KENTUCKY RETIREMENT SYSTEMS A component unit of the Commonwealth of Kentucky



SUMMARY ANNUAL FINANCIAL REPORT

2020 For the Fiscal Year Ended June 30, 2020



County Employees Retirement System (CERS) Kentucky Employees Retirement System (KERS) State Police Retirement System (SPRS)

Prepared by the Accounting, Investments and Communications Divisions

2020 SUMMARY ANNUAL For the Fiscal Year Ended June 30, 2020



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KENTUCKY RETIREMENT SYSTEMS

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December 3, 2020

On behalf of the <u>Board of Trustees (Board)</u>, management, and staff of Kentucky Retirement Systems (KRS), it is my honor to present the Summary Annual Financial Report for the Fiscal Year Ended June 30, 2020. This summary report and the <u>Comprehensive Annual Financial Report (CAFR)</u> are provided as resources for understanding the structure and financial status of KRS.

Here are a few highlights:

COVID-19 Pandemic

Since early April 2020, KRS has had more than 85% of its staff working from home. We made the swift transition almost seamlessly with members experiencing minimal disruption to services, and our various productivity metrics have remained strong throughout the period.

Effective and Transparent Management

The Board and staff are committed to managing all aspects of KRS effectively and with complete transparency. We continuously examine every aspect of our procedures and policies striving for enhancements. All records and information not protected by statutes or confidentiality agreements are available on our website, in our CAFR, or by request. All Board meetings and Committee meetings are live streamed and archived on the <u>official KRS Facebook</u> page.

We publish various newsletters targeted to our members and governmental officials including all legislators, employees of the Legislative Research Commission, and most members of the Executive Branch senior staff. We have frequent meetings with members, government officials, member groups, and other stakeholders who are interested in getting information about KRS or giving us input.

Continuous Improvement

Again this year our most financially troubled plan, KERS Non-Hazardous, had positive cash flow during Fiscal Year 2020. We received more in contributions than we paid in benefits and expenses. CERS plans will likely move into that position shortly as the phase-in of higher contributions moves into its third year. Over the past year, several service enhancements were implemented with an emphasis on <u>Self Service</u>. In February 2020, members were provided the ability to securely apply for their retirement and upload documents online. This allows members the ease of initiating the retirement process and submitting forms from their mobile devices or personal computer.

We prepared for the first Trustee election with an online ballot option for the <u>2021 CERS election</u>. We anticipate significant savings for Board elections prospectively due to recent legislation which reduced the number of CERS Trustee elections from two every four years to one every four years and providing for online voting.

Legislation

The 2019 Special Session of the General Assembly produced House Bill (HB) 1. That bill provided four new options for the 115 quasi-governmental agencies to exit the KERS Non-Hazardous plan, should they choose to do so, at discount rates ranging from 4.5% to 3.0% through lump sum or installment payments. Two of the four options include continuing active KERS membership for Tier 1 and Tier 2 employees.

The 2020 Regular Session of the General Assembly produced significant KRS-related legislation. Senate Bill (SB) 249 extended the exit date for universities and all quasi-governmental agencies to June 30, 2021. SB 249 also reset the amortization period for paying off the unfunded liabilities for all pension and insurance plans. Based on previous assumptions, all pension plans were expected to be fully funded by Fiscal Year 2043. However, SB 249 extends that period to Fiscal Year 2049 by resetting the amortization period from 24 years to 30 years which reduces the required employer contributions for Fiscal Year 2021 by an estimated \$120 million.

In addition, the General Assembly also passed HB 484 which changes our current administrative structure by creating a new CERS Board with oversight and governance responsibility for the CERS plans. The KERS and SPRS plans will remain under the authority of the KRS Board. The Kentucky Public Pensions Authority (KPPA) is a new board, which will be responsible for the day to day administrative,

legal, operational, and investment aspects of all five plans. All employees of the current KRS will now work for the KPPA. To date, we have determined more than 100 action items, or steps, required to make the transition, and expect to identify more as our work progresses.

From a budget standpoint, the economic uncertainty surrounding COVID-19 prompted the General Assembly to approve a one-year Executive Branch budget bill rather than the usual two-year budget. The employer contribution rates for Fiscal Year 2022 will be set in the 2021 Regular Session.

KRS continues to work on implementing previous legislative changes. During the 2017 Regular Session of the General Assembly, SB 104 was enacted which allows Tier 2 members to opt into Tier 3. This provision required a favorable Private Letter Ruling from the IRS, which was received this year. Staff is currently working on system changes to support this law change.

Investments

For Fiscal Year 2020, the investment markets had low returns and limited the ability for our funds to earn their actuarial assumed rates of return of 5.25% and 6.25%. KERS Non-Hazardous and SPRS pension plans earned 2.36% and 2.21%, respectively, but fell short of their assumed rate of return of 5.25%. All of the other pension and insurance plans earned between 0.20% and 0.97%. As such, all eight of those plans failed to earn their assumed rate of return of 6.25%.

Actuarial

The actuarial value of the total pension liability and total insurance liability was determined as of June 30, 2020. The KRS funding ratios improved for both the pension and insurance funds to 33.56% and 69.80% respectively, with nine out of ten plans experiencing an increase in their funding ratios. Funding status by plan, actuarial valuation results and the economic assumptions used to measure the total pension and insurance liability can be found on page 21.

Cyber Security

KRS' goal is to be on the forefront of cyber security for similar-sized public funds because our members and employers have entrusted us with sensitive data that must be protected. Two of the most significant cyber threats in 2020 are social engineering and ransomware. To address these and other threats, KRS is continuing its rigorous staff security training, software patching, and system upgrades, which are key to a quality cyber security program. Additionally, KRS is expanding its business continuity, disaster recovery, and incident response plans. COVID-19 ushered in a new work-athome environment for our employees, which increased the cyber risks to our infrastructure. Our technology team acted swiftly to add measures to counteract that risk.

Looking Forward

By far our most important mandate is to work with the Legislature and the Governor's Office to assure that KRS gets the required funding. Our actuaries, <u>GRS Consulting</u>, project that all of our pension and insurance plans will become fully funded in Fiscal Year 2049, provided KRS receives the full Actuarially Determined Contribution (ADC) each year and all actuarial assumptions are met. Those same projections indicate that all benefits will be secure going forward, supported by the positive fiscal impact of the <u>Tier 3 Hybrid Cash Balance Plan</u>. Receiving the full ADC ensures that KRS continues to provide a stabilizing element for all local economies in the Commonwealth, paying at least \$1 million in ongoing pension benefits to each county annually.

There continues to be consideration for legislation that would change the funding method for employers from a uniform percent of pay method to a method that allocates a dollar value based upon each employer's unfunded liability and requires them to pay it off over a period not to exceed 30 years in most cases. Without this change, employers will likely continue to reduce their employee head count through outsourcing and layoffs and thereby reduce their payrolls and, subsequently, their contributions. This results in their liability being absorbed by other employers and forces contribution rates even higher.

Acknowledgments

The preparation of this report has been a collaborative effort of Executive Management and the Accounting, Investments, and Communications Divisions. The contents have been reviewed by the Internal Audit Division. KRS takes responsibility for all of the information contained in the report and confidently presents it as a basis for making management decisions that promote the responsible stewardship of the assets of KRS.

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David L. Eager Executive Director

GOVERNANCE

Our <u>Board</u> serves as the KRS governing body. Six trustees are elected by members, ten are appointed by the Governor, and the Secretary of the <u>Personnel Cabinet</u> serves ex officio. Three of the ten appointees are selected from lists of candidates provided by the <u>Kentucky Association of Counties (KACo)</u>, the <u>Kentucky League of Cities (KLC)</u>, and the <u>Kentucky School Boards Association (KSBA)</u>.

ELECTED AS OF DECEMBER 3, 2020



BETTY PENDERGRASS Elected by CERS Term ends 3/31/21

CAMPBELL CONNELL Elected by KERS Term ends 3/31/22

KEITH PEERCY VICE CHAIR Elected by SPRS Term ends 3/31/23 JERRY W. POWELL Elected by CERS Term ends 3/31/21

SHERRY LYNN KREMER Elected by KERS Term ends 3/31/22 DAVID RICH Elected by CERS Term ends 10/31/21



J.T. FULKERSON Nominated by KLC Term ends 7/1/21

JOHN CHESHIRE III Term ends 6/17/23

MATTHEW MONTEIRO Term ends 6/17/23

APPOINTED AS OF DECEMBER 3, 2020

TOWNOL CHARGE WE FIN THE REAL OF THE REAL

DAVID L. HARRIS CHAIR Term ends 6/17/22

GERINA WHETHERS Personnel Secretary Ex Officio

JOHN E. CHILTON Term ends 6/17/22

KELLY DOWNARD Term ends 6/17/23 Nominated by KACo Term ends 7/1/21

Term ends 6/17/22

W. JOE BROTHERS

Nominated by KSBA

Term ends 7/1/21

VACANT

C. PREWITT LANE Term ends 6/17/23

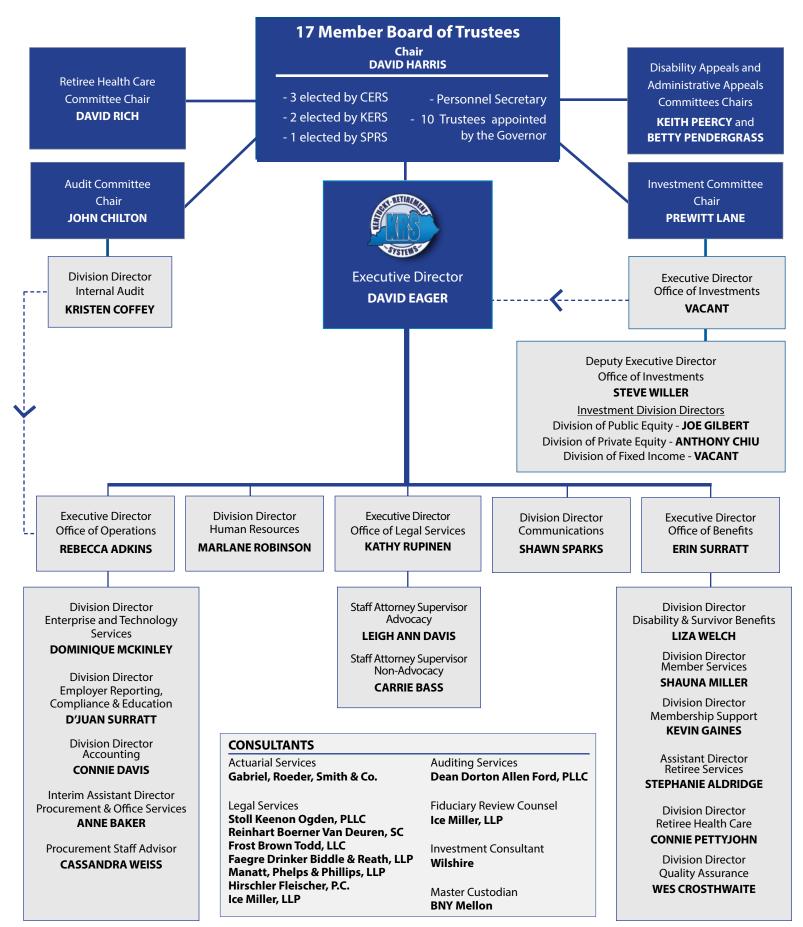
KENTUCKY PUBLIC PENSIONS AUTHORITY

During the 2020 Legislative Session, <u>HB 484</u> was passed establishing a new governance structure for KRS. Effective April 1, 2021, KRS as an Agency of the Commonwealth will be known as the Kentucky Public Pensions Authority (KPPA). Current KRS employees will become KPPA employees and continue to provide administrative support, investment management, and conduct daily activities for the new CERS, KRS, and KPPA boards. KPPA will be led by an Executive Director who will work with the Chief Executive Officers of the CERS and KRS boards to carry out the statutory provisions of the systems.

	KPPA BOARD	
CERS BOARD		KRS BOARD
 COUNTY EMPLOYEES RETIREMENT SYSTEM 3 trustees elected by members 6 trustees appointed by the Governor selected from lists of candidates provided by KACo, KLC and KSBA 	 CERS Board Chair KRS Board Chair CERS Investment Committee Chair CERS Trustee, Elected by Members* CERS Trustee, Governor Appointee* KRS Investment Committee Chair KRS Trustee, Elected by Members** KRS Trustee, Governor Appointee** *Selected by the CERS Board Chair *Selected by the KRS Board Chair 	KENTUCKY EMPLOYEES RETIREMENT SYSTEM & STATE POLICE RETIREMENT SYSTEM • 3 trustees elected by members • 6 trustees appointed by the Governor

KRS AGENCY STRUCTURE

as of December 3, 2020



SYSTEMS AND BENEFIT TIERS

KRS administers three systems. CERS and KERS are multiple-employer, cost-sharing defined benefit pension plans with Non-Hazardous 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.

BENEFIT TIERS

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



HEALTH INSURANCE

KRS pays a percentage of the monthly contribution rate or a dollar amount toward <u>insurance coverage</u>. 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 AS OF JUNE 30, 2020

Our Systems

COUNTY EMPLOYEES RETIREMENT SYSTEM

CERS participating employers include local governments (county and city), school boards, and eligible local agencies. The Non-Hazardous and Hazardous plans combined cover 255,713 members.

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

KERS participating employers include state departments, boards, and employers directed by Executive Order of the Governor to participate in KERS, which covers 136,557 members.

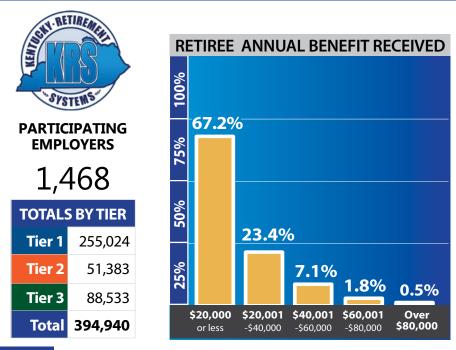
STATE POLICE RETIREMENT SYSTEM SPRS covers all full-time Kentucky State Police

20		
HAZARDOUS		ARDOUS MEMBERS
MBERSHIP		
6 47.8 AVERAGE ANNUAL SALARY \$31 574	Tier 13,969Tier 21,908Tier 33,473Total9,350	AVERAGE AGE 38.4 AVERAGE ANNUAL SALARY \$60,363
MEMBERSHIP		
\$1,238 VESTED AVERAGE ANNUAL DEFERRED BENEFIT	Tier 11,448Tier 2571Tier 3905Total2,924	NON-VESTED AVERAGE CONTRIBUTIONS & INTEREST \$3,584 VESTED AVERAGE ANNUAL DEFERRED BENEFIT \$4,325
IEMBERSHIP		
9 70.7 AVERAGE ANNUAL	Tier 1 8,412 Tier 2 16 Tier 3 3	AVERAGE AGE 62.1 AVERAGE ANNUAL BENEFIT PAYMENT
	08 MEMBERS 08 MEMBERS 08 MEMBERS 09 MERSHIP 0 1 <td< td=""><td>08 MEMBERS $20,705$ EMBERSHIP 47.8 AVERAGE AGE 47.8 AVERAGE ANNUAL SALARY $331,574$ 38 $31,574$ MEMBERSHIP $11er 3$ 3909 $11er 3$ $3,473$ $3,473$ 38 $31,574$ MEMBERSHIP $11er 3$ 39350 $11er 2$ 59 $\$1,238$ $81,238$ $11er 2$ $51,580$ $11er 3$ 905 $10ta 1$ $2,924$ $11er 3$ 905 $10ta 1$ 905 $10ta 1$ 905 $10ta 1$ $2,924$ $11er 1$</td></td<>	08 MEMBERS $20,705$ EMBERSHIP 47.8 AVERAGE AGE 47.8 AVERAGE ANNUAL SALARY $331,574$ 38 $31,574$ MEMBERSHIP $11er 3$ 3909 $11er 3$ $3,473$ $3,473$ 38 $31,574$ MEMBERSHIP $11er 3$ 39350 $11er 2$ 59 $$1,238$ $81,238$ $11er 2$ $51,580$ $11er 3$ 905 $10ta 1$ $2,924$ $11er 3$ 905 $10ta 1$ 905 $10ta 1$ 905 $10ta 1$ $2,924$ $11er 1$

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123,365 MEMBERS	HAZARDOUS 13,192 MEMBERS	2,670 MEMBERS		
ACTIVE MEMBERSHIP				
Tier 1 15,274 AVERAGE AGE Tier 2 5,554 45.7 Tier 3 10,362 AVERAGE ANNUAL SALARY Total 31,190 \$43,774	Tier 1 1,262 AVERAGE AGE Tier 2 727 39.8 Tier 3 2,123 AVERAGE ANNUAL SALARY Total 4,112 \$41,726	Tier 1 403 Tier 2 195 Tier 3 200 Total 798		
INACTIVE MEMBERSHIP				
Tier 131,761Tier 28,733Tier 38,089Total48,583	Tier 11,823Tier 21,280Tier 32,735Total5,838	Tier 1179NON-VESTED AVERAGE CONTRIBUTIONS & INTERESTTier 263\$1,286Tier 3107Vested AVERAGE ANNUAL DEFERRED BENEFITTotal349\$3,221		
RETIRED MEMBERSHIP				
Tier 1 43,386 AVERAGE AGE Tier 2 196 69.6 Tier 3 10 AVERAGE ANNUAL BENEFIT PAYMENT Total 43,592 \$21,440	Tier 1 3,205 Tier 2 36 Tier 3 1 Total 3,242	Tier 11,522AVERAGE AGETier 2163.0Tier 30AVERAGE ANNUAL BENEFIT PAYMENTTotal1,523\$39,766		

TOTAL MEMBERSHIP

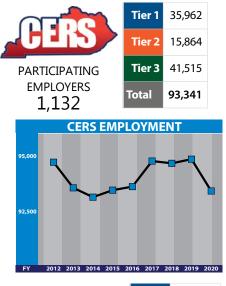




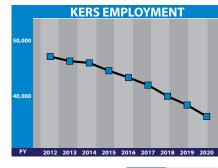
PARTICIPATING EMPLOYERS

EMPLOYER REPORTING

KRS staff works with 1,468 employers entrusted with the responsibility of reporting all employees on a monthly basis.











Employer Classification	FY 20 Number of Agencies	FY 20 Number of Employees	FY 12 Number of Employees	% Change
CERS				
Airport Boards	5	531	504	5.36%
Ambulance Services	19	416	434	-4.15%
Area Development Districts	14	645	690	-6.52%
Boards of Education	172	48,154	49,363	-2.45%
Cities	221	10,275	10,146	1.27%
Community Action	21	2,861	2,816	1.60%
Conservation Districts	49	58	61	-4.92%
County Attorneys	79	567	690	-17.83%
County Clerks	16	588	595	-1.18%
Development Authorities	6	10	10	0.00%
Fire Departments	32	1,001	757	32.23%
Fiscal Courts	118	10,982	10,884	0.90%
Health Departments	1	342	283	20.85%
Housing Authorities	41	419	435	-3.68%
Jailers	2	68	33	106.06%
Libraries	85	1,259	1,159	8.63%
Other Retirement Systems	2	3	3	0.00%
P1 State Agencies	4	1,585	1,696	-6.54%
Parks and Recreation	7	55	62	-11.29%
Planning Commissions	16	204	206	-0.97%
Police Departments	2	15	15	0.00%
Riverport Authorities	5	69	67	2.99%
Sanitation Districts	9	352	348	1.15%
Sheriff Departments	12	737	980	-24.80%
Special Districts & Boards	49	1,370	1,564	-12.40%
Tourist Commissions	23	178	177	0.56%
Urban Government	2	6,521	6,763	-3.58%
Utility Boards	120	4,076	3,894	4.67%
Total	1,132	93,341	94,635	-1.37%
KERS				
County Attorneys	59	172	353	-51.27%
Health Departments	60	1,956	3,449	-43.29%
Master Commissioner	34	65	74	-12.16%
Non-P1 State Agencies	34	791	1,381	-42.72%
Other Retirement Systems	1	22	28	-21.43%
P1 State Agencies	128	28,835	31,751	-9.18%
Regional Mental Health Units	12	1,809	5,823	-68.93%
Universities	7	2,298	3,929	-41.51%
Total	335	35,948	46,788	-23.17%
SPRS				
Kentucky State Police	1	798	909	-12.21%

EMPLOYER COSTS BY TIER

COST COMPONENTS

Employer contributions have two components. The **normal cost** covers the benefit accruals active participants will 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, 2020.

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. Underlying economic assumptions that did not accurately reflect plan experience. Refer to page 21 for more information.
- 3. Investment returns that fell short of the assumed investment rate of return.
- 4. Benefit increases that were not pre-funded, such as previous retiree Cost of Living Adjustments.

	CERS Non-Hazardous	CERS Hazardous	KERS Non-Hazardous	KERS Hazardous	SPRS
NORMAL COST RATE	S ¹ - PENSION (Eac	h employer's cost	for an employee's reti	rement benefit)	
Tier 1 Cost Before 7/03	7.90%	13.74%	8.78%	11.96%	22.76%
Tier 1 Cost After 7/03	7.54%	13.55%	9.16%	11.87%	22.35%
Tier 2 Cost	4.73%	10.67%	6.36%	8.21%	18.72%
Tier 3 Cost	3.01%	5.70%	3.49%	5.14%	7.18%
Average Normal Cost ²	6.46%	11.00%	7.90%	8.84%	19.04%
NORMAL COST RATE	S ¹ - INSURANCE	(Each employer's	cost for an employee'	s insurance benefit)	
Tier 1 Cost Before 7/03	5.11%	12.05%	4.10%	12.29%	15.78%
Tier 1 Cost After 7/03	3.20%	3.63%	2.28%	4.39%	4.60%
Tier 2 Cost	1.09%	1.83%	0.53%	1.94%	2.73%
Tier 3 Cost	1.05%	1.94%	0.37%	1.68%	2.51%
Average Normal Cost ²	2.69%	4.90%	2.20%	4.06%	7.40%
Total Pension & Insurance	9.15%	15.90%	10.10%	12.90%	26.44%
UNFUNDED LIABILIT	Y COST % (Each er	mployer's cost for t	the unfunded liability)	1	
Pension	17.42%	32.23%	67.42%	24.59%	108.95%
Insurance	1.48%	3.83%	7.51%	-4.94%	10.67%
Total Unfunded Liability Cost	18.90%	36.06%	74.93%	19.65%	119.62%

¹ Normal Cost Rate is the cost of an employee's retirement benefit to the employer net of employee contributions.

² Average Normal Cost Rate is the blended normal cost rate of all members active as of the valuation date and includes administrative expenses.

HOW BENEFITS ARE FUNDED



Benefits are funded from three sources:

1. EMPLOYER CONTRIBUTIONS

Recommended <u>employer contribution rates</u> are determined by KRS' independent actuary based on data in the annual actuarial valuation. The Board adopts employer contribution rates necessary for the actuarial soundness of KRS as required by Kentucky Revised Statutes 61.565 and 61.702. KERS and SPRS employer rates are subject to approval by the Kentucky General Assembly through the adoption of the biennial Executive Branch Budget. The Board also 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 Fund and are used to pay monthly benefits and to fund KRS expenses.

5%+1%

Insurance*

8%+1%

Insurance*

2. EMPLOYEE CONTRIBUTIONS

Members contribute a percent of their creditable compensation as set by state law based on their benefit tier.

Employee contributions paid to KRS are deposited to individual member accounts. When an employee retires, his or her account balance is transferred to the Retirement Allowance Account (the account from which monthly benefits are paid).

5%+1%

Insurance*



Administrative expenses are allocated and paid during the fiscal year based on each plan's membership. KRS' administrative expenses for Fiscal Year 2020 can be found on page 15.

Hazardous 8% 8%+1% Insurance*

*One percent (1%) is deposited to the KRS Insurance Fund.

5%

3. INVESTMENTS

Member

Rates

Contribution

Non-Hazardous

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

The Board recognizes its fiduciary duty 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 KRS. In carrying out their fiduciary duties, the Trustees have set forth clearly defined investment policies, objectives, and strategies.

KRS 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.

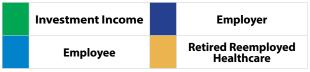


Go to: <u>KYRET.KY.GOV</u>
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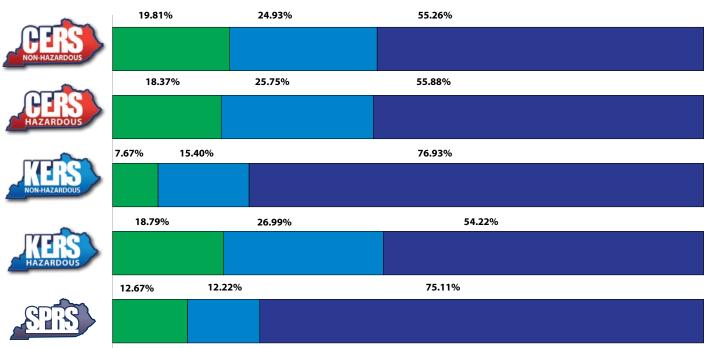
HOW BENEFITS ARE FUNDED

FUNDING SOURCES BY TYPE

The breakdown of funding sources varies by plan for the pension and insurance funds. Investment Income represents dividends, interest and changes in market value net of fees.



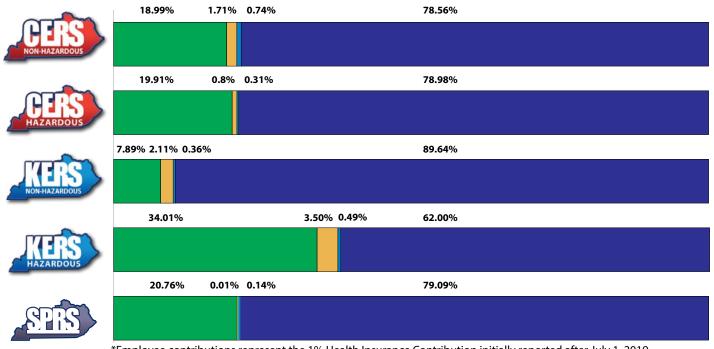
PENSION FUNDS - FOR THE TEN YEAR PERIOD ENDING JUNE 30, 2020



*Employee contributions include the 1% Health Insurance Contribution initially reported prior to July 1, 2019.

INSURANCE FUND - FOR THE TEN YEAR PERIOD ENDING JUNE 30, 2020

The insurance fund has an additional contribution type specific to employers reimbursing KRS for the retiree insurance contribution paid when a reemployed retiree elects insurance coverage through KRS rather than the employer.



*Employee contributions represent the 1% Health Insurance Contribution initially reported after July 1, 2019. **Insurance premiums account for less than 1% of total contributions for all plans during this period.

ECONOMIC IMPACT FOR KENTUCKY

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

	ONE-TIME PAYMENTS			
Pension payments	KRS issues two types of one-time payments to eligible members and beneficiaries: refunds	ONE-TI	ME PAYMENTS	
support state	and a \$5,000 death benefit payment.	Number	Amount	
economic activity		7,160	\$48,406,564	
	MONTHLY INSURANCE PAYMENTS			
93%	KRS pays a percentage of the monthly contribution rate or a dollar amount toward	INSURAI	NCE PAYMENTS	
Paid to	insurance coverage for eligible members. Any portion paid toward eligible dependent	Number of Plans	Amount	
Kentucky residents	coverage is based on the member's hazardous	86,091	\$441,382,933	
residents	service credit.			
Payments per	MONTHLY PENSION PAYMENTS			
county range from	KRS paid more than \$2 billion in monthly pension payments to Kentucky residents.	KENTUC	KY RECIPIENTS	
\$1.1 million to	F F - J	Number	Amount	
\$358.2 million		109,820	\$2,044,487,743	
Less than \$5,000,000	2 To			
\$5,000,000 - \$19,999,999				
\$20,000,000 - \$79,999,999	the the			
More than \$80,000,000		J-J		
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ECONOMIC IMPACT FOR KENTUCKY

In Fiscal Year 2020, KRS paid over \$2 billion in ongoing pension benefit payments. The majority, 93%, of these payments are issued to Kentucky residents. KRS payments per county in the Commonwealth of Kentucky range from \$1.1 million to \$358.2 million annually providing a consistent revenue stream for all local economies.

COUNTY	PAYEES	TOTAL	COUNTY	PAYEES	TOTAL	COUNTY	PAYEES	TOTAL	COUNTY	PAYEES	TOTAL
Adair	489	\$ 8,190	Edmonson	233	\$3,343	Knox	608		Nicholas	207	\$2,857
Allen	403	5,464	Elliott	179	2,656	Larue	360	5,552	Ohio	636	6,807
Anderson	1,401	34,952	Estill	408	5,743	Laurel	1,254	20,793	Oldham	1,347	28,364
Ballard	239	3,357	Fayette	5,475	119,369	Lawrence	334	4,054	Owen	530	12,180
Barren	1,068	16,559	Fleming	466	7,957	Lee	232	3,307	Owsley	214	3,200
Bath	393	5,897	Floyd	892	13,617	Leslie	268	4,067	Pendleton	354	5,866
Bell	661	10,688	Franklin	6,370	197,068	Letcher	608	8,343	Perry	778	11,243
Boone	1,832	37,693	Fulton	180	2,267	Lewis	327	4,268	Pike	1,267	18,705
Bourbon	551	9,199	Gallatin	122	2,022	Lincoln	679	8,636	Powell	343	4,650
Boyd	1,063	17,357	Garrard	419	6,196	Livingston	264	4,438	Pulaski	2,237	37,923
Boyle	893	15,360	Grant	603	11,473	Logan	617	8,790	Robertson	65	1,079
Bracken	229	3,013	Graves	892	13,851	Lyon	352	6,955	Rockcastle	400	5,487
Breathitt	510	7,872	Grayson	763	11,744	Madison	2,385	40,256	Rowan	862	14,858
Breckinridge	478	6,823	Green	304	4,356	Magoffin	360	5,025	Russell	558	8,276
Bullitt	1,535	28,493	Greenup	661	9,040	Marion	548	7,628	Scott	1,263	26,768
Butler	319	4,366	Hancock	220	2,873	Marshall	924	13,632	Shelby	1,655	41,483
Caldwell	529	7,871	Hardin	2,215	36,505	Martin	280	3,108	Simpson	284	3,492
Calloway	1,077	15,320	Harlan	638	9,629	Mason	414	6,691	Spencer	498	11,032
Campbell	1,530	28,834	Harrison	453	6,980	McCracken	1,599	29,205	Taylor	645	9,383
Carlisle	122	1,712	Hart	336	5,063	McCreary	402	4,137	Todd	254	3,480
Carroll	318	5,125	Henderson	1,064	17,830	Mclean	310	4,533	Trigg	516	8,344
Carter	781	10,409	Henry	911	20,236	Meade	455	6,524	Trimble	274	4,294
Casey	359	4,607	Hickman	92	1,654	Menifee	206	2,952	Union	364	4,178
Christian	1,551	27,146	Hopkins	1,269	19,357	Mercer	772	14,049	Warren	2,823	49,671
Clark	838	14,348	Jackson	338	4,511	Metcalfe	303	3,880	Washington	334	5,256
Clay	583	8,621	Jefferson	16,438	358,247	Monroe	261	2,942	Wayne	548	7,573
Clinton	254	3,439	Jessamine	1,104	18,911	Montgomery	656	10,687	Webster	357	4,714
Crittenden	218	2,850	Johnson	620	9,463	Morgan	621	10,743	Whitley	1,086	15,494
Cumberland	184	2,834	Kenton	2,319	48,177	Muhlenberg	800	10,280	Wolfe	335	5,453
Daviess	2,645	\$47,319	Knott	451	\$7,048	Nelson	1,058	\$18,466	Woodford	1,041	\$26,038
NOTE: This table rep	presents all pa	yees receivin	g a monthly paym	ent during the	e Fiscal Year. I	Members receiving	payments from	n multiple ac	counts are represe	ented as one	payee.
					Payees			%			Amount
Kentucky					109,820			93.40%		\$2,	044,488
Out of State					8,593			6.60%			143,826
a 1= / 1											

118,413

\$2,188,314

100.00%

Grand Total

FINANCIAL REPORT



This is an overview of the financial activities for the Fiscal Year ended June 30, 2020. For more detailed information, refer to the Financial Section of the <u>2020 CAFR</u>.

2020 FINANCIAL HIGHLIGHTS

Fiscal Year 2020 financial performance for the Pension and Insurance plans declined from 2019. Net position decreased from \$18.41 billion to \$18.39 billion. The 0.11% decrease was primarily attributable to unrealized losses, which were the result of a decline in the market value of investments, and a reduction in the General Fund appropriations of \$75.8 million. Additional information is provided below and further detailed in the 2020 CAFR.

PENSION

The Total Pension Fiduciary Net Position across the five plans was \$12.93 billion at the beginning of the Fiscal Year and decreased 0.54% to \$12.86 billion as of June 30, 2020. The \$0.07 billion decrease was due in large part to the decline in the fair value of investments, appropriations, and higher retiree payment outflows.

INSURANCE

The combined Fiduciary Net Position of the five Insurance plans administered by KRS increased by \$44.0 million during Fiscal Year 2020. Total combined net position for the Fiscal Year was \$5.53 billion. Total contributions and net investment income of \$428.2 million offset deductions of \$384.2 million which resulted in the net position increase.

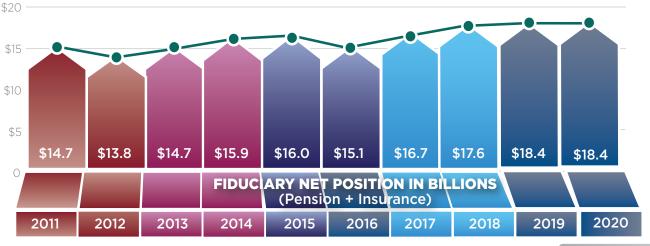
INVESTMENTS

Fiscal Year 2020 investment performance was positive, outperforming the benchmarks used to measure plan performance. However, the funds fell short of the assumed rate of return of 6.25% for CERS, CERS Hazardous, and KERS Hazardous, and 5.25% for KERS Non-Hazardous and SPRS. The KRS Pension Funds earned a combined net return of 1.15% versus the 0.50% benchmark. The KRS Insurance Fund earned a combined net return of 0.48%, and outperformed the benchmark of 0.13%, but also fell short of the assumed rate of return of 6.25% used for all plans in the Insurance Fund.

CASH FLOWS

Pension: Cash flows for the KERS and SPRS plans continued to improve during Fiscal Year 2020 due to employer contributions and investment income. In Fiscal Year 2020, the SPRS plan received additional General Fund appropriations of \$1.1 million. Employer contribution rates increased for the CERS plans for Fiscal Year 2020. Employer contribution rates remained the same for KERS and SPRS plans, helping to sustain cash flows. The KERS Non-Hazardous Quasi agencies once again had a rate of 49.47%, which reduced the cash flow that would have been received if the rates were the same as the other KERS employers.

Insurance: Cash flows for CERS Non-Hazardous, KERS Non-Hazardous and SPRS have continued to stabilize over the last five years with increased employer contribution rates, except for KERS Hazardous, which is overfunded. Cash flow for CERS Hazardous declined due to realized and unrealized losses. The plans' funded status have also been positively impacted by stable expenses and by a benefit formula change that began in 2003.



FINANCIAL REPORT

TABLE 1 - ASSETS AND LIABILITIES

This table shows the assets and liabilities for the years ending June 30, 2020 and June 30, 2019. Total liabilities are comprised of securities lending collateral, investment accounts payable (buys) and outstanding employer/member invoices. The Fiduciary Net Position represents the funds KRS 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)						
	Pensior	Insuranc	e Fund	Т	otal	
Assets	2020	2019	9 2020 2019 2020			2019
Cash & Investments	\$13,150	\$13,134	\$5,688	\$5,623	\$18,838	\$18,757
Receivables	296	468	87	142	383	610
Equip/Int Assets, net of dep/amort.	2	3	-	-	2	3
Total Assets	13,448	13,605	5,775	5,765	19,223	19,370
Total Liabilities	(587)	(671)	(250)	(284)	(837)	(955)
Fiduciary Net Position	\$12,861	\$12,934	\$5,525	\$5,481	\$18,386	\$18,415

Investment Income (Loss) for Pension Funds <i>(\$ in Millions)</i>						
Asset	2020	2019				
Increase (Decrease) in fair value of investments	\$(688)	\$274				
Investment income net of investment expense	238	209				
Gain on sale of investments	590	211				
Net Investment Income	\$140	\$694				

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 2020 and 2019 for both Pension and Insurance plans. 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)

Table 2. Changes in Fluctuary Net Position (\$ #170###1018)						
	Pensior	Funds	Insuranc	otal		
Additions	2020	2019	2020	2019	2020	2019
Member Contributions	\$353	\$355	\$23	\$-	\$376	\$355
Employer Contributions	1,710	1,594	370	387	2,080	1,981
Other Contributions	1	88	12	20	13	108
Net Investment Income	140	694	23	289	163	983
Total Additions	\$2,204	\$2,731	\$428	\$696	\$2,632	\$3,427
Deductions:						
Benefit payments	\$2,206	\$2,144	\$-	\$-	\$2,206	\$2,144
Refunds	33	32	-	-	33	32
Admin/Cap. Proj.	38	37	2	2	40	39
Healthcare Costs	-	-	382	378	382	378
Total Deductions	2,277	2,213	384	380	2,661	2,593
Total Change in Fiduciary Net Position	\$(73)	\$518	\$44	\$316	\$(29)	\$834
CERS Non-Hazardous	(132)	157	12	140	(120)	297
CERS Hazardous	(34)	68	(20)	57	(54)	125
KERS Non-Hazardous	76	238	64	95	140	333
KERS Hazardous	9	36	(12)	14	(3)	50
SPRS	8	19	0	10	8	29

Investment Income (Loss) for
Insurance Fund (\$ in Millions)

Asset	2020	2019
Increase (Decrease) in fair value of investments	\$(309)	\$113
Investment income net of investment expense	105	92
Gain on sale of investments	227	83
Net Investment Income	\$23	\$288

KRS Administrative Expenses (\$ in Millions)

KRS staff = 247 employees	2020	2019
Salaries	\$14.7	\$14.0
Pension & Benefits	14.6	13.8
Contractual Services	1.9	2.4
Communications	0.7	0.6
Rent/Utilities/Misc	1.4	1.3
Technology	3.2	2.5
Healthcare Retiree Fees	2.4	2.4
Depreciation	1.1	1.8
Total	\$40.0	\$38.8

INVESTMENTS REPORT



This is an overview of the investment activities for the Fiscal Year ended June 30, 2020. For more detailed information, refer to the Investments Section of the <u>2020 CAFR</u>.

PENSION FUNDS RESULTS

As of June 30, 2020, the KRS Pension Funds earned net returns of 1.15%, outperforming the benchmark of 0.50%. The Pension Funds' returns fell short of the actuarial assumed rates of return of 5.25% for KERS Non-Hazardous and SPRS and fell short of the 6.25% for CERS Non-Hazardous, CERS Hazardous, and KERS Hazardous. The portfolio benefited from relative outperformance in the Real Estate and Non-U.S. Equity portfolios combined with an overweight to the Core Fixed Income allocation (the best performing asset class during the fiscal year). The portfolio's outperformance was partially hampered due to weaker security selection in both the Core Fixed Income and U.S. Equity allocations.

Net Returns By Pl	an - PENSION	N FUNDS (\$	in Milli	ons)								
Plan	Fair Value	% of Total	1 Yea	ar (%)	3 Yea	rs (%)	5 Yea	rs (%)	10 Yea	ars (%)	Incep	tion (%)
Fidii	(\$ in Millions)	Fair Value	KRS	Index	KRS	Index	KRS	Index	KRS	Index	KRS	Index
CERS Non-Hazardous	\$7,048	55.40	0.84	0.51	5.07	4.85	5.60	5.41	7.37	7.53	8.82	8.90
CERS Hazardous	2,377	18.68	0.71	0.51	5.04	4.85	5.60	5.41	7.36	7.53	8.82	8.90
KERS Non-Hazardous	2,318	18.21	2.36	1.07	5.17	4.76	5.31	5.33	7.26	7.47	8.79	8.88
KERS Hazardous	694	5.45	0.95	0.51	5.06	4.85	5.58	5.41	7.36	7.53	8.82	8.90
SPRS	287	2.25	2.21	1.07	5.17	4.83	5.21	5.28	7.17	7.46	8.76	8.88
KRS*	\$12,724	100.00	1.15	0.50	5.14	4.75	5.58	5.38	7.37	7.55	8.82	8.90

*The KRS 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 FUNDS (\$ in Millions) Note: Fair values are adjusted for accruals and expenses

Structure	Inception	Fair Value	% of	1 Yea	ar (%)	3 Yea	rs (%)	5 Yea	ırs (%)	10 Yea	ars (%)	Ince To D	otion Date	External FEES
	·	(\$ in Millions)	Total	KRS	Index	KRS	Index	KRS	Index	KRS	Index	KRS	Index	(\$ in Millions)
Total Fund	4/1/1984	\$12,724	100.00	1.15	0.50	5.14	4.75	5.58	5.38	7.37	7.55	8.82	8.90	\$56.5
Total Public Equity	4/1/1984	4,840	38.04	1.44	0.86	5.88	5.53	6.25	5.99	8.93	9.10	10.15	9.98	10.5
U.S. Equity	4/1/1984	2,430	19.10	4.86	6.53	8.96	10.04	9.14	10.03	12.95	13.71	11.08	11.18	3.2
Non-U.S. Equity ¹	7/1/2000	2,410	18.94	-2.03	-4.74	3.17	0.99	3.86	2.38	5.35	5.32	2.88	2.94	7.3
Core Fixed Income	4/1/1984	2,550	20.04	5.33	8.74	4.23	5.32	3.80	4.30	-	-	3.59	3.96	3.5
Specialty Credit	7/1/2017	2,046	16.08	-1.38	-0.98	3.71	2.71	-	-	-	-	3.71	2.71	14.0
Opportunistic	7/1/2018	328	2.58	-2.76	-1.99	-	-	-	-	-	-	3.72	0.96	2.5
Real Return	7/1/2011	742	5.83	-9.24	-9.24	-0.95	-0.95	1.11	1.11	-	-	2.32	1.41	4.3
Private Equity	7/1/2002	1,052	8.27	0.29	0.29	8.59	8.59	8.77	8.77	11.27	13.99	10.56	10.28	5.0
Real Estate	7/1/1984	573	4.50	9.77	3.93	9.93	5.85	9.77	7.48	10.59	10.42	6.28	6.39	12.3
Absolute Return	4/1/2010	179	1.40	-4.19	0.87	0.18	2.63	-0.13	1.46	3.18	2.79	2.84	2.73	1.0
Cash Account ²	1/1/1988	\$414	3.26	1.89	1.56	2.05	1.72	1.52	1.15	0.93	0.61	3.50	3.07	\$3.4
¹ Equities include trade o	quities include trade commissions. ² Cash accounts include custodian, consulting and miscellaneous investment expenses.													

INSURANCE FUND RESULTS

As of June 30, 2020, the KRS Insurance Fund earned a net return of 0.48% compared to the benchmark return of 0.13%. The Insurance Fund achieved rates of return of 5.64% over the five year period and 7.47% over the 10 year period. In Fiscal Year 2020, the Insurance Fund gained from the same favorable market conditions as the Pension Funds. The portfolio benefitted from relative outperformance in the Real Estate and Non-U.S. Equity portfolios combined with an overweight to the Core Fixed Income allocation (the best performing asset class during the fiscal year). The portfolio's outperformance was partially hampered due to weaker security selection in both the Core Fixed Income and U.S. Equity allocations.

Dian	Fair Value	% of Total	% of Total 1 Year (%)		3 Years (%)		5 Years (%)		10 Years (%)		Inception (%)	
Plan	(\$ in Millions)	Fair Value	KRS	Index	KRS	Index	KRS	Index	KRS	Index	KRS	Inde>
CERS Non-Hazardous	\$2,482	45.25	0.36	0.24	5.04	4.85	5.66	5.50	7.50	8.13	7.21	7.51
CERS Hazardous	1,300	23.70	0.26	0.24	5.06	4.85	5.70	5.50	7.52	8.14	7.21	7.51
KERS Non-Hazardous	990	18.05	0.97	0.24	4.59	4.80	5.31	5.45	7.20	8.09	7.12	7.50
KERS Hazardous	514	9.37	0.20	0.24	4.84	4.86	5.51	5.49	7.42	8.12	7.18	7.51
SPRS	199	3.63	0.65	0.24	5.18	4.85	5.76	5.50	7.55	8.14	7.22	7.51
KRS*	\$5,485	100.00	0.48	0.13	5.01	4.77	5.64	5.49	7.47	8.19	7.20	7.53

*The KRS 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.

Structure	Inception	Fair Value (\$ in Millions)	% of Total	1 Yea	ar (%)	3 Year	rs (%)	5 Yea	rs (%)	10 Yea	ars (%)		ption Date	External FEES
	-		Iotai	KRS	Index	KRS	Index	KRS	Index	KRS	Index	KRS	Index	(\$ in Millions
Total Fund	4/1/1984	\$5,485	100.00	0.48	0.13	5.01	4.77	5.64	5.49	7.47	8.19	7.20	7.53	\$22.7
Total Public Equity	4/1/1984	2,150	39.19	1.38	0.81	5.79	5.49	6.33	5.99	8.80	9.04	8.32	8.11	4.7
U.S. Equity	4/1/1984	1,081	19.71	4.76	6.53	8.90	10.04	9.31	10.03	12.95	13.66	9.49	9.48	1.5
Non-U.S. Equity ¹	4/1/1984	1,069	19.48	-2.10	-4.74	3.02	0.99	3.76	2.38	5.03	5.30	2.86	2.19	3.2
Core Fixed Income	7/1/2000	1,002	18.28	4.93	8.74	4.13	5.32	3.72	4.30	-	-	3.24	3.96	1.5
Specialty Credit	7/1/2017	897	16.35	-1.64	-0.98	3.40	2.71	-	-	-	-	3.40	2.71	6.3
Opportunistic	7/1/2018	167	3.04	-2.76	-1.99	-	-	-	-	-	-	3.72	0.96	1.3
Real Return	4/1/1984	318	5.80	-7.13	-7.13	-0.25	-0.25	1.44	1.44	-	-	2.35	1.72	1.9
Private Equity	7/1/1984	497	9.07	-5.83	-5.83	7.31	7.31	9.03	9.03	12.30	14.28	9.33	9.78	0.0
Real Estate	4/1/2010	241	4.39	10.00	3.93	10.03	5.85	10.06	7.48	10.90	10.42	9.27	5.84	5.3
Absolute Return	7/1/2011	73	1.34	-4.11	0.87	0.24	2.63	-0.09	1.46	3.19	2.79	2.80	2.73	0.0
Cash Account ²	7/1/2002	\$140	2.54	1.44	1.56	1.77	1.72	1.25	1.15	0.76	0.61	2.59	2.46	\$1.7

			visors & Assets U (\$ in Thousand		inent.		
Public Equity Cash / Accruals	Private Real E		Emerging Ma Absolute Re		Core Fixed Income Real Return		ty Credit tunistic
Actively Manage	ed		Actively Manag	jed	Terminate	d or Runoff St	tatus
Advisor as of 6/30/2020	Assets Under Management	Advisor as of 6	/30/2020	Assets Under Management	Advisor as of 6/30/202		Assets Under Nanagemen
American Century Investments	\$498,109	BTG Pactua	al	\$33,277	Sun Capital Partne	ers IV	\$2
BlackRock ACWI Ex-US	1,066,260	IFM Infrast	ructure Debt Fund	64,417	Technology Crosso	over Ven.	3
Franklin Templeton	387,472	Magnetar	Capital	29,042	Triton Fund		19,3
Internally Managed Accounts	576,426	Nuveen Re	al Asset	-355	VantagePoint Cap	ital Partners	9,1
Lazard Asset Management	567,686	Oberland	Capital	11,046	Vista Equity Partne	ers	90,8
LSV Asset Management	497,991	Putnam		655,349	Warburg Pincus		8,4
Next Century	100,936	Taurus Mir	e Finance	34,007	Wayzata Investme	nt Partners	9,1
Northern Trust Global Inv.	330,502	Tenaska Po	ower	861	Fundamental Part	ners	84,8
River Road Asset Management	251,951	Tortoise Ca	apital	121,735	Gotham Neutral St	trategies	17,0
Internally Managed S&P 500	2,059,136	Arrowmar	()	494,895	Governor's Lane		3
Transition Accounts	1,799	TOTAL		\$16,336,471	Liquidalts H20 For	ce	18,8
Westfield Capital	267,105	Tern	ninated or Runo	ff Status	Luxor Capital		1,3
Black Diamond Capital Mngt.	62,256	Invesco		\$47	Myriad Opportuni	ties	55,4
Middle Ground	24,750	Systematio		3	Pacific Alternative	Asset	
Strategic Value Special Fund	36,616	Arbor Inve	stments	78	Pine River Capital		1
JP Morgan Emerging Markets	199,472	Arcano Ca	oital	25,904	Prisma Capital		138,8
Pzena Emerging Markets	184,868	ARES Capi	al	33,280	SRS Partners		12,4
Loomis, Sayles & Company	723,562	Bay Hills Er	nerging Partners	278,232	Tricadia Select		4,9
Lord Abbett	2,506,656	Blackstone	Capital Partners	54,627	AMERRA Capital M	anagement	110,2
NISA Investment Advisors	321,947	CM Growt	n Capital Partners	9,050	TOTAL		\$1,872,8
Adams Street	34,782	Columbia	Asset Management	3,693	GRAND TOTAL		\$18,209,3
BSP Private Credit	126,263	Crestview	Partners	57,199		ernal manager asse	
Capital Springs	67,974	CVC Capita	al Partners	41,799	management and	d differ from Total F	air Values.
Cerberus	174,435	DAG Ventu	ires	70,451			
Columbia Capital	546,046	DB Second	lary Opportunities	69,038			
H/2 Credit Partners	95,531	DCM	,	12,131		vestment Expe June 30, 2020	nses
Manulife Financial	473,746	Essex Woo	dland	11,619		in Millions)	
Marathon Bluegrass	484,493	Green Eau	ity Investors	141,250	_		Share
Mesa West	130,356	Harvest Pa	•	52,133	Expense	Fees Paid	Expen
Shenkman Capital	295,840	Hellman &		9,190	Portfolio Managemer	nt	
Waterfall Investment	315,125	H.I.G. Capi	tal	55,236	Pension Funds	\$51	64.6
White Oak	198,902		dge International	89,971	Insurance Fund	20	25.5
BNY Mellon Accruals	-1,053		al Venture Partners	6,152	Securities Lending		
Cash Accounts	555,215	JW Childs		23	Pension Funds	3	4.2
Baring Real Estate	68,972	Kayne And	. ,	28,822	Insurance Fund	2	1.8
DivcoWest	4,052		Capital Partners	37,789	Custody	۷.	1.0
Greenfield Acquisition Partners	27,998	Levine Lei	•	86,240	Pension Funds	1	1 5
Harrison Street	123,675	Matlin Pat		8,025			1.5
Lubert-Adler	84,165		tal Partners	218	Insurance Fund	1	0.9
Patron Capital	25,818	· ·	uional Advisors	953	Consultant		
Perimeter Park	7,300	Mill Road (7,332	Pension Funds	1	0.8
Prologis	207,805		Itain Partners	65,013	Insurance Fund	0	0.3
Rubenstein Capital	24,536	Oak Hill Pa		8,331	Total Expenses	\$79	10
Stockbridge	129,340		ipital Management	17	Total Pension Funds	\$56	71.3
	127,570			17		() ()	20.7

Share of Expenses

64.60%

25.52%

4.26%

1.85%

1.58%

0.97%

0.85%

0.36%

100%

71.30%

28.70%

\$23

\$26,884

Total Insurance Fund

Assets Under Management

\$222 339 19,321 9,179 90,870 8,490 9,180 84,808 17,069 359 18,821 1,340 55,444 9 173 138,892 12,416 4,970 110,206 \$1,872,838 \$18,209,309

Walton Street

\$25,381

Riverside Capital

Fair Values By P	lan - Pens	ion as of	June 30, 1	2020 (\$ in	Millions)							
	CEI Non-Haz		CE Haza		KER Non-Haza		KEI Hazare		SP	RS	TOT/ KRS	
Assets	Fair Value (FV)	% of Total FV	Fair Value (FV)	% of Total FV	Fair Value (FV)	% of Total FV	Fair Value (FV)	% of Total FV	Fair Value (FV)	% of Total FV	Fair Value (FV)	% of Total FV
Cash	\$187	2.65%	\$69	2.92%	\$125	5.42%	\$23	3.33%	\$10	3.47%	\$414	3.26%
Core Fixed Income	1,305	18.52%	449	18.86%	585	25.22%	136	19.61%	75	26.14%	2,550	20.04%
US Equity	1,368	19.40%	470	19.77%	402	17.36%	138	19.94%	52	17.98%	2,430	19.10%
Non-US Equity	1,235	17.53%	409	17.20%	337	14.53%	119	17.12%	44	15.25%	2,144	16.85%
Emerging Markets	153	2.18%	51	2.13%	42	1.81%	15	2.12%	5	1.88%	266	2.09%
Specialty Credit	1,152	16.34%	383	16.10%	355	15.30%	112	16.20%	45	15.69%	2,047	16.08%
Private Equity	598	8.48%	201	8.47%	180	7.78%	55	7.92%	17	6.05%	1,051	8.27%
Opportunistic	187	2.66%	62	2.60%	55	2.36%	17	2.45%	7	2.36%	328	2.58%
Real Return	435	6.17%	147	6.20%	104	4.51%	39	5.66%	16	5.47%	741	5.83%
Real Estate	326	4.62%	104	4.39%	100	4.30%	31	4.42%	13	4.47%	574	4.50%
Absolute Return	102	1.45%	32	1.36%	33	1.41%	9	1.23%	3	1.24%	179	1.40%
TOTAL PORTFOLIO	\$7,048		\$2,377		\$2,318		\$694		\$287		\$12,724	

Fair Values By Plan - Insurance as of June 30, 2020 (\$ in Millions) CERS CERS KERS **KERS** TOTAL SPRS KRS Non-Hazardous Hazardous Fair Value % of Assets Total FV Total FV Total FV Total FV Total FV Total FV (FV) (FV) (FV) (FV) (FV) (FV) Cash \$65 2.63% \$30 2.28% \$30 2.99% 1.98% \$5 2.51% \$140 2.54% \$10 **Core Fixed Income** 449 18.10% 37 1,003 18.28% 239 18.36% 18.78% 17.83% 18.58% 186 92 **US Equity** 479 18.65% 22.61% 19.02% 37 1,081 19.71% 19.32% 243 224 98 18.76% **Non-US Equity** 418 16.85% 16.70% 188 18.98% 17.93% 17.65% 950 17.33% 217 92 35 **Emerging Markets** 52 2.07% 27 2.08% 24 2.43% 11 2.21% 4 2.16% 118 2.15% **Specialty Credit** 408 16.44% 211 16.25% 164 16.57% 84 16.34% 30 14.97% 897 16.35% **Private Equity** 244 9.82% 136 10.51% 50 5.06% 46 8.96% 21 10.48% 497 9.07% Opportunistic 76 3.05% 41 3.17% 27 2.73% 17 3.27% 6 3.12% 167 3.04% **Real Return** 148 5.96% 77 5.94% 51 5.19% 31 6.02% 11 5.45% 318 5.80% **Real Estate** 110 4.44% 61 4.65% 35 25 4.95% 10 4.88% 241 3.49% 4.39% **Absolute Return** 33 1.41% 11 8 3 73 1.32% 18 1.17% 1.49% 1.45% 1.34% **TOTAL PORTFOLIO** \$2,482 \$1,300 \$990 \$514 \$199 \$5,485

Schedule of Commissions Paid for the Year Ended June 30, 2020 (in Millions)

Assets	Total Shares	Commissions Paid	Price per Share
U.S. Equities	50	\$0.7	\$0.01
Non-U.S. Equities	218	1.2	0.01
Total	268	\$1.9	\$0.01

ACTUARIAL REPORT



This is an overview of the Pension and Insurance Funds' actuarial status for the Fiscal Year ended June 30, 2020. For more detailed information, refer to the Actuarial Section of the <u>2020 CAFR</u>.

2020 ACTUARIAL VALUATION RESULTS

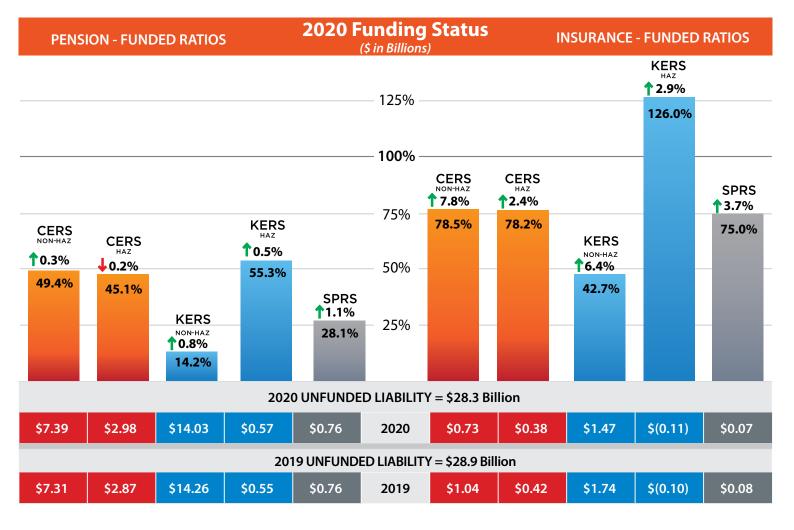
Each year the funding levels of the KRS Pension and Insurance plans are determined by the annual actuarial valuation based on assumptions set by the KRS Board for the Fiscal Year ending June 30. In summary, total pension unfunded liabilities decreased slightly by \$0.02 billion which was caused primarily due to the liability gains in KERS Non-hazardous. Total insurance unfunded liabilities decreased a total of \$0.65 billion due to lower than expected healthcare premium liabilities. Total KRS unfunded liabilities decreased by \$0.67 billion.

PENSION PLANS

The actuarial unfunded liability for the Pension plans was \$25.73 billion, a decrease over Fiscal Year 2019. The funded ratio for all plans, except KERS Non-Hazardous and SPRS, increased since the prior year. The decrease was primarily due to the \$234 million experienced in KERS Non-hazardous as a result of liability gains caused by the mortality experience in the past year. Additionally, the full actuarially determined contribution rates for both CERS funds were not paid in Fiscal Year 2020 due to the contribution phase-in provisions from HB 362 passed during the 2018 legislative session, which further decreased the funded ratio for the CERS Non-Hazardous.

INSURANCE PLANS

The Insurance Plans' unfunded actuarial liability as of June 30, 2020, was \$2.54 billion compared to \$3.19 billion in the last Fiscal Year. The increase in funded ratios is primarily due to the accrued liability being lower than expected due to the 2021 healthcare premium experience. Total KRS Insurance funded ratio was 69.80%.



ACTUARIAL REPORT

Summary of Actuarial Valuation	n Results as	of June 30), 2020 (\$ in l	Millions)		
	CERS Non-Hazardous	CERS Hazardous	KERS Non-Hazardous	KERS Hazardous	SPRS	TOTAL KRS
ACTUARIALLY DETERMINED CONTRIBUTI	ON RATES					
Pension Fund	23.88%	43.23%	75.32%	33.43%	127.99%	
Insurance Fund	4.17%	8.73%	9.71%	0.00%	18.07%	
Total Calculated Employer Contribution	28.05%	51.96%	85.03%	33.43%	146.06%	
FUNDED STATUS AS OF VALUATION DATE						
PENSION FUNDS						
Actuarial Liability	\$14,611	\$5,431	\$16,349	\$1,284	\$1,053	\$38,72
Actuarial Value of Assets	\$7,221	\$2,448	\$2,323	\$710	\$296	\$12,99
Unfunded Liability on Actuarial Value of Assets	\$7,390	\$2,983	\$14,026	\$574	\$757	\$25,73
Funding Ratio on Actuarial Value of Assets	49.42%	45.07%	14.21%	55.27%	28.12%	33.56%
Market Value of Assets	\$7,027	\$2,380	\$2,308	\$690	\$294	\$12,69
Unfunded Liability on Market Value of Assets	\$7,584	\$3,051	\$14,041	\$594	\$759	\$26,02
Funding Ratio on Market Value of Assets	48.10%	43.81%	14.12%	53.78%	27.91%	32.79%
INSURANCE FUND						
Actuarial Liability	\$3,392	\$1,741	\$2,565	\$428	\$276	\$8,40
Actuarial Value of Assets	\$2,661	\$1,362	\$1,096	\$539	\$207	\$5,86
Unfunded Liability on Actuarial Value of Assets	\$731	\$379	\$1,469	(\$111)	\$69	\$2,53
Funding Ratio on Actuarial Value of Assets	78.46%	78.23%	42.73%	126.00%	74.97%	69.80%
Market Value of Assets	\$2,582	\$1,321	\$1,061	\$522	\$201	\$5,68
Unfunded Liability on Market Value of Assets	\$810	\$420	\$1,504	(\$94)	\$75	\$2,71
Funding Ratio on Market Value of Assets	76.11%	75.88%	41.35%	121.91%	72.91%	67.69%

EXPERIENCE STUDY AND ECONOMIC ASSUMPTIONS

Regular <u>experience studies</u> help ensure the underlying economic and demographic assumptions (such as expected payroll growth, investment returns, and retiree life expectancy) accurately reflect plan experience. Accuracy is important because these assumptions are used to calculate the annual employer contribution rate that will allow KRS to pay for current and future retiree benefits.

Experience studies are performed by KRS' independent actuary at least every five years to compare each plan's actual experience to what had been expected (the assumptions). The most recent Experience Study was completed in April 2019. Based on that study, retirement rates, termination rates, disability incidence rates, salary increase assumptions and mortality assumptions were adjusted or reaffirmed, resulting in a net increase in liabilities of \$1,801 million and \$489 million for the pension and insurance funds, respectively. Economic assumptions set by the 2019 Study remained the same in Fiscal Year 2020.

Economic Assumptions as of June 30, 2020							
	CERS Non-Hazardous	CERS Hazardous	KERS Non-Hazardous	KERS Hazardous	SPRS		
Assumed Investment Return - Pension	6.25%	6.25%	5.25%	6.25%	5.25%		
Assumed Investment Return - Insurance	6.25%	6.25%	6.25%	6.25%	6.25%		
Inflation Factor	2.30%	2.30%	2.30%	2.30%	2.30%		
Payroll Growth	2.00%	2.00%	0.00%	0.00%	0.00%		



Established by the Kentucky General Assembly on July 1, 1958

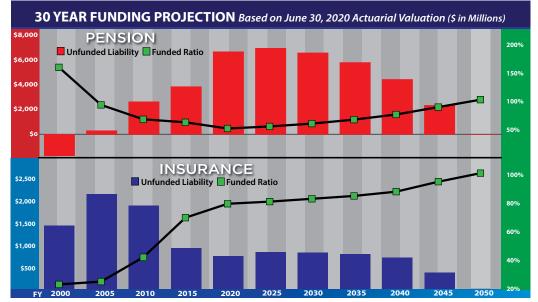
KEY INFORMATION

- CERS Non-Hazardous is the largest plan in KRS with the highest membership and combined assets.
- Combined Pension and Insurance Fiduciary Net Plan Position was \$9.6 billion as of June 30, 2020, compared to \$9.7 billion in 2019.
- As of the June 30, 2020 Valuation, retirees and beneficiaries account for 58% of the unfunded liability.
- Active employees represent 36% of the plan's membership with an average annual salary of \$31,574. Active member payroll increased by 1.7% in Fiscal Year 2020 compared to 2019.
- There are more active employees paying into the plan than retirees drawing benefits (active to retired ratio of 1.37).
- Retirees represent 26% of the plan's membership with an average annual benefit of \$11,915.
- Using Fiscal Year 2020 valuation assumptions and member data, the Pension and Insurance plans have funded ratios of 49% and 79%, respectively.
- Based on current assumptions, the Pension and Insurance plans will be 100% funded by Fiscal Year 2049.

Emp	loyer Contrib	ution Rates					
	Recommended	Actual					
2011	1 6.93 %	1 6.93 %					
2012	18.96%	1 8.96 %					
2013	19.55%	19.55%					
2014	1 8.89 %	1 8.89 %					
2015	17.67%	17 .67 %					
2016	17.06%	1 7.06 %					
2017	18.68 %	18.68 %					
2018	19.18 %	19.18 %					
2019	28.05%	21.48%*					
2020	27.28%	24.06%*					
2021	26.95 %	24.06%*					
	* Increases are capped by law at 12% annually until full contribution rate is achieved.						

* Increases are capped by law at 12% annually until full contribution rate is achieved.				
Course of Donation Fund				
Source of Pension Fund Unfunded Liability				
Actuarial Liability \$14.6 B				
Unfunded Liability \$7.4 B				
Retirees & Beneficiaries 58%				





Based on June 30, 2020 Valuation					
Active	Inactive	Retired	Total		
83,458	90,673	60,877	235,008		
AC	TIVE EMPLC	OYEES VS RE	TIRED		
	Active		Retired		
95,000					
80,000			_		
65,000					
50,000					

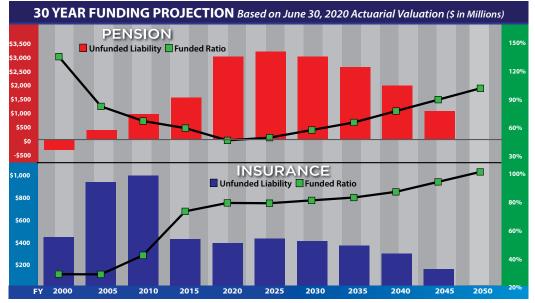
Totals by Tier				
TIER 1				
Active	31,516			
Inactive	50,669			
Retired	60,195			
Total	142,380			
TIER 2				
Active	13,946			
Inactive	17,488			
Retired	669			
Total 32,103				
TIER 3				
Active	37,996			
Inactive	22,516			
Retired	13			
Total	60,525			



KEY INFORMATION

- Combined Pension and Insurance Fiduciary Net Plan Position was \$3.7 billion as of June 30, 2020 compared to \$3.8 billion in 2019.
- As of the June 30, 2020 Valuation, retirees and beneficiaries account for 65% of the unfunded liability.
- Active employees represent 46% of the plan's membership with an average annual salary of \$60,363. Active member payroll increased 1.6% in Fiscal Year 2020 compared to 2019.
- There are more active employees paying into the plan than retirees drawing benefits (active to retired ratio of 1.11).
- Retirees represent 41% of the plan's membership with an average annual benefit of \$28,437.
- Using Fiscal Year 2020 valuation assumptions and member data, the Pension and Insurance plans have funded ratios of 45% and 78%, respectively.
- Based on current assumptions, the Pension and Insurance plans will be 100% funded by Fiscal Year 2049.

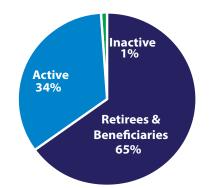
Employer Contribution Rates			
	Recommended	Actual	
2011	33.25%	33.25%	
2012	35.76%	35.76%	
2013	37.60%	37.60%	
2014	35.70%	35.70%	
2015	34.31%	34.31%	
2016	32.95%	32.95%	
2017	31.06%	31.06%	
2018	31.55%	31.55%	
2019	47.86%	35.34%*	
2020	46.50%	39.58%*	
2021	44.33%	39.58 %*	
* Increases are capped by law at 12% annually until full contribution rate is achieved.			



Source of Pension Fund Unfunded Liability				
Actuarial Liability	\$5.4 B			
Unfunded Liability	\$3.0 B			

Retirees & Beneficiaries

65%



Membership Based on June 30, 2020 Valuation										
	Active 9,350		Inactive Retired 2,924 8,431		Total 20,705					
	A	ϲτι៶	/E El	MPL	ΟΥΕ	ES V	S RE	TIRE	D	
10,000		Ad	tive					Ret	ired	
	—	-0-	-0-	-0-	-0-	-0-	-0-	-0-		-
8,000										
6,000	-	-								
4,000	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020

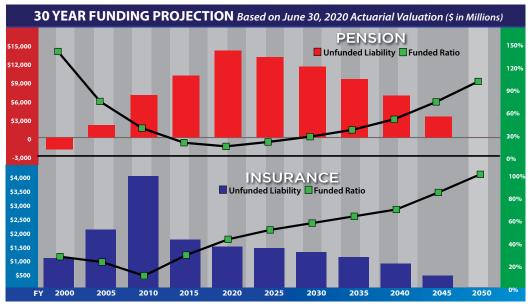
Totals by Tier				
TIER 1				
Active	3,969			
Inactive	1,448			
Retired	8,412			
Total	13,829			
TIER 2				
Active	Active 1,908			
Inactive	571			
Retired	16			
Total 2,495				
TIER 3				
Active	3,473			
Inactive	905			
Retired	3			
Total 4,381				



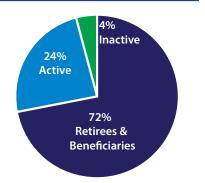
KEY INFORMATION

- Combined Pension and Insurance Fiduciary Net Plan Position was \$3.4 billion as of June 30, 2020 compared to \$3.2 billion in 2019.
- As of the June 30, 2020 Valuation, retirees and beneficiaries account for 72% of the unfunded liability.
- Active employees represent 26% of the plan's membership with an average annual salary of \$43,774. Active member covered payroll continued its trend of decline, decreasing by 3.5% in Fiscal Year 2020.
- There are more retirees drawing benefits than active employees paying into the plan (active to retired ratio of 0.72).
- Retirees represent 35% of the plan's membership with an average annual benefit of \$21,440.
- Using Fiscal Year 2020 valuation assumptions and member data, the Pension and Insurance plans have funded ratios of 14% and 42%, respectively.
- Based on current assumptions, the Pension and Insurance plans will be 100% funded by Fiscal Year 2049.

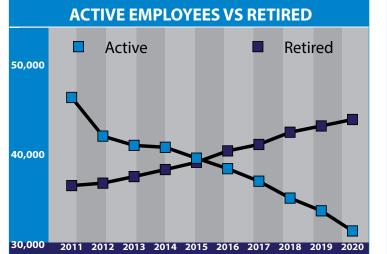
Employer Contribution Rates			
	Recommended	Actual	
2011	38.58%	16.98%	
2012	40.71%	19.82%	
2013	44.55%	23.61%	
2014	45.28%	26.79%	
2015	38.77%	38.77%	
2016	38.77%	38.77%	
2017	48.59%	48.59%	
2018	49.47%	49.47%	
2019	83.43%	83.43%*	
2020	83.43%	83.43%*	
2021	85.03%	84.43*	
* Quasi-governmental agencies maintained the Fiscal Year 2018 rate.			



Source of Pension Fund Unfunded Liability				
Actuarial Liability \$16.3 B				
Unfunded Liability \$14.0 B				
Retirees & Beneficiaries 72%				



Membership Based on June 30, 2020 Valuation						
Active Inactive Retired Total						
31,190 48,583 43,592 123,365						



Totals by Tier				
TIER 1				
Active	15,274			
Inactive	31,761			
Retired	43,386			
Total	90,421			
TIER 2				
Active	5,554			
Inactive	8,733			
Retired	196			
Total	14,483			
TIER 3				
Active	10,362			
Inactive	8,089			
Retired	10			
Total	18,461			



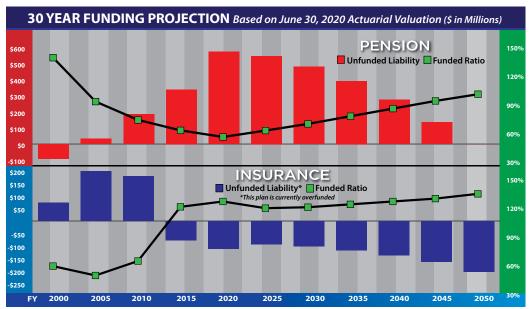
KENTUCKY EMPLOYEES RETIREMENT SYSTEM

Established by the Kentucky General Assembly on July 1, 1956

KEY INFORMATION

- Combined Pension and Insurance Fiduciary Net Plan Position was \$1.2 billion as of June 30, 2020, unchanged from 2019.
- As of the June 30, 2020 Valuation, retirees and beneficiaries account for 66% of the unfunded liability.
- Active employees represent 31% of the plan's membership with an average annual salary of \$41,726. Active member payroll increased by 13.5% in Fiscal Year 2020 compared to 2019.
- There are more active employees paying into the plan than retirees drawing benefits (active to retired ratio of 1.27).
- Retirees represent 25% of the plan's membership with an average annual benefit of \$15,737.
- Using Fiscal Year 2020 valuation assumptions and member data, the Pension and Insurance plans have funded ratios of 55% and 126%, respectively. Unlike the other plans, the goal is to reduce the funded status of the Insurance plan over time with the employer contribution rate projected to be zero percent from 2020 forward.
- Based on current assumptions, the Pension plan will be 100% funded by Fiscal Year 2049.

Employer Contribution Rates				
	Recommended	Actual		
2011	34.37%	26.12%		
2012	33.84%	28.98 %		
2013	35.89%	29.79 %		
2014	28.84%	32.21%		
2015	26.34%	26.34%		
2016	26.34%	26.34%		
2017	23.82%	23.82%		
2018	23.70%	23.70%		
2019	36.85%	36.85%		
2020	36.85%	36.85%		
2021	36.00%	36.00%		

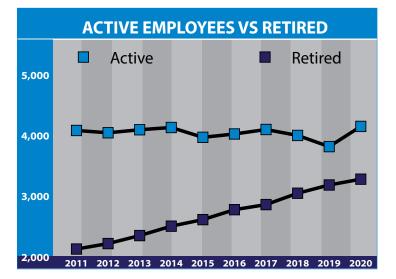


Valuation

Total

13,192

	Membership			
Fund lity	Based on June 30, 2020 Valuat			
	Active	Inactive	Retired	
\$1.3 B	4,112	5,838	3,242	



Totals by Tier		
TIER 1		
Active	1,262	
Inactive	1,823	
Retired	3,205	
Total	6,290	
TIER 2		
Active	727	
Inactive	1,280	
Retired	36	
Total	2,043	
TIER 3		
Active	2,123	
Inactive	2,735	
Retired	1	
Total	4,859	

Source of Pension Unfunded Liabi

Actuarial Liability	\$1.3 B
Unfunded Liability	\$574 M
Retirees & Beneficiaries	66 %





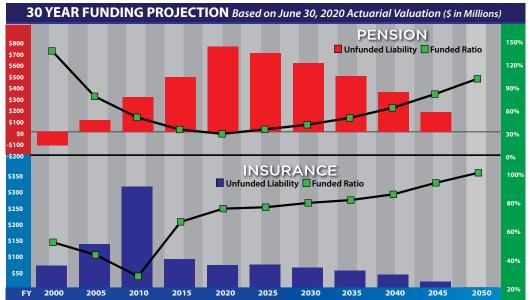
STATE POLICE RETIREMENT SYSTEM

Established by the Kentucky General Assembly on July 1, 1958

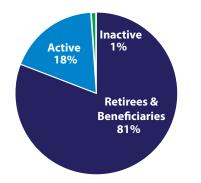
KEY INFORMATION

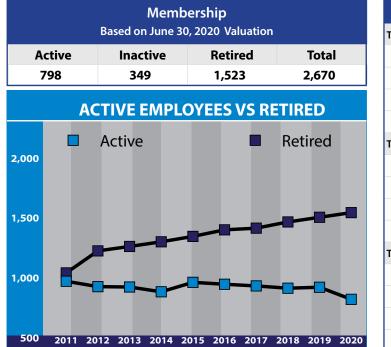
- Combined Pension and Insurance Fiduciary Net Plan Position was \$495 million as of June 30, 2020, compared to \$487 million in 2019.
- SPRS is a relatively small plan and has the highest employer contribution rate of all the KRS plans.
- As of the June 30, 2020 Valuation, retirees and beneficiaries account for 81% of the unfunded liability.
- Active employees represent 30% of the plan's membership with an average annual salary of \$57,826. Active member payroll decreased by 3.3% in Fiscal Year 2020 compared to 2019.
- There are more retirees drawing benefits than active employees paying into the plan (active to retired ratio of 0.52).
- Retirees represent 57% of the plan's membership with an average annual benefit of \$39,766.
- Using Fiscal Year 2020 valuation assumptions and member data, the Pension and Insurance plans have funded ratios of 28% and 75%, respectively.
- Based on current assumptions, the Pension and Insurance plans will be 100% funded by Fiscal Year 2049.

Employer Contribution Rates				
	Recommended	Actual		
2011	85.63%	45.54%		
2012	94.63 %	52.13%		
2013	1 03.4 1%	63.67%		
2014	96.52 %	71.15%		
2015	75.76%	75.76%		
2016	75.76%	75.76%		
2017	89.2 1%	89.21%		
2018	91.24%	91.24%		
2019	146.28%	1 46.28 %		
2020	146.28%	146.28%		
2021	143.48%	143.48%		



Source of Pension Fund Unfunded Liability		
Actuarial Liability	\$1.1 B	
Unfunded Liability	\$757 M	
Retirees & Beneficiaries	81%	





Totals by Tier TIER 1 Active 403 Inactive 179 Retired 1,522 Total 2,104 TIER 2 Active 195 Inactive 63 Retired 1 Total 259 TIER 3 Active 200 Inactive 107 Retired 0 Total 307

ABOUT KRS



KRS is responsible for the investment of funds and administration of pension and health insurance benefits for over 394,000 active, inactive and retired state and local government employees, state police officers, and non-teaching staff of local school boards and regional universities.

KENTUCKY PUBLIC PENSIONS AUTHORITY

During the 2020 Legislative Session, <u>HB 484</u> was passed establishing a new governance structure for KRS. Effective April 1, 2021, KRS as an Agency of the Commonwealth will be known as the Kentucky Public Pensions Authority (KPPA). Current KRS employees will become KPPA employees and continue to provide administrative support, investment management and conduct daily activities for the new CERS, KRS and KPPA boards.

PLAN FUNDING

Our actuaries, <u>GRS Consulting</u>, project that all of our pension and insurance plans will become fully funded in Fiscal Year 2049, provided KRS receives the full ADC each year and all actuarial assumptions are met. Those same projections indicate that all benefits will be secure going forward, supported by the positive fiscal impact of the <u>Tier 3 Hybrid Cash Balance Plan</u>.

SELF SERVICE

KRS encourages all members to access their account online at MYRETIREMENT.KY.GOV

Active and Inactive Members can:

- Apply for Retirement
- Upload Documents
- Vote in Board Elections
- Update Contact Information
- Calculate Retirement Estimates
- Estimate Costs to Purchase Service
- View Annual Statements

- Retired Members can:
 - Change Tax Withholdings
 - Upload Documents
 - Vote in Board Elections
 - Update Contact Information
 - Maintain Direct Deposit
 - View 1099-Rs
 - Submit Insurance Application during Open Enrollment

ACTIVE MEMBERSHIP **SERVICE PURCHASE & DISABILITY** REFUNDS PROCESSED BENEFIT ESTIMATES **APPLICATIONS** 11,367 18,475 489 **RETIRED MEMBERSHIP** NEW ACCOUNT HEALTHCARE RETIREMENTS COVERED LIVES AUDITS 6,374 97,949 17,438 **MEMBERSHIP SUPPORT** INBOUND OFFICE WEBSITE PAGEVIEWS VISITS CALLS 5,135,012 6,335 275,163

Our Six Mandates

- 1. Strive for appropriate funding for all plans.
- 2. Provide members with efficient access to information and helpful counseling to meet their individual needs.
- 3. 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.
- 6. Insist on a culture of continuous enhancement to everything we do.





Kentucky Retirement Systems

1260 Louisville Road Frankfort, KY 40601 **Hours of Operation** 8:00 AM - 4:30 PM (EST) Monday-Friday (502) 696-8800 or (800) 928-4646













