

**KENTUCKY RETIREMENT SYSTEMS  
BOARD OF TRUSTEES  
QUARTERLY MEETING  
MAY 21, 2020 AT 10:00 A.M., ET  
LIVE VIDEO TELECONFERENCE/FACEBOOK LIVE**

1. Roll Call
2. Swearing in of Secretary Gerina Whethers
3. Public Comment
4. Approval of Minutes – April 16, 2020\*
5. Investment Committee Portfolio Report; Blue Torch and Putnam Recommendations\* – Prewitt Lane/Rich Robben
6. Review and Approve Economic Assumptions for All Plans\* – Dave Harris
  - Inflation, Interest Rates and Payroll Growth
7. GRS June 30, 2020 Projections – David Eager
8. Audit Committee Report\* - John Chilton/Kristen Coffey
  - 2021 CERS Board of Trustees Election Update – Kristen Coffey
  - Financial Statements as of March 31, 2020- Rebecca Adkins
  - Cash Flow/Net Position Reports – Rebecca Adkins
  - Budget-to-Actual Expense Quarterly Report – Rebecca Adkins
  - Hazardous Duty Positions – D’Juan Surratt
9. Retiree Health Plan Committee Report - David Rich/Connie Pettyjohn
10. Fiduciary Liability Insurance\* - Rebecca Adkins
11. Committee Assignment Approval\* – Dave Harris
12. KRS Update – David Eager, Rebecca Adkins, Erin Surratt
  - Working Through the Pandemic
  - Other Business
  - Update of HB 484 Work Plan and Status
13. Closed Session [Pending Litigation KRS 61.810(1)(c); Personnel KRS 61.810(1)(f)\*
14. Personnel Matter\*
15. Adjourn\*

*\*Board Action required*

**MINUTES OF MEETING #428**  
**BOARD OF TRUSTEES KENTUCKY RETIREMENT SYSTEMS**  
**QUARTERLY MEETING APRIL 16, 2020 AT 10:00A.M.**  
**VIA LIVE VIDEO TELECONFERENCE DUE TO SB 150,**  
**SIGNED INTO LAW BY THE GOVERNOR ON MARCH 30, 2020,**  
**AND EXECUTIVE ORDER 2020-215 DECLARING A STATE OF EMERGENCY**  
**EFFECTIVE MARCH 6, 2020 DUE TO COVID-19**

At the Quarterly Meeting of the Board of Trustees held on April 16, 2020 the following members were present: David Harris (Chair), Joe Brothers, John Chilton, John Cheshire, Raymond Connell, Kelly Downard, JT Fulkerson, Joseph Grossman, Sherry Kremer, Prewitt Lane, Matthew Monteiro, Keith Peercy, Betty Pendergrass, Jerry Powell, David Rich and Sec. Gerina Whethers. Staff members present were David Eager, Rebecca Adkins, Erin Surratt, Kathy Rupinen, Rich Robben, Andy Kiehl, Steve Willer, Shaun Case, Phillip Cook and Alane Foley.

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Mr. Harris called the meeting to order.

Ms. Alane Foley called roll.

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Mr. Harris introduced agenda item *KRS Employee Service Recognition Awards*. Mr. Eager expressed his appreciation towards KRS staff especially during the State of Emergency due to COVID-19. He provided a presentation showing all employees with five, ten, fifteen, twenty, twenty-five and thirty year anniversaries. KRS will have a reception for these employees at a later date.

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Mr. Harris introduced agenda item *Approval of Minutes- February 20, 2020*. A motion was made by Mr. Powell and was seconded by Mr. Fulkerson to approve the minutes as presented. The motion passed unanimously.

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Mr. Harris introduced agenda item *Legislative Update*. Mr. Eager provided detailed updates on SB 249, HB 352 and HB 484. This was provided for informational purposes only.

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Mr. Harris introduced agenda item *KRS Update*. Mr. David Eager and Mr. Rich Robben discussed investment performance and welcomed the new hire, Steve Willer, to the investment team. Ms. Rebecca Adkins and Ms. Erin Surratt provided an update regarding how KRS is continuing to service its members during the State of Emergency due to COVID-19. This was provided for informational purposes only.

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Mr. Harris introduced agenda item *Election of KRS Board of Trustees Officers: Chair and Vice Chair*. Mr. Rich thanked Mr. Harris and Mr. Percy for their service to the Board and made a motion and was seconded by Mr. Fulkerson to nominate Mr. Harris as Chair and Mr. Percy as Vice-Chair. The motion passed unanimously and was confirmed via a roll call vote.

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A motion was made by Mr. Powell and seconded by Mr. Rich to go in to closed session. The motion passed unanimously.

Mr. Harris read the following statement and the meeting moved into closed session: A motion having been made in open session to move into closed session for a specific purpose, and such motion having carried by majority vote in open, public session, the Board shall now enter closed session to consider the appointment (discipline/dismissal) and member account information of an employee, pursuant to KRS 61.810(1)(f) and KRS 61.810(1)(k). It is necessary to enter closed session because of the sensitive nature of the material to be considered regarding this employee, and the requirement of KRS 61.661(1) that each member's account be administered in a confidential manner.

The meeting was called back into open session.

Mr. Grossman made a motion and was seconded by Mr. Rich to extend Mr. Eager's Executive Director contract as presented effective July 1, 2020 for a period of two years. The motion passed unanimously as confirmed via a roll call vote.

Ms. Pendergrass made a motion and was seconded by Mr. Powell to approve a request to the Secretary of the Finance Cabinet to grant a waiver from 45A for the purposes of retaining Mr. Eager as the Executive Director of Kentucky Retirement Systems in accordance with the contract just approved by the KRS Board of Trustees. The motion passed unanimously as confirmed via a roll call vote.

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There being no further business, a motion was made at 12:45 p.m. by Mr. Powell and seconded by Mr. Rich to adjourn the meeting, to meet again on May 21, 2020 or upon the call of the Executive Director or the Chair of the Board of Trustees. The motion passed unanimously.

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Copies of all documents presented are incorporated as part of the Minutes of the Board of Trustees held April 16, 2020 except documents provided during a closed session conducted pursuant to the open meetings act and exempt under the open records act.

## **CERTIFICATION**

I do certify that I was present at this meeting, and I have recorded the above actions of the Directors on the various items considered by it at this meeting. Further, I certify that all requirements of KRS 61.805-61.850 were met in conjunction with this meeting.

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Recording Secretary

We, the Chair of the Board of Directors of the Kentucky Retirement Systems and Executive Director of the Kentucky Retirement Systems, do certify that the Minutes of Meeting Number 428, held on April 16, 2020 were approved on May 21, 2020.

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Chair of the Board of Directors

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Executive Director

I have reviewed the Minutes of the April 16, 2020 Board of Trustees Meeting for content, form, and legality.

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Interim Executive Director  
Office of Legal Services



## KENTUCKY RETIREMENT SYSTEMS INVESTMENTS



To: KRS Board of Trustees  
 From: Richard Robben, Executive Director – Office of Investments  
 Date: May 21st, 2020  
 Subject: Report on Recent Investment Committee Activities

### Investment Activity

#### *Rebalancing*

##### Purchases and Commitments

Between the end of 2/27/2020 and 3/31/2020, staff purchased equities as follows as part of our normal rebalancing process:

<b><i>KRS Equity Rebalancing - Purchases</i></b>			
	<b>US</b>	<b>International</b>	<b>Total</b>
Pension	\$506,850,000.00	\$240,000,000.00	\$746,850,000.00
Insurance	\$206,150,000.00	\$106,000,000.00	\$312,150,000.00
<b>Total</b>	<b>\$713,000,000.00</b>	<b>\$346,000,000.00</b>	<b>\$1,059,000,000.00</b>

Additionally, during April staff made the following commitments to existing managers:

- Marathon - \$25mm sent on 4/6/2020
- Waterfall - \$55mm
- Arrowmark - \$150mm
- Columbia - \$109mm on 4/7/20.

To fund the rebalancing purchases, staff requested and received the following redemptions from our Fixed Income managers:

- NISA – \$325mm on 3/31/2020
- Lord Abbett - \$275mm on 4/2/2020, \$200mm on 3/31/2020
- Loomis - \$100mm on 3/31/2020
- Manulife - \$200mm on 3/4/2020
- Internal TIPS – \$29,800,000 on 4/1/2020, \$43.5mm on 3/27/2020
- BNY Intermediate Credit Index CTF - \$144mm on 3/24/2020

As equity markets recovered in April, particularly in the US, staff processed the following sales on April 30<sup>th</sup> as part of our routine April rebalancing:

KRS Equity Rebalance - Sells	
Pension	\$481,065,000.00
Insurance	\$245,790,000.00
Total	\$726,855,000.00

The proceeds of the sale were deposited with Lord Abbett into our existing short duration fixed income accounts. My rough analysis says that the overweight position we held in April made us roughly 13.8% over the month, or about \$100mm on the \$726mm we sold.

### New Investments

**Blue Torch:** At the April 15<sup>th</sup>, 2020 meeting, the Investment Committee approved a \$200mm investment with Blue Torch in their distressed & special situations strategy. The investment will be part of our Specialty Finance allocation, and all plans will participate.

**Putnam:** At the May 5<sup>th</sup>, 2020 meeting, the Investment Committee approved the termination of the PIMCO All Asset Fund and the Nuveen Real Return investments, and voted to replace them with Putnam's Dynamic Asset allocation strategy. All of these investments are part of our Real Return allocation, and all plans are participating.

### Actuarial Assumptions

The Actuarial sub-committee met on May 13<sup>th</sup> to review the current economic assumptions for payroll growth, inflation, and investment returns. The sub-committee ultimately voted to keep the current assumptions in place, which is supported by our actuary GRS, who also participated in the meeting. The full Investment Committee ratified this decision at their meeting on May 21<sup>st</sup>, 2020.

Current Economic Assumptions		
	KERS & SPRS	CERS, CERS-Haz, KERS-Haz, All Insurance
Payroll Growth	0.00%	2.00%
Inflation	2.30%	2.30%
Investment Return	5.25%	6.25%

## Asset Allocation - Pension

KRS - PENSION FUND ALLOCATIONS											5/8/2020
Category	KERS - PEN					KERSH - PEN					
	Market Value	Actual	Target	Diff	Market Diff	Market Value	Actual	Target	Diff	Market Diff	
Growth	\$ 1,320,580,959	57.9%	53.50%	4.4%	\$ 101,345,858	\$ 440,420,890	65.4%	62.50%	2.9%	\$ 19,714,717	
US Equity	\$ 388,617,154	17.1%	15.75%	1.3%	\$ 29,683,456	\$ 131,286,042	19.5%	18.75%	0.8%	\$ 5,074,190	
Non-US Equity	\$ 382,414,807	16.8%	15.75%	1.0%	\$ 23,481,109	\$ 137,354,825	20.4%	18.75%	1.7%	\$ 11,142,973	
Private Equity	\$ 189,646,687	8.3%	7.00%	1.3%	\$ 30,120,599	\$ 59,669,946	8.9%	10.00%	-1.1%	\$ (7,643,042)	
High Yield/Specialty Credit	\$ 359,902,311	15.8%	15.00%	0.8%	\$ 18,060,694	\$ 112,110,077	16.7%	15.00%	1.7%	\$ 11,140,596	
Liquidity	\$ 663,173,040	29.1%	23.50%	5.6%	\$ 127,621,173	\$ 135,986,236	20.2%	14.50%	5.7%	\$ 38,382,404	
Core Fixed Income	\$ 519,091,144	22.8%	20.50%	2.3%	\$ 51,907,601	\$ 119,485,404	17.8%	13.50%	4.3%	\$ 28,612,871	
Cash	\$ 144,081,896	6.3%	3.00%	3.3%	\$ 75,713,573	\$ 16,500,832	2.5%	1.00%	1.5%	\$ 9,769,533	
Diversifying Strategies	\$ 293,350,369	12.9%	23.00%	-10.1%	\$ (230,806,777)	\$ 95,193,968	14.1%	23.00%	-8.9%	\$ (59,625,903)	
Real Return	\$ 113,016,654	5.0%	15.00%	-10.0%	\$ (228,824,964)	\$ 41,931,313	6.2%	15.00%	-8.8%	\$ (59,038,169)	
Real Estate	\$ 97,678,110	4.3%	5.00%	-0.7%	\$ (16,269,096)	\$ 29,286,018	4.4%	5.00%	-0.6%	\$ (4,370,476)	
Abs Ret / Opportunistic	\$ 82,655,605	3.6%	3.00%	0.6%	\$ 14,287,282	\$ 23,976,638	3.6%	3.00%	0.6%	\$ 3,782,742	
Miscellaneous	\$ 1,839,746	0.1%	0.00%	0.1%	\$ 1,839,746	\$ 1,528,783	0.2%	0.00%	0.2%	\$ 1,528,783	
TOTAL PORTFOLIO	\$2,278,944,115					\$673,129,877					
Category	CERS - PEN					CERSH - PEN					
	Market Value	Actual	Target	Diff	Market Diff	Market Value	Actual	Target	Diff	Market Diff	
Growth	\$4,504,589,717	65.5%	62.50%	3.0%	\$ 204,618,407	\$1,521,004,619	65.5%	62.50%	3.0%	\$ 70,169,144	
US Equity	\$1,296,420,434	18.8%	18.75%	0.1%	\$ 6,429,041	\$ 447,408,805	19.3%	18.75%	0.5%	\$ 12,158,162	
Non-US Equity	\$1,402,816,878	20.4%	18.75%	1.6%	\$ 112,825,485	\$ 470,387,131	20.3%	18.75%	1.5%	\$ 35,136,488	
Private Equity	\$651,034,629	9.5%	10.00%	-0.5%	\$ (36,960,781)	\$ 220,033,872	9.5%	10.00%	-0.5%	\$ (12,099,804)	
High Yield/Specialty Credit	\$1,154,317,776	16.8%	15.00%	1.8%	\$ 122,324,661	\$ 383,174,812	16.5%	15.00%	1.5%	\$ 34,974,298	
Liquidity	\$1,310,734,795	19.1%	14.50%	4.6%	\$ 313,141,451	\$449,517,050	19.4%	14.50%	4.9%	\$ 112,923,220	
Core Fixed Income	\$1,130,630,884	16.4%	13.50%	2.9%	\$ 201,837,081	\$ 350,743,133	15.1%	13.50%	1.6%	\$ 37,362,670	
Cash	\$180,103,911	2.6%	1.00%	1.6%	\$ 111,304,370	\$ 98,773,917	4.3%	1.00%	3.3%	\$ 75,560,550	
Diversifying Strategies	\$1,063,069,654	15.5%	23.00%	-7.5%	\$ (519,319,788)	\$ 349,024,848	15.0%	23.00%	-8.0%	\$ (184,882,607)	
Real Return	\$464,766,932	6.8%	15.00%	-8.2%	\$ (567,226,183)	\$ 157,425,415	6.8%	15.00%	-8.2%	\$ (190,775,099)	
Real Estate	\$325,973,864	4.7%	5.00%	-0.3%	\$ (18,023,841)	\$ 103,015,433	4.4%	5.00%	-0.6%	\$ (13,051,405)	
Abs Ret / Opportunistic	\$272,328,859	4.0%	3.00%	1.0%	\$ 65,930,236	\$ 88,584,000	3.8%	3.00%	0.8%	\$ 18,943,897	
Miscellaneous	\$1,559,930	0.0%	0.00%	0.0%	\$ 1,559,930	\$ 1,790,243	0.1%	0.00%	0.1%	\$ 1,790,243	
TOTAL PORTFOLIO	\$6,879,954,095					\$2,321,336,761					
Category	SPRS - PEN					PENSION TOTAL FUND					
	Market Value	Actual	Target	Diff	Market Diff	Market Value	Actual	Target	Diff	Market Diff	
Growth	\$160,006,094	57.2%	53.50%	3.7%	\$ 10,427,880	\$ 7,946,602,278	63.9%	60.6%	3.3%	\$ 406,276,005	
US Equity	\$ 48,564,340	17.4%	15.75%	1.6%	\$ 4,529,632	\$ 2,312,296,775	18.6%	18.1%	0.5%	\$ 57,874,482	
Non-US Equity	\$ 48,347,233	17.3%	15.75%	1.5%	\$ 4,312,525	\$ 2,441,320,872	19.6%	18.1%	1.5%	\$ 186,898,579	
Private Equity	\$ 18,132,928	6.5%	7.00%	-0.5%	\$ (1,438,053)	\$ 1,138,518,062	9.2%	9.4%	-0.2%	\$ (28,021,080)	
High Yield/Specialty Credit	\$ 44,961,593	16.1%	15.00%	1.1%	\$ 3,023,776	\$ 2,054,466,569	16.5%	15.0%	1.5%	\$ 189,524,025	
Liquidity	\$80,236,806	28.7%	23.50%	5.2%	\$ 14,534,226	\$ 2,639,647,928	21.2%	16.4%	4.9%	\$ 606,602,475	
Core Fixed Income	\$ 69,413,543	24.8%	20.50%	4.3%	\$ 12,098,526	\$ 2,189,364,107	17.6%	14.9%	2.7%	\$ 331,818,748	
Cash	\$ 10,823,264	3.9%	3.00%	0.9%	\$ 2,435,700	\$ 450,283,820	3.6%	1.4%	2.2%	\$ 274,783,726	
Diversifying Strategies	\$ 38,982,328	13.9%	23.00%	-9.1%	\$ (25,322,325)	\$ 1,839,621,167	14.8%	23.0%	-8.2%	\$ (1,019,957,400)	
Real Return	\$ 16,797,827	6.0%	15.00%	-9.0%	\$ (25,139,990)	\$ 793,938,140	6.4%	15.0%	-8.6%	\$ (1,071,004,404)	
Real Estate	\$ 12,487,405	4.5%	5.00%	-0.5%	\$ (1,491,867)	\$ 568,440,830	4.6%	5.0%	-0.4%	\$ (53,206,684)	
Abs Ret / Opportunistic	\$ 9,697,095	3.5%	3.00%	0.5%	\$ 1,309,532	\$ 477,242,197	3.8%	3.0%	0.8%	\$ 104,253,688	
Miscellaneous	\$ 360,219	0.1%	0.00%	0.1%	\$ 360,219	\$ 7,078,920	0.1%	0.0%	0.1%	\$ 7,078,920	
TOTAL PORTFOLIO	\$279,585,446					\$12,432,950,294					



## Asset Allocation – Insurance

KRS - INSURANCE FUND ALLOCATIONS										5/8/2020
Category	KERS - INS					KERSH - INS				
	Market Value	Actual	Target	Diff	Market Diff	Market Value	Actual	Target	Diff	Market Diff
Growth	\$ 578,830,263	64.2%	62.50%	1.7%	\$ 15,751,085	\$ 315,378,451	65.9%	62.50%	3.4%	\$ 16,205,036
US Equity	\$ 210,485,493	23.4%	18.75%	4.6%	\$ 41,561,740	\$ 94,593,290	19.8%	18.75%	1.0%	\$ 4,841,265
Non-US Equity	\$ 200,463,380	22.3%	18.75%	3.5%	\$ 31,539,627	\$ 102,738,975	21.5%	18.75%	2.7%	\$ 12,986,950
Private Equity	\$ 56,247,086	6.2%	10.00%	-3.8%	\$ (33,845,583)	\$ 51,656,907	10.8%	10.00%	0.8%	\$ 3,789,161
High Yield/Specialty Credit	\$ 111,634,304	12.4%	15.00%	-2.6%	\$ (23,504,698)	\$ 66,389,279	13.9%	15.00%	-1.1%	\$ (5,412,341)
Liquidity	\$ 206,845,177	23.0%	14.50%	8.5%	\$ 76,210,808	\$ 89,434,534	18.7%	14.50%	4.2%	\$ 20,026,302
Core Fixed Income	\$ 176,120,114	19.5%	13.50%	6.0%	\$ 54,495,012	\$ 82,554,402	17.2%	13.50%	3.7%	\$ 17,932,944
Cash	\$ 30,725,063	3.4%	1.00%	2.4%	\$ 21,715,797	\$ 6,880,132	1.4%	1.00%	0.4%	\$ 2,093,358
Diversifying Strategies	\$ 115,279,813	12.8%	23.00%	-10.2%	\$ (91,933,325)	\$ 73,879,778	15.4%	23.00%	-7.6%	\$ (36,216,039)
Real Return	\$ 51,656,725	5.7%	15.00%	-9.3%	\$ (83,482,278)	\$ 30,475,408	6.4%	15.00%	-8.6%	\$ (41,326,212)
Real Estate	\$ 27,551,766	3.1%	5.00%	-1.9%	\$ (17,494,568)	\$ 20,479,061	4.3%	5.00%	-0.7%	\$ (3,454,812)
Abs Ret / Opportunistic	\$ 36,071,321	4.0%	3.00%	1.0%	\$ 9,043,521	\$ 22,925,308	4.8%	3.00%	1.8%	\$ 8,564,984
Miscellaneous	\$ (28,569)	0.0%	0.00%	0.0%	\$ (28,569)	\$ (15,298)	0.0%	0.00%	0.0%	\$ (15,298)
TOTAL PORTFOLIO	\$ 900,926,684					\$ 478,677,464				

Category	CERS - INS					CERSH - INS				
	Market Value	Actual	Target	Diff	Market Diff	Market Value	Actual	Target	Diff	Market Diff
Growth	\$1,517,347,657	65.8%	62.50%	3.3%	\$ 76,632,690	\$804,834,777	66.0%	62.50%	3.5%	\$ 42,723,414
US Equity	\$ 437,878,958	19.0%	18.75%	0.2%	\$ 5,664,467	\$ 224,711,158	18.4%	18.75%	-0.3%	\$ (3,922,251)
Non-US Equity	\$ 486,784,114	21.1%	18.75%	2.4%	\$ 54,569,624	\$ 253,869,442	20.8%	18.75%	2.1%	\$ 25,236,033
Private Equity	\$ 270,409,643	11.7%	10.00%	1.7%	\$ 39,895,249	\$ 152,298,123	12.5%	10.00%	2.5%	\$ 30,360,305
High Yield/Specialty Credit	\$ 322,274,942	14.0%	15.00%	-1.0%	\$ (23,496,650)	\$ 173,956,054	14.3%	15.00%	-0.7%	\$ (8,950,673)
Liquidity	\$454,522,307	19.7%	14.50%	5.2%	\$ 120,276,434	\$235,405,071	19.3%	14.50%	4.8%	\$ 58,595,235
Core Fixed Income	\$ 418,198,893	18.1%	13.50%	4.6%	\$ 107,004,460	\$ 215,033,429	17.6%	13.50%	4.1%	\$ 50,417,375
Cash	\$ 36,323,414	1.6%	1.00%	0.6%	\$ 13,271,975	\$ 20,371,642	1.7%	1.00%	0.7%	\$ 8,177,860
Diversifying Strategies	\$ 333,347,254	14.5%	23.00%	-8.5%	\$ (196,835,854)	\$ 179,176,980	14.7%	23.00%	-8.3%	\$ (101,280,002)
Real Return	\$ 143,156,068	6.2%	15.00%	-8.8%	\$ (202,615,524)	\$ 74,796,774	6.1%	15.00%	-8.9%	\$ (108,109,953)
Real Estate	\$ 88,805,770	3.9%	5.00%	-1.1%	\$ (26,451,427)	\$ 48,626,471	4.0%	5.00%	-1.0%	\$ (12,342,438)
Abs Ret / Opportunistic	\$ 101,385,416	4.4%	3.00%	1.4%	\$ 32,231,097	\$ 55,753,734	4.6%	3.00%	1.6%	\$ 19,172,388
Miscellaneous	\$ (73,270)	0.0%	0.00%	0.0%	\$ (73,270)	\$ (38,647)	0.0%	0.00%	0.0%	\$ (38,647)
TOTAL PORTFOLIO	\$ 2,305,143,947					\$ 1,219,378,180				

Category	SPRS - INS					INSURANCE TOTAL FUND				
	Market Value	Actual	Target	Diff	Market Diff	Market Value	Actual	Target	Diff	Market Diff
Growth	\$122,786,663	65.8%	62.50%	3.3%	\$ 6,211,110	\$ 3,339,177,810	65.6%	62.5%	3.1%	\$ 157,523,335
US Equity	\$ 36,211,337	19.4%	18.75%	0.7%	\$ 1,238,672	\$ 1,003,880,236	19.7%	18.75%	1.0%	\$ 49,383,893
Non-US Equity	\$ 39,399,432	21.1%	18.75%	2.4%	\$ 4,426,766	\$ 1,083,255,343	21.3%	18.75%	2.5%	\$ 128,759,000
Private Equity	\$ 23,272,773	12.5%	10.00%	2.5%	\$ 4,620,684	\$ 553,884,531	10.9%	10.0%	0.9%	\$ 44,819,815
High Yield/Specialty Credit	\$ 23,903,121	12.8%	15.00%	-2.2%	\$ (4,075,012)	\$ 698,157,700	13.7%	15.0%	-1.3%	\$ (65,439,374)
Liquidity	\$37,215,778	20.0%	14.50%	5.5%	\$ 10,170,249	\$ 1,023,422,867	20.1%	14.5%	5.6%	\$ 285,279,028
Core Fixed Income	\$ 33,252,131	17.8%	13.50%	4.3%	\$ 8,071,811	\$ 925,158,968	18.2%	13.5%	4.7%	\$ 237,921,602
Cash	\$ 3,963,647	2.1%	1.00%	1.1%	\$ 2,098,438	\$ 98,263,898	1.9%	1.0%	0.9%	\$ 47,357,427
Diversifying Strategies	\$ 26,524,340	14.2%	23.00%	-8.8%	\$ (16,375,463)	\$ 728,208,164	14.3%	23.0%	-8.7%	\$ (442,640,683)
Real Return	\$ 10,489,706	5.6%	15.00%	-9.4%	\$ (17,488,426)	\$ 310,574,682	6.1%	15.0%	-8.9%	\$ (453,022,392)
Real Estate	\$ 7,523,954	4.0%	5.00%	-1.0%	\$ (1,802,090)	\$ 192,987,023	3.8%	5.0%	-1.2%	\$ (61,545,335)
Abs Ret / Opportunistic	\$ 8,510,680	4.6%	3.00%	1.6%	\$ 2,915,054	\$ 224,646,459	4.4%	3.0%	1.4%	\$ 71,927,045
Miscellaneous	\$ (5,896)	0.0%	0.00%	0.0%	\$ (5,896)	\$ (161,680)	0.0%	0.0%	0.0%	\$ (161,680)
TOTAL PORTFOLIO	\$ 186,520,885					\$ 5,090,647,160				

## Performance

### Pension

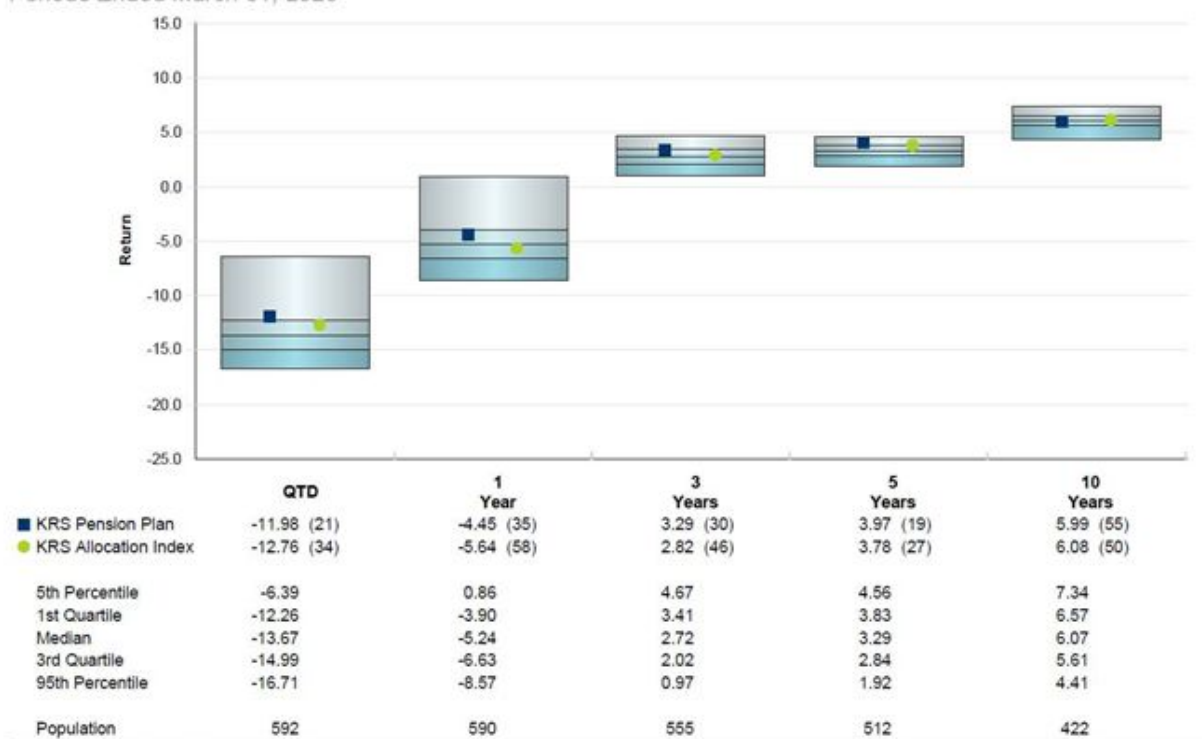
Wilshire Consulting



## Plan Sponsor Peer Group Analysis

KRS Pension Plan vs All Public Plans-Total Fund

Periods Ended March 31, 2020



Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.

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**Pension – Individual Plans**

	Allocation		Performance (%) net of fees							
	Market Value \$	%	1 Month	QTD	FYTD	1 Year	3 Years	5 Years	Since Inception	Inception Date
<b>KRS Pension Plan</b>	<b>11,738,913,646</b>	<b>100.00</b>	<b>-8.65</b>	<b>-11.98</b>	<b>-7.08</b>	<b>-4.45</b>	<b>3.29</b>	<b>3.97</b>	<b>8.63</b>	<b>4/1/1984</b>
KRS Allocation Index			-9.23	-12.76	-8.23	-5.64	2.82	3.78	8.72	
Value Added			0.58	0.78	1.15	1.19	0.47	0.19	-0.09	
KRS IPS Index			-9.20	-12.69	-8.10	-5.48				
Value Added			0.55	0.71	1.02	1.03				
<b>KERS Pension Plan</b>	<b>2,129,622,388</b>	<b>18.14</b>	<b>-7.75</b>	<b>-10.26</b>	<b>-5.78</b>	<b>-3.35</b>	<b>3.34</b>	<b>3.80</b>	<b>8.60</b>	<b>4/1/1984</b>
KERS Allocation Index			-8.82	-11.66	-7.37	-4.84	2.78	3.45	8.67	
Value Added			1.07	1.40	1.59	1.49	0.56	0.35	-0.07	
KERS IPS Index			-9.12	-12.04	-7.73	-5.22				
Value Added			1.37	1.78	1.95	1.87				
Assumed Rate 5.25%			0.43	1.29	3.91	5.25				
Value Added			-8.18	-11.55	-9.69	-8.60				
<b>KERS (H) Pension Plan</b>	<b>633,301,939</b>	<b>5.39</b>	<b>-9.02</b>	<b>-12.53</b>	<b>-7.69</b>	<b>-5.09</b>	<b>3.06</b>	<b>3.88</b>	<b>8.61</b>	<b>4/1/1984</b>
KERS (H) Allocation Index			-9.31	-12.96	-8.33	-5.72	3.03	3.84	8.72	
Value Added			0.29	0.43	0.64	0.63	0.03	0.04	-0.11	
KERS (H) IPS Index			-9.21	-12.81	-8.15	-5.51				
Value Added			0.19	0.28	0.46	0.42				
Assumed Rate 6.25%			0.51	1.53	4.65	6.25				
Value Added			-9.53	-14.06	-12.34	-11.34				
<b>CERS Pension Plan</b>	<b>6,515,091,118</b>	<b>55.50</b>	<b>-8.88</b>	<b>-12.41</b>	<b>-7.47</b>	<b>-4.83</b>	<b>3.19</b>	<b>3.95</b>	<b>8.62</b>	<b>4/1/1984</b>
CERS Allocation Index			-9.31	-12.96	-8.35	-5.73	3.03	3.84	8.72	
Value Added			0.43	0.55	0.88	0.90	0.16	0.11	-0.10	
CERS IPS Index			-9.21	-12.81	-8.17	-5.53				
Value Added			0.33	0.40	0.70	0.70				
Assumed Rate 6.25%			0.51	1.53	4.65	6.25				
Value Added			-9.39	-13.94	-12.12	-11.08				

	Allocation		Performance (%) net of fees							
	Market Value \$	%	1 Month	QTD	FYTD	1 Year	3 Years	5 Years	Since Inception	Inception Date
<b>CERS (H) Pension Plan</b>	<b>2,196,814,128</b>	<b>18.71</b>	<b>-8.85</b>	<b>-12.44</b>	<b>-7.57</b>	<b>-4.92</b>	<b>3.17</b>	<b>3.96</b>	<b>8.62</b>	<b>4/1/1984</b>
CERS (H) Allocation Index			-9.33	-13.05	-8.47	-5.85	3.02	3.83	8.72	
Value Added			0.48	0.61	0.90	0.93	0.15	0.13	-0.10	
CERS (H) IPS Index			-9.23	-12.90	-8.30	-5.65				
Value Added			0.38	0.46	0.73	0.73				
Assumed Rate 6.25%			0.51	1.53	4.65	6.25				
Value Added			-9.36	-13.97	-12.22	-11.17				
<b>SPRS Pension Plan</b>	<b>264,084,115</b>	<b>2.25</b>	<b>-8.22</b>	<b>-10.77</b>	<b>-6.24</b>	<b>-3.74</b>	<b>3.20</b>	<b>3.58</b>	<b>8.57</b>	<b>4/1/1984</b>
SPRS Allocation Index			-8.50	-11.26	-6.85	-4.31	3.38	3.98	8.74	
Value Added			0.28	0.49	0.61	0.57	-0.18	-0.40	-0.17	
SPRS IPS Index			-8.79	-11.64	-7.21	-4.70				
Value Added			0.57	0.87	0.97	0.96				
Assumed Rate 5.25%			0.43	1.29	3.91	5.25				
Value Added			-8.65	-12.06	-10.15	-8.99				

## Performance - Insurance

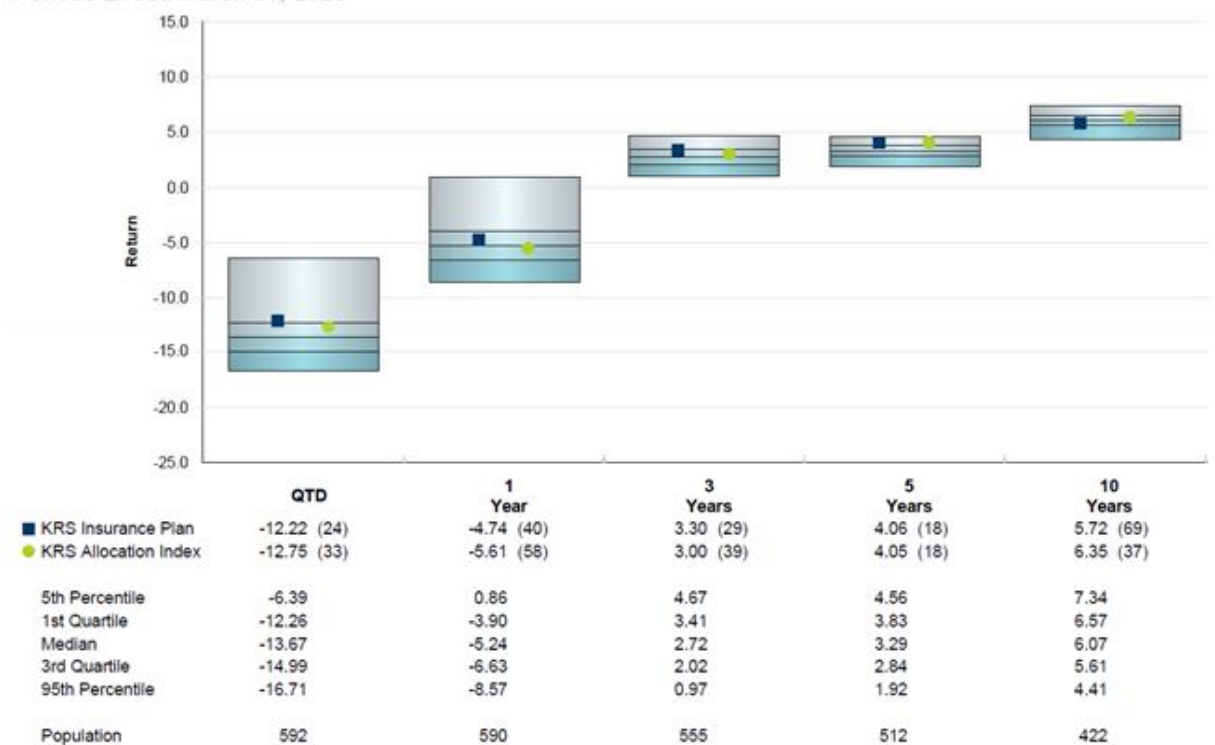
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### Plan Sponsor Peer Group Analysis

KRS Insurance Plan vs All Public Plans-Total Fund

Periods Ended March 31, 2020



Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.

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**Insurance – Individual Plans**

	Allocation		Performance (%) net of fees								
	Market Value \$	%	1 Month	QTD	FYTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<b>KRS Insurance Plan</b>	<b>5,052,840,830</b>	<b>100.00</b>	<b>-8.65</b>	<b>-12.22</b>	<b>-7.36</b>	<b>-4.74</b>	<b>3.30</b>	<b>4.06</b>	<b>5.72</b>	<b>6.99</b>	<b>4/1/1987</b>
KRS Allocation Index			-9.07	-12.75	-8.22	-5.61	3.00	4.05	6.35	7.35	
Value Added			0.42	0.53	0.86	0.87	0.30	0.01	-0.63	-0.36	
KRS IPS Index			-9.05	-12.71	-8.16	-5.53					
Value Added			0.40	0.49	0.80	0.79					
<b>KERS Insurance Plan</b>	<b>888,639,941</b>	<b>17.59</b>	<b>-9.33</b>	<b>-12.84</b>	<b>-8.18</b>	<b>-5.72</b>	<b>2.38</b>	<b>3.43</b>	<b>5.32</b>	<b>6.86</b>	<b>4/1/1987</b>
KERS Allocation Index			-9.11	-12.58	-8.29	-5.72	2.72	3.83	6.21	7.31	
Value Added			-0.22	-0.26	0.11	0.00	-0.34	-0.40	-0.89	-0.45	
KERS IPS Index			-9.10	-12.55	-8.22	-5.64					
Value Added			-0.23	-0.29	0.04	-0.08					
Assumed Rate 6.25%			0.51	1.53	4.65	6.25					
Value Added			-9.84	-14.37	-12.83	-11.97					
<b>KERS (H) Insurance Plan</b>	<b>478,056,599</b>	<b>9.46</b>	<b>-8.67</b>	<b>-12.18</b>	<b>-7.39</b>	<b>-4.78</b>	<b>3.21</b>	<b>3.98</b>	<b>5.70</b>	<b>6.98</b>	<b>4/1/1987</b>
KERS (H) Allocation Index			-9.05	-12.70	-8.23	-5.63	2.98	3.98	6.29	7.33	
Value Added			0.38	0.52	0.84	0.85	0.23	0.00	-0.59	-0.35	
KERS (H) IPS Index			-9.03	-12.67	-8.17	-5.55					
Value Added			0.36	0.49	0.78	0.77					
Assumed Rate 6.25%			0.51	1.53	4.65	6.25					
Value Added			-9.18	-13.71	-12.04	-11.03					

	Allocation		Performance (%) net of fees								
	Market Value \$	%	1 Month	QTD	FYTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<b>CERS Insurance Plan</b>	2,291,100,316	45.34	-8.62	-12.21	-7.39	-4.78	3.37	4.11	5.76	7.00	4/1/1987
CERS Allocation Index			-9.07	-12.77	-8.19	-5.57	3.05	4.03	6.31	7.34	
Value Added			0.45	0.56	0.80	0.79	0.32	0.08	-0.55	-0.34	
CERS IPS Index			-9.05	-12.73	-8.12	-5.50					
Value Added			0.43	0.52	0.73	0.72					
Assumed Rate 6.25%			0.51	1.53	4.65	6.25					
Value Added			-9.13	-13.74	-12.04	-11.03					
<b>CERS (H) Insurance Plan</b>	1,210,379,803	23.95	-8.38	-12.01	-7.16	-4.52	3.52	4.23	5.82	7.02	4/1/1987
CERS (H) Allocation Index			-9.04	-12.76	-8.21	-5.59	3.05	4.03	6.31	7.34	
Value Added			0.66	0.75	1.05	1.07	0.47	0.20	-0.49	-0.32	
CERS (H) IPS Index			-9.03	-12.72	-8.14	-5.51					
Value Added			0.65	0.71	0.98	0.99					
Assumed Rate 6.25%			0.51	1.53	4.65	6.25					
Value Added			-8.89	-13.54	-11.81	-10.77					
<b>SPRS Insurance Plan</b>	184,664,195	3.65	-8.24	-11.72	-6.88	-4.25	3.61	4.27	5.84	7.02	4/1/1987
SPRS Allocation Index			-8.99	-12.64	-8.08	-5.47	3.07	4.04	6.32	7.34	
Value Added			0.75	0.92	1.20	1.22	0.54	0.23	-0.48	-0.32	
SPRS IPS Index			-8.98	-12.60	-8.02	-5.39					
Value Added			0.74	0.88	1.14	1.14					
Assumed Rate 6.25%			0.51	1.53	4.65	6.25					
Value Added			-8.75	-13.25	-11.53	-10.50					

*The full Q1 2020 Performance Report from Wilshire is attached.*





# WILSHIRE ASSOCIATES

Wilshire Consulting



## Kentucky Retirement Systems

Quarterly Board Summary

*March 31, 2020*



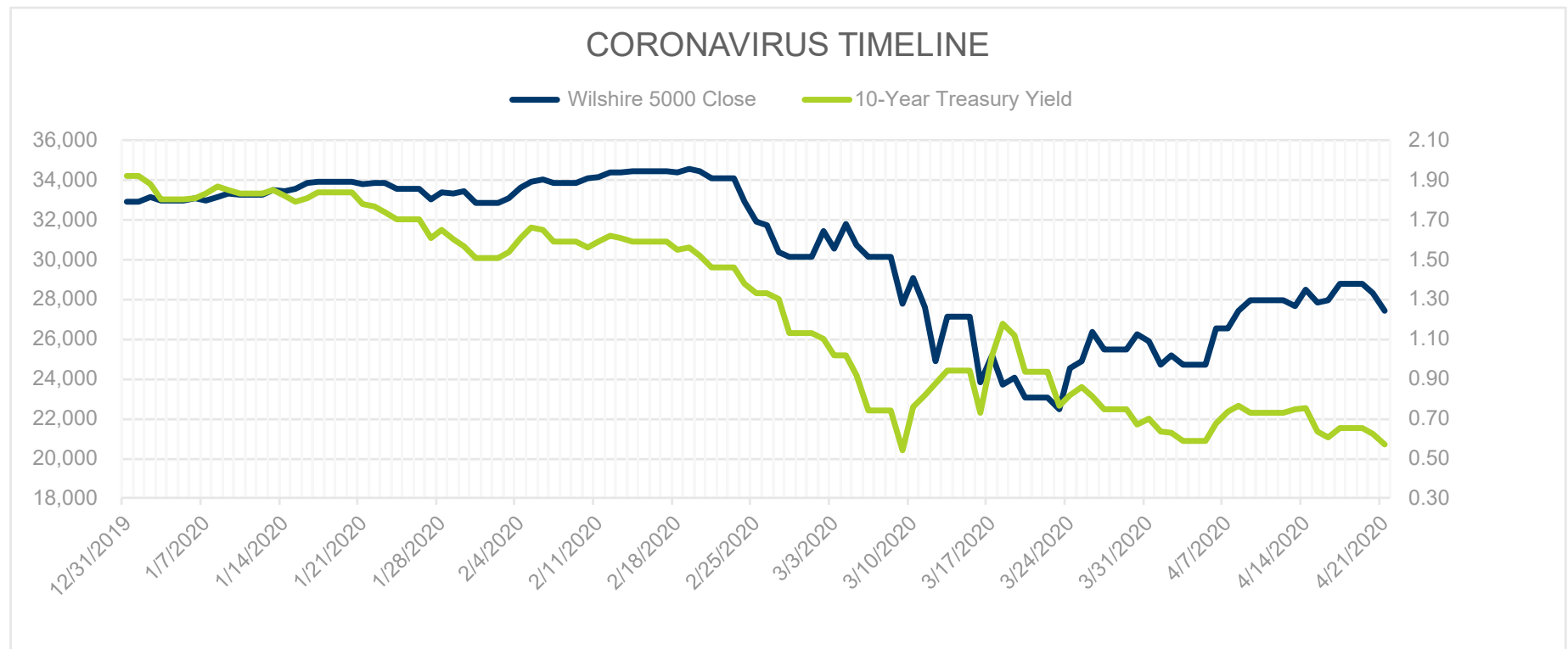


Wilshire Consulting

# CORONAVIRUS TIMELINE

AS OF APRIL 21

<https://wilshire.com/covid19-timeline>





Wilshire Consulting

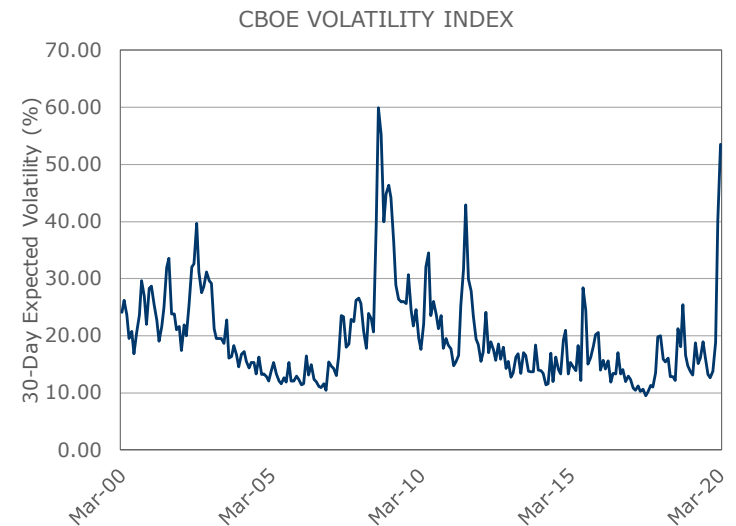
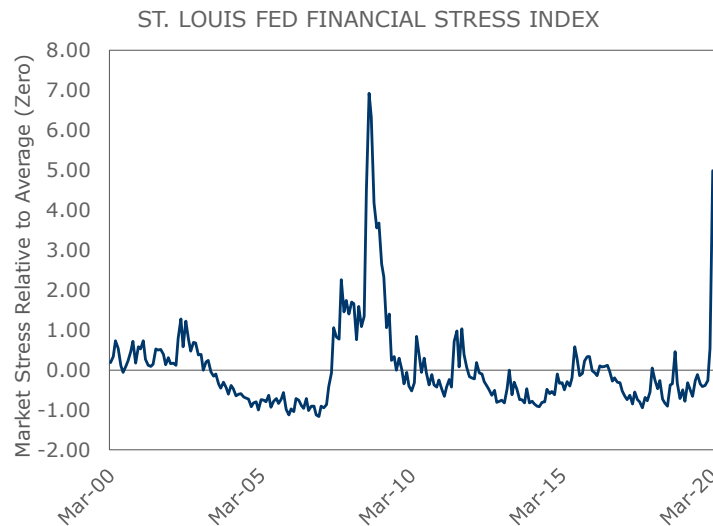
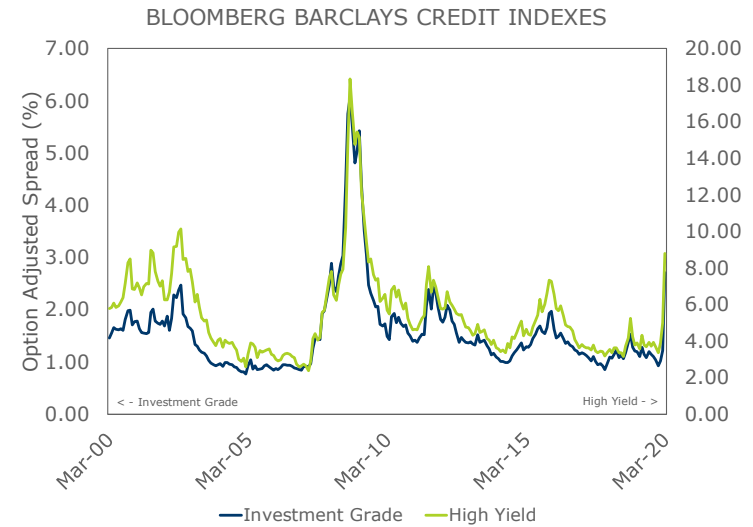
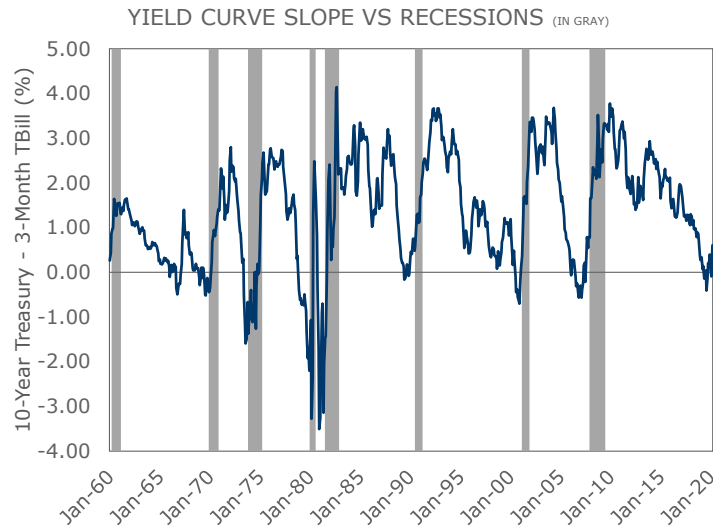
# MARCH 2020 ASSET CLASS ASSUMPTIONS

	EQUITY						FIXED INCOME					REAL ASSETS						
	US Stock	Dev ex-US Stock	Emg Stock	Global ex-US Stock	Global Stock	Private Equity	Cash	Core Bond	LT Core Bond	TIPS	High Yield	Dev ex-US Bond (Hdg)	Real Estate			Comdty	Real Assets	US CPI
COMPOUND RETURN (%)	6.75	7.25	7.25	7.50	7.20	8.40	0.70	1.80	2.70	0.70	5.40	0.80	5.60	5.80	7.00	1.85	5.65	1.15
ARITHMETIC RETURN (%)	8.05	8.70	10.20	9.10	8.50	11.75	0.70	1.95	3.15	0.90	5.85	0.85	6.95	6.95	7.90	2.95	6.00	1.15
EXPECTED RISK (%)	17.00	18.00	26.00	18.95	17.10	28.00	1.25	5.15	9.85	6.00	10.00	3.50	17.00	15.80	14.00	15.00	8.75	1.75
CASH YIELD (%)	2.25	3.75	3.00	3.55	2.80	0.00	0.70	1.90	2.65	1.15	7.40	1.10	4.75	4.75	2.95	0.70	2.50	0.00
<b>CORRELATIONS</b>																		
US Stock	1.00																	
Dev ex-US Stock (USD)	0.81	1.00																
Emerging Mkt Stock	0.74	0.74	1.00															
Global ex-US Stock	0.83	0.96	0.87	1.00														
Global Stock	0.95	0.92	0.83	0.94	1.00													
Private Equity	0.74	0.64	0.62	0.67	0.74	1.00												
Cash Equivalents	-0.05	-0.09	-0.05	-0.08	-0.07	0.00	1.00											
Core Bond	0.28	0.13	0.00	0.09	0.20	0.31	0.19	1.00										
LT Core Bond	0.31	0.16	0.01	0.12	0.23	0.32	0.11	0.93	1.00									
TIPS	-0.05	0.00	0.15	0.05	0.00	-0.03	0.20	0.60	0.47	1.00								
High Yield Bond	0.54	0.39	0.49	0.45	0.51	0.34	-0.10	0.25	0.32	0.05	1.00							
Dev ex-US Bond (Hdg)	0.16	0.25	-0.01	0.18	0.18	0.26	0.10	0.67	0.66	0.39	0.26	1.00						
US RE Securities	0.59	0.47	0.44	0.49	0.56	0.50	-0.05	0.17	0.23	0.10	0.56	0.05	1.00					
Global RE Securities	0.65	0.59	0.56	0.62	0.66	0.58	-0.05	0.17	0.22	0.11	0.62	0.03	0.94	1.00				
Private Real Estate	0.54	0.44	0.44	0.47	0.52	0.51	-0.05	0.19	0.25	0.09	0.57	0.05	0.78	0.76	1.00			
Commodities	0.25	0.34	0.39	0.38	0.32	0.27	0.00	-0.02	-0.02	0.25	0.29	-0.10	0.25	0.28	0.25	1.00		
Real Assets	0.42	0.43	0.50	0.48	0.47	0.43	0.01	0.24	0.25	0.41	0.53	0.06	0.65	0.69	0.69	0.59	1.00	
Inflation (CPI)	-0.10	-0.15	-0.13	-0.15	-0.13	-0.10	0.10	-0.12	-0.12	0.15	-0.08	-0.08	0.05	0.03	0.05	0.44	0.26	1.00



# Wilshire Consulting

## RISK MONITOR



Data sources: Federal Reserve, Bloomberg Barclays

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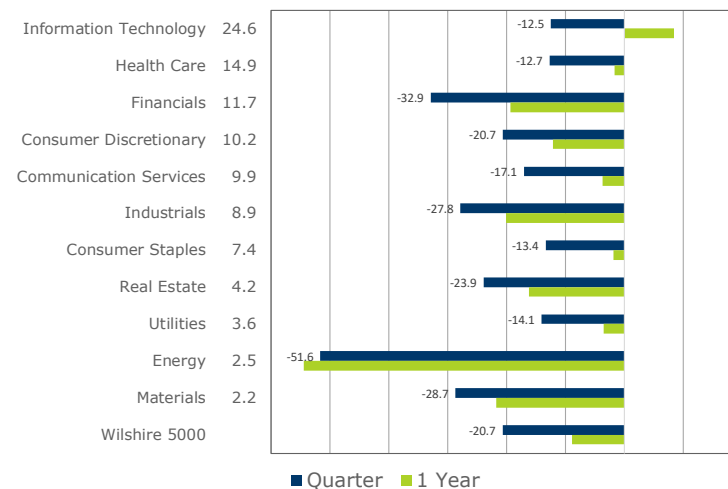


## Wilshire Consulting

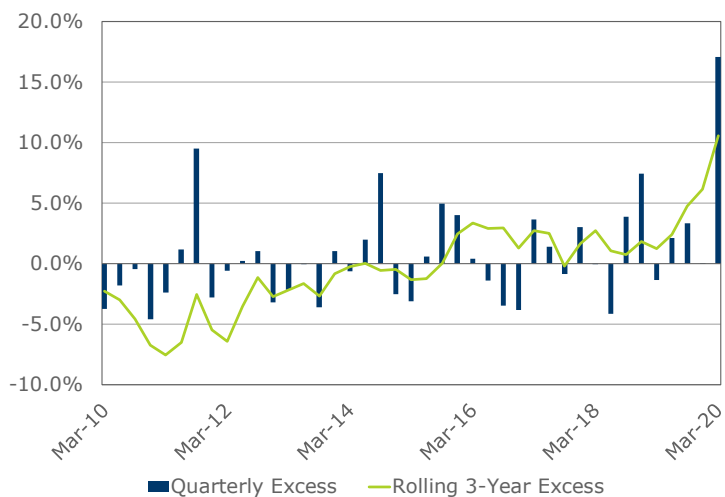
# U.S. EQUITY MARKET

AS OF 3/31/2020	QTR	YTD	1 YR	3 YR	5 YR	10 YR
WILSHIRE 5000 INDEX	-20.7	-20.7	-8.9	4.1	6.0	10.2
WILSHIRE U.S. LARGE CAP	-19.7	-19.7	-7.3	5.0	6.7	10.5
WILSHIRE U.S. SMALL CAP	-31.4	-31.4	-25.0	-5.0	-0.5	7.4
WILSHIRE U.S. LARGE GROWTH	-17.1	-17.1	-2.7	8.6	8.5	11.9
WILSHIRE U.S. LARGE VALUE	-22.1	-22.1	-11.5	1.5	4.7	9.1
WILSHIRE U.S. SMALL GROWTH	-28.2	-28.2	-20.0	-1.1	1.0	8.8
WILSHIRE U.S. SMALL VALUE	-34.5	-34.5	-29.6	-8.9	-2.1	6.0
WILSHIRE REIT INDEX	-25.6	-25.6	-19.4	-2.5	-0.2	7.7
MSCI USA MIN. VOL. INDEX	-17.1	-17.1	-5.9	6.6	7.9	11.8
FTSE RAFI U.S. 1000 INDEX	-26.4	-26.4	-16.1	-0.9	2.8	8.6

U.S. SECTOR WEIGHT AND RETURN (%)

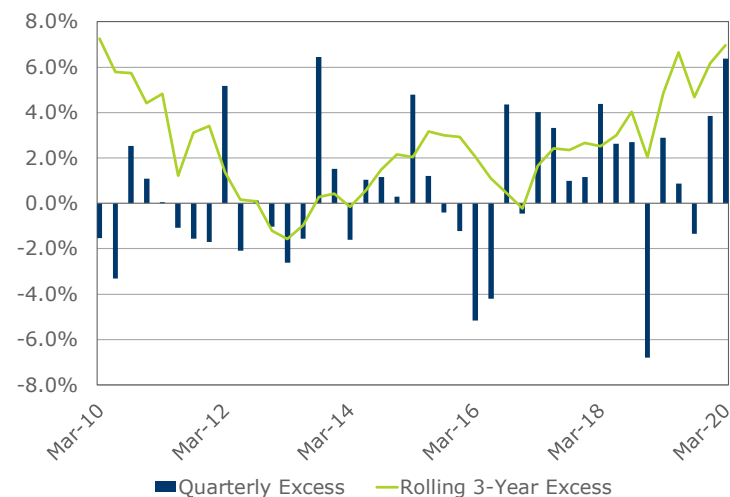


LARGE CAP VS SMALL CAP



Data sources: Wilshire Compass, Wilshire Atlas

LARGE GROWTH VS LARGE VALUE



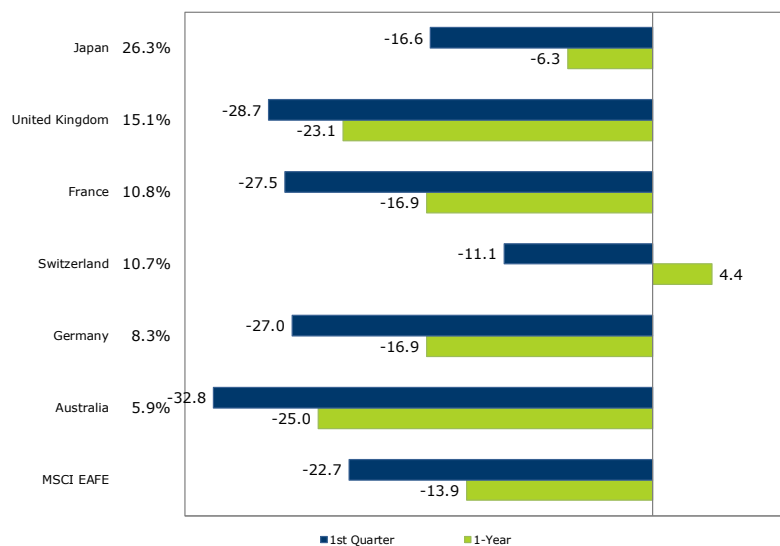


## Wilshire Consulting

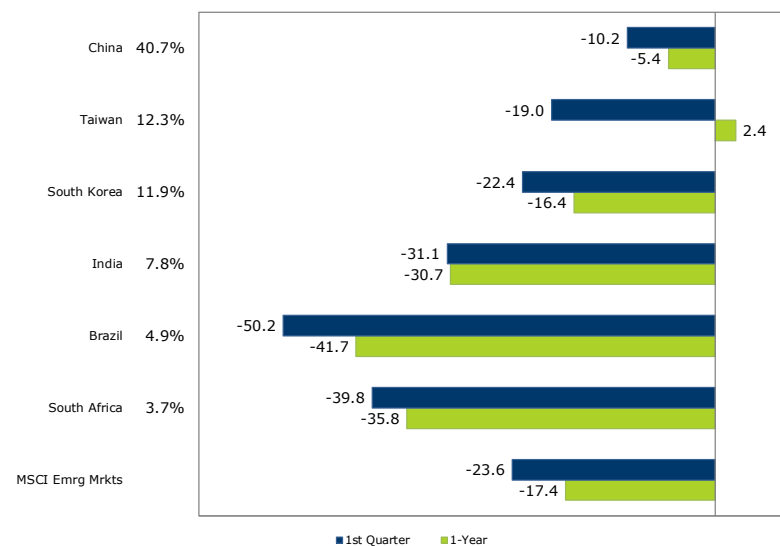
# NON-U.S. EQUITY MARKET

AS OF 3/31/2020	QTR	YTD	1 YR	3 YR	5 YR	10 YR
MSCI ACWI EX-US (\$G)	-23.3	-23.3	-15.1	-1.5	-0.2	2.5
MSCI EAFE (\$G)	-22.7	-22.7	-13.9	-1.3	-0.1	3.2
MSCI EMERGING MARKETS (\$G)	-23.6	-23.6	-17.4	-1.3	0.0	1.0
MSCI FRONTIER MARKETS (\$G)	-26.6	-26.6	-18.7	-4.0	-2.5	1.4
MSCI ACWI EX-US GROWTH (\$G)	-18.2	-18.2	-6.9	2.9	2.5	4.3
MSCI ACWI EX-US VALUE (\$G)	-28.5	-28.5	-23.2	-5.9	-2.9	0.7
MSCI ACWI EX-US SMALL (\$G)	-28.9	-28.9	-20.8	-4.5	-0.3	3.2
MSCI ACWI MINIMUM VOLATILITY	-15.9	-15.9	-7.0	4.3	5.3	8.7
MSCI EAFE MINIMUM VOLATILITY	-16.3	-16.3	-9.0	2.1	2.7	6.1
FTSE RAFI DEVELOPED EX-US	-27.6	-27.6	-20.8	-4.7	-1.8	1.8
MSCI EAFE LC (G)	-20.4	-20.4	-12.1	-1.3	0.3	4.9

MSCI EAFE: LARGEST COUNTRIES & RETURN (USD)



MSCI EM: LARGEST COUNTRIES & RETURN (USD)



Data sources: Wilshire Compass

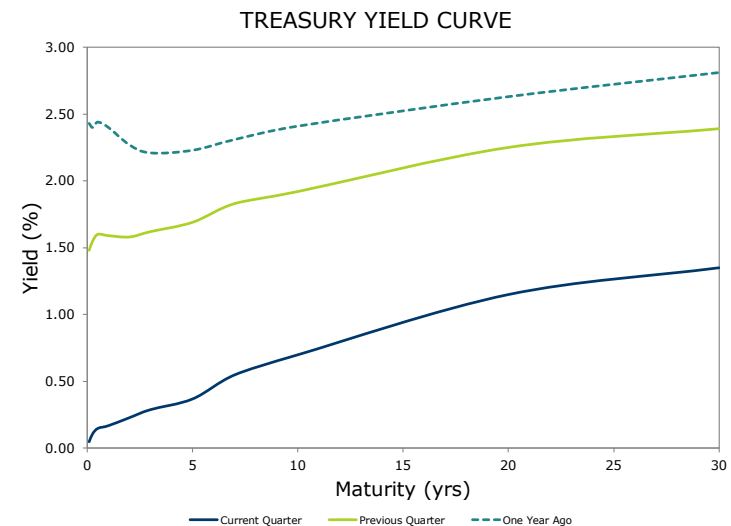
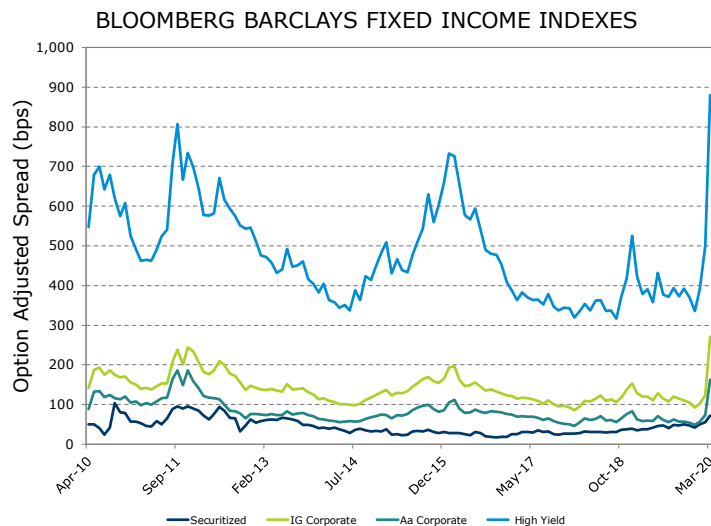


Wilshire Consulting

# U.S. FIXED INCOME

AS OF 3/31/2020	YTM	DURATION	QTR	YTD	1 YR	3 YR	5 YR	10 YR
BLOOMBERG BARCLAYS AGGREGATE	1.6	5.7	3.2	3.2	8.9	4.8	3.4	3.9
BLOOMBERG BARCLAYS TREASURY	0.6	7.0	8.2	8.2	13.2	5.8	3.6	3.8
BLOOMBERG BARCLAYS GOV'T-REL.	2.0	5.6	0.5	0.5	6.2	4.1	2.9	3.4
BLOOMBERG BARCLAYS SECURITIZED	1.4	1.9	2.7	2.7	6.9	4.0	2.9	3.4
BLOOMBERG BARCLAYS CORPORATE	3.4	8.0	-3.6	-3.6	5.0	4.2	3.4	4.9
BLOOMBERG BARCLAYS LT G/C	2.7	16.4	6.2	6.2	19.3	9.7	6.0	8.1
BLOOMBERG BARCLAYS LT TREASURY	1.3	19.2	20.9	20.9	32.6	13.4	7.3	9.0
BLOOMBERG BARCLAYS LT GOV'T-REL.	3.9	12.6	-3.6	-3.6	7.3	6.3	4.3	7.0
BLOOMBERG BARCLAYS LT CORP.	3.9	14.5	-4.5	-4.5	9.6	6.7	4.7	7.3
BLOOMBERG BARCLAYS U.S. TIPS *	0.7	7.8	1.7	1.7	6.8	3.5	2.7	3.5
BLOOMBERG BARCLAYS HIGH YIELD	9.5	4.1	-12.7	-12.7	-6.9	0.8	2.8	5.6
TREASURY BILLS	0.1	0.25	0.6	0.6	2.2	1.8	1.2	0.6

\* Yield and Duration statistics are for a proxy index based on similar maturity, the Bloomberg Barclays U.S. Treasury 7-10 Year Index



Data sources: Wilshire Compass, Bloomberg Barclays, U.S. Treasury

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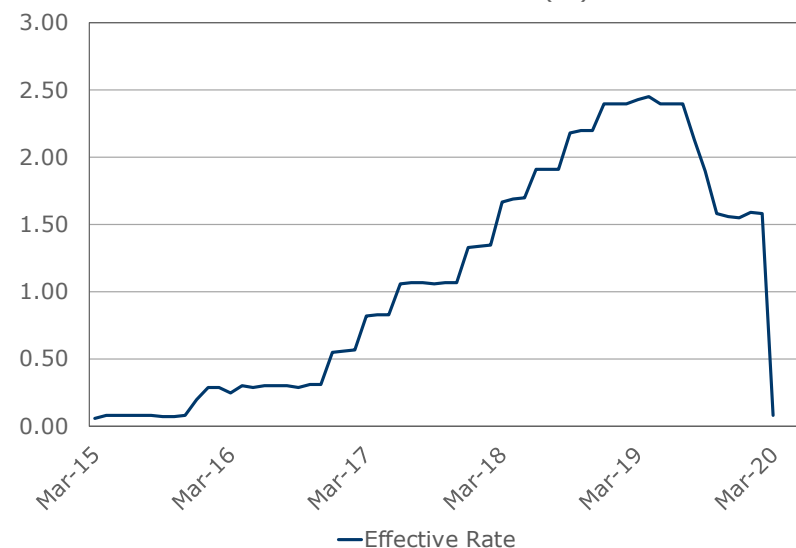


## Wilshire Consulting

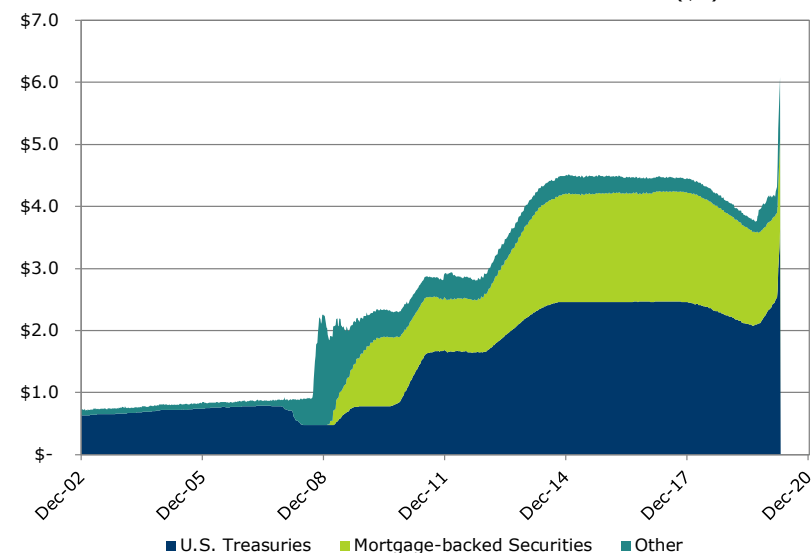
# FEDERAL RESERVE

- Restarted unlimited asset purchase programs
- Reduced reserve requirements for the banking sector
- Restarted Term asset backed securities loan facility (TALF), expanding to include CMBS
- Launched a Primary (PMCCF) and Secondary Corporate Credit Facility (SMCCF)
- Allowed municipal debt to be eligible as collateral in Money Market Fund Liquidity Facility (MMLF) and Commercial Paper Funding Facility (CPFF)
- Total stimulus – FOMC plus U.S. government – in excess of \$3.75 T as of first week of April

FEDERAL FUNDS RATE (%)



FEDERAL RESERVE: BALANCE SHEET FORECAST (\$T)





Wilshire Consulting

# ASSET CLASS PERFORMANCE

ASSET CLASS RETURNS - BEST TO WORST						ANNUALIZED 5-YEAR AS OF 3/2020
2015	2016	2017	2018	2019	2020 YTD	
REITs 4.2%	MLPs 18.3%	Emrg Mrkts 37.7%	T-Bills 1.9%	U.S. Equity 31.0%	Core Bond 3.2%	U.S. Equity 6.0%
U.S. Equity 0.7%	High Yield 17.1%	Developed 25.6%	Core Bond 0.0%	REITs 25.8%	U.S. TIPS 1.7%	Core Bond 3.4%
Core Bond 0.6%	U.S. Equity 13.4%	U.S. Equity 21.0%	U.S. TIPS -1.3%	Developed 22.7%	T-Bills 0.6%	High Yield 2.8%
T-Bills 0.1%	Commodities 11.8%	High Yield 7.5%	High Yield -2.1%	Emrg Mrkts 18.9%	High Yield -12.7%	U.S. TIPS 2.7%
Developed -0.4%	Emrg Mrkts 11.6%	REITs 4.2%	REITs -4.8%	High Yield 14.3%	U.S. Equity -20.7%	T-Bills 1.2%
U.S. TIPS -1.4%	REITs 7.2%	Core Bond 3.6%	U.S. Equity -5.3%	Core Bond 8.7%	Developed -22.7%	Emrg Mrkts 0.0%
High Yield -4.5%	U.S. TIPS 4.7%	U.S. TIPS 3.0%	Commodities -11.2%	U.S. TIPS 8.4%	Commodities -23.3%	Developed -0.1%
Emrg Mrkts -14.6%	Core Bond 2.6%	Commodities 1.7%	MLPs -12.4%	Commodities 7.7%	Emrg Mrkts -23.6%	REITs -0.2%
Commodities -24.7%	Developed 1.5%	T-Bills 0.8%	Developed -13.4%	MLPs 6.6%	REITs -25.6%	Commodities -7.8%
MLPs -32.6%	T-Bills 0.3%	MLPs -6.5%	Emrg Mrkts -14.2%	T-Bills 2.3%	MLPs -57.2%	MLPs -20.7%

Data sources: Wilshire Compass

Note: Developed asset class is developed equity markets ex-U.S., ex-Canada





# KRS Pension Plan

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# Asset Allocation Bucketing

KRS Pension Plan

Periods Ended As of March 31, 2020

	Actual		Target	Difference	
	\$	%		\$	%
<b>Growth</b>	<b>\$7,719,719,291</b>	<b>65.8%</b>	<b>60.7%</b>	<b>\$594,198,707</b>	<b>5.1%</b>
U.S. Equity	\$2,457,550,532	20.9%	18.2%	\$321,068,248	2.7%
Non-U.S. Equity	\$2,208,663,049	18.8%	18.2%	\$72,180,765	0.6%
Private Equity	\$1,117,077,718	9.5%	9.4%	\$13,619,835	0.1%
High Yield/Specialty Credit	\$1,936,427,992	16.5%	15.0%	\$175,590,945	1.5%
<b>Liquidity</b>	<b>\$2,299,100,980</b>	<b>19.6%</b>	<b>16.3%</b>	<b>\$385,658,056</b>	<b>3.3%</b>
Core Fixed Income	\$1,868,303,146	15.9%	15.9%	\$1,815,876	0.0%
Cash	\$430,797,834	3.7%	1.4%	\$266,453,043	2.3%
<b>Diversifying</b>	<b>\$1,720,093,376</b>	<b>14.7%</b>	<b>23.0%</b>	<b>-\$979,856,763</b>	<b>-8.3%</b>
Real Estate	\$574,129,606	4.9%	5.0%	-\$12,816,076	-0.1%
Real Return	\$783,577,440	6.7%	15.0%	-\$977,259,607	-8.3%
Absolute Return	\$362,386,330	3.1%	3.0%	\$10,218,921	0.1%

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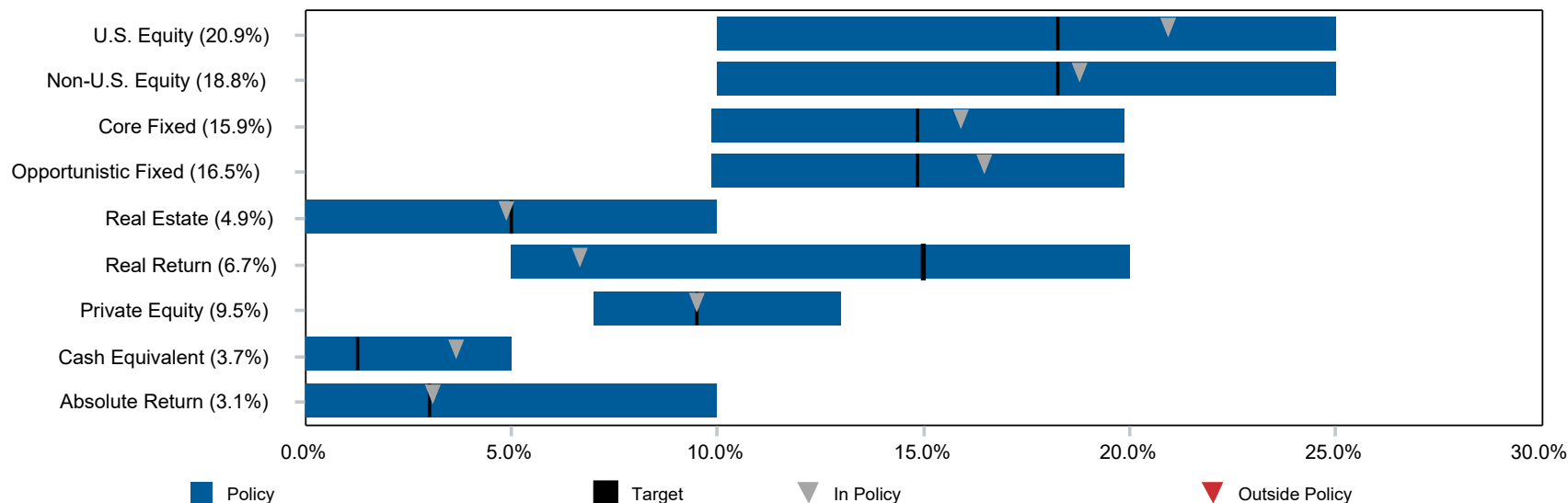


# Asset Allocation Compliance

KRS Pension Plan

Periods Ended As of March 31, 2020

## Executive Summary



	Asset Allocation \$	Asset Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)	Target Allocation (%)	Target Rebalance \$
U.S. Equity	2,457,550,532	20.9	10.0	25.0	18.3	-315,198,791
Non-U.S. Equity	2,208,663,049	18.8	10.0	25.0	18.3	-66,311,309
Core Fixed	1,868,303,146	15.9	9.9	19.9	14.9	-122,139,741
Opportunistic Fixed	1,936,427,992	16.5	9.9	19.9	14.9	-190,264,587
Real Estate	574,129,606	4.9	0.0	10.0	5.0	12,816,076
Real Return	783,577,440	6.7	5.0	20.0	15.0	977,259,607
Private Equity	1,117,077,718	9.5	7.0	13.0	9.5	-1,880,921
Cash Equivalent	430,797,834	3.7	0.0	5.0	1.3	-284,061,413
Absolute Return	362,386,330	3.1	0.0	10.0	3.0	-10,218,920
Total Fund	11,738,913,646	100.0			100.0	

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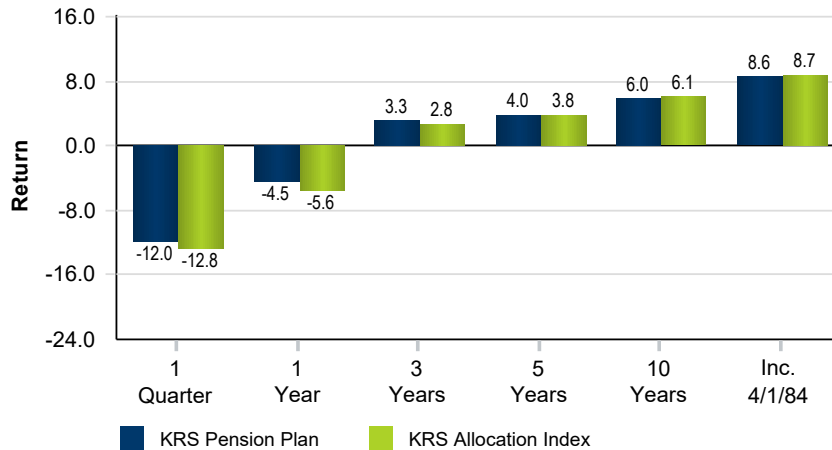


# Total Fund Summary

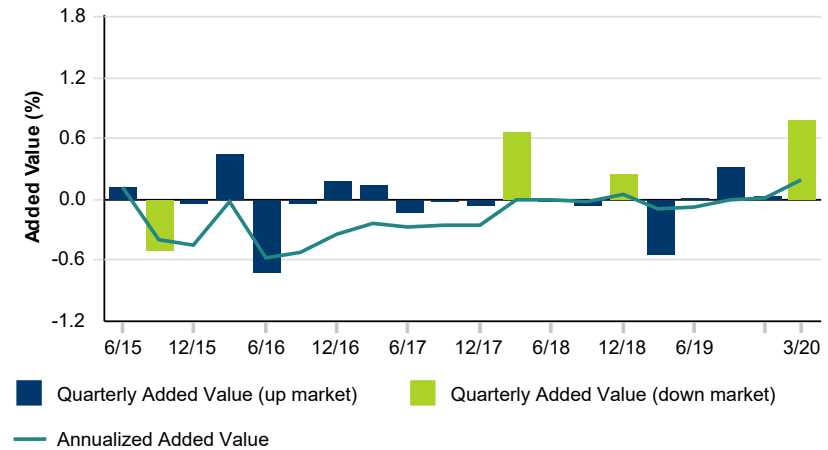
KRS Pension Plan

Periods Ended March 31, 2020

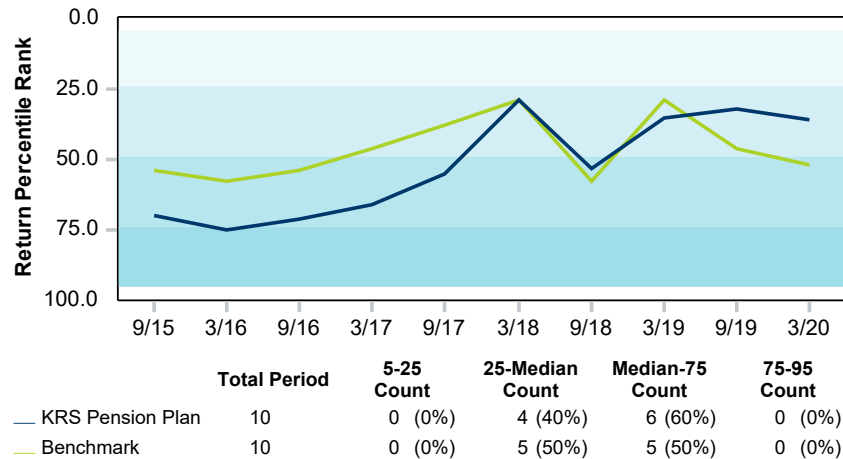
Comparative Performance



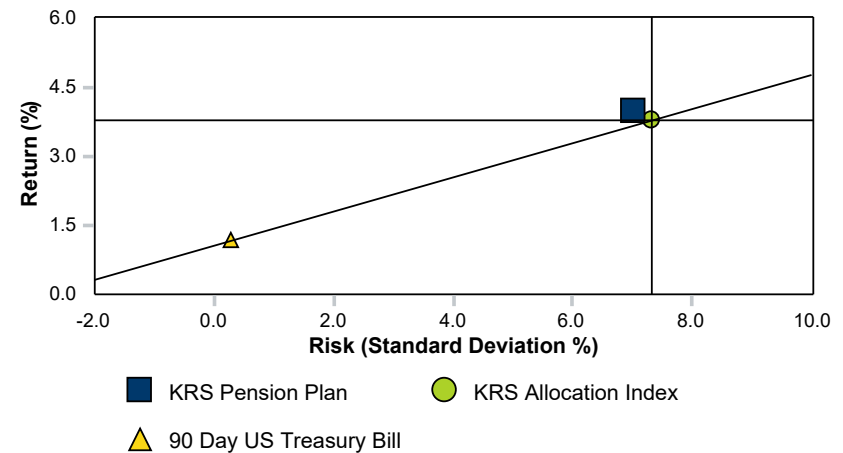
Added Value History



Rolling Percentile Rank: All Public Plans-Total Fund



Risk and Return 04/1/15 - 03/31/20



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# Asset Allocation & Performance

KRS Pension Plan

Periods Ended March 31, 2020

	Allocation		Performance (%) net of fees							
	Market Value \$	%	1 Month	QTD	FYTD	1 Year	3 Years	5 Years	Since Inception	Inception Date
<b>KRS Pension Plan</b>	<b>11,738,913,646</b>	<b>100.00</b>	<b>-8.65</b>	<b>-11.98</b>	<b>-7.08</b>	<b>-4.45</b>	<b>3.29</b>	<b>3.97</b>	<b>8.63</b>	<b>4/1/1984</b>
KRS Allocation Index			-9.23	-12.76	-8.23	-5.64	2.82	3.78	8.72	
Value Added			0.58	0.78	1.15	1.19	0.47	0.19	-0.09	
KRS IPS Index			-9.20	-12.69	-8.10	-5.48				
Value Added			0.55	0.71	1.02	1.03				
<b>KERS Pension Plan</b>	<b>2,129,622,388</b>	<b>18.14</b>	<b>-7.75</b>	<b>-10.26</b>	<b>-5.78</b>	<b>-3.35</b>	<b>3.34</b>	<b>3.80</b>	<b>8.60</b>	<b>4/1/1984</b>
KERS Allocation Index			-8.82	-11.66	-7.37	-4.84	2.78	3.45	8.67	
Value Added			1.07	1.40	1.59	1.49	0.56	0.35	-0.07	
KERS IPS Index			-9.12	-12.04	-7.73	-5.22				
Value Added			1.37	1.78	1.95	1.87				
Assumed Rate 5.25%			0.43	1.29	3.91	5.25				
Value Added			-8.18	-11.55	-9.69	-8.60				
<b>KERS (H) Pension Plan</b>	<b>633,301,939</b>	<b>5.39</b>	<b>-9.02</b>	<b>-12.53</b>	<b>-7.69</b>	<b>-5.09</b>	<b>3.06</b>	<b>3.88</b>	<b>8.61</b>	<b>4/1/1984</b>
KERS (H) Allocation Index			-9.31	-12.96	-8.33	-5.72	3.03	3.84	8.72	
Value Added			0.29	0.43	0.64	0.63	0.03	0.04	-0.11	
KERS (H) IPS Index			-9.21	-12.81	-8.15	-5.51				
Value Added			0.19	0.28	0.46	0.42				
Assumed Rate 6.25%			0.51	1.53	4.65	6.25				
Value Added			-9.53	-14.06	-12.34	-11.34				
<b>CERS Pension Plan</b>	<b>6,515,091,118</b>	<b>55.50</b>	<b>-8.88</b>	<b>-12.41</b>	<b>-7.47</b>	<b>-4.83</b>	<b>3.19</b>	<b>3.95</b>	<b>8.62</b>	<b>4/1/1984</b>
CERS Allocation Index			-9.31	-12.96	-8.35	-5.73	3.03	3.84	8.72	
Value Added			0.43	0.55	0.88	0.90	0.16	0.11	-0.10	
CERS IPS Index			-9.21	-12.81	-8.17	-5.53				
Value Added			0.33	0.40	0.70	0.70				
Assumed Rate 6.25%			0.51	1.53	4.65	6.25				
Value Added			-9.39	-13.94	-12.12	-11.08				

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# Asset Allocation & Performance

KRS Pension Plan

Periods Ended March 31, 2020

	Allocation		Performance (%) net of fees							
	Market Value \$	%	1 Month	QTD	FYTD	1 Year	3 Years	5 Years	Since Inception	Inception Date
<b>CERS (H) Pension Plan</b>	2,196,814,128	18.71	-8.85	-12.44	-7.57	-4.92	3.17	3.96	8.62	4/1/1984
CERS (H) Allocation Index			-9.33	-13.05	-8.47	-5.85	3.02	3.83	8.72	
Value Added			0.48	0.61	0.90	0.93	0.15	0.13	-0.10	
CERS (H) IPS Index			-9.23	-12.90	-8.30	-5.65				
Value Added			0.38	0.46	0.73	0.73				
Assumed Rate 6.25%			0.51	1.53	4.65	6.25				
Value Added			-9.36	-13.97	-12.22	-11.17				
<b>SPRS Pension Plan</b>	264,084,115	2.25	-8.22	-10.77	-6.24	-3.74	3.20	3.58	8.57	4/1/1984
SPRS Allocation Index			-8.50	-11.26	-6.85	-4.31	3.38	3.98	8.74	
Value Added			0.28	0.49	0.61	0.57	-0.18	-0.40	-0.17	
SPRS IPS Index			-8.79	-11.64	-7.21	-4.70				
Value Added			0.57	0.87	0.97	0.96				
Assumed Rate 5.25%			0.43	1.29	3.91	5.25				
Value Added			-8.65	-12.06	-10.15	-8.99				

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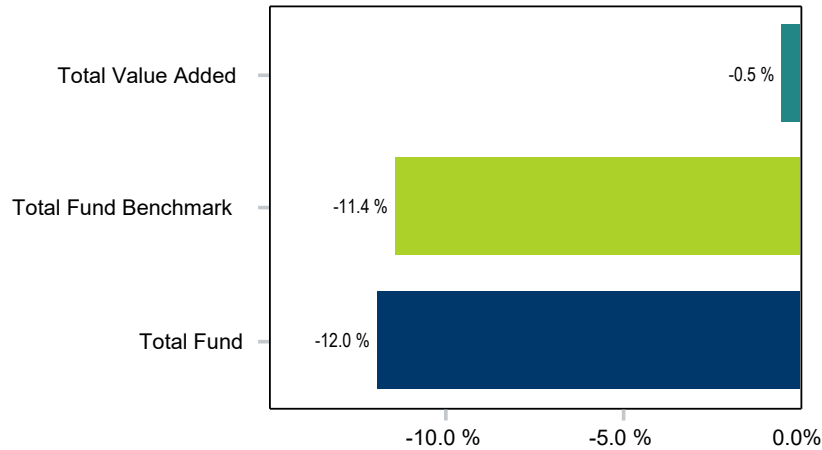


# Total Fund Attribution

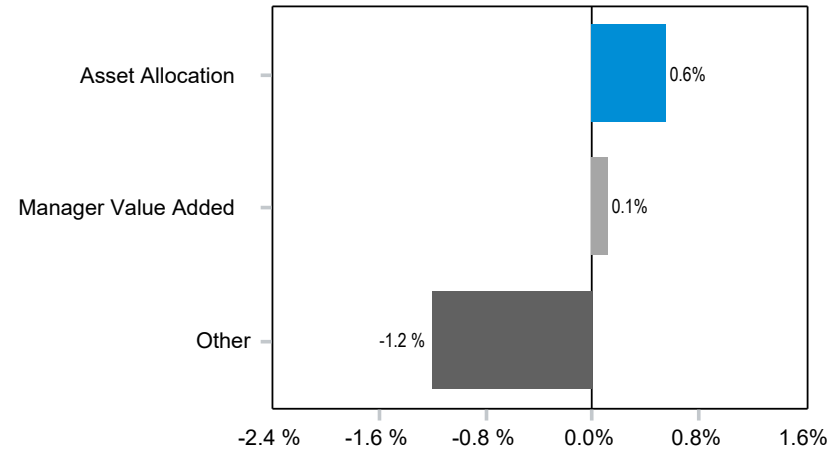
KRS Pension Plan

Periods Ended 1 Quarter Ending March 31, 2020

## Total Fund Performance



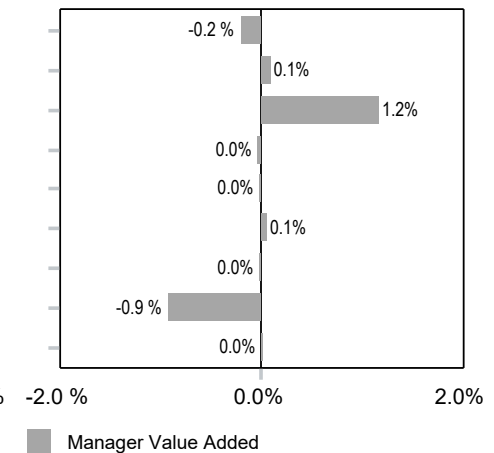
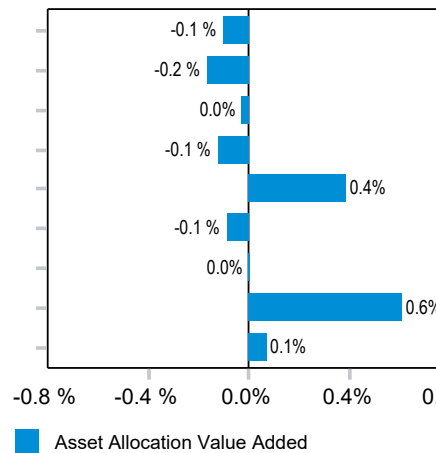
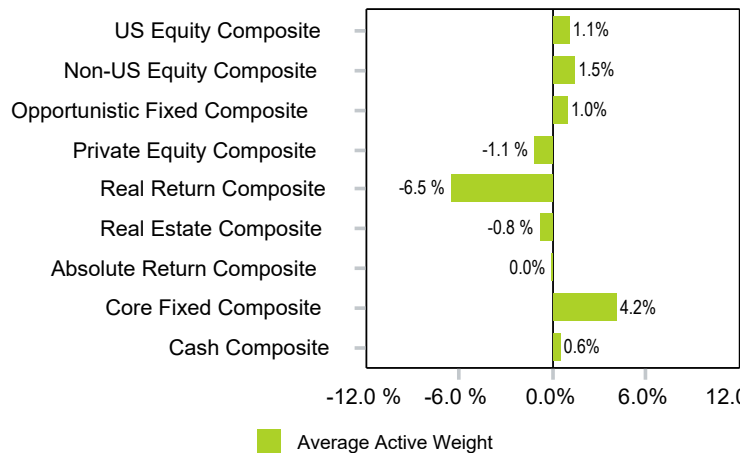
## Total Value Added:-0.5 %



## Total Asset Allocation:0.6%

## Asset Allocation Value Added:0.6%

## Total Manager Value Added:0.1%



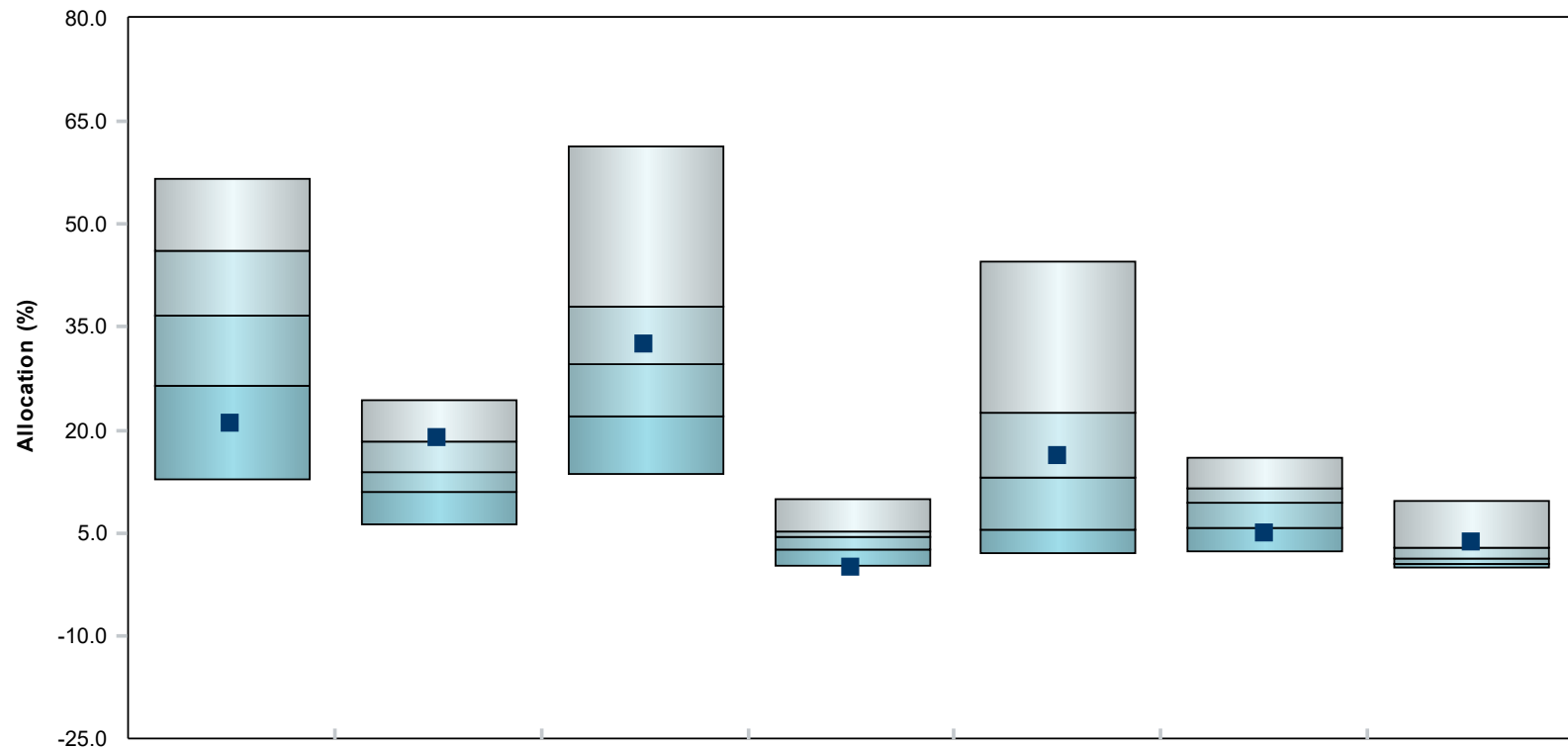
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# Plan Sponsor TF Asset Allocation

KRS Pension Plan vs All Public Plans-Total Fund

Periods Ended March 31, 2020



	US Equity	Intl. Equity	US Fixed Income	Intl. Fixed Income	Alternative Inv.	Real Estate	Cash
■ KRS Pension Plan	20.94	18.81	32.41	0.00	16.19	4.89	3.67
5th Percentile	56.55	24.39	61.39	9.80	44.44	16.02	9.57
1st Quartile	46.03	18.42	38.00	5.24	22.46	11.58	2.83
Median	36.78	13.91	29.49	4.33	13.07	9.41	1.34
3rd Quartile	26.50	10.87	21.92	2.61	5.57	5.64	0.52
95th Percentile	12.86	6.31	13.48	0.08	1.92	2.39	0.06



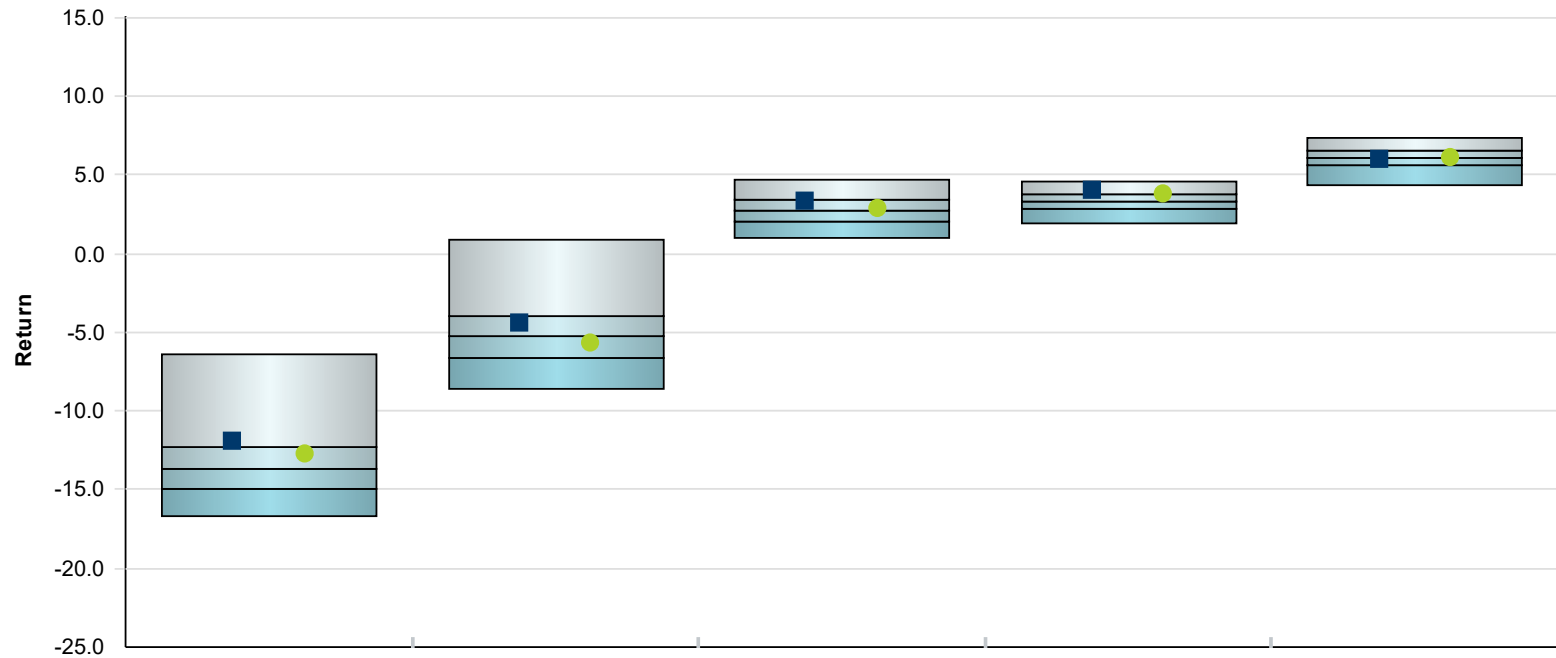
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# Plan Sponsor Peer Group Analysis

KRS Pension Plan vs All Public Plans-Total Fund

Periods Ended March 31, 2020



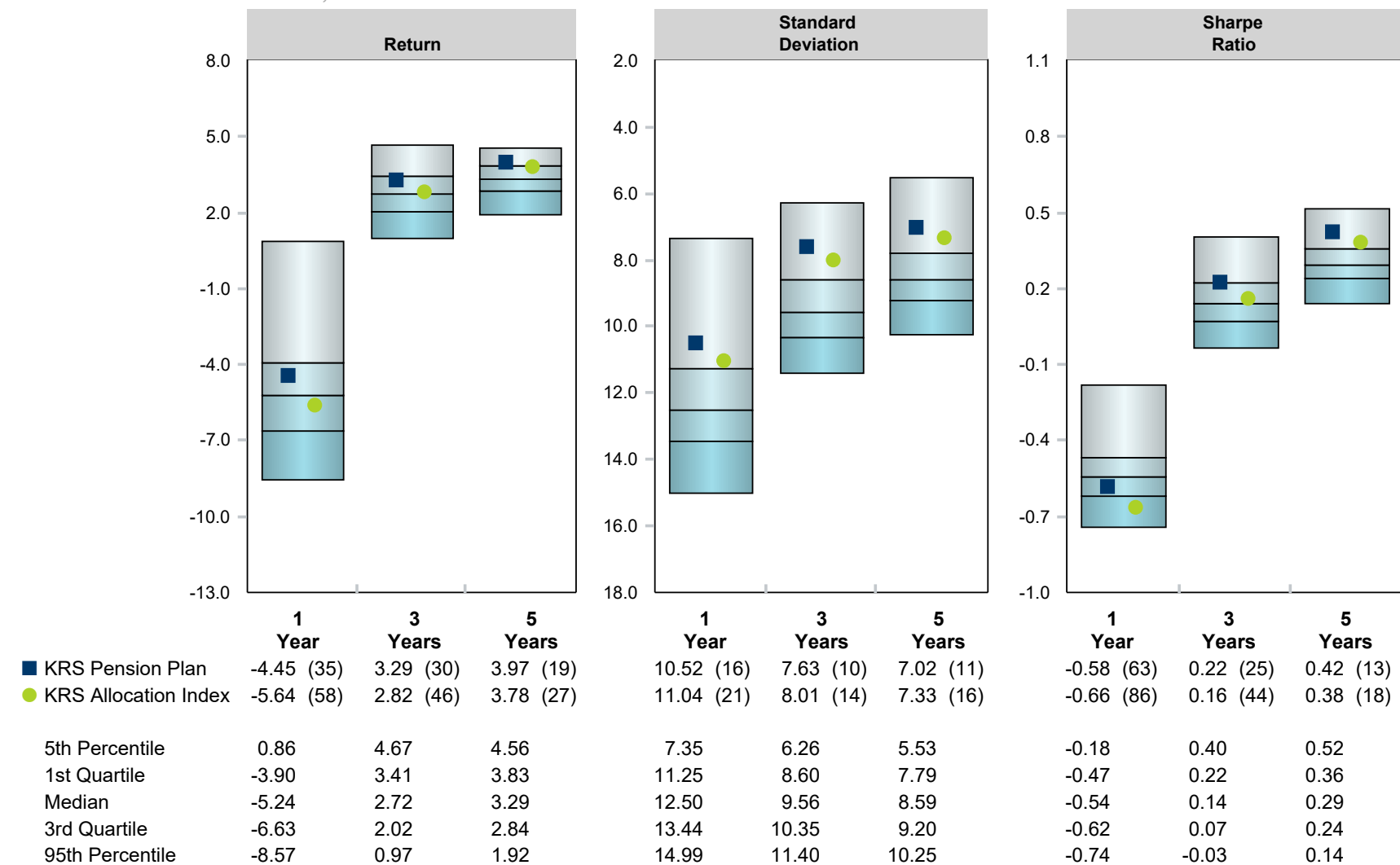
	<b>QTD</b>	<b>1 Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>
■ KRS Pension Plan	-11.98 (21)	-4.45 (35)	3.29 (30)	3.97 (19)	5.99 (55)
● KRS Allocation Index	-12.76 (34)	-5.64 (58)	2.82 (46)	3.78 (27)	6.08 (50)
5th Percentile	-6.39	0.86	4.67	4.56	7.34
1st Quartile	-12.26	-3.90	3.41	3.83	6.57
Median	-13.67	-5.24	2.72	3.29	6.07
3rd Quartile	-14.99	-6.63	2.02	2.84	5.61
95th Percentile	-16.71	-8.57	0.97	1.92	4.41
Population	592	590	555	512	422

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.

# Plan Sponsor Peer Group Analysis-Multi Statistics

KRS Pension Plan

Periods Ended March 31, 2020



Parenttheses contain percentile rankings.  
Calculation based on monthly periodicity.

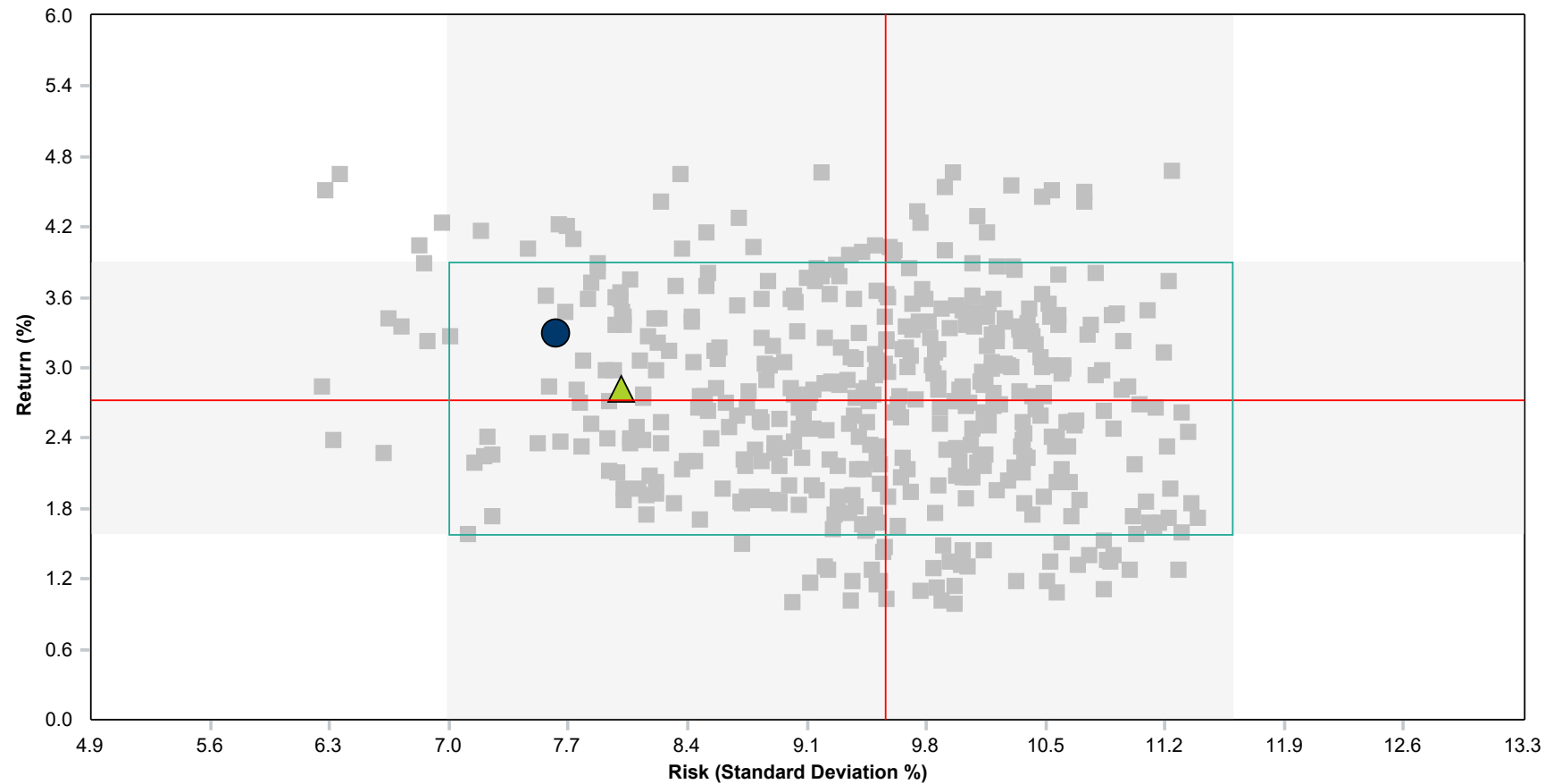
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# Plan Sponsor Scattergram

KRS Pension Plan vs All Public Plans-Total Fund

Periods Ended April 1, 2017 To March 31, 2020



	Return	Standard Deviation
● KRS Pension Plan	3.29	7.63
▲ KRS Allocation Index	2.82	8.01
— Median	2.72	9.56

Calculation based on monthly periodicity.

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# Asset Allocation & Performance

KRS Pension Plan

Periods Ended March 31, 2020

	Allocation		Performance (%) net of fees							
	Market Value \$	%	1 Month	QTD	FYTD	1 Year	3 Years	5 Years	Since Inception	Inception Date
<b>KRS Pension Plan</b>	<b>11,738,913,646</b>	<b>100.00</b>	<b>-8.65</b>	<b>-11.98</b>	<b>-7.08</b>	<b>-4.45</b>	<b>3.29</b>	<b>3.97</b>	<b>8.63</b>	<b>4/1/1984</b>
KRS Allocation Index			-9.23	-12.76	-8.23	-5.64	2.82	3.78	8.72	
Value Added			0.58	0.78	1.15	1.19	0.47	0.19	-0.09	
KRS IPS Index			-9.20	-12.69	-8.10	-5.48				
Value Added			0.55	0.71	1.02	1.03				
<b>GROWTH</b>										
<b>US Equity Composite</b>	<b>2,457,550,532</b>	<b>20.94</b>	<b>-14.29</b>	<b>-21.86</b>	<b>-13.93</b>	<b>-10.28</b>	<b>2.92</b>	<b>4.85</b>	<b>10.55</b>	<b>4/1/1984</b>
Russell 3000 Index			-13.75	-20.90	-12.70	-9.13	4.00	5.77	10.47	
Value Added			-0.54	-0.96	-1.23	-1.15	-1.08	-0.92	0.08	
<b>S&amp;P 500 Index</b>	<b>1,466,292,916</b>	<b>12.49</b>	<b>-11.62</b>	<b>-18.93</b>	<b>-10.09</b>	<b>-6.20</b>	<b>5.49</b>	<b>6.93</b>	<b>6.60</b>	<b>7/1/2001</b>
S&P 500 Index			-12.35	-19.60	-10.82	-6.98	5.10	6.73	6.17	
Value Added			0.73	0.67	0.73	0.78	0.39	0.20	0.43	
<b>Scientific Beta</b>	<b>363,430,944</b>	<b>3.10</b>	<b>-16.27</b>	<b>-23.89</b>	<b>-17.79</b>	<b>-14.03</b>	<b>1.35</b>		<b>3.98</b>	<b>7/1/2016</b>
S&P 500 Index			-12.35	-19.60	-10.82	-6.98	5.10		7.86	
Value Added			-3.92	-4.29	-6.97	-7.05	-3.75		-3.88	
<b>River Road FAV</b>	<b>159,466,821</b>	<b>1.36</b>	<b>-19.03</b>	<b>-29.93</b>	<b>-21.24</b>	<b>-17.33</b>	<b>0.34</b>		<b>5.64</b>	<b>7/1/2016</b>
Russell 3000 Value Index			-17.58	-27.32	-20.93	-18.02	-2.67		1.51	
Value Added			-1.45	-2.61	-0.31	0.69	3.01		4.13	
<b>Westfield Capital</b>	<b>159,978,051</b>	<b>1.36</b>	<b>-11.89</b>	<b>-15.48</b>	<b>-3.44</b>	<b>1.84</b>	<b>11.05</b>	<b>7.62</b>	<b>11.38</b>	<b>7/1/2011</b>
Russell 3000 Growth Index			-10.41	-14.85	-4.73	-0.44	10.54	9.74	12.26	
Value Added			-1.48	-0.63	1.29	2.28	0.51	-2.12	-0.88	

Wilshire Consulting



# Asset Allocation & Performance

KRS Pension Plan

Periods Ended March 31, 2020

	Allocation		Performance (%) net of fees							
	Market Value \$	%	1 Month	QTD	FYTD	1 Year	3 Years	5 Years	Since Inception	Inception Date
<b>Internal US Mid Cap</b>	<b>116,274,095</b>	<b>0.99</b>	<b>-19.58</b>	<b>-29.14</b>	<b>-24.13</b>	<b>-21.78</b>	<b>-3.30</b>	<b>1.00</b>	<b>2.96</b>	<b>8/1/2014</b>
S&P MidCap 400 Index			-20.25	-29.70	-24.80	-22.51	-4.09	0.56	2.58	
Value Added			0.67	0.56	0.67	0.73	0.79	0.44	0.38	
<b>NTGI Structured</b>	<b>145,307,503</b>	<b>1.24</b>	<b>-20.85</b>	<b>-29.99</b>	<b>-24.61</b>	<b>-22.44</b>	<b>-3.27</b>	<b>0.83</b>	<b>8.09</b>	<b>10/1/1999</b>
Russell 2000 Index			-21.73	-30.61	-25.55	-23.99	-4.64	-0.25	6.38	
Value Added			0.88	0.62	0.94	1.55	1.37	1.08	1.71	
<b>Next Century Growth</b>	<b>46,720,711</b>	<b>0.40</b>	<b>-19.09</b>	<b>-21.00</b>					<b>-14.70</b>	<b>11/1/2019</b>
Russell Microcap Growth Index			-20.94	-26.59					-15.66	
Value Added			1.85	5.59					0.96	
<b>Invesco</b>	<b>40,938</b>	<b>0.00</b>								
<b>Transition Account</b>	<b>38,551</b>	<b>0.00</b>								
<b>Non-US Equity Composite</b>	<b>2,208,663,049</b>	<b>18.81</b>	<b>-15.58</b>	<b>-23.80</b>	<b>-17.69</b>	<b>-14.98</b>	<b>-0.65</b>	<b>0.55</b>	<b>2.16</b>	<b>7/1/2000</b>
Policy Index			-15.11	-24.11	-18.55	-16.32	-2.25	-0.63	2.17	
Value Added			-0.47	0.31	0.86	1.34	1.60	1.18	-0.01	
<b>BlackRock World Ex US</b>	<b>602,535,562</b>	<b>5.13</b>	<b>-14.08</b>	<b>-23.23</b>	<b>-18.50</b>	<b>-15.94</b>	<b>-1.95</b>	<b>-0.51</b>	<b>4.29</b>	<b>7/1/2009</b>
Policy Index			-14.12	-23.26	-18.52	-16.09	-2.16	-0.77	4.07	
Value Added			0.04	0.03	0.02	0.15	0.21	0.26	0.22	
<b>American Century</b>	<b>338,313,502</b>	<b>2.88</b>	<b>-11.89</b>	<b>-17.73</b>	<b>-8.44</b>	<b>-3.44</b>	<b>6.74</b>	<b>3.42</b>	<b>2.56</b>	<b>7/1/2014</b>
Policy Index			-15.11	-24.11	-18.55	-16.32	-2.30	-0.67	-1.56	
Value Added			3.22	6.38	10.11	12.88	9.04	4.09	4.12	

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# Asset Allocation & Performance

KRS Pension Plan

Periods Ended March 31, 2020

	Allocation		Performance (%) net of fees							
	Market Value \$	%	1 Month	QTD	FYTD	1 Year	3 Years	5 Years	Since Inception	Inception Date
<b>Franklin Templeton</b>	<b>235,272,234</b>	<b>2.00</b>	<b>-16.41</b>	<b>-22.75</b>	<b>-13.55</b>	<b>-10.21</b>	<b>3.31</b>	<b>3.93</b>	<b>2.76</b>	<b>7/1/2014</b>
Policy Index			-15.11	-24.11	-18.55	-16.32	-2.30	-0.67	-1.56	
Value Added			-1.30	1.36	5.00	6.11	5.61	4.60	4.32	
<b>Lazard Asset Mgmt</b>	<b>416,630,628</b>	<b>3.55</b>	<b>-16.09</b>	<b>-24.10</b>	<b>-19.24</b>	<b>-16.47</b>	<b>-0.47</b>	<b>0.07</b>	<b>-0.41</b>	<b>7/1/2014</b>
Policy Index			-15.11	-24.11	-18.55	-16.32	-2.30	-0.67	-1.56	
Value Added			-0.98	0.01	-0.69	-0.15	1.83	0.74	1.15	
<b>LSV Asset Mgmt</b>	<b>336,317,526</b>	<b>2.86</b>	<b>-17.40</b>	<b>-27.07</b>	<b>-20.63</b>	<b>-19.34</b>	<b>-4.07</b>	<b>-1.44</b>	<b>-2.06</b>	<b>7/1/2014</b>
Policy Index			-15.11	-24.11	-18.55	-16.32	-2.30	-0.67	-1.56	
Value Added			-2.29	-2.96	-2.08	-3.02	-1.77	-0.77	-0.50	
<b>NTGI Int'l Small Cap</b>	<b>60,847,952</b>	<b>0.52</b>	<b>-19.55</b>	<b>-28.77</b>	<b>-21.77</b>	<b>-20.71</b>	<b>-4.57</b>	<b>-0.50</b>	<b>8.00</b>	<b>12/1/2008</b>
MSCI AC World ex USA Small Cap (Net)			-19.30	-29.01	-22.12	-21.18	-4.89	-0.81	8.17	
Value Added			-0.25	0.24	0.35	0.47	0.32	0.31	-0.17	
<b>JP Morgan Emerging Markets</b>	<b>108,018,284</b>	<b>0.92</b>	<b>-19.04</b>	<b>-24.74</b>					<b>-20.40</b>	<b>11/1/2019</b>
MSCI Emerging Markets IMI			-16.16	-24.37					-18.94	
Value Added			-2.88	-0.37					-1.46	
<b>Pzena Emerging Markets</b>	<b>109,566,953</b>	<b>0.93</b>	<b>-20.28</b>	<b>-31.44</b>					<b>-26.95</b>	<b>11/1/2019</b>
MSCI Emerging Markets (Net)			-15.40	-23.60					-18.01	
Value Added			-4.88	-7.84					-8.94	
<b>Pyramis Intl</b>	<b>3,461</b>	<b>0.00</b>								
<b>Non-US Equity Transition</b>	<b>1,156,948</b>	<b>0.01</b>								

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# Asset Allocation & Performance

KRS Pension Plan

Periods Ended March 31, 2020

	Allocation		Performance (%) net of fees							
	Market Value \$	%	1 Month	QTD	FYTD	1 Year	3 Years	5 Years	Since Inception	Inception Date
<b>Opportunistic Fixed Composite</b>	<b>1,936,427,992</b>	<b>16.50</b>	<b>-5.67</b>	<b>-5.48</b>	<b>-2.52</b>	<b>-0.13</b>			<b>1.68</b>	<b>10/1/2018</b>
Policy Index			-11.91	-12.86	-9.93	-8.05			-4.56	
Value Added			6.24	7.38	7.41	7.92			6.24	
<b>BSP Private Credit</b>	<b>97,520,423</b>	<b>0.83</b>	<b>2.51</b>	<b>2.51</b>	<b>4.67</b>	<b>8.02</b>			<b>4.05</b>	<b>2/1/2018</b>
S&P/LSTA Leverage Loan Index			-12.37	-13.05	-10.66	-9.16			-2.82	
Value Added			14.88	15.56	15.33	17.18			6.87	
<b>BSP Coinvestment</b>	<b>11,451,163</b>	<b>0.10</b>	<b>1.78</b>	<b>1.78</b>					<b>1.78</b>	<b>10/1/2019</b>
S&P/LSTA Leverage Loan Index			-12.37	-13.05					-11.54	
Value Added			14.15	14.83					13.32	
<b>Capital Springs</b>	<b>40,169,500</b>	<b>0.34</b>	<b>0.00</b>						<b>0.00</b>	<b>2/1/2020</b>
S&P/LSTA Leverage Loan Index			-12.37						-13.53	
Value Added			12.37						13.53	
<b>Cerberus Capital Mgmt</b>	<b>121,853,924</b>	<b>1.04</b>	<b>0.00</b>	<b>1.86</b>	<b>6.29</b>	<b>8.70</b>	<b>8.55</b>	<b>8.76</b>	<b>8.45</b>	<b>9/1/2014</b>
S&P/LSTA Leverage Loan Index			-12.37	-13.05	-10.66	-9.16	-0.78	1.14	1.20	
Value Added			12.37	14.91	16.95	17.86	9.33	7.62	7.25	
<b>Columbia</b>	<b>316,485,843</b>	<b>2.70</b>	<b>-10.62</b>	<b>-12.10</b>	<b>-7.45</b>	<b>-4.45</b>	<b>1.68</b>	<b>3.03</b>	<b>5.39</b>	<b>11/1/2011</b>
Blmbg. Barc. U.S. Corp: High Yield			-11.46	-12.68	-9.21	-6.94	0.77	2.78	4.98	
Value Added			0.84	0.58	1.76	2.49	0.91	0.25	0.41	
<b>Manulife Asset Mgmt</b>	<b>314,007,934</b>	<b>2.67</b>	<b>-5.14</b>	<b>-4.56</b>	<b>-1.32</b>	<b>1.61</b>	<b>2.04</b>	<b>2.16</b>	<b>3.58</b>	<b>12/1/2011</b>
Policy Index			-1.95	1.30	3.92	7.15	4.37	3.32	2.20	
Value Added			-3.19	-5.86	-5.24	-5.54	-2.33	-1.16	1.38	

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# Asset Allocation & Performance

KRS Pension Plan

Periods Ended March 31, 2020

	Allocation		Performance (%) net of fees							
	Market Value \$	%	1 Month	QTD	FYTD	1 Year	3 Years	5 Years	Since Inception	Inception Date
<b>Marathon Bluegrass</b>	<b>357,123,278</b>	<b>3.04</b>	<b>0.76</b>	<b>2.75</b>	<b>2.45</b>	<b>3.94</b>	<b>3.95</b>		<b>6.67</b>	<b>1/1/2016</b>
Bimbg. Barc. U.S. Corp: High Yield			-11.46	-12.68	-9.21	-6.94	0.77		5.01	
Value Added			12.22	15.43	11.66	10.88	3.18		1.66	
<b>Shenkman Capital</b>	<b>173,557,130</b>	<b>1.48</b>	<b>-12.24</b>	<b>-13.27</b>	<b>-10.50</b>	<b>-9.13</b>	<b>-0.79</b>	<b>0.75</b>	<b>3.09</b>	<b>10/1/2010</b>
S&P/LSTA Leverage Loan Index			-12.37	-13.05	-10.66	-9.16	-0.78	1.14	3.03	
Value Added			0.13	-0.22	0.16	0.03	-0.01	-0.39	0.06	
<b>Waterfall</b>	<b>210,900,396</b>	<b>1.80</b>	<b>-17.47</b>	<b>-17.25</b>	<b>-14.02</b>	<b>-11.50</b>	<b>2.05</b>	<b>4.36</b>	<b>9.05</b>	<b>2/1/2010</b>
Policy Index			-8.69	-9.20	-6.75	-5.09	0.95	2.25	4.12	
Value Added			-8.78	-8.05	-7.27	-6.41	1.10	2.11	4.93	
<b>White Oak Yield Spectrum</b>	<b>129,560,911</b>	<b>1.10</b>	<b>2.23</b>	<b>2.23</b>	<b>5.34</b>	<b>7.29</b>			<b>5.10</b>	<b>3/1/2018</b>
S&P/LSTA Leverage Loan Index			-12.37	-13.05	-10.66	-9.16			-3.03	
Value Added			14.60	15.28	16.00	16.45			8.13	
<b>H/2 Credit Partner</b>	<b>82,356,356</b>	<b>0.70</b>	<b>-3.30</b>	<b>-3.24</b>	<b>-1.80</b>	<b>-3.66</b>	<b>0.71</b>	<b>3.08</b>	<b>4.46</b>	<b>7/1/2011</b>
<b>Mesa West Core Lend</b>	<b>59,717,361</b>	<b>0.51</b>	<b>1.43</b>	<b>1.43</b>	<b>6.64</b>	<b>8.62</b>	<b>7.61</b>	<b>7.73</b>	<b>6.96</b>	<b>5/1/2013</b>
<b>Mesa West IV</b>	<b>21,687,291</b>	<b>0.18</b>	<b>1.62</b>	<b>1.62</b>	<b>6.42</b>	<b>6.42</b>	<b>5.74</b>		<b>5.58</b>	<b>3/1/2017</b>
<b>Loomis</b>	<b>36,482</b>	<b>0.00</b>								
<b>Private Equity Composite</b>	<b>1,117,077,718</b>	<b>9.52</b>	<b>1.66</b>	<b>0.15</b>	<b>6.65</b>	<b>10.27</b>	<b>12.89</b>	<b>11.14</b>	<b>11.10</b>	<b>7/1/2002</b>
KRS Short-Term PE Index			1.66	0.15	6.65	10.27	12.89	11.14	11.10	
Value Added			0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Russell 3000 +3% 1 Quarter Lag			3.14	9.91	17.46	34.95	18.01	14.58	11.63	
Value Added			-1.48	-9.76	-10.81	-24.68	-5.12	-3.44	-0.53	



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# Asset Allocation & Performance

KRS Pension Plan

Periods Ended March 31, 2020

	Allocation		Performance (%) net of fees							
	Market Value \$	%	1 Month	QTD	FYTD	1 Year	3 Years	5 Years	Since Inception	Inception Date
<b>DIVERSIFYING STRATEGIES</b>										
<b>Real Return Composite</b>	<b>783,577,440</b>	<b>6.68</b>	<b>-14.04</b>	<b>-17.50</b>	<b>-15.44</b>	<b>-13.70</b>	<b>-3.03</b>	<b>-0.39</b>	<b>1.57</b>	<b>7/1/2011</b>
Real Return Index (P)			-14.04	-17.50	-15.44	-13.70	-3.67	-1.30	0.64	
Value Added			0.00	0.00	0.00	0.00	0.64	0.91	0.93	
<b>Internal TIPS</b>	<b>38,092,446</b>	<b>0.32</b>	<b>-2.01</b>	<b>-0.81</b>	<b>0.65</b>	<b>2.60</b>	<b>1.78</b>	<b>1.93</b>	<b>4.62</b>	<b>5/1/2002</b>
Blmbg. Barc. U.S. TIPS 1-10 Year			-1.83	0.31	1.92	4.50	2.54	2.18	4.10	
Value Added			-0.18	-1.12	-1.27	-1.90	-0.76	-0.25	0.52	
<b>PIMCO All Asset</b>	<b>293,313,289</b>	<b>2.50</b>	<b>-11.75</b>	<b>-16.12</b>	<b>-12.93</b>	<b>-10.60</b>	<b>-0.98</b>	<b>1.06</b>	<b>2.66</b>	<b>12/1/2011</b>
Blmbg. Barc. U.S. TIPS 1-10 Year			-1.83	0.31	1.92	4.50	2.54	2.18	1.43	
Value Added			-9.92	-16.43	-14.85	-15.10	-3.52	-1.12	1.23	
<b>Tortoise Capital</b>	<b>71,101,127</b>	<b>0.61</b>	<b>-39.61</b>	<b>-49.08</b>	<b>-52.86</b>	<b>-53.15</b>	<b>-23.90</b>	<b>-16.70</b>	<b>2.16</b>	<b>8/1/2009</b>
Alerian MLP Index			-47.23	-57.19	-61.00	-60.95	-28.91	-20.66	-2.50	
Value Added			7.62	8.11	8.14	7.80	5.01	3.96	4.66	
<b>Nuveen Real Asset</b>	<b>168,039,295</b>	<b>1.43</b>	<b>-22.36</b>	<b>-25.50</b>	<b>-19.98</b>	<b>-17.31</b>	<b>-2.26</b>	<b>0.54</b>	<b>0.55</b>	<b>2/1/2015</b>
Policy Index			-15.32	-19.16	-14.99	-12.42	-0.53	1.66	1.61	
Value Added			-7.04	-6.34	-4.99	-4.89	-1.73	-1.12	-1.06	
<b>Amerra AGRI Fund II</b>	<b>24,456,817</b>	<b>0.21</b>	<b>3.80</b>	<b>3.80</b>	<b>15.42</b>	<b>16.55</b>	<b>4.15</b>	<b>5.60</b>	<b>5.43</b>	<b>12/1/2012</b>
<b>Amerra AGRI Holdings</b>	<b>49,138,784</b>	<b>0.42</b>	<b>-0.30</b>	<b>-0.30</b>	<b>0.99</b>	<b>1.71</b>	<b>-2.60</b>		<b>-1.07</b>	<b>8/1/2015</b>
<b>BTG Pactual</b>	<b>26,810,942</b>	<b>0.23</b>	<b>2.48</b>	<b>2.48</b>	<b>1.22</b>	<b>1.23</b>	<b>0.76</b>	<b>-4.34</b>	<b>-6.10</b>	<b>12/1/2014</b>
<b>IFM Infrastructure</b>	<b>43,954,110</b>	<b>0.37</b>	<b>0.00</b>	<b>0.00</b>	<b>2.86</b>				<b>2.86</b>	<b>7/1/2019</b>
<b>Magnetar MTP EOF II</b>	<b>33,791,199</b>	<b>0.29</b>	<b>2.32</b>	<b>2.32</b>	<b>5.83</b>	<b>8.53</b>	<b>7.24</b>		<b>3.91</b>	<b>8/1/2015</b>

Wilshire Consulting



# Asset Allocation & Performance

KRS Pension Plan

Periods Ended March 31, 2020

	Allocation		Performance (%) net of fees							
	Market Value \$	%	1 Month	QTD	FYTD	1 Year	3 Years	5 Years	Since Inception	Inception Date
Oberland Capital	6,577,893	0.06	0.00	0.00	19.36	19.36			10.04	8/1/2018
Taurus Mine Finance	27,525,705	0.23	0.00	0.00	4.49	8.81	10.09	13.30	13.30	4/1/2015
TPF II	775,832	0.01	0.00	0.00	-0.17	14.16	5.23	-0.24	-2.00	10/1/2008
Real Estate Composite	574,129,606	4.89	1.67	2.85	8.80	10.09	9.34	9.38	6.21	7/1/1984
NCREIF ODCE NOF 1 Quarter Lag			1.27	1.27	3.15	4.39	6.13	7.98		
Value Added			0.40	1.58	5.65	5.70	3.21	1.40		
Baring	42,241,755	0.36	9.33	6.67	40.75	42.74			31.04	1/1/2019
Divcowest IV	3,067,533	0.03	1.74	1.74	15.32	15.32	17.46	24.25	20.86	3/1/2014
Fundamental Partners III	62,268,093	0.53	2.92	2.92	13.76	16.00			9.91	5/1/2017
Greenfield Acq VI	798,274	0.01	-36.85	-36.85	-54.14	-54.32	-31.57	-17.82	-8.46	12/1/2012
Greenfield Acq VII	19,827,234	0.17	7.12	7.12	19.36	19.69	15.56	15.26	13.47	7/1/2014
Harrison Street	83,484,880	0.71	0.00	2.36	5.66	7.08	8.28	8.99	8.46	5/1/2012
Lubert Adler VII	28,914,592	0.25	0.89	0.89	0.90	2.02	8.78	6.07	0.71	7/1/2014
Lubert Adler VII B	31,312,374	0.27	4.87	4.87	9.82	12.46			6.17	7/1/2017
Patron Capital	18,566,252	0.16	3.77	1.48	5.06	7.05	16.50		3.58	8/1/2016
Prologis Targeted US	147,280,226	1.25	0.00	4.26	12.27	15.53	17.38	15.84	15.61	10/1/2014
Rubenstein PF II	16,367,756	0.14	0.00	0.00	0.65	0.65	10.38	7.12	11.91	7/1/2013
Stockbridge Sm/Mkts	89,851,248	0.77	1.01	1.01	4.08	6.24	7.62	9.00	8.79	5/1/2014

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# Asset Allocation & Performance

KRS Pension Plan

Periods Ended March 31, 2020

	Allocation		Performance (%) net of fees							
	Market Value \$	%	1 Month	QTD	FYTD	1 Year	3 Years	5 Years	Since Inception	Inception Date
Walton St RE VI	12,658,279	0.11	0.19	0.19	-0.32	1.03	4.21	3.78	-15.38	5/1/2009
Walton St RE VII	10,191,111	0.09	0.32	0.32	-2.38	-2.38	2.98	6.90	9.01	7/1/2013
Perimeter Park	7,300,000	0.06								
Absolute Return Composite	362,386,330	3.09	-8.55	-7.97	-7.14	-7.60	-0.70	-0.22	2.59	4/1/2010
HFRI FOF Div 1 Month Lag			-1.27	0.74	2.66	3.63	2.96	1.74	2.79	
Value Added			-7.28	-8.71	-9.80	-11.23	-3.66	-1.96	-0.20	
Arrowmark	173,646,207	1.48	-14.63	-13.12	-8.73	-6.73			0.52	6/1/2018
S&P/LSTA Leverage Loan Index			-12.37	-13.05	-10.66	-9.16			-3.89	
Value Added			-2.26	-0.07	1.93	2.43			4.41	
Blackstone Strat Opp	2,427,931	0.02	0.72	-0.55	-1.93	-4.81			-0.14	8/1/2017
Credit Suisse	415,818	0.00	0.00	0.00	0.67	2.43			5.49	6/1/2017
Gotham Neutral Strategies	12,429,685	0.11	-2.13	-6.14	-3.73	-6.83	-3.34		-3.34	4/1/2017
Governors Lane Onshore	5,576,338	0.05	-0.19	1.20	4.18	5.41	1.35		1.35	4/1/2017
Liquidalts H20 Force	11,702,174	0.10	-26.77	-35.04	-30.71	-30.63	-8.97		-5.38	8/1/2016
Luxor Capital	1,234,091	0.01	-10.82	-10.86	-25.91	-18.99	2.75	1.40	-0.85	4/1/2014
Myriad Opportunities	44,895,782	0.38	0.07	1.61	1.80	-1.90	1.70		2.85	5/1/2016
PAAMCO	7,095	0.00	0.00	0.00	0.05	0.05	-29.23	-19.59	-9.40	9/1/2011
Pine River	136,488	0.00	0.05	4.45	22.89	35.58	10.02	5.34	5.09	5/1/2014
PRISMA Capital	97,019,183	0.83	0.00	0.67	0.19	0.19	2.53	1.44	3.24	9/1/2011

Wilshire Consulting

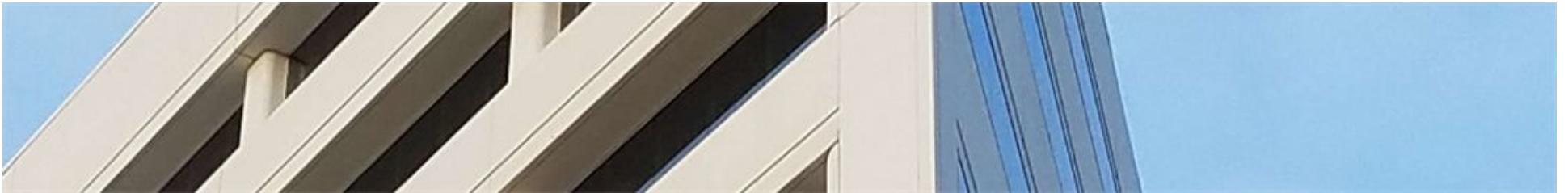


# Asset Allocation & Performance

KRS Pension Plan

Periods Ended March 31, 2020

	Allocation		Performance (%) net of fees							
	Market Value \$	%	1 Month	QTD	FYTD	1 Year	3 Years	5 Years	Since Inception	Inception Date
<b>SRS Partners US</b>	<b>9,330,748</b>	<b>0.08</b>	<b>1.90</b>	<b>4.58</b>	<b>10.89</b>	<b>17.18</b>			<b>12.11</b>	<b>8/1/2017</b>
<b>Tricadia Select</b>	<b>3,564,792</b>	<b>0.03</b>	<b>0.00</b>	<b>0.00</b>	<b>1.05</b>	<b>1.82</b>			<b>-9.43</b>	<b>9/1/2017</b>
<b>LIQUIDITY</b>										
<b>Core Fixed Composite</b>	<b>1,868,303,146</b>	<b>15.92</b>	<b>-3.99</b>	<b>-1.94</b>	<b>0.06</b>	<b>2.69</b>			<b>4.30</b>	<b>10/1/2018</b>
Blmbg. Barc. U.S. Aggregate			-0.59	3.15	5.68	8.93			9.11	
Value Added			-3.40	-5.09	-5.62	-6.24			-4.81	
<b>Loomis Sayles Intmd</b>	<b>518,519,356</b>	<b>4.42</b>	<b>-0.64</b>	<b>1.90</b>	<b>3.81</b>	<b>6.36</b>			<b>6.82</b>	<b>2/1/2019</b>
Blmbg. Barc. U.S. Intermediate Aggregate			-0.04	2.49	4.38	6.88			7.16	
Value Added			-0.60	-0.59	-0.57	-0.52			-0.34	
<b>Lord Abbett</b>	<b>964,590,428</b>	<b>8.22</b>	<b>-7.03</b>	<b>-6.03</b>	<b>-4.28</b>	<b>-2.49</b>			<b>0.06</b>	<b>10/1/2018</b>
ICE BofAML 1-3 Year U.S. Corporate			-2.79	-1.68	0.18	1.79			2.98	
Value Added			-4.24	-4.35	-4.46	-4.28			-2.92	
<b>NISA</b>	<b>385,193,362</b>	<b>3.28</b>	<b>-0.84</b>	<b>2.84</b>	<b>5.40</b>	<b>8.74</b>	<b>4.84</b>	<b>3.52</b>	<b>4.41</b>	<b>2/1/2009</b>
Blmbg. Barc. U.S. Aggregate			-0.59	3.15	5.68	8.93	4.82	3.36	4.25	
Value Added			-0.25	-0.31	-0.28	-0.19	0.02	0.16	0.16	
<b>Cash Composite</b>	<b>430,797,834</b>	<b>3.67</b>	<b>0.08</b>	<b>0.43</b>	<b>1.84</b>	<b>2.58</b>	<b>2.19</b>	<b>1.57</b>	<b>3.54</b>	<b>1/1/1988</b>
90 Day US Treasury Bill			0.29	0.58	1.61	2.25	1.83	1.17	3.16	
Value Added			-0.21	-0.15	0.23	0.33	0.36	0.40	0.38	



# KRS Insurance Plan

Wilshire Consulting



# Asset Allocation Bucketing

KRS Insurance Plan

Periods Ended As of March 31, 2020

	Actual		Target	Difference	
	\$	%		\$	%
<b>Growth</b>	<b>\$3,449,297,701</b>	<b>68.3%</b>	<b>60.7%</b>	<b>\$382,223,317</b>	<b>7.6%</b>
U.S. Equity	\$1,099,286,672	21.8%	18.8%	\$151,879,016	3.0%
Non-U.S. Equity	\$983,320,963	19.5%	18.8%	\$35,913,307	0.7%
Private Equity	\$545,652,256	10.8%	10.0%	\$40,368,173	0.8%
High Yield/Specialty Credit	\$821,037,810	16.2%	15.0%	\$63,111,686	1.2%
<b>Liquidity</b>	<b>\$848,712,600</b>	<b>16.8%</b>	<b>16.3%</b>	<b>\$25,099,545</b>	<b>0.5%</b>
Core Fixed Income	\$761,116,710	15.1%	13.5%	\$78,983,198	1.6%
Cash	\$87,595,890	1.7%	1.0%	\$37,067,482	0.7%
<b>Diversifying</b>	<b>\$754,830,529</b>	<b>14.9%</b>	<b>23.0%</b>	<b>-\$407,322,862</b>	<b>-8.1%</b>
Real Estate	\$239,752,318	4.7%	5.0%	-\$12,889,724	-0.3%
Real Return	\$349,407,830	6.9%	15.0%	-\$408,518,295	-8.1%
Absolute Return	\$165,670,381	3.3%	3.0%	\$14,085,156	0.3%

Wilshire Consulting

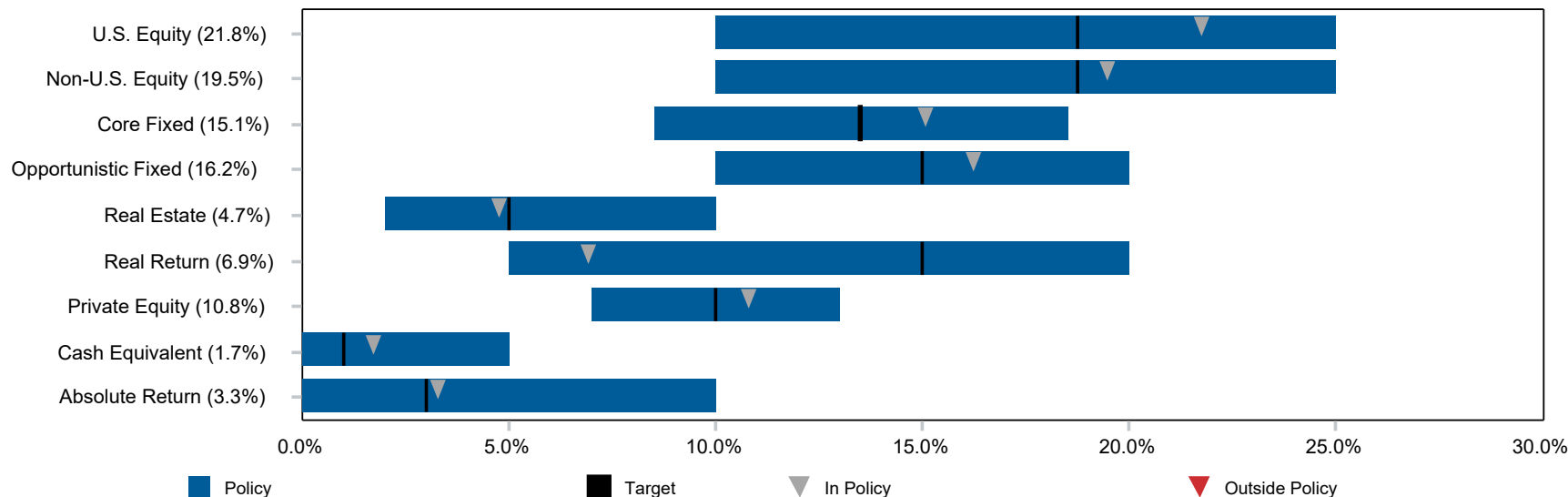


# Asset Allocation Compliance

KRS Insurance Plan

Periods Ended As of March 31, 2020

## Executive Summary



	Asset Allocation \$	Asset Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)	Target Allocation (%)	Target Rebalance \$
U.S. Equity	1,099,286,672	21.8	10.0	25.0	18.8	-151,879,016
Non-U.S. Equity	983,320,963	19.5	10.0	25.0	18.8	-35,913,308
Core Fixed	761,116,710	15.1	8.5	18.5	13.5	-78,983,198
Opportunistic Fixed	821,037,810	16.2	10.0	20.0	15.0	-63,111,685
Real Estate	239,752,318	4.7	2.0	10.0	5.0	12,889,723
Real Return	349,407,830	6.9	5.0	20.0	15.0	408,518,295
Private Equity	545,652,256	10.8	7.0	13.0	10.0	-40,368,172
Cash Equivalent	87,595,890	1.7	0.0	5.0	1.0	-37,067,482
Absolute Return	165,670,381	3.3	0.0	10.0	3.0	-14,085,156
Total Fund	5,052,840,830	100.0			100.0	

Wilshire Consulting

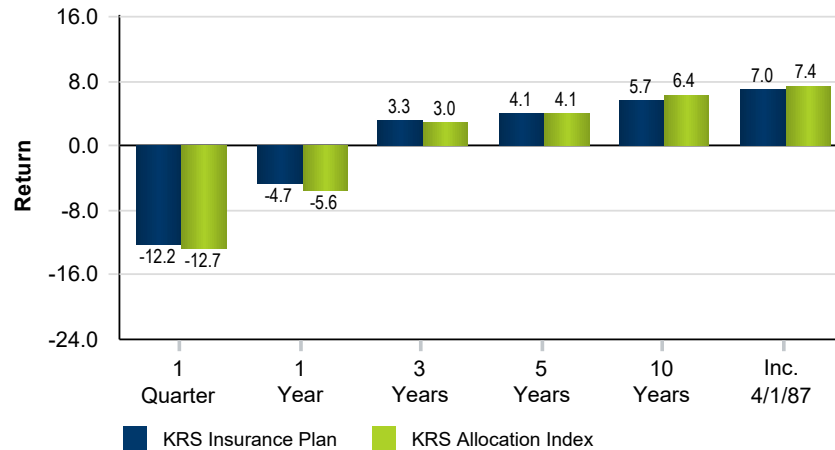


# Total Fund Summary

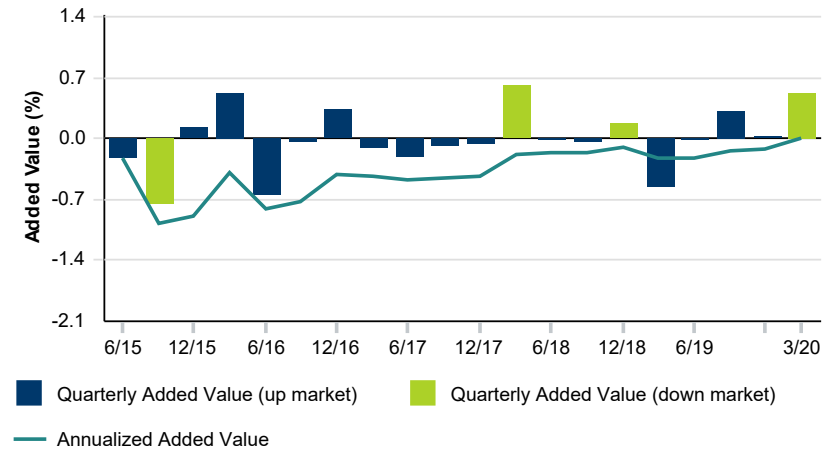
KRS Insurance Plan

Periods Ended March 31, 2020

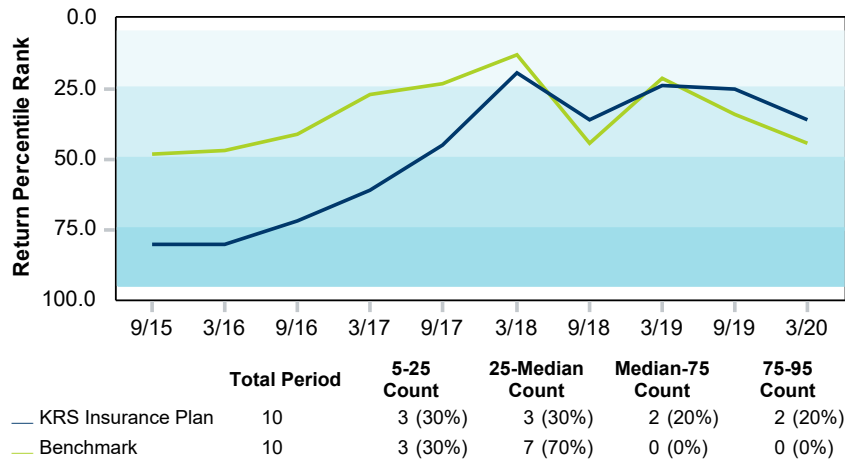
Comparative Performance



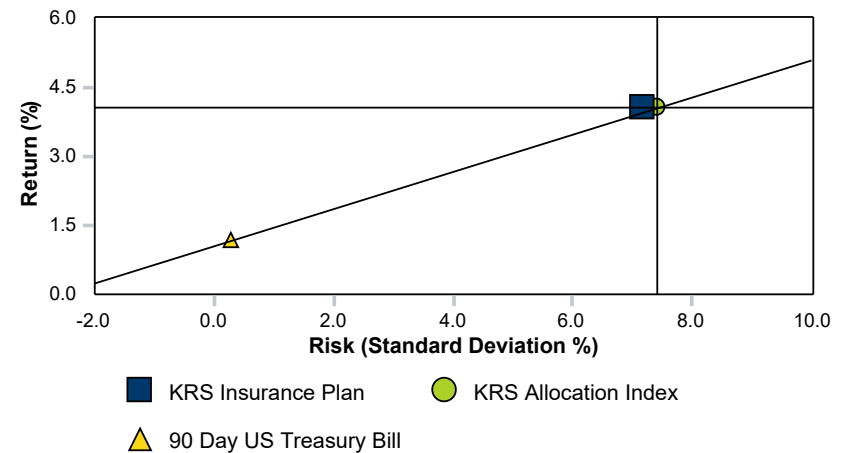
Added Value History



Rolling Percentile Rank: All Public Plans-Total Fund



Risk and Return 04/1/15 - 03/31/20





Wilshire Consulting



# Asset Allocation & Performance

KRS Insurance Plan

Periods Ended March 31, 2020

	Allocation		Performance (%) net of fees								
	Market Value \$	%	1 Month	QTD	FYTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<b>KRS Insurance Plan</b>	<b>5,052,840,830</b>	<b>100.00</b>	<b>-8.65</b>	<b>-12.22</b>	<b>-7.36</b>	<b>-4.74</b>	<b>3.30</b>	<b>4.06</b>	<b>5.72</b>	<b>6.99</b>	<b>4/1/1987</b>
KRS Allocation Index			-9.07	-12.75	-8.22	-5.61	3.00	4.05	6.35	7.35	
Value Added			0.42	0.53	0.86	0.87	0.30	0.01	-0.63	-0.36	
KRS IPS Index			-9.05	-12.71	-8.16	-5.53					
Value Added			0.40	0.49	0.80	0.79					
<b>KERS Insurance Plan</b>	<b>888,639,941</b>	<b>17.59</b>	<b>-9.33</b>	<b>-12.84</b>	<b>-8.18</b>	<b>-5.72</b>	<b>2.38</b>	<b>3.43</b>	<b>5.32</b>	<b>6.86</b>	<b>4/1/1987</b>
KERS Allocation Index			-9.11	-12.58	-8.29	-5.72	2.72	3.83	6.21	7.31	
Value Added			-0.22	-0.26	0.11	0.00	-0.34	-0.40	-0.89	-0.45	
KERS IPS Index			-9.10	-12.55	-8.22	-5.64					
Value Added			-0.23	-0.29	0.04	-0.08					
Assumed Rate 6.25%			0.51	1.53	4.65	6.25					
Value Added			-9.84	-14.37	-12.83	-11.97					
<b>KERS (H) Insurance Plan</b>	<b>478,056,599</b>	<b>9.46</b>	<b>-8.67</b>	<b>-12.18</b>	<b>-7.39</b>	<b>-4.78</b>	<b>3.21</b>	<b>3.98</b>	<b>5.70</b>	<b>6.98</b>	<b>4/1/1987</b>
KERS (H) Allocation Index			-9.05	-12.70	-8.23	-5.63	2.98	3.98	6.29	7.33	
Value Added			0.38	0.52	0.84	0.85	0.23	0.00	-0.59	-0.35	
KERS (H) IPS Index			-9.03	-12.67	-8.17	-5.55					
Value Added			0.36	0.49	0.78	0.77					
Assumed Rate 6.25%			0.51	1.53	4.65	6.25					
Value Added			-9.18	-13.71	-12.04	-11.03					

Wilshire Consulting



# Asset Allocation & Performance

KRS Insurance Plan

Periods Ended March 31, 2020

	Allocation		Performance (%) net of fees								
	Market Value \$	%	1 Month	QTD	FYTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<b>CERS Insurance Plan</b>	<b>2,291,100,316</b>	<b>45.34</b>	<b>-8.62</b>	<b>-12.21</b>	<b>-7.39</b>	<b>-4.78</b>	<b>3.37</b>	<b>4.11</b>	<b>5.76</b>	<b>7.00</b>	<b>4/1/1987</b>
CERS Allocation Index			-9.07	-12.77	-8.19	-5.57	3.05	4.03	6.31	7.34	
Value Added			0.45	0.56	0.80	0.79	0.32	0.08	-0.55	-0.34	
CERS IPS Index			-9.05	-12.73	-8.12	-5.50					
Value Added			0.43	0.52	0.73	0.72					
Assumed Rate 6.25%			0.51	1.53	4.65	6.25					
Value Added			-9.13	-13.74	-12.04	-11.03					
<b>CERS (H) Insurance Plan</b>	<b>1,210,379,803</b>	<b>23.95</b>	<b>-8.38</b>	<b>-12.01</b>	<b>-7.16</b>	<b>-4.52</b>	<b>3.52</b>	<b>4.23</b>	<b>5.82</b>	<b>7.02</b>	<b>4/1/1987</b>
CERS (H) Allocation Index			-9.04	-12.76	-8.21	-5.59	3.05	4.03	6.31	7.34	
Value Added			0.66	0.75	1.05	1.07	0.47	0.20	-0.49	-0.32	
CERS (H) IPS Index			-9.03	-12.72	-8.14	-5.51					
Value Added			0.65	0.71	0.98	0.99					
Assumed Rate 6.25%			0.51	1.53	4.65	6.25					
Value Added			-8.89	-13.54	-11.81	-10.77					
<b>SPRS Insurance Plan</b>	<b>184,664,195</b>	<b>3.65</b>	<b>-8.24</b>	<b>-11.72</b>	<b>-6.88</b>	<b>-4.25</b>	<b>3.61</b>	<b>4.27</b>	<b>5.84</b>	<b>7.02</b>	<b>4/1/1987</b>
SPRS Allocation Index			-8.99	-12.64	-8.08	-5.47	3.07	4.04	6.32	7.34	
Value Added			0.75	0.92	1.20	1.22	0.54	0.23	-0.48	-0.32	
SPRS IPS Index			-8.98	-12.60	-8.02	-5.39					
Value Added			0.74	0.88	1.14	1.14					
Assumed Rate 6.25%			0.51	1.53	4.65	6.25					
Value Added			-8.75	-13.25	-11.53	-10.50					

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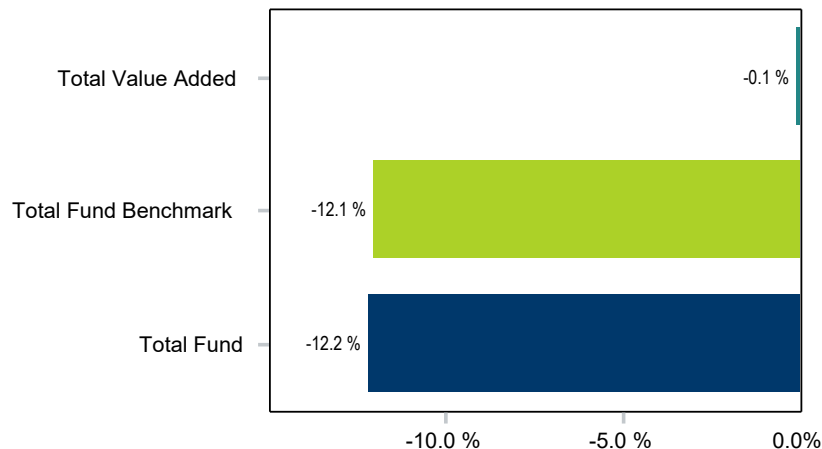


# Total Fund Attribution

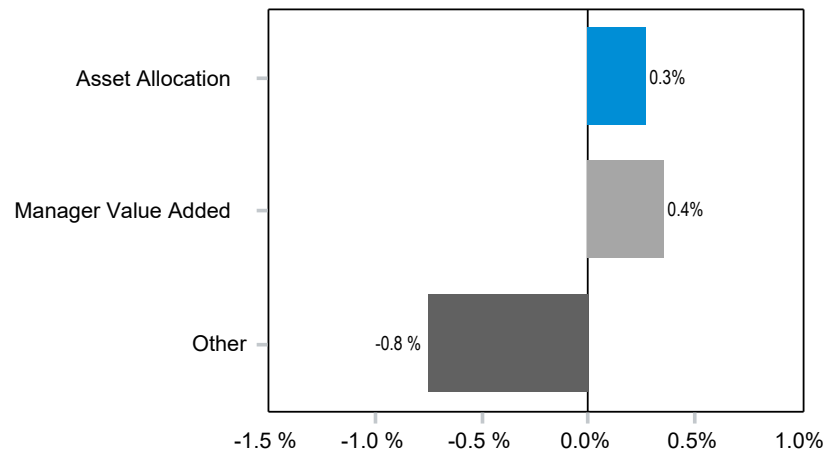
KRS Insurance Plan

Periods Ended 1 Quarter Ending March 31, 2020

## Total Fund Performance



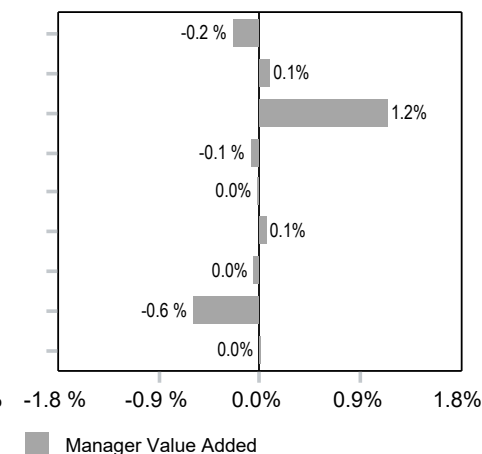
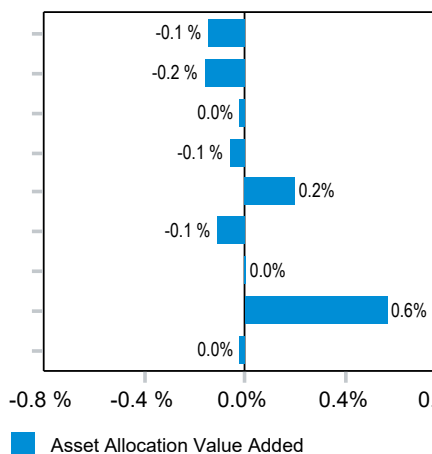
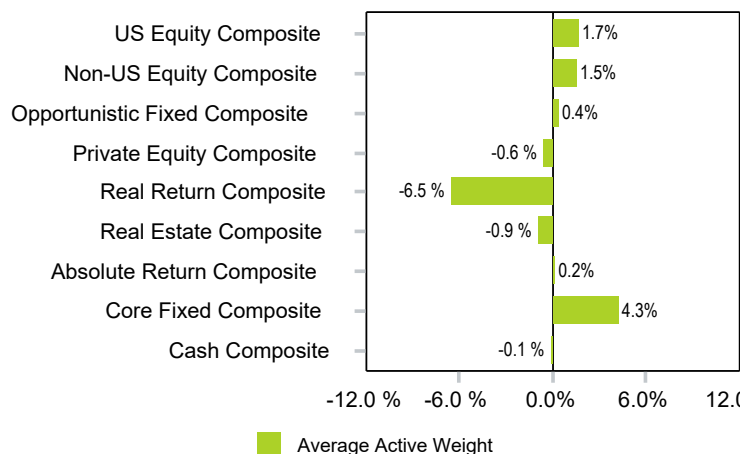
## Total Value Added:-0.1 %



## Total Asset Allocation:0.3%

## Asset Allocation Value Added:0.3%

## Total Manager Value Added:0.4%



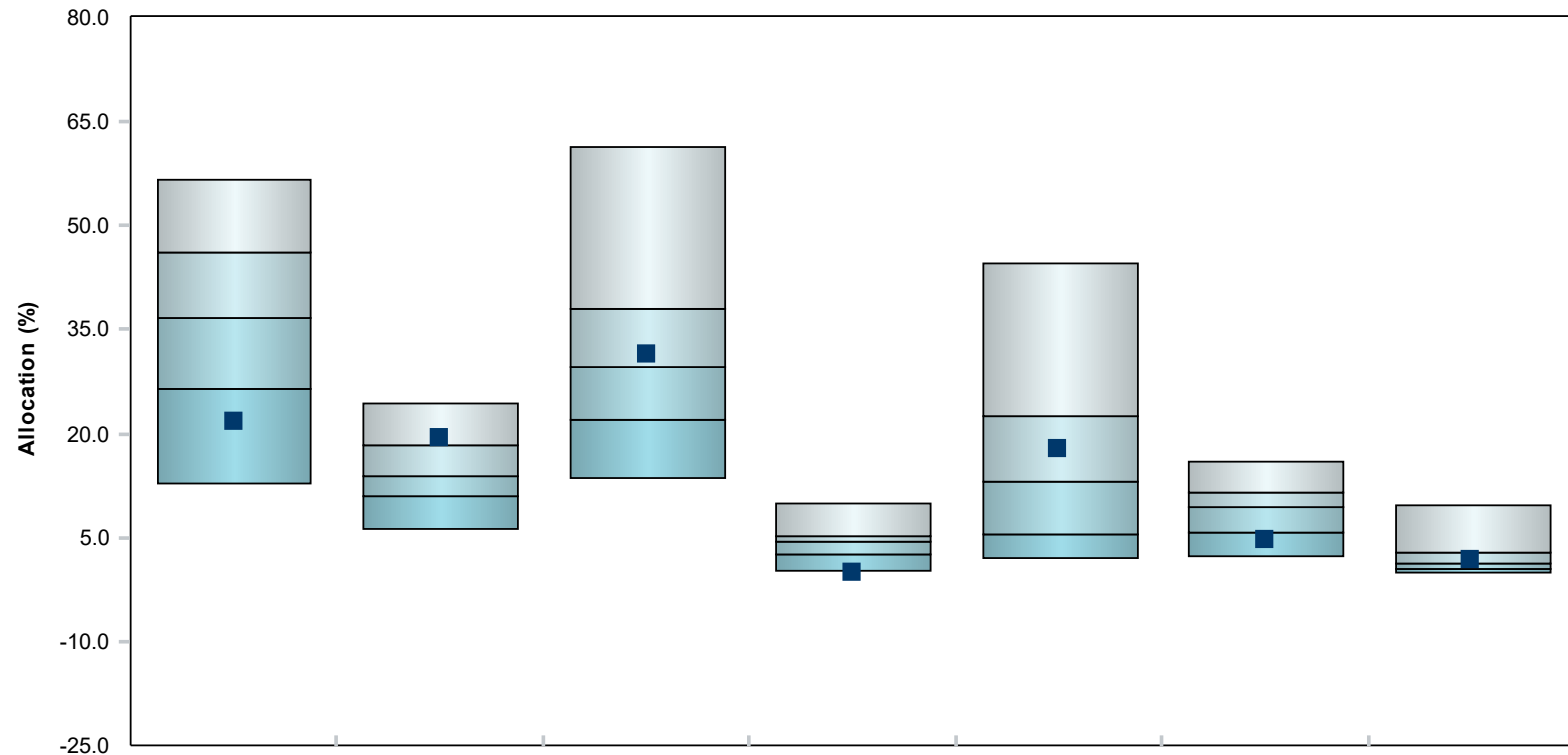
Wilshire Consulting



# Plan Sponsor TF Asset Allocation

KRS Insurance Plan vs All Public Plans-Total Fund

Periods Ended March 31, 2020



	US Equity	Intl. Equity	US Fixed Income	Intl. Fixed Income	Alternative Inv.	Real Estate	Cash
■ KRS Insurance Plan	21.76	19.46	31.31	0.00	17.71	4.74	1.73
5th Percentile	56.55	24.39	61.39	9.80	44.44	16.02	9.57
1st Quartile	46.03	18.42	38.00	5.24	22.46	11.58	2.83
Median	36.78	13.91	29.49	4.33	13.07	9.41	1.34
3rd Quartile	26.50	10.87	21.92	2.61	5.57	5.64	0.52
95th Percentile	12.86	6.31	13.48	0.08	1.92	2.39	0.06

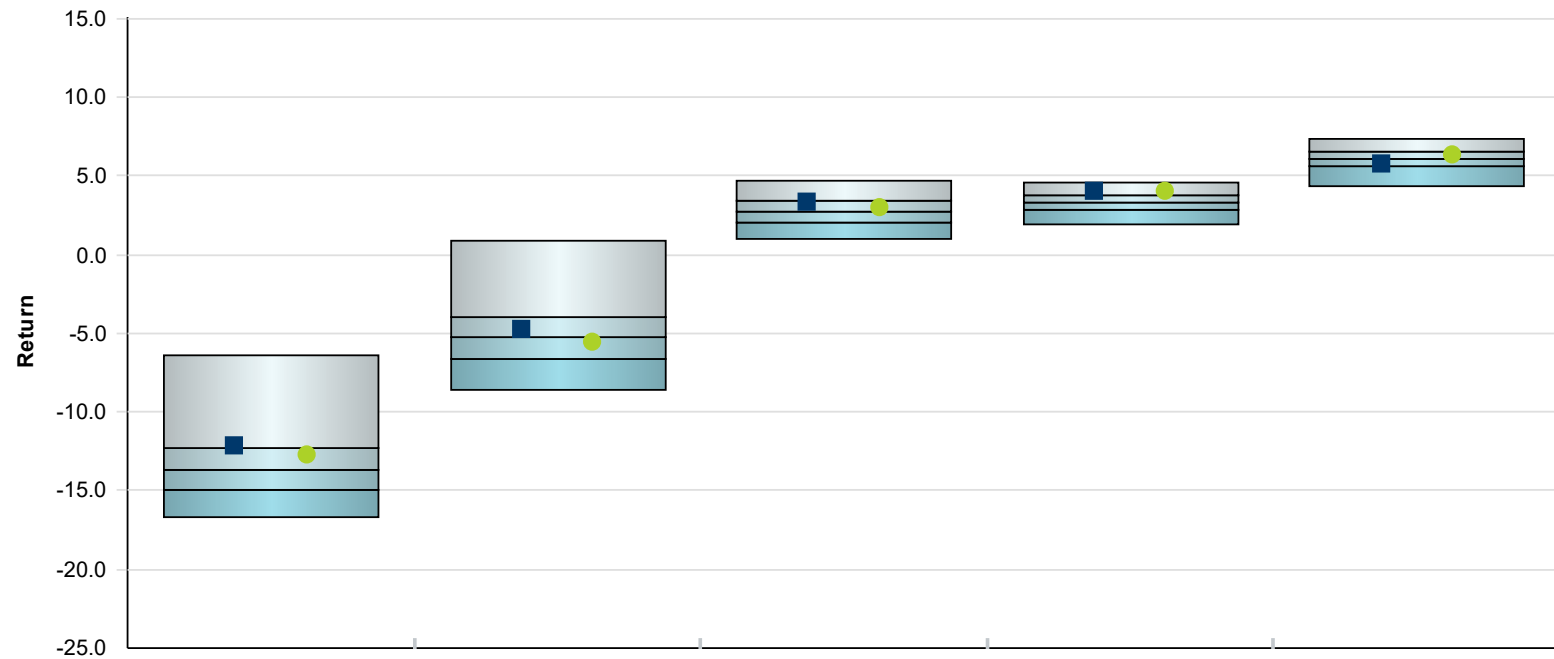
Wilshire Consulting



# Plan Sponsor Peer Group Analysis

KRS Insurance Plan vs All Public Plans-Total Fund

Periods Ended March 31, 2020



	QTD	1 Year	3 Years	5 Years	10 Years
■ KRS Insurance Plan	-12.22 (24)	-4.74 (40)	3.30 (29)	4.06 (18)	5.72 (69)
● KRS Allocation Index	-12.75 (33)	-5.61 (58)	3.00 (39)	4.05 (18)	6.35 (37)
5th Percentile	-6.39	0.86	4.67	4.56	7.34
1st Quartile	-12.26	-3.90	3.41	3.83	6.57
Median	-13.67	-5.24	2.72	3.29	6.07
3rd Quartile	-14.99	-6.63	2.02	2.84	5.61
95th Percentile	-16.71	-8.57	0.97	1.92	4.41
Population	592	590	555	512	422

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.

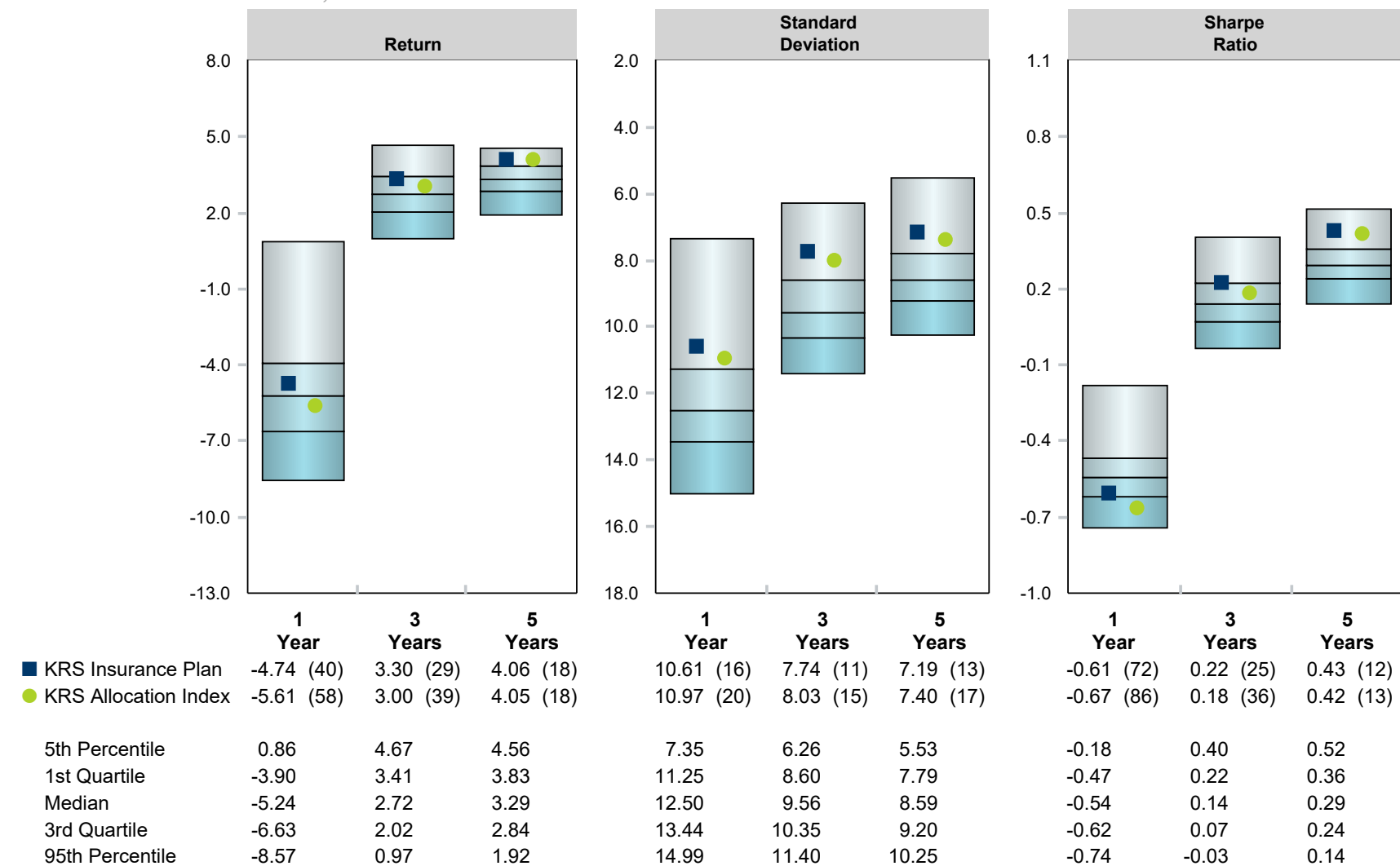
Wilshire Consulting



# Plan Sponsor Peer Group Analysis-Multi Statistics

KRS Insurance Plan

Periods Ended March 31, 2020



Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.

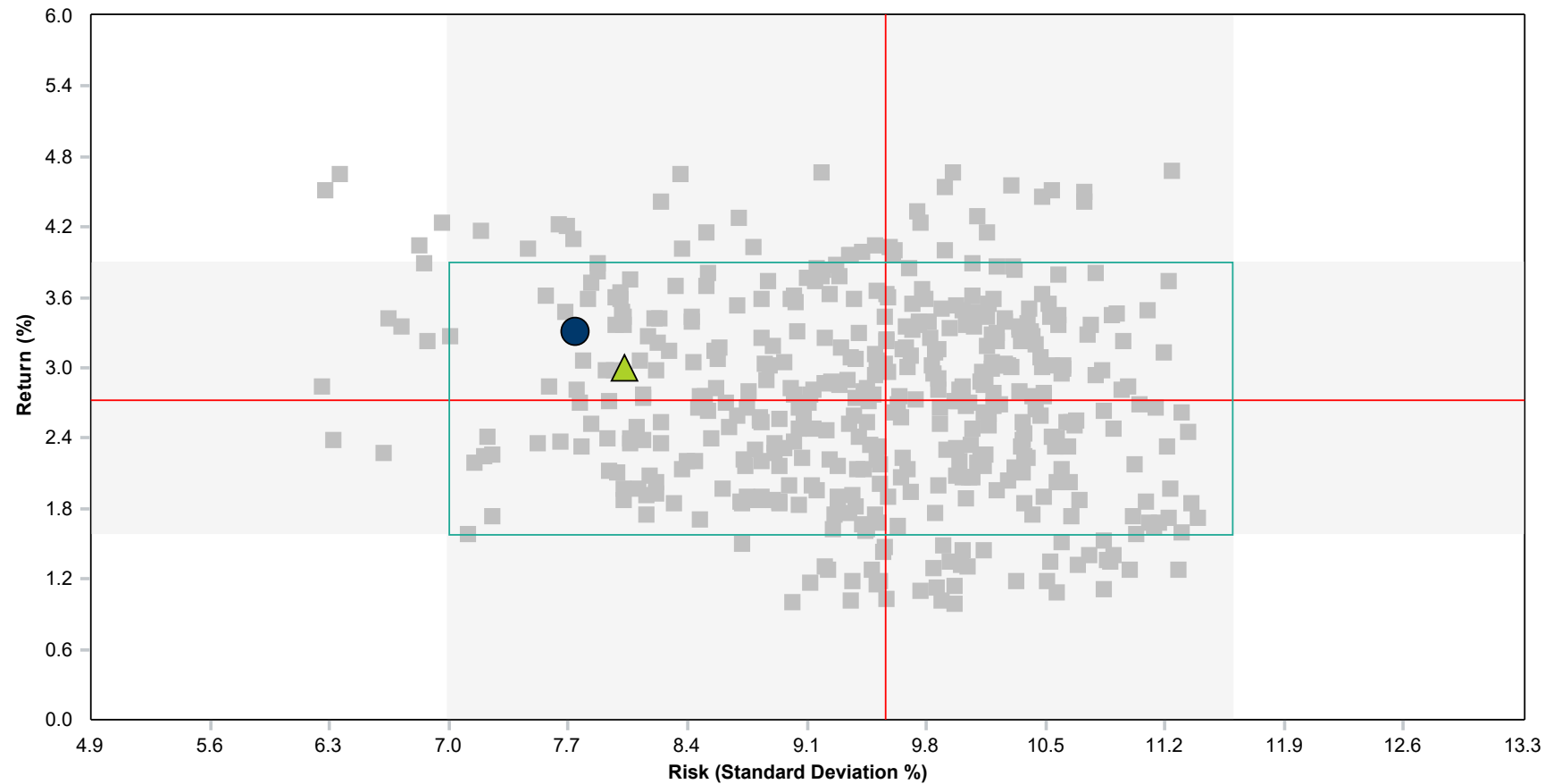
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# Plan Sponsor Scattergram

KRS Insurance Plan vs All Public Plans-Total Fund

Periods Ended April 1, 2017 To March 31, 2020

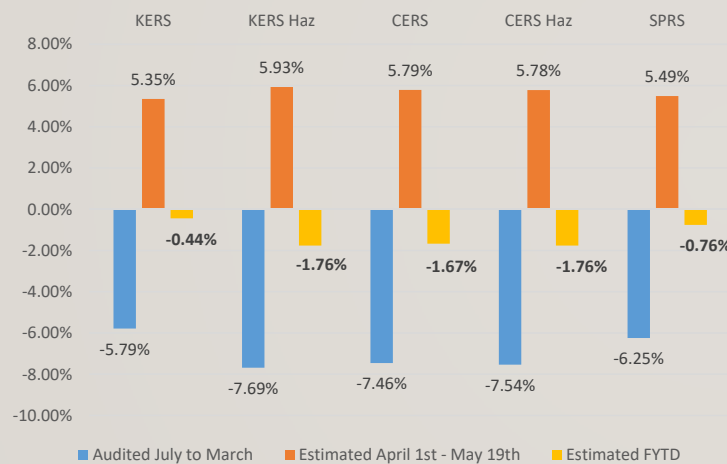


	Return	Standard Deviation
● KRS Insurance Plan	3.30	7.74
▲ KRS Allocation Index	3.00	8.03
— Median	2.72	9.56

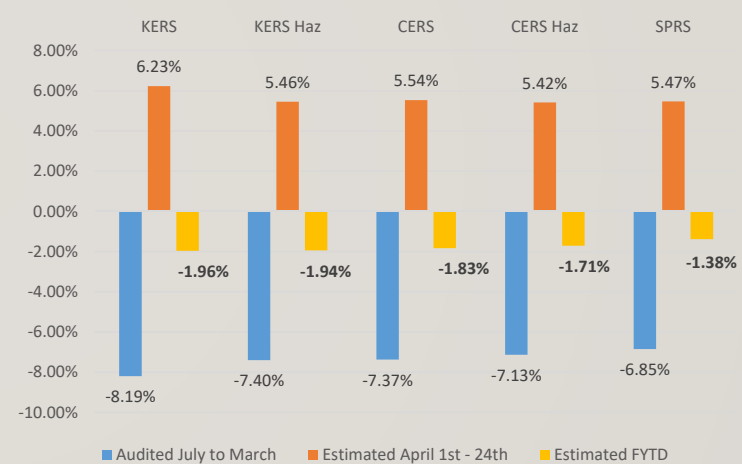
Calculation based on monthly periodicity.

## ESTIMATED FYTD PERFORMANCE

**Estimated FYTD Performance - PENSION**



**Estimated FYTD Performance - INSURANCE**







# Actuarial Subcommittee Meeting Review of Economic Assumptions

○

Originally presented May 13, 2020

**Kentucky Retirement Systems  
GRS Actuarial Experience Study  
Period Ending June 30, 2018  
Recap of Economic Assumptions**

**Inflation**

- Actual: Last 25 years: 2.25% annually
- Consulting Firms' 20 year projection: 2.20% annually
- Federal Reserve Target: 2.0% annually

**GRS Recommendation: Continue to use 2.30%**

**Kentucky Retirement Systems  
GRS Actuarial Experience Study  
Period Ending June 30, 2018  
Recap of Economic Assumptions**

Investment Returns

- 10 year historical returns: 5.89% and 6.23%
- Forward looking modeling (50<sup>th</sup> percentile):
  - CERS, KERS-H, All Insurance Plans: 6.11%
  - KERS-NH, SPRS: 5.72%

**GRS Recommendation: Continue to use 6.25% for CERS, KERS-H and All Insurance Plans; 5.25% for KERS-NH, SPRS**

**Kentucky Retirement Systems  
GRS Actuarial Experience Study  
Period Ending June 30, 2018  
Recap of Economic Assumptions**

Payroll Growth

Experience Past 10 Years: KERS-NH: (2.20%)

KERS-H: +.62%

CERS-NH: 1.31%

CERS: 1.19%

SPRS: (.87%)

**GRS Recommendation: Continue to use +2.0% for CERS, KERS-H;  
0.0% for KERS-NH, SPRS**

## Inflation 2010-2019

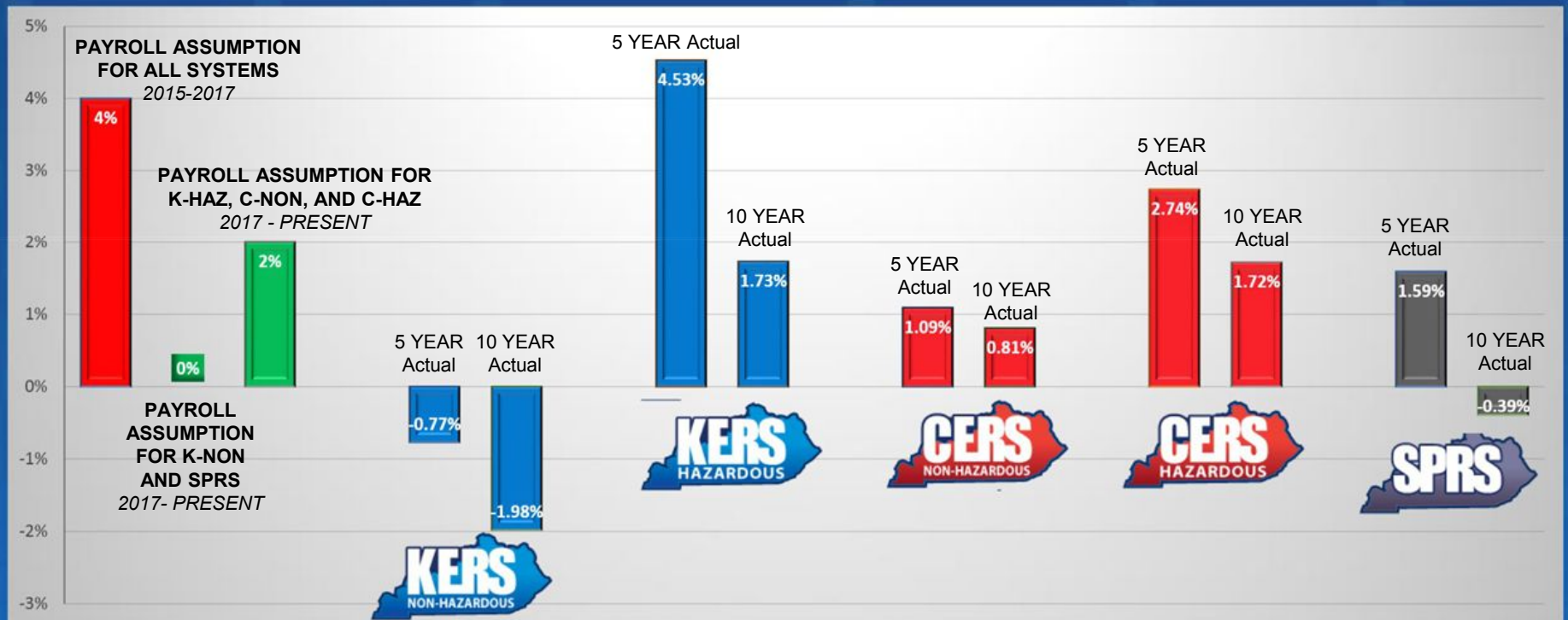
1.74% yearly average

Current Assumption: 2.3%

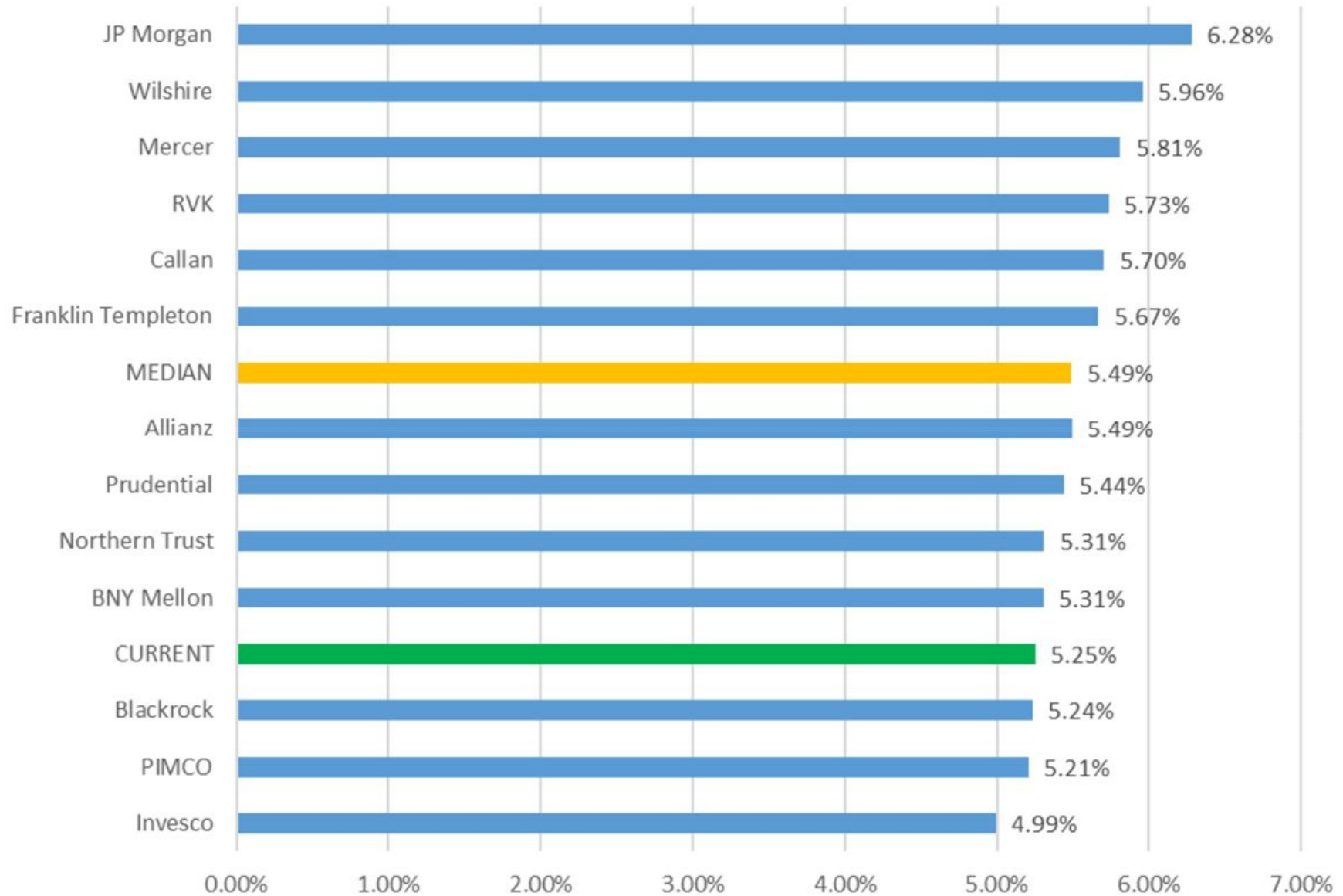
# ECONOMIC ASSUMPTIONS

## ANNUAL PAYROLL GROWTH

5-YEAR AND 10-YEAR PERIOD

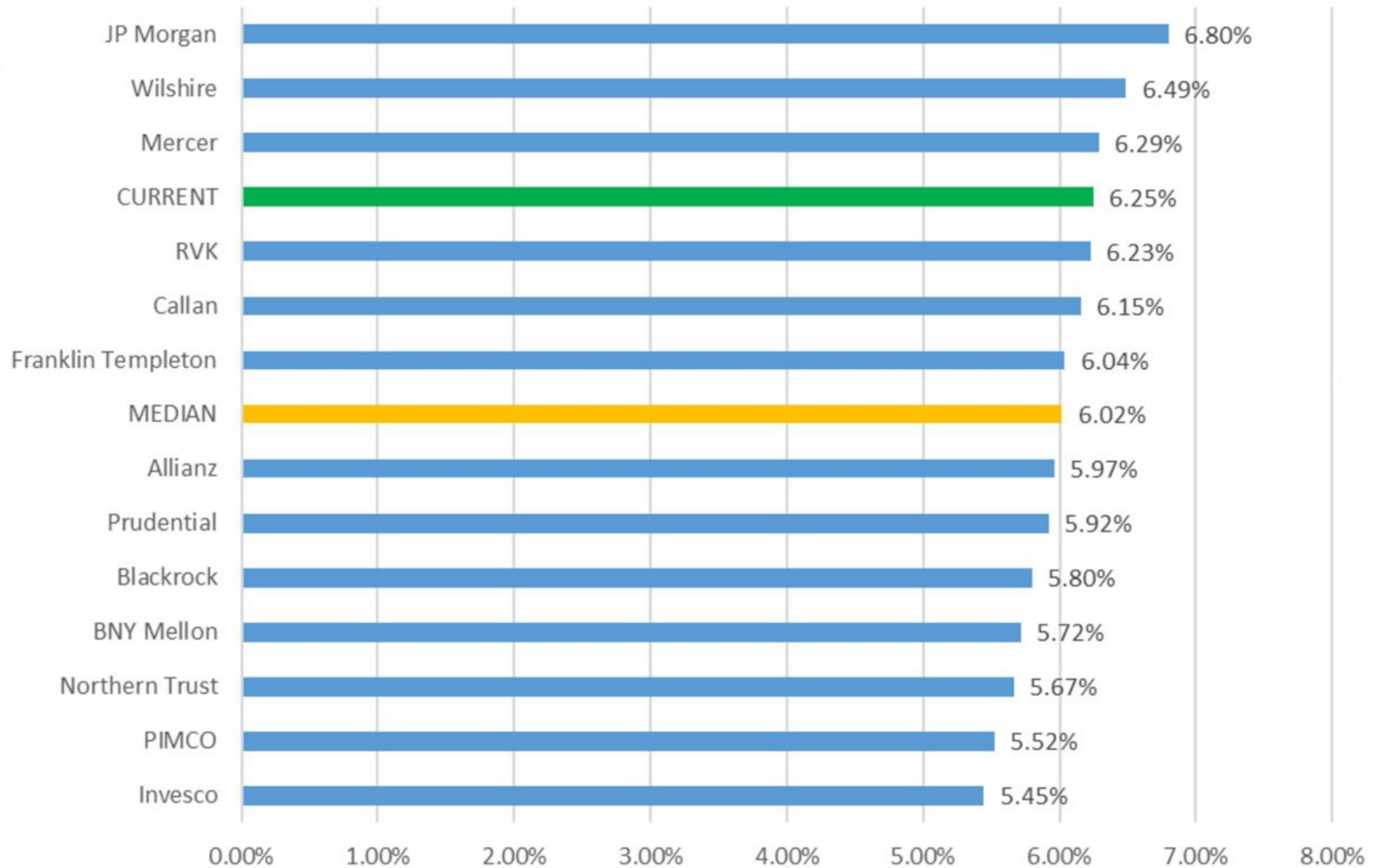


## Return Expectations - KERS and SPRS





## Return Expectations - CERS, CERS-Haz, KERS-Haz, All Insurance Plans





## Impact of the Market Decline on Contributions

### GRS Projections (\$ MIL)

### Pensions

	CERS-NH	CERS-HAZ	KERS-NH	KERS-HAZ	SPRS
<b>Market Value</b>					
<b>6/30/2019</b>	<b>\$7,160</b>	<b>\$2,414</b>	<b>\$2,234</b>	<b>\$681</b>	<b>\$286</b>
<b>4/30/2020</b>	<b>\$6,849</b>	<b>\$2,311</b>	<b>\$2,236</b>	<b>\$669</b>	<b>\$227</b>
<b>% Change</b>	<b>-4.30%</b>	<b>-4.30%</b>	<b>0.10%</b>	<b>-2.90%</b>	<b>-3.10%</b>
<b>One Year Cont. Rate Change*</b>	<b>0.30%</b>	<b>0.50%</b>	<b>0.10%</b>	<b>0.50%</b>	<b>0.80%</b>
<b>Five Year Cont. Rate Change*</b>	<b>1.90%</b>	<b>3.30%</b>	<b>0.70%</b>	<b>3.20%</b>	<b>5.00%</b>

\*Change in the absolute rate (e.g. .1% would change 84.0% to 84.1%)



## KENTUCKY RETIREMENT SYSTEMS

David L. Eager, Executive Director

1260 Louisville Road • Frankfort, Kentucky 40601  
kyret.ky.gov • Phone: 502-696-8800 • Fax: 502-696-8822



To: Kentucky Retirement Systems Board of Trustees

From: John E. Chilton, CPA, Chair  
Audit Committee of the Board of Trustees

Kristen N. Coffey, CICA *KNC*  
Division Director, Internal Audit Administration

Date: May 21, 2020

Subject: May 7, 2020 Audit Committee Meeting

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The Audit Committee held a special called meeting on May 7, 2020.

**Two items were approved by the Audit Committee and are being forwarded to the Board of Trustees for ratification:**

- a. Four requests for Hazardous Position Classifications.
- b. Results of the Infrastructure and Application Security Assessment.

**RECOMMENDATION: The Audit Committee requests the Board of Trustees ratify the actions taken by the Audit Committee.**

The following other information was discussed during the Audit Committee meeting:

1. Updates to Board Election Policy – policy will be presented for review at next quarterly meeting,
2. Information disclosures,
3. Financial statements,
4. Outstanding invoices,
5. Employer penalty waivers,
6. Investment compliance,
7. Internal Audit Budget,
8. Anonymous reports received,
9. Status of current internal audits, including audits issued since last meeting,
10. Status of Board of Trustee elections – postcards requesting nominations were sent out on May 8 – postcard proof attached,
11. State-wide single audit, and
12. Auditor Independence Statements.

**Attachment**



## Kentucky Retirement Systems

### Internal Audit Administration



To: Members of the Audit Committee of the KRS Board of Trustees

From: Kristen N. Coffey, CICA *KNC*  
Division Director, Internal Audit Administration

Date: May 7, 2020

Subject: 2021 CERS Board of Trustee Election Update

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The passage of House Bill 484 (CERS Separation) will not affect the upcoming election because the election takes place prior to the effective date of the bill.

The term of office for Betty Pendergrass and Jerry Powell, Trustees for County Employees Retirement Systems (CERS), expires on March 31, 2021. The term of office for David Rich, Trustee for CERS, expires October 31, 2021. Information pertaining to nomination requests is posted on the Kentucky Retirement Systems (KRS) website (<https://kyret.ky.gov/About/Board-Elections/Pages/default.aspx>). An announcement pertaining to requests for nominations will be mailed to the CERS membership no later than May 8, 2020. A proof of the post card that will be mailed is attached.

The contract with the election vendor was signed on February 25, 2020. A meeting with the vendor is planned for July 2020. During the meeting, the election requirements will be reviewed and a plan of action will be established. The KRS electronic balloting team is currently working on the paper ballot message that will be presented to the membership, via self-service, in October and November of 2020.

**No action is required of the Committee.**

Attachment



Kentucky Retirement Systems  
1260 Louisville Road  
Frankfort, KY 40601

Name

Address Line 1

Address Line 2

City, State Zipcode

## **CERS BOARD OF TRUSTEES ELECTION**

**Submit your email at [MYRETIREMENT.KY.GOV](https://myretirement.ky.gov)  
to cast your vote online in the upcoming election**

## **NOW ACCEPTING APPLICATIONS FOR NOMINATIONS CERS BOARD OF TRUSTEES ELECTION**

CERS members interested in being nominated to be a candidate must submit:

1. Completed application
2. Detailed resume
3. Signed release for a criminal background check

*All documents must be received at the KRS office by close of business on July 31, 2020.*

**Access forms and read more about the 2021 CERS  
Election at <https://kyret.ky.gov/About/Board-Elections>**



Members will be able to vote online in the upcoming election.  
Verify or update your email address at **MYRETIREMENT.KY.GOV**

Monday - Friday 8:00am - 4:30pm EST  
1-800-928-4646



[kyret.ky.gov](https://kyret.ky.gov)



@KYretirement



@KYretire

# Board of Trustees Quarterly Meeting - May 21, 2020 - Audit Committee Report

## KENTUCKY RETIREMENT SYSTEMS COMBINING STATEMENTS OF FIDUCIARY NET POSITION PENSION FUNDS As of March 31, 2020 (Unaudited)(In Whole Dollars)

	CERS	CHAZ	KERS	KHAZ	SPRS	2020	2019		
<b>ASSETS</b>									
Cash and Short-term Investments									
Cash Deposits	\$ 1,095,883	\$ 597,064	\$ 1,967,165	\$ 47,691	\$ 60,644	\$ 3,768,446	\$ 759,509	396%	1
Short-term Investments	\$ 445,627,149	\$ 163,129,598	\$ 220,809,998	\$ 41,882,601	\$ 24,085,979	\$ 895,535,326	\$ 724,573,085	24%	2
Total Cash and Short-term Investments	\$ 446,723,032	\$ 163,726,663	\$ 222,777,163	\$ 41,930,292	\$ 24,146,623	\$ 899,303,772	\$ 725,332,594		
<b>RECEIVABLES</b>									
Accounts Receivable	\$ 49,937,341	\$ 18,874,501	\$ 90,978,946	\$ 7,519,868	\$ 10,776,775	\$ 178,087,431	\$ 189,535,425	-6%	
Accounts Receivable - Investments	\$ 137,777,366	\$ 46,890,724	\$ 61,225,437	\$ 14,436,621	\$ 7,975,356	\$ 268,305,503	\$ 139,113,869	93%	3
Total Receivables	\$ 187,714,707	\$ 65,765,225	\$ 152,204,383	\$ 21,956,489	\$ 18,752,131	\$ 446,392,934	\$ 328,649,294		
<b>INVESTMENTS, AT FAIR VALUE</b>									
Core Fixed Income	\$ 809,208,364	\$ 277,709,556	\$ 436,473,778	\$ 88,033,824	\$ 54,727,776	\$ 1,666,153,298	\$ 2,214,032,090	-25%	4
Public Equities	\$ 2,639,592,746	\$ 885,741,782	\$ 730,673,144	\$ 259,643,575	\$ 92,988,748	\$ 4,608,639,996	\$ 4,608,381,662	0%	
Specialty Credit	\$ 1,065,159,921	\$ 352,546,322	\$ 295,220,188	\$ 102,126,185	\$ 39,414,885	\$ 1,854,467,501	\$ 1,925,412,425	-4%	
Private Equities	\$ 638,529,162	\$ 216,117,869	\$ 186,103,756	\$ 58,517,626	\$ 17,809,306	\$ 1,117,077,718	\$ 1,173,648,896	-5%	
Absolute Return	\$ 105,171,516	\$ 33,314,554	\$ 33,796,992	\$ 8,817,833	\$ 3,658,619	\$ 184,759,513	\$ 232,456,997	-21%	5
Real Estate	\$ 326,734,970	\$ 104,554,862	\$ 99,279,581	\$ 30,739,912	\$ 12,820,281	\$ 574,129,606	\$ 481,159,629	19%	6
Real Return	\$ 442,007,651	\$ 149,617,634	\$ 106,487,149	\$ 39,873,525	\$ 16,012,158	\$ 753,998,116	\$ 1,048,988,796	-28%	7
Opportunistic	\$ 99,239,197	\$ 32,806,941	\$ 29,018,946	\$ 8,996,716	\$ 3,584,405	\$ 173,646,207	\$ 99,658,007	74%	8
Derivatives	\$ 1,607,746	\$ 537,333	\$ 331,159	\$ 142,729	\$ 66,609	\$ 2,685,577	\$ 917,612	193%	9
Total Investments, at Fair Value	\$ 6,127,251,274	\$ 2,052,946,852	\$ 1,917,384,692	\$ 596,891,924	\$ 241,082,788	\$ 10,935,557,531	\$ 11,784,656,113		
<b>CAPITAL/INTANGIBLE ASSETS</b>									
Capital Assets	\$ 1,700,704	\$ 153,235	\$ 929,074	\$ 91,375	\$ 11,003	\$ 2,885,391	\$ 2,885,391		
Intangible Assets	\$ 9,960,922	\$ 826,734	\$ 5,919,584	\$ 493,581	\$ 100,005	\$ 17,300,826	\$ 17,300,826		
Accumulated Depreciation	\$ (1,654,218)	\$ (148,863)	\$ (903,397)	\$ (88,592)	\$ (11,262)	\$ (2,806,331)	\$ (2,696,487)		
Accumulated Amortization	\$ (8,936,830)	\$ (759,779)	\$ (5,249,025)	\$ (444,629)	\$ (106,586)	\$ (15,496,849)	\$ (13,933,112)		
Total Capital Assets	\$ 1,070,578	\$ 71,328	\$ 696,236	\$ 51,734	\$ (6,840)	\$ 1,883,037	\$ 3,556,618	-47%	10
Total Assets	\$ 6,762,759,592	\$ 2,282,510,068	\$ 2,293,062,474	\$ 660,830,438	\$ 283,974,702	\$ 12,283,137,274	\$ 12,842,194,619		
<b>LIABILITIES</b>									
Accounts Payable	\$ 3,415,672	\$ 664,191	\$ 1,869,359	\$ 171,045	\$ 209,475	\$ 6,329,742	\$ 12,551,371	-50%	11
Investment Accounts Payable	\$ 195,564,676	\$ 66,153,048	\$ 69,797,740	\$ 19,909,207	\$ 9,060,008	\$ 360,484,678	\$ 201,939,035	79%	12
Total Liabilities	\$ 198,980,348	\$ 66,817,239	\$ 71,667,098	\$ 20,080,252	\$ 9,269,483	\$ 366,814,420	\$ 214,490,406		
Total Fiduciary Net Position Restricted for Pensions	\$ 6,563,779,244	\$ 2,215,692,829	\$ 2,221,395,376	\$ 640,750,186	\$ 274,705,219	\$ 11,916,322,854	\$ 12,627,704,214		

### NOTE - Variance Explanation

- 1 Variance is a result of continuous fluctuation of deposits and transactions that flow through the cash account.
- 2 Short Term Investments is primarily comprised of the cash on hand with the custodial bank along with any small amounts of cash managers and brokers may have; therefore, the variance is driven by cash flow.
- 3 Variance is a result of transaction activity which is based on each individual manager.
- 4 The decrease in Core Fixed Income is a result of distributions used to fund new investments and unrealized losses due to the declining market.
- 5 The decline in Absolute Return is due to the continued redemptions of multiple managers.
- 6 The increase in Real Estate is a result of additional funding and unrealized gains.
- 7 The decrease in Real Return is a result of distributions used to fund new investments and unrealized losses due to the declining market.
- 8 The increase in Opportunistic is due to additional funds invested in current manager.
- 9 The increase in Derivatives is primarily due to an increase in foreign exchange derivatives.
- 10 The decrease in total Fixed Assets is due to the increase in the amortization of the fixed assets.
- 11 The decrease in Accounts Payable is due to an effort to resolve outstanding employer invoices.
- 12 Variance is a result of transaction activity which is based on each individual manager.

Board of Trustees Quarterly Meeting - May 21, 2020 - Audit Committee Report

**KENTUCKY RETIREMENT SYSTEMS**  
**COMBINING STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION**  
**PENSION FUNDS**  
**For the Quarter Ended March 31, 2020**  
**(Unaudited)(In Whole Dollars)**

	CERS	CHAZ	KERS	KHAZ	SPRS	2020	2019		
<b>ADDITIONS</b>									
Member Contributions	\$ 125,753,162	\$ 48,732,479	\$ 75,383,948	\$ 14,785,201	\$ 3,641,405	\$ 268,296,196	\$ 245,334,761	9%	
Employer Contributions	\$ 345,591,589	\$ 126,983,802	\$ 756,823,460	\$ 47,725,729	\$ 47,007,764	\$ 1,324,132,344	\$ 1,229,397,167	8%	
General Fund Appropriations	\$ -	\$ -	\$ -	\$ -	\$ 1,086,200	\$ 1,086,200	\$ 16,849,450	-94%	1
Pension Spiking Contributions	\$ 89,034	\$ 153,746	\$ 13,351	\$ 19,260	\$ 2,859	\$ 278,251	\$ 555,929	-50%	2
Northern Trust Settlement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100,888	-100%	3
Health Insurance Contributions (HB1)	\$ 5,525	\$ 980	\$ 1,661	\$ 3,950	\$ -	\$ 12,116	\$ 15,461,204	-100%	4
Employer Cessation Contributions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,642,662	-100%	5
<b>Total Contributions</b>	<b>\$ 471,439,310</b>	<b>\$ 175,871,007</b>	<b>\$ 832,222,420</b>	<b>\$ 62,534,141</b>	<b>\$ 51,738,229</b>	<b>\$ 1,593,805,107</b>	<b>\$ 1,518,342,061</b>		
<b>INVESTMENT INCOME</b>									
From Investing Activities									
Net Appreciation in FV of Investments	\$ (623,599,308)	\$ (213,488,703)	\$ (158,390,815)	\$ (62,071,792)	\$ (21,353,407)	\$ (1,078,904,024)	\$ 194,392,338	-655%	6
Interest/Dividends	\$ 135,005,834	\$ 45,522,674	\$ 39,073,569	\$ 13,097,791	\$ 5,402,927	\$ 238,102,796	\$ 211,126,145	13%	7
<b>Total Investing Activities Income</b>	<b>\$ (488,593,474)</b>	<b>\$ (167,966,029)</b>	<b>\$ (119,317,245)</b>	<b>\$ (48,974,000)</b>	<b>\$ (15,950,480)</b>	<b>\$ (840,801,229)</b>	<b>\$ 405,518,483</b>		
Investment Expense	\$ 21,664,390	\$ 6,731,235	\$ 5,785,838	\$ 2,002,556	\$ 848,171	\$ 37,032,190	\$ 38,648,646	-4%	
Performance Fee/Carried Interest	\$ 16,671,355	\$ 5,373,575	\$ 4,588,787	\$ 1,491,379	\$ 564,146	\$ 28,689,242	\$ 22,143,948	30%	8
<b>Net Income from Investing Activities</b>	<b>\$ (526,929,219)</b>	<b>\$ (180,070,839)</b>	<b>\$ (129,691,870)</b>	<b>\$ (52,467,936)</b>	<b>\$ (17,362,796)</b>	<b>\$ (906,522,660)</b>	<b>\$ 344,725,890</b>		
From Securities Lending Activities									
Securities Lending Income	\$ 3,056,751	\$ 1,027,656	\$ 849,314	\$ 290,932	\$ 120,543	\$ 5,345,196	\$ 7,821,078		
Securities Lending Expense	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Securities Lending Borrower Rebates	\$ 1,843,231	\$ 619,825	\$ 519,616	\$ 176,682	\$ 75,830	\$ 3,235,184	\$ 5,830,597		
Securities Lending Agent Fee	\$ 151,847	\$ 51,094	\$ 42,217	\$ 14,344	\$ 5,740	\$ 265,242	\$ 269,315		
<b>Net Income from Securities Lending</b>	<b>\$ 1,061,673</b>	<b>\$ 356,737</b>	<b>\$ 287,481</b>	<b>\$ 99,906</b>	<b>\$ 38,973</b>	<b>\$ 1,844,770</b>	<b>\$ 1,721,166</b>	7%	
<b>Total Investment Income</b>	<b>\$ (525,867,546)</b>	<b>\$ (179,714,101)</b>	<b>\$ (129,404,389)</b>	<b>\$ (52,368,030)</b>	<b>\$ (17,323,823)</b>	<b>\$ (904,677,890)</b>	<b>\$ 346,447,056</b>		
<b>Total Additions</b>	<b>\$ (54,428,236)</b>	<b>\$ (3,843,094)</b>	<b>\$ 702,818,030</b>	<b>\$ 10,166,112</b>	<b>\$ 34,414,405</b>	<b>\$ 689,127,217</b>	<b>\$ 1,864,789,117</b>		
<b>DEDUCTIONS</b>									
Benefit Payments	\$ 595,788,873	\$ 205,631,850	\$ 749,567,522	\$ 53,824,911	\$ 46,753,278	\$ 1,651,566,434	\$ 1,603,406,704	3%	
Refunds	\$ 12,790,919	\$ 3,001,695	\$ 9,826,641	\$ 2,613,843	\$ 18,435	\$ 28,251,533	\$ 23,852,077	18%	9
Administrative Expenses	\$ 16,187,527	\$ 1,443,340	\$ 8,653,289	\$ 854,475	\$ 180,026	\$ 27,318,657	\$ 25,682,719	6%	
<b>Total Deductions</b>	<b>\$ 624,767,320</b>	<b>\$ 210,076,885</b>	<b>\$ 768,047,452</b>	<b>\$ 57,293,229</b>	<b>\$ 46,951,738</b>	<b>\$ 1,707,136,624</b>	<b>\$ 1,652,941,500</b>		
<b>Net Increase (Decrease) in Fiduciary Net Position</b>	<b>\$ (679,195,555)</b>	<b>\$ (213,919,979)</b>	<b>\$ (65,229,422)</b>	<b>\$ (47,127,118)</b>	<b>\$ (12,537,333)</b>	<b>\$ (1,018,009,406)</b>	<b>\$ 211,847,617</b>		
<b>FIDUCIARY NET POSITION HELD IN TRUST FOR PENSION BENEFITS</b>									
Beginning of Period	\$ 7,242,974,797	\$ 2,429,612,808	\$ 2,286,624,798	\$ 687,877,305	\$ 287,242,561	\$ 12,934,332,269	\$ 12,415,856,606		
End of Period	\$ 6,563,779,242	\$ 2,215,692,830	\$ 2,221,395,376	\$ 640,750,187	\$ 274,705,229	\$ 11,916,322,863	\$ 12,627,704,223		

**NOTE - Variance Explanation**

- 1 General Fund Appropriations have significantly decreased in FY 2020.
- 2 Pension Spiking contributions decreased due to a change in statute. Pension spiking is now the member's responsibility.
- 3 The Northern Trust Settlement has been paid in full.
- 4 Health Insurance Contributions will continue to decrease in the Pension Funds, as they are now qualified in the Insurance Fund.
- 5 FY2019 reflects the Kentucky Bar Association Employer Cessation invoice payment.
- 6 The decline in Net Appreciation in Fair Value of Investments is a result of unrealized losses across the entire portfolio.
- 7 The increase in Interest/Dividends is due to additional income in FY20 from Core Fixed Income and Private Equity as compared to FY19
- 8 The increase in Performance Fees is a result of additional investment in Real Estate and Opportunistic.
- NOTE: Performance fees are associated with our LPs and they report on a quarter lag, you are seeing 12/31/2019 data for the LPs.
- 9 Increase in refunds taken by members not eligible for retirement benefit.

Board of Trustees Quarterly Meeting - May 21, 2020 - Audit Committee Report

**KENTUCKY RETIREMENT SYSTEMS**  
**COMBINING STATEMENTS OF FIDUCIARY NET POSITION**  
**INSURANCE FUNDS**  
**As of March 31, 2020**  
**(Unaudited)(In Whole Dollars)**

	CERS	CHAZ	KERS	KHAZ	SPRS	2020	2019		
<b>ASSETS</b>									
Cash and Short-Term Investments									
Cash Deposits	\$ 629,229	\$ 18,955	\$ 416,541	\$ 14,406	\$ 10,194	\$ 1,089,324	\$ 244,827	345%	1
Short-term Investments	\$ 138,620,944	\$ 78,213,312	\$ 49,863,793	\$ 25,565,778	\$ 8,788,554	\$ 301,052,381	\$ 311,469,008	-3%	
Total Cash and Short-term Investments	\$ 139,250,173	\$ 78,232,267	\$ 50,280,334	\$ 25,580,184	\$ 8,798,748	\$ 302,141,706	\$ 311,713,834		
<b>RECEIVABLES</b>									
Accounts Receivable	\$ 11,891,756	\$ 4,661,160	\$ 16,248,134	\$ 800,664	\$ 1,207,959	\$ 34,809,672	\$ 36,054,079	-3%	
Investment Accounts Receivable	\$ 47,720,876	\$ 23,959,519	\$ 20,855,494	\$ 9,640,757	\$ 3,782,580	\$ 105,959,226	\$ 45,592,832	132%	2
Total Receivables	\$ 59,612,632	\$ 28,620,678	\$ 37,103,628	\$ 10,441,421	\$ 4,990,538	\$ 140,768,897	\$ 81,646,911		
<b>INVESTMENTS, AT FAIR VALUE</b>									
Fixed Income	\$ 308,770,196	\$ 152,736,903	\$ 138,082,363	\$ 60,611,076	\$ 24,487,023	\$ 684,687,561	\$ 818,160,084	-16%	3
Public Equities	\$ 911,652,693	\$ 476,349,044	\$ 394,795,817	\$ 192,378,868	\$ 74,836,209	\$ 2,050,012,631	\$ 2,047,602,679	0%	
Specialty Credit	\$ 347,164,696	\$ 181,682,591	\$ 145,410,716	\$ 78,612,157	\$ 27,946,945	\$ 780,817,105	\$ 789,277,706	-1%	
Private Equities	\$ 266,818,115	\$ 150,296,834	\$ 54,749,178	\$ 50,847,335	\$ 22,940,793	\$ 545,652,255	\$ 553,335,410	-1%	
Absolute Return	\$ 33,869,878	\$ 18,976,177	\$ 11,931,297	\$ 7,922,629	\$ 2,971,030	\$ 75,671,011	\$ 95,208,883	-21%	4
Real Estate	\$ 109,971,508	\$ 60,262,693	\$ 34,482,265	\$ 25,351,756	\$ 9,684,096	\$ 239,752,318	\$ 199,752,832	20%	5
Real Return	\$ 152,771,646	\$ 79,920,353	\$ 52,561,219	\$ 31,927,565	\$ 11,243,434	\$ 328,424,217	\$ 446,091,127	-26%	6
Opportunistic	\$ 40,070,673	\$ 21,830,033	\$ 14,326,347	\$ 8,905,974	\$ 3,288,690	\$ 88,421,717	\$ 50,746,471	74%	7
Derivatives	\$ 482,663	\$ 265,041	\$ 171,149	\$ 108,489	\$ 39,619	\$ 1,066,962	\$ 382,093	179%	8
Total Investments, at Fair Value	\$ 2,171,572,069	\$ 1,142,319,668	\$ 846,510,351	\$ 456,665,849	\$ 177,437,840	\$ 4,794,505,777	\$ 5,000,557,286		
Total Assets	\$ 2,370,434,873	\$ 1,249,172,613	\$ 933,894,313	\$ 492,687,454	\$ 191,227,126	\$ 5,237,416,380	\$ 5,393,918,031		
<b>LIABILITIES</b>									
Accounts Payable	\$ 119,159	\$ 57,296	\$ 169,274	\$ 9,225	\$ 8,791	\$ 363,745	\$ 919,294	-60%	9
Investment Accounts Payable	\$ 66,813,574	\$ 34,112,697	\$ 28,589,698	\$ 13,815,786	\$ 5,344,777	\$ 148,676,532	\$ 72,385,925	105%	10
Total Liabilities	\$ 66,932,734	\$ 34,169,993	\$ 28,758,972	\$ 13,825,011	\$ 5,353,568	\$ 149,040,278	\$ 73,305,219		
Total Fiduciary Net Position Restricted for Insurance	\$ 2,303,502,139	\$ 1,215,002,620	\$ 905,135,341	\$ 478,862,443	\$ 185,873,558	\$ 5,088,376,102	\$ 5,320,612,812		

**NOTE - Variance Explanation**

- 1 Variance is a result of continuous fluctuation of deposits and transactions that flow through the cash account.
- 2 Variance is a result of transaction activity which is based on each individual manager.
- 3 The decrease in Core Fixed Income is a result of distributions used to fund new investments and unrealized losses due to the declining market.
- 4 The decline in Absolute Return is due to the continued redemptions of multiple managers.
- 5 The increase in Real Estate is a result of additional funding and unrealized gains.
- 6 The decrease in Real Return is a result of distributions used to fund new investments and unrealized losses due to the declining market.
- 7 The increase in Opportunistic is due to additional funds invested in current manager.
- 8 The increase in Derivatives is primarily due to an increase in foreign exchange derivatives.
- 9 The decrease in Accounts Payable is due to an effort to resolve outstanding employer invoices.
- 10 Variance is a result of transaction activity which is based on each individual manager.



Board of Trustees Quarterly Meeting - May 21, 2020 - Audit Committee Report

**KENTUCKY RETIREMENT SYSTEMS**  
**COMBINING STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION**  
**INSURANCE FUNDS**  
**For the Quarter Ended March 31, 2020**  
**(Unaudited)(In Whole Dollars)**

	CERS	CHAZ	KERS	KHAZ	SPRS	2020	2019	
<b>ADDITIONS</b>								
Employer Contributions	\$ 90,691,502	\$ 42,870,608	\$ 128,505,050	\$ 3,353,159	\$ 9,995,012	\$ 275,415,331	\$ 286,294,731	-4%
Medicare Drug Reimbursement	\$ 3,231	\$ 58	\$ 1,578	\$ 956	\$ 8	\$ 5,831	\$ 6,817	-14% 1
Insurance Premiums	\$ 453,150	\$ (33,144)	\$ 144,112	\$ (9,056)	\$ (10,394)	\$ 544,668	\$ 558,577	-2%
Humana Gain Share Payment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,514,065	
Retired Reemployed Healthcare	\$ 3,606,571	\$ 832,656	\$ 3,345,878	\$ 960,654	\$ -	\$ 8,745,759	\$ 7,980,558	10% 2
Employer Cessation Contributions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,391,354	-100% 3
Health Insurance Contributions (HB1)	\$ 9,364,464	\$ 2,079,608	\$ 4,601,815	\$ 816,435	\$ 147,756	\$ 17,010,077	\$ -	4
Northern Trust Settlement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 21,598	5
<b>Total Contributions</b>	<b>\$ 104,118,919</b>	<b>\$ 45,749,787</b>	<b>\$ 136,598,432</b>	<b>\$ 5,122,147</b>	<b>\$ 10,132,382</b>	<b>\$ 301,721,666</b>	<b>\$ 303,746,101</b>	
<b>INVESTMENT INCOME</b>								
From Investing Activities								
Net Appreciation in FV of Investments	\$ (216,299,514)	\$ (111,484,370)	\$ (92,265,936)	\$ (45,486,147)	\$ (16,320,877)	\$ (481,856,843)	\$ 71,207,487	-777% 6
Interest/Dividends	\$ 46,322,999	\$ 24,273,093	\$ 17,853,079	\$ 9,643,183	\$ 3,664,475	\$ 101,756,829	\$ 95,420,395	7%
<b>Total From Investing Activities</b>	<b>\$ (169,976,516)</b>	<b>\$ (87,211,276)</b>	<b>\$ (74,412,856)</b>	<b>\$ (35,842,964)</b>	<b>\$ (12,656,402)</b>	<b>\$ (380,100,014)</b>	<b>\$ 166,627,882</b>	
Investment Expense	\$ 6,181,974	\$ 3,180,976	\$ 2,601,805	\$ 1,324,646	\$ 516,781	\$ 13,806,181	\$ 16,979,348	-19% 7
Performance Fee	\$ 7,103,588	\$ 3,888,125	\$ 1,714,070	\$ 1,437,608	\$ 602,214	\$ 14,745,605	\$ 10,791,629	37% 8
<b>Net Income from Investing Activities</b>	<b>\$ (183,262,078)</b>	<b>\$ (94,280,377)</b>	<b>\$ (78,728,731)</b>	<b>\$ (38,605,217)</b>	<b>\$ (13,775,397)</b>	<b>\$ (408,651,800)</b>	<b>\$ 138,856,906</b>	
From Securities Lending								
Securities Lending Income	\$ 1,010,875	\$ 531,385	\$ 419,678	\$ 216,146	\$ 80,508	\$ 2,258,593	\$ 2,988,387	
Securities Lending Expense								
Security Lending Borrower Rebates	\$ 631,521	\$ 331,305	\$ 262,174	\$ 134,790	\$ 50,649	\$ 1,410,440	\$ 2,180,098	
Security Lending Agent Fees	\$ 51,187	\$ 26,919	\$ 21,070	\$ 10,946	\$ 4,006	\$ 114,127	\$ 111,625	
<b>Net Income from Securities Lending</b>	<b>\$ 328,168</b>	<b>\$ 173,161</b>	<b>\$ 136,433</b>	<b>\$ 70,410</b>	<b>\$ 25,854</b>	<b>\$ 734,026</b>	<b>\$ 696,664</b>	5%
<b>Total Net Income from Investments</b>	<b>\$ (182,933,910)</b>	<b>\$ (94,107,216)</b>	<b>\$ (78,592,297)</b>	<b>\$ (38,534,807)</b>	<b>\$ (13,749,543)</b>	<b>\$ (407,917,774)</b>	<b>\$ 139,553,570</b>	
<b>Total Additions</b>	<b>\$ (78,814,992)</b>	<b>\$ (48,357,429)</b>	<b>\$ 58,006,134</b>	<b>\$ (33,412,660)</b>	<b>\$ (3,617,161)</b>	<b>\$ (106,196,108)</b>	<b>\$ 443,299,671</b>	
<b>DEDUCTIONS</b>								
Healthcare Premiums Subsidies	\$ 100,377,661	\$ 60,896,166	\$ 92,991,997	\$ 14,635,123	\$ 10,565,406	\$ 279,466,353	\$ 281,351,230	-1%
Administrative Expense	\$ 689,372	\$ 349,229	\$ 642,302	\$ 94,221	\$ 53,854	\$ 1,828,979	\$ 1,589,494	15% 9
Self Funded Healthcare Costs	\$ 3,073,885	\$ 203,497	\$ 1,372,133	\$ 103,640	\$ 18,265	\$ 4,771,420	\$ 4,946,568	-4%
Excise Tax Insurance	\$ -	\$ -	\$ 28	\$ -	\$ -	\$ 28	\$ -	
<b>Total Deductions</b>	<b>\$ 104,140,919</b>	<b>\$ 61,448,892</b>	<b>\$ 95,006,432</b>	<b>\$ 14,832,984</b>	<b>\$ 10,637,525</b>	<b>\$ 286,066,752</b>	<b>\$ 287,887,292</b>	
<b>Net Increase (Decrease) in Fiduciary Net Position</b>	<b>\$ (182,955,911)</b>	<b>\$ (109,806,321)</b>	<b>\$ (37,000,298)</b>	<b>\$ (48,245,644)</b>	<b>\$ (14,254,686)</b>	<b>\$ (392,262,859)</b>	<b>\$ 155,412,379</b>	
<b>FIDUCIARY NET POSITION HELD IN TRUST FOR INSURANCE BENEFITS</b>								
Beginning of Period	\$ 2,486,458,049	\$ 1,324,808,941	\$ 942,135,657	\$ 527,108,088	\$ 200,128,245	\$ 5,480,638,979	\$ 5,165,178,825	
End of Period	\$ 2,303,502,139	\$ 1,215,002,620	\$ 905,135,359	\$ 478,862,443	\$ 185,873,559	\$ 5,088,376,119	\$ 5,320,591,204	

**NOTE - Variance Explanation**

- 1 Medicare drug reimbursement payments fluctuate year to year based on claims reviewed.
  - 2 Retired Reemployed Health Insurance contributions increased due to an increase in retired reemployed members reported.
  - 3 FY2019 reflects the Kentucky Bar Association Employer Cessation invoice payment.
  - 4 Health Insurance Contributions will continue to increase, as they are now qualified in the Insurance Fund.
  - 5 The Northern Trust Settlement has been paid in full.
  - 6 The decline in Net Appreciation in Fair Value of Investments is a result of unrealized losses across the entire portfolio.
  - 7 The decrease in Investment Advisory Fees is a result of a reduction in Private Equity and Absolute Return through redemptions and distributions.
  - 8 The increase in Performance Fees is a result of additional investment in Real Estate and Opportunistic.
- NOTE: Performance fees are associated with our LPs and they report on a quarter lag, you are seeing 12/31/2019 data for the LPs.
- 9 The increase in the insurance administrative expense is primarily due to an increase in premiums paid to Humana.





Kentucky Retirement Systems

# Board of Trustees

May 21, 2020






**Pension Fund Contribution Report**  
**(CERS-Non Hazardous and CERS-Hazardous)**  
**March 31, 2020 (compared to March 31, 2019)**  
 (\$ in millions)

				
<b>Contributions</b>	<b>FY19</b>	<b>FY20</b>	<b>FY19</b>	<b>FY20</b>
<i>Member Contributions</i>	\$122.6	\$125.7	\$45.9	\$48.7
<i>Employer Contributions</i>	282.9	345.7	104.0	127.1
<b>Contribution Inflows</b>	<b>405.5</b>	<b>471.4</b>	<b>149.9</b>	<b>175.8</b>
<i>Benefit Payments/Refunds</i>	582.8	608.5	195.3	208.6
<i>Administrative Expenses</i>	15.4	16.2	1.2	1.4
<b>Contribution Outflows</b>	<b>598.2</b>	<b>624.7</b>	<b>196.5</b>	<b>210.0</b>
<b>NET Contributions</b>	<b>(192.7)</b>	<b>(153.3)</b>	<b>(46.6)</b>	<b>(34.2)</b>
<i>Net Investment Income</i>	87.3	97.7	29.9	33.8
<i>Realized Gain/(Loss)</i>	98.8	240.0	32.4	79.7
<i>Unrealized Gain/(Loss)</i>	7.8	(863.6)	3.2	(293.2)
<b>NET Investment Activity</b>	<b>193.9</b>	<b>(525.9)</b>	<b>65.5</b>	<b>(179.7)</b>
<b>Change in Net Position</b>	<b>1.2</b>	<b>(679.2)</b>	<b>18.9</b>	<b>(213.9)</b>
<i>Beginning of Period</i>	<b>7,086.3</b>	<b>7,243.0</b>	<b>2,361.1</b>	<b>2,429.6</b>
<i>End of Period</i>	<b>\$7,087.5</b>	<b>\$6,563.8</b>	<b>\$2,380.0</b>	<b>\$2,215.7</b>



**Pension Fund Contribution Report**  
**(KERS Non Hazardous, KERS Hazardous & SPRS)**  
**March 31, 2020 (compared to March 31, 2019)**  
**(\$ in millions)**

						
<b>Contributions</b>	<b>FY19</b>	<b>FY20</b>	<b>FY19</b>	<b>FY20</b>	<b>FY19</b>	<b>FY20</b>
<i>Member Contributions</i>	\$74.7	\$75.4	\$13.7	\$14.8	\$3.9	\$3.6
<i>Employer Contributions</i>	777.6	756.8	44.7	47.7	48.3	48.1
<b>Contribution Inflows</b>	<b>852.3</b>	<b>832.2</b>	<b>58.4</b>	<b>62.5</b>	<b>52.2</b>	<b>51.7</b>
<i>Benefit Payments/Refunds</i>	749.4	759.4	53.9	56.4	45.8	46.7
<i>Administrative Expenses</i>	8.2	8.6	0.8	0.9	0.2	0.2
<b>Contribution Outflows</b>	<b>757.6</b>	<b>768.0</b>	<b>54.7</b>	<b>57.3</b>	<b>46.0</b>	<b>46.9</b>
<b>NET Contributions</b>	<b>94.7</b>	<b>64.2</b>	<b>3.7</b>	<b>5.2</b>	<b>6.2</b>	<b>4.8</b>
<i>Net Investment Income</i>	23.0	29.0	8.3	9.7	3.5	4.0
<i>Realized Gain/(Loss)</i>	28.9	62.9	8.8	22.1	3.1	8.6
<i>Unrealized Gain/(Loss)</i>	9.3	(221.3)	1.0	(84.2)	1.1	(29.9)
<b>NET Investment Activity</b>	<b>61.2</b>	<b>(129.4)</b>	<b>18.1</b>	<b>(52.4)</b>	<b>7.7</b>	<b>(17.3)</b>
<b>Change in Net Position</b>	<b>155.9</b>	<b>(65.2)</b>	<b>21.8</b>	<b>(47.2)</b>	<b>13.9</b>	<b>(12.5)</b>
<i>Beginning of Period</i>	2,048.9	2,286.6	651.2	687.9	268.4	287.2
<i>End of Period</i>	\$2,204.8	\$2,221.4	\$673.0	\$640.7	\$282.3	\$274.7






**Insurance Fund Contribution Report**  
**(CERS Non Hazardous and CERS Hazardous)**  
**March 31, 2020 (compared to March 31, 2019)**  
**(in \$millions)**

<b>Contributions</b>	<b>FY19</b>	<b>FY20</b>	<b>FY19</b>	<b>FY20</b>
<i>Employer Contributions</i>	\$97.3	\$90.7	\$45.9	\$42.9
<i>Insurance Premiums</i>	4.0	0.4	0.5	0.0
<i>Retired Reemployed Healthcare</i>	3.1	3.6	0.9	0.8
<i>Health Insurance Contributions (HB1)</i>	-	9.4	-	2.0
<b>Contribution Inflows</b>	<b>104.4</b>	<b>104.1</b>	<b>47.3</b>	<b>45.7</b>
<i>Healthcare Premiums</i>	104.1	103.4	58.7	61.1
<i>Administrative Expenses</i>	0.6	0.7	0.3	0.3
<b>Contribution Outflows</b>	<b>104.7</b>	<b>104.1</b>	<b>59.0</b>	<b>61.4</b>
<b>NET Contributions</b>	<b>(0.3)</b>	<b>-</b>	<b>(11.7)</b>	<b>(15.7)</b>
<i>Net Investment Income</i>	31.1	33.3	16.5	17.4
<i>Realized Gain/(Loss)</i>	32.1	73.4	17.9	40.0
<i>Unrealized Gain/(Loss)</i>	2.7	(289.6)	1.5	(151.5)
<b>NET Investment Activity</b>	<b>65.9</b>	<b>(182.9)</b>	<b>35.9</b>	<b>(94.1)</b>
<b>Change in Net Position</b>	<b>65.6</b>	<b>(182.9)</b>	<b>24.2</b>	<b>(109.8)</b>
<i>Beginning of Period</i>	<b>2,346.8</b>	<b>2,486.4</b>	<b>1,268.3</b>	<b>1,324.8</b>
<i>End of Period</i>	<b>\$2,412.4</b>	<b>\$2,303.5</b>	<b>\$1,292.5</b>	<b>1,215.0</b>



**CASH FLOW – Insurance Fund**  
**(KERS Non-Haz, KERS Haz & SPRS)**  
**March 31, 2020 (compared to March 31, 2019)**  
**(\$ in millions)**

						
<b>Contributions</b>	<b>FY19</b>	<b>FY20</b>	<b>FY19</b>	<b>FY20</b>	<b>FY19</b>	<b>FY20</b>
<i>Employer Contributions</i>	\$131.8	\$128.5	\$2.7	\$3.3	\$10.0	\$10.0
<i>Insurance Premiums</i>	3.3	0.2	0.2	-	0.1	-
<i>Retired Reemployed Healthcare</i>	3.0	3.3	1.0	1.0	-	-
<i>Health Insurance Contributions (HB1)</i>	-	4.6	-	0.8	-	0.1
<b>Contribution Inflow</b>	<b>138.1</b>	<b>136.6</b>	<b>3.9</b>	<b>5.1</b>	<b>10.1</b>	<b>10.1</b>
<i>Healthcare Premiums</i>	98.4	94.4	14.5	14.7	10.7	10.6
<i>Administrative Expenses</i>	0.6	0.6	0.1	0.1	-	-
<b>Contribution Outflow</b>	<b>99.0</b>	<b>95.0</b>	<b>14.6</b>	<b>14.8</b>	<b>10.7</b>	<b>10.6</b>
<b>NET Contributions</b>	<b>39.1</b>	<b>41.6</b>	<b>(10.7)</b>	<b>(9.7)</b>	<b>(0.6)</b>	<b>(0.5)</b>
<i>Net Investment Income</i>	11.7	13.7	6.6	7.0	2.4	2.6
<i>Realized Gain/(Loss)</i>	7.5	19.0	6.4	14.3	2.7	6.0
<i>Unrealized Gain/(Loss)</i>	(0.3)	(111.3)	0.5	(59.8)	0.1	(22.4)
<b>NET Investment Activity</b>	<b>18.9</b>	<b>(78.6)</b>	<b>13.5</b>	<b>(38.5)</b>	<b>5.2</b>	<b>(13.8)</b>
<b>Change in Net Position</b>	<b>58.0</b>	<b>(37.0)</b>	<b>2.8</b>	<b>(48.2)</b>	<b>4.6</b>	<b>(14.3)</b>
<i>Beginning of Period</i>	<b>846.8</b>	<b>942.1</b>	<b>513.4</b>	<b>527.1</b>	<b>190.0</b>	<b>200.2</b>
<i>Ending of Period</i>	<b>\$904.8</b>	<b>905.1</b>	<b>\$516.2</b>	<b>478.9</b>	<b>194.6</b>	<b>185.9</b>

**KRS ADMINISTRATIVE BUDGET 2019-20**  
**THIRD QUARTER BUDGET-TO-ACTUAL ANALYSIS**

Fiscal 20					
Acc't #	Account Name	Budgeted	Actual Expenditures	Remaining	% Remaining
	<b>PERSONNEL</b>				
111	Salaries	\$16,151,700	\$11,074,837	\$5,076,863	31.43%
115	Wages (Overtime)	\$594,500	\$202,327	\$392,173	65.97%
119	Wages (Block 50)	\$120,000	\$24,370	\$95,630	79.69%
121	Emp Paid FICA	\$1,200,000	\$806,748	\$393,252	32.77%
122	Emp Paid Retirement	\$12,000,000	\$8,942,869	\$3,057,131	25.48%
123	Emp Paid Health Ins	\$3,000,000	\$1,816,922	\$1,183,078	39.44%
124	Emp Paid Life Ins	\$12,000	\$2,500	\$9,500	79.17%
126	Health Insurance Admin Fee	\$18,100	\$0	\$18,100	100.00%
128	Emp Paid Sick Leave	\$75,000	\$41,240	\$33,760	45.01%
111A	Escrow For Admin Fees	\$0	(\$98,667)	(\$98,667)	
131	Workers Compensation	\$50,400	\$11,719	\$38,681	76.75%
132	Unemployment	\$10,000	\$3,684	\$6,316	63.16%
133	Tuition Assistance	\$35,000	\$9,152	\$25,848	73.85%
133I	Investment Tuition Assistance	\$5,000	\$0	\$5,000	100.00%
133T	Audit Tuition Assistance	\$2,500	\$0	\$2,500	100.00%
135	Bonds	\$3,000	\$0	\$3,000	100.00%
141	<b>LEGAL &amp; AUDITING SERVICES</b>				
141A	Legal Hearing Officers	\$350,000	\$60,166	\$289,834	82.81%
141B	Legal (Stoll, Keenon)	\$1,200,000	\$121,429	\$1,078,571	89.88%
141C	Polsinelli Shugart	\$100,000	\$0	\$100,000	100.00%
141D	Frost Brown	\$120,000	\$81,077	\$38,923	32.44%
141E	Reinhart	\$500,000	\$31,837	\$468,164	93.63%
141F	Ice Miller	\$500,000	\$166,151	\$333,849	66.77%
141L	Legal Expense	\$150,000	\$114,045	\$35,955	23.97%
142	Auditing	\$360,000	\$151,931	\$208,069	57.80%
146	<b>CONSULTING SERVICES</b>				
146A	Medical Reviewers	\$400,000	\$141,428	\$258,573	64.64%
146B	Medical Reports	\$10,000	\$0	\$10,000	100.00%
146C	Medical Exams	\$35,000	\$0	\$35,000	100.00%
146E	Escrow for Actuary Fees	\$12,000	(\$49,333)	(\$37,333)	
150	<b>CONTRACTUAL SERVICES</b>				
150C	Miscellaneous Contracts	\$275,000	\$13,149	\$261,851	95.22%
150D	Health Consultant	\$130,000	\$0	\$130,000	100.00%
150G	Human Resources Consulting	\$100,000	\$6,767	\$93,233	93.23%
159	Actuarial Services	\$780,000	\$455,437	\$324,563	41.61%
162	Facility Security Charges	\$78,000	\$3,118	\$74,882	96.00%
193	Tuition Assistance	\$5,000	\$0	\$5,000	100.00%
	<b>PERSONNEL SUBTOTAL</b>	<b>\$38,382,200</b>	<b>\$24,134,900</b>	<b>\$13,951,300</b>	<b>36.35%</b>

**KRS ADMINISTRATIVE BUDGET 2018-19**  
**THIRD QUARTER BUDGET-TO-ACTUAL ANALYSIS**

Acc't #	Account Name	Budgeted	Actual Expenditures	Remaining	% Remaining
	<b>OPERATIONAL</b>				
211	Natural Gas	\$48,000	\$16,356	\$31,644	65.92%
212	Electric	\$190,000	\$127,032	\$62,968	33.14%
221	Rent-NonState Building	\$70,000	\$48,782	\$21,218	30.31%
222	Building Rental - PPW	\$759,400	\$667,543	\$91,857	12.10%
223	Equipment Rental	\$15,000	\$0	\$15,000	100.00%
224	Copier Rental	\$100,000	\$51,576	\$48,424	48.42%
226	Rental Carpool	\$10,000	\$7,222	\$2,778	27.78%
232	Vehicle/Equip. Mainten.	\$29,000	\$1,204	\$27,796	95.85%
241	Postage	\$525,000	\$286,977	\$238,023	45.34%
242	Freight	\$1,200	\$41	\$1,159	96.55%
251	Printing (State)	\$12,000	\$8,966	\$3,034	25.29%
252	Printing (non-state)	\$300,000	\$52,828	\$247,172	82.39%
254	Insurance	\$250,000	\$0	\$250,000	100.00%
256	Garbage Collection	\$20,000	\$3,529	\$16,471	82.35%
259	Conference Expense	\$40,000	\$17,111	\$22,889	57.22%
259I	Conference Exp. Investment	\$12,600	\$0	\$12,600	100.00%
259T	Conference Exp. Audit	\$1,500	\$420	\$1,080	72.00%
300	MARS Usage	\$84,000	\$34,950	\$49,050	58.39%
302	COVID-19 Expenses	\$0	\$29,134.94	(\$29,135)	
321	Office Supplies	\$150,000	\$74,350	\$75,650	50.43%
343	Motor Fuels & Lubricants	\$3,000	\$0	\$3,000	100.00%
361	Travel (In-State)	\$75,000	\$27,413	\$47,587	63.45%
361I	Travel (In-State) Investment	\$1,500	\$137	\$1,363	90.88%
361T	Travel (In-State) Audit	\$500	\$0	\$500	100.00%
362	Travel (Out of State)	\$20,000	\$16,595	\$3,405	17.02%
362I	Travel (Out of State) Invest	\$50,000	\$35,574	\$14,426	28.85%
362T	Travel (Out of State) Audit	\$2,500	\$1,533	\$967	38.69%
381	Dues & Subscriptions	\$85,000	\$41,163	\$43,837	51.57%
381I	Dues & Subscriptions Invest	\$15,000	\$1,250	\$13,750	91.67%
381T	Dues & Subscriptions Audit	\$5,000	\$0	\$5,000	100.00%
399	Miscellaneous	\$75,100	\$1,447	\$73,653	98.07%
399I	Miscellaneous Investment	\$20,000	\$0	\$20,000	100.00%
399T	Miscellaneous Audit	\$2,000	\$0	\$2,000	100.00%
802	COT Charges	\$90,000	\$10,120	\$79,880	88.76%
814	Telephone - Wireless	\$8,000	\$3,463	\$4,537	56.71%
815	Telephone - Other	\$250,000	\$81,434	\$168,566	67.43%
847	Computer Equip./Software	\$6,000,000	\$1,559,916	\$4,440,084	74.00%
	<b>OPERATIONAL SUBTOTAL</b>	<b>\$9,320,300</b>	<b>\$3,208,069</b>	<b>\$6,112,231</b>	<b>65.58%</b>
	<b>TOTALS</b>	<b>\$47,702,500</b>	<b>\$27,342,969</b>	<b>\$20,063,531</b>	<b>42.06%</b>





## KENTUCKY RETIREMENT SYSTEMS

David L. Eager, Executive Director

Perimeter Park West • 1260 Louisville Road • Frankfort, Kentucky 40601

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TO: Board of Trustees

FROM: D’Juan Surratt  
Director of Employer Reporting, Compliance and Education

DATE: 05/21/2020

SUBJECT: Hazardous Position Classification

AGENCIES ARE REQUESTING HAZARDOUS DUTY COVERAGE FOR THE FOLLOWING POSITIONS:

<b><u>Agency</u></b>	<b><u>Position</u></b>	<b><u>Effective Date</u></b>
Elliott County Fiscal Court	Sheriff	10/01/2019
Kentucky State University	Assistant Chief of Police	05/01/2020
Kentucky State University	Police Lieutenant	05/01/2020
City of Winchester	Single Role Emergency Medical Technician	06/01/2020

Kentucky Retirement Systems has reviewed the above requests and feel that these positions meet the statutory guidelines for Hazardous coverage. Position Questionnaires and Job Descriptions are attached.

**61.592 Retirement of persons working in hazardous positions.**

(1)

- (a) "Hazardous position" for employees participating in the Kentucky Employees Retirement System, and for employees who begin participating in the County Employees Retirement System before September 1, 2008, means:
  - 1. Any position whose principal duties involve active law enforcement, including the positions of probation and parole officer and Commonwealth detective, active fire suppression or prevention, or other positions, including, but not limited to, pilots of the Transportation Cabinet and paramedics and emergency medical technicians, with duties that require frequent exposure to a high degree of danger or peril and also require a high degree of physical conditioning;
  - 2. Positions in the Department of Corrections in state correctional institutions and the Kentucky Correctional Psychiatric Center with duties that regularly and routinely require face-to-face contact with inmates; and
  - 3. Positions of employees who elect coverage under KRS 196.167(3)(b)2. and who continue to provide educational services and support to inmates as a Department of Corrections employee.
- (b) "Hazardous position" for employees who begin participating in the County Employees Retirement System on or after September 1, 2008, means police officers and firefighters as defined in KRS 61.315(1), paramedics, correctional officers with duties that routinely and regularly require face-to-face contact with inmates, and emergency medical technicians if:
  - 1. The employee's duties require frequent exposure to a high degree of danger or peril and a high degree of physical conditioning; and
  - 2. The employee's duties are not primarily clerical or administrative.
- (c) The effective date of participation under hazardous duty coverage for positions in the Department of Alcoholic Beverage Control shall be April 1, 1998. The employer and employee contributions shall be paid by the employer and forwarded to the retirement system for the period not previously reported.

(2)

- (a) Each employer may request of the board hazardous duty coverage for those positions as defined in subsection (1) of this section. Upon request, each employer shall certify to the system, in the manner prescribed by the board, the names of all employees working in a hazardous position as defined in subsection (1) of this section for which coverage is requested. The certification of the employer shall bear the approval of the agent or agency responsible for the budget of the department or county indicating that the required employer contributions have been provided for in the budget of the employing department or county. The system shall determine whether the employees whose names have been certified by the employer are working in positions meeting the definition of a hazardous position as provided by subsection (1) of this section. This process shall not be required for employees who elect coverage under KRS 196.167(3)(b)2.

September 4, 2019

- (b) Each employer desiring to provide hazardous duty coverage to employees who begin participating in the County Employees Retirement System on or after September 1, 2008, may request that the board approve hazardous duty coverage for those positions that meet the criteria set forth in subsection (1)(b) of this section. Each employer shall certify to the system, in the manner prescribed by the board, the names of all employees working in a hazardous position as defined in subsection (1)(b) of this section for which coverage is requested and a job description for each position or employee. The certification of the employer shall bear the approval of the agent or agency responsible for the budget of the department or county indicating that the required employer contributions have been provided for in the budget of the employing department or county. Each employer shall also certify, under penalty of perjury in accordance with KRS Chapter 523, that each employee's actual job duties are accurately reflected in the job description provided to the system. The system shall determine whether the employees whose names have been certified by the employer are working in positions meeting the definition of a hazardous position as defined in subsection (1)(b) of this section. The board shall have the authority to remove any employee from hazardous duty coverage if the board determines the employee is not working in a hazardous duty position or if the employee is classified in a hazardous duty position but has individual job duties that do not meet the definition of a hazardous duty position or are not accurately reflected in the job descriptions filed by the employer with the system. (3) (a) An employee who elects coverage under KRS 196.167(3)(b)2., and an employee participating in the Kentucky Employees Retirement System who is determined by the system to be working in a hazardous position in accordance with subsection (2) of this section, shall contribute, for each pay period for which he receives compensation, eight percent (8%) of his creditable compensation. An employee participating in the County Employees Retirement System who is determined by the system to be working in a hazardous duty position in accordance with subsection (2) of this section shall contribute, for each pay period for which he receives compensation, eight percent (8%) of his creditable compensation. (b) Each employer shall pay employer contributions based on the creditable compensation of the employees determined by the system to be working in a hazardous position at the employer contribution rate as determined by the board. The rate shall be determined by actuarial methods consistent with the provisions of KRS 61.565.
- (c) If the employer participated in the system prior to electing hazardous duty coverage, the employer may pay to the system the cost of converting the nonhazardous service to hazardous service from the date of participation to the date the payment is made, or the employer may establish a payment schedule for payment of the cost of the hazardous service above that which would be funded within the existing employer contribution rate. The employer may extend the payment schedule to a maximum of thirty (30) years. Payments made by the employer under this subsection shall be deposited to the retirement allowance account of the proper retirement system and these funds shall not be considered accumulated contributions of the individual members. If the employer elects not to make the additional payment, the employee may pay the cost of converting the service and provide payment for the cost as provided by KRS 61.552(14). Payments made by the employee under this

**61.315 Benefits payable on death of certain peace officers, firefighters, and members of a state National Guard or Reserve component-- Administrative regulations -- Funds allotted to a self-insuring account.**

- (1) As used in this section, "police officer" means every paid police officer, sheriff, or deputy sheriff, corrections employee with the power of a peace officer pursuant to KRS 196.037, any auxiliary police officer appointed pursuant to KRS 95.445, or any citation or safety officer appointed pursuant to KRS 83A.087 and 83A.088, elected to office, or employed by any county, airport board created pursuant to KRS Chapter 183, city, or by the state; "firefighter" means every paid firefighter or volunteer firefighter who is employed by or volunteers his or her services to the state, airport board created pursuant to KRS Chapter 183, any county, city, fire district, or any other organized fire department recognized, pursuant to KRS 95A.262, as a fire department operated and maintained on a nonprofit basis in the interest of the health and safety of the inhabitants of the Commonwealth and shall include qualified civilian firefighters employed at Kentucky-based military installations.
- (2) The spouse of any police officer, sheriff, deputy sheriff, corrections employee with the power of a peace officer pursuant to KRS 196.037, any auxiliary police officer appointed pursuant to KRS 95.445, or any citation or safety officer appointed pursuant to KRS 83A.087 and 83A.088, firefighter, or member of the Kentucky National Guard on state active duty pursuant to KRS 38.030, or a member of a state National Guard or a Reserve component on federal active duty who names Kentucky as home of record for military purposes, whose death occurs on or after July 1, 2002, as a direct result of an act in the line of duty shall receive a lump-sum payment of eighty thousand dollars (\$80,000) if there are no surviving children, which sum shall be paid by the State Treasurer from the general expenditure fund of the State Treasury. If there are surviving children and a surviving spouse, the payment shall be apportioned equally among the surviving children and the spouse. If there is no surviving spouse, the payment shall be made to the surviving children, eighteen (18) or more years of age. For surviving children less than eighteen (18) years of age, the State Treasurer shall:
  - (a) Pay thirty-five thousand dollars (\$35,000) to the surviving children; and
  - (b) Hold forty-five thousand dollars (\$45,000) in trust divided into equal accounts at appropriate interest rates for each surviving child until the child reaches the age of eighteen (18) years.

If a child dies before reaching the age of eighteen (18) years, his or her account shall be paid to his or her estate. If there are no surviving children, the payment shall be made to any parents of the deceased.
- (3) The Commission on Fire Protection Personnel Standards and Education shall be authorized to promulgate administrative regulations establishing criteria and procedures applicable to the administration of this section as it pertains to both paid and volunteer firefighters, including but not limited to defining when a firefighter has died in line of duty. Administrative hearings promulgated by administrative

regulation under authority of this subsection shall be conducted in accordance with KRS Chapter 13B.

- (4) The Justice and Public Safety Cabinet may promulgate administrative regulations establishing criteria and procedures applicable to the administration of this section as it pertains to police officers, including but not limited to defining when a police officer has died in line of duty. Administrative hearings promulgated by administrative regulation under authority of this subsection shall be conducted in accordance with KRS Chapter 13B.
- (5) The Department of Corrections shall promulgate administrative regulations establishing the criteria and procedures applicable to the administration of this section as it pertains to correctional employees, including but not limited to defining which employees qualify for coverage and which circumstances constitute death in the line of duty.
- (6) The benefits payable under this section shall be in addition to any benefits now or hereafter prescribed under any police, sheriff, firefighter's, volunteer firefighter's, or National Guard or Reserve retirement or benefit fund established by the federal government or by any state, county, or any municipality.
- (7) Any funds appropriated for the purpose of paying the death benefits described in subsection (2) of this section shall be allotted to a self-insuring account. These funds shall not be used for the purpose of purchasing insurance.

Effective: June 26, 2007

**History:** Amended 2007 Ky. Acts ch. 85, sec. 128, effective June 26, 2007. -- Amended 2006 Ky. Acts ch. 252, Pt. XXVIII, sec. 12, effective April 25, 2006. -- Amended 2002 Ky. Acts ch. 289, sec. 1, effective July 15, 2002. -- Amended 1996 Ky. Acts ch. 117, sec. 1, effective July 15, 1996; and ch. 318, sec. 28, effective July 15, 1996. -- Amended 1992 Ky. Acts ch. 48, sec. 3, effective July 14, 1992; ch. 294, sec. 1, effective April 9, 1992; ch. 307, sec. 10, effective April 9, 1992; and ch. 381, sec. 8, effective July 14, 1992. -- Amended 1988 Ky. Acts ch. 225, sec. 26, effective July 15, 1988. -- Amended 1986 Ky. Acts ch. 135, sec. 1, effective July 15, 1986. -- Amended 1984 Ky. Acts ch. 247, sec. 1, effective July 13, 1984. -- Amended 1982 Ky. Acts ch. 250, sec. 1, effective July 15, 1982. -- Amended 1980 Ky. Acts ch. 344, sec. 1, effective July 15, 1980. -- Amended 1978 Ky. Acts ch. 164, sec. 4, effective June 17, 1978. -- Amended 1976 Ky. Acts ch. 35, sec. 1. -- Created 1972 Ky. Acts ch. 8, sec. 1.

**Legislative Research Commission Note (4/25/2006).** 2006 Ky. Acts ch. 252; Pt. XXVIII, sec. 17, provides that the amendments made to subsections (2) and (6) of this section "shall apply retroactively to July 1, 2002."

**Legislative Research Commission Note (1988).** Although this section was included in 1988 Acts ch. 225, sec. 26, the amended language was deleted by committee amendment.



# KENTUCKY RETIREMENT SYSTEMS

1260 Louisville Road • Frankfort, Kentucky 40601  
kyret.ky.gov • Phone: 502-696-8800 • Fax: 502-696-8822



Form 7025  
Revised 09/2010

## Position Questionnaire

### Instructions

To petition the Board for approval of hazardous duty positions for KERS employees, complete Sections 1 and 3.

To petition for CERS employees with a CERS participation date prior to 9/1/2008, complete Sections 1 and 3.

To petition for CERS employees with a CERS participation date on or after 9/1/2008, complete Sections 2 and 3.

### Section 1: For KERS Employees or Employees With a CERS Participation Date Prior to September 1, 2008

Employer: ELLIOTT COUNTY FISCAL COURT

Position Title: \_\_\_\_\_

Is this position required to have Peace Officer Professional Standards and Certification? ☐ Yes ☐ No

If no, is this position required to carry a firearm? ☐ Yes ☐ No

Does this position require active fire suppression or prevention? ☐ Yes ☐ No

### Section 2: For Employees With a CERS Participation Date On or After September 1, 2008

Employer: ELLIOTT COUNTY FISCAL COURT

Position Title: Sheriff

Please select the appropriate classification and answer all that are applicable.

☒ Police Officer

☐ Firefighter Does this position require active fire suppression? ☐ Yes ☐ No

☐ Paramedic

☐ Correctional Officer Does this position routinely require face to face contact with inmates? ☐ Yes ☐ No

☐ Other Specify: \_\_\_\_\_

Is this position required to have Peace Officer Professional Standards and Certification? ☐ Yes ☒ No

If no, is this position required to carry a firearm? ☐ Yes ☐ No

☐ Emergency Medical Technician (If this position is selected please complete the remainder of this page, if not skip to page 2.)

Does this position require frequent exposure to a high degree of danger or peril? ☐ Yes ☐ No

Does this position require a high degree of physical conditioning? ☐ Yes ☐ No

Are the employee's duties primarily clerical or administrative? ☐ Yes ☐ No

Position Duty: Clerical or Administrative (Complete only if EMT is selected):

Percentage of Time Spent: \_\_\_\_\_

Description of Duties:

Agency Head Signature: \_\_\_\_\_

Date: 1/31/2020

Agency Head Title: Judge Executive

Page 1

Employer: ELLIOTT COUNTY FISCAL COURT

Position Title:

Sheriff

**Section 3: For All Positions**

1. List the exact position title as it appears on your job description.

2. List the position's duties (i.e. training, field duties, etc.), the percentage of time spent performing each duty (percentages must equal 100% including the clerical/administrative duties on the first page for EMT positions), and a description of each duty in the box provided.

3. BE AS DETAILED AS POSSIBLE. The Board of Trustees will use this document in determining if the position meets the definition of hazardous duty per KRS 61.592.

Position Duty: Sheriff / Police Duties / Field Duties

Percentage of Time Spent: 90%

Description of Duties:

Respond to calls that come into Dispatch / 911 (i.e. domestic violence, murders, altercations, theft)

Bailiff Court

Position Duty: Clerical Duties

Percentage of Time Spent: 10%

Description of Duties:

Serve papers

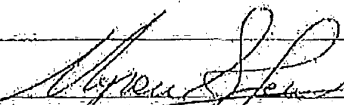
Collect taxes

Position Duty:

Percentage of Time Spent:

Description of Duties:

Agency Head Signature:



Agency Head Title:

County Judge Executive

Date:

4/31/2020

ELLIOTT COUNTY KENTUCKY  
SHERIFF JOB DESCRIPTION

The sheriff is an elected position, serving for a term of 4 years. The sheriff is responsible for law enforcement on the county level, ensuring that all local, state, and federal laws are followed. He manages the Sheriff's Office which is in charge of protecting people and property and maintain order in the County.

The sheriff performs the following duties:

- Investigating complaints
- Emergency response
- Patrolling
- Monitoring traffic safety
- Resolving disputes
- Arresting suspects
- Criminal investigation
- Executing warrants
- Collect Taxes and remit to Taxing Districts

The sheriff is also responsible for managerial and clerical office duties, which may include filling out paperwork on warrants and complaints, reviewing patrol logs, overseeing hiring and training of deputies, managing the county jail, and writing and distributing the budget.





# KENTUCKY RETIREMENT SYSTEMS

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Form 7025  
Revised 09/2010

## Position Questionnaire

### Instructions

To petition the Board for approval of hazardous duty positions for KERS employees, complete Sections 1 and 3.  
To petition for CERS employees with a CERS participation date prior to 9/1/2008, complete Sections 1 and 3.  
To petition for CERS employees with a CERS participation date on or after 9/1/2008, complete Sections 2 and 3.

### Section 1: For KERS Employees or Employees With a CERS Participation Date Prior to September 1, 2008

Employer: KENTUCKY STATE UNIVERSITY

Position Title: Assistant Chief of Police

Is this position required to have Peace Officer Professional Standards and Certification? ☒ Yes ☐ No

If no, is this position required to carry a firearm? ☒ Yes ☐ No

Does this position require active fire suppression or prevention? ☐ Yes ☒ No

### Section 2: For Employees With a CERS Participation Date On or After September 1, 2008

Employer: KENTUCKY STATE UNIVERSITY

Position Title:

Please select the appropriate classification and answer all that are applicable.

☐ Police Officer

☐ Firefighter Does this position require active fire suppression? ☐ Yes ☐ No

☐ Paramedic

☐ Correctional Officer Does this position routinely require face to face contact with inmates? ☐ Yes ☐ No

☐ Other Specify: \_\_\_\_\_

Is this position required to have Peace Officer Professional Standards and Certification? ☐ Yes ☐ No

If no, is this position required to carry a firearm? ☐ Yes ☐ No

☐ Emergency Medical Technician (If this position is selected please complete the remainder of this page, if not skip to page 2.)

Does this position require frequent exposure to a high degree of danger or peril? ☐ Yes ☐ No

Does this position require a high degree of physical conditioning? ☐ Yes ☐ No

Are the employee's duties primarily clerical or administrative? ☐ Yes ☐ No

Position Duty: Clerical or Administrative (Complete only if EMT is selected):

Percentage of Time Spent: \_\_\_\_\_

Description of Duties:

Agency Head Signature: [Signature]

Date: 4-17-2020

Agency Head Title: ELP FOR FINANCE & ADMINISTRATION

Employer: KENTUCKY STATE UNIVERSITY

Position Title: Assistant Chief of Police

**Section 3: For All Positions**

1. List the exact position title as it appears on your job description.
2. List the position's duties (i.e. training, field duties, etc.), the percentage of time spent performing each duty (percentages must equal 100% including the clerical/administrative duties on the first page (for EMT positions), and a description of each duty in the box provided.
3. BE AS DETAILED AS POSSIBLE. The Board of Trustees will use this document in determining if the position meets the definition of hazardous duty per KRS 61.592.

Position Duty: Responding to in progress calls and vehicle patrol

Percentage of Time Spent: 45%

Description of Duties:

Calls are serious in nature such as burglaries, assaults, robberies, sexual assaults, fires (false and actual), injury crashes, etc. Preventative patrol of property owned, leased, or controlled by the University and streets contiguous to.

Position Duty: Special Assignments

Percentage of Time Spent: 38%

Description of Duties:

Mandatory working of events outside of patrol such as athletic events, dances, concerts, step shows, stake outs, and other special events.

Position Duty: Community relation and safety presentations

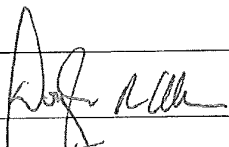
Percentage of Time Spent: 17%

Description of Duties:

Instituting and establishing positive relationships with the University community, its neighbors, as well as with local, state, and federal law enforcement agencies.

Presenting awareness and education training to the community.

Agency Head Signature:



Date: 4-17-2020

Agency Head Title:

EVP for Finance &amp; Administration / CEO

## KENTUCKY STATE UNIVERSITY

### JOB DESCRIPTION

**Job Code/Title:** 2347 /ASSISTANT CHIEF OF POLICE

Exempt

**Grade: 10**

*The following statements are intended to describe the general nature and level of work being performed. They are not intended to be construed as an exhaustive list of all responsibilities, duties and skills required of personnel so classified.*

#### **SUMMARY:**

Under minimum supervision, manages all aspects of the integrated operations units within the University Police Department. Oversees and coordinates supervision of subordinate management and operating staff within the unit. Participates in the strategic planning and policy development for the unit, and represents the department to the University, other law enforcement agencies, the media, and the general public.

#### **DUTIES AND RESPONSIBILITIES:**

- Assists with the development and implementation of policies and procedures consistent with those of the organization to ensure efficient and safe operation of the units.
- Oversees facets of the daily operations of the organizational unit, ensuring compliance with the University, state, and federal laws, policies, and regulations.
- Oversees the supervision of personnel, which includes work allocation, training, and problem resolution; evaluates performance and makes recommendations for personnel actions; motivates employees to achieve peak productivity and performance.
- Participates in development, implementation and maintenance of policies, objectives, short-and long-range planning; assists in the development and implementation of projects and programs to assist in accomplishment of established goals.
- Assists subordinates in performance of duties; reviews cases with subordinates as appropriate, and provides guidance and direction.
- Assists in the annual budget planning process.
- Manages appropriate department records in accordance with applicable regulations, policies, and standards.
- Attends meetings and workshops, and participates on committees, as assigned.
- Represents the department at business and community meetings, as appropriate.
- Performs miscellaneous job-related duties as assigned by the Chief of Police.
- Assist and provide back up to Patrol Officers as needed.

#### **MINIMUM JOB REQUIREMENTS:**

Graduation from an accredited law enforcement academy; at least 5 years of experience that is directly related to the duties and responsibilities specified; directly related, completed degrees from accredited institutions may be substituted for experience on a year-for-year basis. Successful completion from an accredited police supervision and management academy.

State of Kentucky Certified Law Enforcement Officer, or eligibility for Certification by waiver.

**KNOWLEDGE, SKILLS, AND ABILITIES REQUIRED:**

- Strong interpersonal skills and the ability to effectively communicate with a wide range of individuals and constituencies in a diverse community.
- Records maintenance skills.
- Skill in establishing priorities.
- Ability to supervise and train employees, to include organizing, prioritizing, and scheduling work assignments.
- Ability to communicate effectively, both orally and in writing.
- Ability to interpret, adapt, and apply guidelines and procedures.
- Employee development and performance management skills.
- Knowledge of faculty and/or staff hiring procedures.
- Skill in the use of personal computers and related software applications.
- Ability to foster a cooperative work environment.
- Knowledge and understanding of police protocols, procedures, and methodology.
- Skill in examining and re-engineering operations and procedures, formulating policy, and developing and implementing new strategies and procedures.
- Ability to assist in the development, planning and implementation of short and long range goals.

**WORKING CONDITIONS AND PHYSICAL EFFORT:**

- The employee's duties require frequent exposure to a high degree of danger or peril and a high degree of physical conditioning.
- The employee's duties are not primarily clerical or administrative.

**CREATED:** February 2008

**KENTUCKY RETIREMENT SYSTEMS**

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**Form 7025**  
Revised 09/2010

**Position Questionnaire****Instructions**

To petition the Board for approval of hazardous duty positions for KERS employees, complete Sections 1 and 3.

To petition for CERS employees with a CERS participation date prior to 9/1/2008, complete Sections 1 and 3.

To petition for CERS employees with a CERS participation date on or after 9/1/2008, complete Sections 2 and 3.

**Section 1: For KERS Employees or Employees With a CERS Participation Date Prior to September 1, 2008**Employer: KENTUCKY STATE UNIVERSITYPosition Title: Police Lieutenant

Is this position required to have Peace Officer Professional Standards and Certification? ☒ Yes ☐ No

If no, is this position required to carry a firearm? ☒ Yes ☐ No

Does this position require active fire suppression or prevention? ☐ Yes ☒ No

**Section 2: For Employees With a CERS Participation Date On or After September 1, 2008**Employer: KENTUCKY STATE UNIVERSITY

Position Title: \_\_\_\_\_

Please select the appropriate classification and answer all that are applicable.

☐ Police Officer

☐ Firefighter Does this position require active fire suppression? ☐ Yes ☒ No

☐ Paramedic

☐ Correctional Officer Does this position routinely require face to face contact with inmates? ☐ Yes ☐ No

☐ Other Specify: \_\_\_\_\_

Is this position required to have Peace Officer Professional Standards and Certification? ☐ Yes ☐ No

If no, is this position required to carry a firearm? ☐ Yes ☐ No

☐ Emergency Medical Technician (If this position is selected please complete the remainder of this page, if not skip to page 2.)

Does this position require frequent exposure to a high degree of danger or peril? ☐ Yes ☐ No

Does this position require a high degree of physical conditioning? ☐ Yes ☐ No

Are the employee's duties primarily clerical or administrative? ☐ Yes ☐ No

Position Duty: Clerical or Administrative (Complete only if EMT is selected):

Percentage of Time Spent: \_\_\_\_\_

Description of Duties:

Agency Head Signature: \_\_\_\_\_

Date: 4.17.2020Agency Head Title: EXECUTIVE VICE PRESIDENT/CFO

Employer: KENTUCKY STATE UNIVERSITY

Position Title: Police Lieutenant

**Section 3: For All Positions**

1. List the exact position title as it appears on your job description.
2. List the position's duties (i.e. training, field duties, etc.), the percentage of time spent performing each duty (percentages must equal 100% including the clerical/administrative duties on the first page (for EMT positions), and a description of each duty in the box provided.
3. BE AS DETAILED AS POSSIBLE. The Board of Trustees will use this document in determining if the position meets the definition of hazardous duty per KRS 61.592.

Position Duty: Vehicle/Foot Patrol and Responding to in progress calls

Percentage of Time Spent: 57%

## Description of Duties:

Preventative patrol of property owned, leased or controlled by the university and street contiguous to. Both heavily populated and desolate areas.

Calls are typically serious in nature. (Burglaries, assaults, robberies, sexual assaults, fires (false and actual), injury crashes, etc.

Position Duty: Report Writing/Responding to dispatched service calls

Percentage of Time Spent: 30%

## Description of Duties:

Answering calls received to communications center. Taking criminal and crash reports from the University community

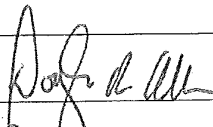
Position Duty: Community Safety Presentations/Special Assignments

Percentage of Time Spent: 13%

## Description of Duties:

Presenting awareness and education training to the community.

Mandatory working of events such as athletic events, dances, concerts, step-shows, stake-outs, and other special events.

Agency Head Signature: 

Date: 4-17-2020

Agency Head Title: EVP FOR FINANCE + ADMINISTRATION / CFO

## KENTUCKY STATE UNIVERSITY

### JOB DESCRIPTION

Job Code/Title: 2345 POLICE LIEUTENANT

Non-Exempt

Grade: 9

*The following statements are intended to describe the general nature and level of work being performed. They are not intended to be construed as an exhaustive list of all responsibilities, duties and skills required of personnel so classified.*

#### SUMMARY:

Under general supervision, plans, organizes, oversees, and coordinates the daily activities of a designated operational entity of the Police Department. Manages supervisory personnel and police officers who provide personal, real property, and equipment security throughout campus, ensuring consistent and equitable enforcement of local, state, and federal laws and university regulations. Reviews and approves reports on incident and crime investigations.

#### DUTIES AND RESPONSIBILITIES:

- Manages a specific division of the police department, such as operations, crime prevention, or administration; relays orders and messages from superior.
- Oversees the supervision of personnel, which includes work allocation, training, and problem resolution; evaluates performance and makes recommendations for personnel actions; motivates employees to achieve peak productivity and performance.
- Reviews police reports and logbooks to ascertain that information is recorded in conformance with regulations; determines the need for follow-up; determines appropriate distribution throughout the campus community.
- Assists subordinates in performance of duties; reviews cases with subordinates as appropriate, and provides guidance and direction.
- Responds to the public and media representatives, both orally and in writing, regarding department activities.
- Participates as a member of various committees, including departmental hiring and promotion, and may assist in developing and communicating departmental operating procedures.
- Represents the organization at various community and/or business meetings; promotes existing and new programs and/or policies.
- Performs miscellaneous job-related duties as assigned.

**MINIMUM JOB REQUIREMENTS:**

Graduation from an accredited law enforcement academy; at least 3 years of experience that is directly related to the duties and responsibilities specified.

State of Kentucky Certified Law Enforcement Officer, or eligibility for Certification by waiver.

Possession of a valid Kentucky driver's license.

**KNOWLEDGE, SKILLS, AND ABILITIES REQUIRED:**

- Knowledge of management principles and practices.
- Ability to supervise and train employees, to include organizing, prioritizing, and scheduling work assignments.
- Strong interpersonal and communication skills and the ability to work effectively with a wide range of constituencies in a diverse community.
- Knowledge of police reporting and recordkeeping policies, procedures, and regulations.
- Ability to interpret, adapt, and apply guidelines and procedures.
- Employee development and performance management skills.
- Knowledge and understanding of police protocols, procedures, and methodology.
- Knowledge of faculty and/or staff hiring procedures.
- Ability to foster a cooperative work environment.

**WORKING CONDITIONS AND PHYSICAL EFFORT:**

- The employee's duties require frequent exposure to a high degree of danger or peril and a high degree of physical conditioning

REVISED: 4/25/05





# KENTUCKY RETIREMENT SYSTEMS

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Form 7025  
Revised 09/2010

## Position Questionnaire

### Instructions

To petition the Board for approval of hazardous duty positions for KERS employees, complete Sections 1 and 3.

To petition for CERS employees with a CERS participation date prior to 9/1/2008, complete Sections 1 and 3.

To petition for CERS employees with a CERS participation date on or after 9/1/2008, complete Sections 2 and 3.

### Section 1: For KERS Employees or Employees With a CERS Participation Date Prior to September 1, 2008

Employer: CITY OF WINCHESTER

Position Title: Single Role Emergency Medical Technician

Is this position required to have Peace Officer Professional Standards and Certification? ☐ Yes ☒ No

If no, is this position required to carry a firearm? ☐ Yes ☒ No

Does this position require active fire suppression or prevention? ☐ Yes ☒ No

### Section 2: For Employees With a CERS Participation Date On or After September 1, 2008

Employer: CITY OF WINCHESTER

Position Title: Single Role Emergency Medical Technician

Please select the appropriate classification and answer all that are applicable.

☐ Police Officer

☐ Firefighter Does this position require active fire suppression? ☐ Yes ☐ No

☐ Paramedic

☐ Correctional Officer Does this position routinely require face to face contact with inmates? ☐ Yes ☐ No

☐ Other Specify: \_\_\_\_\_

Is this position required to have Peace Officer Professional Standards and Certification? ☐ Yes ☐ No

If no, is this position required to carry a firearm? ☐ Yes ☐ No

☒ Emergency Medical Technician (If this position is selected please complete the remainder of this page, if not skip to page 2.)

Does this position require frequent exposure to a high degree of danger or peril? ☒ Yes ☐ No

Does this position require a high degree of physical conditioning? ☒ Yes ☐ No

Are the employee's duties primarily clerical or administrative? ☐ Yes ☒ No

Position Duty: Clerical or Administrative (Complete only if EMT is selected):

Percentage of Time Spent: 10%

Description of Duties:

Responsible for patient care reports ; participates in QA/QI process.  
performs wide variety of housekeeping chores ; general maintenance

Agency Head Signature: \_\_\_\_\_

Date: 4-16-2020

Agency Head Title: City Manager

Page 1

Employer: CITY OF WINCHESTER

Position Title:

Single Role  
Emergency Medical Technician**Section 3: For All Positions**

1. List the exact position title as it appears on your job description.
2. List the position's duties (i.e. training, field duties, etc.), the percentage of time spent performing each duty (percentages must equal 100% including the clerical/administrative duties on the first page (for EMT positions), and a description of each duty in the box provided.
3. BE AS DETAILED AS POSSIBLE. The Board of Trustees will use this document in determining if the position meets the definition of hazardous duty per KRS 61.592.

Position Duty: Field DutyPercentage of Time Spent: 70%

Description of Duties:

Responds to all emergency calls : performs EMS functions.  
 Performs basic life support and/or advanced life support when necessary as regard to certification  
 Makes life : death decisions during emergency conditions

Position Duty: TrainingPercentage of Time Spent: 20%

Description of Duties:

Performs all requirements to maintain certification as EMT.  
 Studies all prescribed training materials as well as location of city streets : County roads.  
 Trains in control of hazardous material

Position Duty: \_\_\_\_\_

Percentage of Time Spent: \_\_\_\_\_

Description of Duties:

Agency Head Signature: \_\_\_\_\_

Date: 4-16-2020Agency Head Title: City Manager

## CITY OF WINCHESTER, KENTUCKY POSITION DESCRIPTION

Code No. 26-30  
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### CLASS TITLE: SINGLE ROLE EMERGENCY MEDICAL TECHNICIAN

**CHARACTERISTICS OF CLASS:** This is a full-time position with the primary responsibility of medical care and transportation of sick and injured persons on an emergency scene. Also to include a secondary responsibility of providing medical care on intra-facility transfers. **This position is EMS only; no firefighting activities.** EMT participates in emergency operations commensurate with attained level of training. EMT engages routinely in housekeeping and maintenance activities at assigned stations. EMT is closely supervised by company and superior officers and is instructed by senior personnel. EMT works an assigned shift.

### EXAMPLES OF WORK:

- ❑ Will NOT participate in firefighting activities. Will provide EMS only.
- ❑ Learns all departmental rules and regulations and abides by same.
- ❑ Responds to all emergency calls with company or any other company as directed by superior officers and will perform EMS functions.
- ❑ Performs all requirements to maintain certification/licensure as an EMT.
- ❑ Performs basic life support and/or advanced life support when necessary as regard to certification.
- ❑ Responsible for patient care reports and participates in QA/QI process of EMS runs.
- ❑ Studies all prescribed training materials as well as location of City Streets and County Roads.
- ❑ Learns proper use of tools and equipment used within the department.
- ❑ Performs a wide variety of housekeeping chores general maintenance, and any other duties assigned by a superior officer.
- ❑ Attends training schools or classes as recommended by the superior officers.
- ❑ Performs all tasks under direct supervision of a superior officer and follows all orders in keeping with the overall mission of the WFD.
- ❑ Participates in physical fitness program of the department and keeps physically and mentally capable of performing their assigned duties.
- ❑ Trains in control of hazardous materials and responds as operation/decontamination level to hazardous material incidents.
- ❑ Operate as both a member of a team and independently.
- ❑ Spends extensive time exposed to severe weather conditions and tolerates extreme fluctuations of temperature.
- ❑ Operates in environments of high noise, poor visibility, and limited mobility at heights and in closed in spaces due to nature of emergency and weather conditions.
- ❑ Performs work in wet, icy, muddy areas and performs a variety of tasks on slippery, hazardous surfaces.
- ❑ Works in areas where sustaining traumatic or thermal injuries are possible.
- ❑ Faces exposure to body or health damaging agents.
- ❑ Could wear personal protective equipment that weighs in excess of 25 pounds.
- ❑ Performs complex tasks during life-threatening emergencies.
- ❑ Makes life and death decisions during emergency conditions
- ❑ Make rapid transitions from rest to near maximal exertion without warm-up period.
- ❑ Works for long periods of time, requiring sustained physical activity and intense concentration.

## **CITY OF WINCHESTER, KENTUCKY POSITION DESCRIPTION**

Code No. 26-30

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- Rely on senses of sight, hearing, smell and touch to help determine the nature of the emergency, maintain personal safety and make critical decisions in a confused, chaotic and potentially life threatening environment.
- Must be able to drag or lift a minimum of 175 pounds all inclusive.

### **MINIMUM REQUIREMENTS**

#### **TRAINING AND EXPERIENCE:**

- High School graduate or GED.
- Must have a valid Kentucky Operator's License and a good driving record.
- Must be in good standing with the KY Board of EMS.
- Must have and maintain up-to-date KBEMS EMT certification.

**SPECIAL KNOWLEDGE, SKILLS AND ABILITIES:** Must be in excellent physical condition with no impairment. Candidate will pass a pre-entry physical ability assessment administered by the department. Candidate may have corrected vision. Must have ability to understand and follow difficult oral or written instructions. Must have the mental capacity to retain and utilize instructions offered in lecture, demonstration and practical exercise training presentations.

### **JOB RESPONSIBILITIES RELATED TO PATIENT PRIVACY**

1. The employee is expected to protect the privacy of all patient information in accordance with the City of Winchester's Fire/EMS privacy policies, procedures, and practices, as required by federal [and state] law, and in accordance with general principles of professionalism as a health care provider. Failure to comply with the City of Winchester's, Fire/EMS policies and procedures on patient privacy may result in disciplinary action up to and including termination of employment or of membership or association with City of Winchester.
2. The employee may access protected health information and other patient information only to the extent that is necessary to complete your job duties. The employee may only share such information with those who have a need to know specific patient information you have in your possession to complete their job responsibilities related to treatment, payment or other City of Winchester, Fire/EMS operations.
3. The employee is encouraged and expected to report, without the threat of retaliation, any concerns regarding the City of Winchester's, Fire/EMS policies and procedures on patient privacy and any observed practices in violation of that policy to the designated Privacy Officer.
4. The employee is expected to actively participate in City of Winchester, Fire/EMS privacy training and is required to communicate privacy policy information to coworkers, students, patients and others in accordance with City of Winchester's, Fire/EMS policy.

## **CITY OF WINCHESTER, KENTUCKY POSITION DESCRIPTION**

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### **PHYSICAL DEMANDS**

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is frequently required to sit; talk or hear; stand; walk; use hands to finger, handle, or operate objects, tools, or controls; and reach with hands and arms. The employee is occasionally required to climb or balance; stoop, kneel, crouch, or crawl while carrying a load; and taste or smell.

The employee must frequently lift and/or move up to 175 pounds and occasionally lift and/or move greater than 175 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception, and the ability to adjust focus.

### **WORK ENVIRONMENT**

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Work is performed primarily in office, vehicles, and outdoor settings, in all weather conditions, including temperature extremes, during day and night shifts. Work is often performed in emergency and stressful situations. Individual is exposed to hearing alarms and hazards associated with emergency scenes, including noxious odors, fumes, chemicals and smoke.

The employee occasionally works near moving mechanical parts and in high, precarious places and is occasionally exposed to wet and/or humid conditions, fumes or airborne particles, toxic or caustic chemicals, risk of electrical shock, and vibration.

The noise level in the work environment is usually quiet in office settings, and loud at an emergency scene.

The examples of duties are intended only as illustrations of the various types of work performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to the position.

**NOTE:** Appointees will be subject to completion of a standard one year probationary period.

### **NO RESIDENCY REQUIREMENT**

## CITY OF WINCHESTER, KENTUCKY POSITION DESCRIPTION

Code No. 26-30

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I have read the job description and understand the job description does not constitute an employment agreement between the employer and the employee and is subject to change by the employer as the needs of the employer and requirements of the job change.

Employee: \_\_\_\_\_

Date: \_\_\_\_\_

Non-Exempt Position

Shift 24/48

EEO Classification: 3

Hazardous Duty retirement classification

Grade 23-4 for EMT

\*May Advance to Grade 24 after one year employment with satisfactory evaluations and recommendation of the Fire Chief.

Order No      Effective:



## KENTUCKY RETIREMENT SYSTEMS

David L. Eager, Executive Director

1260 Louisville Road • Frankfort, Kentucky 40601

kyret.ky.gov • Phone: 502-696-8800 • Fax: 502-696-8822



**TO:** Members of the of the Kentucky Retirement Systems Board of Trustees

**FROM:** Retiree Health Plan Committee

**DATE:** May 12, 2020

**SUBJECT:** Retiree Health Plan Committee Report

The Retiree Health Plan Committee met on Tuesday, May 12, 2020, and reviewed a presentation from Humana regarding the following: Humana COVID-19 Response, 2019 Plan Performance, Factors Expected to Impact 2021 Rates, Benefit Enhancement Options and Program Changes, and 2019 Member Satisfaction Survey Results.

The Committee was informed that the 2021 Medicare Advantage/COBRA Request for Proposal Draft has been sent to KRS Legal Team and Actuary for review. The final version is due in November 2020.



## KENTUCKY RETIREMENT SYSTEMS

David L. Eager, Executive Director

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kyret.ky.gov • Phone: 502-696-8800 • Fax: 502-696-8822



To: Members of the KRS Board of Trustees

From: Rebecca H Adkins, Executive Director, Office of Operations  
Kathy Rupinen, Executive Director, Office of Legal Services

Date: May 21, 2020

Subject: Fiduciary Liability insurance Renewal 2020

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On May 16, 2019, the KRS Board of Trustees received the results of the Request for Bid (RFB) that was posted by the Division of State Risk and Insurance Services on behalf of KRS. Due to the high cost of these bid, the Board elected to self-insure for fiduciary liability insurance beginning May 25, 2019. A special 1400 fund was set up with the Office of State Budget Director to use if necessary. No money has been transferred into the account since no claims have been submitted on actions taken during the coverage period.

We reached out to the Division of State Risk and Insurance Services for their opinion on submitting another RFB. They advised that bids would likely continue to be unfavorable to KRS. However, they are willing to submit an RFB, if requested. The other option is to continue to self-insure for another year.

**Board action requested: We request the Board select an option for fiduciary liability insurance.**



**2020 KRS BOARD COMMITTEE MEMBERSHIP**  
**Board of Trustees Chair, Dave Harris**

**Disability Appeals/Administrative Appeals**  
**Committee #1 (Limit 3)**

*Betty Pendergrass, Chair*  
Jerry Powell  
Sec. Gerina Whethers

**Disability Appeals/ Administrative Appeals**  
**Committee #2 (Limit 3)**

*Keith Percy, Chair*  
Campbell Connell  
Sec. Gerina Whethers

**Audit Committee (Limit 7)**

*John Chilton, Chair*  
Joe Brothers  
Campbell Connell  
JT Fulkerson  
Betty Pendergrass  
David Rich

**Investment Committee (Must be 9)**

*Prewitt Lane, Chair*  
John Cheshire  
Kelly Downard  
Joseph Grossman  
Dave Harris  
Sherry Kremer  
Matthew Monteiro  
Keith Percy  
Neil Ramsey, Independent Advisor

**Actuarial Subcommittee (Must be 7)**

*Prewitt Lane, Chair*  
John Chilton  
Joe Grossman  
Dave Harris  
Sherry Kremer  
Keith Percy  
Jerry Powell

**Retiree Health Plan Committee (Limit 7)**

*David Rich, Chair*  
Kelly Downard  
JT Fulkerson  
Jerry Powell  
Sec. Gerina Whethers

**Perimeter Park West (PPW)\***

*Keith Percy, Chair*  
Jerry Powell

*\*KRS is sole shareholder and governing  
authority of PPW.*

May 2020