SUMMARY ANNUAL FINANCIAL REPORT

Kentucky Retirement Systems
A component of the Commonwealth of Kentucky

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

2017

For Fiscal Year Ending June 30, 2017

2017 Board of Trustees

as of December 1, 2017

APPOINTED MEMBERS:

John R. Farris
Chair
Governor Appointee
Term ends 6/17/19

David L. Harris
Vice Chair
Governor Appointee
Term ends 6/17/18

W. Joe Brothers
Governor Appointee
Term ends 7/1/21

John E. Chilton
Governor Appointee
Term ends 6/17/18

William S. Cook
Governor Appointee
Term ends 6/17/19

Kelly Downard
Governor Appointee
Term ends 6/17/19

Thomas K. Elliott
Governor Appointee
Term ends 3/31/19
Non-voting

J.T. Fulkerson
Governor Appointee
Term ends 7/1/21

David M. Gallagher
Governor Appointee
Term ends 7/1/21

Matthew Monteiro
Governor Appointee
Term ends 6/17/19

Neil P. Ramsey
Governor Appointee
Term ends 6/17/18

Thomas B. Stephens
Personnel Secretary
Ex-Officio

ELECTED MEMBERS:

Vince Lang
Elected by KERS
Term ends 3/31/18

Keith Peercy
Elected by SPRS
Term ends 3/31/19

Betty Pendergrass
Elected by CERS
Term ends 3/31/21

Mary Helen Peter
Elected by KERS
Term ends 3/31/18

Jerry W. Powell
Elected by CERS
Term ends 3/31/21

David Rich
Elected by CERS
Term ends 3/31/21

Annual Highlights

I am pleased to present the Summary Annual Financial Report (SAFR) of Kentucky Retirement Systems (KRS) for the fiscal year ended June 30, 2017. This report covers the ten (10) plans that form KRS: the Kentucky Employees Retirement System (KERS Hazardous and Non-Hazardous), the County Employees Retirement System (CERS Hazardous and Non-Hazardous), and the State Police Retirement System (SPRS) for both pensions and retiree healthcare. These ten plans include more than 372,000 members representing firefighters, police officers, bus drivers, janitorial staff at local schools, and many who work directly for Kentucky state government.

We present this information in Summary form to assist the Board of Trustees, members of the Systems, state executive and legislative branch officials, and the general public in understanding KRS' financial and actuarial status.

Fiscal 2017 was an eventful and improved year for KRS. Among other things, we:

» Changed our economic actuarial assumptions to be more realistic of the future outlook;

» Benefited from improved funding;

» Modified our investment policies, asset allocations and manager/consultant lineup, lowered our fees and improved our returns; and,

» Became more outwardly focused on all of our constituents (members, the media, etc.).

Actuarial Assumption Changes

At the Board's May and July, 2017 meetings, major changes to the economic actuarial assumptions (inflation, interest rate, and payroll growth) used to calculate the Systems' liabilities and contribution rates were approved. The Board believed the previous assumptions no longer represented a reasonable outlook, were too aggressive, and resulted in understating the existing liabilities and the contributions required to properly fund the Systems.

As a result, the Systems' estimated unfunded liabilities increased by approximately $5 Billion to $27 Billion, reflecting more accurately the true unfunded position. At the same time, the contribution rates will rise significantly in Fiscal Years 2019 and 2020. Funding from the State and CERS employers will rise in the area of 50% +/- over the next few years. More information regarding the actuarial assumption changes can be found on pages 58, 135, and 137-141 of the Comprehensive Annual Financial Report (CAFR) for 2017 available on our website: https://kyret.ky.gov. A summary of the Actuarial Unfunded Liabilities can be found on pages 146-149 of the CAFR.

Improved Funding

Beginning with Senate Bill 2 (SB 2) in 2013 (effective in Fiscal Year 2015), the Legislature must now approve funding the KERS and SPRS plans at least at the full actuarially required contribution (ARC). For Fiscal Years 2016 and 2017 the Legislature approved an additional $186 million contribution over and above the ARC.

Investment Policy, Asset Allocation and Manager/Consultant Changes

In June, 2016, the KRS Investment Committee began a process that resulted in more conservative investment policies and asset allocations for each plan, better aligning each plan's assets to its liquidity needs and risk tolerance, and reducing the number of managers and fees, thereby saving millions of dollars.

The combined KRS investment return for 2017 was 13.47% vs. minus .52% the prior year and 12.4% for the median public pension fund.

Detailed information regarding the KRS investments, the management of those investments, and our investment performance can be found in this report and in the 2017 CAFR.

Outward Focus

One of KRS management's Six Mandates is to communicate effectively with all constituents. In Fiscal Year 2017, we began having regular contact with and conducting educational sessions for legislators, members of the administration, LRC staff, the media, employers, and retiree groups. Our objective is to help people better understand the nature of defined benefit plans and the particular issues for KRS.

In addition, we "re-bid" nearly every major outside service provider role (e.g. actuarial consultant) and made seven new appointments. Our objective was to improve the quality of service and reduce the level of fees.

We also significantly upgraded our website in July, 2017. An effective website is critically important in order to be able to provide, in a very cost-effective way, the wide variety of information we need to make available. The website also allows members to use our Self Service function for their convenience and reduce the demand on our benefit staff's time.

Looking Forward

For the first time in 15 years we can say things are improving in almost every aspect of KRS. Funding has improved dramatically. Our focus on investments has increased. Service to members has improved. We have expanded communications with the Executive and the Legislative Branches. Our Board is committed and has the expertise required to oversee this complex organization and its demands.

While our funded status problem is significant, fiscal year 2017 showed net improvements in many financial areas. We remain dedicated to manage our way through these challenges and return Kentucky Retirement Systems to a sound financial footing.

David Eager
Interim Executive Director

FINDING OUR COMPREHENSIVE ANNUAL REPORT

To view the Comprehensive Annual Financial Report (CAFR) in its entirety, please visit us online.

1. Go to **KYRET.KY.GOV**
2. Select **PUBLICATIONS**
3. Select **COMPREHENSIVE ANNUAL FINANCIAL REPORTS**
4. Click on **2017 CAFR**

2018 SCHEDULES

BOARD MEETINGS

Quarterly Meetings
February 15
May 17
September 13
November 8
December 6

Annual Meeting
April 19

COMMITTEE MEETINGS

AUDIT
February 1
May 3
August 23
November 1

INVESTMENT
February 6
May 1
August 28
November 7

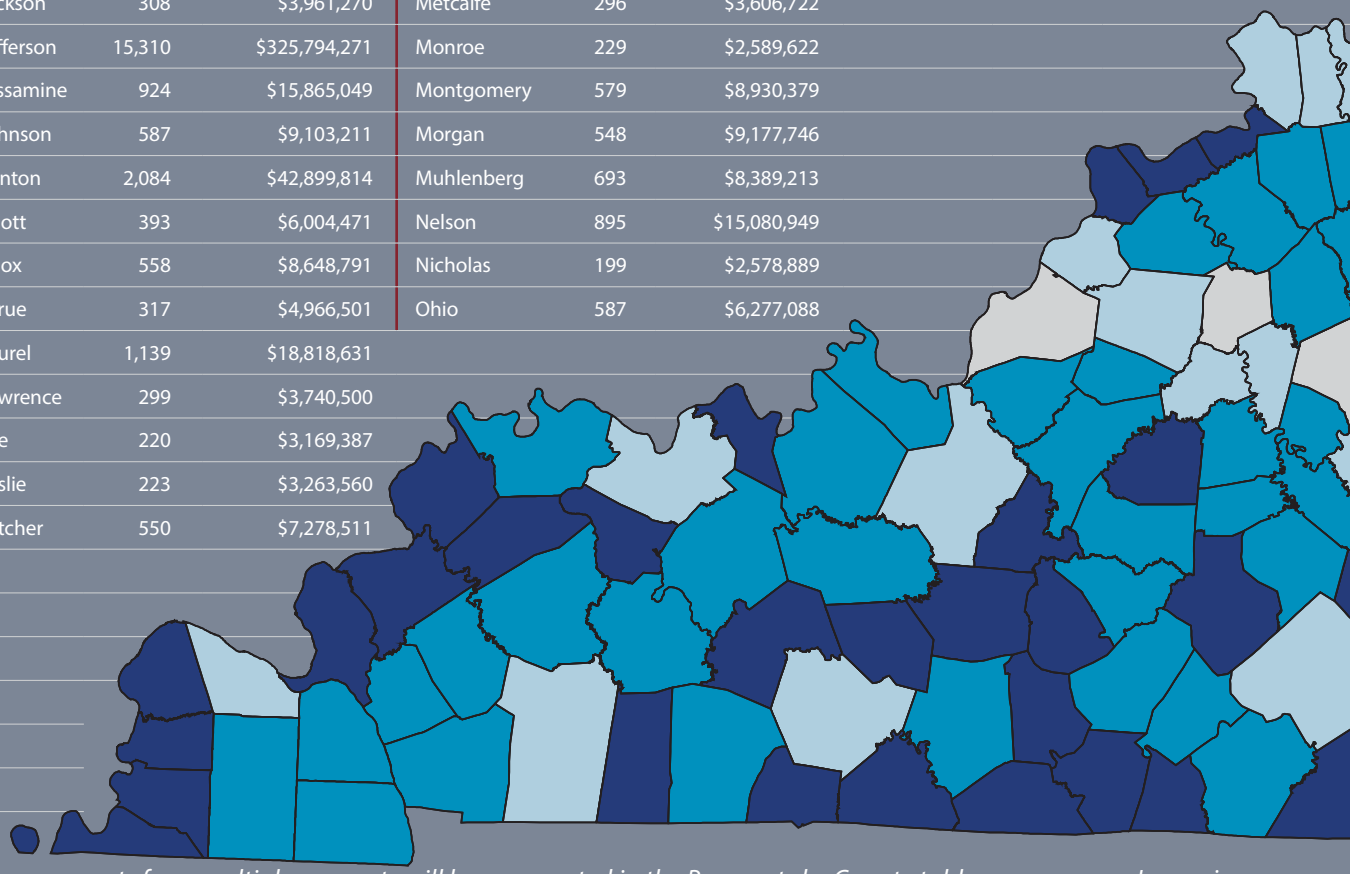
RETIREE HEALTH PLAN
February 13
May 8
September 6
November 13

ADMINISTRATIVE & DISABILITY APPEALS
Check website for dates and times.

**Dates subject to change. Please visit our website for updates. Annual Meeting, Quarterly Meetings, and Audit Committee begin at 10 am Eastern; all other Committee Meetings begin at 9 am Eastern unless otherwise noted.*

2017 Total Fiscal Year KRS Pension Benefits Paid by County

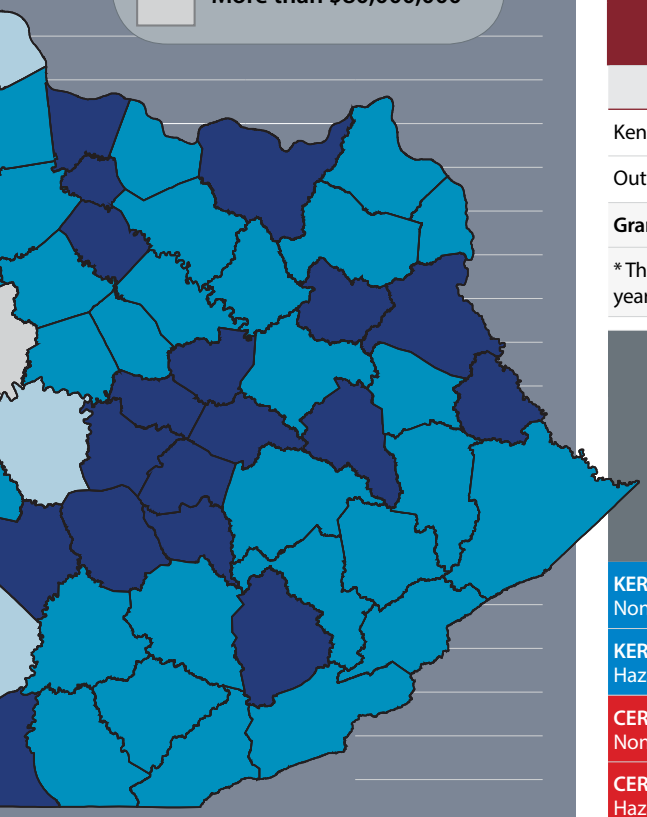
County	Payees	Total	County	Payees	Total	County	Payees	Total	County	Payees	Total
Adair	440	$7,318,805	Fulton	158	$1,807,458	Lewis	290	$3,419,617	Oldham	1,204	$24,592,221
Allen	370	$4,772,603	Gallatin	111	$1,892,725	Lincoln	618	$7,651,093	Owen	503	$11,500,523
Anderson	1,273	$31,002,833	Garrard	411	$6,068,886	Livingston	241	$3,879,340	Owsley	198	$2,935,139
Ballard	208	$3,007,007	Grant	541	$9,930,434	Logan	560	$7,728,566	Pendleton	337	$5,350,326
Barren	965	$15,068,110	Graves	804	$12,181,400	Lyon	334	$6,218,088	Perry	705	$10,096,362
Bath	350	$5,181,758	Grayson	652	$9,794,276	Madison	2,111	$34,920,071	Pike	1,130	$16,803,539
Bell	603	$9,392,743	Green	263	$3,694,663	Magoffin	320	$4,452,060	Powell	313	$4,110,624
Boone	1,581	$31,227,965	Greenup	595	$7,883,006	Marion	511	$6,994,626	Pulaski	2,052	$34,260,248
Bourbon	506	$8,218,097	Hancock	216	$2,702,617	Marshall	787	$11,446,220	Robertson	65	$1,043,952
Boyd	966	$15,680,984	Hardin	1,952	$32,157,982	Martin	252	$2,731,521	Rockcastle	361	$4,801,685
Boyle	818	$14,140,920	Harlan	586	$9,033,014	Mason	376	$6,052,299	Rowan	822	$13,714,163
Bracken	199	$2,462,237	Harrison	421	$6,249,250	Mccracken	1,453	$25,884,599	Russell	517	$7,482,897
Breathitt	448	$6,821,135	Hart	288	$4,040,331	Mccreary	377	$3,849,805	Scott	1,124	$23,205,394
Breckinridge	402	$5,738,076	Henderson	979	$16,174,545	Mclean	279	$3,951,748	Shelby	1,505	$37,159,553
Bullitt	1,351	$23,752,396	Henry	860	$18,962,708	Meade	396	$5,554,849	Simpson	261	$2,889,000
Butler	299	$4,099,697	Hickman	91	$1,714,045	Menifee	202	$2,763,961	Spencer	447	$9,228,660
Caldwell	488	$7,202,606	Hopkins	1,154	$17,325,608	Mercer	716	$12,653,136	Taylor	564	$8,167,472
Calloway	999	$13,925,387	Jackson	308	$3,961,270	Metcalfe	296	$3,606,722			
Campbell	1,401	$25,795,031	Jefferson	15,310	$325,794,271	Monroe	229	$2,589,622			
Carlisle	117	$1,532,020	Jessamine	924	$15,865,049	Montgomery	579	$8,930,379			
Carroll	299	$4,569,359	Johnson	587	$9,103,211	Morgan	548	$9,177,746			
Carter	726	$9,368,724	Kenton	2,084	$42,899,814	Muhlenberg	693	$8,389,213			
Casey	328	$4,251,223	Knott	393	$6,004,471	Nelson	895	$15,080,949			
Christian	1,457	$24,938,262	Knox	558	$8,648,791	Nicholas	199	$2,578,889			
Clark	747	$12,461,679	Larue	317	$4,966,501	Ohio	587	$6,277,088			
Clay	543	$7,533,406	Laurel	1,139	$18,818,631						
Clinton	228	$2,904,964	Lawrence	299	$3,740,500						
Crittenden	199	$2,621,265	Lee	220	$3,169,387						
Cumberland	172	$2,458,014	Leslie	223	$3,263,560						
Daviess	2,401	$41,681,263	Letcher	550	$7,278,511						
Edmonson	206	$2,966,287									
Elliott	161	$2,210,913									
Estill	354	$4,998,273									
Fayette	5,057	$109,435,669									
Fleming	426	$7,185,153									
Floyd	818	$12,510,377									
Franklin	6,093	$189,377,621									

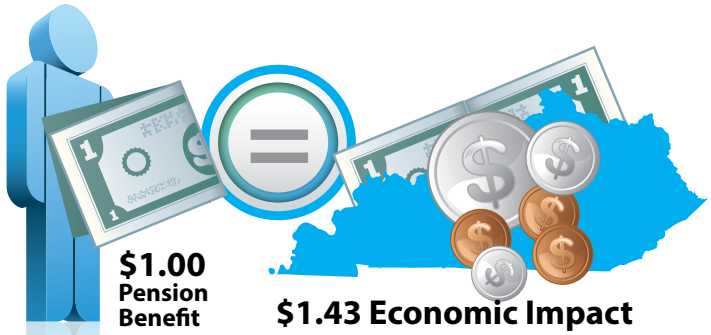


NOTE: Beginning in 2017, members receiving payments from multiple accounts will be represented in the Payments by County table as one payee. In previous years each account was represented separately.

County	Payees	Total
Todd	240	$3,284,897
Trigg	490	$7,725,122
Trimble	243	$3,706,544
Union	328	$3,673,938
Warren	2,556	$44,724,536
Washington	294	$4,704,962
Wayne	485	$6,886,929
Webster	322	$4,160,205
Whitley	950	$13,596,344
Wolfe	303	$4,925,727
Woodford	935	$23,094,626

- Less than $5,000,000
- $5,000,000 - $19,999,999
- $20,000,000 - $79,999,999
- More than $80,000,000





ECONOMIC IMPACT FOR KENTUCKY

Pension Benefits paid to retirees and beneficiaries of Kentucky Retirement Systems have a wide ranging impact on the state's economic health. In fiscal year 2017, KRS paid ***over $1.9 billion*** to its recipients. The majority, 93.85%, of these recipients live in Kentucky. Not only do these dollars impact those receiving a benefit, but according to the National Institute of Retirement Security (NIRS), ***each $1.00 paid out in pension benefits supported $1.43 in total economic activity in Kentucky.*** Each county in the Commonwealth receives at least $1 million annually from KRS, providing a stabilizing element for all local economies.

Total Fiscal Year Retirement Benefit Payments

	Payees	%	Payments
Kentucky Total	100,096	93.85%	$1,837,547,565
Out of State	7,319	6.15%	$120,170,968
Grand Total	**107,415**	**100.00%**	**$1,957,718,533**

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

MEMBERSHIP - Active and Retired

	ACTIVE MEMBERSHIP		RETIRED MEMBERSHIP	
	Average Age	Average Salary	Average Age	Average Annual Benefit Payment
KERS Non-Hazardous	45.4	$41,133	68.8	$21,699
KERS Hazardous	40.3	$40,133	64.5	$15,306
CERS Non-Hazardous	47.9	$29,835	70.2	$11,583
CERS Hazardous	39.2	$57,044	61.8	$27,326
SPRS	37.5	$53,819	62.7	$39,774

2017 FAST FACTS

Retiree Healthcare Planholders (covered lives):
89,880

Member Office Visits:
11,375

New Retirements:
7,184

Benefit Estimates:
14,253

Service Purchase Estimates:
8,124

Disability Applications:
718

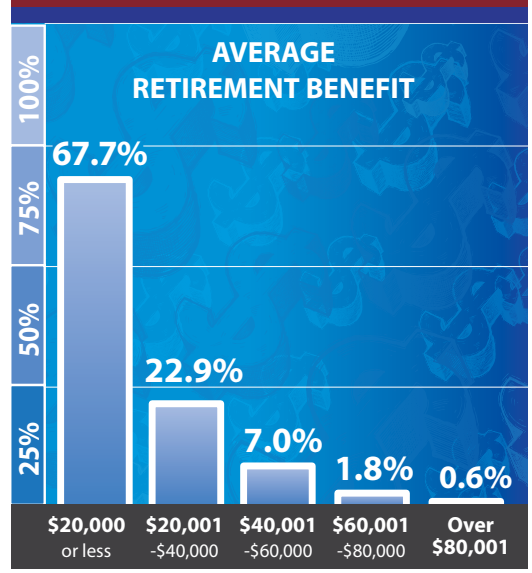
Call Center Inbound Calls:
285,916

Refunds Processed:
4,961

Account Audits:
23,589

Facebook Likes:
13,819

Website Pageviews:
1,333,209



BENEFIT TIERS

KRS currently administers three different pension benefit tiers within our defined benefit plans. The Hybrid Cash Balance plan was enacted by the Kentucky General Assembly effective January 1, 2014.

Members participating before September 1, 2008

Members participating on, or after, September 1, 2008 through December 31, 2013

Members participating on, or after, January 1, 2014

Membership Statistics - by Tiers

		Active	Inactive	Retired	Total
KERS Non-Hazardous					
	Tier 1	21,229	33,138	40,762	95,129
	Tier 2	7,555	8,402	51	16,008
	Tier 3	7,941	3,308	0	11,249
	Total	36,725	44,848	40,813	122,386
KERS Hazardous					
	Tier 1	1,730	1,896	2,817	6,443
	Tier 2	946	1,303	6	2,255
	Tier 3	1,385	1,164	0	2,549
	Total	4,061	4,363	2,823	11,247
CERS Non-Hazardous					
	Tier 1	41,611	53,266	53,907	148,784
	Tier 2	18,271	16,757	111	35,139
	Tier 3	24,519	8,917	0	33,436
	Total	84,401	78,940	54,018	217,359
CERS Hazardous					
	Tier 1	5,394	1,579	7,179	14,152
	Tier 2	2,018	546	7	2,571
	Tier 3	1,909	317	0	2,226
	Total	9,321	2,442	7,186	18,949
SPRS					
	Tier 1	578	179	1,392	2,149
	Tier 2	207	64	1	272
	Tier 3	125	35	0	160
	Total	910	278	1,393	2,581
KRS TOTALS					
	Tier 1	70,542	90,058	106,058	266,658
	Tier 2	28,997	27,072	176	56,245
	Tier 3	35,879	13,741	0	49,620
	Total	**135,418**	**130,871**	**106,234**	**372,523**

SYSTEMS

KERS (Kentucky Employees Retirement System)

This system consists of two plans - ***Non-Hazardous and Hazardous***. Each plan is a cost-sharing, multiple-employer defined benefit pension plan that covers all regular full-time members employed by any state department, board, or agency directed by Executive Order of the Governor to participate in KERS.

CERS (County Employees Retirement System)

This system consists of two plans - ***Non-Hazardous and Hazardous***. Each plan is a cost-sharing, multiple-employer defined benefit pension plan that covers all regular full-time members employed by each participating county, city, and school board, and any additional eligible local agencies participating in CERS.

SPRS (State Police Retirement System)

This system is a single-employer defined benefit pension plan that covers all full-time state troopers employed by the Kentucky State Police.

HOW WE DIFFER FROM OTHER PUBLIC RETIREMENT SYSTEMS

Many other public retirement systems have only one pension plan and do not provide insurance plans. KRS administers both pension and insurance plans for our members. We manage three Systems: two are split into Hazardous and Non-Hazardous plans.

We maintain three different pension benefit tiers within our defined benefit plans. Each tier resulted from legislation enacted by the Kentucky General Assembly.

Medical insurance coverage is provided based on the member's initial participation date and length of service. Members receive either a percentage of costs or dollar amount for insurance coverage.

Medical Insurance Coverage - Non-Medicare and Medicare plans

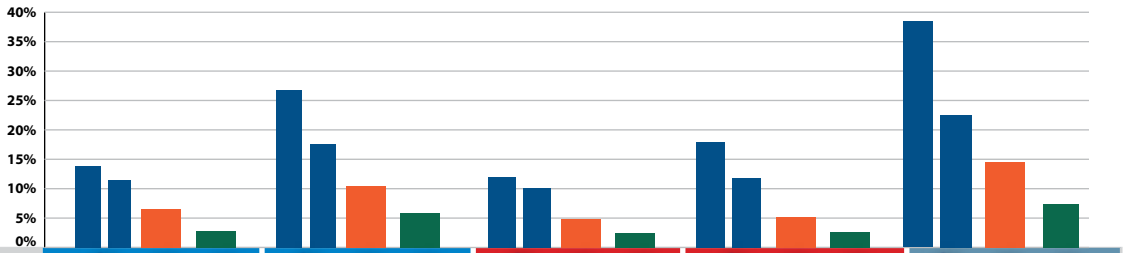
Participation prior to 7/01/2003

House Bill 290 - Participation 7/01/2003 - 8/31/2008

House Bill 1 - Participation on or after 9/01/2008

Employer Normal Cost Rates by Tier - Fiscal Year 2019

(Based on June 30, 2017 Actuarial Valuations by Plan)



NORMAL COST RATES[1]	KERS Non-Hazardous		KERS Hazardous		CERS Non-Hazardous		CERS Hazardous		SPRS	
	Pension	Insurance	Pension	Insurance	Pension	Insurance	Pension	Insurance	Pension	Insurance
Tier 1 Cost Before 7/03	9.17%	4.62%	12.88%	13.86%	6.62%	5.37%	8.32%	9.63%	18.30%	20.13%
Tier 1 Cost After 7/03	9.28%	2.28%	12.84%	4.69%	7.09%	3.02%	8.82%	2.95%	18.37%	4.20%
Tier 2 Cost	5.97%	0.53%	8.17%	2.29%	3.84%	1.04%	3.91%	1.20%	12.44%	2.13%
Tier 3 Cost	2.26%	0.52%	3.57%	2.31%	1.27%	1.17%	1.26%	1.39%	5.44%	1.89%

[1] Normal Cost Rate is the cost of an employee's benefit to the employer net of the employee contribution.

Recommended Employer Contribution Rates - Fiscal Year 2019

(Based on June 30, 2017 Actuarial Valuations by Plan)

CONTRIBUTION RATE ALLOCATION	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
A Average Normal Cost Rates[2] PENSION	7.45%	9.10%	5.05%	6.52%	15.84%
B Average Normal Cost Rates[2] INSURANCE	2.71%	5.88%	3.16%	5.03%	11.18%
C Unfunded Liability Cost PENSION	62.86%	24.72%	15.99%	28.91%	102.84%
D Unfunded Liability Cost INSURANCE	9.63%	-3.48%	3.02%	7.07%	15.91%
Administrative Expense PENSION & INSURANCE	0.78%	0.63%	0.83%	0.33%	0.51%
Combined Rate	**83.43%**	**36.85%**	**28.05%**	**47.86%**	**146.28%**

[2] Average Normal Cost Rate is calculated by averaging the actuarially recommended employer contribution rates for all Tiers which is the normal cost of employee benefits for each plan.

HOW MEMBERS' BENEFITS ARE FUNDED

Benefits are funded by three sources.

EMPLOYEE CONTRIBUTIONS

The contribution rate is set by State statute. Members' contributions of their annual creditable compensation:

Tier 1 Members 5% Non-Hazardous and 8% Hazardous

Tier 2 Members 6% Non-Hazardous and 9% Hazardous.

Tier 3 Members 6% Non-Hazardous and 9% Hazardous.

EMPLOYER CONTRIBUTIONS

+ General Fund Appropriations

An amount is paid by the employer participating in KRS (state and local government agencies). In fiscal year 2017 and 2018, the KERS and SPRS plans received special general fund appropriations. All employer rates are set each year by the KRS Board of Trustees based on actuarial valuations and recommendations; however, the KERS and SPRS employer rates are subject to final adoption by the Kentucky General Assembly in the biennial state budget legislation.

INVESTMENTS

The Systems' assets are invested to provide for future members' benefits. Each System has its own asset base from which each system's benefits are drawn. KRS follows a policy of thoughtfully growing our asset base while protecting against undue risk and losses in any particular investment area.

FINANCIAL

2017 Financial REPORT

This is an overview of the Pension and Insurance Funds' financial activities for the fiscal year ending June 30, 2017. Please read it in conjunction with the combining financial statements, which begin on page 20 in the CAFR. Find a full version of the CAFR at https://kyret.ky.gov/Publications/Pages/Comprehensive-Annual-Financial-Reports.aspx under Comprehensive Annual Financial Report.

2017 Financial Highlights

Fiscal year 2017 financial performance for the Pension and Insurance Plans improved from 2016. Net position increased from $15.1 billion to $16.7 billion. The 11% improvement was primarily attributable to positive investment returns, higher employer contributions, and General Fund appropriations of $98.2 million. Additional details are provided below and further detailed in the 2017 CAFR.

Pension

The Total Pension Net Position across the five plans was $10.9 billion at the beginning of the fiscal year and increased by 9.6% to $11.9 billion at June 30, 2017. The $1.0 billion increase was due to the improvement in the fair value of investments, increased contributions and appropriations, and was partially offset by retiree payment outflows.

Insurance

The combined net position of the five Insurance Plans administered by KRS increased by $552.6 million during fiscal 2017. Total combined net position for the fiscal year was $4.8 billion. The net position increase was driven by improved investment performance and higher employer contributions.

Investments

Fiscal year 2017 investment performance was much improved compared to 2016. The KRS Pension Funds earned a net return of 13.47% (outperforming the benchmark of 13.28%). The KRS Insurance Fund earned a net return of 13.72%, also higher than the benchmark. Both the Pension and Insurance Funds investment returns were negative in 2016 (-0.52% and -0.09%). The positive investment returns reflect additional Investment Committee expertise, investment sector allocations, and overall 2017 market performance.

Cash Flows

Pension: Cash flows for the KERS and SPRS plans improved during fiscal year 2017 due to $98.2 million of General Fund appropriations and realized investment gains. The Investment Committee and Board are actively monitoring short-term cash needs. In fiscal year 2018, these plans will receive additional General Fund appropriations of $87.6 million and higher employer contributions.

Insurance: Cash flows for the five plans have continued to stabilize over the last five years with increased employer contribution rates. The plans have also benefited from a benefit formula change starting in 2008 and lower expenses by using a third-party provider for our Medicare advantage retiree plans.

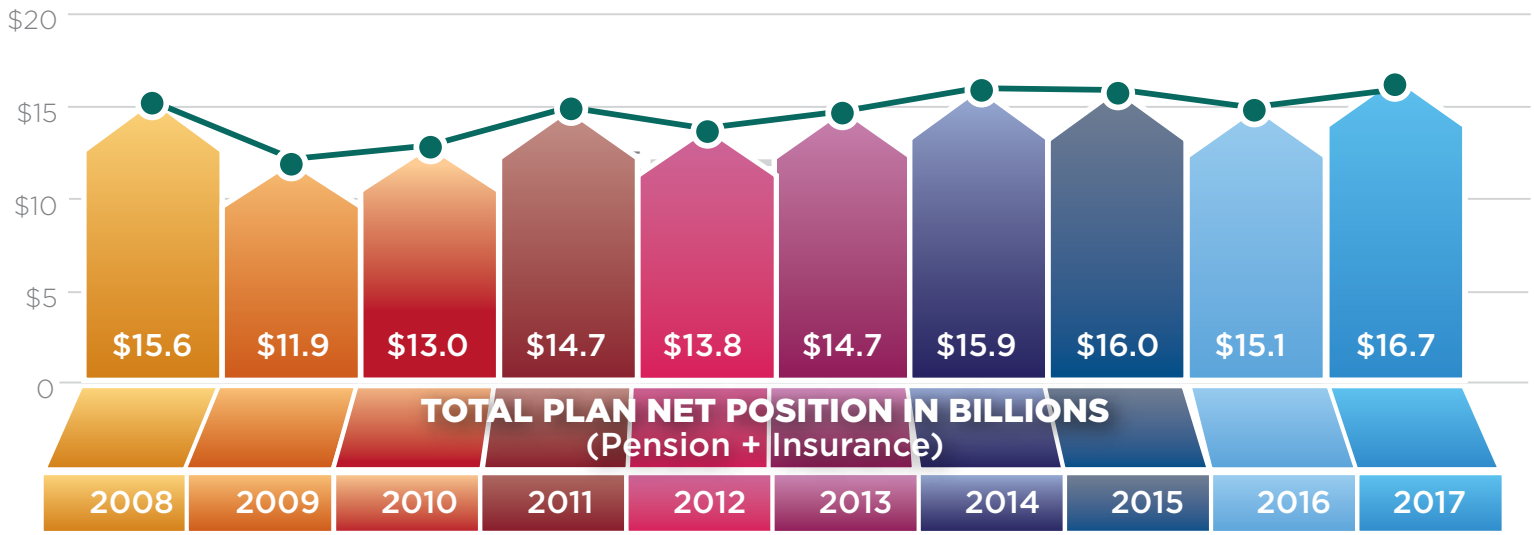


Table 1 - Assets and Liabilities

This table shows the assets and liabilities for the years ending June 30, 2017, 2016, and 2015. The 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 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 2017, negative in 2016, but positive in 2015 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 1. Plan Net Position *($ in Millions)*

	Pension Funds			Insurance Fund			Total		
Assets	**2017**	**2016**	**2015**	**2017**	**2016**	**2015**	**2017**	**2016**	**2015**
Cash & Investments	$12,169	$11,411	$12,217	$4,936	$4,401	$4,451	$17,105	$15,812	$16,668
Receivables	348	442	459	104	171	148	452	613	607
Equip/Int Assets, net of dep/amort.	6	8	10	-	-	-	6	8	10
Total Assets	**12,523**	**11,861**	**12,686**	**5,040**	**4,572**	**4,599**	**17,563**	**16,433**	**17,285**
Total Liabilities	**(601)**	**(983)**	**(1,040)**	**(256)**	**(341)**	**(352)**	**(857)**	**(1,324)**	**1,392**
Plan Net Position	**$11,922**	**$10,878**	**$11,646**	**$4,784**	**$4,231**	**$4,247**	**$16,706**	**$15,109**	**$15,893**

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

	Pension Funds			Insurance Fund			Total		
Additions	**2017**	**2016**	**2015**	**2017**	**2016**	**2015**	**2017**	**2016**	**2015**
Member Cont.	$334	$307	$298	$-	$-	$-	$334	$307	$298
Employer Cont.	1,167	950	986	315	333	343	1,482	1,283	1,329
Heath Ins. Cont.	17	15	13	-	-	-	17	15	13
Pension Spiking Cont.	5	2	3	-	-	-	5	2	3
BoA Settlement	-	-	23	-	-	-	-	-	23
General Fund Appro.	98	-	-	-	-	-	98	-	-
Employer Cessation Cont.	53	-	-	16	-	-	69	-	-
Premiums Ret Remp	-	-	-	9	10	10	9	10	10
Invest. Inc. (Net)(Loss)	1,415	(76)	204	574	(5)	76	1,989	(81)	280
Total Additions	**3,089**	**1,198**	**1,527**	**914**	**338**	**429**	**4,003**	**1,536**	**1,956**
Deductions:									
Benefit payments	1,981	1,903	1,832	-	-	-	1,981	1,903	1,832
Refunds	31	31	33	-	-	-	31	31	33
Admin/Cap. Proj.	33	33	31	2	2	2	35	35	33
Healthcare Costs	-	-	-	359	351	335	359	351	335
Total Deductions	**2,045**	**1,967**	**1,896**	**361**	**353**	**337**	**2,406**	**2,320**	**2,233**
Inc. (Decrease) in Plan Net Position	**$1,044**	**$(769)**	**$(369)**	**$553**	**$(15)**	**$92**	**$1,597**	**$(784)**	**$(277)**

Investment Income (Loss) for Pension Funds *($ in Millions)*

Asset	2017	2016	2015
Increase (Decrease) in fair value of investments	$604	$(270)	$(557)
Investment income net of investment expense	251	137	219
Gain on sale of investments	560	57	542
Net Investment Income (Loss)	**$1,415**	**$(76)**	**$204**

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

Asset	2017	2016	2015
Increase (Decrease) in fair value of investments	$257	$(47)	$(126)
Investment income net of investment expense	94	49	72
Gain on sale of investments (Loss)	223	(7)	130
Net Investment Income (Loss)	**$574**	**$(5)**	**$76**

KRS Administrative Expenses *($ in Millions)*

KRS staff = 250 employees	
Salaries	$14.0
Pension & Benefits	$10.0
Contractual Services	$2.0
Communications	$0.9
Rent/Utilities/Misc	$1.5
Technology	$2.8
Healthcare Retiree Fees	$2.2
Depreciation	$1.9
Total	**$35.3**

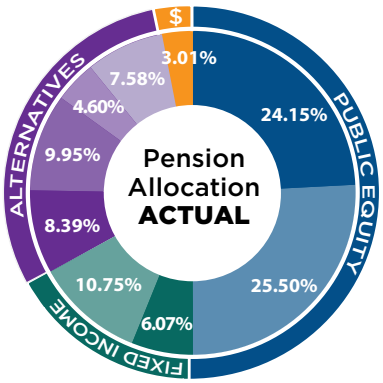
INVESTMENTS

2017 Investment REPORT

This is an overview of the Pension and Insurance Funds' financial activities for the fiscal year ending June 30, 2017. Please read it in conjunction with the combining financial statements, which begin on page 88 in the CAFR. Find a full version of the CAFR at https://kyret.ky.gov/Publications/Pages/Comprehensive-Annual-Financial-Reports.aspx under Comprehensive Annual Financial Report.

2017 Pension Results

For the fiscal year ending on June 30, 2017, the KRS Pension Fund earned a net return of 13.47% and outpaced its benchmark return of 13.28%. Returns also exceeded the actuarial assumed rates of return of 6.75% for KERS Non-Hazardous and SPRS and 7.50% for CERS Non-Hazardous, CERS Hazardous, and KERS Hazardous. All asset classes saw positive returns for fiscal year 2017. Total Public Equity, which made up 49.7% of all of assets in the Pension Funds, was the primary driver and produced a total return of 19.18%. U.S. Equity, which accounted for 24.15% of all assets, and International Equity, which accounted for 25.50% of all assets, returned 17.99% and 20.23%, respectively. Private Equity and Real Estate also added value with returns of 12.76% and 9.87%, respectively, for the fiscal year.



Net Returns By System - Pension Funds *($ in Millions)*

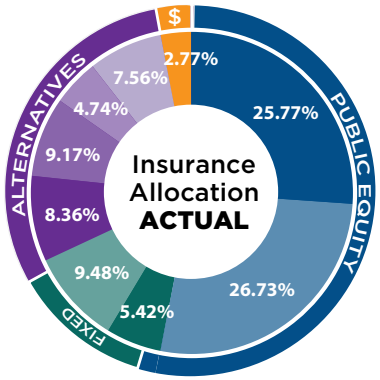
Plan	Market Value ($ in Millions)	% of Total Market Value	1 Year (%)		3 Years (%)		5 Years (%)		GANIR	10 Years (%)		Inception (%)	
			KRS	Index	KRS	Index	KRS	Index		KRS	Index	KRS	Index
KERS Non-Hazardous	$2,016.5	17.14%	12.09	11.92	4.46	4.81	7.84	8.04	2.56	4.75	5.17	9.12	9.26
KERS Hazardous	$600.4	5.10%	13.44	13.58	4.86	4.81	8.12	8.11	2.99	4.81	5.20	9.14	9.27
CERS Non-Hazardous	$6,688.7	56.85%	13.81	13.64	4.89	4.80	8.12	8.11	2.89	4.88	5.20	9.16	9.27
CERS Hazardous	$2,216.7	18.84%	13.73	13.61	4.93	4.80	8.14	8.10	3.05	4.89	5.20	9.17	9.27
SPRS	$243.6	2.07%	12.50	12.61	4.12	4.61	7.67	7.97	2.69	4.66	5.14	9.09	9.25
Total	**$11,765.9**	**100.00%**	**13.47**	**13.28**	**4.81**	**5.13**	**8.08**	**8.22**	**-**	**4.86**	**5.26**	**9.16**	**9.29**

Note: GANIR = (5 Year Return - 4.0%) x .75 and is calculated net of fees and expenses. See the Financial Section for more information.

Pension Funds - Net Returns By Allocation *Note: Market values are adjusted for accruals and expenses*

Structure	Inception	Market Value ($ in Millions)	% of Total	1 Year (%)		3 Years (%)		5 Years (%)		10 Years (%)		Inception To Date		External FEES
				KRS	Index	KRS	Index	KRS	Index	KRS	Index	KRS	Index	($ in Millions)
Total Fund	**4/1/84**	**$11,765.9**	**100.00%**	**13.47**	**13.28**	**4.81**	**5.13**	**8.08**	**8.22**	**4.86**	**5.26**	**9.16**	**9.29**	**$86.6**
Total Public Equity[1]	4/1/84	$5,841.6	49.65%	19.18	19.83	4.72	4.63	10.67	10.51	4.22	3.97	10.54	10.39	$11.6
US Equity	4/1/84	$2,841.3	24.15%	17.99	18.51	8.27	9.10	13.99	14.59	7.01	7.29	11.27	11.29	$4.3
International[1]	7/1/00	$3,000.3	25.50%	20.23	20.97	1.85	1.29	8.30	7.72	1.65	1.38	2.83	3.29	$7.3
Fixed Income	4/1/84	$1,979.1	16.82%	6.54	6.66	4.23	5.24	4.47	4.21	5.57	5.61	7.69	7.51	$14.1
Real Return	7/1/11	$987.1	8.39%	7.52	3.12	1.44	0.61	2.47	2.34	-	-	4.00	2.73	$7.2
Absolute Return	4/1/10	$1,170.3	9.95%	5.41	5.05	1.39	1.72	4.89	3.65	-	-	3.96	2.75	$13.1
Real Estate	7/1/84	$541.3	4.60%	9.87	7.36	8.97	10.77	9.39	10.94	7.23	4.62	5.95	6.44	$8.1
Private Equity	7/1/02	$891.9	7.58%	12.76	12.76	9.23	9.23	12.19	12.19	7.32	10.63	10.95	10.95	$30.2
Cash Account[2]	1/1/88	$354.6	3.01%	0.99	0.46	0.54	0.20	0.51	0.15	1.06	0.51	3.65	3.20	$1.0
													Consulting/Other	$1.3

[1]Equities include trade commissions. [2]Cash accounts include custodial fees.



2017 Insurance Results

The KRS Insurance Fund earned a net return of 13.72%, for the fiscal year ending June 30, 2017, compared to the benchmark's 13.55% return. The Insurance Fund achieved rates of return of 7.92% over the five year period and 3.78% over the 10 year period. In 2017, the Insurance Fund gained from the same favorable market conditions as the Pension Funds. Total Public Equity, which accounted for 52.50% of all assets in the Insurance Fund, provided value with a total return of 19.31%. U.S. Equity, which accounted for 25.77% of all assets, and International Equity, which accounted for 26.73% of all assets, returned 18.09% and 20.40%, respectively. Much like the Pension Fund, Private Equity and Real Estate added value with returns of 10.44% and 12.76%, respectively.

Net Returns By System - Insurance Fund *($ in Millions)*

Plan	Market Value ($ in Millions)	% of Total Market Value	1 Year (%)		3 Years (%)		5 Years (%)		10 Years (%)		Inception (%)	
			KRS	Index	KRS	Index	KRS	Index	KRS	Index	KRS	Index
KERS Non-Hazardous	$768.8	16.17%	13.78	13.89	4.72	4.97	7.65	8.17	3.65	4.22	7.37	7.77
KERS Hazardous	$483.9	10.17%	13.76	13.73	4.93	5.02	7.93	8.21	3.79	4.24	7.42	7.77
CERS Non-Hazardous	$2,149.5	45.19%	13.67	13.62	5.03	5.06	7.97	8.23	3.81	4.25	7.42	7.78
CERS Hazardous	$1,176.8	24.74%	13.70	13.61	5.08	5.06	8.00	8.24	3.82	4.25	7.43	7.78
SPRS	$177.4	3.73%	13.70	13.61	5.03	5.08	7.98	8.25	3.81	4.26	7.42	7.78
Total	**$4,756.4**	**100.00%**	**13.72**	**13.55**	**4.99**	**5.45**	**7.92**	**8.40**	**3.78**	**4.33**	**7.42**	**7.80**

Insurance Fund - Net Returns By Allocation *Note: Market values are adjusted for accruals and expenses*

Structure	Inception	Market Value ($ in Millions)	% of Total	1 Year (%)		3 Years (%)		5 Years (%)		10 Years (%)		Inception To Date		External FEES
				KRS	Index	KRS	Index	KRS	Index	KRS	Index	KRS	Index	($ in Millions)
Total Fund	**4/1/84**	**$4,756.4**	**100.00%**	**13.72**	**13.55**	**4.99**	**5.45**	**7.92**	**8.40**	**3.78**	**4.33**	**7.42**	**7.80**	**$34.5**
Total Public Equity[1]	4/1/84	$2,497.1	52.50%	19.31	19.84	5.04	4.69	10.75	10.44	4.11	3.82	8.63	8.43	$4.7
US Equity	4/1/84	$1,225.8	25.77%	18.09	18.51	8.69	9.10	14.15	14.59	6.93	7.22	9.56	9.41	$1.8
International[1]	7/1/00	$1,271.3	26.73%	20.40	20.97	1.77	1.29	8.15	7.72	1.64	1.04	2.84	2.40	$2.9
Fixed Income	4/1/84	$709.0	14.91%	5.90	6.66	3.69	5.24	4.00	4.21	5.78	5.85	6.53	6.51	$5.5
Real Return	7/1/11	$397.6	8.36%	6.60	2.96	1.32	0.77	2.11	2.43	-	-	3.69	2.81	$3.0
Absolute Return	4/1/10	$436.1	9.17%	5.32	5.05	1.41	1.72	4.87	3.65	-	-	3.89	2.75	$3.6
Real Estate	7/1/84	$225.3	4.74%	10.44	7.36	9.32	10.77	9.09	10.94	-	-	8.99	5.84	$4.9
Private Equity	7/1/02	$359.5	7.56%	12.76	12.76	12.63	12.63	14.16	14.16	8.94	9.81	9.74	10.34	$11.7
Cash Account[2]	1/1/88	$131.8	2.77%	0.62	0.46	0.38	0.20	0.37	0.15	0.76	0.51	2.69	2.55	$0.7
													Consulting/Other	$0.4

[1]Equities include trade commissions. [2]Cash accounts include custodial fees.

KRS Does NOT "Commingle"

Plan Investments

KRS investments by plan (KERS, CERS, SPRS) are NOT "commingled" to support the other systems or to pay benefits. Each fund (Pension and Insurance) consists of five plans each having its own investment strategy based upon their individual liquidity needs. All plan assets are maintained through separate financial accounts and are reported individually in audited financial statements.

Like many of our pension peers, KRS maintains "unitized funds" with BNY Mellon, the Systems' custodial bank. A unitized fund is similar to a mutual fund you might own for your personal investment portfolio. This is a structure that allows the plans to benefit from investment buying or selling economies of scale and gain diversification while retaining individual asset values for each plan.

ACTUARIAL

2017 Actuarial REPORT

This is an overview of the Pension and Insurance Funds' financial activities for the fiscal year ending June 30, 2017. Please read it in conjunction with the combining financial statements, which begin on page 142 in the CAFR. Find a full version of the CAFR at https://kyret.ky.gov/Publications/Pages/Comprehensive-Annual-Financial-Reports.aspx under Comprehensive Annual Financial Report.

2017 Actuarial Valuation Results

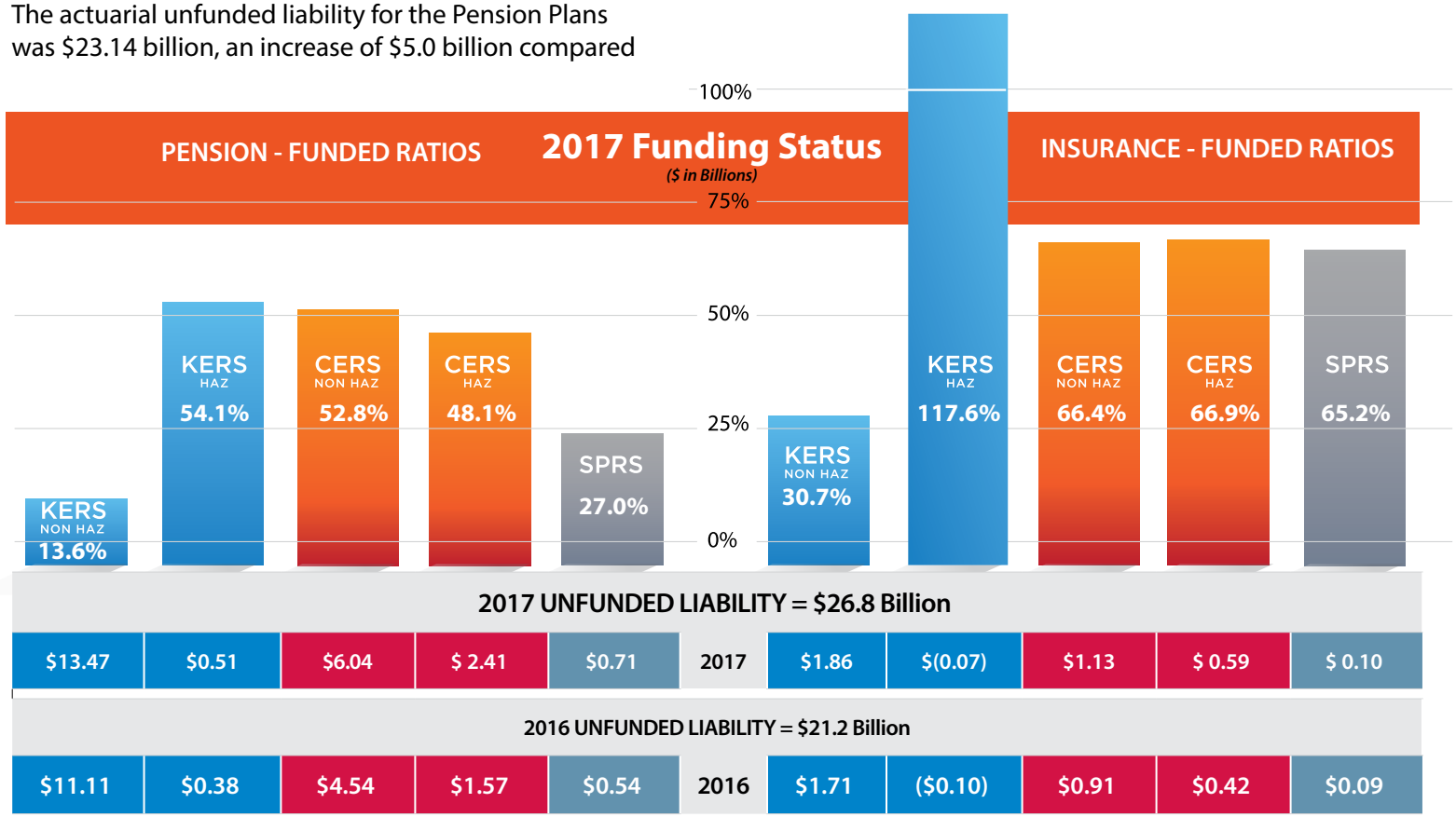
Each year the funding levels of the KRS Pension and Insurance Plans are determined by the annual actuarial valuation based on assumptions set by the KRS Board of Trustees for the fiscal year ending June 30. The Board used independent consultants to review the valuation economic assumptions (inflation, interest rate, and payroll growth) for each of the plans, resulting in changes to assumptions used for fiscal year 2017 valuations. The funding levels for the retirement and insurance funds have decreased from 2016 primarily due to the lower assumed rates of return. Changes in the economic assumptions also increased recommended employer contributions rates. Higher future contribution inflows, especially for the KERS Non-Hazardous and SPRS Pension Plans, will help stabilize cash flows to cover future retiree benefit payments.

Pension Plans:

The actuarial unfunded liability for the Pension Plans was $23.14 billion, an increase of $5.0 billion compared to fiscal year 2016. In addition to the assumption changes in 2017, the pension liability has continued to increase since 2004 due to a number of factors including: unfunded Cost of Living Adjustments prior to 2012, shortfall in employer contributions to KERS and SPRS plans prior to fiscal year 2015, adverse investment markets (2002, 2008, 2009, 2016), retirement incentives (2000-2009), and the number of Tier 1 benefit members reaching retirement status based on either service credit or age.

Insurance Plan:

The Insurance Plan unfunded actuarial liability as of June 30, 2017, was $3.61 billion, compared to $3.03 billion in 2016. The $0.58 billion change, is a noticeably small increase compared to the Pension Plans. Funding levels for the Insurance Plans began to improve in 2004 as employer contributions increased. Also in 2013, KRS began offering fully-insured Medicare Advantage plans through a third party provider. This change from self-funding, reduced expenses and stabilized premiums for retirees over age 65.



Summary of Actuarial Valuation Results for 2017

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS	TOTAL KRS
RECOMMENDED CONTRIBUTION RATES						
Pension Fund	71.03%	34.39%	21.84%	35.69%	119.05%	
Insurance Fund	12.40%	2.46%	6.21%	12.17%	27.23%	
Recommended Employer Contribution	83.43%	36.85%	28.05%	47.86%	146.28%	
Funded Status as of Valuation Date						
PENSION FUND						
Actuarial Liability	$15,591,641,083	$1,121,419,836	$12,803,509,449	$4,649,046,764	$967,144,667	$35,132,761,799
Actuarial Value of Assets	2,123,623,157	607,158,871	6,764,873,113	2,238,320,330	261,320,225	$11,995,295,696
Unfunded Liability on Actuarial Value of Assets	13,468,017,926	514,260,965	6,038,636,336	2,410,726,434	705,824,442	$23,137,466,103
Funding Ratio on Actuarial Value of Assets	13.62%	54.14%	52.84%	48.15%	27.02%	34.14%
Market Value of Assets	2,056,869,899	601,528,922	6,687,237,095	2,217,996,136	255,736,583	$11,819,368,635
Unfunded Liability on Market Value of Assets	$13,534,771,184	$519,890,914	$6,116,272,354	$2,431,050,628	$711,408,084	$23,313,393,164
Funding Ratio on Market Value of Assets	13.19%	53.64%	52.23%	47.71%	26.44%	51.08%
INSURANCE FUND						
Actuarial Liability	$2,683,496,055	$419,439,652	$3,355,151,286	$1,788,432,768	$276,641,361	$8,523,161,122
Actuarial Value of Assets	823,917,560	493,458,367	2,227,401,268	1,196,779,877	180,463,820	$4,922,020,892
Unfunded Liability on Actuarial Value of Assets	1,859,578,495	(74,018,715)	1,127,750,018	591,652,891	96,177,541	$3,601,140,230
Funding Ratio on Actuarial Value of Assets	30.70%	117.65%	66.39%	66.92%	65.23%	57.75%
Market Value of Assets	817,369,841	488,838,463	2,212,535,662	1,189,001,387	178,838,260	$4,886,583,613
Unfunded Liability on Market Value of Assets	$1,866,126,214	$(69,398,811)	$1,142,615,624	$599,431,381	$97,803,101	$3,636,577,509
Funding Ratio on Market Value of Assets	30.46%	116.55%	65.94%	66.48%	64.65%	57.33%

Economic Assumptions as of June 30

	KERS Non-Hazardous		KERS Hazardous		CERS Non-Hazardous		CERS Hazardous		SPRS	
	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016
Assumed Investment Return - Pension	5.25%	6.75%	6.25%	7.50%	6.25%	7.50%	6.25%	7.50%	5.25%	6.75%
Assumed Investment Return - Insurance	6.25%	7.50%	6.25%	7.50%	6.25%	7.50%	6.25%	7.50%	6.25%	7.50%
Inflation Factor	2.30%	3.25%	2.30%	3.25%	2.30%	3.25%	2.30%	3.25%	2.30%	3.25%
Payroll Growth	0.00%	4.00%	0.00%	4.00%	2.00%	4.00%	2.00%	4.00%	0.00%	4.00%

KERS NON-HAZARDOUS

Kentucky Employees Retirement System- established July 1, 1956, by the state legislature.

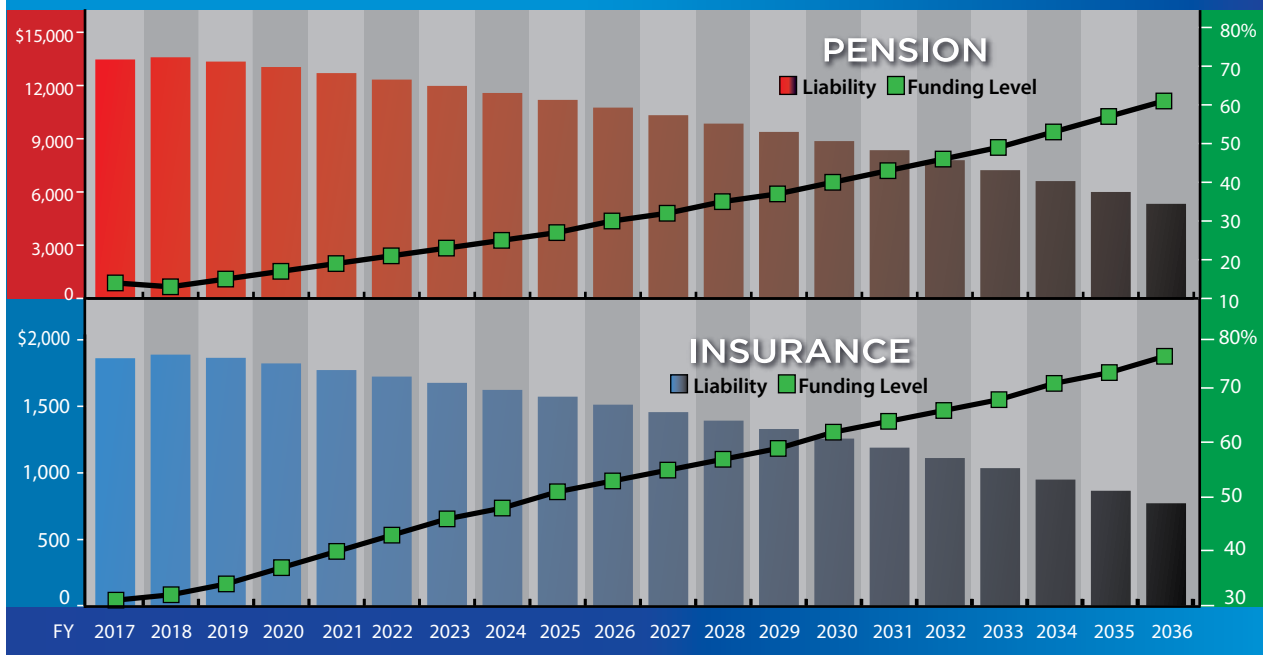
KEY INFORMATION

- KRS actuaries provide 20-year Pension and Insurance projections by Plan. Using fiscal year 2017 valuation assumptions and member data, the KERS Non-Hazardous Pension Plan would have a 61% funded ratio and an unfunded liability of $5.3 billion by year 2036. For Insurance, the funded ratio is projected to be 76%. Employer contribution rates would still exceed 50% of payroll.

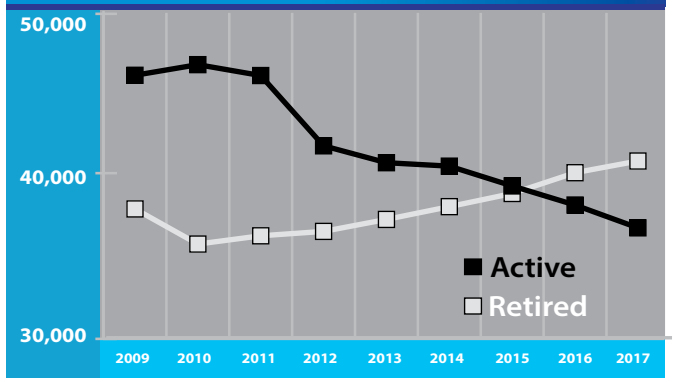
- Active employees have continued to decrease over the last 10 years. There are more retirees drawing benefits than active employees paying into the plan. Both trends increase employer contribution rates.

- Combined Pension and Insurance Net Plan Position improved in fiscal year 2017 compared to 2016 by 8.5% to $2.9 billion. The increase was due to improved investment returns, higher contributions, and additional General Fund appropriations funding.

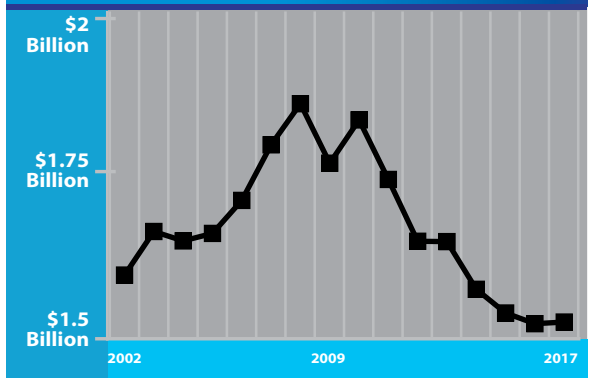
20 YEAR FUNDING PROJECTION *Based on June 30, 2017 Actuarial Valuation ($ in Millions)*



ACTIVE EMPLOYEE VS RETIRED



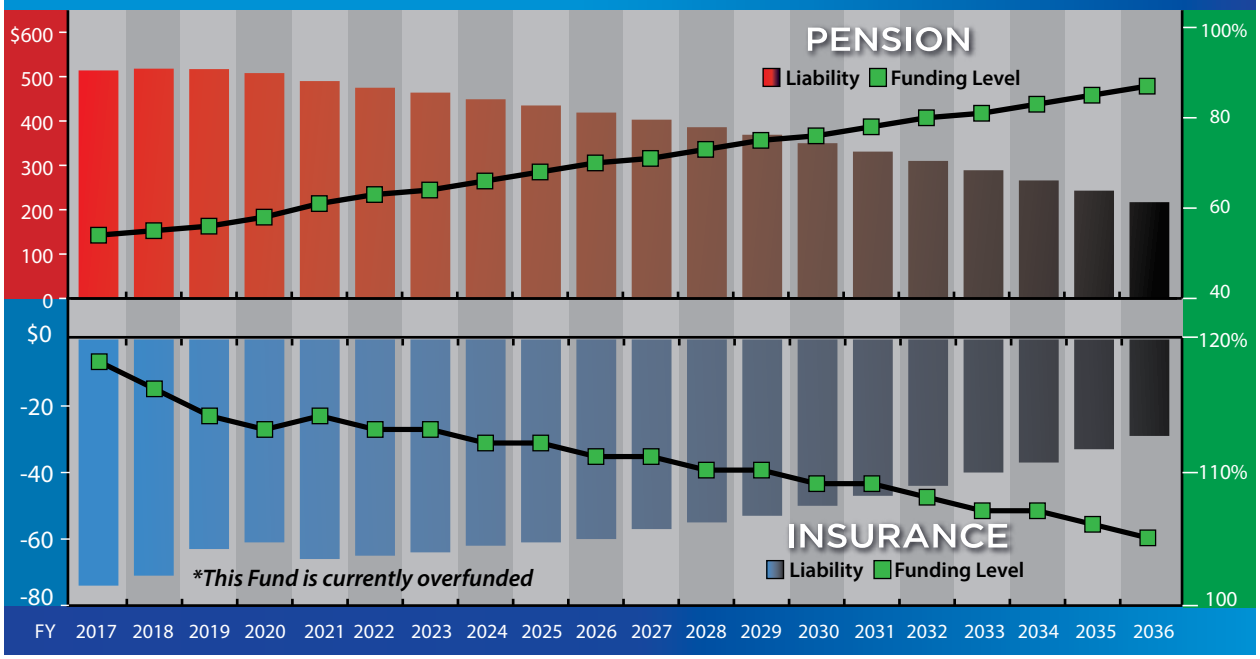
ACTIVE EMPLOYEE PAYROLL



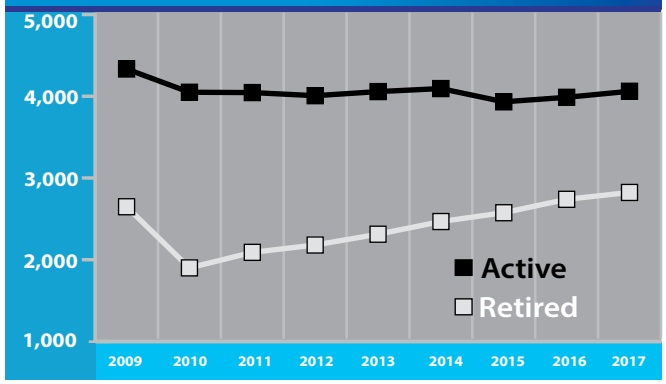
Employer Contribution Rates

	Pension		Insurance		Total	
	Recommended	Actual	Recommended	Actual	Recommended	Actual
2009	16.54%	5.79%	12.06%	4.22%	**28.60%**	**10.01%**
2010	18.96%	6.65%	12.33%	4.96%	**31.29%**	**11.61%**
2011	21.77%	9.58%	16.81%	7.40%	**38.58%**	**16.98%**
2012	24.30%	11.59%	16.41%	8.23%	**40.71%**	**19.82%**
2013	28.03%	14.86%	16.52%	8.75%	**44.55%**	**23.61%**
2014	32.57%	17.29%	12.71%	9.50%	**45.28%**	**26.79%**
2015	30.84%	30.84%	7.93%	7.93%	**38.77%**	**38.77%**
2016	30.84%	30.84%	7.93%	7.93%	**38.77%**	**38.77%**
2017	40.24%	40.24%	8.35%	8.35%	**48.59%**	**48.59%**
2018	41.06%	41.06%	8.41%	8.41%	**49.47%**	**49.47%**

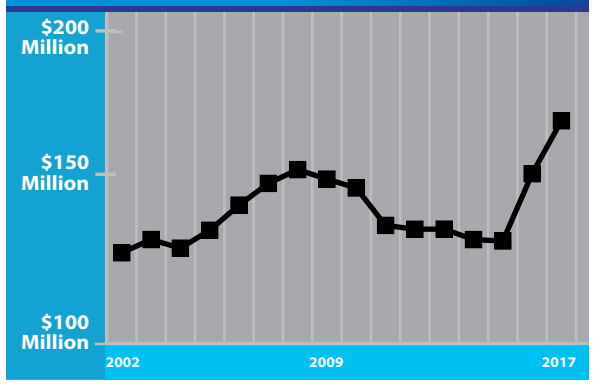
20 YEAR FUNDING PROJECTION *Based on June 30, 2017 Actuarial Valuation ($ in Millions)*



ACTIVE EMPLOYEE VS RETIRED



ACTIVE EMPLOYEE PAYROLL



Employer Contribution Rates

	Pension		Insurance		Total	
	Recommended	Actual	Recommended	Actual	Recommended	Actual
2009	10.84%	9.79%	23.94%	14.56%	**34.78%**	**24.35%**
2010	11.98%	9.89%	23.56%	14.80%	**35.54%**	**24.69%**
2011	14.11%	10.72%	20.26%	15.40%	**34.37%**	**26.12%**
2012	14.11%	12.33%	19.73%	16.65%	**33.84%**	**28.98%**
2013	16.16%	13.41%	19.73%	16.38%	**35.89%**	**29.79%**
2014	17.00%	14.89%	11.84%	17.32%	**28.84%**	**32.21%**
2015	16.37%	16.37%	9.97%	9.97%	**26.34%**	**26.34%**
2016	16.37%	16.37%	9.97%	9.97%	**26.34%**	**26.34%**
2017	21.08%	21.08%	2.74%	2.74%	**23.82%**	**23.82%**
2018	21.44%	21.44%	2.26%	2.26.%	**23.70%**	**23.70%**

KERS HAZARDOUS

Kentucky Employees Retirement System- established July 1, 1956, by the state legislature.

KEY INFORMATION

- KERS Hazardous participating employers are state agencies and universities.

- KERS Hazardous ended the fiscal year with $606 million in pension assets; $484 million for Insurance - a combined 13% asset increase from 2016.

- Payroll growth increased by 10% in 2017 vs. 2016.

- The KRS actuaries provide a 20-year Pension and Insurance projection view. Using fiscal year 2017, valuation assumptions and member data, the KERS Hazardous Pension Plan would have a funded ratio of 87% and an unfunded liability of $217 million by year 2036. The Insurance plan is currently overfunded at 118%. Unlike the other plans, the goal is to reduce the funded status over time.

CERS NON-HAZARDOUS

County Employees Retirement System - established July 1, 1958, by the state legislature.

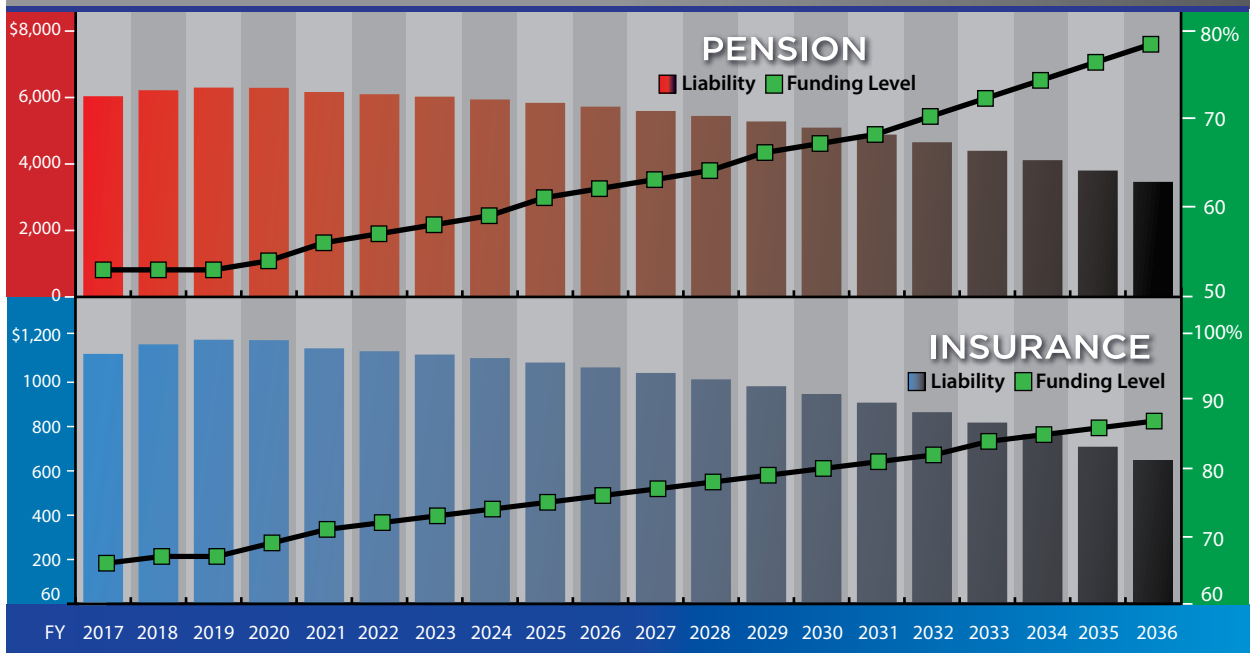
KEY INFORMATION

- CERS Non-Hazardous has the highest membership and with combined Pension and Insurance assets of $8.9 billion, is the largest system in KRS. Net position increased by $850 million in 2017.

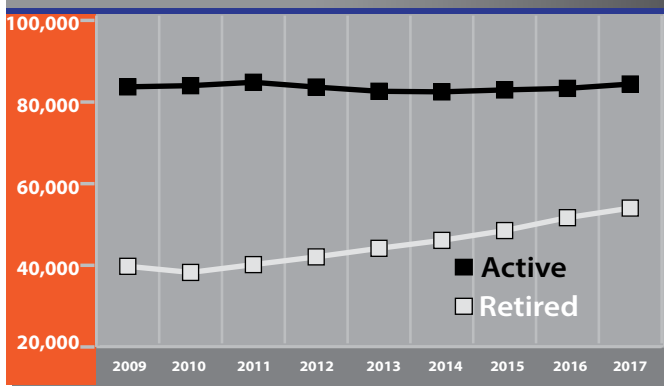
- Active members increased slightly to 84,401 in 2017 vs. 2016, while Retiree members increased by 4.5% to 54,018. With higher retirements and slower payroll growth, employer pension annual contribution rates increased in fiscal years 2017 and 2018.

- Using fiscal year 2017 valuation assumptions and member data, the CERS Non-Hazardous Pension Plan had a 53% funded ratio and an unfunded liability of $6.0 billion as of June 30. Based on the actuarial 20-year projection, the unfunded liability would be $3.5 billion in 2036 with a funded ratio of 78%. The funded ratio for Insurance is projected to be 87% with an unfunded liability of $646 million at the 20-year mark. Combined employer contribution rates would peak at 28.05% before starting a gradual decline to 22.67%.

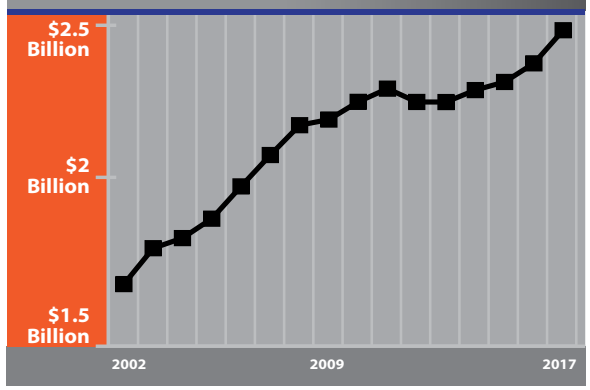
20 YEAR FUNDING PROJECTION *Based on June 30, 2017 Actuarial Valuation ($ in Millions)*



ACTIVE EMPLOYEE VS RETIRED



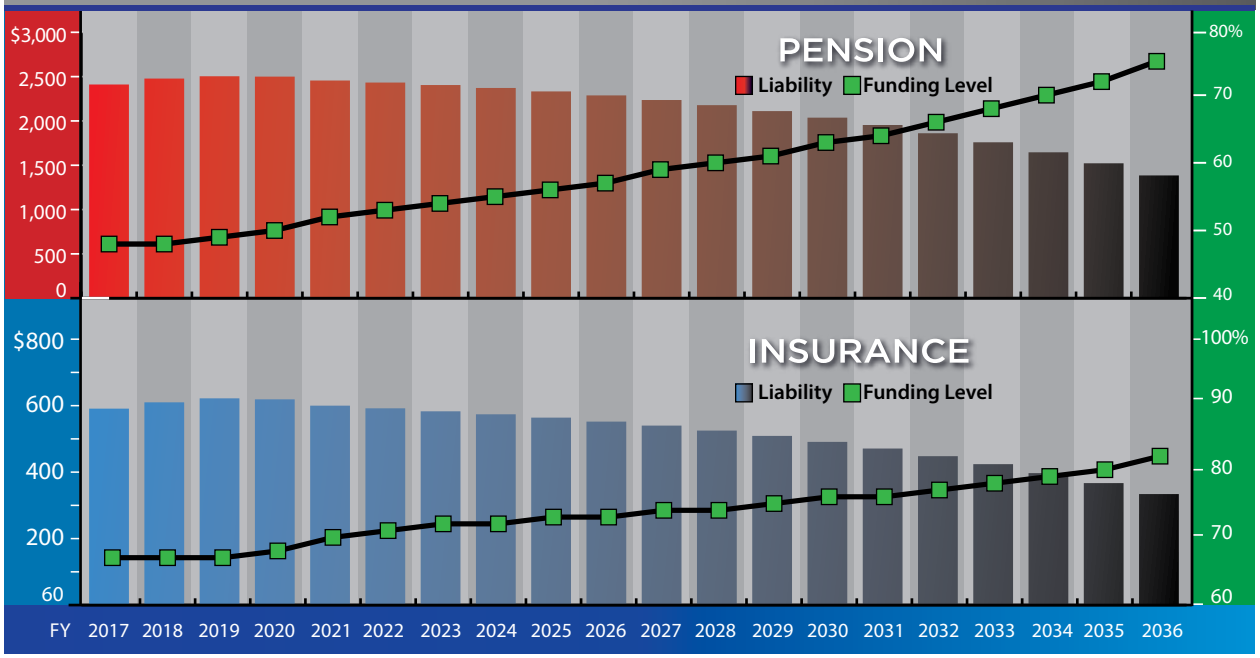
ACTIVE EMPLOYEE PAYROLL



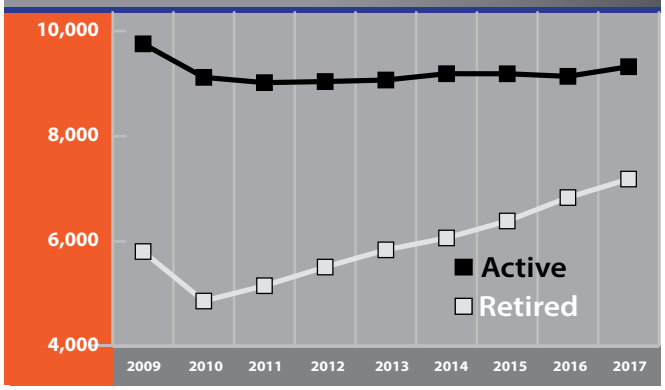
Employer Contribution Rates

	Pension		Insurance		Total	
	Recommended	Actual	Recommended	Actual	Recommended	Actual
2009	5.68%	5.68%	7.82%	7.82%	**13.50%**	**13.50%**
2010	7.41%	7.41%	8.75%	8.75%	**16.16%**	**16.16%**
2011	10.03%	10.03%	6.90%	6.90%	**16.93%**	**16.93%**
2012	11.70%	11.70%	7.26%	7.26%	**18.96%**	**18.96%**
2013	12.62%	12.62%	6.93%	6.93%	**19.55%**	**19.55%**
2014	13.74%	13.74%	5.15%	5.15%	**18.89%**	**18.89%**
2015	12.75%	12.75%	4.92%	4.92%	**17.67%**	**17.67%**
2016	12.42%	12.42%	4.64%	4.64%	**17.06%**	**17.06%**
2017	13.95%	13.95%	4.73%	4.73%	**18.68%**	**18.68%**
2018	14.48%	14.48%	4.70%	4.70%	**19.18%**	**19.18%**

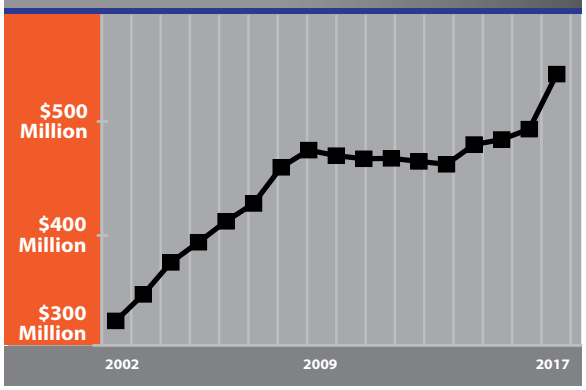
20 YEAR FUNDING PROJECTION *Based on June 30, 2017 Actuarial Valuation ($ in Millions)*



ACTIVE EMPLOYEE VS RETIRED



ACTIVE EMPLOYEE PAYROLL



Employer Contribution Rates

	Pension		Insurance		Total	
	Recommended	Actual	Recommended	Actual	Recommended	Actual
2009	12.55%	12.55%	16.95%	16.95%	**29.50%**	**29.50%**
2010	13.47%	13.47%	19.50%	19.50%	**32.97%**	**32.97%**
2011	16.79%	16.79%	16.46%	16.46%	**33.25%**	**33.25%**
2012	17.91%	17.91%	17.85%	17.85%	**35.76%**	**35.76%**
2013	20.10%	20.10%	17.50%	17.50%	**37.60%**	**37.60%**
2014	21.77%	21.77%	13.93%	13.93%	**35.70%**	**35.70%**
2015	20.73%	20.73%	13.58%	13.58%	**34.31%**	**34.31%**
2016	20.26%	20.26%	12.69%	12.69%	**32.95%**	**32.95%**
2017	21.71%	21.71%	9.35%	9.35%	**31.06%**	**31.06%**
2018	22.20%	22.20%	9.35%	9.35%	**31.55%**	**31.55%**

CERS HAZARDOUS

KEY INFORMATION

- CERS Hazardous membership includes fire fighters, EMT/EMS, local police, and sheriffs' departments.

- Hazardous employees contribute 8% for Tier 1 and 9% for Tiers 2 and 3, of their pay. The average annual pension benefit is $27,326.

- CERS Hazardous has had steady asset growth since 2012 and ended the fiscal year with $3.4 billion in pension and insurance assets.

- Based on fiscal year 2017 valuation assumptions and member data, the CERS Hazardous Pension Plan would grow from a current funded ratio of 48% to 75% by year 2036. The Insurance fund would decrease its unfunded liability from $591 million to $334 million during this 20-year period reaching an 82% funded ratio.

SPRS

State Police Retirement System- established July 1, 1958, by the state legislature.

KEY INFORMATION

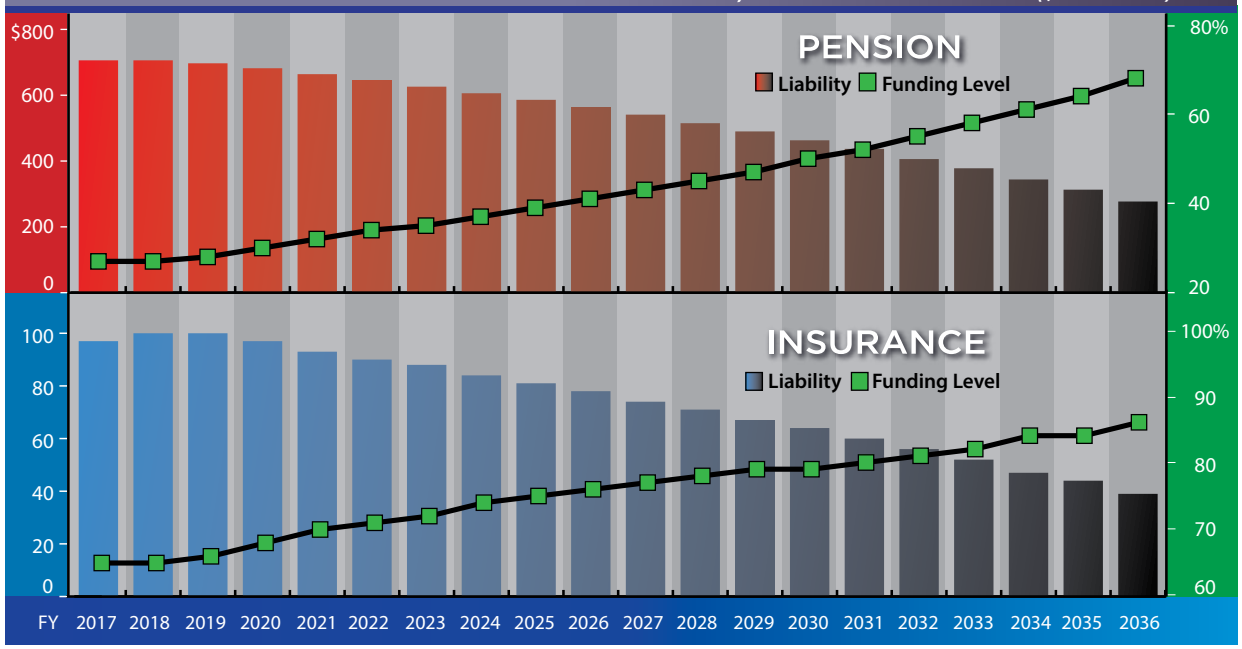
- SPRS is a relatively small plan with 2017 assets of $435 million (up by 14.7% compared to 2016) and approximately 2,600 members. Active employees contribute 8% for Tier 1 and 9% for Tiers 2 and 3, of their salary for a pension and insurance benefit.

- SPRS has the highest employer contribution rates of all the KRS plans. Their average retirement age is 48 after an average of 24 years of service. Approximately 54% of their members are retired with an average pension benefit of $39,774.

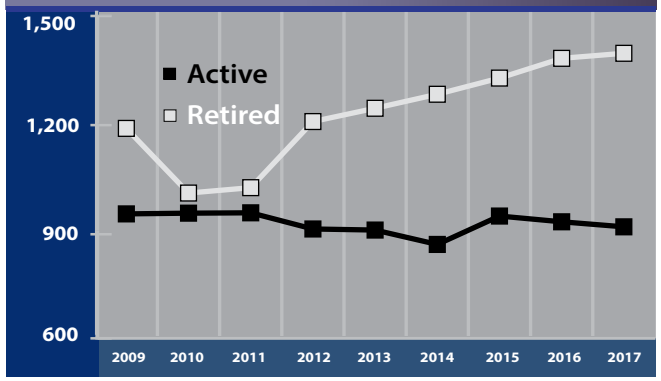
- Because of the small asset size and membership, SPRS' cash flows benefit from the $35 million of additional General Fund appropriations in 2017 ($25 million) and 2018 ($10 million).

- Using fiscal year 2017 valuation assumptions and member data, the SPRS Hazardous Pension Plan is only 27% funded with an unfunded liability of $706 million. Based on the actuary's 20-year projections, the Pension funded ratio would increase to 68% and the Insurance funded ratio to 86% by year 2036.

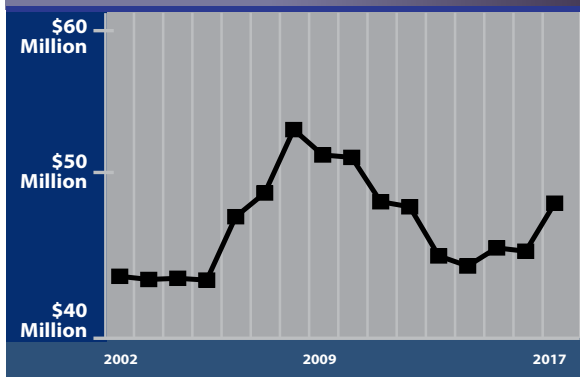
20 YEAR FUNDING PROJECTION *Based on June 30, 2017 Actuarial Valuation ($ in Millions)*



ACTIVE EMPLOYEE VS RETIRED



ACTIVE EMPLOYEE PAYROLL



Employer Contribution Rates

	Pension		Insurance		Total	
	Recommended	Actual	Recommended	Actual	Recommended	Actual
2009	32.39%	15.28%	27.75%	14.79%	**60.14%**	**30.07%**
2010	35.23%	16.81%	26.64%	16.27%	**61.87%**	**33.08%**
2011	35.74%	21.44%	49.89%	24.10%	**85.63%**	**45.54%**
2012	39.80%	26.55%	54.83%	25.58%	**94.63%**	**52.13%**
2013	47.48%	33.24%	55.93%	30.43%	**103.41%**	**63.67%**
2014	53.35%	39.50%	43.17%	31.65%	**96.52%**	**71.15%**
2015	53.90%	53.90%	21.86%	21.86%	**75.76%**	**75.76%**
2016	53.90%	53.90%	21.86%	21.86%	**75.76%**	**75.76%**
2017	70.34%	70.34%	18.87%	18.87%	**89.21%**	**89.21%**
2018	72.47%	72.47%	18.77%	18.77%	**91.24%**	**91.24%**

Agency Structure *as of December 1,2017*

Board of Trustees

3 Members elected by CERS

2 Members elected by KERS

1 Member elected by SPRS

Personnel Secretary

10 Members appointed by the Governor

1 Non-Voting Member

Audit Committee

Division Director of Internal Audit - Vacant

Investment Committee

Interim Executive Director Office of Investments
Rich Robben

Division Directors
- Division of Public Equity - Joe Gilbert
- Division of Real Return & Real Estate - Andy Kiehl
- Division of Alternative Investments - Vacant
- Division of Fixed Income - Rich Robben
- Division of Private Equity - Vacant

Interim Executive Director
David Eager

Office of Investments Division

Internal Audit Division

Executive Director Office of Operations
Karen Roggenkamp

- Accounting
  Connie Davis
- Employer Reporting, Compliance & Education
  D'Juan Surratt
- Enterprise and Technology Services
  Rebecca Adkins
- Procurement & Office Services
  Joe C. Gilbert

Executive Director Office of Benefits
Erin Surratt

- Disability & Death
  Liza Welch
- Member Services
  Shauna Miller
- Membership Support
  Kevin Gaines
- Retiree Payroll
  David Nix
- Retiree Health Care
  Connie Pettyjohn
- Quality Assurance
  Wes Crosthwaite

Executive Director Office of Legal Services
Vacant

- Non-Advocacy
  Joe Bowman
- Advocacy
  Kathy Rupinen
- Executive Advisor
  Mark Blackwell

Division Director Human Resources
Marlane Robinson

Division Director Communications
Shawn Sparks

KRS Participating Agencies	
KERS	354
CERS	1,138
SPRS	1
Total	1,493

PARTICIPATING EMPLOYERS *in Agency Classification*	Number of Agencies
KERS	
County Attorneys	61
Health Departments	60
Master Commissioner	37
Non-P1 State Agencies	37
Other Retirement Systems	2
P1 State Agencies	138
Regional Mental Health Units	12
Universities	7
Total	**354**
CERS	
Airport Boards	5
Ambulance Services	19
Area Development Districts	14
Boards of Education	173
Cities	221
Community Action Agencies	21
Conservation Districts	49
County Attorneys	77
County Clerks	16
Development Authorities	6
Fire Departments	38
Fiscal Courts	118
Health Departments	1
Housing Authorities	42
Jailers	2
Libraries	85
Other Retirement Systems	2
P1 State Agencies	4
Parks and Recreation	7
Planning Commissions	16
Police Departments	2
Riverport Authorities	5
Sanitation Districts	9
Sheriff Departments	12
Special Districts & Boards	49
Tourist Commissions	22
Urban Government Agencies	2
Utility Boards	121
Total	**1,138**
SPRS	
Kentucky State Police Uniformed Officers	1
Total	**1**

(502) 696-8800 or (800) 928-4646
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Facebook: kyretirement
www.youtube.com/user/KentuckyRetire
Twitter.com/Kyretire
MyRetirement Portal - https://myretirement.ky.gov

Kentucky Retirement Systems
1260 Louisville Rd, Frankfort, KY 40601

Hours of Operation:
8:00 AM - 4:30PM (EST) Monday-Friday