

Public Pension Oversight Board

Investment Returns and Cash Flows

Data for periods ending June 30, 2022

August 22, 2022

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Kentucky Public Pensions Authority (KPPA)

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Kentucky Public Pensions Authority (KPPA)



KPPA HIGHLIGHTS

FISCAL YEAR 2022

FY 2022 market losses were across the Board

Wilshire 5000 Index - 13.2%

MSCI ACWL Ex US Index - 19.4%

Wilshire Bond Index - 10.3%

Wilshire TUC Universe -10.6%

- > FY 2022 -5.73% (the worst year since 2009 -17.2%)
- Exceeded our benchmarks in 85% of the 1, 3, 5, and 10 year periods



KPPA HIGHLIGHTS

FISCAL YEAR 2022 (continued)

- ➤ Net cash flows positive in all pension funds except CERS NH (\$-12.7 Mil)
- \$215 Mil SPRS appropriation reduced the contribution rate from 140.51% to 99.43% and raised the funded status from 30.7% to 51.1%
- A number of asset allocations are outside of their ranges
 - Cash infusions that have not been fully invested
 - Real estate and Equity targets increased by the Boards
 - All making progress to be compliant

Pension – Investment Returns

For the period ending June 30, 2022

		Net of Fe	es Rates of	f Return						
	Market Value (\$ in millions)	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years			
KERS Non-Hazardous	\$2,992.9	-5.2%	6.0%	6.2%	7.0%	6.5%	7.7%			
Plan Index		-4.8%	5.1%	5.7%	6.9%	6.5%	7.6%			
KERS Hazardous	\$815.6	-6.0%	5.9%	6.4%	7.3%	6.6%	7.8%			
Plan Index		-5.2%	6.1%	6.3%	7.2%	6.7%	7.7%			
CERS Non-Hazardous	\$7,948.7	-5.9%	6.1%	6.5%	7.3%	6.6%	7.8%			
Plan Index		-6.4%	5.6%	6.1%	7.1%	6.6%	7.7%			
CERS Hazardous	\$2,703.1	-6.1%	5.9%	6.5%	7.3%	6.6%	7.8%			
Plan Index		-6.4%	5.6%	6.1%	7.1%	6.6%	7.7%			
SPRS	\$542.4	-4.6%	5.9%	6.2%	6.9%	6.4%	7.6%			
Plan Index		-4.8%	5.1%	5.7%	6.8%	6.5%	7.6%			

Insurance - Investment Returns

For the period ending June 30, 2022

Net of Fees Rates of Return

	Market Value (\$ in millions)	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years
KERS Non-Hazardous	\$1,288.6	-6.2%	5.9%	6.1%	6.9%	6.1%	6.8%
Plan Index		-4.9%	5.9%	6.2%	7.2%	6.6%	7.2%
KERS Hazardous	\$579.5	-4.5%	6.1%	6.6%	7.3%	6.3%	6.9%
Plan Index		-4.9%	5.7%	6.2%	7.2%	6.6%	7.2%
CERS Non-Hazardous	\$3,004.3	-5.4%	5.8%	6.5%	7.2%	6.3%	6.9%
Plan Index		-6.2%	5.2%	5.9%	7.0%	6.5%	7.1%
CERS Hazardous	\$1,508.5	-5.0%	6.0%	6.6%	7.3%	6.3%	6.9%
Plan Index		-6.2%	5.2%	5.9%	7.1%	6.5%	7.1%
SPRS	\$229.0	-4.5%	6.4%	6.9%	7.4%	6.4%	6.9%
Plan Index		-4.9%	5.7%	6.2%	7.2%	6.6%	7.2%

Pension Fund Contribution Report

(KERS Non Hazardous, KERS Hazardous & SPRS)
For the twelve month period ending June 30, 2022 and June 30, 2021
(\$ in millions)

	NON-HAZZ	PS (RDOUS	HAZARDOUS		SPR	S
Contributions	FY22	FY21	FY22	FY21	FY22	FY21
Member Contributions	\$89.6	\$90.2	\$20.6	\$20.0	\$4.8	\$4.8
Employer Contributions	141.1	958.6	59.1	62.2	62.3	59.3
Actuarially Accrued Liability Contributions	912.7	-	-	-	-	-
General Fund Appropriations	-	-	-	-	215.0	0.4
Employer Cessation Contributions	63.1	175.6	-	-	-	-
Net Investment Income	52.7	50.6	15.1	13.9	6.3	5.9
Contribution Inflows	1,259.2	1,275.0	94.8	96.1	288.4	70.4
Benefit Payments/Refunds	1,035.5	1,018.5	82.0	78.3	64.4	63.5
Administrative Expenses	13.5	11.6	1.5	1.3	0.3	0.2
Contribution Outflows	1,049.0	1,030.1	83.5	79.6	64.7	63.7
NET Contributions	210.2	244.9	11.3	16.5	223.7	6.7
Realized and Unrealized Gain/(Loss)	(218.6)	477.9	(67.0)	161.0	(28.5)	56.0
Change in Net Position	(8.4)	722.8	(55.7)	177.5	195.2	62.7
Beginning of Period	3,085.0	2,362.2	874.9	697.4	357.7	295.0
End of Period	\$3,076.6	\$3,085.0	\$819.2	\$874.9	\$552.9	\$357.7

Pension Fund Contribution Report (CERS-Non Hazardous and CERS-Hazardous)

For the twelve month period ending June 30, 2022 and June 30, 2021 (\$ in millions)

	NON-HA	RS	CERS		
Contributions	FY22	FY21	FY22	FY21	
Member Contributions	\$186.6	\$165.7	\$69.6	\$62.4	
Employer Contributions	561.2	472.2	210.4	172.2	
Net Investment Income	139.9	135.7	49.4	45.8	
Contribution Inflows	887.7	773.6	329.4	280.4	
Benefit Payments/Refunds	878.0	840.6	311.6	294.7	
Administrative Expenses	22.4	21.7	2.0	1.9	
Contribution Outflows	900.4	862.3	313.6	296.6	
NET Contributions	(12.7)	(88.7)	15.8	(16.2)	
Realized and Unrealized Gain/(Loss)	(637.7)	1,648.5	(224.1)	554.9	
Change in Net Position	(650.4)	1,559.8	(208.3)	538.7	
Beginning of Period	8,670.7	7,110.9	2,934.4	2,395.7	
End of Period	\$8,020.3	\$8,670.7	\$2,726.1	\$2,934.4	

Insurance Fund Contribution Report

(KERS Non-Hazardous, KERS Hazardous & SPRS)
For the twelve month period ending June 30, 2022 and June 30, 2021
(\$ in millions)

	NON-HAZ	ARDOUS LARDOUS	HAZAF	Roous	SPRS	
Contributions	FY22	FY21	FY22	FY21	FY22	FY21
Employer Contributions	\$31.6	\$153.6	\$-	\$-	\$8.8	\$9.3
Actuarially Accrued Liability Contributions	101.7	-	-	-	-	-
Employer Cessation Contributions	2.4	28.4				
Insurance Premiums	0.2	0.2	-	-	-	-
Humana Gain Share	7.3	17.1	0.5	1.2	0.3	0.8
Retired Reemployed Healthcare	5.0	4.7	1.3	1.3	-	-
Health Insurance Contributions (HB1)	6.6	6.3	1.2	1.2	0.2	0.2
Net Investment Income	20.0	18.5	9.5	8.4	3.6	3.1
Contribution Inflow	174.8	228.8	12.5	12.1	12.9	13.4
Healthcare Premiums	120.0	121.5	20.5	19.9	14.4	14.5
Administrative Expenses	0.8	0.8	0.1	0.1	0.1	0.1
Contribution Outflow	120.8	122.3	20.6	20.0	14.5	14.6
NET Contributions	54.0	106.5	(8.1)	(7.9)	(1.6)	(1.2)
Realized and Unrealized Gain/(Loss)	(105.6)	240.1	(36.9)	118.1	(14.4)	47.0
Change in Net Position	(51.6)	346.6	(45.0)	110.2	(16.0)	45.8
Beginning of Period	1,353.1	1,006.5	624.9	514.7	246.0	200.2
Ending of Period	\$1,301.5	\$1,353.1	\$579.9	\$624.9	\$230.0	\$246.0

Insurance Fund Contribution Report (CERS Non Hazardous and CERS Hazardous)

For the twelve month period ending June 30, 2022 and June 30, 2021 (\$ in millions)

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	NON-H	AZARDOUS	HAZAF	RDOUS	
Contributions	FY22	FY21	FY22	FY21	
Employer Contributions	\$164.1	\$124.7	\$70.0	\$58.5	
Insurance Premiums	0.5	0.5	(0.3)	(0.2)	
Humana Gain Share	8.9	20.7	1.3	3.0	
Retired Reemployed Healthcare	4.8	5.2	1.5	1.4	
Health Insurance Contributions (HB1)	15.9	13.6	3.7	3.1	
Net Investment Income	48.5	41.0	24.0	20.3	
Contribution Inflows	242.7	205.7	100.2	86.1	
Healthcare Premiums	137.7	139.7	89.5	85.4	
Administrative Expenses	0.9	0.9	0.5	0.5	
Contribution Outflows	138.6	140.6	90.0	85.9	
NET Contributions	104.1	65.1	10.2	0.2	
Realized and Unrealized Gain/(Loss)	(222.3)	578.6	(103.3)	302.5	
Change in Net Position	(118.2)	643.7	(93.1)	302.7	
Beginning of Period	3,141.8	2,498.1	1,607.8	1,305.1	
End of Period	\$3,023.6	\$3,141.8	\$1,514.7	\$1,607.8	

KPPA Pension Plans (6/30/22)

	Actual	CERS NH Target	Range	Actual	CERS HAZ Target	Range	Actual	KERS NH Target	Range	Actual	KERS HAZ Target	Range	Actual	SPRS Target	Range
Equity															
Public Equity	45.99%	50.0%	35.0% - 65.0%	46.09%	50.0%	35.0% - 65.0%	30.29%	32.5%	24.0% - 42.0%	41.07%	43.5%	30.0% - 50.0%	28.52%	32.5%	24.0% - 42.0%
Private Equity	9.51%	10.0%	7.0% - 13.0%	9.34%	10.0%	7.0% - 13.0%	6.91%	7.0%	5.0% - 9.0%	8.56%	10.0%	7.0% - 13.0%	3.70%	7.0%	5.0% - 9.0%
Fixed Income															
Specialty Credit	21.03%	10.0%	7.0% - 13.0%	21.03%	10.0%	7.0% - 13.0%	19.12%	15.0%	10.5% - 19.5%	20.67%	15.0%	10.0% - 20.0%	16.36%	15.0%	10.5% - 19.5%
Core Fixed Income	11.81%	10.0%	8.0% - 12.0%	11.76%	10.0%	8.0% - 12.0%	21.64%	20.5%	16.5% - 24.5%	13.25%	10.0%	8.0% - 12.0%	21.13%	20.5%	16.5% - 24.5%
Cash	1.04%	0.0%	0.0% - 3.0%	1.67%	0.0%	0.0% - 3.0%	13.39%	5.0%	0.0% - 10.0%	6.85%	1.5%	0.0% - 3.0%	24.26%	5.0%	0.0% - 10.0%
Inflation Protected															
Real Return	3.97%	13.0%	9.0% - 17.0%	3.89%	13.0%	9.0% - 17.0%	3.01%	10.0%	7.0% - 13.0%	3.61%	10.0%	7.0% - 13.0%	2.23%	10.0%	7.0% - 13.0%
Real Estate	6.64%	7.0%	5.0% - 9.0%	6.21%	7.0%	5.0% - 9.0%	5.64%	10.0%	7.0% - 13.0%	5.99%	10.0%	7.0% - 13.0%	3.80%	10.0%	7.0% - 13.0%

KPPA Insurance Plans (6/30/22)

	Actual	CERS NH Target	Range	Actual	CERS HAZ Target	Range	Actual	KERS NH Target	Range	Actual	KERS HAZ Target	Range	Actual	SPRS Target	Range
Equity															
Public Equity	45.92%	50.0%	35.0% - 65.0%	45.46%	50.0%	35.0% - 65.0%	41.02%	43.5%	30.0% - 50.0%	41.05%	43.5%	30.0% - 50.0%	40.91%	43.5%	30.0% - 50.0%
Private Equity	9.65%	10.0%	7.0% - 13.0%	10.82%	10.0%	7.0% - 13.0%	6.43%	10.0%	7.0% - 13.0%	9.83%	10.0%	7.0% - 13.0%	11.21%	10.0%	7.0% - 13.0%
Fixed Income															
Specialty Credit	20.74%	10.0%	7.0% - 13.0%	20.88%	10.0%	7.0% - 13.0%	20.27%	15.0%	10.0% - 20.0%	21.13%	15.0%	10.0% - 20.0%	21.25%	15.0%	10.0% - 20.0%
Core Fixed Income	11.61%	10.0%	8.0% - 12.0%	11.68%	10.0%	8.0% - 12.0%	12.60%	10.0%	8.0% - 12.0%	12.28%	10.0%	8.0% - 12.0%	12.20%	10.0%	8.0% - 12.0%
Cash	2.51%	0.0%	0.0% - 3.0%	0.82%	0.0%	0.0% - 3.0%	12.14%	1.5%	0.0% - 3.0%	4.50%	1.5%	0.0% - 3.0%	3.66%	1.5%	0.0% - 3.0%
Inflation Protected															
Real Return	3.23%	13.0%	9.0% - 17.0%	3.42%	13.0%	9.0% - 17.0%	3.01%	10.0%	7.0% - 13.0%	3.63%	10.0%	7.0% - 13.0%	3.45%	10.0%	7.0% - 13.0%
Real Estate	6.33%	7.0%	5.0% - 9.0%	6.92%	7.0%	5.0% - 9.0%	5.64%	10.0%	7.0% - 13.0%	7.58%	10.0%	7.0% - 13.0%	7.32%	10.0%	7.0% - 13.0%



Pension* Variance Comments

Outside of Ranges as of 6/30/22

Real Estate – Searches in Progress

KERS Non Hazardous -1.4%

KERS Hazardous -1.0%

SPRS -3.2%

Specialty Credit Target Decreased by 5% for CERS Funds in 11/2021

CERS Non Hazardous +8.0%

CERS Hazardous +8.0%

KERS Hazardous +0.7%

^{*} Insurance variances generally similar to Pension



Pension* Variance Comments (continued)

Outside of Ranges as of 6/30/22

> SPRS: \$215 Mil Appropriation in 5/2022 = 38% of Assets

Cash +14% Real Return -4.8%

Real Estate -3.2%

Private Equity -1.3%

Other Cash Variances

KERS Non Hazardous +3.4%

KERS Hazardous +3.9%

^{*} Insurance variances generally similar to Pension



Pension* Variance Comments (continued)

Outside of Ranges as of 6/30/22

Real Return Mgr. with \$850 Mil terminated. Targets increased by 3% for CERS Funds in 11/2021.

CERS Non Hazardous	-5%	KERS Non Hazardous	-4.0%
CERS Hazardous	-5.1%	KERS Hazardous	-3.4%
SPRS	-4.8%		

Invested \$794 Mil in Public Equity and Fixed Income (90% in June and 10% in July)

^{*} Insurance variances generally similar to Pension



TIER 3 INTEREST CREDITS

FY 2017 – FY 2022

5 YEAR GEOMETRIC NET INVESTMENT RETURN (GAINR)										
	2017	2018	2019	2020	2021	2022				
CERS	7.85%	7.39%	5.51%	5.29%	10.35%	6.24%				
KRS	7.41%	6.66%	4.77%	4.76%	9.28%	5.70%				
TIER 3 I	NTERES [*]	T CREDIT	ΓBY FISC	CAL YEAR	₹					
	2017	2018	2019	2020	2021	2022				
CERS	6.89%	6.54%	5.13%	4.97%	8.76%	5.68%				
KRS	6.56%	6%	4.58%	4.57%	7.96%	5.28%				