



Kentucky Retirement Systems

# Public Pension Oversight Board

June 4, 2018



# KRS GENERAL UPDATE

- KRS moving in the right direction
  - Funding
  - Investment results
  - Member services
  - Communications
  - Employer and Member outreach
  - Working with the Legislative and Executive Branches
- Many challenges remain
  - Funding and patience
  - Education
  - Implementing SB 151 and other legislation
  - Spike in retirements
  - Filling staffing vacancies
  - Completing an Opt-Out plan



## Topics

- Asset Allocation
- Investment Returns Through March 31, 2018
- Pension and Insurance Cash Flows Through March 31, 2018
- Opt – Out Provisions Planning



# KRS TAKE AWAYS

1. Asset allocation changes continue to reflect each plan's needs
  - Liquidity, income, risk
  - Wilshire proposal close to new KRS targets
2. FY 18 YTD investment returns are very good and meaningfully over the benchmarks
  - Pension = 7.72%
  - Insurance = 8.02%
3. Asset levels up \$905 Mil
  - Net cash flow -\$197 Mil
  - Investment gains +\$1,102 Mil
4. Opt-Out provisions planning underway



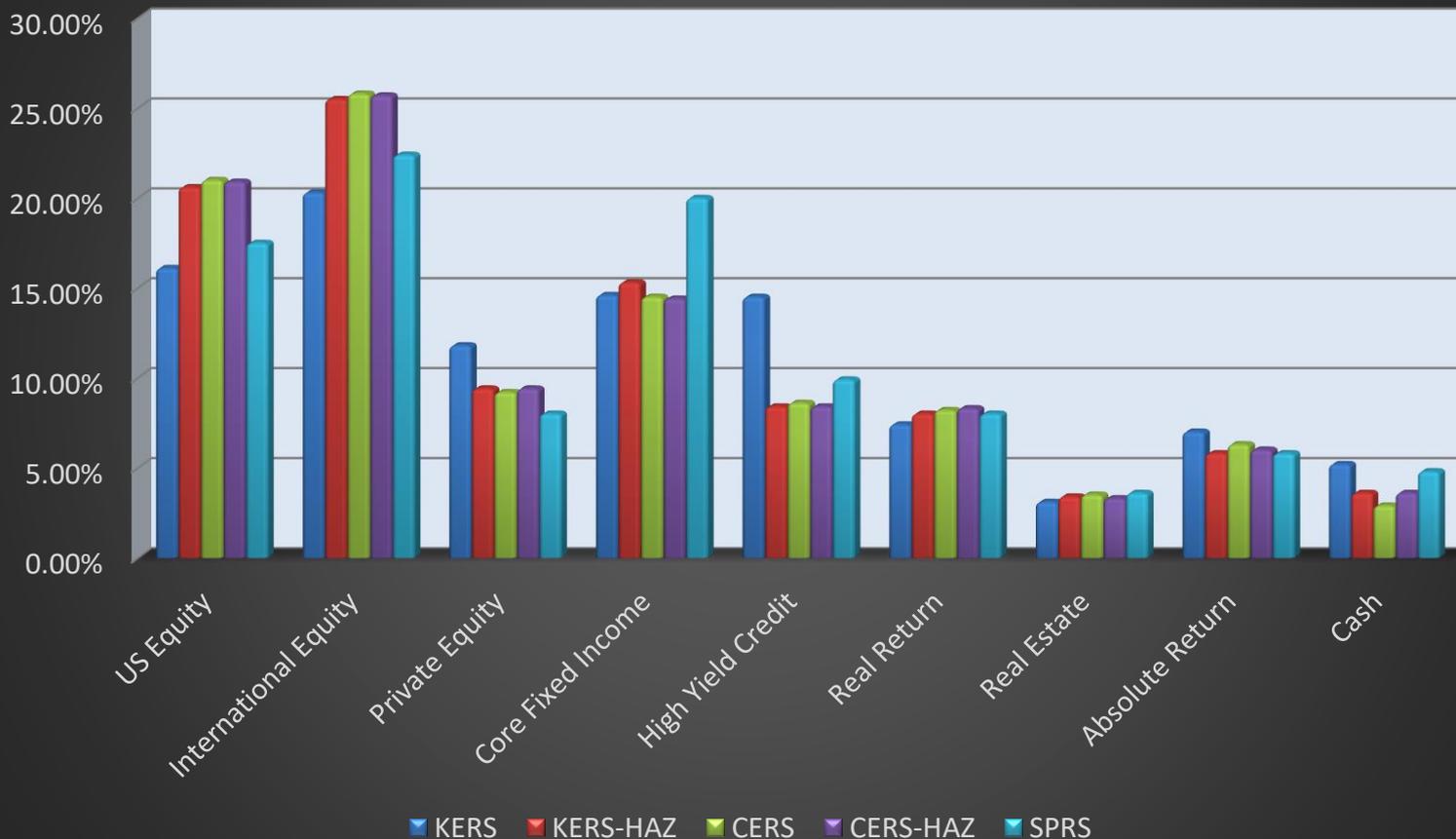
# ASSET ALLOCATION

- New general consultant, Wilshire Associates, just completed their first asset liability study for all systems.
- Recommended minimal changes to the current asset allocation for CERS, CERS-Hazardous, KERS-Hazardous, and all Insurance portfolios.
- For the severely underfunded KERS and SPRS plans, Wilshire recommended a slight reduction to risk assets and an increase to core fixed income in order to lower the expected annual volatility, increase current income, and increase liquidity for these systems.
- New asset allocations for each system will be presented to the Investment Committee and Board of Trustees for approval on June 7<sup>th</sup>.



# ASSET ALLOCATION - PENSIONS

## Current Allocations – March 31, 2018





# PERFORMANCE BENCHMARKS

## KRS IPS Benchmark

- ✓ What KRS would have earned if it invested in passive investments in line with the Investment Policy Statement allocation (e.g. 40% U.S. equities, 20% non U.S. equities, 40% fixed income)

## KRS Allocation Benchmark

- ✓ What KRS would have earned if it invested passively in the actual allocation (e.g. 45% U.S. equities, 10% non U.S. equities, 45% fixed income)

## KRS Actual Returns

- ✓ The actual portfolio return

## KRS vs. TUCS Universe

- ✓ How KRS performed vs. 130+ other public funds

# PENSION PERFORMANCE vs. BENCHMARKS - FY 18

YTD March 31, 2018



KRS IPS Benchmark 5.90%

+1.19% earned by favorable variances from target

KRS Allocation 7.09%

+0.63% earned by favorable manager decisions

KRS Actual Return (Net) 7.72%

+1.82% total value added = \$227 Mil

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Wilshire TUCS Universe Median (Gross) 7.15%

+1.17% better than TUCS median

KRS Actual Return (Gross) 8.32%

+1.17% value added = \$144 Mil



# PERFORMANCE COMPARISON

## KRS Pension Plan Composite

*Period Ended March 31, 2018*

	1 Quarter	YTD	1 Year	3 Years	5 Years	10 Years
<b>KRS Pension Plan (Net)</b>	<b>0.41%</b>	<b>7.72%</b>	<b>11.19%</b>	<b>7.03%</b>	<b>7.38%</b>	<b>5.98%</b>
<b>KRS Pension Plan (Gross)</b>	<b>0.60 (15)</b>	<b>8.32 (22)</b>	<b>12.01 (20)</b>	<b>7.67 (23)</b>	<b>7.93 (60)</b>	<b>6.30 (70)</b>
<b>1 KRS Allocation Index</b>	<b>-0.25 (51)</b>	<b>7.09 (50)</b>	<b>10.69 (44)</b>	<b>7.03 (44)</b>	<b>7.77 (62)</b>	<b>6.35 (67)</b>
<b>2 KRS IPS Benchmark</b>	<b>-0.11 (47)</b>	<b>5.90 (80)</b>				
<b>25th %tile</b>	<b>0.28</b>	<b>8.22</b>	<b>11.73</b>	<b>7.61</b>	<b>8.85</b>	<b>7.10</b>
<b>Median</b>	<b>-0.23</b>	<b>7.15</b>	<b>10.34</b>	<b>6.91</b>	<b>8.24</b>	<b>6.79</b>
<b>75th %tile</b>	<b>-0.90</b>	<b>6.37</b>	<b>9.19</b>	<b>5.88</b>	<b>7.22</b>	<b>6.16</b>
<b>95th %tile</b>	<b>-1.42</b>	<b>3.37</b>	<b>5.85</b>	<b>3.49</b>	<b>4.52</b>	<b>5.55</b>
<b>*TUCS Number of Funds</b>	<b>137</b>	<b>135</b>	<b>135</b>	<b>135</b>	<b>133</b>	<b>112</b>

# PERFORMANCE COMPARISON

## KRS Insurance Plan Composite

Period Ended March 31, 2018



	1 Quarter	YTD	1 Year	3 Years	5 Years	10 Years
<b>KRS Insurance Plan (Net)</b>	<b>0.48%</b>	<b>8.02%</b>	<b>11.56%</b>	<b>7.29%</b>	<b>7.33%</b>	<b>5.32%</b>
<b>KRS Insurance Plan (Gross)</b>	<b>0.73 (11)</b>	<b>8.69 (15)</b>	<b>12.45 (15)</b>	<b>8.00 (12)</b>	<b>7.92 (61)</b>	<b>5.64 (88)</b>
<b>1 KRS Allocation Index</b>	<b>-0.12 (47)</b>	<b>7.50 (43)</b>	<b>11.23 (33)</b>	<b>7.48 (27)</b>	<b>8.15 (53)</b>	<b>5.92 (84)</b>
<b>2 KRS IPS Benchmark</b>	<b>0.02 (38)</b>	<b>6.10 (79)</b>				
<b>25th %tile</b>	<b>0.28</b>	<b>8.22</b>	<b>11.73</b>	<b>7.61</b>	<b>8.85</b>	<b>7.10</b>
<b>Median</b>	<b>-0.23</b>	<b>7.15</b>	<b>10.34</b>	<b>6.91</b>	<b>8.24</b>	<b>6.79</b>
<b>75th %tile</b>	<b>-0.90</b>	<b>6.37</b>	<b>9.19</b>	<b>5.88</b>	<b>7.22</b>	<b>6.16</b>
<b>95th %tile</b>	<b>-1.42</b>	<b>3.37</b>	<b>5.85</b>	<b>3.49</b>	<b>4.52</b>	<b>5.55</b>
<b>*TUCS Number of Funds</b>	<b>137</b>	<b>135</b>	<b>135</b>	<b>135</b>	<b>133</b>	<b>112</b>



**CASH FLOW – Pension Fund  
(KERS Non-Haz, KERS Haz & SPRS)  
As of March 31, 2018  
(\$ in millions)**

						
	FY17	FY18	FY17	FY18	FY17	FY18
<b>Contributions</b>						
<i>Member Contributions</i>	\$80.6	\$83.0	\$13.7	\$14.0	\$4.1	\$4.4
<i>Employer Contributions/Appropriations</i>	532.4	539.3	39.9	35.2	47.6	37.6
<i>Northern Trust Settlement</i>	-	0.3	-	-	-	-
<i>Investment Income (Net of Expenses)</i>	40.9	23.1	9.5	6.4	4.4	2.8
<b>Total Cash Inflows</b>	<b>653.9</b>	<b>645.7</b>	<b>63.1</b>	<b>55.6</b>	<b>56.1</b>	<b>44.8</b>
<i>Benefit Payments/Refunds</i>	714.6	733.9	47.5	50.7	42.7	44.0
<i>Administrative Expenses</i>	10.1	7.2	0.8	0.6	0.2	0.1
<b>Total Cash Outflows</b>	<b>724.7</b>	<b>741.1</b>	<b>48.3</b>	<b>51.3</b>	<b>42.9</b>	<b>44.1</b>
<b>NET Cash Flow Before Gains(Losses)</b>	<b>(70.8)</b>	<b>(95.4)</b>	<b>14.8</b>	<b>4.3</b>	<b>13.2</b>	<b>0.7</b>
<i>Realized Gain/Loss</i>	70.4	92.1	25.4	29.8	9.4	10.6
<b>NET Cash Flow w/ Realized Gains(Losses)</b>	<b>(0.4)</b>	<b>(3.3)</b>	<b>40.2</b>	<b>34.1</b>	<b>22.6</b>	<b>11.3</b>
<i>Unrealized Gain(Loss)</i>	50.1	19.1	17.2	10.6	6.0	3.4
<b>Change in Net Plan Assets</b>	<b>\$49.7</b>	<b>\$15.8</b>	<b>\$57.4</b>	<b>\$44.7</b>	<b>\$28.6</b>	<b>\$14.7</b>
<b>Beginning of Period</b>	<b>\$1,980.3</b>	<b>\$2,092.8</b>	<b>\$527.8</b>	<b>\$605.9</b>	<b>\$218.0</b>	<b>\$256.4</b>
<b>End of Period</b>	<b>\$2,030</b>	<b>\$2,108.6</b>	<b>\$585.2</b>	<b>\$650.6</b>	<b>\$246.6</b>	<b>\$271.1</b>

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



**CASH FLOW – Pension Fund**  
**(KERS-Haz and CERS-Haz)**  
**As of March 31, 2018**  
**(\$ in millions)**

				
<b>Contributions</b>	FY17	FY18	FY17	FY18
<i>Member Contributions</i>	\$125.0	\$127.2	\$50.5	\$48.2
<i>Employer Contributions</i>	260.0	266.1	90.0	97.6
<i>Northern Trust Settlement</i>	-	0.4	-	0.1
<i>Investment Income (Net of Expenses)</i>	109.0	71.9	35.5	23.8
<b>Contribution Inflow</b>	<b>494.0</b>	<b>465.6</b>	<b>176.0</b>	<b>169.7</b>
<i>Benefit Payments/Refunds</i>	524.6	552.7	170.9	184.8
<i>Administrative Expenses</i>	17.9	13.3	1.4	0.9
<b>Contribution Outflow</b>	<b>542.5</b>	<b>566.0</b>	<b>172.3</b>	<b>185.7</b>
<b>NET Cash Flow Before Gains(Losses)</b>	<b>(48.5)</b>	<b>(100.4)</b>	<b>3.7</b>	<b>(16.0)</b>
<i>Realized Gain/Loss</i>	295.8	326.6	96.0	108.9
<b>NET Cash Flow w/ Realized Gains/(Losses)</b>	<b>247.3</b>	<b>226.2</b>	<b>99.7</b>	<b>92.9</b>
<i>Unrealized Gain(Loss)</i>	209.4	124.6	69.0	40.5
<b>Change in Net Plan Assets</b>	<b>\$456.7</b>	<b>\$350.8</b>	<b>\$168.7</b>	<b>\$133.4</b>
<i>Beginning of Period</i>	<b>\$6,141.4</b>	<b>\$6,739.1</b>	<b>\$2,010.2</b>	<b>\$2,227.7</b>
<i>End of Period</i>	<b>\$6,598.1</b>	<b>\$7,089.9</b>	<b>\$2,178.9</b>	<b>\$2,361.1</b>

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 March 31, 2018**  
**(\$ in millions)**

						
<b>Contributions</b>	<b>FY17</b>	<b>FY18</b>	<b>FY17</b>	<b>FY18</b>	<b>FY17</b>	<b>FY18</b>
<i>Employer Contributions</i>	\$101.7	\$99.5	\$3.5	\$3.0	\$7.0	\$7.1
<i>Insurance Premiums</i>	0.2	0.2	(0.1)	-	-	-
<i>Retired Reemployed Healthcare</i>	2.7	3.1	0.7	0.7	-	-
<i>Northern Trust Settlement</i>	-	-	-	-	-	-
<i>Investment Income (Net of Expenses)</i>	12.4	8.0	7.9	4.3	2.8	1.5
<b>Contribution Inflow</b>	<b>117.0</b>	<b>110.8</b>	<b>12.0</b>	<b>8.0</b>	<b>9.8</b>	<b>8.6</b>
<i>Healthcare Premiums</i>	97.2	98.6	13.2	14.0	10.2	10.4
<i>Administrative Expenses</i>	0.7	0.7	0.1	0.1	0.1	0.1
<b>Contribution Outflow</b>	<b>97.9</b>	<b>99.3</b>	<b>13.3</b>	<b>14.1</b>	<b>10.3</b>	<b>10.5</b>
<b>NET Cash Flow Before Gains(Losses)</b>	<b>19.1</b>	<b>11.5</b>	<b>(1.3)</b>	<b>(6.1)</b>	<b>(0.5)</b>	<b>(1.9)</b>
<i>Realized Gain/Loss</i>	32.3	30.7	20.8	20.5	7.5	7.8
<b>NET Cash Flow w/ Realized Gains/(Losses)</b>	<b>51.4</b>	<b>42.2</b>	<b>19.5</b>	<b>14.4</b>	<b>7.0</b>	<b>5.9</b>
<i>Unrealized Gain(Loss)</i>	23.1	17.3	15.2	13.2	5.6	5.2
<b>Change in Net Position</b>	<b>\$74.5</b>	<b>\$59.5</b>	<b>\$34.7</b>	<b>\$27.6</b>	<b>\$12.6</b>	<b>\$11.1</b>
<i>Beginning of Period</i>	\$668.3	\$781.4	\$437.4	\$484.4	\$160.9	\$178.2
<i>Ending of Period</i>	\$742.8	\$840.9	\$472.1	\$512.0	\$173.5	\$189.3



**CASH FLOW – Insurance Fund  
(CERS Non-Haz and CERS-Haz)  
As of March 31, 2018  
(in \$millions)**

				
	FY17	FY18	FY17	FY18
<b>Contributions</b>				
<i>Employer Contributions</i>	\$91.7	\$89.6	\$40.0	\$41.8
<i>Insurance Premiums</i>	0.6	0.5	(0.3)	(0.2)
<i>Retired Reemployed Healthcare</i>	2.7	3.0	0.6	0.7
<i>Northern Trust Settlement</i>	-	0.1	-	-
<i>Investment Income (Net of Expenses)</i>	33.7	19.2	18.6	10.2
<b>Contribution Inflow</b>	<b>128.7</b>	<b>112.4</b>	<b>58.9</b>	<b>52.5</b>
<i>Healthcare Premiums</i>	95.7	101.6	52.5	55.9
<i>Administrative Expenses</i>	0.6	0.7	0.3	0.3
<b>Contribution Outflow</b>	<b>96.3</b>	<b>102.3</b>	<b>52.8</b>	<b>56.2</b>
<b>NET Cash Flow Before Gains(Losses)</b>	<b>32.4</b>	<b>10.1</b>	<b>6.1</b>	<b>(3.7)</b>
<i>Realized Gain/Loss</i>	89.9	94.1	49.4	51.9
<b>NET Cash Flow Before w/ Realized Gains/(Losses)</b>	<b>122.3</b>	<b>104.2</b>	<b>55.5</b>	<b>48.2</b>
<i>Unrealized Gain(Loss)</i>	67.3	61.3	37.1	34.0
<b>Change in Net Position</b>	<b>\$189.6</b>	<b>\$165.5</b>	<b>\$92.6</b>	<b>\$82.2</b>
<i>Beginning of Period</i>	<b>\$1,908.5</b>	<b>\$2,160.5</b>	<b>\$1,056.1</b>	<b>\$1,179.3</b>
<i>End of Period</i>	<b>\$2,098.1</b>	<b>\$2,326.0</b>	<b>\$1,148.7</b>	<b>\$1,261.5</b>



# OPT-OUT PROVISIONS SITUATION ANALYSIS

1. Current cessation governed by HB 351
  - Riskless discount rate
  - Lump sum payment
  
2. Many of the 215 KRS quasi state agencies are financially stressed
  - Difficult to make required pension contributions
  - Unlikely to afford HB 351
  
3. KRS has to deal with agency and member issues
  - KRS may lose contributions if agencies can't pay
  - KRS will be hurt if buyouts are more favorable than HB 351 and/or the agencies can't make these payments
  - Some members with longer service would cease service participation, but unable to retire
  
4. State wants agencies to continue to provide services
  
5. Solution will likely be complex and will require sacrifices by all parties



# OPT-OUT PROVISIONS PLANNING

1. KRS has a fiduciary responsibility (systems and members).
2. KRS recommended solution due December 2018.
3. Principals and objectives of Agency opt-out plan completed.
4. Discussions with many constituents.
5. Assistance from GRS (actuary).
6. Consulting with other retirement systems regarding employer cessation and unfunded liability reduction efforts.
7. May need more than one option for agencies and/or implementation stages.
8. Need to get buy-in; requires effective communication and education.