

Summary Annual Financial Report

FOR THE FISCAL YEAR ENDED JUNE 30

2023

Prepared through the joint efforts of KPPA's team members. Available online at kyret.ky.gov

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EXECUTIVE DIRECTOR'S MESSAGE



David L. Eager Executive Director

December 6, 2023

To the Trustees & Membership

On behalf of the Kentucky Public Pensions Authority (KPPA) and the Boards of the County Employees Retirement System (CERS) and the Kentucky Retirement Systems (KRS), it is my honor to present the Summary Annual Financial Report for the Fiscal Year (FY) ended June 30, 2023. This report, and the Annual Comprehensive Financial Report, are provided as a resource for understanding the KPPA structure and the financial status of the systems KPPA operates.

Total assets in the systems administered by KPPA increased to a record \$24.9 billion in FY 2023, buoyed by strong investment returns, General Fund appropriations authorized by the legislature, and employer contributions. The blended FY return for all of the CERS and KRS hazardous and nonhazardous pension funds was 9.54%, while the blended return for the CERS and KRS hazardous and nonhazardous insurance trust fund was 10.15%.

Investment performance by system can be found on pages 16-17. More information can be found in the Investments section of the KPPA website.

Those strong investment returns exceeded the median peer pension fund return of 7.64%, the target returns for those portfolios, and the actuarially assumed rates of return, which were 5.25% for the Kentucky Employees Retirement System (KERS) Nonhazardous and State Police Retirement System (SPRS) pension funds and 6.25% for all other pension and insurance funds.

Funding Improves

Thanks to strong investment returns for FY 2023 and funding approved by the General Assembly over and above the actuarially determined contribution (ADC) for KERS Nonhazardous and SPRS, as well as changes in some actuarial assumptions for CERS, the funded ratio of all three pension systems improved from FY 2022.

Pension Funded Ratio

	2018	2019	2020	2021	2022	2023
CERS NH	52.7%	49.1%	49.4%	51.8%	52.0%	56.1%
CERS H	48.4%	45.3%	45.1%	46.7%	47.6%	51.4%
KERS NH	12.9%	13.4%	14.2%	16.8%	18.5%	21.8%
KERS H	55.5%	54.8%	55.3%	60.4%	63.2%	65.4%
SPRS	27.1%	27.0%	28.1%	30.7%	52.5%	54.0%

Insurance Funded Ratio

	2010	2010	2020	2021	2022	2022
	2018	2019	2020	2021	2022	2023
CERS NH	76.7%	70.7%	78.5%	85.4%	132.1%	131.5%
CERS H	74.6%	75.8%	78.2%	84.3%	101.0%	100.7%
KERS NH	36.4%	36.3%	42.7%	50.2%	79.1%	81.7%
KERS H	130.0%	123.1%	126.0%	135.5%	172.2%	170.4%
SPRS	71.6%	71.3%	75.0%	82.0%	100.6%	100.5%

Commitments by the General Assembly and the Governor to fully fund contributions, and provide additional allocations, combined with prudent management by the Office of Investments and other staff, have all five pension funds on track to be fully funded by 2049.

To read the full actuarial reports, visit the Actuarial Valuations page on our website, under the Publications & Forms tab.

Ratings Boosts

Both S&P Global Ratings and Fitch Ratings raised their credit ratings for the Commonwealth in FY 2023. Governor Andy Beshear said on June 29, "We're showing everyone that our economy is booming, our pension systems are strong and our fiscal house is in order due to strong management."

For Fiscal Year 2023, the General Assembly allocated the full actuarially recommended contribution. Additionally, legislation passed in the 2022 General Assembly made additional appropriations to the KERS Nonhazardous plan of \$240 million for FY 2023 and FY 2024, and \$215 million for FY 22 to the State Police Retirement System (SPRS).

Strategic Plan

In March 2023 Provaliant Retirement, LLC of Scottsdale, Arizona, was selected through an RFP process to assist KPPA in developing the agency's first strategic plan since 2009. Provaliant is tasked with helping KPPA identify ways to improve efficiency, productivity, the quality of service delivery, governance practices, retaining and motivating employees, and promoting the best interest of members and stakeholders.

KPPA will collaborate with the CEOs and Trustees of CERS and KRS to develop strategic plans that are specific to each entity but that also complement one another. This months-long process is expected to yield plans with actions that will be implemented over time, in some cases years.

EXECUTIVE DIRECTOR'S MESSAGE

Financial Management

KPPA hired its first Chief Financial Officer, Michael Lamb, who is responsible for oversight of the accounting, budgeting, cash management, risk management, and procurement for KPPA, and for developing and maintaining accounting controls, conducting financial operations, and producing financial reporting for all of the systems operated by KPPA. Previously Mr. Lamb was General Manager, Enterprise Risk Management and Audit at Toyota Tsusho America (TAI) Inc., in Georgetown, KY.

Cybersecurity

KPPA continues to make the security of our members' information our highest priority. Nation-wide news reports of cyberattacks and data breaches at large companies and government agencies are unfortunately all too frequent. Our Enterprise and Technology Services staff monitor an ever-changing cyberthreat landscape and take a variety of proactive measures to protect both member information and KPPA resources. All KPPA staff are routinely trained in cybersecurity issues to ensure they recognize suspicious activity and work to keep KPPA data secure, and security topics are covered in KPPA member newsletters to increase member security awareness. KPPA also has ongoing agency-wide planning and readiness efforts in disaster recovery, business continuity, and incident response.

Report from CERS CEO Ed Owens III

This fiscal year has been an exciting one for the CERS Board of Trustees and its membership. Our FY 2023 Actuarial Valuation shows we had an estimated annual return on net assets of over 10% for both the pension and insurance plans. Those returns ranked in the top five for public pension systems nationwide.

The Board increased the assumed rate of return from 6.25% to 6.50% for all four plans. This has the effect of lowering the employer contribution rate and decreasing our unfunded liability. Our pension plans are now approximately 56% funded while our insurance plans are over 100% funded.

Although employer contributions were lowered, the pension plans received approximately the same dollar amount of contributions as in the prior fiscal year due to strong growth in active membership and covered payroll.

The CERS Investment Committee and the Board are now focused on reviewing the system's asset allocation and making changes where appropriate. The goal will be to target the same level of investment return while reducing the amount of risk in the portfolio.

The Board of Trustees and I remain focused on protecting the assets of the CERS Trust while we ensure excellent service to the CERS members.

Report from KRS CEO John Chilton

As a part of the FY 2023 and 2024 budgets, the General Assembly provided full funding for the actuarially determined pension and health insurance contributions, plus additional amounts totaling \$695 million over fiscal years 2022 through 2024. The progress toward fully funding the actuarial liabilities will continue.

The KRS trustees continue to follow the evolving world of Environmental, Social, and Governance (ESG) issues as they relate to investments. In response to legislation passed in the 2023 Regular Session, KRS' corporate proxy voting history will be posted quarterly on the KPPA website. (Many ESG issues are addressed in corporate governance proposals by the corporations in which we invest.) Additionally, and importantly, the KRS Board monitors ongoing litigation in anticipation of favorably resolving longstanding cases.

This year, the Investment Committee worked with the KPPA Office of Investments to monitor KRS investments with a view to maximizing investment returns while minimizing investment risks. In fiscal year 2023, KPPA, CERS, and KRS have worked to further upgrade the Office of Investments team by adding investment professionals. Further staff additions are planned for FY 2024.

A Personal Update

In 2023, I signed a one-year contract that will end with my retirement. KPPA has formed a search committee comprising members of the KRS and CERS boards, which is in the process of identifying candidates to be the next KPPA Executive Director.

It has been my great honor to have served as KPPA's Executive Director these past eight years. During that time, KPPA has worked hard to improve member servicing. We enhanced our relationships with key stakeholders including members of the State Legislature and the Executive Branch, as well as retiree groups, members of the media, and the general public. And, we successfully strengthened employee morale, with 94% of our employees agreeing that they feel part of the KPPA team. KPPA is like a family, and I have been fortunate to have been a part of that family. No matter who sits in the Executive Director's office, KPPA's commitment to our Six Mandates will not waver, nor will our commitment to serving the retirees of state and local government and the State Police. KPPA will never stop working for our Members.

Acknowledgments

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 CERS and KRS CEOs. 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 systems operated by KPPA.

AGENCY STRUCTURE

The Kentucky Public Pensions Authority oversees the operations of CERS, KERS, and SPRS by providing administrative support, investment management, and conducting daily activities on behalf of the CERS, KRS, and KPPA Boards. The 8-member KPPA board is made up of elected and appointed trustees from the CERS and KRS boards. KPPA is led by an Executive Director who is appointed by the KPPA Board to work with the CERS and KRS Chief Executive Officers to carry out the statutory provisions of the Systems.



KPPA BOARD Four (4) CERS and Four (4) KRS **Trustees**

*Elected to position by KPPA Board

Keith Peercy KPPA Chair* Selected by KRS Chair

Jerry W. Powell KPPA Vice Chair* Selected by CERS Chair Lynn Hampton **KRS Board Chair**

Betty Pendergrass CERS Board Chair

C. Prewitt Lane KRS Investment **Committee Chair**

Dr. Merl Hackbart **CFRS** Investment Committee Chair

William Summers V **KRS Trustee** Selected by KRS Chair

William O'Mara CFRS Trustee Selected by CERS Chair

Chief Auditor Kristen Coffey

> Chief Financial Officer Michael Lamb

Division Director Accounting Connie Davis

KPPA BOARD

Director Rebecca Adkins

Deputy Executive

Executive Director

Erin Surratt

Executive Director

David Eager

CERS & KRS INVESTMENT COMMITTEES

> Chief Investment Officer Office of Investments

> > Steve Willer

Office of Benefits

Executive Director Office of Legal Services

Michael Board

Division Director Communications

Shawn Sparks

Division Director **Human Resources**

Lori Casey

Deputy Chief Investment Officer

Anthony Chiu

Division Director Enterprise & Technology Services Dominique McKinley

Division Director Employer Reporting, Compliance & Education D'Juan Surratt

> Assistant Director Procurement & Office Services Anne Baker

Division Director Disability & Survivor Benefits Liza Welch

> **Division Director** Member Services Shauna Miller

Division Director Membership Support Odette Gwandi

Division Director Retiree Services Stephanie Aldridge

Division Director Retiree Health Care Connie Pettyjohn

Division Director Quality Assurance Wes Crosthwaite

General Counsel Non-Advocacy Victoria Hale

General Counsel Advocacy Leigh Ann Davis CONSULTANTS

Actuarial Services Gabriel, Roeder, Smith & Co.

Legal Services Stoll Keenon Ogden, PLLC Reinhart Boerner Van Deuren, SC Frost Brown Todd, LLC Faegre Drinker Biddle & Reath, LLP Manatt, Phelps & Phillips, LLP Hirschler Fleischer, P.C. Ice Miller, LLP Umberg Zipser, LLP

> **Auditing Services** Auditor of Public Accounts

Fiduciary Review Counsel Ice Miller, LLP

Investment Consultant Wilshire

Master Custodian **BNY Mellon**

Portfolio Manager **Public Equity** Joe Gilbert IV

Portfolio Manager **Private Equity** Vacant

Portfolio Manager Real Return & Real Estate Vacant

Portfolio Manager Fixed Income Brian Caldwell

GOVERNANCE

The systems operated by KPPA are governed by two 9-member boards of trustees, each consisting of three elected members and six gubernatorial appointees serving four-year terms. The CERS Board of Trustees is responsible for governance of the CERS funds. The governance of the KERS funds and the SPRS funds are the responsibility of the KRS Board of Trustees. CERS and KRS each have a Chief Executive Officer who serves as a legislative and executive advisor to the respective boards and a General Counsel who provides legal services.

ELECTED BY MEMBERSHIP

APPOINTED BY GOVERNOR: The Governor selects appointees from lists of candidates provided by the Kentucky Association of Counties (KACo), the Kentucky League of Cities (KLC), and the Kentucky School Boards Association (KSBA).

CERS BOARD OF TRUSTEES Betty Pendergrass, Chair George Cheatham, Vice Chair

General Counsel: Johnson Branco & Brennan, LLP Three (3) Elected Trustees Six (6) Appointed by Governor













J. Michael Foster Term ends July 1, 2021* Nominated by KACo



J.T. Fulkerson Term ends July 1, 2021* Nominated by KLC



Dr. Martin Milkman Dr. Merl Hackbart Term ends March 31, 2025 Nominated by KACo Term ends July 1, 2025 Nominated by KSBA



Term ends March 31, 2025 Nominated by KLC

*Trustee continues to serve until the Governor makes an appointment to fill the trustee position.

ELECTED BY MEMBERSHIP

APPOINTED BY GOVERNOR

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







David Adkins Term ends March 31, 2026 Elected by KERS



Chair



Vice Chair



Pamela F. Thompson Term ends June 17, 2027



Ramsey Bova Term ends June 17, 2026



Mary G. Eaves Term ends June 21, 2027



Term ends June 17, 2026

SYSTEMS AND BENEFIT TIERS

KPPA operates three systems. CERS and KERS are multiple-employer, cost-sharing defined benefit pension plans with nonhazardous and hazardous members. SPRS is a single-employer defined benefit pension plan with hazardous members. Each system covers regular full-time members employed by the participating agencies.

OUR SYSTEMS



CERS participating employers include local governments (county and city), school boards, and eligible local agencies. Nonhazardous and hazardous combined cover 277,371 members.



KERS participating employers include state departments, boards, employers directed by Executive Order of the Governor to participate in KERS, and 112 quasi-governmental agencies. Nonhazardous and hazardous combined cover 141,386 members.



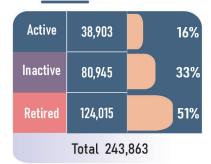
SPRS covers all 2,852 retired, active, and inactive Kentucky State Police troopers. All SPRS positions are hazardous.

BENEFIT TIERS

Each plan provides pension and insurance benefits based on the member's participation date.



Participation
Date Prior to
9/1/2008



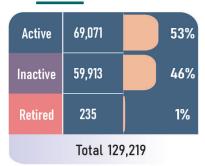


Participation Date 9/1/2008 - 12/31/2013





Participation Date 1/1/2014 and after

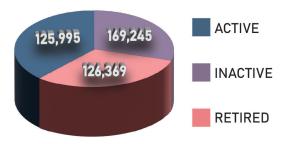


ANNUAL PENSION BENEFIT

98% of CERS, KERS, and SPRS retirees receive \$60,000 or less in pension benefits each year. Most - 92% - of KPPA's \$2.3 billion retiree payroll goes to Kentucky residents (see page 12), meaning most of the pension benefits KPPA pays stay in Kentucky and benefit local economies.



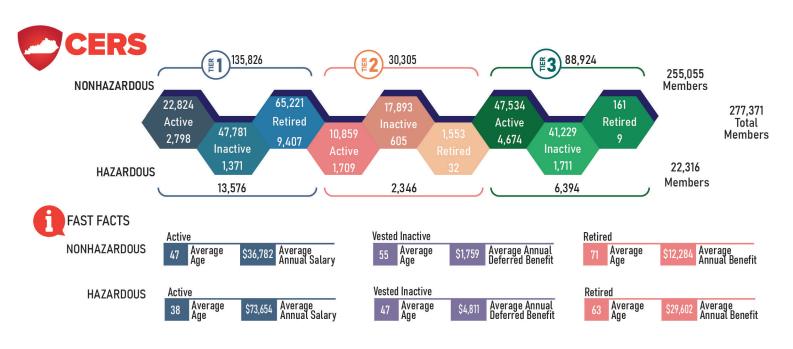
TOTAL MEMBERS 421,609

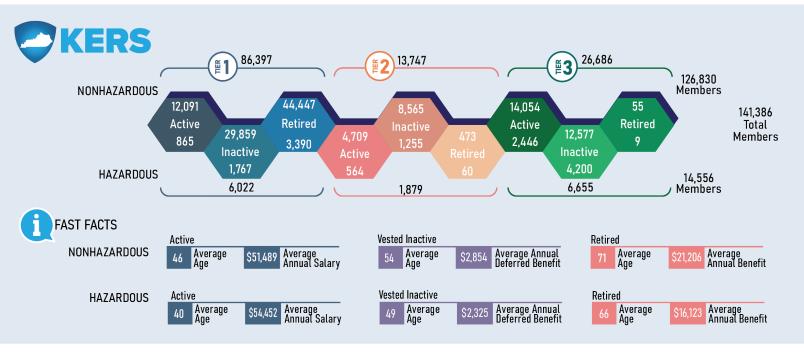


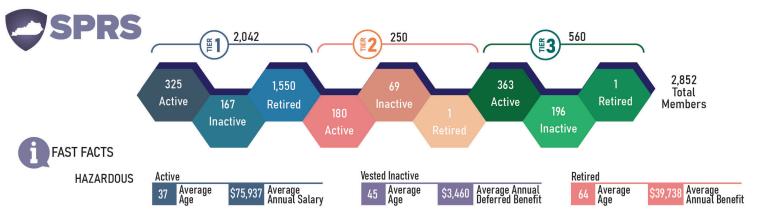
HEALTH INSURANCE

KPPA pays a percentage of the monthly contribution rate or a dollar amount toward insurance coverage. The contribution amount is based on the retired member's participation date, years of service, and type of service. A percentage of the monthly contribution rate is paid for members participating prior to July 1, 2003. A dollar amount is paid toward insurance coverage for members participating on or after July 1, 2003.

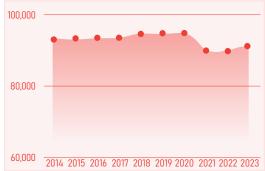
MEMBERSHIP BY SYSTEM



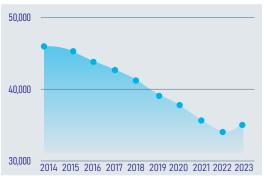




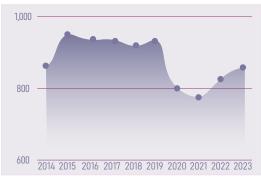
PARTICIPATING EMPLOYERS













CERS Employers

Classification	Agencies	Participating Employees
Airport Boards	5	538
Ambulance Services	18	413
Area Development Districts	14	686
Boards of Education	171	45,868
Cities	222	10,381
Community Action	21	2,820
Conservation Districts	49	63
County Attorneys	75	543
County Clerks	16	580
Development Authorities	6	8
Fire Departments	29	1,140
Fiscal Courts	118	10,946
Health Departments	1	298
Housing Authorities	39	410
Jailers	2	69
Libraries	86	1,298
Other Retirement Systems	2	3
P1 State Agencies	4	1,443
Parks and Recreation	6	63
Planning Commissions	16	204
Police Departments	2	13
Riverport Authorities	5	71
Sanitation Districts	8	320
Sheriff Departments	12	700
Special Districts & Boards	47	1,401
Tourist Commissions	25	199
Urban Government	2	6,130
Utility Boards	119	4,077
Total	1,120	90,685

KERS Employers

Classification	Agencies	Participating Employees
County Attorneys	58	268
Health Departments	60	2,158
Master Commissioner	31	54
Non-P1 State Agencies	33	597
Other Retirement Systems	1	20
P1 State Agencies	133	28,272
Regional Mental Health Units	10	2,433
Universities	7	1,508
Total	333	35,310

SPRS

Classification	Agencies	Participating Employees
Kentucky State Police	1	868

EMPLOYER COSTS BY TIER

COST COMPONENTS

Employer contributions have two components. The normal cost covers the benefit accruals active participants are projected to earn during the upcoming year toward their retirement and insurance benefits. The second component is the unfunded liability. The unfunded liability cost represents the benefit accruals a member has already earned that were not fully funded as of June 30, 2023.

UNFUNDED LIABILITY

Unfunded liabilities are debt obligations that do not have sufficient funds set aside to pay the debt. They result primarily from four factors:

- 1. A shortfall between the Actuarially Determined Contribution (ADC) and the actual contribution.
- 2. Investment returns that fell short of the assumed investment rate of return.
- 3. Other economic and demographic assumptions that did not accurately reflect plan experience. Refer to page 21 for more information.
- 4. Benefit increases that were not pre-funded, such as previous retiree Cost of Living Adjustments.

GRS Actuarial Valuation Results as of June 30, 2023

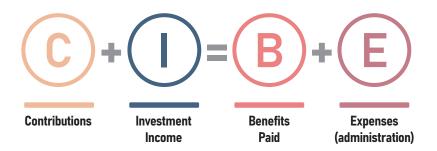
	CERS	CERS	KERS NONHAZARDOUS	KERS HAZARDOUS	SPRS					
PENSION - NORMAL COST RATES' (Each employer's cost for an employee's retirement benefit)										
Tier 1 Cost Before 7/03	6.36%	12.75%	7.86%	10.07%	22.26%					
Tier 1 Cost After 7/03	5.95%	12.48%	8.11%	9.89%	21.83%					
Tier 2 Cost	3.65%	9.73%	5.61%	6.65%	18.24%					
Tier 3 Cost	3.37%	6.78%	4.07%	5.83%	15.69%					
Average Normal Cost²	5.29%	9.77%	6.99%	7.71%	19.41%					
INSURANCE - NORMAL COST RATES¹ (Each	employer's cost for an	employee's retirement	: benefit)							
Tier 1 Cost Before 7/03	4.18%	10.69%	3.41%	9.62%	12.84%					
Tier 1 Cost After 7/03	2.56%	3.64%	1.83%	3.36%	4.30%					
Tier 2 Cost	0.76%	1.62%	0.30%	1.19%	2.30%					
Tier 3 Cost	0.67%	1.47%	0.15%	0.83%	2.15%					
Average Normal Cost ²	1.75%	3.21%	1.45%	2.08%	4.93%					
Total Pension & Insurance	7.04%	12.98%	8.44%	9.79%	24.34%					
UNFUNDED LIABILITY COST % (Each emplo	yer's cost for the unfur	nded liability)								
Pension	14.42%	26.72%	*	16.03%	46.38%					
Insurance	-2.86%	-1.09%	*	-11.29%	-2.62%					
Total Unfunded Liability Cost	11.56%	25.63%	*	4.74%	43.76%					

Normal Cost Rate is the cost of an employee's retirement benefit to the employer net of employee contributions earned during that fiscal year.

Average Normal Cost Rate is the blended normal cost rate of all members active as of the valuation date and includes administrative expenses.

Per House Bill 8 (2021 Regular Session), amortization cost for KERS Nonhazardous employers is allocated based on their percentage of the 2019 Actuarial Accrued Liability. Amortization cost for the Hazardous fund is included in the contribution rate, payable as a percentage of payroll.

HOW BENEFITS ARE FUNDED





1. EMPLOYER CONTRIBUTIONS

Recommended employer contribution rates are determined by KPPA's independent actuary based on data in the annual actuarial valuation. The CERS and KRS Boards adopt employer contribution rates necessary for the actuarial soundness of the systems as required by Kentucky Revised Statutes 61.565, 61.702, 78.635, and 78.5536. KERS and SPRS employer rates are subject to approval by the Kentucky General Assembly through the adoption of the biennial Executive Branch Budget. The CERS Board sets CERS employer contribution rates, unless altered by legislation enacted by the Kentucky General Assembly. Employer contributions are deposited to the Retirement Allowance Account and the insurance funds and are used to pay monthly benefits and to fund KPPA expenses.



2. EMPLOYEE CONTRIBUTIONS

Members contribute a percent of their creditable compensation as set by state law based on their benefit tier. Employee contributions are deposited to individual member accounts.

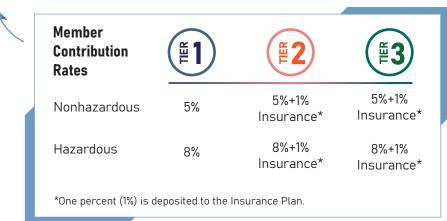


3. INVESTMENTS

The CERS and KRS Boards are charged with the responsibility of investing assets to provide for member benefits. To achieve that goal, the Boards follow a policy of thoughtfully growing our asset base while protecting against undue risk and losses in any particular investment area.

The Boards recognize their fiduciary duty to not only invest the funds in compliance with the Prudent Person Rule, but also to manage the funds in continued recognition of the basic long-term nature of the Systems. In carrying out their fiduciary duties, the Trustees have set forth clearly defined investment policies, objectives, and strategies.

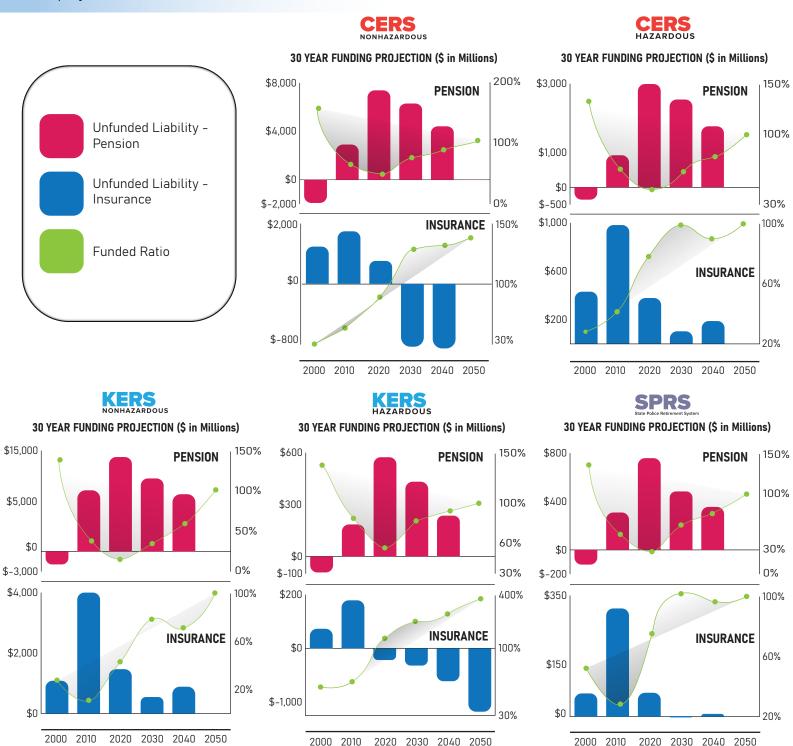
KPPA maintains all plan assets for CERS, KERS, and SPRS through separate financial accounts and does not commingle assets between the plans. Plan assets are reported individually in audited financial statements.



FUNDING TRENDS

30 YEAR FUNDING PROJECTIONS

Based on current assumptions, all pension and insurance funds will be fully funded (100%) by Fiscal Year 2049. All projections shown below are based on the June 30, 2023 Actuarial Valuation.



Fully funded by 2049

The Systems' actuary, GRS, projects that the pension and insurance funds will be fully funded by 2049, based on the most recent actuarial valuation and the closed amortization period set in statute, provided the systems receive the full Actuarially Determined Employer Contribution each year and all actuarial assumptions are met. Those same projections show that benefits will be secure going forward due to steps taken over the past ten years, including the passage of legislation and adoption of internal policies designed to put the funds on solid financial footing.

ECONOMIC IMPACT FOR KENTUCKY

Pension benefits have a wide-ranging impact on the state's economic health. In addition to ongoing monthly pension payments, KPPA issued refunds, death benefit payments, and paid toward insurance coverage for eligible retirees, beneficiaries, and their dependents during the Fiscal Year.

ONE-TIME PAYMENTS

KPPA issues two types of one-time payments to eligible members and beneficiaries: refunds and a \$5,000 death benefit payment.

MONTHLY INSURANCE PAYMENTS

KPPA pays a percentage of the monthly contribution rate or a dollar amount toward insurance coverage for eligible members. Any portion paid toward eligible dependent coverage is based on the member's hazardous service credit.

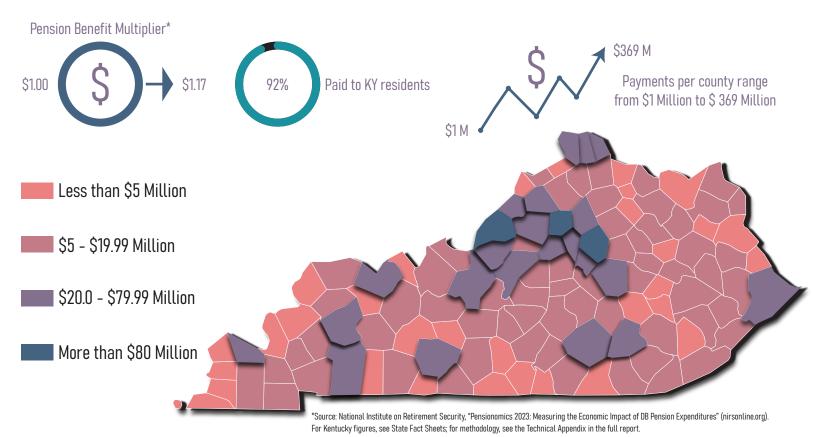
MONTHLY PENSION PAYMENTS

KPPA paid more than \$2 billion in monthly pension benefits to Kentucky residents.

ONE-TIME PAYMENTS								
Number	Amount							
8,263	\$70 Million							
INSURANCE PAYMENTS								
Number of Plan Holders	Amount							
88,188	\$409 Million							
KENTU	CKY RECIPIENTS							
Number	Amount							
115,957	\$2,185 Million							

ECONOMIC IMPACT

KPPA's pension payments support state economic activity, with 92% paid to in-state residents. Each \$1 in taxpayer contributions to Kentucky's state and local pension plans ultimately supported \$3.54 in total output in the state. Each \$1 in state and local pension benefits paid to Kentucky residents ultimately supported \$1.17 in total output in the state.



ECONOMIC IMPACT FOR KENTUCKY

In Fiscal Year 2023, KPPA paid over \$2 billion in ongoing pension benefits. Payments per county in the Commonwealth of Kentucky range from \$1.2 million to \$369 million annually providing a consistent revenue stream for all local economies.

	Fiscal Year 2023 Monthly Pension Benefits Paid by County (\$ in Millions)										
County	Payees	Total	County	Payees	Total	County	Payees	Total	County	Payees	Total
Adair	542	\$9.33	Edmonson	248	\$3.46	Knox	646	\$10.12	Nicholas	220	\$3.19
Allen	450	6.18	Elliott	190	2.97	Larue	405	6.61	Ohio	678	7.97
Anderson	1,452	36.38	Estill	442	6.40	Laurel	1,362	22.54	Oldham	1,433	30.75
Ballard	263	3.84	Fayette	5,711	123.64	Lawrence	353	4.35	Owen	526	12.27
Barren	1,170	17.63	Fleming	506	8.40	Lee	243	3.52	Owsley	224	3.30
Bath	421	6.66	Floyd	932	14.82	Leslie	277	4.17	Pendleton	397	6.91
Bell	699	11.37	Franklin	6,266	194.09	Letcher	638	8.92	Perry	819	11.84
Boone	2,071	44.21	Fulton	187	2.35	Lewis	348	4.78	Pike	1,327	20.07
Bourbon	565	9.38	Gallatin	128	2.24	Lincoln	726	9.53	Powell	369	5.18
Boyd	1,087	18.16	Garrard	471	6.97	Livingston	276	4.68	Pulaski	2,404	40.65
Boyle	899	15.95	Grant	658	12.62	Logan	693	9.88	Robertson	74	1.24
Bracken	238	3.40	Graves	966	15.44	Lyon	363	7.41	Rockcastle	425	6.12
Breathitt	527	8.28	Grayson	855	13.84	Madison	2,585	43.65	Rowan	920	15.95
Breckinridge	526	8.04	Green	347	5.06	Magoffin	390	5.47	Russell	597	9.22
Bullitt	1,778	33.53	Greenup	716	10.41	Marion	580	8.59	Scott	1,397	29.31
Butler	338	4.84	Hancock	233	3.28	Marshall	964	14.68	Shelby	1,711	43.23
Caldwell	549	8.75	Hardin	2,428	41.57	Martin	278	3.27	Simpson	319	4.04
Calloway	1,142	16.80	Harlan	655	9.96	Mason	428	7.17	Spencer	579	13.34
Campbell	1,625	32.04	Harrison	496	8.15	McCracken	1,643	30.07	Taylor	696	10.46
Carlisle	123	1.87	Hart	371	5.67	McCreary	422	4.44	Todd	274	3.78
Carroll	333	5.53	Henderson	1,172	19.82	McLean	326	4.67	Trigg	564	9.31
Carter	848	11.45	Henry	944	21.40	Meade	514	7.65	Trimble	292	4.86
Casey	388	5.09	Hickman	99	1.76	Menifee	228	3.43	Union	389	4.60
Christian	1,571	28.38	Hopkins	1,331	21.08	Mercer	818	14.87	Warren	3,060	54.55
Clark	898	15.94	Jackson	351	4.66	Metcalfe	327	4.38	Washington	366	5.88
Clay	615	9.05	Jefferson	16,543	368.59	Monroe	298	3.62	Wayne	591	8.49
Clinton	314	4.17	Jessamine	1,181	21.03	Montgomery	703	11.95	Webster	380	5.04
Crittenden	233	3.37	Johnson	645	9.78	Morgan	674	11.71	Whitley	1,210	17.44
Cumberland	202	2.97	Kenton	2,429	52.61	Muhlenberg	834	11.04	Wolfe	350	5.87
Daviess	2,878	\$52.01	Knott	469	\$7.26	Nelson	1,187	\$21.37	Woodford	1,122	\$28.27

This table represents all payees receiving a monthly payment during the Fiscal Year. Members receiving payments from multiple accounts are represented as one payee

	Payees	%	Amount
Kentucky	115,957	92%	\$2,185
Out of State	9,773	8%	\$169
Grand Total	125,730	100%	\$2,354

FINANCIAL REPORT

2023 Financial Highlights

Fiduciary Net Position for the CERS, KERS, SPRS, and Insurance Plan increased 11%, with assets growing to a record \$24.9 billion due to strong investment returns, General Fund appropriations, and employer contributions.

This is an overview of the financial activities for the Fiscal Year ended June 30, 2023. For more detailed information, refer to the Financial Section of the 2023 Annual Comprehensive Financial Report.

PENSION

Total Pension assets (CERS, KERS, and SPRS) increased 10.79% in Fiscal Year 2023.

- Up from \$15.76 billion at the beginning of the Fiscal Year to \$17.46 billion as of June 30, 2023.
- This \$1.7 billion increase was due in large part to the appreciation in the fair value of investments.

INSURANCE

The combined assets of the five Insurance funds (CERS Nonhazardous, CERS Hazardous, KERS Nonhazardous, KERS Hazardous, and SPRS) **increased \$0.58 billion** in Fiscal Year 2023.

- The funds received \$998 million in total contributions and net investment income, which offset \$363 million in deductions during the Fiscal Year.
- Total assets increased from \$6.84 billion at the beginning of the Fiscal Year to \$7.43 billion as of June 30, 2023.

INVESTMENTS

Fiscal Year 2023 investment performance was strong with all plans exceeding the median peer pension fund return of 7.64%, the target returns for those portfolios, and the actuarially assumed rates of return.

- The **Pension funds** earned a combined net return of 9.54% versus the 8.88% benchmark.
- All **Pension funds** outperformed their assumed rates of return: 6.25% for CERS and KERS Hazardous; and 5.25% for KERS Nonhazardous and SPRS.
- The **Insurance funds** earned a combined net return of 10.15%, versus the 9.27% benchmark.
- All **Insurance funds** outperformed the 6.25% assumed rate of return used for all funds.

CASH FLOWS

For Fiscal Year 2023, in aggregate, all ten funds combined had positive cash flow.

Pension: Cash flows were positive for all pension plans for Fiscal Year 2023. CERS reached the full phase in of their employer contribution rates. KERS Nonhazardous received full funding plus an **additional \$240 million appropriated** from the General Fund. In addition, investment income increased for all plans during the year.

Insurance: Cash flows were positive for KERS Nonhazardous, CERS Nonhazardous and SPRS for Fiscal Year 2023. Due to funding levels exceeding 100%, KERS Hazardous applied all contributions to the pension fund and the CERS Hazardous insurance component of the employer contribution was reduced. This resulted in negative cash flows for both plans.

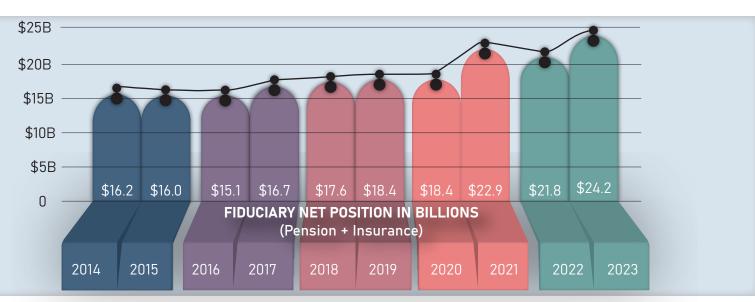


Table 1 - Assets and Liabilities

This table shows the assets and liabilities for the years ending June 30, 2023, and June 30, 2022. Total liabilities are composed of securities lending collateral, investment accounts payable (buys), and outstanding employer/member invoices. The Fiduciary Net Position represents the funds KPPA has accumulated thus far to pay pension benefits for retirees, active and inactive members, and health care premiums for current and future retirees.

Table 1. Fiduciary Net Position (\$ in Millions)

	Pension	n Funds	Insuran	ce Fund	Total		
Assets	2023	2022	2023	2022	2023	2022	
Cash & Investments	\$17,097	\$15,418	\$7,339	\$6,767	\$24,436	\$22,185	
Receivables	362	338	87	78	449	416	
Total Assets	17,459	15,756	7,426	6,845	24,885	22,601	
Total Liabilities	(519)	(508)	(194)	(248)	(713)	(756)	
Fiduciary Net Position	\$16,940	\$15,248	\$7,232	\$6,597	\$24,172	\$21,845	

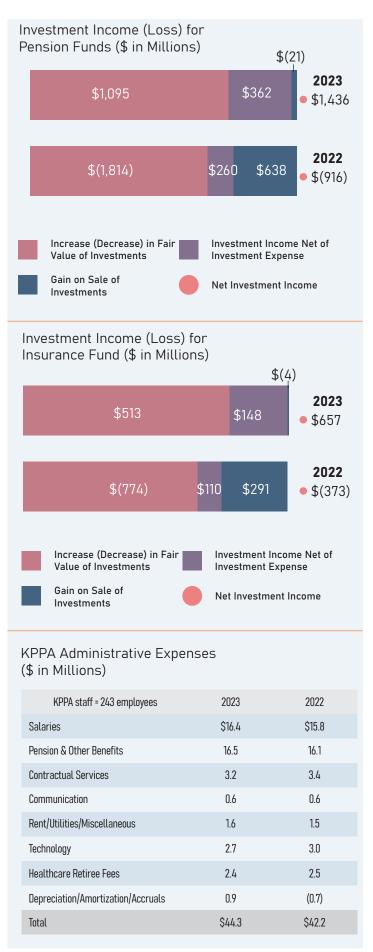
Capital Assets include capital assets, intangible assets, depreciation and amortization.

Table 2 - Income and Expenses

This table shows the annual additions (income) and deductions (expenses) for the plans. Investment earnings and contributions typically make up the majority of the income. Investment returns were positive in 2023 and negative in 2022 for the funds. The deductions largely represent pension benefits, health insurance expenses, administrative costs, and refunds of contributions to inactive members.

Table 2. Changes in Fiduciary Net Position (\$ in Millions)

	Pension Funds		Insuran	ce Fund	Total		
Additions	2023	2022	2023	2022	2023	2022	
Member Contributions	\$312	\$290	\$32	\$28	\$344	\$318	
Employer Contributions	2,172	2,085	283	319	2,455	2,404	
Other Contributions	240	278	26	33	266	311	
Net Investment Income	1,436	(916)	657	(373)	2,093	(1,289)	
Total Additions	\$4,160	\$1,737	\$998	\$7	\$5,158	\$1,744	
Deductions							
Benefit payments	\$2,380	\$2,328	\$-	\$-	\$2,380	\$2,328	
Refunds	46	43	-	-	46	43	
Admin/Cap. Proj.	42	40	3	2	45	42	
Healthcare Costs	-	-	360	382	360	382	
Total Deductions	\$2,468	\$2,411	\$363	\$384	\$2,831	\$2,795	
Total Change in Fiduciary Net Position	\$1,692	\$(674)	\$635	\$(377)	\$2,327	\$(1,051)	
CERS Nonhazardous	719	(608)	308	(160)	1,027	(768)	
CERS Hazardous	319	(197)	110	(104)	429	(302)	
KERS Nonhazardous	531	(8)	164	(52)	695	(59)	
KERS Hazardous	83	(56)	36	(45)	119	(101)	
SPRS	40	195	17	(16)	57	179	



INVESTMENTS REPORT

Pension Results

For the Fiscal Year ended June 30, 2023, the Pension portfolio earned a net return of 9.54%, exceeding both the 8.88% benchmark and the actuarial assumed rates of return of 5.25% for KERS Nonhazardous and SPRS and 6.25% for all other funds.

(!)

This is an overview of the investment activities for the Fiscal Year ended June 30, 2023. For more detailed information, refer to the Investments Section of the 2023 Annual Comprehensive Financial Report.

Net Returns - PENSION (\$ in Millions)

			1 Year (%) 3 Years (%)		5 Years (%)		10 Years (%)		Inception (%)			
Plan	Fair Value (\$ in Millions)	% of Total Fair Value	KPPA	Index	KPPA	Index	KPPA	Index	KPPA	Index	KPPA	Index
CERS Nonhazardous	\$8,694	52.0	10.2	9.5	9.3	8.8	6.8	6.6	7.3	6.9	8.9	8.9
CERS Hazardous	3,006	18.0	10.3	9.5	9.2	8.8	6.8	6.6	7.2	6.9	8.9	8.9
KERS Nonhazardous	3,522	21.1	7.0	7.0	7.5	7.1	6.1	5.7	6.7	6.4	8.7	8.7
KERS Hazardous	899	5.4	9.5	8.7	8.8	9.0	6.6	6.7	7.1	7.0	8.8	8.9
SPRS	587	3.5	7.6	7.0	7.7	7.1	6.2	5.7	6.6	6.4	8.7	8.7
Total*	\$16,708	100.0	9.5	8.9	8.9	8.5	6.7	6.4	7.2	6.9	8.8	8.9

^{*}The total is not a weighted average of each plan. Each plan has a different asset allocation which results in different returns compared to the overall pool.

Net Returns by Allocation - PENSION (\$ in Millions)

Note: Fair values are adjusted for accruals and expenses

Plan	Inception	Fair Value (\$ in Millions)	% of Total	1 Year (%)		3 Years (%)		5 Years (%)		10 Years (%)		Inception To Date		External FEES
				KPPA	Index	KPPA	Index	KPPA	Index	KPPA	Index	KPPA	Index	(\$ in Millions)
Total Fund	4/1/1984	\$16,708	100.0	9.5	8.9	8.9	8.5	6.7	6.4	7.2	6.9	8.8	8.9	123.6
Public Equity ¹	4/1/1984	7,675	45.9	17.7	16.5	10.9	10.8	7.6	7.5	8.6	8.5	10.2	10.1	23.8
Private Equity	7/1/2002	1,158	6.9	-1.6	-5.6	19.7	21.6	13.9	13.5	13.4	15.0	11.8	11.8	10.7
Core Fixed Income	7/1/2013	2,157	12.9	1.3	-0.9	04	-4.0	2.2	0.8	2.4	1.5	2.4	1.5	4.3
Specialty Credit	7/1/2017	3,233	19.4	7.2	9.9	7.7	4.8	5.7	3.8	n/a	n/a	5.7	3.7	67.7
Cash Account ²	1/1/1988	1,037	6.2	3.4	3.8	1.2	1.3	1.6	1.6	1.2	1.0	3.3	2.9	3.9
Real Return	7/1/2011	477	2.9	12.8	7.1	12.7	12.8	6.4	6.5	4.7	4.1	4.8	4.1	7.1
Real Estate	7/1/1984	\$971	5.8	-2.7	-3.9	11.1	7.5	10.4	6.6	9.8	8.5	6.6	6.5	6.1
¹ Equities include tra	¹ Equities include trade commissions. ² Cash accounts include custodian, consulting and miscellaneous investment expenses.													

INVESTMENTS REPORT

Insurance Results

For the Fiscal Year ended June 30, 2023, the Insurance portfolio earned a net return of 10.15% exceeding both the 9.27% benchmark and the 6.25% actuarial assumed rate of return used for all funds. In Fiscal Year 2023, the Insurance portfolio achieved rates of return of 6.70% over the five year period and 7.21% over the 10 year period.

This is an overview of the investment activities for the Fiscal Year ended June 30, 2023. For more detailed information, refer to the Investments Section of the 2023 Annual Comprehensive Financial Report.

Net Returns - INSURANCE (\$ in Millions)

Disc	Fair Wales	% of Total	1 Year	(%)	3 Year	rs (%)	5 Yea	rs (%)	10 Yea	ırs (%)	Incept	ion (%)
Plan	Fair Value (\$ in Millions)		KPPA	Index	KPPA	Index	KPPA	Index	KPPA	Index	KPPA	Index
CERS Nonhazardous	\$3,275	45.5	10.3	9.5	9.2	8.6	6.7	6.3	7.2	6.9	7.4	7.6
CERS Hazardous	1,606	22.3	10.1	9.5	9.4	8.6	6.8	6.3	7.3	6.9	7.4	7.6
KERS Nonhazardous	1,452	20.2	9.9	8.7	8.9	8.8	6.5	6.5	6.9	7.0	7.3	7.6
KERS Hazardous	616	8.6	9.3	8.7	9.3	8.9	6.7	6.4	7.2	7.0	7.4	7.6
SPRS	246	3.4	9.5	8.7	9.4	8.9	6.9	6.4	7.4	7.0	7.4	7.6
Total*	\$7,195	100.0	10.2	9.3	9.2	8.8	6.7	6.4	7.2	7.0	7.4	7.6

^{*}The total is not a weighted average of each plan. Each plan has a different asset allocation which results in different returns compared to the overall pool.

Net Returns by Allocation - INSURANCE (\$ in Millions)

Note: Fair values are adjusted for accruals and expenses

Plan	Inception	Fair Value	% of Total	1 Year (%)		3 Years (%)		5 Years (%)		10 Years (%)		Inception To Date		External FEES
		(\$ in Millions)		KPPA	Index	KPPA	Index	KPPA	Index	KPPA	Index	KPPA	Index	(\$ in Millions)
Total Fund	4/1/1987	\$7,195	100.0	10.2	9.3	9.2	8.8	6.7	6.4	7.2	7.0	7.4	7.6	57.1
Public Equity 1	7/1/1992	3,503	48.7	17.6	16.5	10.9	10.8	7.5	7.5	8.6	8.5	8.6	8.4	9.7
Private Equity	7/1/2002	591	8.2	2.0	-5.6	21.3	21.6	13.3	13.5	14.4	15.0	11.0	11.4	7.3
Core Fixed Income	7/1/2013	768	10.7	1.1	-0.9	-0.5	-4.0	2.1	0.8	2.1	1.5	2.1	1.5	1.7
Specialty Credit	7/1/2017	1,450	20.1	7.4	9.9	7.8	4.8	5.6	3.8	n/a	n/a	5.6	3.7	30.4
Cash Account ²	7/1/1992	269	3.7	3.4	3.8	1.2	1.3	1.5	1.6	1.0	1.0	2.5	2.4	1.9
Real Return	7/1/2011	186	2.6	11.1	7.1	11.6	11.9	6.3	6.5	4.5	4.1	4.6	4.2	3.2
Real Estate	5/1/2009	\$428	6.0	-3.1	-3.9	10.8	7.5	10.3	6.6	9.8	8.5	9.6	6.2	2.9
¹ Equities include tra	¹ Equities include trade commissions. ² Cash accounts include custodian, consulting and miscellaneous investment expenses.													

Investment Advisors & Assets Under Management (\$ in Thousands)



Actively Managed

These managers are either fully funded or are in the investment phase of the strategy.

pr	nase of the strategy.	
	Advisor as of 6/30/2023	Assets Under Management
	American Century Investments	\$630,265
	Axiom	134,745
	BlackRock ACWI Ex-US	1,244,103
	Franklin Templeton	516,336
	JP Morgan Emerging Markets	208,991
	Lazard Asset Management	733,778
	LSV Asset Management	742,141
	Next Century	209,484
	Northern Trust Global Inv.	448,010
	Pzena Emerging Markets	250,520
	River Road Asset Management	422,233
	Westfield Capital	501,881
	Internally Managed by KPPA	5,135,966
	Middle Ground	237,081
	New State	5,713
	Strategic Value Partners	134,147
	Loomis, Sayles & Company	565,896
	Lord Abbett & Co	1,949,208
	NISA Investment Advisors	409,182
	Internally Managed by KPPA	1,306,662
	Adams Street	398,733
	Arrowmark	791,520
	Blue Torch	202,971
	Benefit Street Partners	190,165
	CapitalSpring	109,111
	Cerberus	264,646
	Columbia Asset Management	651,672
	Manulife Financial	411,250
	Marathon Bluegrass	678,947
	Shenkman Capital	368,954
	Waterfall Asset Management	417,598
	White Oak Global Advisors	197,334
	Barings Real Estate	73,237
	Harrison Street	379,873
	Mesa West	80,232
	Prologis	446,942
	Stockbridge	167,132
	Internally Managed by KPPA	7,300
	Arctos Sports	15,932
	IFM Infrastructure Debt Fund	100,191
	Tortoise Capital	262,496
	Internally Managed by KPPA	416
	Assets Under Management	\$22,002,994
	Assets Univer Management	222,002,774

In Redemption

These managers are in the process of liquidation or are in the final investment phase awaiting payout.

Advisor as of 6/30/2023	Assets Under Management
ARES Capital	\$28,047
Bay Hills Emerging Partners	275,503
Black Diamond	105,788
Blackstone Capital Partners	34,598
Crestview Partners	82,202
CVC Capital Partners	33,082
DAG Ventures	25,200
Harvest Partners	66,848
H.I.G. Capital	32,732
Horsley Bridge International	102,505
Kayne Anderson	52,281
Keyhaven Capital Partners	35,609
Leonard Green	127,529
Levine Leichtman	123,208
Triton Fund	19,408
Vista Equity Partners	101,914
Fundamental	87,507
Lubert-Adler	41,709
Patron	67,981
Rubenstein	12,898
Walton Street	29,707
AMERRA	88,701
BTG Pactual	37,653
Prisma	138,330
Other ²	149,591
Assets Under Management	\$1,900,531
TOTAL ¹	\$23,903,525
¹ Totals reflect external manager as	sets under

¹Totals reflect external manager assets under management and differ from Total Fair Values.

External Investment Expenses as of June 30, 2023 (\$ in Millions)

Expense	Fees Paid	Share of Expenses						
Portfolio Managem	ent							
Pension Funds	\$106.9	59.2%						
Insurance Fund	50.8	28.1%						
Securities Lending*								
Pension Funds 14.7 8.1%								
Insurance Fund	5.2	2.9%						
Custody								
Pension Funds	1.4	0.8%						
Insurance Fund	0.9	0.5%						
Consultant								
Pension Funds	0.6	0.3%						
Insurance Fund	0.2	0.1%						
Total Pension Funds	\$123.6	68.4%						
Total Insurance Fund \$57.1 31.6%								
Total Expenses \$180.7 100%								
*Income is offset against expenses.								

² Managers who are in runoff status or have been liquidated with a de minimis balance are reported as "Other"; see the Investments Section of the 2023 Annual Comprehensive Financial Report for a complete list.

Fair Values by Fund - Pension as of June 30, 2023 (\$ in Millions)

	CER	S	CER	S ous	KER	Dous	KER	Sous	SPR	S	Total KPP	
Assets	Fair Value (FV)	% of Total FV	Fair Value (FV)	% of Total FV								
Equity												
Public Equity	\$4,387	50.4%	\$1,515	50.4%	\$1,186	33.7%	\$394	43.9%	\$193	32.8%	\$7,675	45.9%
Private Equity	689	7.9%	230	7.6%	160	4.5%	63	7.0%	16	2.8%	1,158	6.9%
Fixed Income												
Core Fixed Income	888	10.2%	308	10.2%	730	20.7%	109	12.2%	122	20.8%	2,157	12.9%
Specialty Credit	1,737	20.0%	599	19.9%	613	17.4%	182	20.2%	102	17.3%	3,233	19.4%
Cash	172	2.0%	89	3.0%	579	16.5%	75	8.3%	122	20.8%	1,037	6.2%
Inflation Protected												
Real Return	275	3.2%	92	3.1%	75	2.1%	25	2.8%	11	1.9%	478	2.9%
Real Estate	546	6.3%	173	5.8%	179	5.1%	51	5.6%	21	3.6%	970	5.8%
TOTAL PORTFOLIO	\$8,694		\$3,006		\$3,522		\$899		\$587		\$16,708	

Fair Values by Fund - Insurance as of June 30, 2023 (\$ in Millions)

	CER		CER	S	KER	Dous	KER	S	SPR	S	Total KPP	
Assets	Fair Value (FV)	% of Total FV	Fair Value (FV)	% of Total FV								
Equity												
Public Equity	\$1,655	50.5%	\$819	51.0%	\$647	44.5%	\$272	44.2%	\$110	44.7%	\$3,503	48.7%
Private Equity	268	8.2%	151	9.4%	94	6.5%	54	8.7%	24	9.8%	591	8.2%
Fixed Income												
Core Fixed Income	335	10.2%	153	9.5%	176	12.1%	75	12.1%	29	11.6%	768	10.7%
Specialty Credit	651	19.9%	322	20.0%	295	20.3%	131	21.3%	52	21.2%	1,451	20.1%
Cash	85	2.6%	9	0.6%	147	10.2%	21	3.4%	7	2.9%	269	3.7%
Inflation Protected												
Real Return	84	2.6%	44	2.8%	32	2.2%	18	2.9%	7	2.7%	185	2.6%
Real Estate	197	6.0%	108	6.7%	61	4.2%	45	7.4%	17	7.1%	428	6.0%
TOTAL PORTFOLIO	\$3,275		\$1,606		\$1,452		\$616		\$246		\$7,195	

Schedule of Commissions Paid for the Year Ended June 30, 2023 (in Millions)

Assets	Total Shares	Commissions Paid	Cost per Share				
U.S. Equities	45	\$0.8	\$0.02				
Non-U.S. Equities	261	1.3	0.01				
Total	306	\$2.1	\$0.01				
*Only applies to internally managed assets.							

ACTUARIAL REPORT

2023 Actuarial Valuation Results

Each year the funding levels of the plans are determined by the annual actuarial valuation based on assumptions set by the Boards for the Fiscal Year ended June 30. In summary, total pension unfunded liabilities decreased by \$1.82 billion in Fiscal Year 2023 while the insurance plan increased its over funding by \$0.07 billion. Total unfunded liabilities across all funds decreased by \$1.89 billion.

refer to the

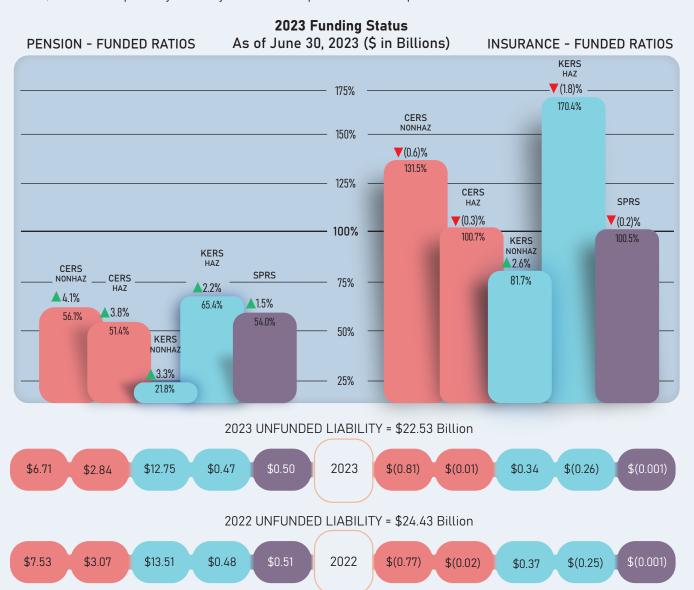
This is an overview of the actuarial status for the Fiscal Year ended June 30, 2023. For more detailed information, refer to the Actuarial Section of the 2023 Annual Comprehensive Financial Report.

PENSION PLANS

The actuarial unfunded liability for CERS, KERS and SPRS was \$23.28 billion, a decrease of \$1.82 billion from Fiscal Year 2022. At the same time, the actuarial value of assets increased by \$1.23 billion. The result was an increase in the funded ratio across all pension funds, primarily due to strong investment returns and an increase in contributions compared to the prior year. Contributions increased as a result of the continued stabilization of KERS Nonhazardous contributions, attributable to the fixed allocation funding model, and an additional general fund appropriation of \$240 million for KERS Nonhazardous in Fiscal Year 2023.

INSURANCE PLAN

As of June 30, 2023, the Insurance Plan's over funding increased from \$0.67 billion last fiscal year to \$0.74 billion. All funds, except for KERS Nonhazardous, experienced a decrease in funded ratio due to higher than expected non-Medicare premiums, which were partially offset by lower than expected Medicare premiums.



Summary of Actuarial Valuation Results as of June 30, 2023 (\$ in Millions)

	CERS	CERS HAZARDOUS	KERS NONHAZARDOUS	KERS HAZARDOUS	SPRS	Total KPPA
ACTUARIALLY DETERMINED CONTRIBUTION RA	TES					
Pension Funds	19.71%	36.49%	6.99%	23.74%	65.79%	
Insurance Funds	0.00%	2.12%	1.45%	0.00%	2.31%	
Amortization Cost to be Allocated	N/A	N/A	\$857	N/A	N/A	
Actuarially Determined Employer Contribution Rate	19.71%	38.61%	8.44%1	23.74%	68.10%	
FUNDED STATUS AS OF VALUATION DATE						
PENSION FUNDS						
Actuarial Liability	\$15,296	\$5,850	\$16,304	\$1,363	\$1,092	\$39,905
Actuarial Value of Assets	\$8,585	\$3,008	\$3,552	\$891	\$590	\$16,626
Unfunded Liability on Actuarial Value of Assets	\$6,711	\$2,842	\$12,752	\$472	\$502	\$23,279
Funding Ratio on Actuarial Value of Assets	56.12%	51.42%	21.79%	65.40%	54.03%	41.66%
Market Value of Assets	\$8,673	\$3,035	\$3,540	\$894	\$591	\$16,733
Unfunded Liability on Market Value of Assets	\$6,623	\$2,815	\$12,764	\$469	\$501	\$23,172
Funding Ratio on Market Value of Assets	56.70%	51.88%	21.71%	65.55%	54.18%	41.93%
INSURANCE FUNDS						
Actuarial Liability	\$2,560	\$1,604	\$1,877	\$364	\$244	\$6,649
Actuarial Value of Assets	\$3,366	\$1,615	\$1,533	\$620	\$245	\$7,379
Unfunded Liability on Actuarial Value of Assets	(\$806)	(\$11)	\$344	(\$256)	(\$1)	\$(730)
Funding Ratio on Actuarial Value of Assets	131.48%	100.70%	81.66%	170.43%	100.46%	110.98%
Market Value of Assets	\$3,398	\$1,634	\$1,533	\$625	\$248	\$7,438
Unfunded Liability on Market Value of Assets	\$(838)	\$(30)	\$344	\$(261)	\$(4)	\$(789)
Funding Ratio on Market Value of Assets	132.73%	101.87%	81.65%	172.03%	101.66%	111.87%

^{&#}x27;All KERS Nonhazardous employers pay the normal cost plus a monthly invoice representing their fixed dollar allocation.

EXPERIENCE STUDY AND ECONOMIC ASSUMPTIONS

Regular actuarial experience studies help ensure the underlying economic and demographic assumptions (such as expected payroll growth, investment returns, and member life expectancy) accurately reflect plan experience. Accuracy is important because these assumptions are used to calculate the unfunded liability and annual employer contribution rates that will allow the systems operated by KPPA to pay for current and future retiree benefits.

Experience studies are performed by KPPA's independent actuary every two to five years to compare each plan's actual experience to what had been expected (the assumptions). The most recent experience studies were completed in May 2023 (CERS) and June 2023 (KERS and SPRS). Based on these studies, retirement rates, termination rates, disability incidence rates, salary increase assumptions, mortality assumptions, and the cash balance interest credit were adjusted for the Fiscal Year 2023 Actuarial Valuation. Economic assumptions were also modified as a result of the latest study.

- The rate of inflation was increased from 2.30% to 2.50%.
- The investment return assumption for the CERS pension funds and all insurances funds increased from 6.25% to 6.50%.

Economic Assumptions as of June 30, 2023

	CERS	CERS	KERS NONHAZARDOUS	KERS HAZARDOUS	SPRS
Assumed Investment Return - Pension*	6.50%	6.50%	5.25%	6.25%	5.25%
Assumed Investment Return - Insurance*	6.50%	6.50%	6.50%	6.50%	6.50%
Inflation Factor	2.50%	2.50%	2.50%	2.50%	2.50%
Payroll Growth	2.00%	2.00%	0.00%	0.00%	0.00%

^{*}The new investment return assumptions for the CERS pension funds and all insurances funds will be used beginning in Fiscal Year 2024.

CERS NONHAZARDOUS

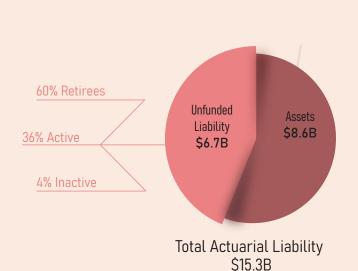
Established by the Kentucky General Assembly on July 1, 1958

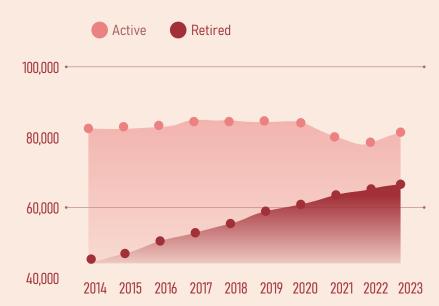
CERS Nonhazardous is the largest system operated by KPPA, accounting for 60% of the total membership and 52% of the total assets within KPPA.

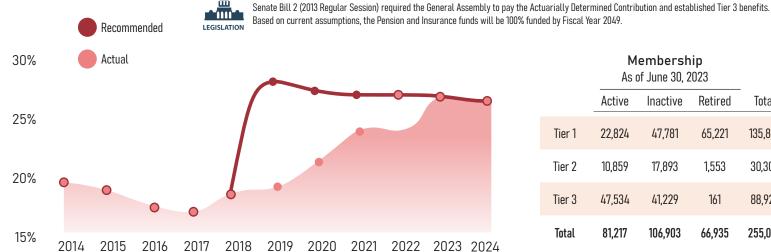
- On average, a retired CERS Nonhazardous member in 2023 is 71 years old and receives \$1,024 per month in pension benefits (\$12,284 annually). This represents the lowest average monthly benefit payment of all systems administered by KPPA.
- There are more active employees paying into the plan (81,217) than retirees drawing benefits (66,935).
- The Combined Pension and Insurance Fiduciary Net Position was \$12.1 billion as of June 30, 2023, compared to \$11.0 billion in 2022.

As of the June 30, 2023 Valuation, retirees and beneficiaries account for 60% of the pension fund unfunded liability.

Active member covered payroll reversed its trend of decline, increasing by 954 members (0.01%) in Fiscal Year 2023.







Membership Ac of lune 20 2022

	AS C	ot June 30, 2	.023	
	Active	Inactive	Retired	Total
Tier 1	22,824	47,781	65,221	135,826
Tier 2	10,859	17,893	1,553	30,305
Tier 3	47,534	41,229	161	88,924
Total	81,217	106,903	66,935	255,055

CERS HAZARDOUS

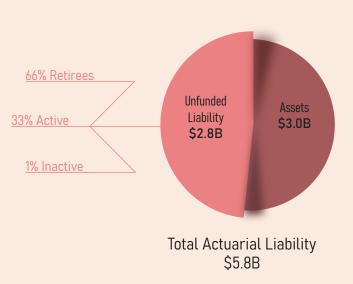
Established by the Kentucky General Assembly on July 1, 1958

A total of 272 employers participate in the CERS Hazardous system. CERS Hazardous members include, but are not limited to, active law enforcement, probation and parole officers, detectives, pilots, paramedics, and emergency medical technicians, with job duties that require frequent exposure to a high degree of danger and also require a high degree of physical conditioning.

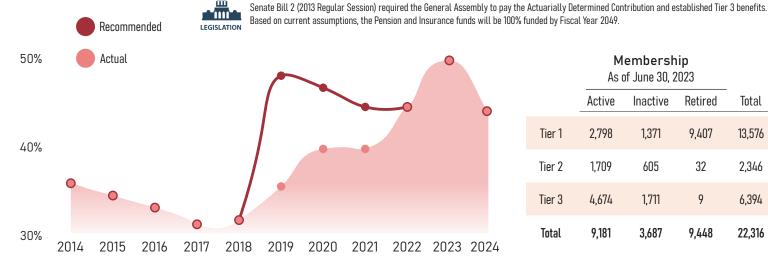
- On average, a retired CERS Hazardous member in 2023 is 63 years old and receives \$2,467 per month in pension benefits (\$29,602 annually). This represents the lowest average age for retirees and the second-highest average monthly benefit payment of all systems operated by KPPA.
- There are 267 more retirees drawing benefits (9,448) than active employees paying into the plan (9,181).
- The Combined Pension and Insurance Fiduciary Net Position was \$4.7 billion as of June 30, 2023, compared to \$4.2 billion in 2022.

As of the June 30, 2023 Valuation, retirees and beneficiaries account for 66% of the pension fund unfunded liability.

Active member covered payroll continued to increase, adding 32 new active members (0.35%) in Fiscal Year 2023.







Membership As of June 30, 2023 Inactive Retired Active Total Tier 1 2,798 1,371 9,407 13,576 Tier 2 1.709 605 32 2.346 9 Tier 3 4,674 1,711 6,394 9,181 3,687 9,448 22,316 Total

KERS NONHAZARDOUS

Established by the Kentucky General Assembly on July 1, 1956

KERS Nonhazardous is the second-largest plan operated by KPPA in terms of both membership and financial resources, accounting for 30% of the total membership and 21% of the total assets within KPPA. The plan also has the lowest funded ratio (21.8%) of all pension funds administered by KPPA. However, due to the sustained efforts of the Kentucky General Assembly, the Governor's Office, and the KRS Board of Trustees over the past few years, the plan is improving. The unfunded liability decreased by 5.3% from the previous fiscal year, moving the funded ratio to its highest level since 2013.

House Bill 8 (2021 Regular Session) adjusted the method for calculating KERS Nonhazardous employer contributions from a percent of payroll model to fixed allocation funding. Under the new method, a percentage of the Unfunded Accrued Liability Payment (UAL) is assigned to each employer based on total UAL as of 6/30/2019:

_	Each employer's 2019 percentage of the liability is multiplied by the
	current year UAL to calculate the UAL flat dollar amount each
	employer must pay for that year.

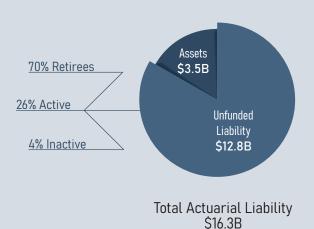
— UAL dollar amount is determined each year based on the current year UAL, but always applies the same 2019 percentage.

Beginning with Fiscal Year 2022, under the fixed allocation funding model, employers pay the normal cost plus a monthly invoice representing their fixed dollar allocation.

Funding Comparison (\$ in Millions)						
	July 2023	July 2022	July 2021	July 2020		
Payroll	\$150.97	\$130.77	\$120.63	\$125.21		
Participating Employees	33,148	34,921	31,438	33,111		
Employer Contribution	\$14.95	\$12.89	\$12.61	\$95.63		
Contribution Rate*	9.97%	9.97%	10.10%	84.43%		
UAL Payment	\$82.87	\$82.87	\$84.53	N/A		
Total Employer Contribution	\$97.82	\$95.76	\$97.14	\$95.63		

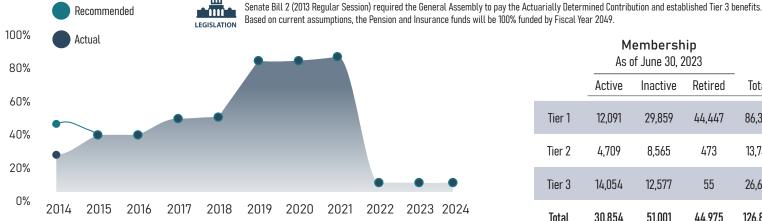
^{*}The 2021, 2022 and 2023 employer contribution rate reflects the normal cost.

As of the June 30, 2023 Valuation, retirees and beneficiaries account for 70% of the pension fund unfunded liability.



Active member covered payroll reversed its trend of decline, increasing by 6% (1,785 new members) in Fiscal Year 2023.





Quasi-governmental agencies maintained the Fiscal Year 2018 rate for Fiscal Years 2019 - 2021. Beginning with Fiscal Year 2022, all employers pay the normal cost plus a monthly invoice representing their fixed dollar allocation.

Membership

	As o			
	Active	Inactive	Retired	Total
Tier 1	12,091	29,859	44,447	86,397
Tier 2	4,709	8,565	473	13,747
Tier 3	14,054	12,577	55	26,686
Total	30,854	51,001	44,975	126,830

KERS HAZARDOUS

Established by the Kentucky General Assembly on July 1, 1956

The KERS Hazardous pension and insurance funds currently have the highest funding ratios (65.4% and 170.4%, respectively) among all systems administered by KPPA.

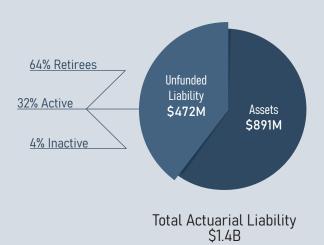
FUNDING RATIO CONSIDERATIONS

Ideally, the funding ratio of each plan will be 100%, where the system has enough assets on hand to meet all required obligations. This means the KERS Hazardous insurance fund is in the enviable position of having 70.4% more assets on hand than what is needed.

You may wonder why the surplus in the insurance fund can't simply be shifted to the pension fund to bring both to 100% funding. The reason is federal law requires the money in each fund to be accounted for separately and used to pay that specific liability, either pension or insurance. In other words, money earmarked for the insurance fund can't be used to pay pension obligations, and vice versa.

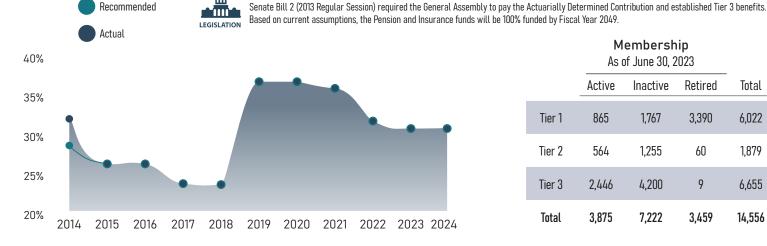
Therefore, the solution lies on the front end: the system's actuary recommended allocating the employer's contribution entirely to the pension fund beginning in 2020, with no additional money allocated to the insurance fund. This puts the money directly into the fund where it is needed most, while allowing the insurance fund's ratio to gradually lower to 100%. The allocation percentages are reviewed each year and will be adjusted as needed.

As of the June 30, 2023 Valuation, retirees and beneficiaries account for 64% of the pension fund unfunded liability.



Active member covered payroll reversed its trend of decline, increasing by 7.4% (268 new members) in Fiscal Year 2023.





Membership

	As	As of June 30, 2023			
	Active	Inactive	Retired	Total	
Tier 1	865	1,767	3,390	6,022	
Tier 2	564	1,255	60	1,879	
Tier 3	2,446	4,200	9	6,655	
Total	3,875	7,222	3,459	14,556	

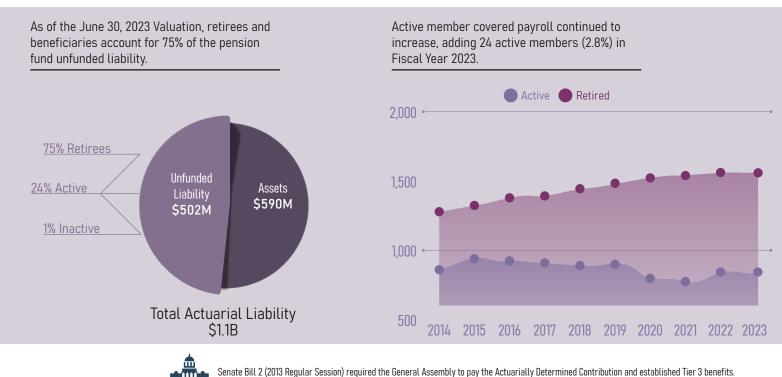
STATE POLICE RETIREMENT SYSTEM

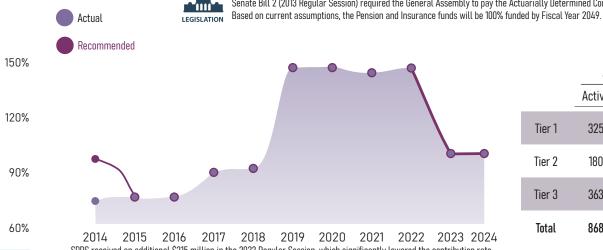
Established by the Kentucky General Assembly on July 1, 1958

Membership in SPRS, the smallest system operated by KPPA, consists solely of full-time state troopers employed in positions by the Kentucky State Police.

SPRS also has the highest employer contribution rate of all our systems. To help address this problem, House Bill 1 (2022 Regular Session), the State Executive Branch Budget Bill, included an additional \$215 million in Fiscal Year 2022 to be applied to the unfunded liability of the SPRS pension fund. This influx of money lowered the SPRS contribution rate for the biennium from the planned 146.06% to 99.43%; and it also dramatically increased the plan's funding ratio from 30.7% to 52.5%. The funding ratio continued to improve in 2023, increasing to 54.03%.

- On average, a retired Kentucky state trooper in 2023 is 64 years old and receives \$3,311 per month (\$39,738 annually) in pension benefits. All trooper positions are considered to be hazardous.
- There are almost twice as many retirees currently drawing benefits (1,552) than active employees paying into the plan (868).
- SPRS experienced a slight increase in active members in Fiscal Year 2023 (from 844 actives in Fiscal Year 2022 to 868 actives in Fiscal Year 2023).
- The Combined Pension and Insurance Fiduciary Net Position was \$840 million as of June 30, 2023, compared to \$783 million in 2022.





As of June 30, 2023 Inactive Retired Active Total Tier 1 325 167 1,550 2.042 180 1 250 Tier 2 69 Tier 3 363 196 1 560 868 1,552 Total 432 2,852

Membership

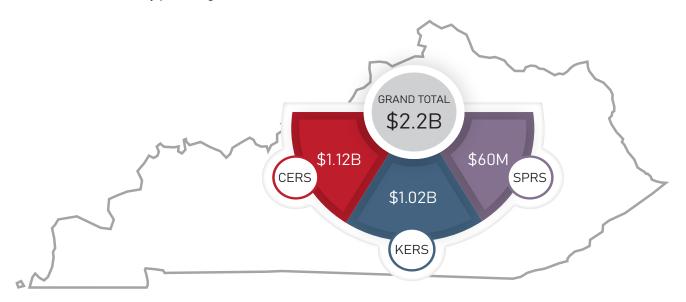
SPRS received an additional \$215 million in the 2022 Regular Session, which significantly lowered the contribution rate in Fiscal Years 2023 and 2024. See above for details.

ABOUT KPPA

KPPA is responsible for the investment of funds and administration of pension and health insurance benefits for over 421,000 active, inactive, and retired state and local government employees, state police officers, and non-teaching staff of local school boards and regional universities.

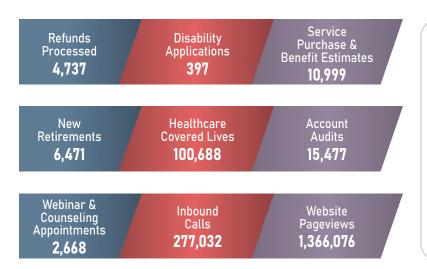
ECONOMIC IMPACT

In Fiscal Year 2023, KPPA paid over \$2 billion in ongoing pension benefits to Kentuckians. KPPA's pension payments support state economic activity, with 92% paid to in-state residents. Payments per Kentucky county range from \$1.2 million to \$369 million annually providing a consistent revenue stream for all local economies.



SERVING OUR MEMBERS

Daily system activities, including administrative support, investment management, benefits counseling, accounting and payroll functions, and legal services are performed by a staff of professional employees working as the KPPA.



Our Six Mandates

- 1. Strive for appropriate funding for all plans.
- Provide members with efficient access to information and helpful counseling to meet their individual needs.
- Manage the assets in accordance with each plan's needs while adding value to a passive portfolio.
- 4. Communicate effectively with all constituents, while ensuring appropriate transparency.
- 5. Maintain a work environment that promotes employee inclusion and diversity, effectiveness, morale, safety, and retention.
- . Insist on a culture of continuous enhancement to everything we do.

