112,310	\$631,186	\$651,790	\$481,125	\$460,521	56.75%	58.60%

SPRS Insur	ance Plan						
Valuation Date	Actuarial Liability	Value of Assets		Unfunded Actuarial Liability		Funding Level	
		Actuarial	Market	Actuarial	Market	Actuarial	Market
2015	\$254,839	\$167,775	\$165,018	\$87,064	\$89,821	65.84%	64.75%
2016	257,197	172,704	161,366	84,494	95,831	67.15%	62.74%
2017	276,641	180,464	178,838	96,178	97,803	65.23%	64.65%
2018	262,088	187,535	190,847	74,553	71,242	71.55%	72.82%
2019	276,809	197,395	201,206	79,415	75,604	71.31%	72.69%
2020	276,143	207,018	201,340	69,126	74,803	74.97%	72.91%
2021	272,406	223,251	247,318	49,154	25,088	81.96%	90.79%
2022	232,798	234,239	231,242	(1,441)	1,556	100.62%	99.33%
2023	244,058	245,172	248,109	(1,114)	(4,051)	100.46%	101.66%
2024	\$251,178	\$263,369	\$273,517	\$(12,191)	\$(22,339)	104.85%	108.89%

Solvency Test

Solvency Test

As of June 30 (\$ in Thousands)

KERS Nonhazardous Pension Plan

		Actuarial Liabilities	s					
Valuation Date	(1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	,	% of Actuarial Liabilities Co by Actuarial Assets		
					(1)	(2)	(3)	
2015	\$925,934	\$9,437,468	\$1,996,271	\$2,350,990	100.00%	15.10%	0.00%	
2016	920,120	10,010,168	2,294,410	2,112,286	100.00%	11.90%	0.00%	
2017	934,559	11,608,346	3,048,736	2,123,623	100.00%	10.20%	0.00%	
2018	892,033	11,929,018	2,854,180	2,019,278	100.00%	9.40%	0.00%	
2019	881,020	12,513,230	3,072,176	2,206,280	100.00%	10.60%	0.00%	
2020	869,196	12,467,523	3,012,243	2,323,298	100.00%	11.70%	0.00%	
2021	877,142	12,425,951	3,018,279	2,735,876	100.00%	15.00%	0.00%	
2022	859,591	12,700,595	3,016,445	3,065,263	100.00%	17.40%	0.00%	
2023	889,146	12,013,685	3,401,447	3,552,471	100.00%	22.20%	0.00%	
2024	\$935,186	\$11,876,221	\$3,836,485	\$4,122,268	100.00%	26.80%	0.00%	

KERS Nonh	azardous Ins	urance Plan					
		Actuarial Liabilitie	s				
Valuation Date	(1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuaria	al Liabilities tuarial Asse	
					(1)	(2)	(3)
2015	\$	- \$1,428,350	\$985,355	\$695,018	100.00%	48.70%	0.00%
2016		- 1,483,636	973,042	743,270	100.00%	50.10%	0.00%
2017		- 1,575,294	1,108,202	823,918	100.00%	52.30%	0.00%
2018		- 1,475,954	959,552	887,121	100.00%	60.10%	0.00%
2019		- 1,686,605	1,046,461	991,427	100.00%	58.80%	0.00%
2020		- 1,589,742	975,045	1,095,959	100.00%	68.90%	0.00%
2021		- 1,609,775	964,337	1,291,472	100.00%	80.20%	0.00%
2022		- 967,051	815,335	1,409,553	100.00%	100.00%	54.30%
2023		- 1,040,344	836,765	1,532,895	100.00%	100.00%	58.90%
2024	\$	- \$1,189,231	\$905,513	\$1,712,043	100.00%	100.00%	57.70%

		Actuarial Liabilitie	s				
Valuation Date	(1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuaria	Il Liabilities uarial Asse	
					(1)	(2)	(3)
2015	\$83,606	\$633,189	\$178,638	\$556,688	100.00%	74.70%	0.00%
2016	86,705	648,482	201,519	559,487	100.00%	72.90%	0.00%
2017	93,350	746,350	281,720	607,159	100.00%	68.80%	0.00%
2018	89,106	810,311	252,506	639,262	100.00%	67.90%	0.00%
2019	86,663	879,818	259,713	671,647	100.00%	66.50%	0.00%
2020	95,528	898,128	290,114	709,587	100.00%	68.40%	0.00%
2021	97,559	916,431	281,254	782,496	100.00%	74.70%	0.00%
2022	94,538	946,328	275,959	832,436	100.00%	78.00%	0.00%
2023	103,310	929,321	330,406	891,460	100.00%	84.80%	0.00%
2024	\$116,828	\$943,102	\$382,689	\$985,075	100.00%	92.10%	0.00%

KERS Haza	KERS Hazardous Insurance Plan											
		Actuarial Liabilitie	s									
Valuation Date	(1) (2) (3) Active Member Retired Members Active Members Actuarial Value of % of Actuarial Liabilities Contributions & Beneficiaries (Employer Portion) Assets by Actuarial Assets											
					(1)	(2)	(3)					
2015	\$	- \$221,115	\$153,789	\$451,514	100.00%	100.00%	100.00%					
2016		- 228,361	149,384	473,160	100.00%	100.00%	100.00%					
2017		- 243,816	175,623	493,458	100.00%	100.00%	100.00%					
2018		- 248,775	144,706	511,441	100.00%	100.00%	100.00%					
2019		- 282,070	144,635	525,315	100.00%	100.00%	100.00%					
2020		- 281,924	146,053	539,251	100.00%	100.00%	100.00%					
2021		- 288,015	136,441	575,025	100.00%	100.00%	100.00%					
2022		- 232,585	114,459	597,701	100.00%	100.00%	100.00%					
2023		- 250,189	113,323	619,519	100.00%	100.00%	100.00%					
2024	\$	- \$263,737	\$115,831	\$652,349	100.00%	100.00%	100.00%					

Solvency Test

As of June 30 (\$ in Thousands) SPRS Pension Plan

		Actuarial Liabilities					
Valuation Date	(1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuari	al Liabilities tuarial Asset	
					(1)	(2)	(3)
2015	\$41,567	\$605,855	\$86,734	\$248,388	100.00%	34.10%	0.00%
2016	41,871	636,499	96,791	234,568	100.00%	30.30%	0.00%
2017	44,798	773,982	148,365	261,320	100.00%	28.00%	0.00%
2018	43,835	800,788	144,905	268,259	100.00%	28.00%	0.00%
2019	41,948	848,396	154,974	282,162	100.00%	28.30%	0.00%
2020	40,831	863,579	148,747	296,126	100.00%	29.60%	0.00%
2021	42,035	860,801	150,423	323,250	100.00%	32.70%	0.00%
2022	42,027	7 870,200	155,220	559,973	100.00%	59.50%	0.00%
2023	47,394	825,683	218,717	589,848	100.00%	65.70%	0.00%
2024	\$52,957	7 \$808,935	\$250,418	\$631,186	100.00%	71.50%	0.00%

SPRS Insura	ance Plan							
		ACI	uarial Liabilities	S				
Valuation Date	(1) Active Member Contributions		(2) ed Members & eneficiaries	(3) Active Members (Employer Portion)	Actuarial Value of Assets	% of Actuaria	al Liabilities tuarial Asse	
						(1)	(2)	(3)
2015		\$-	\$170,447	\$84,392	\$167,775	100.00%	98.40%	0.00%
2016		-	177,094	80,103	172,704	100.00%	97.50%	0.00%
2017		-	186,390	90,251	180,464	100.00%	96.80%	0.00%
2018		-	183,151	78,937	187,535	100.00%	100.00%	5.60%
2019		-	199,959	76,850	197,395	100.00%	98.70%	0.00%
2020		-	207,638	68,506	207,018	100.00%	99.70%	0.00%
2021		-	206,707	65,699	223,251	100.00%	100.00%	25.20%
2022		-	172,664	60,134	234,239	100.00%	100.00%	100.00%
2023		-	176,587	67,471	245,172	100.00%	100.00%	100.00%
2024		\$-	\$179,898	\$71,280	\$263,369	100.00%	100.00%	100.00%

Member Valuation

Summary of Active Member Valuation Data As of June 30 (\$ in Thousands)

KERS Nonhazardous Schedule of Active Member Valuation Data

Valuation Date	Number of Employers	Total Active Members	Annual Covered Payroll (1)	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit
2015	348	39,056	\$1,544,234	\$40	1.20%	45.0	10.6
2016	349	37,779	1,529,249	40	2.40%	45.1	10.7
2017	342	37,234	1,531,535	41	1.62%	45.4	10.9
2018	338	35,139	1,471,477	42	1.81%	45.2	10.8
2019	331	33,696	1,437,647	43	1.88%	45.4	11.0
2020	313	31,703	1,387,761	44	2.60%	45.7	11.2
2021	321	30,186	1,349,330	45	2.12%	46.0	11.6
2022	319	29,551	1,355,267	46	2.60%	46.0	11.4
2023	320	31,383	1,615,868	51	12.27%	45.7	10.9
2024	320	32,455	\$1,861,522	\$57	11.40%	45.5	10.7
2024	320	32,455	\$1,861,522	\$57	11.40%	45.5	10.7

KERS Hazar	KERS Hazardous Schedule of Active Member Valuation Data								
Valuation Date	Number of Employers	Total Active Members	Annual Covered Payroll (1)	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit		
2015	17	3,886	\$128,680	\$33	3.20%	40.7	7.5		
2016	17	3,959	147,563	37	12.60%	40.4	7.5		
2017	18	4,047	162,418	40	7.67%	40.3	7.6		
2018	18	3,929	158,213	40	0.34%	39.8	7.3		
2019	18	3,705	150,446	41	0.84%	39.8	7.3		
2020	19	4,094	170,826	42	2.76%	39.8	7.3		
2021	19	3,827	162,836	43	1.97%	40.1	7.7		
2022	19	3,617	165,637	46	7.63%	40.0	7.6		
2023	19	3,886	211,602	54	18.91%	39.7	7.2		
2024	19	4,154	\$259,606	\$62	14.77%	39.9	7.1		

SPRS Sched	SPRS Schedule of Active Member Valuation Data							
Valuation Date	Number of Employers	Total Active Members	Annual Covered Payroll (1)	Annual Average Pay	% Increase In Average Pay	Average Age	Average Years of Service Credit	
2015	1	937	\$45,765	\$49	(6.40)%	36.8	9.8	
2016	1	908	45,551	50	2.71%	37.0	10.0	
2017	1	903	48,598	54	7.28%	37.5	10.6	
2018	1	886	48,808	55	2.36%	37.3	10.5	
2019	1	883	47,752	54	(1.83)%	36.7	10.0	
2020	1	798	46,145	58	6.93%	37.5	10.7	
2021	1	775	45,338	59	1.17%	37.7	11.1	
2022	1	844	47,885	57	(3.02)%	36.5	10.1	
2023	1	868	65,913	76	33.84%	36.9	10.5	
2024	1	872	\$73,295	\$84	10.69%	37.4	11.1	

⁽¹⁾ 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 ended June 30, 2024.

Summary of Retired Member Valuation Data As of June 30 (\$ in Thousands)

KERS Nonhazardous Schedule of Retired Member Valuation

Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances Added	Annualized Retirement Allowances Removed	Annualized Retirement Allowances (1)	% Increase In Allowances	Average Annual Allowance
2015	2,140	1,094	42,269	\$32,433	\$14,902	\$883,576	2.02%	\$21
2016	2,441	706	44,004	61,294	9,942	934,930	5.81%	21
2017	2,181	1,269	44,916	35,150	48,778	921,302	(1.46)%	21
2018	2,853	1,243	46,526	50,360	18,711	952,951	3.44%	20
2019	2,226	1,342	47,410	36,115	20,359	968,706	1.65%	20
2020	1,806	1,883	47,333	29,576	30,319	967,963	(0.08)%	20
2021	2,026	1,659	47,700	32,264	27,794	972,434	0.46%	20
2022	2,471	1,976	48,195	42,661	33,726	981,369	0.92%	20
2023	2,115	1,901	48,409	35,508	32,596	984,280	0.30%	20
2024	2,031	1,966	48,474	\$34,573	\$34,595	\$984,257	0.00%	\$20

KERS H	azardoı	us Sched	lule of Retire	d Member Va	luation			
Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances Added	Annualized Retirement Allowances Removed	Annualized Retirement Allowances (1)	% Increase In Allowances	Average Annual Allowance
2015	203	65	3,758	\$3,144	\$985	\$56,431	3.98%	\$15
2016	237	29	3,966	3,028	458	59,001	4.55%	15
2017	206	79	4,093	2,771	2,609	59,162	0.27%	14
2018	321	44	4,370	5,394	507	64,050	8.26%	15
2019	227	60	4,537	4,242	769	67,523	5.42%	15
2020	214	123	4,628	3,102	1,543	69,081	2.31%	15
2021	263	165	4,726	3,681	1,959	70,803	2.49%	15
2022	300	176	4,850	4,978	2,093	73,689	4.08%	15
2023	210	173	4,887	3,101	1,924	74,867	1.60%	15
2024	207	160	4,934	\$3,281	\$1,911	\$76,237	1.83%	\$15

SPRS S	chedule	of Retir	ed Member \	/aluation				
Valuation Date	Number Added	Number Removed	Total Retirees & Beneficiaries	Annualized Retirement Allowances Added	Annualized Retirement Allowances Removed	Annualized Retirement Allowances (1)	% Increase In Allowances	Average Annual Allowance
2015	62	15	1,460	\$1,947	\$449	\$54,930	2.80%	\$38
2016	65	10	1,515	2,004	285	56,650	3.13%	37
2017	30	9	1,536	1,046	443	57,253	1.06%	37
2018	81	17	1,600	2,837	464	59,626	4.14%	37
2019	74	27	1,647	2,735	957	61,404	2.98%	37
2020	61	39	1,669	2,411	1,382	62,432	1.68%	37
2021	55	51	1,673	1,967	1,699	62,700	0.43%	37
2022	76	47	1,702	2,948	1,868	63,780	1.72%	37
2023	43	48	1,697	1,308	1,793	63,294	(0.76)%	37
2024	41	62	1,676	\$1,399	\$2,070	\$62,623	(1.06)%	\$37

⁽¹⁾ 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. Headcounts and hazardous benefits for members receiving benefits in both the nonhazardous and hazardous fund have been included in the hazardous funds' summaries above. Additional \$25,136,000 in KERS Nonhazardous annual benefits are not included in the summary above for June 30, 2024.

Summary of Benefit Provisions KERS, and SPRS

Plan Funding

State statute requires active members to contribute 5% of creditable compensation for nonhazardous members and 8% of creditable compensation for hazardous members. 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 Boards to be necessary for the actuarial soundness of the systems, as required by Kentucky Revised Statute 61.565. KERS rates are subject to state budget approval.

Membership Eligibility

For all regular full-time non-school board employees to be eligible for membership, they must average 100 or more hours of work per month over a fiscal or calendar year. For all regular full-time school board employees to be eligible for membership, they must average 80 hours of work per month over the actual days worked during the school year.

Age	Years of Service	Allowance Reduction
r 1 Mer	nbers Whose P	articipation Began Before 9/1/2008
65	1 month	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
r 2 Mer	nbers Whose P	articipation Began On or After 9/1/2008 but before 1/1/2014
65	5	None
57	Rule of 87	None
60	10	6.5% per year for first five years, and 4.5% for next five years before age 65 or Rule of 87 (age
		plus years of service)
r 3 Mer	nbers Whose P	articipation Began On or After 1/1/2014
65	5	None
57	Rule of 87	None

Retiremer	nt Eligibility for	Hazardous
Age	Years of Service	Allowance Reduction
Tier 1 Mer	mbers Whose P	articipation Began Before 9/1/2008
55	1 month	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.
Tier 2 Mer	mbers Whose P	articipation Began On or After 9/1/2008 but before 1/1/2014
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.
Tier 3 Mer	mbers Whose P	articipation Began On or After 1/1/2014
60	5	None
Any	25	None

Benefit Formula for Nonhazardous

Tier 1: Members whose participation began before 9/1/2008

Final Compensation		Benefit Factor	Years of Service
	KERS 1.97% if:	Member does not have 13	
		months of service credit for	Includes earned service,
		1/1/1998-1/1/1999.	purchased service, prior service,
Average of the	KERS 2.00% if:	Member has 13 months of service	and sick leave service (if the
five highest years of		credit from 1/1/1998-1/1/1999.	member's employer participates
compensation	KERS 2.20% if:	Member has 20 or more years	in an approved sick leave
		of service, including 13 months	program).
		from 1/1/1998-1/1/1999 and	
		retires by 1/1/2009.	

If a member retires with less than four years of service credit, the member's benefit is equal to the actuarially equivalent of two times their member contribution balance with interest.

Benefit Formula Nonhazardous

Tier 2: Membe	rs whose partic	cipation began on or	after 9/1/2008 but before 1/1/2014
Final Compensation		Benefit Factor	Years of Service
	KERS increasing		
	percent based on s	service at	
	retirement up to 30	years*	Includes earned service,
Average of the last	plus 2.00% for eac	h year of	purchased service, prior service,
five years of	service over 30 year	ars	and sick leave service (if the
compensation	*Service	Multiplier	member's employer participates in
	10 years or less	1.10%	an approved sick leave program).
	10-20 years	1.30%	
	20-26 years	1.50%	
	26-30 years	1.75%	

Benefit Formula for Hazardous for	or Tier 1: Members whose participation began before 9/1/2008	
Final Compensation	Benefit Factor	Years of Service
Average of the three highest years of compensation	KERS 2.49% if:	Includes earned service, purchased service, prior service, and sick leave service (if the member's employer participates in an approved sick leave

If a member retires with less than four years of service, the member's benefit is equal to the actuarially equivalent of two times their member contribution balance with interest.

program).

Final Compensation		Benefit Factor	Years of Service
	KERS, & SPRS in percent based on retirement*	· ·	Includes earned service, purchased
Average of the three highest	*Service	Multiplier	service, prior service, and sick leave
complete years of compensation	10 years or less	1.30%	service (if the member's employer
	10-20 years	1.50%	participates in an approved sick lea program).
	20-25 years	2.25%	p. og. a
	25+ years	2.50%	

Benefit Formula for Hazardous for Tier 3: Members whose participation began on or after 1/1/2014

SPRS 2.50% if:

Each year that the member is active, a 7.50% employer pay credit and the employee's 8.00% contribution will be credited to each member's hypothetical cash balance account. The hypothetical account will earn interest at a minimum rate of 4%, annually. If the geometric average net investment return for the previous five years exceeds 4%, then the hypothetical account will be credited with an additional amount of interest in that year equal to 75% of the amount of the return which exceeds 4%. All interest credits will be applied to the hypothetical account balance on June 30 based on the account balance as of June 30 of the previous year. At retirement, the member's hypothetical account balance may be converted into an annuity based on an actuarial factor.

Benefit Formula

Tier 3: Members whose participation began on or after 1/1/2014 Accumulated Account Balance / Actuarial Factor = Monthly Life Annuity

Accumulated Account Balance									
	Member	Employer	Base Annual	Upside Sharing	Actuarial				
	Contributions	Contributions	Interest	Interest (FY 2023)	Factor				
KERS Nonhazardous	5.00%	4.00%	4.00%	5.79%					
KERS Hazardous	8.00%	7.50%	4.00%	6.60%					
SPRS	8.00%	7.50%	4.00%	6.15%					

Note: Accumulated Account Balance is composed of member contributions, employer contributions, annual interest and annual upside sharing interest. For additional information on the calculation of the annual interest for Tier 3 see Upside Sharing Interest in Note B. Note: Please see Plan Provisions for additional details.

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 qualify for disability retirement 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 qualify for disability retirement provided the member has at least 60 months of service credit. Nonhazardous benefits are computed as the higher of 20% of the member's monthly final rate of pay or the amount calculated under the Benefit Formula based upon actual service. Hazardous benefits are computed as the higher of 25% of the member's monthly 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 qualify for disability retirement provided the member has at least 60 months of service credit. The benefit to the member is the higher of 20% or 25% of the member's monthly final rate of pay for nonhazardous and hazardous, respectively or the Annuity amount using the factor at the member's normal retirement age.

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

* Service requirements may be waived if line of duty or duty related.

Pre-Retirement Death Benefits

The beneficiary of a deceased member is eligible for a monthly benefit if the member died while in the line of duty or a duty related death. The beneficiary of a deceased member who did not die in the line of duty is 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 member is not eligible for a monthly benefit, the beneficiary will receive a lump-sum payment of the member's accumulated account balance.

Cost of Living Adjustment (COLA)

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, the system pays a percentage of the monthly premium for single coverage based on the service credit accrued at retirement. Hazardous members also receive a percentage paid for eligible spouse or dependent coverage based on the accrued hazardous service at retirement.

For members participating on or after July 1, 2003, a dollar contribution amount is paid toward insurance coverage. Any portion paid toward eligible spouse and dependent coverage is based on the member's hazardous service credit. The member must have a minimum of 10 years of service to be eligible for insurance benefits if the participation date is between July 1, 2003 and August 31, 2008, and a 15 years of service if the participation date is on or after September 1, 2008. A nonhazardous member will receive \$10 for each year of service and hazardous members receive \$15 for each year of service. Since July 2004, the dollar amount increases annually on July 1 by 1.5%. Members can earn an additional dollar contribution amount if they surpass the career threshold defined in Kentucky Revised Statute 61.702.

Refunds

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

Interest on Accounts

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%.

Benefit Changes since the Prior Valuation

There have been no benefit changes since the prior valuation.

STATISTICAL TABLE OF CONTENTS

- 133 PLAN STATISTICS
- 135 PARTICIPATING EMPLOYERS
- 136 MEMBER MONTHLY BENEFIT
- 137 FIDUCIARY NET POSITION
- 138 CHANGES IN FIDUCIARY NET POSITION
- 144 SCHEDULE OF BENEFIT EXPENSES
- 148 ACTIVE REFUNDS
- 149 ANALYSIS OF INITIAL RETIREES
- 150 PAYMENT OPTIONS
- 151 EMPLOYER CONTRIBUTION RATES
- 152 INSURANCE CONTRACTS
- 153 GLOSSARY

Plan Statistics

Definitions

Active members are those members who are currently employed by a participating agency and contributing to KRS 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 KRS.

A single member may have multiple accounts. For these tables, persons who participate in two or more of the KRS plans; SPRS, KERS Hazardous or KERS Nonhazardous, will appear in each plan in which they have service credit.

These tables do not include individuals receiving payments under dependent child accounts, Qualified Domestic Relations Orders (QDRO), or multiple beneficiary accounts.

KERS Nonhazardous Memb	pership As of June 30			
Fiscal Year	Active	Inactive	Retired	Total
2015	40,835	46,867	44,515	132,217
2016	39,561	48,506	46,366	134,433
2017	38,128	49,693	47,317	135,138
2018	36,160	50,772	48,985	135,917
2019	34,700	51,944	49,886	136,530
2020	32,688	54,234	50,518	137,440
2021	31,066	55,437	51,783	138,286
2022	30,293	56,636	52,429	139,358
2023	32,093	57,247	52,524	141,864
2024	33,135	58,154	52,686	143,975
KERS Hazardous Members	ship As of June 30			
Fiscal Year	Active	Inactive	Retired	Total
2015	4,559	4,643	3,761	12,963
2016	4,585	5,054	3,992	13,631
2017	4,660	5,453	4,120	14,233
2018	4,551	5,889	4,397	14,837
2019	4,402	6,414	4,563	15,379
2020	4,667	7,263	4,696	16,626
2021	4,412	8,022	4,890	17,324
2022	4,295	8,568	5,013	17,876
2023	4,581	9,031	5,048	18,660
2024	4,910	9,454	5,084	19,448
SPRS Membership As of Ju	ine 30			
Fiscal Year	Active	Inactive	Retired	Total
2015	946	418	1,461	2,825
2016	934	430	1,539	2,903
2017	934	453	1,557	2,944
2018	917	470	1,623	3,010
2019	932	511	1,666	3,109
2020	798	592	1,698	3,088
2021	775	638	1,734	3,147
2022	844	670	1,748	3,262
2023	868	718	1,749	3,335
2024	872	749	1,736	3,357
KRS Membership As of Jun	ne 30			
Fiscal Year	Active	Inactive	Retired	Total
2015	46,340	51,928	49,737	148,005
2016	45,080	53,990	51,897	150,967
2017	43,722	55,599	52,994	152,315
2018	41,628	57,131	55,005	153,764
2019	40,034	58,869	56,115	155,018
2020	38,153	62,089	56,912	157,154
2021	36,253	64,097	58,407	158,757
2022	35,432	65,874	59,190	160,496
2023	37,542	66,996	59,321	163,859
2024	38,917	68,357	59,506	166,780

Participating Employers

Principal Participating Employers in KERS As of June 30, 2024			
Participating Employer	Rank	Covered Employees	% of Total System
DEPARTMENT FOR COMMUNITY BASED SERVICES	1	4,566	12.46%
DEPARTMENT OF HIGHWAYS	2	3,611	9.86%
DEPARTMENT OF CORRECTIONS	3	3,572	9.75%
JUDICIAL DEPARTMENT ADMINISTRATIVE OFFICE OF THE COURTS	4	1,469	4.01%
DEPARTMENT OF JUVENILE JUSTICE	5	1,137	3.10%
UNIFIED PROSECUTORIAL SYSTEM	6	896	2.45%
KENTUCKY STATE POLICE	7	885	2.42%
DEPARTMENT OF REVENUE	8	692	1.89%
DEPARTMENT OF PARKS	9	683	1.86%
DEPARTMENT OF VETERANS AFFAIRS	10	672	1.83%
ALL OTHERS		18,454	50.37%
Total		36,637	100.00%

Schedule of Participating Employers in KERS As of June 30, 2024		
Agency Classification	Number of Agencies	Covered Employees
County Attorneys	57	277
Health Departments	60	2205
Master Commissioner	30	56
Non-P1 State Agencies	32	603
Other Retirement Systems	1	20
P1 State Agencies	132	29,417
Regional Mental Health Units	10	2,679
Universities	7	1,380
Total	329	36,637
Total Employees By Tier Levels		
Tier 1		12,434
Tier 2		5,203
Tier 3		19,000

Schedule of Participating Employers in SPRS As of June 30	, 2024	
Agency Classification	Number of Agencies	Covered Employees
Kentucky State Police - Uniformed Police Officers	1	872
Total Employees By Tier Levels		
Tier 1		310
Tier 2		180
Tier 3		382

Member Monthly Benefit

Average Monthly Benefit	by Length of Se	rvice in KR	S As of Jun	e 30, 2024 ((in Whole \$)	
	KERS Nonha	azardous	KERS Haz	ardous	SPR	S
Service Credit Range	Number of Accounts	Average Monthly Benefit	Number of Accounts	Average Monthly Benefit	Number of Accounts	Average Monthly Benefit
Under 5 years	7,258	\$227	997	\$220	160	\$766
5 or more but less than 10	6,238	442	876	576	56	918
10 or more but less than 15	5,843	738	821	1,047	71	1,454
15 or more but less than 20	5,095	1,094	761	1,578	130	2,139
20 or more but less than 25	5,500	1,449	1,349	2,074	555	2,770
25 or more but less than 30	13,699	2,310	214	2,982	492	3,796
30 or more but less than 35	6,611	3,248	60	3,764	216	4,811
35 or more	2,442	4,603	6	4,405	56	6,304
Total	52,686	\$1,644	5,084	\$1,273	1,736	\$3,083

Note: These tables reflect the Average Monthly Pension Benefit. A single member may have multiple accounts, which contribute to one pension. These tables do not reflect dependent child accounts, Qualified Domestic Relations Order (QDRO) accounts or multiple beneficiary accounts.

Fiduciary Net Position

Fiduciary Net Position As of June 30 (\$ in Thousan						
	No	onhazardous				
Fiscal Year	Pension	Insurance	Total	Pension	Insurance	Total
2015	\$2,327,782	\$665,639	\$2,993,421	\$552,468	\$439,113	\$991,581
2016	1,980,292	668,318	2,648,610	527,880	437,397	965,277
2017	2,092,781	781,406	2,874,187	605,921	484,442	1,090,363
2018	2,048,890	846,762	2,895,652	651,173	513,384	1,164,557
2019	2,286,625	942,136	3,228,761	687,877	527,108	1,214,985
2020	2,362,231	1,006,498	3,368,729	697,366	514,740	1,212,106
2021	3,085,014	1,353,123	4,438,137	874,928	624,889	1,499,817
2022	3,076,743	1,301,522	4,378,265	819,237	579,902	1,399,139
2023	3,607,206	1,465,489	5,072,695	902,567	616,322	1,518,889
2024	\$4,297,571	\$1,692,094	\$5,989,665	\$1,029,921	\$667,917	\$1,697,838
Fiduciary Net Position	on - SPRS					
As of June 30 (\$ in Thousan	ids)					
Fiscal Year				Pension	Insurance	Total
2015				\$247,229	\$164,714	\$411,943
2016				218,013	160,949	378,962

Fiscal Year	Pension	Insurance	Total	
2015	\$247,229	\$164,714	\$411,943	
2016	218,013	160,949	378,962	
2017	256,383	178,191	434,574	
2018	268,425	189,994	458,419	
2019	287,242	200,128	487,370	
2020	295,044	200,245	495,289	
2021	357,660	246,004	603,664	
2022	552,926	230,015	782,941	
2023	592,826	246,797	839,623	
2024	\$653,216	\$272,091	\$925,307	

Fiduciary Net Position - KRS			
As of June 30 (\$ in Thousands)			
Fiscal Year	Pension	Insurance	Total
2015	\$3,127,479	\$1,269,466	\$4,396,945
2016	2,726,185	1,266,664	3,992,849
2017	2,955,085	1,444,039	4,399,124
2018	2,968,488	1,550,140	4,518,628
2019	3,261,744	1,669,372	4,931,116
2020	3,354,641	1,721,483	5,076,124
2021	4,317,602	2,224,016	6,541,618
2022	4,448,906	2,111,439	6,560,345
2023	5,102,599	2,328,608	7,431,207
2024	\$5,980,708	\$2,632,102	\$8,612,810

Note: For additional historical data for all charts presented, please visit our website for previous annual reports at https://kyret.ky.gov/ Publications/Pages/Annual-Reports.aspx

Changes in Fiduciary Net Position

Changes in Fiduciary Net	Position - KE	ERS Nonha	zardous Pe	nsion Plan						
As of June 30 (\$ in Thousands)										
Additions	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Members' Contributions	\$100,424	\$101,677	\$100,544	\$104,972	\$93,759	\$96,594	\$90,202	\$89,607	\$84,579	\$96,615
Employers' Contributions	520,948	512,670	644,803	619,988	948,866	948,578	1,134,180	141,027	136,445	156,007
General Fund Appropriations	-	-	58,193	67,574	75,858	-	-	912,705	240,000	240,000
Health Insurance Contributions (HB1)	4,181	4,817	5,156	5,786	5,963	1	(8)	(13)	(12)	(18)
Actuarially Accrued Liability Contributions	-	-	-	-	-	-	-	-	898,545	899,663
Employer Cessation	-	-	53,215	17	10,643	20	-	63,113	-	-
Net Investment Income (Loss)	44,570	(20,662)	220,985	147,577	114,918	53,696	528,439	(165,904)	220,258	356,018
Bank of America Settlement	8,442	-	-	-	-	-	-	-	-	-
Northern Trust Settlement	-	-	-	301	37	-	-	-	-	-
Pension Spiking	743	414	909	1,564	95	(6)	52	24	16	25
Total Additions	679,308	598,916	1,083,805	947,779	1,250,139	1,098,883	1,752,865	1,040,559	1,579,831	1,748,310
Deductions										
Benefit Payments	905,790	923,288	948,489	967,374	988,349	999,813	1,009,501	1,023,375	1,023,704	1,032,124
Refunds	13,552	12,130	11,819	13,603	12,342	11,523	8,953	12,116	11,847	11,693
Administrative Expenses	10,474	10,807	10,974	10,692	11,712	11,941	11,627	13,339	13,817	14,128
Capital Project Expenses	-	181	34	-	-	-	-	-	-	-
Total Deductions	929,816	946,406	971,316	991,669	1,012,403	1,023,277	1,030,081	1,048,830	1,049,368	1,057,945
Net Increase (Decrease) in Fiduciary Net Position	\$(250,508)	\$(347,490)	\$112,489	\$(43,890)	\$237,736	\$75,606	\$722,784	\$(8,271)	\$530,463	\$690,365

As of June 30 (\$ in Thousands)										
Additions	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Employers' Contributions	\$132,208	\$131,935	\$133,024	\$132,364	\$173,576	\$170,479	\$153,571	\$31,611	\$35,549	\$41,362
Actuarially Accrued Liability Contributions	-	-	-	-	-	-	-	101,637	87,674	87,782
Net Investment Income (Loss)	8,690	(3,904)	90,915	61,331	43,202	10,624	258,595	(85,555)	128,052	166,714
Retired Re-employed (HB1)	3,732	3,880	3,765	4,055	3,996	4,502	4,705	5,041	5,885	7,484
Member Drug Reimbursement	-	-	1	5	3	2	-	-	4	4
Premiums Received from Retirees	272	240	248	216	184	183	182	182	(27)	79
Humana Gain Share Payment	-	-	-	-	3,079	-	17,167	7,321	4,851	8,440
Employer Cessation	-	-	15,567	-	1,391	25	28,400	2,405	-	-
Northern Trust Settlement	-	-	-	32	4	-	-	-	-	-
Health Insurance Contribution (HB1)	-	-	-	-	-	6,127	6,326	6,560	8,370	10,603
Total Additions	144,902	132,151	243,520	198,003	225,435	191,942	468,946	69,202	270,358	322,468
Deductions										
Health Insurance Premiums	123,127	126,550	127,648	130,069	127,221	125,006	119,897	118,451	103,952	93,751
Administrative Expenses	893	818	861	760	875	847	815	821	771	727
Self-Funded Healthcare Costs	2,145	2,095	1,920	1,819	1,962	1,724	1,609	1,525	1,668	1,378
Excise Tax Insurance	3	6	3	3	3	3	-	6	-	7
Total Deductions	126,168	129,469	130,432	132,651	130,061	127,580	122,321	120,803	106,391	95,863
Net Increase (Decrease) in Fiduciary Net Position	\$18,734	\$2,679	\$113,088	\$65,352	\$95,374	\$64,362	\$346,625	\$(51,601)	\$163,967	\$226,60

Additions	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Members' Contributions	\$12,670	\$15,055	\$17,523	\$17,891	\$17,118	\$19,769	\$19,961	\$20,588	\$17,459	\$21,568
Employers' Contributions	28,374	23,690	37,630	32,790	55,229	59,096	62,182	59,052	64,020	89,898
General Fund Appropriations	-	-	15,000	10,000	-	-	-	-	-	-
Health Insurance Contributions (HB1)	537	684	811	909	934	4	3	(5)	(7)	(8)
Net Investment Income (Loss)	8,701	(1,652)	70,993	51,848	36,704	6,805	174,922	(51,841)	77,261	102,139
Actuarially Accrued Liability Contributions (AALC)	767	-	-	-	-	-	-	-	-	_
Northern Trust Settlement	-	-	-	33	4	-	-	-	-	-
Pension Spiking	162	70	344	871	29	19	18	3	29	1
Total Additions	51,211	37,847	142,301	114,342	110,018	85,693	257,086	27,797	167,520	213,598
Deductions										
Benefit Payments	56,774	59,306	61,231	65,616	69,527	71,861	73,889	77,047	78,636	80,528
Refunds	2,609	2,211	2,106	2,501	2,684	3,168	4,380	4,976	4,041	4,133
Administrative Expenses	844	903	919	975	1,103	1,176	1,255	1,465	1,513	1,583
Capital Project Expenses	-	15	4	-	-	-	-	-	-	-
Total Deductions	60,227	62,435	64,260	69,092	73,314	76,205	79,524	83,488	84,190	86,244
Net Increase (Decrease) in Fiduciary Net Position										

Changes in Fiduciary Net Pos	sition - KER	S Hazardo	us Insurar	nce Plan						
As of June 30 (\$ in Thousands) Additions	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Employers' Contributions	\$14.173	\$15,929	\$4,688	\$4,302	\$3.725	\$4,482	\$23	\$1	\$37	\$45
Net Investment Income (Loss)	7,793	(882)	59,188	42,567	28,049	638	126,475	(27,406)	52,991	67,435
Retired Re-employed (HB1)	709	837	932	986	1,245	1,294	1,276	1,280	1,452	1,865
Actuarially Accrued Liability Contributions (AALC)	_	_		_	-	-	-	_	_	
Member Drug Reimbursement	-	-	-	-	-	1	-	1	-	-
Premiums Received from Retirees	14	(13)	(51)	(50)	(19)	(5)	(11)	(54)	(69)	(24)
Humana Gain Share	-	-	-	-	213	-	1,253	548	368	651
Northern Trust Settlement	-	-	-	18	2	-	-	-	-	-
Health Insurance Contributions (HB1)	-	-	-	-	-	1,100	1,164	1,232	1,592	2,094
Total Additions	22,689	15,871	64,757	47,823	33,215	7,510	130,180	(24,398)	56,371	72,066
Deductions										
Health Insurance Premiums	17,000	17,490	17,562	18,697	19,280	19,630	19,800	20,355	19,748	20,260
Administrative Expenses	101	97	105	104	117	123	118	125	123	117
Self-Funded Healthcare Costs	-	-	45	79	94	125	112	109	80	94
Excise Tax Insurance	-	-	-	-	-	-	-	-	-	-
Total Deductions	17,101	17,587	17,712	18,880	19,491	19,878	20,030	20,589	19,951	20,471
Net Increase (Decrease) in Fiduciary Net Position	\$5,588	\$(1,716)	\$47,045	\$28,943	\$13,724	\$(12,368)	\$110,150	\$(44,987)	\$36,420	\$51,595

As of June 30 (\$ in Thousands)										
Additions	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Members' Contributions	\$5,150	\$5,149	\$5,349	\$5,522	\$5,062	\$4,767	\$4,752	\$4,773	\$5,250	\$5,703
Employers' Contributions	31,444	25,723	38,028	36,486	58,947	58,358	59,262	62,341	58,121	61,998
General Fund Appropriations	-	-	25,000	10,000	1,086	1,086	384	215,000	-	-
Health Insurance Contributions (HB1)	94	113	131	155	176	-	-	(26)	(8)	(12)
Net Investment Income (Loss)	3,427	(3,841)	26,795	18,487	14,863	6,359	61,966	(22,148)	40,801	57,058
Bank of America Settlement	646	-	-	-	-	-	-	-	-	-
Northern Trust Settlement	-	-	-	21	3	-	-	-	-	-
Pension Spiking	546	99	210	392	15	9	4	-	-	-
Total Additions	41,307	27,243	95,513	71,063	80,152	70,579	126,368	259,940	104,164	124,747
Deductions										
Benefit Payments	54,766	56,268	56,935	58,805	60,948	62,423	63,249	64,121	63,805	63,823
Refunds	85	11	26	22	162	88	273	280	166	220
Administrative Expenses	201	176	181	194	225	266	230	273	293	314
Capital Project Expenses	-	4	1	-	-	-	-	-	-	-
Total Deductions	55,052	56,459	57,143	59,021	61,335	62,777	63,752	64,674	64,264	64,357
Net Increase (Decrease) in Fiduciary Net Position	\$(13,745)	\$(29,216)	\$38,370	\$12,042	\$18,817	\$7,802	\$62,616	\$195,266	\$39,900	\$60,390

Changes in Fiduciary Net Pos	sition - SPR	S Insuran	ce Plan							
As of June 30 (\$ in Thousands)										
Additions	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Employers' Contributions	\$10,379	\$10,228	\$9,222	\$9,397	\$13,282	\$13,133	\$9,284	\$8,782	\$9,289	\$10,158
Net Investment Income (Loss)	2,921	(48)	21,570	16,420	10,766	1,108	50,051	(10,787)	21,426	26,836
Retired Re-employed (HB1)	3	9	-	-	6	-	-	-	-	5
Member Drug Reimbursement	-	-	-	-	-	-	-	-	-	-
Premiums Received from Retirees	1	(29)	(55)	(41)	(13)	(12)	(14)	(27)	(131)	(13)
Humana Gain Share	-	-	-	-	144	-	811	342	224	390
Northern Trust Settlement	-	-	-	8	1	-	-	-	-	-
Health Insurance contributions (HB1)	-	-	-	-	-	196	209	256	356	408
Total Additions	13,304	10,160	30,737	25,784	24,186	14,425	60,341	(1,434)	31,164	37,784
Deductions										
Health Insurance Premiums	13,483	13,836	13,405	13,881	13,942	14,215	14,487	14,461	14,290	12,412
Administrative Expenses	65	89	66	62	69	71	71	73	74	71
Self-Funded Healthcare Costs	-	-	24	38	40	22	25	21	18	7
Excise Tax Insurance	-	-	-	-	-	-	-	-	-	-
Total Deductions	13,548	13,925	13,495	13,981	14,051	14,308	14,583	14,555	14,382	12,490
Net Increase (Decrease) in Fiduciary Net Position	\$(244)	\$(3,765)	\$17,242	\$11,803	\$10,135	\$117	\$45,758	\$(15,989)	\$16,782	\$25,294

Schedule of Benefit Expenses

The following tables include individuals receiving a monthly benefit as of June 30 in the indicated fiscal year. A single member may have multiple accounts which contribute to one pension. This table represents all individuals receiving a benefit including dependent children, Qualified Domestic Relations Order (QDRO) accounts and multiple beneficiary accounts. If a member has died or a disability decision is pending, the monthly benefit amount is reflected as zero until the account status changes.

chedule of Benefit Expenses - KERS Nonhazardous s of June 30 (in Whole \$)				
s of Julie 30 (iii Whole \$)	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments
scal Year 2015				
verage Benefit	\$992	\$1,901	\$996	\$909
umber of Accounts	6,896	33,940	2,696	983
otal Monthly Benefits	\$6,843,193	\$64,503,048	\$2,684,720	\$893,407
of Total Monthly Benefits	9.13%	86.09%	3.58%	1.19%
scal Year 2016				
verage Benefit	\$989	\$1,886	\$1,005	\$902
umber of Accounts	7,390	35,192	2,770	1,014
otal Monthly Benefits	\$7,312,293	\$66,383,638	\$2,784,928	\$914,804
of Total Monthly Benefits	9.45%	85.77%	3.60%	1.18%
scal Year 2017				
verage Benefit	\$992	\$1,883	\$1,013	\$924
umber of Accounts	7,628	35,890	2,772	1,028
otal Monthly Benefits	\$7,565,780	\$67,591,003	\$2,807,938	\$950,318
of Total Monthly Benefits	9.59%	85.65%	3.56%	1.20%
scal Year 2018				
verage Benefit	\$998	\$1,879	\$1,019	\$940
umber of Accounts	8,070	37,141	2,767	1,007
otal Monthly Benefits	\$8,049,794	\$69,780,011	\$2,818,593	\$946,466
of Total Monthly Benefits	9.87%	85.52%	3.45%	1.16%
scal Year 2019				
verage Benefit	\$993	\$1,876	\$1,029	\$933
umber of Accounts	8,387	37,751	2,751	997
otal Monthly Benefits	\$8,328,706	\$70,826,696	\$2,831,527	\$930,110
of Total Monthly Benefits	10.04%	85.42%	3.41%	1.12%
scal Year 2020	10.0470	05.4270	3.4170	1.12/
verage Benefit	\$984	\$1,872	\$1,031	\$937
umber of Accounts	8,622	38,233	2,676	987
otal Monthly Benefits	\$8,483,484	\$71,585,386	\$2,759,983	\$924,459
of Total Monthly Benefits				
scal Year 2021	10.13%	85.47%	3.30%	1.10%
	\$004	¢1 964	¢4.026	¢040
/erage Benefit	\$984	\$1,864	\$1,036	\$949
umber of Accounts	9,046	39,020	2,698	1,019
otal Monthly Benefits	\$8,897,420	\$72,724,923	\$2,796,355	\$966,951
of Total Monthly Benefits	10.42%	85.17%	3.27%	1.13%
scal Year 2022	0007	** **********************************	** ***	4000
verage Benefit	\$987	\$1,860	\$1,031	\$966
umber of Accounts	9,279	39,508	2,609	1,033
otal Monthly Benefits	\$9,155,941	\$73,489,369	\$2,690,544	\$997,608
of Total Monthly Benefits	10.61%	85.12%	3.12%	1.16%
scal Year 2023				
verage Benefit	\$982	\$1,861	\$1,034	\$956
umber of Accounts	9,464	39,505	2,531	1,024
				¢070 466
otal Monthly Benefits	\$9,291,103	\$73,531,803	\$2,615,997	\$979,166
		\$73,531,803 85.09%	\$2,615,997 3.03%	
otal Monthly Benefits	\$9,291,103			
otal Monthly Benefits of Total Monthly Benefits	\$9,291,103			
otal Monthly Benefits of Total Monthly Benefits scal Year 2024	\$9,291,103 10.75%	85.09%	3.03%	1.13%
otal Monthly Benefits of Total Monthly Benefits scal Year 2024 verage Benefit	\$9,291,103 10.75% \$981	85.09% \$1,862	3.03% \$1,027	1.13% \$990

Schedule of Benefit Expenses - KERS Hazardous				
As of June 30 (in Whole \$)				
	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments
Fiscal Year 2015				
Average Benefit	\$986	\$1,556	\$661	\$714
Number of Accounts	1,912	1,566	193	90
Total Monthly Benefits	\$1,884,477	\$2,436,923	\$127,477	\$64,250
% of Total Monthly Benefits	41.76%	54.00%	2.82%	1.42%
Fiscal Year 2016				
Average Benefit	\$984	\$1,542	\$663	\$730
Number of Accounts	2,046	1,658	194	94
Total Monthly Benefits	\$2,011,530	\$2,557,114	\$128,663	\$68,605
% of Total Monthly Benefits	42.21%	53.65%	2.70%	1.44%
Fiscal Year 2017				
Average Benefit	\$993	\$1,541	\$662	\$721
Number of Accounts	2,101	1,719	205	96
Total Monthly Benefits	\$2,086,732	\$2,648,685	\$135,625	\$69,255
% of Total Monthly Benefits	42.24%	53.61%	2.75%	1.40%
Fiscal Year 2018				
Average Benefit	\$1,002	\$1,551	\$684	\$737
Number of Accounts	2,215	1,877	205	100
Total Monthly Benefits	\$2,218,520	\$2,911,409	\$140,174	\$73,704
% of Total Monthly Benefits	41.52%	54.48%	2.62%	1.38%
Fiscal Year 2019	11.0270	01.1070	2.0270	1.0070
Average Benefit	\$1,020	\$1,561	\$708	\$744
Number of Accounts	2,269	1,987	208	99
Total Monthly Benefits	\$2,315,435	\$3,101,783	\$147,342	\$73,702
% of Total Monthly Benefits	41.07%	55.01%	2.61%	1.31%
Fiscal Year 2020	41.0770	00.0170	2.0170	1.0176
Average Benefit	\$1,017	\$1,561	\$701	\$739
Number of Accounts	2,334	2,061	207	94
Total Monthly Benefits	\$2,374,412	\$3,216,376	\$145,112	\$69,433
% of Total Monthly Benefits	40.90%	55.40%	2.50%	1.20%
Fiscal Year 2021	40.9070	33.40 /0	2.30 /0	1.2070
Average Benefit	\$1,021	\$1,551	\$701	\$751
Number of Accounts	2,414	2,164	215	97
Total Monthly Benefits				
,	\$2,464,831 40.78%	\$3,355,473 55.52%	\$150,742 2.49%	\$72,837 1.21%
% of Total Monthly Benefits Fiscal Year 2022	40.76%	55.52%	2.49%	1.2170
Average Benefit	¢1 022	¢1 560	\$711	\$786
-	\$1,032	\$1,560	· ·	
Number of Accounts	2,434	2,267	216	96
Total Monthly Benefits	\$2,512,089	\$3,536,881	\$153,476	\$75,437
% of Total Monthly Benefits	40.01%	56.34%	2.44%	1.20%
Fiscal Year 2023		#4.505		0.40
Average Benefit	\$1,040	\$1,565	\$703	\$843
Number of Accounts	2,441	2,296	213	98
Total Monthly Benefits	\$2,538,237	\$3,592,494	\$149,801	\$82,626
% of Total Monthly Benefits	39.89%	56.46%	2.35%	1.30%
Fiscal Year 2024				
Average Benefit	\$1,049	\$1,579	\$708	\$863
Number of Accounts	2,444	2,327	214	99
Total Monthly Benefits	\$2,562,636	\$3,673,571	\$151,555	\$85,417
% of Total Monthly Benefits	39.59%	56.75%	2.34%	1.32%

Schedule of Benefit Expenses - SPRS				
As of June 30 (in Whole \$)				
	Normal Retirement	Early Retirement	Disability Retirement	Beneficiary Payments
Fiscal Year 2015				
Average Benefit	\$3,578	\$3,189	\$1,347	\$2,153
Number of Accounts	150	1,213	75	23
Total Monthly Benefits	\$536,649	\$3,867,971	\$101,018	\$49,524
% of Total Monthly Benefits	11.78%	84.91%	2.22%	1.09%
Fiscal Year 2016				
Average Benefit	\$3,579	\$3,135	\$1,269	\$2,008
Number of Accounts	155	1,277	82	25
Total Monthly Benefits	\$554,743	\$4,002,993	\$104,056	\$50,196
% of Total Monthly Benefits	11.77%	84.95%	2.21%	1.07%
Fiscal Year 2017				
Average Benefit	\$3,611	\$3,135	\$1,278	\$2,008
Number of Accounts	149	1,303	82	25
Total Monthly Benefits	\$538,032	\$4,084,771	\$104,788	\$50,196
% of Total Monthly Benefits	11.26%	85.50%	2.19%	1.05%
Fiscal Year 2018				
Average Benefit	\$3,642	\$3,128	\$1,289	\$2,082
Number of Accounts	153	1,361	83	26
Total Monthly Benefits	\$557,249	\$4,257,579	\$107,019	\$54,127
% of Total Monthly Benefits	11.20%	85.56%	2.15%	1.09%
Fiscal Year 2019				
Average Benefit	\$3,607	\$3,138	\$1,298	\$2,082
Number of Accounts	156	1,401	83	26
Total Monthly Benefits	\$562,630	\$4,395,857	\$107,737	\$54,127
% of Total Monthly Benefits	10.99%	85.85%	2.10%	1.06%
Fiscal Year 2020	10.0070	00.0070	2.1070	1.0070
Average Benefit	\$3,628	\$3,154	\$1,339	\$2,137
Number of Accounts	152	1,440	Ψ1,333 80	Ψ <u>2,137</u>
	\$551,470	\$4,541,490	\$107,148	\$55,558
Total Monthly Benefits			2.04%	
% of Total Monthly Benefits	10.49%	86.41%	2.04%	1.06%
Fiscal Year 2021	Ф0.540	#0.400	04.007	#0.407
Average Benefit	\$3,542	\$3,160	\$1,287	\$2,137
Number of Accounts	156	1,468	84	26
Total Monthly Benefits	\$552,551	\$4,638,826	\$108,101	\$55,558
% of Total Monthly Benefits	10.32%	86.63%	2.02%	1.04%
Fiscal Year 2022				
Average Benefit	\$3,565	\$3,163	\$1,275	\$2,077
Number of Accounts	159	1,481	83	25
Total Monthly Benefits	\$566,764	\$4,683,959	\$105,787	\$51,931
% of Total Monthly Benefits	10.48%	86.60%	1.96%	0.96%
Fiscal Year 2023				
Average Benefit	\$3,550	\$3,146	\$1,294	\$2,077
Number of Accounts	155	1,486	83	25
Total Monthly Benefits	\$550,304	\$4,674,802	\$107,386	\$51,931
% of Total Monthly Benefits	10.22%	86.82%	1.99%	0.97%
Fiscal Year 2024				
Average Benefit	\$3,511	\$3,145	\$1,286	\$2,172
Number of Accounts	155	1,481	76	24
Total Monthly Benefits	\$544,210	\$4,658,414	\$97,752	\$52,129
% of Total Monthly Benefits	10.17%	87.03%	1.83%	0.97%
70 OF TOTAL MOTHERY DOTTORIO	10.17/0	07.0070	1.00 /0	0.31 /0

Active Refunds

	Active	Refunds Rep	ort For the Pe	eriod ended J	June 30, 202	4 (in Whole \$	5)
		Active Termina	ation Refunds	Active Deatl	n Refunds	Tota	als
		Number of Refunds	Amount of Refunds	Number of Refunds	Amount of Refunds	Number of Refunds	Amount of Refunds
System	Tier						
	1	161	2,497,333	79	268,714	240	2,766,047
	2	73	506,667	14	81,433	87	588,100
KERS	3	723	7,939,370	11	41,846	734	7,981,216
Nonhazardous	Total	957	10,943,370	104	391,993	1,061	11,335,363
	1	13	201,697	2	5,579	15	207,276
	2	16	130,529	3	8,477	19	139,006
KERS	3	223	3,630,505	10	68,691	233	3,699,196
Hazardous	Total	252	3,962,731	15	82,747	267	4,045,478
	1	1	19,477	-	-	1	19,477
	2	-	-	-	-	-	-
	3	5	201,096	-	-	5	201,096
SPRS	Total	6	220,573	-	-	6	220,573
TOTALS		1,215	\$15,126,674	119	\$474,740	1,334	\$15,601,414

Analysis of Initial Retirees

	KERS	KERS	
	Nonhazardous	Hazardous	SPRS
Fiscal Year 2015			
Number of Accounts	2,078	191	5
Average Service Credit (months)	204	164	25
Average Final Compensation	\$47,187	\$47,148	\$67,86
Average Monthly Benefit	\$1,308	\$1,280	\$3,00
Average System Payment for Health Insurance	\$549	\$906	\$1,37
Fiscal Year 2016			
Number of Accounts	2,043	205	5
Average Service Credit (months)	207	160	23
Average Final Compensation	\$47,429	\$44,494	\$65,53
Average Monthly Benefit	\$1,351	\$1,225	\$2,95
Average System Payment for Health Insurance	\$558	\$870	\$1,42
Fiscal Year 2017			
Number of Accounts	2,094	191	3
Average Service Credit (months)	208	146	24
Average Final Compensation	\$46,753	\$47,604	\$68,40
Average Monthly Benefit	\$1,339	\$1,150	\$2,93
Average System Payment for Health Insurance	\$558	\$872	\$1,19
Fiscal Year 2018			
Number of Accounts	2,682	328	6
Average Service Credit (months)	223	167	24
Average Final Compensation	\$48,552	\$51,219	\$71,13
Average Monthly Benefit	\$1,481	\$1,392	\$3,03
Average System Payment for Health Insurance	\$578	\$1,033	\$1,36
Fiscal Year 2019			
Number of Accounts	1,993	234	6
Average Service Credit (months)	204	174	25
Average Final Compensation	\$47,824	\$51,901	\$73,79
Average Monthly Benefit	\$1,355	\$1,532	\$3,34
Average System Payment for Health Insurance	\$569	\$1,015	\$1,39
Fiscal Year 2020	, , , , , , , , , , , , , , , , , , ,	7.,2	* 1,52
Number of Accounts	1,755	195	5
Average Service Credit (months)	211	150	24
Average Final Compensation	\$47,069	\$51,021	\$78,46
Average Monthly Benefit	\$1,352	\$1,242	\$3,31
Average System Payment for Health Insurance	\$579	\$1,013	\$1,40
Fiscal Year 2021	Ψοισ	ψ1,010	Ψ1,40
Number of Accounts	1,644	201	3
Average Service Credit (months)	201	143	21
Average Final Compensation	\$46,600	\$49,664	\$72,94
Average Final Compensation Average Monthly Benefit	\$1,276	\$49,664	\$72,94
• •			
Average System Payment for Health Insurance	\$560	\$1,019	\$1,34
Fiscal Year 2022	4.040	001	
Number of Accounts	1,910	221	2/
Average Service Credit (months)	213	165	24
Average Final Compensation	\$48,028	\$52,575	\$76,37
Average Monthly Benefit	\$1,389	\$1,515	\$3,28
Average System Payment for Health Insurance	\$599	\$1,020	\$1,34

Analysis of Initial Retirees As of June 30 (in	Whole \$) Continued		
	KERS Nonhazardous	KERS Hazardous	SPRS
Fiscal Year 2023			
Number of Accounts	1,479	136	13
Average Service Credit (months)	190	146	186
Average Final Compensation	\$50,304	\$52,473	\$73,081
Average Monthly Benefit	\$1,332	\$1,315	\$2,737
Average System Payment for Health Insurance	\$640	\$1,151	\$1,208
Fiscal Year 2024			
Number of Accounts	1,483	146	16
Average Service Credit (months)	195	150	171
Average Final Compensation	\$50,548	\$57,500	\$70,651
Average Monthly Benefit	\$1,310	\$1,430	\$2,492
Average System Payment for Health Insurance	\$680	\$1,173	\$1,366
Note: This table represents all individuals who had an initial retire	ement date within the fiscal year.		

Payment Options

	Basic	Other			Social Security Adjustment Survivorship		Annuity
KERS Nonhazardous		Other	ocitam	Торор	Aujustinont	Carvivoronip	Amilaity
Number of Accounts	19,521	23	6,745	10,142	3,174	13,055	26
Monthly Benefits	\$28,708,579	\$45,511	\$10,402,173	\$20,532,386	\$5,504,498	\$21,414,771	\$6,684
KERS Hazardous							
Number of Accounts	1,424	6	554	1,417	314	1,364	5
Monthly Benefits	\$1,602,073	\$5,498	\$698,705	\$2,142,484	\$360,813	\$1,662,219	\$1,387
SPRS							
Number of Accounts	187	1	132	756	178	482	
Monthly Benefits	\$539,025	\$3,084	\$380,895	\$2,616,641	\$350,170	\$1,462,691	\$
KRS Total							
Number of Accounts	21,132	30	7,431	12,315	3,666	14,901	3′
Monthly Benefits	\$30,849,677	\$54,093	\$11,481,773	\$25,291,511	\$6,215,481	\$24,539,681	\$8,07

one pension.

Employer Contribution Rates

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

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

The actual pension and insurance employer contribution rates that were paid are shown below.

Under Kentucky Revised Statutes 61.565, KERS and SPRS employer contribution rates are set by the KRS Board 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. The tables on pages 117 and 118 in the Actuarial Section, shows the KERS and SPRS employer contribution rates that were actuarial recommended rates in the annual valuation. House Bill 8 passed during the 2021 legislative session changed how employer contributions are allocated and collected from the participating employers in the KERS Nonhazardous Plan. Each employer will pay a normal cost contribution on the payroll of their covered employees and contribute to the Plan an allocated share of the cost required to amortize the unfunded liability.

Employer Contribution	Employer Contribution Rates (%) As of June 30										
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	
KERS Nonhazardous*											
Actual Rate	38.77%	38.77%	48.59%	49.47%	83.43%	83.43%	84.43%	10.10%	9.97%	9.97%	
KERS Hazardous											
Actual Rate	26.34%	26.34%	23.82%	23.70%	36.85%	36.85%	36.00%	33.43%	31.82%	31.82%	
SPRS											
Actual Rate	75.76%	75.76%	89.21%	91.24%	146.28%	146.28%	143.48%	146.06%	99.43%	99.43%	

^{*2021} House Bill 8 changed the manner in which KERS Nonhazardous pays employer contributions. Beginning in FY22, each employer pays the normal cost, which is the rate stated above, along with an actuarial accrued liability payment that is calculated and provided by the actuary.

Insurance Contracts

KRS 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. KRS provides access to health insurance coverage through the Kentucky Employees' 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 KRS. A retired member's spouse and/or dependents may also be covered on health insurance through KRS.

Insurance Benefits Paid to Retirees & Beneficiaries Participating in a KRS Health Insurance Plan As of June 30, 2024 (in Whole \$)									
	KERS Nonhazardous	KERS Hazardous	SPRS						
Number	31,088	3,100	1,768						
Average Service Credit (Months)	311	264	318						
Average Monthly System Payment for Health Insurance	\$290	\$691	\$914						
Average Monthly Member Payment for Health Insurance	\$36	\$34	\$24						
Total Monthly Payment for Health Insurance	\$9,543,037	\$1,841,985	\$1,277,999						

Insurance Contracts by Type As of June 30										
KERS										
Nonhazardous	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
KEHP Parent Plus	452	441	411	460	441	433	428	434	433	395
KEHP Couple/Family	714	656	663	696	700	666	633	612	553	473
KEHP Single	9,251	8,876	8,627	8,638	8,304	7,942	7,415	7,141	6,693	6,334
Medicare without Prescription	1,303	1,286	1,229	1,179	1,141	1,089	1,026	989	957	939
Medicare with Prescription	18,577	19,447	20,215	21,117	21,713	22,271	22,648	22,903	22,976	22,947
KERS Hazardous	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
KEHP Parent Plus	110	97	88	96	103	112	104	116	118	108
KEHP Couple/Family	448	439	432	478	493	491	491	477	470	462
KEHP Single	656	663	667	686	699	677	667	686	653	621
Medicare without Prescription	62	66	72	73	83	82	82	84	72	66
Medicare with Prescription	1,177	1,302	1,401	1,495	1,584	1,662	1,693	1,746	1,796	1,843
SPRS	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
KEHP Parent Plus	81	77	79	74	77	85	89	90	92	79
KEHP Couple/Family	441	447	420	426	454	459	448	454	434	415
KEHP Single	265	246	251	253	224	226	221	217	230	239
Medicare without Prescription	16	18	17	21	16	16	13	14	17	16
Medicare with Prescription	777	850	897	941	975	998	1003	1,016	1,022	1,019
KRS Total	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
KEHP Parent Plus	643	615	578	630	621	630	621	640	643	582
KEHP Couple/Family	1,603	1,542	1,515	1,600	1,647	1,616	1,572	1,543	1,457	1,350
KEHP Single	10,172	9,785	9,545	9,577	9,227	8,845	8,303	8,044	7,576	7,194
Medicare without										
Prescription	1,381	1,370	1,318	1,273	1,240	1,187	1,121	1,087	1,046	1,021
Medicare with Prescription	20,531	21,599	22,513	23,553	24,272	24,931	25,344	25,665	25,794	25,809

Acronym Glossary for Kentucky Retirement Systems As of December 5, 2024

Phrase Acronym **Actuarially Determined Contribution ADC** Actuarial Accrued Liability AAL Annual Comprehensive Financial Report **ACFR Board of Trustees** Board Collateralized Mortgage Obligations CMO Commonwealth of Kentucky Commonwealth Consumer Price Index CPI County Employees Retirement System **CERS** Cost of Living Adjustment COLA Department of Employee Insurance DEI **Emerging Market Debt EMD** Entry Age Normal Cost Method **EANC Exchange Traded Funds ETFs** FΥ Fair Value Fiscal Year (Ended) FY(E) Gabriel, Roeder, Smith & Co. **GRS** Generally Accepted Accounting Principles **GAAP** Geometric Average Net Investment Return **GANIR** Governmental Accounting Standards Board **GASB** House Bill HB **Investment Management Agreement** IMA **Investment Policy Statement IPS** Internal Revenue Service **IRS** Information Technology IT Judicial Form Retirement System **JFRS** Kentucky Administrative Regulations KAR Kentucky Employees' Health Plan **KEHP** Kentucky Employees Retirement Systems **KERS** Kentucky Public Pensions Authority **KPPA** Kohlberg, Kravis, Roberts KKR Management's Discussion and Analysis MD&A Net Asset Value NAV **Net OPEB Liability** NOL **Net Pension Liability NPL** Not Rated NR Other Post-Employment Benefits **OPEB** Pacific Alternative Asset Management Company **PAAMCO** Perimeter Park West Incorporated **PPW** Qualified Domestic Relations Order **QDRO** Required Supplementary Information RSI Senate Bill SB Short Term Investment Funds **STIFs** State Police Retirement System **SPRS** SAFR Summary Annual Financial Report Total Pension Liability TPL Teachers' Retirement System **TRS** Unfunded Actuarial Accrued Liability **UAAL** Unfunded Accrued Liability UAL **Unrelated Business Income UBI**

