



KPPA

Kentucky Public Pensions Authority

Interim Joint Committee on Appropriations and Revenue September 20, 2023

KERS Nonhazardous

David Eager, Executive Director



Cash Flow (\$ in millions)

KERS Nonhazardous FY 23 and FY 22

	Pension Fund		Retiree Health	
	<u>FY 23</u>	<u>FY 22</u>	<u>FY 23</u>	<u>FY 22</u>
Cash Inflows				
Member Contributions	\$84.5	\$74.2	\$-	\$-
Employer contributions/appropriations	1,275.0	1,069.1	123.2	133.2
Investment income (net of asset gains/losses)	85.5	52.7	32.1	20.0
Other	-	63.1	19.1	21.6
Total Cash Inflows	1,445.0	1,259.1	174.4	174.8
Cash Outflows				
Benefit Payments	1,035.6	1,035.5	105.6	120.0
Adm. Expense	13.8	13.3	0.8	0.8
Total Cash Outflows	1,049.4	1,048.8	106.4	120.8
Net cash flow before asset gain (loss)	395.6	210.3	68.0	54.0
Inv. gains or losses (realized & unrealized)	134.8	(218.6)	96.0	(105.6)
Net Plan Assets	530.4	(8.3)	164.0	(51.6)
Beginning of Fiscal Year	3,076.7	3,085.0	1,301.5	1,353.1
End of Fiscal Year	\$3,607.1	\$3,076.7	\$1,465.5	\$1,301.5



Expected Budget Needs Vs. FY 24 (\$ in millions)

Kentucky Employees Retirement System Nonhazardous

	<u>FYE 24</u>	<u>FYE 25</u>	<u>FYE 26</u>
<u>Normal Cost Rate</u>			
Pension	7.82%	7.32%	7.32%
Insurance	2.15%	1.58%	1.58%
Total	9.97%	8.90%	8.90%
<u>Amortization Cost (\$millions)</u>			
Pension	\$906	\$819	\$819
Insurance	88	-	-
Total	\$994	\$819	\$819
<u>Contribution Requirement (\$millions)</u>			
Pension	\$1,012	\$918	\$918
Insurance	117	21	21
Total	\$1,129	\$939	\$939
<u>Special Appropriation</u>	\$240		



Historical, Current, and Future Needs

KERS Nonhazardous Total Contributions (\$ in millions)

	Pension	Retiree Health	Total
Selected History			
FY 10	\$144	\$93	\$237
FY 15	521	132	653
FY 20	949	170	1,119
Current FY	1,275*	123	1,398
FY 24	1,252*	117	1,369
Upcoming Budget			
FY 25	918	21	939
FY 26	918	21	939
Selected Projections			
FY 30	907	15	922
FY 35	896	9	905
FY 40	\$892	\$6	\$898

*Includes \$240 million in additional appropriations



Actuarial Stats (\$ in billions)

KERS Nonhazardous	2018	2019	2020	2021	2022	2023
Pension UL (\$ in billions)	\$13.7	\$14.3	\$14.0	\$13.6	\$13.5	\$12.3
Pension % Funded	12.9%	13.4%	14.2%	16.8%	18.5%	22.2%
Ret. Health UL (\$ in billions)	\$1.5	\$1.7	\$1.5	\$1.3	\$0.4	\$0.2
Retiree Health % Funded	36.4%	36.3%	42.7%	50.2%	79.1%	88.9%



Historical Assumptions (KERS Nonhazardous)

Economic and Demographic Assumptions that effect employer contributions over time									
Assumption (FYE)	2016	2017	2018	2019	2020	2021	2022	2023	2024
Payroll Growth (%)	4	0	0	0	0	0	0	0	0
Rate of Return (%)	6.75	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25
Life Expectancy at age 65: Male	19.0	19.0	19.0	21.4	21.4	21.4	21.4	21.4	21.4
Life Expectancy at age 65: Female	22.2	22.2	22.2	24.4	24.4	24.4	24.4	24.4	24.4
Employer Contribution Rate (%) Pension Only.	33.57	38.93	41.98	71.03	74.54	73.28	74.37	69.80	59.02



Updated Assumptions for Mortality and Life Expectancy

Economic and Demographic Assumption

- Mortality: Update the KPPA specific base mortality assumption to reflect recent experience (data dependent). Update the improvement assumption based on more recent published report (anticipated trend).
 - Increase disability mortality. No change to pre-retirement mortality.

Life Expectancy for an Age 65 Retiree in Years					
Assumption	Years of Retirement				
	2025	2030	2035	2040	2045
Prior Assumption – Male	17.8	17.8	17.8	17.8	17.8
2015 Assumption – Male	19.0	19.0	19.0	19.0	19.0
2019 Assumption – Male	21.4	21.8	22.2	22.6	23.0
Current Assumptions – Male	19.8	20.2	20.6	21.0	21.3
Prior Assumption – Female	21.3	21.3	21.3	21.3	21.3
2015 Assumption – Female	22.2	22.2	22.2	22.2	22.2
2019 Assumption – Female	24.4	24.8	25.2	25.6	25.9
Current Assumptions – Female	22.4	22.7	23.1	23.4	23.7

Note(s): These assumptions were adopted by the KRS Board on June 5, 2023, and the mortality assumption is based on KPPA retiree experience (versus using a national published table)...the change was made in 2019 to explicitly project improvement in life expectancy (i.e., a retiree who is 65 in 2045 has a greater life expectancy than a retiree who is 65 in 2025). Prior to that, the assumption was the same for a members.



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Appendix:

KERS Hazardous, SPRS, CERS Nonhazardous, and CERS Hazardous



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KERS Hazardous

Cash Flow (\$ in millions)



KERS Hazardous FY 23 and FY 22

	Pension Fund		Retiree Health	
	<u>FY 23</u>	<u>FY 22</u>	<u>FY 23</u>	<u>FY 22</u>
Cash Inflows				
Member Contributions	\$17.5	\$15.1	\$-	\$-
Employer contributions/appropriations	72.7	64.6	-	-
Investment income (net of asset gains/losses)	20.7	15.1	13.1	9.5
Other	-	-	3.3	3.0
Total Cash Inflows	110.9	94.8	16.4	12.5
Cash Outflows				
Benefit Payments	82.7	82.0	19.8	20.5
Adm. Expense	1.5	1.5	0.1	0.1
Total Cash Outflows	84.2	83.5	19.9	20.6
Net cash flow before asset gain (loss)	26.7	11.3	(3.5)	(8.1)
Inv. gains or losses (realized & unrealized)	56.6	(67.0)	39.9	(36.9)
Net Plan Assets	83.3	(55.7)	36.4	(45.0)
Beginning of Fiscal Year	819.2	874.9	579.9	624.9
End of Fiscal Year	\$902.5	\$819.2	\$616.3	\$579.9



Expected Budget Needs Vs. FY 24 (\$ in millions)

Kentucky Employees Retirement System Hazardous

	<u>FYE 24</u>	<u>FYE 25</u>	<u>FYE 26</u>
<u>Employer Contribution Rate</u>			
Pension	31.82%	28.13%	28.13%
Insurance	-	-	-
Total	31.82%	28.13%	28.13%
<u>Amortization Cost (\$millions)</u>			
Pension	N/A	N/A	N/A
Insurance	N/A	N/A	N/A
Total	N/A	N/A	N/A
<u>Contribution Requirement (\$millions)</u>			
Pension	\$53	\$47	\$47
Insurance	-	-	-
Total	\$53	\$47	\$47



Historical, Current, and Future Needs

KERS Hazardous Total Contributions (\$ in millions)

	Pension	Retiree Health	Total
Selected History			
FY 10	\$18	\$22	\$40
FY 15	28	14	42
FY 20	59	4	63
Current FY	73	-	73
FY 24	53	-	53
Upcoming Budget			
FY 25	47	-	47
FY 26	47	-	47
Selected Projections			
FY 30	46	-	46
FY 35	45	-	45
FY 40	\$45	\$-	\$45



Actuarial Stats (\$ in billions)

KERS Hazardous	2018	2019	2020	2021	2022	2023
Pension UL (\$ in billions)	\$0.5	\$0.6	\$0.6	\$0.5	\$0.5	\$0.5
Pension % Funded	55.5%	54.8%	55.3%	60.4%	63.2%	65.8%
Ret. Health UL (\$ in billions)	(\$0.1)	(\$0.1)	(\$0.1)	(\$0.2)	(\$0.3)	(\$0.3)
Retiree Health % Funded	130.0%	123.1%	126.0%	135.5%	172.2%	181.5%



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Kentucky Public Pensions Authority

SPRS

Cash Flow (\$ in millions)



SPRS FY 23 and FY 22

	Pension Fund		Retiree Health	
	<u>FY 23</u>	<u>FY 22</u>	<u>FY 23</u>	<u>FY 22</u>
Cash Inflows				
Member Contributions	\$5.2	\$3.9	\$-	\$-
Employer contributions/appropriations	58.1	278.2	9.3	8.8
Investment income (net of asset gains/losses)	15.4	6.3	5.3	3.6
Other	-	-	0.5	0.6
Total Cash Inflows	78.7	288.4	15.1	13.0
Cash Outflows				
Benefit Payments	64.0	64.4	14.3	14.5
Adm. Expense	0.3	0.3	0.1	0.1
Total Cash Outflows	64.3	64.7	14.4	14.6
Net cash flow before asset gain (loss)	14.4	223.7	0.7	(1.6)
Inv. gains or losses (realized & unrealized)	25.4	(28.5)	16.1	(14.4)
Net Plan Assets	39.8	195.2	16.8	(16.0)
Beginning of Fiscal Year	552.9	357.7	230.0	246.0
End of Fiscal Year	\$592.7	\$552.9	\$246.8	\$230.0



Expected Budget Needs Vs. FY 24 (\$ in millions)

State Police Retirement System

	<u>FYE 24</u>	<u>FYE 25</u>	<u>FYE 26</u>
<u>Employer Contribution Rate</u>			
Pension	85.32%	79.63%	79.63%
Insurance	14.11%	1.15%	1.15%
Total	99.43%	80.78%	80.78%
<u>Amortization Cost (\$millions)</u>			
Pension	N/A	N/A	N/A
Insurance	N/A	N/A	N/A
Total	N/A	N/A	N/A
<u>Contribution Requirement (\$millions)</u>			
Pension	\$41	\$38	\$38
Insurance	7	1	1
Total	\$48	\$39	\$39



Historical, Current, and Future Needs

SPRS Total Contributions (\$ in millions)

	Pension	Retiree Health	Total
Selected History			
FY 10	\$9	\$8	\$17
FY 15	31	10	41
FY 20	59	13	72
Current FY	58	9	67
FY 24	41	7	48
Upcoming Budget			
FY 25	38	1	39
FY 26	38	1	39
Selected Projections			
FY 30	37	-	37
FY 35	36	-	36
FY 40	\$36	\$-	\$36



Actuarial Stats (\$ in billions)

SPRS	2018	2019	2020	2021	2022	2023
Pension UL (\$ in billions)	\$0.7	\$0.8	\$0.8	\$0.7	\$0.5	\$0.5
Pension % Funded	27.1%	27.0%	28.1%	30.7%	52.5%	55.0%
Ret. Health UL (\$ in billions)	\$0.08	\$0.08	\$0.07	\$0.05	(\$0.001)	(\$0.012)
Retiree Health % Funded	71.6%	71.3%	75.0%	82.0%	100.6%	104.9%



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CERS Nonhazardous

Cash Flow (\$ in millions)



CERS Nonhazardous FY 23 and FY 22

	Pension Fund		Retiree Health	
	<u>FY 23</u>	<u>FY 22</u>	<u>FY 23</u>	<u>FY 22</u>
Cash Inflows				
Member Contributions	\$145.5	\$144.4	\$-	\$-
Employer contributions/appropriations	686.6	649.0	99.5	118.6
Investment income (net of asset gains/losses)	178.0	136.8	66.0	51.6
Other	-	-	28.7	30.2
Total Cash Inflows	1,010.1	930.2	194.2	200.4
Cash Outflows				
Benefit Payments	917.6	878.0	126.8	137.7
Adm. Expense	24.1	22.7	0.9	0.9
Total Cash Outflows	941.7	900.7	127.7	138.6
Net cash flow before asset gain (loss)	68.4	29.5	66.5	61.8
Inv. gains or losses (realized & unrealized)	637.3	(637.9)	240.0	(222.4)
Net Plan Assets	705.7	(608.4)	306.5	(160.6)
Beginning of Fiscal Year	8,062.3	8,670.7	2,981.2	3,141.8
End of Fiscal Year	\$8,768.0	\$8,062.3	\$3,287.7	\$2,981.2



Expected Budget Needs Vs. FY 24 (\$ in millions)

County Employees Retirement System Nonhazardous

	<u>FYE 24</u>	<u>FYE 25</u>	<u>FYE 26</u>
<u>Employer Contribution Rate</u>			
Pension	23.34%	20.46%	20.05%
Insurance	-	-	-
Total	23.34%	20.46%	20.05%
<u>Amortization Cost (\$millions)</u>			
Pension	N/A	N/A	N/A
Insurance	N/A	N/A	N/A
Total	N/A	N/A	N/A
<u>Contribution Requirement (\$millions)</u>			
Pension	\$641	\$573	\$573
Insurance	-	-	-
Total	\$641	\$573	\$573



Historical, Current, and Future Needs

CERS Nonhazardous Total Contributions (\$ in millions)

	Pension	Retiree Health	Total
Selected History			
FY 10	\$207	\$166	\$373
FY 15	298	116	414
FY 20	475	125	600
Current FY	687	100	787
FY 24	641	-	641
Upcoming Budget			
FY 25	573	-	573
FY 26	573	-	573
Selected Projections			
FY 30	610	-	610
FY 35	661	-	661
FY 40	\$724	\$-	\$724



Actuarial Stats (\$ in billions)

CERS Nonhazardous	2018	2019	2020	2021	2022	2023
Pension UL (\$ in billions)	\$6.2	\$7.3	\$7.4	\$7.2	\$7.5	\$6.6
Pension % Funded	52.7%	49.1%	49.4%	51.8%	52.0%	56.2%
Ret. Health UL (\$ in billions)	\$0.7	\$1.0	\$0.7	\$0.5	(\$0.8)	(\$1.0)
Retiree Health % Funded	76.7%	70.7%	78.5%	85.4%	132.1%	142.3%



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CERS Hazardous

Cash Flow (\$ in millions)



CERS Hazardous FY 23 and FY 22

	Pension Fund		Retiree Health	
	<u>FY 23</u>	<u>FY 22</u>	<u>FY 23</u>	<u>FY 22</u>
Cash Inflows				
Member Contributions	\$53.3	\$52.7	\$-	\$-
Employer contributions/appropriations	288.1	238.8	45.6	58.4
Investment income (net of asset gains/losses)	62.7	48.7	32.1	24.8
Other	-	-	6.0	6.3
Total Cash Inflows	404.1	340.2	83.7	89.5
Cash Outflows				
Benefit Payments	326.2	311.6	93.7	89.5
Adm. Expense	2.1	2.0	0.5	0.5
Total Cash Outflows	328.3	313.6	94.2	90.0
Net cash flow before asset gain (loss)	75.8	26.6	(10.5)	(0.5)
Inv. gains or losses (realized & unrealized)	219.2	(224.1)	116.6	(103.3)
Net Plan Assets	295.0	(197.5)	106.1	(103.8)
Beginning of Fiscal Year	2,736.9	2,934.4	1,504.0	1,607.8
End of Fiscal Year	\$3,031.9	\$2,736.9	\$1,610.1	\$1,504.0



Expected Budget Needs Vs. FY 24 (\$ in millions)

County Employees Retirement System Hazardous

	<u>FYE 24</u>	<u>FYE 25</u>	<u>FYE 26</u>
<u>Employer Contribution Rate</u>			
Pension	41.11%	38.16%	37.42%
Insurance	2.58%	1.43%	0.78%
Total	43.69%	39.59%	38.20%
<u>Amortization Cost (\$millions)</u>			
Pension	N/A	N/A	N/A
Insurance	N/A	N/A	N/A
Total	N/A	N/A	N/A
<u>Contribution Requirement (\$millions)</u>			
Pension	\$260	\$247	\$247
Insurance	16	9	5
Total	\$276	\$256	\$252



Historical, Current, and Future Needs

CERS Hazardous Total Contributions (\$ in millions)

	Pension	Retiree Health	Total
Selected History			
FY 10	\$83	\$83	\$166
FY 15	108	71	179
FY 20	168	57	225
Current FY	288	46	334
FY 24	260	16	276
Upcoming Budget			
FY 25	247	9	256
FY 26	247	5	252
Selected Projections			
FY 30	261	1	262
FY 35	283	-	283
FY 40	\$308	\$-	\$308



Actuarial Stats (\$ in billions)

CERS Hazardous	2018	2019	2020	2021	2022	2023
Pension UL (\$ in billions)	\$2.5	\$2.9	\$3.0	\$3.0	\$3.1	\$2.8
Pension % Funded	48.4%	45.3%	45.1%	46.7%	47.6%	51.5%
Ret. Health UL (\$ in billions)	\$0.4	\$0.4	\$0.4	\$0.3	(\$0.02)	(\$0.09)
Retiree Health % Funded	74.6%	75.8%	78.2%	84.3%	101.0%	106.2%