



Kentucky Retirement Systems

Public Pension Oversight Board

August 27, 2018



HIGHLIGHTS

- Investment Performance – **Good markets + Alpha = A GOOD YEAR**
 - Pensions +8.6% Insurance +9.1%
 - 26th Percentile*
- Cash Flows
 - Pensions had negative cash flow (\$311 mil) vs (\$120 mil) in 2017
 - 2019 should be better
 - Fund assets grew by \$493 mil vs \$1,044 mil in FY2017
- SB2 Compliance
 - 18A and 45A transitions somewhat problematic
 - Traditional investment manager contract compliance met with limited resistance
 - Suggest using SEC Investment Adviser Codes of Ethics going forward
- Agency Opt-Out HB 362 Replacement
 - On target for December completion
 - Not an easy solution

*Gross of fees vs TUCS gross of fees universe of 125 funds



Investment Background

- **In the longest bull market in history – up 320%, nearly 10 years**
- **Interest rates still low by historic standards**
- **We are well diversified**
- **Fees are coming down**



Pension- Investment Update 6/30/2018

Annual Rates of Return (Net of Fees)

	Market Value (\$ in millions)	1 Year	3 Years	5 Years	10 Years	20 Years
 KERS Non-Hazardous	\$2,007.0	7.5%	6.2%	7.2%	6.0%	5.8%
<i>Plan Index*</i>		7.2%	6.5%	7.2%	6.3%	5.9%
 KERS Hazardous	\$647.9	8.7%	7.1%	7.7%	6.2%	5.9%
<i>Plan Index*</i>		8.2%	6.9%	7.5%	6.5%	6.0%
 CERS Non-Hazardous	\$7,033.7	8.8%	7.2%	7.7%	6.2%	5.9%
<i>Plan Index*</i>		8.2%	6.9%	7.5%	6.5%	6.0%
 CERS Hazardous	\$2,345.9	8.8%	7.2%	7.7%	6.2%	5.9%
<i>Plan Index*</i>		8.2%	6.9%	7.5%	6.5%	6.0%
 SPRS	\$257.0	7.7%	6.1%	7.0%	5.9%	5.8%
<i>Plan Index*</i>		7.7%	6.5%	7.3%	6.3%	5.9%
Total Pension Fund	\$12,291.5	8.6%	7.0%	7.6%	6.2%	5.9%
<i>Plan Index**</i>		7.9%	6.9%	7.6%	6.5%	6.0%

*Plan Index – KRS Blended Index

** Weighted Composite of Individual Plans



Insurance - Investment Update 6/30/2018

Annual Rates of Return (Net of Fees)

	Market Value (\$ in millions)	1 Year	3 Years	5 Years	10 Years	20 Years
 KERS Non-Hazardous	\$834.4	8.0%	6.9%	7.2%	5.3%	5.2%
<i>Plan Index*</i>		8.4%	7.1%	7.7%	6.0%	5.5%
 KERS Hazardous	\$512.7	8.9%	7.3%	7.7%	5.5%	5.3%
<i>Plan Index*</i>		8.6%	7.2%	7.7%	6.0%	5.5%
 CERS Non-Hazardous	\$2,333.4	9.2%	7.4%	7.8%	5.6%	5.3%
<i>Plan Index*</i>		8.6%	7.2%	7.8%	6.0%	5.5%
 CERS Hazardous	\$1,264.0	9.3%	7.6%	7.8%	5.6%	5.3%
<i>Plan Index*</i>		8.6%	7.2%	7.8%	6.0%	5.5%
 SPRS	\$189.1	9.3%	7.5%	7.8%	5.6%	5.3%
<i>Plan Index*</i>		8.6%	7.2%	7.8%	6.0%	5.5%
Total Pension Fund	\$5,133.6	9.1%	7.4%	7.7%	5.6%	5.3%
<i>Plan Index**</i>		8.5%	7.2%	7.9%	6.1%	5.5%

*Plan Index – KRS Blended Index

** Weighted Composite of Individual Plans



Risk/Return Analysis

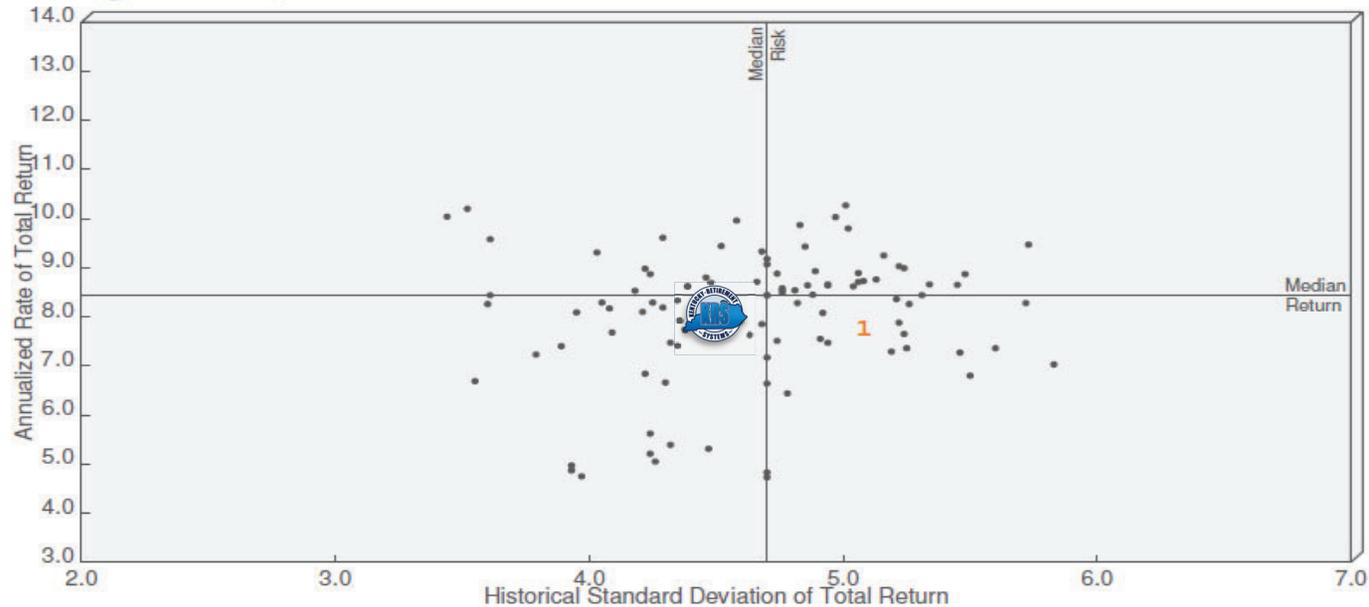


Wilshire Consulting

RISK / RETURN ANALYSIS

KRS Pension Plan

Five Years Ending June 30, 2018



Description	Legend	Gross Fee Ret		Standard Deviation	
		Value	Rank	Value	Rank
KRS Pension Plan	Ω	8.20	58	4.49	59
KRS Allocation Index	1	7.73	68	5.10	28
Median		8.44		4.70	



CASH FLOW – Pension Fund
(KERS Non-Haz, KERS Haz & SPRS)
As of June 30, 2018
(\$ in millions)

						
Contributions	FY17	FY18	FY17	FY18	FY17	FY18
<i>Member Contributions</i>	\$105.7	\$110.8	\$18.3	\$18.8	\$5.5	\$5.7
<i>Employer Contributions/Appropriations</i>	757.1	689.1	53.0	43.7	63.3	46.9
<i>Northern Trust Settlement</i>	-	0.3	-	0.9	-	-
<i>Investment Income (Net of Expenses)</i>	50.9	34.6	12.0	9.2	5.5	4.0
Total Cash Inflows	913.7	834.8	83.3	71.7	74.3	56.6
<i>Benefit Payments/Refunds</i>	960.3	981.0	63.3	68.1	57.0	58.8
<i>Administrative Expenses</i>	11.0	10.7	0.9	1.0	0.1	0.2
Total Cash Outflows	971.3	991.7	64.2	69.1	57.1	59.0
NET Cash Flow Before Gains/(Losses)	(57.6)	(156.9)	19.1	2.6	17.2	(2.4)
<i>Realized Gain/Loss</i>	80.7	148.7	28.6	50.2	10.5	17.7
NET Cash Flow w/ Realized Gains(Losses)	23.1	(8.2)	47.7	52.8	27.7	15.3
<i>Unrealized Gain/(Loss)</i>	89.4	(35.7)	30.4	(7.5)	10.7	(3.3)
Change in Net Plan Assets	112.5	(43.9)	78.1	45.3	38.4	12.0
<i>Beginning of Period</i>	\$1,980.3	\$2,092.8	\$527.8	\$605.9	\$218.0	\$256.4
<i>End of Period</i>	\$2,092.8	\$2,048.9	\$605.9	\$651.2	\$256.4	\$268.4

Note: Member contributions include the Health Insurance Contribution (1%) as required by HB1



**CASH FLOW – Pension Fund
(CERS-Non-Haz and CERS-Haz)
As of June 30, 2018
(\$ in millions)**

				
	FY17	FY18	FY17	FY18
Contributions				
<i>Member Contributions</i>	\$159.9	\$171.2	\$61.8	\$63.2
<i>Employer Contributions</i>	333.6	358.0	116.0	127.7
<i>Northern Trust Settlement</i>	-	0.4	-	0.1
<i>Investment Income (Net of Expenses)</i>	137.7	101.2	44.8	33.4
Contribution Inflow	631.2	630.8	222.6	224.4
<i>Benefit Payments/Refunds</i>	701.9	741.2	229.3	248.3
<i>Administrative Expenses</i>	19.7	19.6	1.4	1.5
Contribution Outflow	721.6	760.8	230.7	249.8
NET Cash Flow Before Gains(Losses)	(90.4)	(130.0)	(8.1)	(25.4)
<i>Realized Gain/Loss</i>	332.3	549.0	108.3	182.8
NET Cash Flow w/ Realized Gains/(Losses)	241.9	419.0	100.2	157.4
<i>Unrealized Gain(Loss)</i>	355.8	(71.8)	117.3	(24.0)
Change in Net Plan Assets	597.7	347.2	217.5	133.4
<i>Beginning of Period</i>	\$6,141.4	\$6,739.1	\$2,010.2	\$2,227.7
<i>End of Period</i>	\$6,739.1	\$7,086.3	\$2,227.7	\$2,361.1

Note: Member contributions include the Health Insurance Contribution (1%) as required by HB1.



**CASH FLOW – Insurance Fund
(KERS Non-Haz, KERS Haz & SPRS)
As of June 30, 2018
(\$ in millions)**

Contributions	FY17	FY18	FY17	FY18	FY17	FY18
<i>Employer Contributions</i>	\$148.6	\$132.4	\$4.7	\$4.3	\$9.2	\$9.4
<i>Insurance Premiums</i>	0.2	0.2	-	-	-	-
<i>Retired Reemployed Healthcare</i>	3.8	4.1	0.9	1.0	-	-
<i>Northern Trust Settlement</i>	-	-	-	-	-	-
<i>Investment Income (Net of Expenses)</i>	15.6	11.4	9.8	6.1	3.5	2.1
Contribution Inflow	168.2	148.1	15.4	11.2	12.7	11.5
<i>Healthcare Premiums</i>	129.6	131.9	17.6	18.8	13.5	13.9
<i>Administrative Expenses</i>	0.8	0.8	0.1	0.1	-	0.1
Contribution Outflow	130.4	132.7	17.7	18.9	13.5	14.0
NET Cash Flow Before Gains(Losses)	37.8	15.4	(2.3)	(7.7)	(0.8)	(2.5)
<i>Realized Gain/Loss</i>	35.7	53.8	23.2	33.7	8.4	12.9
NET Cash Flow w/ Realized Gains/(Losses)	73.5	69.2	20.9	26.0	7.6	10.4
<i>Unrealized Gain(Loss)</i>	39.6	(3.9)	26.1	2.7	9.6	1.4
Change in Net Position	113.1	65.3	47.0	28.9	17.2	11.8
<i>Beginning of Period</i>	\$668.3	\$781.4	\$437.4	\$484.4	\$161.0	\$178.2
<i>Ending of Period</i>	\$781.4	\$846.7	\$484.4	\$513.3	\$178.2	\$190.0



**CASH FLOW – Insurance Fund
(CERS Non-Haz and CERS-Haz)
As of June 30, 2018
(in \$millions)**

				
Contributions	FY17	FY18	FY17	FY18
<i>Employer Contributions</i>	\$117.3	\$120.8	\$50.7	\$55.0
<i>Insurance Premiums</i>	0.7	0.6	(0.3)	(0.2)
<i>Retired Reemployed Healthcare</i>	3.4	3.8	0.8	1.0
<i>Northern Trust Settlement</i>	-	0.1	-	-
<i>Investment Income (Net of Expenses)</i>	42.0	26.8	23.0	14.2
Contribution Inflow	163.4	152.1	74.2	70.0
<i>Healthcare Premiums</i>	125.4	135.9	70.6	75.4
<i>Administrative Expenses</i>	3.6	0.7	0.3	0.4
Contribution Outflow	129.0	136.6	70.9	75.8
NET Cash Flow Before Gains(Losses)	34.4	15.5	3.3	(5.8)
<i>Realized Gain/Loss</i>	100.5	155.1	55.5	85.1
NET Cash Flow Before w/ Realized Gains/(Losses)	134.9	170.6	58.8	79.3
<i>Unrealized Gain(Loss)</i>	117.1	15.6	64.4	9.7
Change in Net Position	252.0	186.2	123.2	\$89.0
<i>Beginning of Period</i>	\$1,908.5	\$2,160.6	\$1,056.1	\$1,179.3
<i>End of Period</i>	\$2,160.5	\$2,346.8	\$1,179.3	\$1,268.3



SB2 KRS IN COMPLIANCE WITH 18A AND 45A

Compared to the past, both 18A and 45A:

- Take a longer time period to complete the tasks
- Require more management, administrative time, and expense
- Provide less flexibility and responsiveness



SB2 INVESTMENT MANAGER CONTRACTS

- Using a “gating” process for all new potential managers
- Have CFA compliance statements from all traditional managers



SB2 CFA CODE OF ETHICS

Replace CFA Institute Code of Ethics and Standards of Professional Conduct and the CFA Institute Asset Manager Code of Professional Conduct with the SEC Investment Manager Code of Ethics.

REASONS:

1. Overall, the SEC requirement is the industry standard.
2. Both, the SEC and the CFA, require investment managers to comply with:
 - Prudent man rules
 - Customer protections
 - Ethical standards
3. The SEC is a governmental agency requiring registration whereas the CFA Institute is a voluntary association.
4. The SEC has punitive powers (“teeth”) whereas the CFA Institute can only censure or expel members.
5. The SEC conducts periodical on-site audits whereas the CFA has no audit power.



SB2 TRANSPARENCY

The American Legislation Exchange Council wrote in their December 2017 Pension Report

- *“Rather than merely presenting required information such as the actuarial valuation of assets and liabilities, Kentucky (KRS) provides the raw data along with computed key fundamentals.”*
- *“In addition, the financial investment’s actuarial and statistical sections of the report are laid out in a clear, organized, rationally flowing manner.”*



SB2 TRANSPARENCY

The American Legislation Exchange Council wrote in their December 2017 Pension Report

TRANSPARENCY LEADERS AND LAGGARDS	
MOST TRANSPARENT	LEAST TRANSPARENT
Kentucky	Alabama
Montana	California
Nebraska	Georgia
North Carolina	Louisiana



HB 362 OPT-OUT Provision Replacement Project

- KRS to make recommendations by December, 2018
- Formed a four person task force:
 - David Eager** **John Chilton**
 - Karen Roggenkamp** **Mark Blackwell**
- Initial focus on 118-120 KERS Non-Haz quasi state agencies (\$3.5 B Unfunded Liabilities).
 - Roughly 1/3 each Health Departments, Mental Health Departments, Universities, Non P1 Agencies (\$0.2 B).
 - Can't afford 83% contribution or HB 351 withdrawal requirements.



HB 362 OPT-OUT Provision Replacement Project

- **Explore options to maintain or reduce contribution rates.**
- **Consider alternative exit strategies.**
- **Explore how to apply findings to remaining plans.**
- **There will likely be a step phase-in and more than one option.**