



# Monthly Investment Performance Analysis

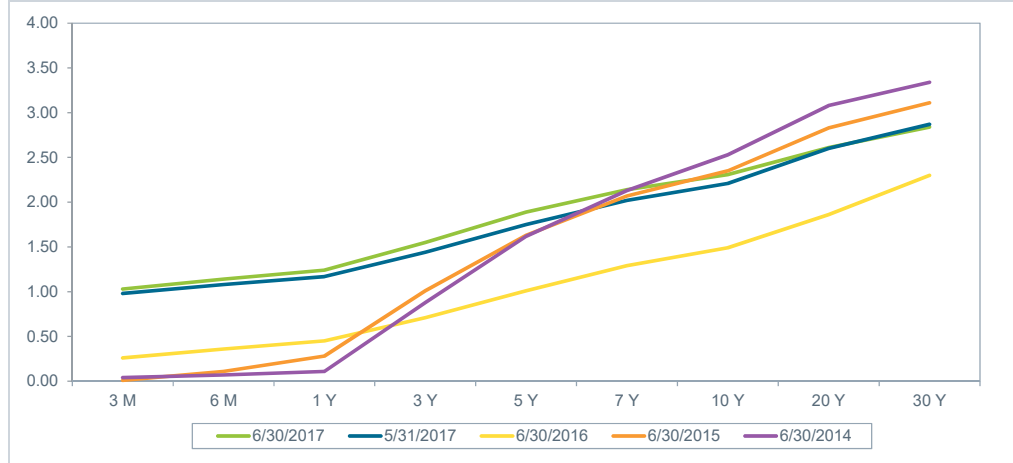
Kentucky Retirement Systems

Period Ended: June 30, 2017

General Market Commentary

- The International Monetary Fund (IMF) cut their US growth outlook for 2017 from 2.3% to 2.1%, citing uncertainty over the current administration's economic and tax reform policies.
- The Federal Reserve raised the benchmark interest rate 25 basis points for the second time in 2017, bringing the target range up to 100 to 125 basis points. The FOMC also stated that it would start to unwind its \$4.5 trillion balance sheet of agency bonds and mortgage-backed securities at some point in 2017 assuming the economy evolves broadly as anticipated.
- Equity markets posted mixed returns in June as the S&P 500 (Cap Wtd) Index returned 0.62% and the MSCI EAFE (Net) Index returned -0.18%. Emerging markets returned 1.01% as measured by the MSCI EM (Net) Index.
- The Bloomberg US Aggregate Bond Index returned -0.10% in June, outperforming the -0.27% return by the Bloomberg US Treasury Intermediate Term Index. International fixed income markets returned -0.12%, as measured by the Citi Non-US World Gov't Bond Index.
- Public real estate, as measured by the Wilshire US REIT Index, returned 2.44% in June and 9.35% over the trailing five-year period.
- The Cambridge US Private Equity Index returned 17.80% for the trailing one-year period and 12.54% for the trailing five-year period ending March 2017.
- Absolute return strategies, as measured by the HFRI FOF Comp Index, returned -0.15% for the month and 6.37% over the trailing one-year period.
- Crude oil's price fell by 4.72% during the month, and has decreased by 4.74% YoY.

Treasury Yield Curve (%)



Economic Indicators	Jun-17	May-17	Jun-16	10 Yr	20 Yr
Federal Funds Rate (%)	1.06 ▲	0.83	0.30	0.61	2.23
Breakeven Inflation - 1 Year (%)	0.72 ▼	1.20	1.17	0.84	N/A
Breakeven Inflation - 5 Year (%)	1.66 ▼	1.76	1.40	1.67	N/A
Breakeven Inflation - 10 Year (%)	1.74 ▼	1.84	1.44	1.99	N/A
Breakeven Inflation - 30 Year (%)	1.85 ▼	1.96	1.61	2.20	N/A
Bloomberg US Agg Bond Index - Yield (%)	2.55 ▲	2.46	1.91	2.93	4.22
Bloomberg US Agg Bond Index - OAS (%)	0.43 ▲	0.42	0.55	0.73	0.66
Bloomberg US Credit Index - OAS (%)	1.03 ▼	1.07	1.47	1.73	1.51
Bloomberg US Corp: HY Index - OAS (%)	3.64 ▲	3.63	5.94	6.12	5.72
Capacity Utilization (%)	76.57 ▲	76.35	75.83	76.06	77.73
Unemployment Rate (%)	4.4 ▲	4.3	4.9	7.0	5.9
PMI - Manufacturing (%)	57.8 ▲	54.9	52.8	52.2	52.3
Baltic Dry Index - Shipping	901 ▲	878	660	2,287	2,289
Consumer Conf (Conf Board)	117.30 ▼	117.60	97.40	75.14	93.08
CPI YoY (Headline) (%)	1.6 ▼	1.9	1.0	1.8	2.1
CPI YoY (Core) (%)	1.7 —	1.7	2.2	1.8	2.0
PPI YoY (%)	2.2 ▼	2.6	-2.0	1.9	2.0
M2 YoY (%)	5.5 ▼	5.9	7.0	6.5	6.4
US Dollar Total Weighted Index	90.54 ▼	92.11	90.65	79.30	86.89
WTI Crude Oil per Barrel (\$)	46 ▼	48	48	78	57
Gold Spot per Oz (\$)	1,242 ▼	1,269	1,322	1,238	806

Treasury Yield Curve (%)	Jun-17	May-17	Jun-16	Jun-15	Jun-14
3 Month	1.03	0.98	0.26	0.01	0.04
6 Month	1.14	1.08	0.36	0.11	0.07
1 Year	1.24	1.17	0.45	0.28	0.11
3 Year	1.55	1.44	0.71	1.01	0.88
5 Year	1.89	1.75	1.01	1.63	1.62
7 Year	2.14	2.02	1.29	2.07	2.13
10 Year	2.31	2.21	1.49	2.35	2.53
20 Year	2.61	2.60	1.86	2.83	3.08
30 Year	2.84	2.87	2.30	3.11	3.34

Market Performance (%)	MTD	QTD	CYTD	1 Yr	3 Yr	5 Yr	7 Yr	10 Yr
S&P 500 (Cap Wtd)	0.62	3.09	9.34	17.90	9.61	14.63	15.41	7.18
Russell 2000	3.46	2.46	4.99	24.60	7.36	13.70	14.35	6.92
MSCI EAFE (Net)	-0.18	6.12	13.81	20.27	1.15	8.69	7.91	1.03
MSCI EAFE SC (Net)	-0.02	8.10	16.72	23.18	5.60	12.94	11.40	3.41
MSCI EM (Net)	1.01	6.27	18.43	23.75	1.07	3.96	3.87	1.92
Bloomberg US Agg Bond	-0.10	1.45	2.27	-0.31	2.48	2.21	3.19	4.48
BofA ML 3 Mo US T-Bill	0.08	0.20	0.30	0.49	0.23	0.17	0.15	0.58
NCREIF ODCE (Gross)	1.70	1.70	3.50	7.87	11.34	11.79	13.08	5.25
Wilshire US REIT	2.44	1.78	1.82	-1.71	8.30	9.35	13.32	5.63
HFRI FOF Comp Index	-0.15	0.70	3.10	6.37	1.52	3.85	3.01	0.86
Bloomberg Cmdty Index (TR)	-0.19	-3.00	-5.26	-6.50	-14.81	-9.25	-5.68	-6.49

NCREIF performance is reported quarterly; MTD and QTD returns are shown as "N/A" on interim-quarter months and until available. Data shown is as of most recent quarter-end. Treasury data courtesy of the US Department of the Treasury. Economic data courtesy of Bloomberg Professional Service. Breakeven Inflation does not have 20 years of history; therefore, its 20-year average is shown as "N/A."



Kentucky Retirement Systems - Pension Plan  
Manager Comparative Performance

As of June 30, 2017

	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	2016	2015	2014	Since Incep.	Inception Date
<b>U.S. Equity Composite</b>	<b>1.09</b>	<b>2.64</b>	<b>7.76</b>	<b>17.99</b>	<b>17.99</b>	<b>8.27</b>	<b>13.99</b>	<b>14.10</b>	<b>-0.95</b>	<b>10.78</b>	<b>11.27</b>	<b>04/01/1984</b>
Russell 3000 Index (P)*	0.90	3.02	8.93	18.51	18.51	9.10	14.58	12.74	0.48	12.56	11.28	
Difference	0.19	-0.38	-1.17	-0.52	-0.52	-0.83	-0.59	1.36	-1.43	-1.78	-0.01	
<b>River Road Asset Management (SA)</b>	<b>1.63</b>	<b>0.21</b>	<b>3.33</b>	<b>14.22</b>	<b>14.22</b>	<b>7.92</b>	<b>12.58</b>	<b>20.99</b>	<b>-3.83</b>	<b>9.82</b>	<b>11.52</b>	<b>07/01/2011</b>
Russell 3000 Val Index	1.78	1.29	4.32	16.21	16.21	7.32	13.89	18.40	-4.13	12.70	11.93	
Difference	-0.15	-1.08	-0.99	-1.99	-1.99	0.60	-1.31	2.59	0.30	-2.88	-0.41	
<b>River Road FAV (SA)</b>	<b>1.71</b>	<b>3.73</b>	<b>6.49</b>	<b>26.16</b>	<b>26.16</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>26.16</b>	<b>07/01/2016</b>
Russell 3000 Val Index	1.78	1.29	4.32	16.21	16.21	7.32	13.89	18.40	-4.13	12.70	16.21	
Difference	-0.07	2.44	2.17	9.95	9.95	N/A	N/A	N/A	N/A	N/A	9.95	
<b>Westfield Capital (SA)</b>	<b>0.48</b>	<b>5.43</b>	<b>16.36</b>	<b>23.53</b>	<b>23.53</b>	<b>7.19</b>	<b>15.15</b>	<b>1.17</b>	<b>-1.37</b>	<b>12.34</b>	<b>12.02</b>	<b>07/01/2011</b>
Russell 3000 Grth Index	0.00	4.65	13.69	20.72	20.72	10.83	15.20	7.39	5.09	12.44	13.44	
Difference	0.48	0.78	2.67	2.81	2.81	-3.64	-0.05	-6.22	-6.46	-0.10	-1.42	
<b>Scientific Beta (SA)</b>	<b>0.81</b>	<b>3.31</b>	<b>9.04</b>	<b>14.85</b>	<b>14.85</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>14.85</b>	<b>07/01/2016</b>
S&P 500 Index (Cap Wtd)	0.62	3.09	9.34	17.90	17.90	9.61	14.63	11.96	1.38	13.69	17.90	
Difference	0.19	0.22	-0.30	-3.05	-3.05	N/A	N/A	N/A	N/A	N/A	-3.05	
<b>Internal S&amp;P 500 Index (SA)</b>	<b>0.63</b>	<b>3.00</b>	<b>9.35</b>	<b>17.83</b>	<b>17.83</b>	<b>9.54</b>	<b>14.52</b>	<b>11.71</b>	<b>1.37</b>	<b>13.61</b>	<b>6.90</b>	<b>07/01/2001</b>
S&P 500 Index (Cap Wtd)*	0.62	3.09	9.34	17.90	17.90	9.61	14.63	11.96	1.38	13.69	6.86	
Difference	0.01	-0.09	0.01	-0.07	-0.07	-0.07	-0.11	-0.25	-0.01	-0.08	0.04	
<b>Internal US Mid Cap (SA)</b>	<b>1.59</b>	<b>1.96</b>	<b>5.96</b>	<b>18.41</b>	<b>18.41</b>	<b>N/A</b>	<b>N/A</b>	<b>20.60</b>	<b>-2.37</b>	<b>N/A</b>	<b>10.28</b>	<b>08/01/2014</b>
S&P Mid Cap 400 Index (Cap Wtd)	1.62	1.97	5.99	18.57	18.57	8.53	14.92	20.74	-2.18	9.77	10.42	
Difference	-0.03	-0.01	-0.03	-0.16	-0.16	N/A	N/A	-0.14	-0.19	N/A	-0.14	
<b>Systematic Financial Management (SA)</b>	<b>1.54</b>	<b>-0.25</b>	<b>1.09</b>	<b>18.14</b>	<b>18.14</b>	<b>4.16</b>	<b>12.21</b>	<b>20.12</b>	<b>-5.24</b>	<b>5.34</b>	<b>12.21</b>	<b>07/01/2012</b>
Russell Mid Cap Val Index	1.49	1.37	5.18	15.93	15.93	7.46	15.14	20.00	-4.78	14.75	15.14	
Difference	0.05	-1.62	-4.09	2.21	2.21	-3.30	-2.93	0.12	-0.46	-9.41	-2.93	
<b>NT Structured Small Cap (SA)</b>	<b>2.86</b>	<b>2.49</b>	<b>5.24</b>	<b>22.98</b>	<b>22.98</b>	<b>8.13</b>	<b>14.69</b>	<b>21.09</b>	<b>-3.18</b>	<b>6.55</b>	<b>10.17</b>	<b>10/01/1999</b>
Russell 2000 Index	3.46	2.46	4.99	24.60	24.60	7.36	13.70	21.31	-4.41	4.89	8.41	
Difference	-0.60	0.03	0.25	-1.62	-1.62	0.77	0.99	-0.22	1.23	1.66	1.76	

Performance shown is net of fees. All data reported for Kentucky Retirement Systems, including manager performance, is provided by BNY Mellon. Fiscal year ends June 30th. An index marked with an asterisk (\*) represents the current benchmark. Manager inception dates shown represent the first full month following initial funding.

**Kentucky Retirement Systems - Pension Plan  
Manager Comparative Performance**

As of June 30, 2017

	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	2016	2015	2014	Since Incep.	Inception Date
<b>Non-U.S. Equity Composite</b>	<b>0.01</b>	<b>6.27</b>	<b>14.76</b>	<b>20.23</b>	<b>20.23</b>	<b>1.85</b>	<b>8.30</b>	<b>3.93</b>	<b>-3.34</b>	<b>-4.12</b>	<b>2.83</b>	<b>07/01/2000</b>
MSCI ACW Ex US Investable Mkt Index (Gross) (P)*	0.37	6.05	14.65	20.97	20.97	1.29	7.72	4.91	-5.25	-3.44	3.29	
Difference	-0.36	0.22	0.11	-0.74	-0.74	0.56	0.58	-0.98	1.91	-0.68	-0.46	
<b>Lazard Int'l Strategic Equity (SA)</b>	<b>-0.40</b>	<b>7.20</b>	<b>13.96</b>	<b>14.84</b>	<b>14.84</b>	<b>2.02</b>	<b>N/A</b>	<b>0.36</b>	<b>-0.62</b>	<b>N/A</b>	<b>2.02</b>	<b>07/01/2014</b>
MSCI ACW Ex US Index (USD) (Gross)	0.35	5.99	14.45	21.00	21.00	1.27	7.70	5.01	-5.25	-3.44	1.27	
Difference	-0.75	1.21	-0.49	-6.16	-6.16	0.75	N/A	-4.65	4.63	N/A	0.75	
<b>LSV Int'l Concentrated Value Equity (SA)</b>	<b>0.05</b>	<b>5.29</b>	<b>14.05</b>	<b>26.74</b>	<b>26.74</b>	<b>1.89</b>	<b>N/A</b>	<b>7.07</b>	<b>-5.96</b>	<b>N/A</b>	<b>1.89</b>	<b>07/01/2014</b>
MSCI ACW Ex US Index (USD) (Gross)	0.35	5.99	14.45	21.00	21.00	1.27	7.70	5.01	-5.25	-3.44	1.27	
Difference	-0.30	-0.70	-0.40	5.74	5.74	0.62	N/A	2.06	-0.71	N/A	0.62	
<b>BTC ACWI Ex US Fund (CF)</b>	<b>0.29</b>	<b>5.89</b>	<b>14.39</b>	<b>20.83</b>	<b>20.83</b>	<b>1.07</b>	<b>7.46</b>	<b>4.83</b>	<b>-5.42</b>	<b>-3.85</b>	<b>7.35</b>	<b>07/01/2009</b>
MSCI ACW Ex US Index (USD) (Net)	0.31	5.78	14.10	20.45	20.45	0.80	7.22	4.50	-5.66	-3.87	7.13	
Difference	-0.02	0.11	0.29	0.38	0.38	0.27	0.24	0.33	0.24	0.02	0.22	
<b>American Century Non-US Growth Equity (SA)</b>	<b>0.40</b>	<b>8.20</b>	<b>15.39</b>	<b>17.38</b>	<b>17.38</b>	<b>0.94</b>	<b>N/A</b>	<b>-4.26</b>	<b>-0.88</b>	<b>N/A</b>	<b>0.94</b>	<b>07/01/2014</b>
MSCI ACW Ex US Index (USD) (Gross)	0.35	5.99	14.45	21.00	21.00	1.27	7.70	5.01	-5.25	-3.44	1.27	
Difference	0.05	2.21	0.94	-3.62	-3.62	-0.33	N/A	-9.27	4.37	N/A	-0.33	
<b>Franklin Templeton Non-US Equity (SA)</b>	<b>-1.35</b>	<b>5.92</b>	<b>18.50</b>	<b>22.10</b>	<b>22.10</b>	<b>3.96</b>	<b>N/A</b>	<b>1.31</b>	<b>1.00</b>	<b>N/A</b>	<b>3.96</b>	<b>07/01/2014</b>
MSCI ACW Ex US Index (USD) (Gross)	0.35	5.99	14.45	21.00	21.00	1.27	7.70	5.01	-5.25	-3.44	1.27	
Difference	-1.70	-0.07	4.05	1.10	1.10	2.69	N/A	-3.70	6.25	N/A	2.69	
<b>NT Int'l Sm Cap Eq Index (SA)</b>	<b>0.46</b>	<b>5.96</b>	<b>15.47</b>	<b>20.37</b>	<b>20.37</b>	<b>3.51</b>	<b>10.34</b>	<b>4.13</b>	<b>2.87</b>	<b>-3.76</b>	<b>13.28</b>	<b>12/01/2008</b>
MSCI ACW Ex US Sm Cap Index (USD) (Net)	0.42	6.24	15.56	20.32	20.32	3.31	10.02	3.91	2.60	-4.03	13.69	
Difference	0.04	-0.28	-0.09	0.05	0.05	0.20	0.32	0.22	0.27	0.27	-0.41	

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Kentucky Retirement Systems - Pension Plan  
 Manager Comparative Performance

As of June 30, 2017

	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	2016	2015	2014	Since Incep.	Inception Date
<b>Fixed Income Composite</b>	<b>0.13</b>	<b>1.66</b>	<b>3.28</b>	<b>6.54</b>	<b>6.54</b>	<b>4.22</b>	<b>4.46</b>	<b>8.45</b>	<b>0.48</b>	<b>5.42</b>	<b>7.69</b>	<b>04/01/1984</b>
50/50 Bloomberg US Unv Bond/US Corp: Hi Yld Index (P)*	0.03	1.85	3.78	6.66	6.66	5.24	4.21	10.38	0.43	5.56	7.51	
Difference	0.10	-0.19	-0.50	-0.12	-0.12	-1.02	0.25	-1.93	0.05	-0.14	0.18	
Bloomberg Gbl Agg Bond Index	-0.09	2.60	4.41	-2.18	-2.18	-0.35	0.78	2.09	-3.15	0.59	N/A	
Difference	0.22	-0.94	-1.13	8.72	8.72	4.57	3.68	6.36	3.63	4.83	N/A	
<b>IG Credit FI Unit (SA)</b>	<b>-0.06</b>	<b>1.17</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>1.17</b>	<b>04/01/2017</b>
<b>NISA Core Agg Fixed Income (SA)</b>	<b>-0.08</b>	<b>1.51</b>	<b>2.34</b>	<b>-0.16</b>	<b>-0.16</b>	<b>2.80</b>	<b>2.41</b>	<b>3.08</b>	<b>0.87</b>	<b>6.27</b>	<b>4.31</b>	<b>02/01/2009</b>
Bloomberg US Agg Bond Index	-0.10	1.45	2.27	-0.31	-0.31	2.48	2.21	2.65	0.55	5.97	4.10	
Difference	0.02	0.06	0.07	0.15	0.15	0.32	0.20	0.43	0.32	0.30	0.21	
<b>Cerberus KRS Levered Loan Opps, L.P.</b>	<b>1.19</b>	<b>2.53</b>	<b>5.00</b>	<b>9.06</b>	<b>9.06</b>	<b>N/A</b>	<b>N/A</b>	<b>8.63</b>	<b>9.29</b>	<b>N/A</b>	<b>8.53</b>	<b>09/01/2014</b>
S&P-LSTA Lvg'd Loan Index	-0.04	0.76	1.91	7.42	7.42	3.35	4.58	10.16	-0.69	1.60	3.51	
Difference	1.23	1.77	3.09	1.64	1.64	N/A	N/A	-1.53	9.98	N/A	5.02	
<b>Columbia HY Fixed Income (SA)</b>	<b>0.32</b>	<b>2.46</b>	<b>4.68</b>	<b>10.48</b>	<b>10.48</b>	<b>4.86</b>	<b>6.97</b>	<b>11.65</b>	<b>-0.25</b>	<b>4.38</b>	<b>7.62</b>	<b>11/01/2011</b>
Bloomberg US Corp: Hi Yld Index	0.14	2.17	4.93	12.70	12.70	4.48	6.89	17.13	-4.47	2.45	7.46	
Difference	0.18	0.29	-0.25	-2.22	-2.22	0.38	0.08	-5.48	4.22	1.93	0.16	
<b>Marathon Bluegrass Credit Fund</b>	<b>-0.69</b>	<b>0.47</b>	<b>1.12</b>	<b>13.02</b>	<b>13.02</b>	<b>N/A</b>	<b>N/A</b>	<b>16.38</b>	<b>N/A</b>	<b>N/A</b>	<b>11.47</b>	<b>01/01/2016</b>
Bloomberg US Corp: Hi Yld Index	0.14	2.17	4.93	12.70	12.70	4.48	6.89	17.13	-4.47	2.45	14.74	
Difference	-0.83	-1.70	-3.81	0.32	0.32	N/A	N/A	-0.75	N/A	N/A	-3.27	
<b>Shenkman Capital (SA)</b>	<b>-0.08</b>	<b>1.06</b>	<b>1.88</b>	<b>7.04</b>	<b>7.04</b>	<b>2.75</b>	<b>4.57</b>	<b>8.95</b>	<b>-0.61</b>	<b>1.64</b>	<b>4.91</b>	<b>10/01/2010</b>
Shenkman Blended Index	-0.04	0.76	1.91	7.42	7.42	3.35	5.41	10.16	-0.69	2.98	5.87	
Difference	-0.04	0.30	-0.03	-0.38	-0.38	-0.60	-0.84	-1.21	0.08	-1.34	-0.96	
<b>Waterfall (SA)</b>	<b>1.02</b>	<b>3.83</b>	<b>8.33</b>	<b>17.34</b>	<b>17.34</b>	<b>8.61</b>	<b>10.47</b>	<b>9.84</b>	<b>3.17</b>	<b>10.71</b>	<b>12.26</b>	<b>02/01/2010</b>
Opportunistic FI Blended Index	0.16	1.63	3.76	9.47	9.47	3.40	4.83	11.22	-2.73	2.16	5.52	
Difference	0.86	2.20	4.57	7.87	7.87	5.21	5.64	-1.38	5.90	8.55	6.74	
<b>Manulife Asset Mgmt (SA)</b>	<b>0.43</b>	<b>1.63</b>	<b>3.09</b>	<b>2.84</b>	<b>2.84</b>	<b>2.59</b>	<b>3.96</b>	<b>4.46</b>	<b>0.59</b>	<b>3.95</b>	<b>4.55</b>	<b>12/01/2011</b>
Bloomberg US Unv Bond Index*	-0.08	1.52	2.63	0.91	0.91	-0.44	0.88	3.91	-3.29	0.48	1.22	
Difference	0.51	0.11	0.46	1.93	1.93	3.03	3.08	0.55	3.88	3.47	3.33	

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Kentucky Retirement Systems - Pension Plan  
Manager Comparative Performance

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	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	2016	2015	2014	Since Incep.	Inception Date
<b>Real Return Composite</b>	<b>0.11</b>	<b>0.63</b>	<b>5.58</b>	<b>7.52</b>	<b>7.52</b>	<b>1.44</b>	<b>2.47</b>	<b>10.46</b>	<b>-5.96</b>	<b>3.20</b>	<b>4.00</b>	<b>07/01/2011</b>
Real Return Actual Allocation Index (P)*	-0.30	-0.11	2.45	3.07	3.07	0.77	2.45	7.22	-4.07	2.95	2.82	
Difference	0.41	0.74	3.13	4.45	4.45	0.67	0.02	3.24	-1.89	0.25	1.18	
<b>Internal TIPS (SA)</b>	<b>-0.86</b>	<b>-0.38</b>	<b>0.63</b>	<b>0.16</b>	<b>0.16</b>	<b>0.89</b>	<b>0.48</b>	<b>4.56</b>	<b>0.22</b>	<b>3.03</b>	<b>5.09</b>	<b>05/01/2002</b>
Internal US TIPS Blend	-0.79	-0.40	0.65	-0.26	-0.26	0.33	0.09	4.01	-0.52	2.63	4.95	
Difference	-0.07	0.02	-0.02	0.42	0.42	0.56	0.39	0.55	0.74	0.40	0.14	
<b>Nuveen Real Asset Income (SA)</b>	<b>0.78</b>	<b>3.13</b>	<b>8.17</b>	<b>8.00</b>	<b>8.00</b>	<b>N/A</b>	<b>N/A</b>	<b>10.19</b>	<b>N/A</b>	<b>N/A</b>	<b>5.42</b>	<b>02/01/2015</b>
Nuveen Real Asset Custom Index	0.74	3.78	9.28	7.79	7.79	N/A	N/A	8.74	N/A	N/A	5.77	
Difference	0.04	-0.65	-1.11	0.21	0.21	N/A	N/A	1.45	N/A	N/A	-0.35	
<b>PIMCO:All Asset;Inst (PAAIX)</b>	<b>0.15</b>	<b>1.86</b>	<b>9.53</b>	<b>10.76</b>	<b>10.76</b>	<b>1.47</b>	<b>4.26</b>	<b>12.87</b>	<b>-7.87</b>	<b>0.52</b>	<b>4.90</b>	<b>12/01/2011</b>
Bloomberg US Trsy Infl Notes: 1-10 Yr Index	-0.79	-0.40	0.65	-0.26	-0.26	0.35	0.28	4.01	-0.52	0.91	0.71	
Difference	0.94	2.26	8.88	11.02	11.02	1.12	3.98	8.86	-7.35	-0.39	4.19	
<b>Tortoise Capital (CF)</b>	<b>0.40</b>	<b>-5.52</b>	<b>-0.72</b>	<b>4.62</b>	<b>4.62</b>	<b>-8.36</b>	<b>7.52</b>	<b>16.10</b>	<b>-27.04</b>	<b>15.54</b>	<b>13.33</b>	<b>08/01/2009</b>
Alerian MLP Index	-0.65	-6.35	-2.66	0.40	0.40	-11.23	1.77	18.31	-32.59	4.80	9.08	
Difference	1.05	0.83	1.94	4.22	4.22	2.87	5.75	-2.21	5.55	10.74	4.25	
<b>Amerra Ag Fund II (CF)</b>	<b>1.08</b>	<b>1.08</b>	<b>1.51</b>	<b>2.94</b>	<b>2.94</b>	<b>7.96</b>	<b>N/A</b>	<b>3.50</b>	<b>14.34</b>	<b>8.63</b>	<b>5.99</b>	<b>12/01/2012</b>
<b>Amerra-AGRI Holding (CF)</b>	<b>-1.80</b>	<b>-1.80</b>	<b>0.68</b>	<b>0.48</b>	<b>0.48</b>	<b>N/A</b>	<b>N/A</b>	<b>0.72</b>	<b>N/A</b>	<b>N/A</b>	<b>0.55</b>	<b>08/01/2015</b>
<b>BTG Pactual Brazil Timberland Fund I, L.P.</b>	<b>4.21</b>	<b>4.21</b>	<b>5.21</b>	<b>15.53</b>	<b>15.53</b>	<b>N/A</b>	<b>N/A</b>	<b>-16.19</b>	<b>-17.41</b>	<b>N/A</b>	<b>-11.55</b>	<b>12/01/2014</b>
<b>Magnetar MTP Energy Fund, L.P.</b>	<b>-2.43</b>	<b>-4.60</b>	<b>-2.08</b>	<b>6.27</b>	<b>6.27</b>	<b>-3.21</b>	<b>N/A</b>	<b>13.68</b>	<b>-15.63</b>	<b>2.98</b>	<b>-0.08</b>	<b>07/01/2013</b>
<b>Magnetar MTP EOF II, L.P.</b>	<b>3.79</b>	<b>3.79</b>	<b>4.55</b>	<b>20.43</b>	<b>20.43</b>	<b>N/A</b>	<b>N/A</b>	<b>-3.75</b>	<b>N/A</b>	<b>N/A</b>	<b>0.33</b>	<b>08/01/2015</b>
<b>Oberland Capital Healthcare, L.P.</b>	<b>5.02</b>	<b>5.02</b>	<b>8.81</b>	<b>-1.15</b>	<b>-1.15</b>	<b>N/A</b>	<b>N/A</b>	<b>53.70</b>	<b>-27.53</b>	<b>N/A</b>	<b>5.98</b>	<b>10/01/2014</b>
<b>Taurus Mining Finance Fund</b>	<b>2.30</b>	<b>2.30</b>	<b>8.62</b>	<b>22.95</b>	<b>22.95</b>	<b>N/A</b>	<b>N/A</b>	<b>31.15</b>	<b>N/A</b>	<b>N/A</b>	<b>17.29</b>	<b>04/01/2015</b>
<b>Tenaska Power Fund II (CF)</b>	<b>0.14</b>	<b>3.11</b>	<b>3.11</b>	<b>16.63</b>	<b>16.63</b>	<b>-2.46</b>	<b>-5.94</b>	<b>-23.28</b>	<b>16.85</b>	<b>-0.88</b>	<b>-3.97</b>	<b>10/01/2008</b>

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Kentucky Retirement Systems - Pension Plan  
 Manager Comparative Performance

As of June 30, 2017

	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	2016	2015	2014	Since Incep.	Inception Date
<b>Real Estate Composite</b>	<b>1.97</b>	<b>2.24</b>	<b>5.29</b>	<b>9.87</b>	<b>9.87</b>	<b>8.97</b>	<b>9.39</b>	<b>9.44</b>	<b>8.89</b>	<b>8.85</b>	<b>5.95</b>	<b>07/01/1984</b>
NCREIF ODCE Index (AWA) (Net) (1 Qtr Lag)	1.54	1.54	3.45	7.36	7.36	10.77	10.94	9.08	13.86	11.36	6.44	
Difference	0.43	0.70	1.84	2.51	2.51	-1.80	-1.55	0.36	-4.97	-2.51	-0.49	
<b>H/2 Credit Partners (CF)</b>	<b>2.02</b>	<b>2.02</b>	<b>5.01</b>	<b>12.70</b>	<b>12.70</b>	<b>5.98</b>	<b>6.81</b>	<b>9.29</b>	<b>2.11</b>	<b>6.57</b>	<b>6.55</b>	<b>07/01/2011</b>
<b>Harrison Street Core (CF)</b>	<b>2.46</b>	<b>2.46</b>	<b>4.79</b>	<b>9.08</b>	<b>9.08</b>	<b>9.85</b>	<b>8.95</b>	<b>10.18</b>	<b>9.53</b>	<b>10.12</b>	<b>8.65</b>	<b>05/01/2012</b>
<b>Mesa West Core Lending, L.P.</b>	<b>1.84</b>	<b>1.84</b>	<b>3.79</b>	<b>8.69</b>	<b>8.69</b>	<b>6.92</b>	<b>N/A</b>	<b>8.22</b>	<b>7.56</b>	<b>4.84</b>	<b>6.53</b>	<b>05/01/2013</b>
<b>Mesa West IV, L.P.</b>	<b>-2.55</b>	<b>-2.55</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-2.55</b>	<b>03/01/2017</b>
<b>Prologis Targeted U.S. Logistics Fund (CF)</b>	<b>2.95</b>	<b>4.03</b>	<b>9.79</b>	<b>15.43</b>	<b>15.43</b>	<b>N/A</b>	<b>N/A</b>	<b>13.39</b>	<b>14.74</b>	<b>N/A</b>	<b>13.84</b>	<b>10/01/2014</b>
<b>Stockbridge SmtMkts, L.P.</b>	<b>1.74</b>	<b>1.74</b>	<b>4.37</b>	<b>8.89</b>	<b>8.89</b>	<b>10.34</b>	<b>N/A</b>	<b>9.82</b>	<b>12.00</b>	<b>N/A</b>	<b>9.77</b>	<b>05/01/2014</b>
<b>DivcoWest Fund IV, L.P.</b>	<b>10.05</b>	<b>10.05</b>	<b>16.78</b>	<b>39.29</b>	<b>39.29</b>	<b>30.23</b>	<b>N/A</b>	<b>38.32</b>	<b>28.79</b>	<b>N/A</b>	<b>25.82</b>	<b>03/01/2014</b>
<b>Fundamental Partners III</b>	<b>-3.94</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-2.40</b>	<b>05/01/2017</b>
<b>Greenfield Acquisition Partners VI, L.P.</b>	<b>-0.06</b>	<b>-0.06</b>	<b>4.81</b>	<b>1.19</b>	<b>1.19</b>	<b>10.64</b>	<b>N/A</b>	<b>0.93</b>	<b>18.77</b>	<b>16.59</b>	<b>11.27</b>	<b>12/01/2012</b>
<b>Greenfield Acquisition Partners VII, L.P.</b>	<b>0.55</b>	<b>0.55</b>	<b>5.94</b>	<b>10.64</b>	<b>10.64</b>	<b>10.45</b>	<b>N/A</b>	<b>12.78</b>	<b>15.29</b>	<b>N/A</b>	<b>10.45</b>	<b>07/01/2014</b>
<b>Lubert Adler Real Estate Fund VII, L.P.</b>	<b>1.24</b>	<b>1.24</b>	<b>2.93</b>	<b>6.91</b>	<b>6.91</b>	<b>-6.44</b>	<b>N/A</b>	<b>4.19</b>	<b>-0.33</b>	<b>N/A</b>	<b>-6.44</b>	<b>07/01/2014</b>
<b>Patron Capital V, L.P.</b>	<b>-0.37</b>	<b>4.75</b>	<b>8.19</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-24.63</b>	<b>08/01/2016</b>
<b>Rubenstein Properties Fund II, L.P.</b>	<b>3.68</b>	<b>3.68</b>	<b>4.84</b>	<b>6.14</b>	<b>6.14</b>	<b>7.15</b>	<b>N/A</b>	<b>1.34</b>	<b>11.17</b>	<b>44.51</b>	<b>13.29</b>	<b>07/01/2013</b>
<b>Walton Street Real Estate Fund VI, L.P.</b>	<b>1.42</b>	<b>1.42</b>	<b>2.30</b>	<b>-4.12</b>	<b>-4.12</b>	<b>5.36</b>	<b>8.88</b>	<b>-3.80</b>	<b>12.99</b>	<b>16.41</b>	<b>-21.08</b>	<b>05/01/2009</b>
<b>Walton Street Real Estate Fund VII, L.P.</b>	<b>2.37</b>	<b>2.37</b>	<b>5.12</b>	<b>11.24</b>	<b>11.24</b>	<b>14.46</b>	<b>N/A</b>	<b>12.32</b>	<b>16.78</b>	<b>15.13</b>	<b>13.81</b>	<b>07/01/2013</b>

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Kentucky Retirement Systems - Pension Plan  
 Manager Comparative Performance

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	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	2016	2015	2014	Since Incep.	Inception Date
<b>Absolute Return Composite</b>	<b>-0.05</b>	<b>0.44</b>	<b>1.98</b>	<b>5.41</b>	<b>5.41</b>	<b>1.39</b>	<b>4.89</b>	<b>-0.25</b>	<b>1.70</b>	<b>4.84</b>	<b>3.96</b>	<b>04/01/2010</b>
HFRI FOF: Dv'd Index (1 Mo Lag)	0.24	0.91	3.69	5.11	5.11	1.74	3.66	-1.34	0.79	4.72	2.76	
Difference	-0.29	-0.47	-1.71	0.30	0.30	-0.35	1.23	1.09	0.91	0.12	1.20	
<b>BAAM (SA)</b>	<b>0.42</b>	<b>0.98</b>	<b>1.09</b>	<b>4.89</b>	<b>4.89</b>	<b>3.45</b>	<b>6.51</b>	<b>0.71</b>	<b>6.10</b>	<b>7.97</b>	<b>6.02</b>	<b>09/01/2011</b>
Davidson-Kemper, L.P.	0.04	2.01	4.10	8.39	8.39	N/A	N/A	N/A	N/A	N/A	7.89	02/01/2016
<b>PAAMCO (SA)</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>-0.01</b>	<b>-0.01</b>	<b>-1.67</b>	<b>3.62</b>	<b>-1.85</b>	<b>-2.01</b>	<b>3.83</b>	<b>3.32</b>	<b>09/01/2011</b>
Prisma Capital Partners (SA)	0.01	0.19	1.22	4.81	4.81	1.33	3.96	-0.87	2.52	3.30	3.49	09/01/2011
Senator Investment Group, L.P.	1.07	3.32	6.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7.29	09/01/2016
Tourbillon Global Master Fund, Ltd	0.47	-1.70	-2.60	4.49	4.49	N/A	N/A	-9.76	N/A	N/A	-7.06	11/01/2015
Anchorage Capital	-1.20	-0.72	2.62	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4.67	08/01/2016
Blackrock GAO Fund, Ltd (CF)	0.27	0.53	4.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-1.74	08/01/2016
Coatue Qualified Partners, L.P.	-1.05	7.51	17.44	22.15	22.15	N/A	N/A	4.26	N/A	N/A	13.84	07/01/2015
Credit Suisse Fund	0.90	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.90	05/01/2017
Finisterre Global Op	1.42	-1.15	-0.81	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.58	08/01/2016
Gotham Neutral Strategies (CF)	0.52	-4.06	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-4.06	04/01/2017
Governors Lane fund (CF)	0.42	2.73	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.73	04/01/2017
HBK II (CF)	0.09	1.08	2.66	6.63	6.63	2.22	N/A	5.39	-1.46	3.93	3.18	12/01/2013
Karya fund LLC (CF)	-1.93	0.08	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.08	04/01/2017
Knighthead Capital (CF)	0.19	0.75	3.23	13.67	13.67	-0.16	N/A	8.51	-10.22	5.59	1.73	01/01/2014
Liquidalts H2O Force (CF)	1.28	3.01	2.16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	11.52	08/01/2016
Luxor Capital (CF)	0.95	2.82	13.78	33.54	33.54	-3.73	N/A	0.85	-16.70	N/A	-3.17	04/01/2014

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Kentucky Retirement Systems - Pension Plan  
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Myriad Opportunities	1.07	4.68	5.48	9.49	9.49	N/A	N/A	N/A	N/A	N/A	9.45	05/01/2016
Pine River (CF)	-2.25	-0.72	-1.19	3.53	3.53	0.39	N/A	0.63	0.09	N/A	0.01	05/01/2014
Prudential Fund I (CF)	0.85	3.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3.24	04/01/2017
QMS Diversified Global Macro (CF)	-9.07	-8.73	-7.61	-18.01	-18.01	N/A	N/A	-10.36	N/A	N/A	-10.28	11/01/2015
Scopia PX, LLC	-0.99	-1.79	-2.65	3.34	3.34	N/A	N/A	-4.46	0.92	N/A	-0.76	11/01/2014
Systematica BlueMatrix Fund (CF)	2.46	-1.11	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-1.11	04/01/2017
Tide Point Partners (CF)	-2.91	-8.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-8.17	04/01/2017

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Manager Comparative Performance**

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	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	2016	2015	2014	Since Incep.	Inception Date
<b>Private Equity Composite</b>	<b>3.60</b>	<b>5.57</b>	<b>8.46</b>	<b>12.76</b>	<b>12.76</b>	<b>9.23</b>	<b>12.19</b>	<b>5.74</b>	<b>11.15</b>	<b>16.20</b>	<b>10.95</b>	<b>07/01/2002</b>
Private Equity Benchmark (P) [Short Term]	3.60	5.57	8.46	12.76	12.76	9.23	12.19	5.74	11.15	16.20	10.95	
Difference	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Russell 3000 Index+3% (Qtr Lag) (P)* [Long Term]	0.33	6.60	14.13	24.33	24.33	14.09	17.39	17.96	3.51	21.76	11.15	
Difference	3.27	-1.03	-5.67	-11.57	-11.57	-4.86	-5.20	-12.22	7.64	-5.56	-0.20	
<b>Cash Equivalents (SA)</b>	<b>0.08</b>	<b>0.23</b>	<b>0.41</b>	<b>0.99</b>	<b>0.99</b>	<b>0.54</b>	<b>0.51</b>	<b>0.94</b>	<b>0.21</b>	<b>0.17</b>	<b>3.65</b>	<b>01/01/1988</b>
Citi 3 Mo T-Bill Index	0.07	0.18	0.30	0.46	0.46	0.20	0.15	0.27	0.03	0.02	3.20	
Difference	0.01	0.05	0.11	0.53	0.53	0.34	0.36	0.67	0.18	0.15	0.45	

Performance for Absolute Return managers and the HFRI FOF Diversified Index is lagged by one month.

Performance for the NCREIF ODCE Index (AWA) (Net) is lagged by one quarter and available quarterly; interim months assume a 0.00% return.

Performance shown is net of fees. All data reported for Kentucky Retirement Systems, including manager performance, is provided by BNY Mellon. Fiscal year ends June 30th. An index marked with an asterisk (\*) represents the current benchmark. Manager inception dates shown represent the first full month following initial funding.

Kentucky Retirement Systems - Insurance Plan  
 Manager Comparative Performance

As of June 30, 2017

	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	2016	2015	2014	Since Incep.	Inception Date
<b>U.S. Equity Composite</b>	<b>1.12</b>	<b>2.72</b>	<b>7.84</b>	<b>18.09</b>	<b>18.09</b>	<b>8.69</b>	<b>14.15</b>	<b>14.66</b>	<b>-0.48</b>	<b>10.58</b>	<b>9.56</b>	<b>07/01/1992</b>
Russell 3000 Index (I)*	0.90	3.02	8.93	18.51	18.51	9.10	14.58	12.74	0.48	12.56	N/A	
Difference	0.22	-0.30	-1.09	-0.42	-0.42	-0.41	-0.43	1.92	-0.96	-1.98	N/A	
<b>River Road Asset Management (SA)</b>	<b>1.63</b>	<b>0.17</b>	<b>3.34</b>	<b>14.22</b>	<b>14.22</b>	<b>7.85</b>	<b>12.56</b>	<b>20.81</b>	<b>-3.97</b>	<b>9.86</b>	<b>11.51</b>	<b>07/01/2011</b>
Russell 3000 Val Index	1.78	1.29	4.32	16.21	16.21	7.32	13.89	18.40	-4.13	12.70	11.93	
Difference	-0.15	-1.12	-0.98	-1.99	-1.99	0.53	-1.33	2.41	0.16	-2.84	-0.42	
<b>River Road FAV (SA)</b>	<b>1.72</b>	<b>3.76</b>	<b>6.54</b>	<b>26.16</b>	<b>26.16</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>26.16</b>	<b>07/01/2016</b>
Russell 3000 Val Index	1.78	1.29	4.32	16.21	16.21	7.32	13.89	18.40	-4.13	12.70	16.21	
Difference	-0.06	2.47	2.22	9.95	9.95	N/A	N/A	N/A	N/A	N/A	9.95	
<b>Westfield Capital (SA)</b>	<b>0.47</b>	<b>5.42</b>	<b>16.46</b>	<b>23.74</b>	<b>23.74</b>	<b>7.22</b>	<b>15.32</b>	<b>1.23</b>	<b>-1.42</b>	<b>12.82</b>	<b>12.16</b>	<b>07/01/2011</b>
Russell 3000 Grth Index	0.00	4.65	13.69	20.72	20.72	10.83	15.20	7.39	5.09	12.44	13.44	
Difference	0.47	0.77	2.77	3.02	3.02	-3.61	0.12	-6.16	-6.51	0.38	-1.28	
<b>Scientific Beta (SA)</b>	<b>0.81</b>	<b>3.51</b>	<b>9.10</b>	<b>13.32</b>	<b>13.32</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>13.32</b>	<b>07/01/2016</b>
S&P 500 Index (Cap Wtd)	0.62	3.09	9.34	17.90	17.90	9.61	14.63	11.96	1.38	13.69	17.90	
Difference	0.19	0.42	-0.24	-4.58	-4.58	N/A	N/A	N/A	N/A	N/A	-4.58	
<b>Internal S&amp;P 500 Index (SA)</b>	<b>0.67</b>	<b>3.14</b>	<b>9.56</b>	<b>18.00</b>	<b>18.00</b>	<b>9.62</b>	<b>14.60</b>	<b>11.65</b>	<b>1.46</b>	<b>13.63</b>	<b>6.96</b>	<b>07/01/2001</b>
S&P 500 Index (Cap Wtd)*	0.62	3.09	9.34	17.90	17.90	9.61	14.63	11.96	1.38	13.69	6.86	
Difference	0.05	0.05	0.22	0.10	0.10	0.01	-0.03	-0.31	0.08	-0.06	0.10	
<b>Internal US Mid Cap (SA)</b>	<b>1.59</b>	<b>1.96</b>	<b>6.06</b>	<b>18.39</b>	<b>18.39</b>	<b>N/A</b>	<b>N/A</b>	<b>21.10</b>	<b>-2.39</b>	<b>N/A</b>	<b>10.47</b>	<b>08/01/2014</b>
S&P Mid Cap 400 Index (Cap Wtd)	1.62	1.97	5.99	18.57	18.57	8.53	14.92	20.74	-2.18	9.77	10.42	
Difference	-0.03	-0.01	0.07	-0.18	-0.18	N/A	N/A	0.36	-0.21	N/A	0.05	
<b>Systematic Financial Management (SA)</b>	<b>1.54</b>	<b>-0.24</b>	<b>1.07</b>	<b>18.16</b>	<b>18.16</b>	<b>4.15</b>	<b>12.18</b>	<b>20.13</b>	<b>-5.14</b>	<b>5.09</b>	<b>12.18</b>	<b>07/01/2012</b>
Russell Mid Cap Val Index	1.49	1.37	5.18	15.93	15.93	7.46	15.14	20.00	-4.78	14.75	15.14	
Difference	0.05	-1.61	-4.11	2.23	2.23	-3.31	-2.96	0.13	-0.36	-9.66	-2.96	
<b>NT Structured Small Cap (SA)</b>	<b>2.91</b>	<b>2.55</b>	<b>5.06</b>	<b>22.70</b>	<b>22.70</b>	<b>8.05</b>	<b>14.49</b>	<b>21.10</b>	<b>-3.27</b>	<b>5.80</b>	<b>11.89</b>	<b>07/01/2011</b>
Russell 2000 Index	3.46	2.46	4.99	24.60	24.60	7.36	13.70	21.31	-4.41	4.89	10.91	
Difference	-0.55	0.09	0.07	-1.90	-1.90	0.69	0.79	-0.21	1.14	0.91	0.98	

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**Kentucky Retirement Systems - Insurance Plan  
Manager Comparative Performance**

As of June 30, 2017

	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	2016	2015	2014	Since Incep.	Inception Date
<b>Non-U.S. Equity Composite</b>	<b>0.05</b>	<b>6.25</b>	<b>14.66</b>	<b>20.40</b>	<b>20.40</b>	<b>1.77</b>	<b>8.15</b>	<b>3.97</b>	<b>-3.46</b>	<b>-4.28</b>	<b>2.84</b>	<b>04/01/2000</b>
MSCI ACW Ex US Investable Mkt Index (Gross) (I)*	0.37	6.05	14.65	20.97	20.97	1.29	7.72	4.91	-5.25	-3.44	2.40	
Difference	-0.32	0.20	0.01	-0.57	-0.57	0.48	0.43	-0.94	1.79	-0.84	0.44	
<b>Lazard Int'l Strategic Equity (SA)</b>	<b>-0.32</b>	<b>7.19</b>	<b>13.90</b>	<b>14.77</b>	<b>14.77</b>	<b>1.92</b>	<b>N/A</b>	<b>0.20</b>	<b>-0.61</b>	<b>N/A</b>	<b>1.92</b>	<b>07/01/2014</b>
MSCI ACW Ex US Index (USD) (Gross)	0.35	5.99	14.45	21.00	21.00	1.27	7.70	5.01	-5.25	-3.44	1.27	
Difference	-0.67	1.20	-0.55	-6.23	-6.23	0.65	N/A	-4.81	4.64	N/A	0.65	
<b>LSV Int'l Concentrated Value Equity (SA)</b>	<b>0.21</b>	<b>5.43</b>	<b>14.10</b>	<b>27.16</b>	<b>27.16</b>	<b>1.68</b>	<b>N/A</b>	<b>6.77</b>	<b>-5.97</b>	<b>N/A</b>	<b>1.68</b>	<b>07/01/2014</b>
MSCI ACW Ex US Index (USD) (Gross)	0.35	5.99	14.45	21.00	21.00	1.27	7.70	5.01	-5.25	-3.44	1.27	
Difference	-0.14	-0.56	-0.35	6.16	6.16	0.41	N/A	1.76	-0.72	N/A	0.41	
<b>BTC ACWI Ex US Fund (CF)</b>	<b>0.28</b>	<b>5.80</b>	<b>14.17</b>	<b>20.48</b>	<b>20.48</b>	<b>1.14</b>	<b>7.32</b>	<b>5.44</b>	<b>-5.62</b>	<b>-3.88</b>	<b>8.41</b>	<b>06/01/2012</b>
MSCI ACW Ex US Index (USD) (Net)	0.31	5.78	14.10	20.45	20.45	0.80	7.22	4.50	-5.66	-3.87	8.31	
Difference	-0.03	0.02	0.07	0.03	0.03	0.34	0.10	0.94	0.04	-0.01	0.10	
<b>American Century Non-US Growth Equity (SA)</b>	<b>0.46</b>	<b>8.22</b>	<b>15.34</b>	<b>17.33</b>	<b>17.33</b>	<b>0.86</b>	<b>N/A</b>	<b>-4.42</b>	<b>-0.89</b>	<b>N/A</b>	<b>0.86</b>	<b>07/01/2014</b>
MSCI ACW Ex US Index (USD) (Gross)	0.35	5.99	14.45	21.00	21.00	1.27	7.70	5.01	-5.25	-3.44	1.27	
Difference	0.11	2.23	0.89	-3.67	-3.67	-0.41	N/A	-9.43	4.36	N/A	-0.41	
<b>Franklin Templeton Non-US Equity (SA)</b>	<b>-1.53</b>	<b>5.86</b>	<b>18.32</b>	<b>21.98</b>	<b>21.98</b>	<b>3.75</b>	<b>N/A</b>	<b>1.12</b>	<b>0.60</b>	<b>N/A</b>	<b>3.75</b>	<b>07/01/2014</b>
MSCI ACW Ex US Index (USD) (Gross)	0.35	5.99	14.45	21.00	21.00	1.27	7.70	5.01	-5.25	-3.44	1.27	
Difference	-1.88	-0.13	3.87	0.98	0.98	2.48	N/A	-3.89	5.85	N/A	2.48	
<b>BTC ACWI Ex US Small Cap Fund (CF)</b>	<b>0.39</b>	<b>6.23</b>	<b>15.73</b>	<b>20.57</b>	<b>20.57</b>	<b>3.45</b>	<b>N/A</b>	<b>3.75</b>	<b>2.85</b>	<b>-3.90</b>	<b>9.28</b>	<b>07/01/2013</b>
MSCI ACW Ex US Sm Cap Index (USD) (Net)	0.42	6.24	15.56	20.32	20.32	3.31	10.02	3.91	2.60	-4.03	8.58	
Difference	-0.03	-0.01	0.17	0.25	0.25	0.14	N/A	-0.16	0.25	0.13	0.70	

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Kentucky Retirement Systems - Insurance Plan  
 Manager Comparative Performance

As of June 30, 2017

	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	2016	2015	2014	Since Incep.	Inception Date
<b>Fixed Income Composite</b>	<b>0.11</b>	<b>1.53</b>	<b>3.13</b>	<b>5.90</b>	<b>5.90</b>	<b>3.69</b>	<b>4.00</b>	<b>8.22</b>	<b>0.53</b>	<b>3.79</b>	<b>6.53</b>	<b>07/01/1992</b>
50/50 Bloomberg US Unv Bond/US Corp: Hi Yld Index (I)*	0.03	1.85	3.78	6.66	6.66	5.24	4.21	10.38	0.43	5.56	6.51	
Difference	0.08	-0.32	-0.65	-0.76	-0.76	-1.55	-0.21	-2.16	0.10	-1.77	0.02	
Bloomberg Gbl Agg Bond Index	-0.09	2.60	4.41	-2.18	-2.18	-0.35	0.78	2.09	-3.15	0.59	5.18	
Difference	0.20	-1.07	-1.28	8.08	8.08	4.04	3.22	6.13	3.68	3.20	1.35	
<b>IG Credit FI Unit (SA)</b>	<b>-0.06</b>	<b>1.17</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>1.17</b>	<b>04/01/2017</b>
<b>NISA Core Agg Fixed Income (SA)</b>	<b>-0.07</b>	<b>1.51</b>	<b>2.36</b>	<b>-0.28</b>	<b>-0.28</b>	<b>2.72</b>	<b>2.35</b>	<b>2.96</b>	<b>0.77</b>	<b>6.16</b>	<b>3.23</b>	<b>07/01/2011</b>
Bloomberg US Agg Bond Index	-0.10	1.45	2.27	-0.31	-0.31	2.48	2.21	2.65	0.55	5.97	3.07	
Difference	0.03	0.06	0.09	0.03	0.03	0.24	0.14	0.31	0.22	0.19	0.16	
<b>Cerberus KRS Levered Loan Opps, L.P.</b>	<b>1.19</b>	<b>2.53</b>	<b>5.00</b>	<b>9.06</b>	<b>9.06</b>	<b>N/A</b>	<b>N/A</b>	<b>8.63</b>	<b>9.29</b>	<b>N/A</b>	<b>8.53</b>	<b>09/01/2014</b>
S&P-LSTA Lvg'd Loan Index	-0.04	0.76	1.91	7.42	7.42	3.35	4.58	10.16	-0.69	1.60	3.51	
Difference	1.23	1.77	3.09	1.64	1.64	N/A	N/A	-1.53	9.98	N/A	5.02	
<b>Columbia HY Fixed Income (SA)</b>	<b>0.28</b>	<b>2.36</b>	<b>4.58</b>	<b>10.28</b>	<b>10.28</b>	<b>5.05</b>	<b>7.00</b>	<b>12.19</b>	<b>-0.17</b>	<b>4.45</b>	<b>7.65</b>	<b>11/01/2011</b>
Bloomberg US Corp: Hi Yld Index	0.14	2.17	4.93	12.70	12.70	4.48	6.89	17.13	-4.47	2.45	7.46	
Difference	0.14	0.19	-0.35	-2.42	-2.42	0.57	0.11	-4.94	4.30	2.00	0.19	
<b>Marathon Bluegrass Credit Fund</b>	<b>-0.70</b>	<b>0.47</b>	<b>1.10</b>	<b>13.10</b>	<b>13.10</b>	<b>N/A</b>	<b>N/A</b>	<b>16.88</b>	<b>N/A</b>	<b>N/A</b>	<b>11.77</b>	<b>01/01/2016</b>
Bloomberg US Corp: Hi Yld Index	0.14	2.17	4.93	12.70	12.70	4.48	6.89	17.13	-4.47	2.45	14.74	
Difference	-0.84	-1.70	-3.83	0.40	0.40	N/A	N/A	-0.25	N/A	N/A	-2.97	
<b>Shenkman Capital (SA)</b>	<b>-0.25</b>	<b>0.48</b>	<b>1.47</b>	<b>6.29</b>	<b>6.29</b>	<b>2.58</b>	<b>3.75</b>	<b>8.46</b>	<b>-0.38</b>	<b>-1.32</b>	<b>4.00</b>	<b>07/01/2011</b>
Shenkman Blended Index	-0.04	0.76	1.91	7.42	7.42	3.35	5.41	10.16	-0.69	2.98	5.40	
Difference	-0.21	-0.28	-0.44	-1.13	-1.13	-0.77	-1.66	-1.70	0.31	-4.30	-1.40	
<b>Waterfall (SA)</b>	<b>1.07</b>	<b>3.52</b>	<b>8.35</b>	<b>12.18</b>	<b>12.18</b>	<b>7.62</b>	<b>10.06</b>	<b>7.52</b>	<b>2.82</b>	<b>8.91</b>	<b>10.45</b>	<b>07/01/2011</b>
Opportunistic FI Blended Index	0.16	1.63	3.76	9.47	9.47	3.40	4.83	11.22	-2.73	2.16	4.77	
Difference	0.91	1.89	4.59	2.71	2.71	4.22	5.23	-3.70	5.55	6.75	5.68	
<b>Manulife Asset Mgmt (SA)</b>	<b>0.46</b>	<b>1.68</b>	<b>3.13</b>	<b>2.84</b>	<b>2.84</b>	<b>2.51</b>	<b>3.96</b>	<b>4.38</b>	<b>0.47</b>	<b>3.19</b>	<b>4.53</b>	<b>12/01/2011</b>
Bloomberg US Unv Bond Index*	-0.08	1.52	2.63	0.91	0.91	-0.44	0.88	3.91	-3.29	0.48	1.22	
Difference	0.54	0.16	0.50	1.93	1.93	2.95	3.08	0.47	3.76	2.71	3.31	

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Kentucky Retirement Systems - Insurance Plan  
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	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	2016	2015	2014	Since Incep.	Inception Date
<b>Real Return Composite</b>	<b>0.02</b>	<b>0.66</b>	<b>5.12</b>	<b>6.60</b>	<b>6.60</b>	<b>1.32</b>	<b>2.11</b>	<b>9.69</b>	<b>-6.13</b>	<b>3.78</b>	<b>3.68</b>	<b>07/01/2011</b>
Real Return Actual Allocation Index (I)*	-0.30	0.08	2.61	2.99	2.99	0.95	2.55	6.87	-3.56	3.15	2.91	
Difference	0.32	0.58	2.51	3.61	3.61	0.37	-0.44	2.82	-2.57	0.63	0.77	
<b>Internal TIPS (SA)</b>	<b>-0.84</b>	<b>-0.35</b>	<b>0.70</b>	<b>-0.08</b>	<b>-0.08</b>	<b>0.80</b>	<b>0.54</b>	<b>4.14</b>	<b>0.26</b>	<b>3.02</b>	<b>4.46</b>	<b>10/01/2003</b>
Internal US TIPS Blend	-0.79	-0.40	0.65	-0.26	-0.26	0.33	0.09	4.01	-0.52	2.63	4.13	
Difference	-0.05	0.05	0.05	0.18	0.18	0.47	0.45	0.13	0.78	0.39	0.33	
<b>Nuveen Real Asset Income (SA)</b>	<b>0.72</b>	<b>3.11</b>	<b>8.07</b>	<b>7.80</b>	<b>7.80</b>	<b>N/A</b>	<b>N/A</b>	<b>10.16</b>	<b>N/A</b>	<b>N/A</b>	<b>5.38</b>	<b>02/01/2015</b>
Nuveen Real Asset Custom Index	0.74	3.78	9.28	7.79	7.79	N/A	N/A	8.74	N/A	N/A	5.77	
Difference	-0.02	-0.67	-1.21	0.01	0.01	N/A	N/A	1.42	N/A	N/A	-0.39	
<b>PIMCO:All Asset;Inst (PAAIX)</b>	<b>0.15</b>	<b>1.86</b>	<b>9.53</b>	<b>10.76</b>	<b>10.76</b>	<b>1.45</b>	<b>4.25</b>	<b>12.87</b>	<b>-10.43</b>	<b>3.34</b>	<b>4.88</b>	<b>12/01/2011</b>
Bloomberg US Trsy Infl Notes: 1-10 Yr Index	-0.79	-0.40	0.65	-0.26	-0.26	0.35	0.28	4.01	-0.52	0.91	0.71	
Difference	0.94	2.26	8.88	11.02	11.02	1.10	3.97	8.86	-9.91	2.43	4.17	
<b>Tortoise Capital (CF)</b>	<b>0.40</b>	<b>-5.52</b>	<b>-0.73</b>	<b>4.60</b>	<b>4.60</b>	<b>-8.43</b>	<b>7.36</b>	<b>15.95</b>	<b>-26.95</b>	<b>14.90</b>	<b>13.51</b>	<b>08/01/2009</b>
Alerian MLP Index	-0.65	-6.35	-2.66	0.40	0.40	-11.23	1.77	18.31	-32.59	4.80	9.08	
Difference	1.05	0.83	1.93	4.20	4.20	2.80	5.59	-2.36	5.64	10.10	4.43	
<b>Amerra Ag Fund II (CF)</b>	<b>1.08</b>	<b>1.08</b>	<b>1.51</b>	<b>2.94</b>	<b>2.94</b>	<b>7.96</b>	<b>N/A</b>	<b>3.50</b>	<b>14.34</b>	<b>8.63</b>	<b>5.99</b>	<b>12/01/2012</b>
<b>Amerra-AGRI Holding (CF)</b>	<b>-1.80</b>	<b>-1.80</b>	<b>0.68</b>	<b>0.48</b>	<b>0.48</b>	<b>N/A</b>	<b>N/A</b>	<b>0.72</b>	<b>N/A</b>	<b>N/A</b>	<b>0.55</b>	<b>08/01/2015</b>
<b>BTG Pactual Brazil Timberland Fund I, L.P.</b>	<b>4.21</b>	<b>4.21</b>	<b>5.21</b>	<b>15.53</b>	<b>15.53</b>	<b>N/A</b>	<b>N/A</b>	<b>-16.19</b>	<b>-17.41</b>	<b>N/A</b>	<b>-11.55</b>	<b>12/01/2014</b>
<b>Magnetar MTP Energy Fund, L.P.</b>	<b>-2.43</b>	<b>-4.64</b>	<b>-2.13</b>	<b>6.22</b>	<b>6.22</b>	<b>-3.23</b>	<b>N/A</b>	<b>13.68</b>	<b>-15.63</b>	<b>2.98</b>	<b>-0.10</b>	<b>07/01/2013</b>
<b>Magnetar MTP EOF II, L.P.</b>	<b>3.79</b>	<b>3.79</b>	<b>4.55</b>	<b>20.43</b>	<b>20.43</b>	<b>N/A</b>	<b>N/A</b>	<b>-3.75</b>	<b>N/A</b>	<b>N/A</b>	<b>0.33</b>	<b>08/01/2015</b>
<b>Oberland Capital Healthcare, L.P.</b>	<b>5.02</b>	<b>5.02</b>	<b>8.81</b>	<b>-1.15</b>	<b>-1.15</b>	<b>N/A</b>	<b>N/A</b>	<b>53.70</b>	<b>-27.53</b>	<b>N/A</b>	<b>5.98</b>	<b>10/01/2014</b>
<b>Taurus Mining Finance Fund</b>	<b>2.30</b>	<b>2.30</b>	<b>8.62</b>	<b>22.95</b>	<b>22.95</b>	<b>N/A</b>	<b>N/A</b>	<b>31.15</b>	<b>N/A</b>	<b>N/A</b>	<b>17.29</b>	<b>04/01/2015</b>
<b>Tenaska Power Fund II (CF)</b>	<b>0.14</b>	<b>3.11</b>	<b>3.11</b>	<b>16.63</b>	<b>16.63</b>	<b>-2.46</b>	<b>-5.94</b>	<b>-23.28</b>	<b>16.85</b>	<b>-0.88</b>	<b>-3.97</b>	<b>10/01/2008</b>

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Kentucky Retirement Systems - Insurance Plan  
 Manager Comparative Performance

As of June 30, 2017

	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	2016	2015	2014	Since Incep.	Inception Date
<b>Real Estate Composite</b>	<b>2.08</b>	<b>2.21</b>	<b>5.42</b>	<b>10.44</b>	<b>10.44</b>	<b>9.32</b>	<b>9.09</b>	<b>9.76</b>	<b>8.99</b>	<b>7.46</b>	<b>8.99</b>	<b>05/01/2009</b>
NCREIF ODCE Index (AWA) (Net) (1 Qtr Lag)	1.54	1.54	3.45	7.36	7.36	10.77	10.94	9.08	13.86	11.36	5.84	
Difference	0.54	0.67	1.97	3.08	3.08	-1.45	-1.85	0.68	-4.87	-3.90	3.15	
<b>H/2 Credit Partners (CF)</b>	<b>2.02</b>	<b>2.02</b>	<b>5.01</b>	<b>12.70</b>	<b>12.70</b>	<b>5.94</b>	<b>6.76</b>	<b>9.16</b>	<b>2.11</b>	<b>6.57</b>	<b>6.51</b>	<b>07/01/2011</b>
<b>Harrison Street Core (CF)</b>	<b>2.46</b>	<b>2.46</b>	<b>5.25</b>	<b>9.58</b>	<b>9.58</b>	<b>9.35</b>	<b>8.31</b>	<b>10.09</b>	<b>7.00</b>	<b>12.03</b>	<b>8.03</b>	<b>05/01/2012</b>
<b>Mesa West Core Lending, L.P.</b>	<b>1.76</b>	<b>1.76</b>	<b>3.61</b>	<b>8.31</b>	<b>8.31</b>	<b>6.64</b>	<b>N/A</b>	<b>7.91</b>	<b>7.29</b>	<b>4.68</b>	<b>6.31</b>	<b>05/01/2013</b>
<b>Mesa West IV, L.P.</b>	<b>-2.55</b>	<b>-2.55</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-2.55</b>	<b>03/01/2017</b>
<b>Prologis Targeted U.S. Logistics Fund (CF)</b>	<b>4.02</b>	<b>4.02</b>	<b>10.79</b>	<b>17.74</b>	<b>17.74</b>	<b>N/A</b>	<b>N/A</b>	<b>13.34</b>	<b>13.54</b>	<b>N/A</b>	<b>13.76</b>	<b>10/01/2014</b>
<b>Stockbridge SmtMkts, L.P.</b>	<b>1.73</b>	<b>1.73</b>	<b>4.33</b>	<b>8.80</b>	<b>8.80</b>	<b>10.32</b>	<b>N/A</b>	<b>9.73</b>	<b>11.30</b>	<b>N/A</b>	<b>9.75</b>	<b>05/01/2014</b>
<b>DivcoWest Fund IV, L.P.</b>	<b>10.05</b>	<b>10.05</b>	<b>16.78</b>	<b>39.29</b>	<b>39.29</b>	<b>30.23</b>	<b>N/A</b>	<b>38.32</b>	<b>28.79</b>	<b>N/A</b>	<b>25.81</b>	<b>03/01/2014</b>
<b>Fundamental Partners III</b>	<b>-3.94</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-2.40</b>	<b>05/01/2017</b>
<b>Greenfield Acquisition Partners VI, L.P.</b>	<b>-0.06</b>	<b>-0.06</b>	<b>4.81</b>	<b>1.19</b>	<b>1.19</b>	<b>10.64</b>	<b>N/A</b>	<b>0.93</b>	<b>18.77</b>	<b>16.59</b>	<b>11.26</b>	<b>12/01/2012</b>
<b>Greenfield Acquisition Partners VII, L.P.</b>	<b>0.55</b>	<b>0.55</b>	<b>5.94</b>	<b>10.64</b>	<b>10.64</b>	<b>10.45</b>	<b>N/A</b>	<b>12.78</b>	<b>15.29</b>	<b>N/A</b>	<b>10.45</b>	<b>07/01/2014</b>
<b>Lubert Adler Real Estate Fund VII, L.P.</b>	<b>1.24</b>	<b>1.24</b>	<b>2.93</b>	<b>6.91</b>	<b>6.91</b>	<b>-6.44</b>	<b>N/A</b>	<b>4.19</b>	<b>-0.33</b>	<b>N/A</b>	<b>-6.44</b>	<b>07/01/2014</b>
<b>Patron Capital V, L.P.</b>	<b>-0.37</b>	<b>4.75</b>	<b>8.19</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-24.97</b>	<b>08/01/2016</b>
<b>Rubenstein Properties Fund II, L.P.</b>	<b>3.68</b>	<b>3.68</b>	<b>4.84</b>	<b>6.14</b>	<b>6.14</b>	<b>7.15</b>	<b>N/A</b>	<b>1.34</b>	<b>11.17</b>	<b>44.51</b>	<b>13.29</b>	<b>07/01/2013</b>
<b>Walton Street Real Estate Fund VI, L.P.</b>	<b>1.42</b>	<b>1.42</b>	<b>2.30</b>	<b>-4.12</b>	<b>-4.12</b>	<b>5.36</b>	<b>8.88</b>	<b>-3.80</b>	<b>12.99</b>	<b>16.41</b>	<b>-21.08</b>	<b>05/01/2009</b>
<b>Walton Street Real Estate Fund VII, L.P.</b>	<b>2.37</b>	<b>2.37</b>	<b>5.12</b>	<b>11.24</b>	<b>11.24</b>	<b>14.46</b>	<b>N/A</b>	<b>12.32</b>	<b>16.78</b>	<b>15.13</b>	<b>13.81</b>	<b>07/01/2013</b>

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Kentucky Retirement Systems - Insurance Plan  
 Manager Comparative Performance

As of June 30, 2017

	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	2016	2015	2014	Since Incep.	Inception Date
<b>Absolute Return Composite</b>	<b>-0.03</b>	<b>0.42</b>	<b>1.93</b>	<b>5.32</b>	<b>5.32</b>	<b>1.41</b>	<b>4.87</b>	<b>-0.26</b>	<b>1.80</b>	<b>4.80</b>	<b>3.88</b>	<b>04/01/2010</b>
HFRI FOF: Dv'd Index (1 Mo Lag)	0.24	0.91	3.69	5.11	5.11	1.74	3.66	-1.34	0.79	4.72	2.76	
Difference	-0.27	-0.49	-1.76	0.21	0.21	-0.33	1.21	1.08	1.01	0.08	1.12	
<b>BAAM (SA)</b>	<b>0.42</b>	<b>0.98</b>	<b>1.09</b>	<b>4.89</b>	<b>4.89</b>	<b>3.45</b>	<b>6.49</b>	<b>0.72</b>	<b>6.11</b>	<b>7.91</b>	<b>6.04</b>	<b>09/01/2011</b>
Davidson-Kemper, L.P.	0.04	2.01	4.10	8.46	8.46	N/A	N/A	N/A	N/A	N/A	7.95	02/01/2016
<b>PAAMCO (SA)</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>-0.01</b>	<b>-0.01</b>	<b>-1.67</b>	<b>3.58</b>	<b>-1.84</b>	<b>-2.05</b>	<b>3.81</b>	<b>3.32</b>	<b>09/01/2011</b>
Prisma Capital Partners (SA)	0.02	0.20	1.23	4.86	4.86	1.35	3.95	-0.82	2.54	3.18	3.52	09/01/2011
Senator Investment Group, L.P.	1.07	3.32	6.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7.29	09/01/2016
Tourbillon Global Master Fund, Ltd	0.47	-1.70	-2.60	4.49	4.49	N/A	N/A	-9.75	N/A	N/A	-7.06	11/01/2015
Anchorage Capital	-1.20	-0.72	2.62	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4.81	08/01/2016
Blackrock GAO Fund, Ltd (CF)	0.27	0.53	4.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-1.79	08/01/2016
Coatue Qualified Partners, L.P.	-1.05	7.51	17.44	22.15	22.15	N/A	N/A	4.18	N/A	N/A	13.84	07/01/2015
Credit Suisse Fund	0.90	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.90	05/01/2017
Finisterre Global Op	1.91	-0.67	-0.34	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.07	08/01/2016
Gotham Neutral Strategies (CF)	0.52	-4.06	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-4.06	04/01/2017
Governors Lane fund (CF)	1.03	2.73	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.73	04/01/2017
HBK II (CF)	0.09	1.08	2.66	6.59	6.59	2.21	N/A	5.35	-1.46	3.93	3.17	12/01/2013
Karya fund LLC (CF)	-2.15	-0.15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-0.15	04/01/2017
Knighthead Capital (CF)	0.19	0.75	3.23	13.67	13.67	-0.16	N/A	8.51	-10.22	5.59	1.73	01/01/2014
Liquidalts H2O Force (CF)	1.28	3.01	2.16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	11.58	08/01/2016
Luxor Capital (CF)	0.95	2.82	13.78	33.54	33.54	-3.73	N/A	0.85	-16.70	N/A	-3.17	04/01/2014

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Kentucky Retirement Systems - Insurance Plan  
 Manager Comparative Performance

As of June 30, 2017

	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	2016	2015	2014	Since Incep.	Inception Date
Myriad Opportunities	1.07	4.67	5.71	9.49	9.49	N/A	N/A	N/A	N/A	N/A	9.45	05/01/2016
Pine River (CF)	-2.25	-0.72	-1.19	3.53	3.53	0.39	N/A	0.63	0.09	N/A	0.01	05/01/2014
Prudential Fund I (CF) (Insurance)	0.85	3.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3.24	04/01/2017
QMS Diversified Global Macro (CF)	-9.07	-8.73	-7.61	-18.31	-18.31	N/A	N/A	-10.69	N/A	N/A	-10.48	11/01/2015
Scopia PX, LLC	-0.99	-1.87	-2.72	3.22	3.22	N/A	N/A	-4.56	0.92	N/A	-0.82	11/01/2014
Systematica BlueMatrix Fund (CF)	2.46	-1.11	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-1.11	04/01/2017
Tide Point Partners (CF)	-2.91	-8.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-8.17	04/01/2017

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**Kentucky Retirement Systems - Insurance Plan  
Manager Comparative Performance**

As of June 30, 2017

	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	2016	2015	2014	Since Incep.	Inception Date
<b>Private Equity Composite</b>	<b>3.52</b>	<b>5.84</b>	<b>8.85</b>	<b>12.76</b>	<b>12.76</b>	<b>12.63</b>	<b>14.16</b>	<b>8.73</b>	<b>15.93</b>	<b>17.50</b>	<b>9.74</b>	<b>07/01/2002</b>
Private Equity Benchmark (I) [Short Term]	3.52	5.84	8.85	12.76	12.76	12.63	14.16	8.73	15.93	17.50	9.74	
Difference	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Russell 3000 Index+3% (Qtr Lag) (I)* [Long Term]	0.33	6.60	14.13	24.33	24.33	14.09	17.39	17.96	3.51	21.76	10.53	
Difference	3.19	-0.76	-5.28	-11.57	-11.57	-1.46	-3.23	-9.23	12.42	-4.26	-0.79	
<b>Cash Equivalents (SA)</b>	<b>0.08</b>	<b>0.23</b>	<b>0.40</b>	<b>0.62</b>	<b>0.62</b>	<b>0.38</b>	<b>0.37</b>	<b>0.44</b>	<b>0.21</b>	<b>0.19</b>	<b>2.69</b>	<b>07/01/1992</b>
Citi 3 Mo T-Bill Index	0.07	0.18	0.30	0.46	0.46	0.20	0.15	0.27	0.03	0.02	2.55	
Difference	0.01	0.05	0.10	0.16	0.16	0.18	0.22	0.17	0.18	0.17	0.14	

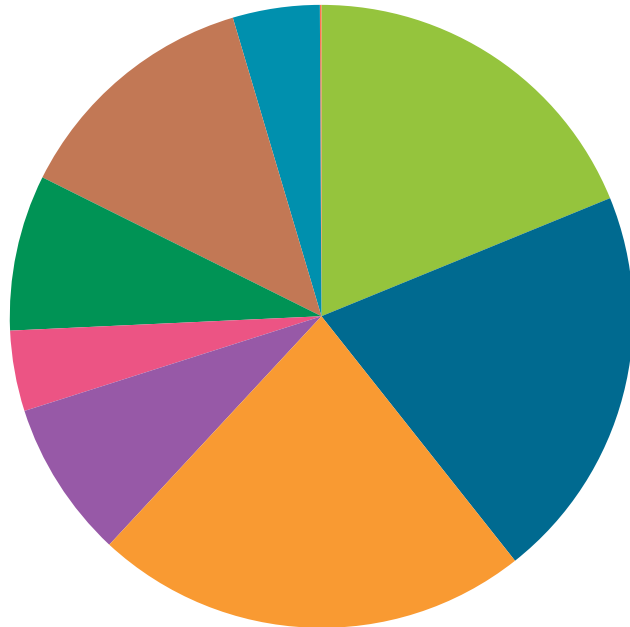
Performance for Absolute Return managers and the HFRI FOF Diversified Index is lagged by one month.

Performance for the NCREIF ODCE Index (AWA) (Net) is lagged by one quarter and available quarterly; interim months assume a 0.00% return.

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Asset Allocation by Asset Class - Pension

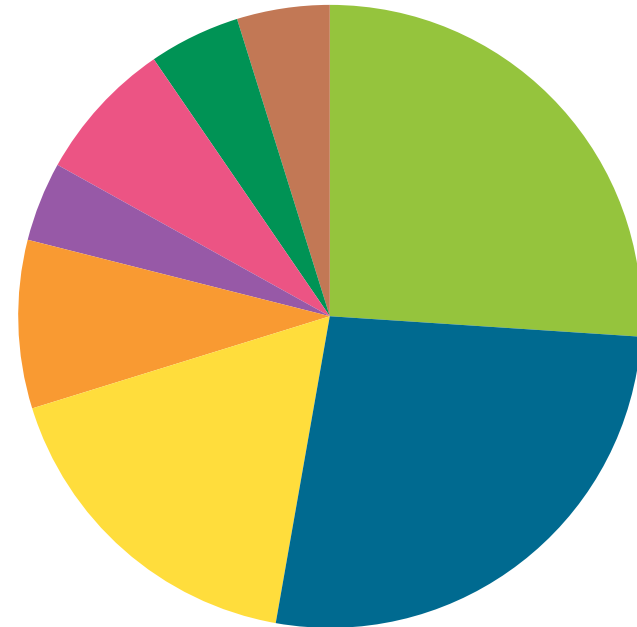
June 30, 2017 : \$2,016,474,973



	Market Value (\$)	Allocation (%)
U.S. Equity Composite	379,261,398	18.81
Non-U.S. Equity Composite	414,207,301	20.54
Fixed Income Composite	454,994,554	22.56
Real Return Composite	164,793,790	8.17
Real Estate Composite	84,358,629	4.18
Absolute Return Composite	163,020,693	8.08
Private Equity Composite	263,191,260	13.05
Cash Equivalents Composite	90,860,675	4.51
Other Composite	1,786,673	0.09

Asset Allocation by Asset Class - Insurance

June 30, 2017 : \$768,806,028



	Market Value (\$)	Allocation (%)
U.S. Equity Composite	200,208,934	26.04
Non-U.S. Equity Composite	205,647,442	26.75
Fixed Income Composite	134,146,359	17.45
Real Return Composite	67,088,217	8.73
Real Estate Composite	31,720,752	4.13
Absolute Return Composite	56,697,820	7.37
Private Equity Composite	36,377,342	4.73
Cash Equivalents Composite	36,977,204	4.81
Other Composite	-58,041	-0.01

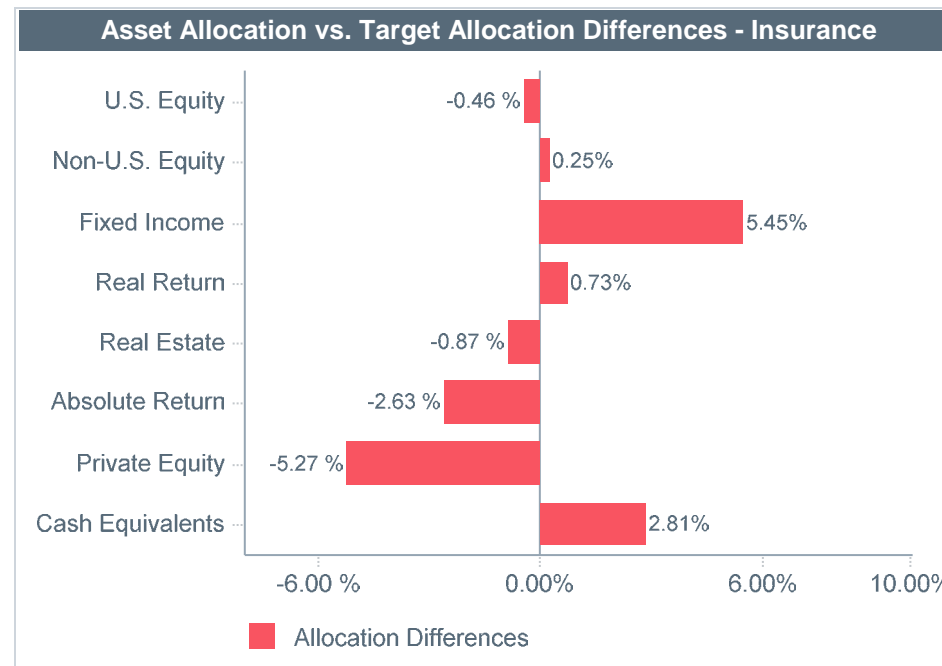
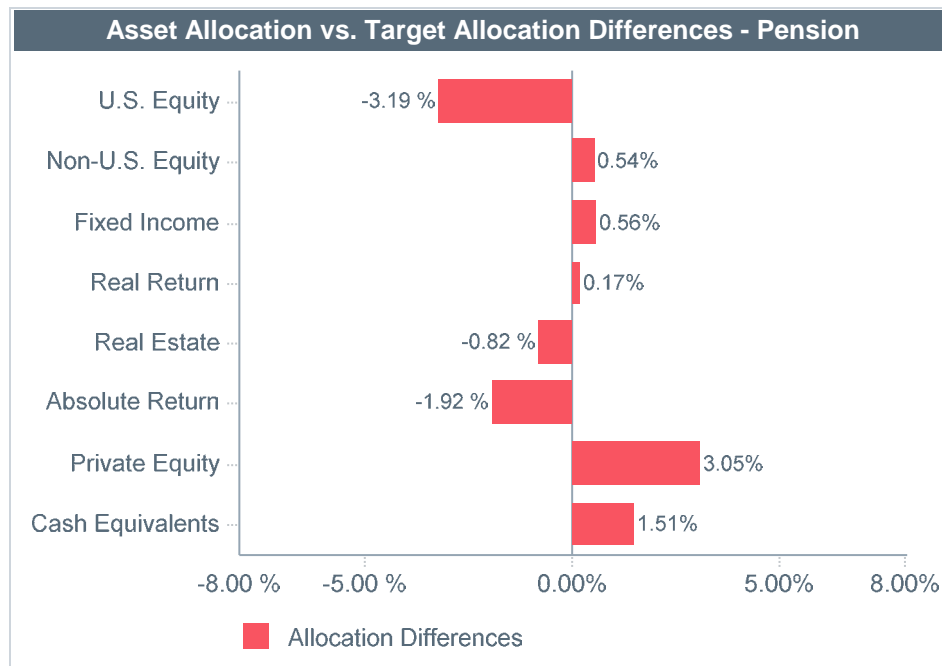
Allocations shown may not sum up to 100% exactly due to rounding.

KERS

Asset Allocation vs. Target Allocation

Asset Allocation vs. Target Allocation - Pension					
	Asset Allocation (\$)	Asset Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)	Target Allocation (%)
KERS (P)	2,016,474,973	100.00	-	-	100.00
U.S. Equity	379,261,398	18.81	17.00	27.00	22.00
Non-U.S. Equity	414,207,301	20.54	15.00	25.00	20.00
Fixed Income	454,994,554	22.56	18.00	26.00	22.00
Real Return	164,793,790	8.17	6.00	10.00	8.00
Real Estate	84,358,629	4.18	3.00	7.00	5.00
Absolute Return	163,020,693	8.08	8.00	12.00	10.00
Private Equity	263,191,260	13.05	7.00	13.00	10.00
Cash Equivalents	90,860,675	4.51	1.00	5.00	3.00

Asset Allocation vs. Target Allocation - Insurance					
	Asset Allocation (\$)	Asset Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)	Target Allocation (%)
KERS (I)	768,806,028	100.00	-	-	100.00
U.S. Equity	200,208,934	26.04	21.50	31.50	26.50
Non-U.S. Equity	205,647,442	26.75	21.50	31.50	26.50
Fixed Income	134,146,359	17.45	8.00	16.00	12.00
Real Return	67,088,217	8.73	6.00	10.00	8.00
Real Estate	31,720,752	4.13	3.00	7.00	5.00
Absolute Return	56,697,820	7.37	8.00	12.00	10.00
Private Equity	36,377,342	4.73	7.00	13.00	10.00
Cash Equivalents	36,977,204	4.81	0.00	4.00	2.00



Allocations shown may not sum up to 100% due to rounding and the exclusion of the Other Composite from this page. KERS (P) Private Equity Composite is over the maximum allocation. KERS (I) Private Equity Composite is under the minimum allocation. This is an illiquid asset class and may take additional time to bring back into target range. KERS (I) Fixed Income Composite is over the maximum allocation. KERS (I) Absolute Return Composite is under the minimum allocation. KERS (I) Cash Equivalents Composite is over the maximum allocation.

Kentucky Retirement Systems  
Asset Allocation & Performance  
KERS - Pension

As of June 30, 2017

	Allocation		Performance (%)									
	Market Value (\$)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	2016	2015	Since Incep.	Inception Date
<b>KERS (P)</b>	<b>2,016,474,973</b>	<b>100.00</b>	<b>0.81</b>	<b>3.06</b>	<b>7.05</b>	<b>12.10</b>	<b>12.10</b>	<b>4.46</b>	<b>6.49</b>	<b>0.61</b>	<b>9.12</b>	<b>04/01/1984</b>
Target Allocation Index (KERS P)			0.74	3.02	6.90	10.93	10.93	4.60	6.97	0.58	9.24	
Difference			0.07	0.04	0.15	1.17	1.17	-0.14	-0.48	0.03	-0.12	
<b>U.S. Equity Composite</b>	<b>379,261,398</b>	<b>18.81</b>	<b>1.08</b>	<b>2.63</b>	<b>7.82</b>	<b>18.35</b>	<b>18.35</b>	<b>8.98</b>	<b>13.74</b>	<b>0.25</b>	<b>13.04</b>	<b>07/01/2013</b>
Russell 3000 Index			0.90	3.02	8.93	18.51	18.51	9.10	12.74	0.48	12.93	
Difference			0.18	-0.39	-1.11	-0.16	-0.16	-0.12	1.00	-0.23	0.11	
<b>Non-U.S. Equity Composite</b>	<b>414,207,301</b>	<b>20.54</b>	<b>0.01</b>	<b>6.27</b>	<b>14.79</b>	<b>20.26</b>	<b>20.26</b>	<b>1.47</b>	<b>2.79</b>	<b>-3.35</b>	<b>6.02</b>	<b>07/01/2013</b>
MSCI ACW Ex US Investable Mkt Index (Gross)*			0.37	6.05	14.65	20.97	20.97	1.29	4.91	-5.25	6.17	
Difference			-0.36	0.22	0.14	-0.71	-0.71	0.18	-2.12	1.90	-0.15	
<b>Fixed Income Composite</b>	<b>454,994,554</b>	<b>22.56</b>	<b>0.13</b>	<b>1.70</b>	<b>3.31</b>	<b>6.70</b>	<b>6.70</b>	<b>3.92</b>	<b>8.66</b>	<b>0.47</b>	<b>4.64</b>	<b>07/01/2013</b>
50/50 Bloomberg US Unv Bond/US Corp: Hi Yld Index*			0.03	1.85	3.78	6.66	6.66	5.24	10.38	0.43	5.23	
Difference			0.10	-0.15	-0.47	0.04	0.04	-1.32	-1.72	0.04	-0.59	
<b>Real Return Composite</b>	<b>164,793,790</b>	<b>8.17</b>	<b>0.09</b>	<b>0.53</b>	<b>5.53</b>	<b>7.56</b>	<b>7.56</b>	<b>1.08</b>	<b>10.63</b>	<b>-6.80</b>	<b>2.97</b>	<b>07/01/2013</b>
Real Return Actual Allocation Index (P)*			-0.30	-0.11	2.45	3.07	3.07	0.77	7.22	-4.07	1.97	
Difference			0.39	0.64	3.08	4.49	4.49	0.31	3.41	-2.73	1.00	
<b>Real Estate Composite</b>	<b>84,358,629</b>	<b>4.18</b>	<b>2.13</b>	<b>2.29</b>	<b>5.26</b>	<b>9.99</b>	<b>9.99</b>	<b>7.82</b>	<b>9.04</b>	<b>6.35</b>	<b>7.74</b>	<b>07/01/2013</b>
NCREIF ODCE Index (AWA) (Net) (1 Qtr Lag)			1.54	1.54	3.45	7.36	7.36	10.77	9.08	13.86	11.26	
Difference			0.59	0.75	1.81	2.63	2.63	-2.95	-0.04	-7.51	-3.52	
<b>Absolute Return Composite</b>	<b>163,020,693</b>	<b>8.08</b>	<b>-0.05</b>	<b>0.44</b>	<b>1.98</b>	<b>5.41</b>	<b>5.41</b>	<b>1.38</b>	<b>-0.24</b>	<b>1.71</b>	<b>3.06</b>	<b>07/01/2013</b>
HFRI FOF: Dvf'd Index (1 Mo Lag)			0.24	0.91	3.69	5.11	5.11	1.74	-1.34	0.79	2.56	
Difference			-0.29	-0.47	-1.71	0.30	0.30	-0.36	1.10	0.92	0.50	
<b>Private Equity Composite</b>	<b>263,191,260</b>	<b>13.05</b>	<b>3.76</b>	<b>5.60</b>	<b>7.99</b>	<b>12.35</b>	<b>12.35</b>	<b>7.81</b>	<b>4.09</b>	<b>9.62</b>	<b>11.47</b>	<b>07/01/2013</b>
Private Equity Benchmark (KERS P) [Short Term]			3.76	5.60	7.99	12.35	12.35	7.81	4.09	9.62	11.47	
Difference			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
R 3000 Index+3% (Qtr Lag) (P)* [Long Term]			0.33	6.60	14.13	24.33	24.33	14.09	17.96	3.51	17.10	
Difference			3.43	-1.00	-6.14	-11.98	-11.98	-6.28	-13.87	6.11	-5.63	

Performance shown is net of fees. An index marked with an asterisk (\*) represents the current benchmark. Fiscal year ends June 30th. Allocations shown may not sum up to 100% due to the exclusion of Cash Equivalents and Other from this page; returns for Kentucky Retirement Systems Pension Fund's Cash Equivalents can be found in the manager performance section of this report.



Kentucky Retirement Systems  
Asset Allocation & Performance  
KERS - Insurance

As of June 30, 2017

	Allocation		Performance (%)									
	Market Value (\$)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	2016	2015	Since Incep.	Inception Date
<b>KERS (I)</b>	<b>768,806,028</b>	<b>100.00</b>	<b>0.53</b>	<b>3.17</b>	<b>7.81</b>	<b>13.80</b>	<b>13.80</b>	<b>4.73</b>	<b>8.41</b>	<b>-0.68</b>	<b>7.37</b>	<b>04/01/1987</b>
Target Allocation Index (KERS I)			0.86	3.48	8.31	13.72	13.72	5.55	8.15	0.96	7.83	
Difference			-0.33	-0.31	-0.50	0.08	0.08	-0.82	0.26	-1.64	-0.46	
<b>U.S. Equity Composite</b>	<b>200,208,934</b>	<b>26.04</b>	<b>1.10</b>	<b>2.75</b>	<b>7.70</b>	<b>18.12</b>	<b>18.12</b>	<b>8.68</b>	<b>14.69</b>	<b>-0.43</b>	<b>12.42</b>	<b>07/01/2013</b>
Russell 3000 Index			0.90	3.02	8.93	18.51	18.51	9.10	12.74	0.48	12.93	
Difference			0.20	-0.27	-1.23	-0.39	-0.39	-0.42	1.95	-0.91	-0.51	
<b>Non-U.S. Equity Composite</b>	<b>205,647,442</b>	<b>26.75</b>	<b>0.05</b>	<b>6.29</b>	<b>14.70</b>	<b>20.44</b>	<b>20.44</b>	<b>1.67</b>	<b>3.69</b>	<b>-3.48</b>	<b>6.15</b>	<b>07/01/2013</b>
MSCI ACW Ex US Investable Mkt Index (Gross)*			0.37	6.05	14.65	20.97	20.97	1.29	4.91	-5.25	6.17	
Difference			-0.32	0.24	0.05	-0.53	-0.53	0.38	-1.22	1.77	-0.02	
<b>Fixed Income Composite</b>	<b>134,146,359</b>	<b>17.45</b>	<b>0.08</b>	<b>1.51</b>	<b>3.10</b>	<b>5.88</b>	<b>5.88</b>	<b>3.65</b>	<b>8.18</b>	<b>0.51</b>	<b>4.38</b>	<b>07/01/2013</b>
50/50 Bloomberg US Unv Bond/US Corp: Hi Yld Index*			0.03	1.85	3.78	6.66	6.66	5.24	10.38	0.43	5.23	
Difference			0.05	-0.34	-0.68	-0.78	-0.78	-1.59	-2.20	0.08	-0.85	
<b>Real Return Composite</b>	<b>67,088,217</b>	<b>8.73</b>	<b>0.03</b>	<b>0.73</b>	<b>5.25</b>	<b>6.47</b>	<b>6.47</b>	<b>1.21</b>	<b>9.43</b>	<b>-6.25</b>	<b>3.03</b>	<b>07/01/2013</b>
Real Return Actual Allocation Index (KERS I)*			-0.30	0.08	2.61	2.99	2.99	0.95	6.87	-3.56	2.07	
Difference			0.33	0.65	2.64	3.48	3.48	0.26	2.56	-2.69	0.96	
<b>Real Estate Composite</b>	<b>31,720,752</b>	<b>4.13</b>	<b>2.08</b>	<b>2.21</b>	<b>5.43</b>	<b>10.39</b>	<b>10.39</b>	<b>9.28</b>	<b>9.72</b>	<b>8.88</b>	<b>8.70</b>	<b>07/01/2013</b>
NCREIF ODCE Index (AWA) (Net) (1 Qtr Lag)			1.54	1.54	3.45	7.36	7.36	10.77	9.08	13.86	11.26	
Difference			0.54	0.67	1.98	3.03	3.03	-1.49	0.64	-4.98	-2.56	
<b>Absolute Return Composite</b>	<b>56,697,820</b>	<b>7.37</b>	<b>-0.03</b>	<b>0.42</b>	<b>1.93</b>	<b>5.32</b>	<b>5.32</b>	<b>1.41</b>	<b>-0.26</b>	<b>1.79</b>	<b>3.11</b>	<b>07/01/2013</b>
HFRI FOF: Dvf'd Index (1 Mo Lag)			0.24	0.91	3.69	5.11	5.11	1.74	-1.34	0.79	2.56	
Difference			-0.27	-0.49	-1.76	0.21	0.21	-0.33	1.08	1.00	0.55	
<b>Private Equity Composite</b>	<b>36,377,342</b>	<b>4.73</b>	<b>4.40</b>	<b>5.49</b>	<b>7.82</b>	<b>12.48</b>	<b>12.48</b>	<b>9.22</b>	<b>6.35</b>	<b>10.54</b>	<b>12.86</b>	<b>07/01/2013</b>
Private Equity Benchmark (KERS I) [Short Term]			4.40	5.49	7.82	12.48	12.48	8.31	6.35	10.54	12.15	
Difference			0.00	0.00	0.00	0.00	0.00	0.91	0.00	0.00	0.71	
R 3000 Index+3% (Qtr Lag) (I)* [Long Term]			0.33	6.60	14.13	24.33	24.33	14.09	17.96	3.51	17.10	
Difference			4.07	-1.11	-6.31	-11.85	-11.85	-4.87	-11.61	7.03	-4.24	

Performance shown is net of fees. An index marked with an asterisk (\*) represents the current benchmark. Fiscal year ends June 30th. Allocations shown may not sum up to 100% due to the exclusion of Cash Equivalents and Other from this page; returns for Kentucky Retirement Systems Insurance Fund's Cash Equivalents can be found in the manager performance section of this report.

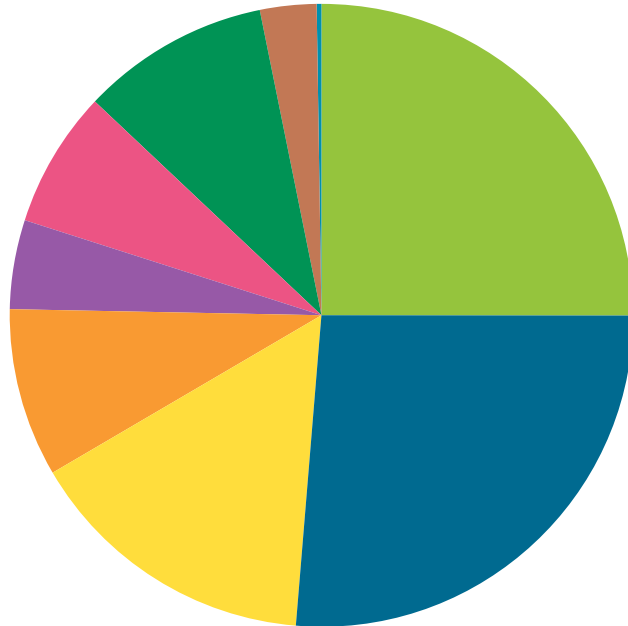


Pension	
<p><b>U.S. Equity Composite</b> River Road Asset Management (SA) River Road FAV (SA) Westfield Capital (SA) Scientific Beta (SA) Internal S&amp;P 500 Index (SA) Internal US Mid Cap (SA) Systematic Financial Management (SA) NT Structured Small Cap (SA) Pension Transition (SA)</p> <p><b>Non-U.S. Equity Composite</b> Lazard Int'l Strategic Equity (SA) LSV Int'l Concentrated Value Equity (SA) BTC ACWI Ex US Fund (CF) American Century Non-US Growth Equity (SA) Franklin Templeton Non-US Equity (SA) NT Int'l Sm Cap Eq Index (SA)</p> <p><b>Fixed Income Composite</b> <i>Core Fixed Income Composite</i> IG Credit FI Unit NISA Core Agg Fixed Income (SA) <i>High Yield Fixed Income Composite</i> Cerberus KRS Levered Loan Opps, L.P. Columbia HY Fixed Income (SA) Marathon Bluegrass Credit Fund Shenkman Capital (SA) Waterfall (SA) <i>Global Fixed Income Composite</i> Manulife Asset Mgmt (SA)</p> <p><b>Real Return Composite</b> Internal TIPS (SA) Nuveen Real Asset Income (SA) PIMCO:All Asset;Inst (PAAIX) Tortoise Capital (CF) Amerra Ag Fund II (CF) Magnetar MTP Energy Fund, L.P. Magnetar MTP EOF II, L.P. Tenaska Power Fund II (CF)</p> <p><b>Cash Equivalents Composite</b> Cash Equivalents (SA)</p>	<p><b>Real Estate Composite</b> H/2 Credit Partners (CF) Harrison Street Core (CF) Mesa West Core Lending, L.P. Mesa West IV, L.P. Patron Capital V, L.P. Prologis Targeted U.S. Logistics Fund (CF) Fundamental Partners III, L.P. Stockbridge SmtMkts, L.P. Walton Street Real Estate Fund VI, L.P.</p> <p><b>Absolute Return Composite</b> BAAM (SA) Davidson-Kemper, L.P. PAAMCO (SA) Prisma Capital Partners (SA) Senator LP Tourbillon Global Master Fund, Ltd Anchorage Capital Blackrock GAO Fund, Ltd (CF) Coatue Qualified Partners, L.P. Credit Suisse Fund Finisterre Global Op (CF) Gotham Neutral Strategies (CF) Governors Lane Fund (CF) HBK II (CF) Karya Fund, LLC Knighthead Capital (CF) Liquidalts H2O Force (CF) Luxor Capital (CF) Myriad Opportunities Pine River (CF) Prudential Fund I (CF) QMS Diversified Global Macro (CF) Scopia PX, LLC Systematica Blue Matrix Fund (CF) Tide Point Partners (CF)</p> <p><b>Private Equity Composite</b></p> <p><b>Other Composite</b> Perimeter Park (SA) Custody Fee Accrual (SA)</p>

Insurance	
<p><b>U.S. Equity Composite</b> River Road Asset Management (SA) River Road FAV (SA) Westfield Capital (SA) Scientific Beta (SA) Internal S&amp;P 500 Index (SA) Internal US Mid Cap (SA) Systematic Financial Management (SA) NT Structured Small Cap (SA) Insurance Transition (SA)</p> <p><b>Non-U.S. Equity Composite</b> Lazard Int'l Strategic Equity (SA) LSV Int'l Concentrated Value Equity (SA) BTC ACWI Ex US Fund (CF) American Century Non-US Growth Equity (SA) Franklin Templeton Non-US Equity (SA) BTC ACWI Ex US Small Cap Fund (CF)</p> <p><b>Fixed Income Composite</b> <i>Core Fixed Income Composite</i> IG Credit FI Unit NISA Core Agg Fixed Income (SA) <i>High Yield Fixed Income Composite</i> Cerberus KRS Levered Loan Opps, L.P. Columbia HY Fixed Income (SA) Marathon Bluegrass Credit Fund Shenkman Capital (SA) Waterfall (SA) <i>Global Fixed Income Composite</i> Manulife Asset Mgmt (SA)</p> <p><b>Real Return Composite</b> Internal TIPS (SA) Nuveen Real Asset Income (SA) PIMCO:All Asset;Inst (PAAIX) Tortoise Capital (CF) Amerra Ag Fund II (CF) Amerra-AGRI Holding (CF) BTG Pactual Brazil Timberland Fund I, L.P. Magnetar MTP Energy Fund, L.P. Magnetar MTP EOF II, L.P. Oberland Capital Healthcare, L.P. Tenaska Power Fund II (CF)</p> <p><b>Cash Equivalents Composite</b> Cash Equivalents (SA)</p>	<p><b>Real Estate Composite</b> H/2 Credit Partners (CF) Harrison Street Core (CF) Mesa West Core Lending, L.P. Mesa West IV, L.P. Prologis Targeted U.S. Logistics Fund (CF) Stockbridge SmtMkts, L.P. DivCoWest Fund IV, L.P. Fundamental Partners III, L.P. Greenfield Acquisition Partners VI, L.P. Greenfield Acquisition Partners VII, L.P. Lubert Adler Real Estate Fund VII, L.P. Patron Capital V, L.P. Rubenstein Properties Fund II, L.P. Walton Street Real Estate Fund VI, L.P. Walton Street Real Estate Fund VII, L.P.</p> <p><b>Absolute Return Composite</b> BAAM (SA) Davidson-Kemper, L.P. PAAMCO (SA) Prisma Capital Partners (SA) Senator LP Tourbillon Global Master Fund, Ltd Anchorage Capital Blackrock GAO Fund, Ltd (CF) Coatue Qualified Partners, L.P. Credit Suisse Fund Finisterre Global Op Gotham Neutral Strategies (CF) Governors Lane Fund (CF) HBK II (CF) Karya Fund, LLC Knighthead Capital (CF) Liquidalts H2O Force (CF) Luxor Capital (CF) Myriad Opportunities Pine River (CF) Prudential Fund I (CF) QMS Diversified Global Macro (CF) Scopia PX, LLC Systematica BlueMatrix Fund (CF) Tide Point Partners (CF)</p> <p><b>Private Equity Composite</b></p> <p><b>Other Composite</b> Custody Fee Accrual (SA)</p>

Asset Allocation by Asset Class - Pension

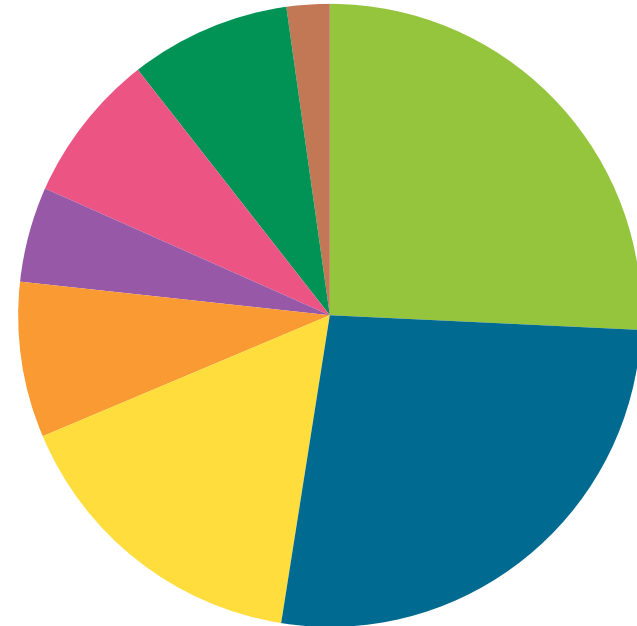
June 30, 2017 : \$600,383,971



	Market Value (\$)	Allocation (%)
U.S. Equity Composite	150,165,709	25.01
Non-U.S. Equity Composite	157,958,333	26.31
Fixed Income Composite	91,593,821	15.26
Real Return Composite	52,473,231	8.74
Real Estate Composite	27,788,633	4.63
Absolute Return Composite	42,628,766	7.10
Private Equity Composite	58,642,746	9.77
Cash Equivalents Composite	17,619,618	2.93
Other Composite	1,513,114	0.25

Asset Allocation by Asset Class - Insurance

June 30, 2017 : \$483,868,457



	Market Value (\$)	Allocation (%)
U.S. Equity Composite	124,584,401	25.75
Non-U.S. Equity Composite	129,468,470	26.76
Fixed Income Composite	78,189,469	16.16
Real Return Composite	39,050,692	8.07
Real Estate Composite	23,908,705	4.94
Absolute Return Composite	37,624,723	7.78
Private Equity Composite	40,288,639	8.33
Cash Equivalents Composite	10,789,946	2.23
Other Composite	-36,588	-0.01

Allocations shown may not sum up to 100% exactly due to rounding.

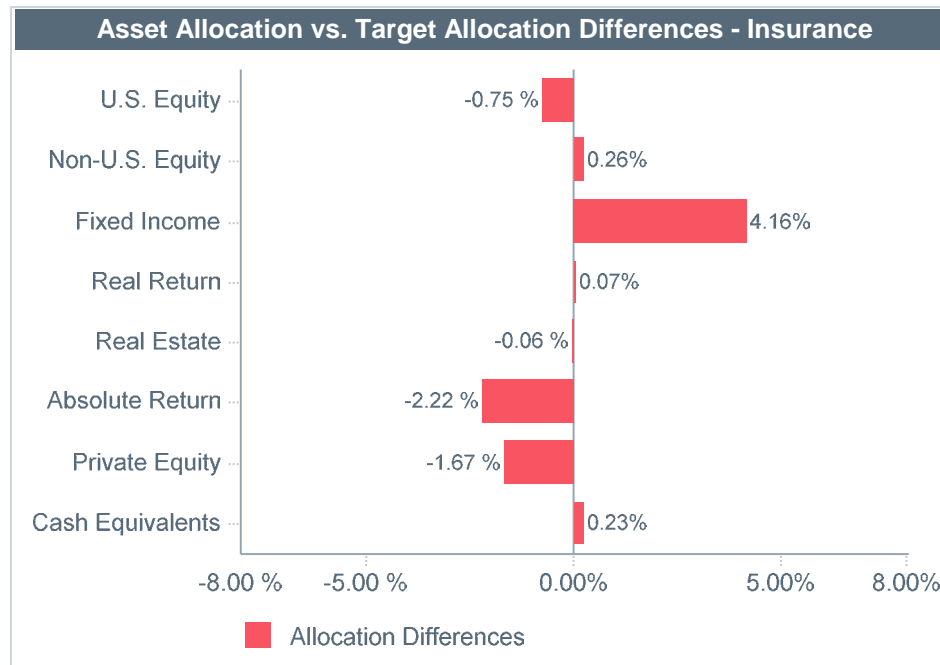
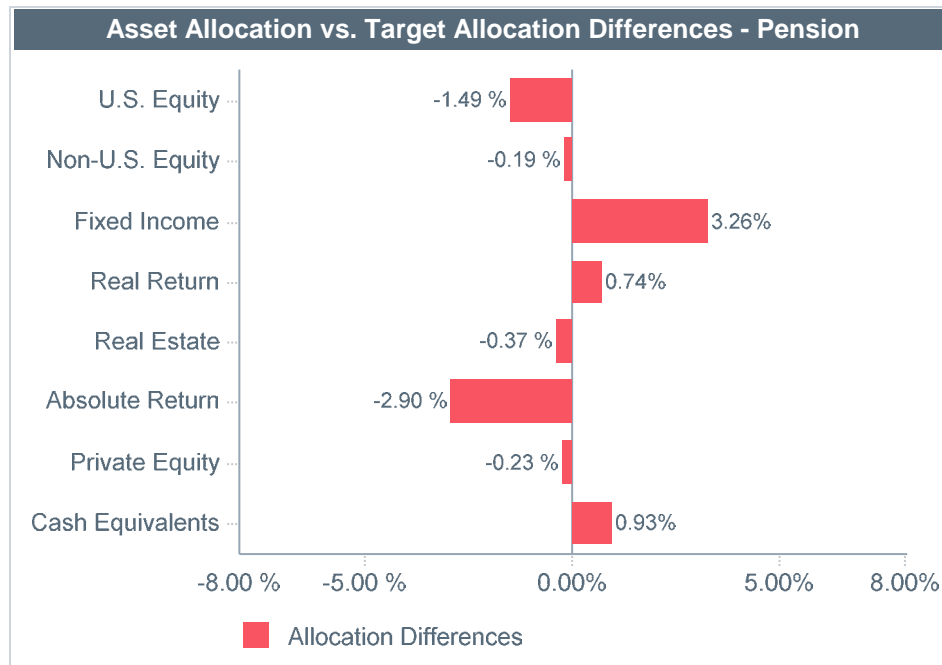


KERS Haz

Asset Allocation vs. Target Allocation

Asset Allocation vs. Target Allocation - Pension					
	Asset Allocation (\$)	Asset Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)	Target Allocation (%)
KERS Haz (P)	600,383,971	100.00	-	-	100.00
U.S. Equity	150,165,709	25.01	21.50	31.50	26.50
Non-U.S. Equity	157,958,333	26.31	21.50	31.50	26.50
Fixed Income	91,593,821	15.26	8.00	16.00	12.00
Real Return	52,473,231	8.74	6.00	10.00	8.00
Real Estate	27,788,633	4.63	3.00	7.00	5.00
Absolute Return	42,628,766	7.10	8.00	12.00	10.00
Private Equity	58,642,746	9.77	7.00	13.00	10.00
Cash Equivalents	17,619,618	2.93	0.00	4.00	2.00

Asset Allocation vs. Target Allocation - Insurance					
	Asset Allocation (\$)	Asset Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)	Target Allocation (%)
KERS Haz (I)	483,868,457	100.00	-	-	100.00
U.S. Equity	124,584,401	25.75	21.50	31.50	26.50
Non-U.S. Equity	129,468,470	26.76	21.50	31.50	26.50
Fixed Income	78,189,469	16.16	8.00	16.00	12.00
Real Return	39,050,692	8.07	6.00	10.00	8.00
Real Estate	23,908,705	4.94	3.00	7.00	5.00
Absolute Return	37,624,723	7.78	8.00	12.00	10.00
Private Equity	40,288,639	8.33	7.00	13.00	10.00
Cash Equivalents	10,789,946	2.23	0.00	4.00	2.00



Allocations shown may not sum up to 100% due to rounding and the exclusion of the Other Composite from this page.  
 KERS Haz (P) and KERS Haz (I) Absolute Return Composites are under their minimum allocations.  
 KERS Haz (I) Fixed Income Composite is over the maximum allocation.

Kentucky Retirement Systems  
Asset Allocation & Performance  
KERS Haz - Pension

As of June 30, 2017

	Allocation		Performance (%)									
	Market Value (\$)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	2016	2015	Since Incep.	Inception Date
<b>KERS Haz (P)</b>	<b>600,383,971</b>	<b>100.00</b>	<b>0.73</b>	<b>3.26</b>	<b>7.98</b>	<b>13.44</b>	<b>13.44</b>	<b>4.86</b>	<b>8.01</b>	<b>0.03</b>	<b>9.16</b>	<b>04/01/1984</b>
Target Allocation Index (KERS Haz P)			0.85	3.43	8.06	13.60	13.60	5.05	7.92	0.22	9.29	
Difference			-0.12	-0.17	-0.08	-0.16	-0.16	-0.19	0.09	-0.19	-0.13	
<b>U.S. Equity Composite</b>	<b>150,165,709</b>	<b>25.01</b>	<b>1.08</b>	<b>2.63</b>	<b>7.77</b>	<b>17.21</b>	<b>17.21</b>	<b>8.09</b>	<b>13.84</b>	<b>-1.08</b>	<b>12.02</b>	<b>07/01/2013</b>
Russell 3000 Index			0.90	3.02	8.93	18.51	18.51	9.10	12.74	0.48	12.93	
Difference			0.18	-0.39	-1.16	-1.30	-1.30	-1.01	1.10	-1.56	-0.91	
<b>Non-U.S. Equity Composite</b>	<b>157,958,333</b>	<b>26.31</b>	<b>0.01</b>	<b>6.27</b>	<b>14.71</b>	<b>20.20</b>	<b>20.20</b>	<b>1.98</b>	<b>4.32</b>	<b>-3.33</b>	<b>6.46</b>	<b>07/01/2013</b>
MSCI ACW Ex US Investable Mkt Index (Gross)*			0.37	6.05	14.65	20.97	20.97	1.29	4.91	-5.25	6.17	
Difference			-0.36	0.22	0.06	-0.77	-0.77	0.69	-0.59	1.92	0.29	
<b>Fixed Income Composite</b>	<b>91,593,821</b>	<b>15.26</b>	<b>0.14</b>	<b>1.63</b>	<b>3.29</b>	<b>6.58</b>	<b>6.58</b>	<b>3.82</b>	<b>8.42</b>	<b>0.52</b>	<b>4.62</b>	<b>07/01/2013</b>
50/50 Bloomberg US Unv Bond/US Corp: Hi Yld Index*			0.03	1.85	3.78	6.66	6.66	5.24	10.38	0.43	5.23	
Difference			0.11	-0.22	-0.49	-0.08	-0.08	-1.42	-1.96	0.09	-0.61	
<b>Real Return Composite</b>	<b>52,473,231</b>	<b>8.74</b>	<b>0.15</b>	<b>0.68</b>	<b>5.59</b>	<b>7.52</b>	<b>7.52</b>	<b>1.51</b>	<b>10.30</b>	<b>-5.71</b>	<b>3.50</b>	<b>07/01/2013</b>
Real Return Actual Allocation Index (P)*			-0.30	-0.11	2.45	3.07	3.07	0.77	7.22	-4.07	1.97	
Difference			0.45	0.79	3.14	4.45	4.45	0.74	3.08	-1.64	1.53	
<b>Real Estate Composite</b>	<b>27,788,633</b>	<b>4.63</b>	<b>2.14</b>	<b>2.28</b>	<b>5.34</b>	<b>10.20</b>	<b>10.20</b>	<b>9.33</b>	<b>9.79</b>	<b>9.45</b>	<b>9.00</b>	<b>07/01/2013</b>
NCREIF ODCE Index (AWA) (Net) (1 Qtr Lag)			1.54	1.54	3.45	7.36	7.36	10.77	9.08	13.86	11.26	
Difference			0.60	0.74	1.89	2.84	2.84	-1.44	0.71	-4.41	-2.26	
<b>Absolute Return Composite</b>	<b>42,628,766</b>	<b>7.10</b>	<b>-0.05</b>	<b>0.44</b>	<b>1.98</b>	<b>5.41</b>	<b>5.41</b>	<b>1.38</b>	<b>-0.25</b>	<b>1.68</b>	<b>3.12</b>	<b>07/01/2013</b>
HFRI FOF: Dvf'd Index (1 Mo Lag)			0.24	0.91	3.69	5.11	5.11	1.74	-1.34	0.79	2.56	
Difference			-0.29	-0.47	-1.71	0.30	0.30	-0.36	1.09	0.89	0.56	
<b>Private Equity Composite</b>	<b>58,642,746</b>	<b>9.77</b>	<b>3.79</b>	<b>5.14</b>	<b>8.24</b>	<b>12.56</b>	<b>12.56</b>	<b>9.25</b>	<b>5.90</b>	<b>11.17</b>	<b>12.45</b>	<b>07/01/2013</b>
Private Equity Benchmark (KERS Haz P) [Short Term]			3.79	5.14	8.24	12.56	12.56	9.25	5.90	11.17	12.45	
Difference			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
R 3000 Index+3% (Qtr Lag) (P)* [Long Term]			0.33	6.60	14.13	24.33	24.33	14.09	17.96	3.51	17.10	
Difference			3.46	-1.46	-5.89	-11.77	-11.77	-4.84	-12.06	7.66	-4.65	

Performance shown is net of fees. An index marked with an asterisk (\*) represents the current benchmark. Fiscal year ends June 30th. Allocations shown may not sum up to 100% due to the exclusion of Cash Equivalents and Other from this page; returns for Kentucky Retirement Systems Pension Fund's Cash Equivalents can be found in the manager performance section of this report.

Kentucky Retirement Systems  
Asset Allocation & Performance  
KERS Haz - Insurance

As of June 30, 2017

	Allocation		Performance (%)									
	Market Value (\$)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	2016	2015	Since Incep.	Inception Date
<b>KERS Haz (I)</b>	<b>483,868,457</b>	<b>100.00</b>	<b>0.70</b>	<b>3.26</b>	<b>7.99</b>	<b>13.77</b>	<b>13.77</b>	<b>4.94</b>	<b>8.31</b>	<b>-0.24</b>	<b>7.42</b>	<b>04/01/1987</b>
Target Allocation Index (KERS Haz I)			0.86	3.48	8.31	13.72	13.72	5.55	8.15	0.96	7.83	
Difference			-0.16	-0.22	-0.32	0.05	0.05	-0.61	0.16	-1.20	-0.41	
<b>U.S. Equity Composite</b>	<b>124,584,401</b>	<b>25.75</b>	<b>1.11</b>	<b>2.69</b>	<b>7.75</b>	<b>17.94</b>	<b>17.94</b>	<b>8.53</b>	<b>14.15</b>	<b>-0.46</b>	<b>12.30</b>	<b>07/01/2013</b>
Russell 3000 Index			0.90	3.02	8.93	18.51	18.51	9.10	12.74	0.48	12.93	
Difference			0.21	-0.33	-1.18	-0.57	-0.57	-0.57	1.41	-0.94	-0.63	
<b>Non-U.S. Equity Composite</b>	<b>129,468,470</b>	<b>26.76</b>	<b>0.06</b>	<b>6.24</b>	<b>14.68</b>	<b>20.42</b>	<b>20.42</b>	<b>1.80</b>	<b>3.96</b>	<b>-3.42</b>	<b>6.29</b>	<b>07/01/2013</b>
MSCI ACW Ex US Investable Mkt Index (Gross)*			0.37	6.05	14.65	20.97	20.97	1.29	4.91	-5.25	6.17	
Difference			-0.31	0.19	0.03	-0.55	-0.55	0.51	-0.95	1.83	0.12	
<b>Fixed Income Composite</b>	<b>78,189,469</b>	<b>16.16</b>	<b>0.10</b>	<b>1.52</b>	<b>3.12</b>	<b>5.88</b>	<b>5.88</b>	<b>3.67</b>	<b>8.19</b>	<b>0.53</b>	<b>4.39</b>	<b>07/01/2013</b>
50/50 Bloomberg US Unv Bond/US Corp: Hi Yld Index*			0.03	1.85	3.78	6.66	6.66	5.24	10.38	0.43	5.23	
Difference			0.07	-0.33	-0.66	-0.78	-0.78	-1.57	-2.19	0.10	-0.84	
<b>Real Return Composite</b>	<b>39,050,692</b>	<b>8.07</b>	<b>-0.01</b>	<b>0.63</b>	<b>5.05</b>	<b>6.50</b>	<b>6.50</b>	<b>1.22</b>	<b>9.55</b>	<b>-6.20</b>	<b>3.00</b>	<b>07/01/2013</b>
Real Return Actual Allocation Index (I)*			-0.30	0.08	2.61	2.99	2.99	0.95	6.87	-3.56	2.11	
Difference			0.29	0.55	2.44	3.51	3.51	0.27	2.68	-2.64	0.89	
<b>Real Estate Composite</b>	<b>23,908,705</b>	<b>4.94</b>	<b>2.25</b>	<b>2.26</b>	<b>5.48</b>	<b>10.85</b>	<b>10.85</b>	<b>9.44</b>	<b>10.09</b>	<b>8.96</b>	<b>8.85</b>	<b>07/01/2013</b>
NCREIF ODCE Index (AWA) (Net) (1 Qtr Lag)			1.54	1.54	3.45	7.36	7.36	10.77	9.08	13.86	11.26	
Difference			0.71	0.72	2.03	3.49	3.49	-1.33	1.01	-4.90	-2.41	
<b>Absolute Return Composite</b>	<b>37,624,723</b>	<b>7.78</b>	<b>-0.03</b>	<b>0.42</b>	<b>1.93</b>	<b>5.32</b>	<b>5.32</b>	<b>1.41</b>	<b>-0.26</b>	<b>1.79</b>	<b>3.11</b>	<b>07/01/2013</b>
HFRI FOF: Dvf'd Index (1 Mo Lag)			0.24	0.91	3.69	5.11	5.11	1.74	-1.34	0.79	2.56	
Difference			-0.27	-0.49	-1.76	0.21	0.21	-0.33	1.08	1.00	0.55	
<b>Private Equity Composite</b>	<b>40,288,639</b>	<b>8.33</b>	<b>4.33</b>	<b>5.02</b>	<b>8.22</b>	<b>12.45</b>	<b>12.45</b>	<b>12.25</b>	<b>8.96</b>	<b>15.38</b>	<b>14.75</b>	<b>07/01/2013</b>
Private Equity Benchmark (KERS Haz I) [Short Term]			4.33	5.02	8.22	12.45	12.45	12.25	8.96	15.38	14.75	
Difference			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
R 3000 Index+3% (Qtr Lag) (I)* [Long Term]			0.33	6.60	14.13	24.33	24.33	14.09	17.96	3.51	17.10	
Difference			4.00	-1.58	-5.91	-11.88	-11.88	-1.84	-9.00	11.87	-2.35	

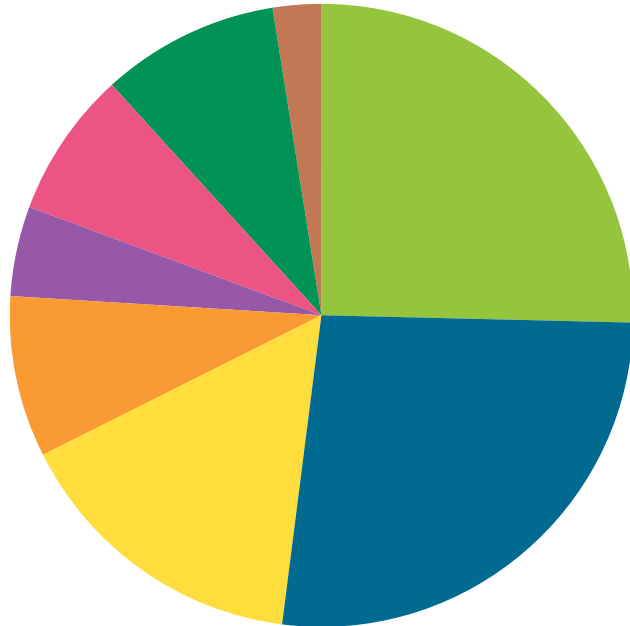
Performance shown is net of fees. An index marked with an asterisk (\*) represents the current benchmark. Fiscal year ends June 30th. Allocations shown may not sum up to 100% due to the exclusion of Cash Equivalents and Other from this page; returns for Kentucky Retirement Systems Insurance Fund's Cash Equivalents can be found in the manager performance section of this report.

Pension	
<p><b>U.S. Equity Composite</b>  River Road Asset Management (SA)  River Road FAV (SA)  Westfield Capital (SA)  Scientific Beta (SA)  Internal S&amp;P 500 Index (SA)  Internal US Mid Cap (SA)  Systematic Financial Management (SA)  NT Structured Small Cap (SA)  Pension Transition (SA)</p> <p><b>Non-U.S. Equity Composite</b>  Lazard Int'l Strategic Equity (SA)  LSV Int'l Concentrated Value Equity (SA)  BTC ACWI Ex US Fund (CF)  American Century Non-US Growth Equity (SA)  Franklin Templeton Non-US Equity (SA)  NT Int'l Sm Cap Eq Index (SA)</p> <p><b>Fixed Income Composite</b>  <i>Core Fixed Income Composite</i>  IG Credit FI Unit  NISA Core Agg Fixed Income (SA)  <i>High Yield Fixed Income Composite</i>  Cerberus KRS Levered Loan Opps, L.P.  Columbia HY Fixed Income (SA)  Marathon Bluegrass Credit Fund  Shenkman Capital (SA)  Waterfall (SA)  <i>Global Fixed Income Composite</i>  Manulife Asset Mgmt (SA)</p> <p><b>Real Return Composite</b>  Internal TIPS (SA)  Nuveen Real Asset Income (SA)  PIMCO:All Asset;Inst (PAAIX)  Tortoise Capital (CF)  Amerra Ag Fund II (CF)  Amerra-AGRI Holding (CF)  BTG Pactual Brazil Timberland Fund I, L.P.  Magnetar MTP Energy Fund, L.P.  Magnetar MTP EOF II, L.P.  Oberland Capital Healthcare, L.P.  Taurus Mining Finance Fund  Tenaska Power Fund II (CF)</p> <p><b>Cash Equivalents Composite</b>  Cash Equivalents (SA)</p>	<p><b>Real Estate Composite</b>  H/2 Credit Partners (CF)  Harrison Street Core (CF)  Mesa West Core Lending, L.P.  Mesa West IV, L.P.  Prologis Targeted U.S. Logistics Fund (CF)  Stockbridge SmtMkts, L.P.  DivCoWest Fund IV, L.P.  Fundamental Partners III, L.P.  Greenfield Acquisition Partners VI, L.P.  Greenfield Acquisition Partners VII, L.P.  Lubert Adler Real Estate Fund VII, L.P.  Patron Capital V, L.P.  Rubenstein Properties Fund II, L.P.  Walton Street Real Estate Fund VI, L.P.  Walton Street Real Estate Fund VII, L.P.</p> <p><b>Absolute Return Composite</b>  BAAM (SA)  Davidson-Kemper, L.P.  PAAMCO (SA)  Prisma Capital Partners (SA)  Senator LP  Tourbillon Global Master Fund, Ltd  Anchorage Capital  Blackrock GAO Fund, Ltd (CF)  Coatue Qualified Partners, L.P.  Credit Suisse Fund  Finisterre Global Op  Gotham Neutral Strategies (CF)  Governors Lane Fund (CF)  HBK II (CF)  Karya Fund, LLC  Knighthead Capital (CF)  Liquidalts H2O Force (CF)  Luxor Capital (CF)  Myriad Opportunities  Pine River (CF)  Prudential Fund I (CF)  QMS Diversified Global Macro (CF)  Scopia PX, LLC  Systematica BlueMatrix Fund (CF)  Tide Point Partners (CF)</p> <p><b>Private Equity Composite</b></p> <p><b>Other Composite</b>  Perimeter Park (SA)  Custody Fee Accrual (SA)</p>

Insurance	
<p><b>U.S. Equity Composite</b>  River Road Asset Management (SA)  River Road FAV (SA)  Westfield Capital (SA)  Scientific Beta (SA)  Internal S&amp;P 500 Index (SA)  Internal US Mid Cap (SA)  Systematic Financial Management (SA)  NT Structured Small Cap (SA)  Insurance Transition (SA)</p> <p><b>Non-U.S. Equity Composite</b>  Lazard Int'l Strategic Equity (SA)  LSV Int'l Concentrated Value Equity (SA)  BTC ACWI Ex US Fund (CF)  American Century Non-US Growth Equity (SA)  Franklin Templeton Non-US Equity (SA)  BTC ACWI Ex US Small Cap Fund (CF)</p> <p><b>Fixed Income Composite</b>  <i>Core Fixed Income Composite</i>  IG Credit FI Unit  NISA Core Agg Fixed Income (SA)  <i>High Yield Fixed Income Composite</i>  Cerberus KRS Levered Loan Opps, L.P.  Columbia HY Fixed Income (SA)  Marathon Bluegrass Credit Fund  Shenkman Capital (SA)  Waterfall (SA)  <i>Global Fixed Income Composite</i>  Manulife Asset Mgmt (SA)</p> <p><b>Real Return Composite</b>  Internal TIPS (SA)  Nuveen Real Asset Income (SA)  PIMCO:All Asset;Inst (PAAIX)  Tortoise Capital (CF)  Amerra Ag Fund II (CF)  Amerra-AGRI Holding (CF)  BTG Pactual Brazil Timberland Fund I, L.P.  Magnetar MTP Energy Fund, L.P.  Magnetar MTP EOF II, L.P.  Oberland Capital Healthcare, L.P.  Taurus Mining Finance Fund  Tenaska Power Fund II (CF)</p> <p><b>Cash Equivalents Composite</b>  Cash Equivalents (SA)</p>	<p><b>Real Estate Composite</b>  H/2 Credit Partners (CF)  Harrison Street Core (CF)  Mesa West Core Lending, L.P.  Mesa West IV, L.P.  Prologis Targeted U.S. Logistics Fund (CF)  Stockbridge SmtMkts, L.P.  DivCoWest Fund IV, L.P.  Fundamental Partners III, L.P.  Greenfield Acquisition Partners VI, L.P.  Greenfield Acquisition Partners VII, L.P.  Lubert Adler Real Estate Fund VII, L.P.  Patron Capital V, L.P.  Rubenstein Properties Fund II, L.P.  Walton Street Real Estate Fund VI, L.P.  Walton Street Real Estate Fund VII, L.P.</p> <p><b>Absolute Return Composite</b>  BAAM (SA)  Davidson-Kemper, L.P.  PAAMCO (SA)  Prisma Capital Partners (SA)  Senator LP  Tourbillon Global Master Fund, Ltd  Anchorage Capital  Blackrock GAO Fund, Ltd (CF)  Coatue Qualified Partners, L.P.  Credit Suisse Fund  Finisterre Global Op  Gotham Neutral Strategies (CF)  Governors Lane Fund (CF)  HBK II (CF)  Karya Fund, LLC  Knighthead Capital (CF)  Liquidalts H2O Force (CF)  Luxor Capital (CF)  Myriad Opportunities  Pine River (CF)  Prudential Fund I (CF)  QMS Diversified Global Macro (CF)  Scopia PX, LLC  Systematica BlueMatrix Fund (CF)  Tide Point Partners (CF)</p> <p><b>Private Equity Composite</b></p> <p><b>Other Composite</b>  Custody Fee Accrual (SA)</p>

**Asset Allocation by Asset Class - Pension**

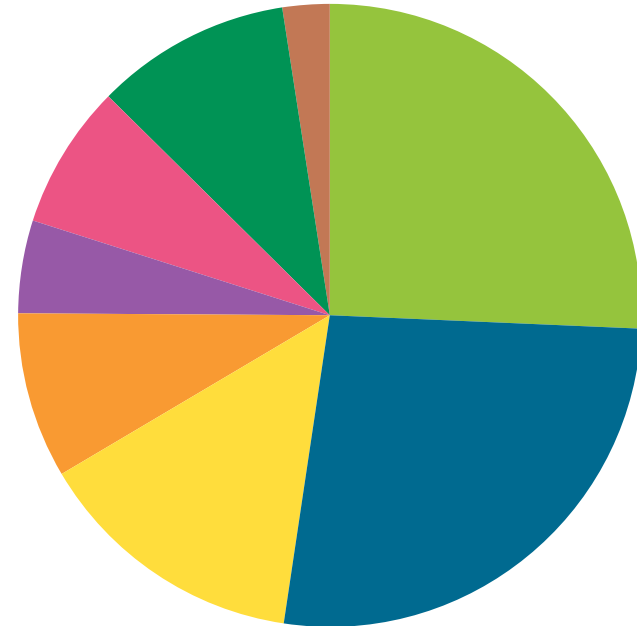
June 30, 2017 : \$6,688,757,843



	Market Value (\$)	Allocation (%)
U.S. Equity Composite	1,696,693,476	25.37
Non-U.S. Equity Composite	1,782,424,798	26.65
Fixed Income Composite	1,042,868,733	15.59
Real Return Composite	560,657,145	8.38
Real Estate Composite	312,006,331	4.66
Absolute Return Composite	508,090,748	7.60
Private Equity Composite	617,304,639	9.23
Cash Equivalents Composite	167,337,518	2.50
Other Composite	1,374,456	0.02

**Asset Allocation by Asset Class - Insurance**

June 30, 2017 : \$2,149,543,571



	Market Value (\$)	Allocation (%)
U.S. Equity Composite	552,163,647	25.69
Non-U.S. Equity Composite	573,600,091	26.68
Fixed Income Composite	303,873,797	14.14
Real Return Composite	184,939,331	8.60
Real Estate Composite	103,678,537	4.82
Absolute Return Composite	160,927,035	7.49
Private Equity Composite	218,166,687	10.15
Cash Equivalents Composite	52,356,433	2.44
Other Composite	-161,988	-0.01

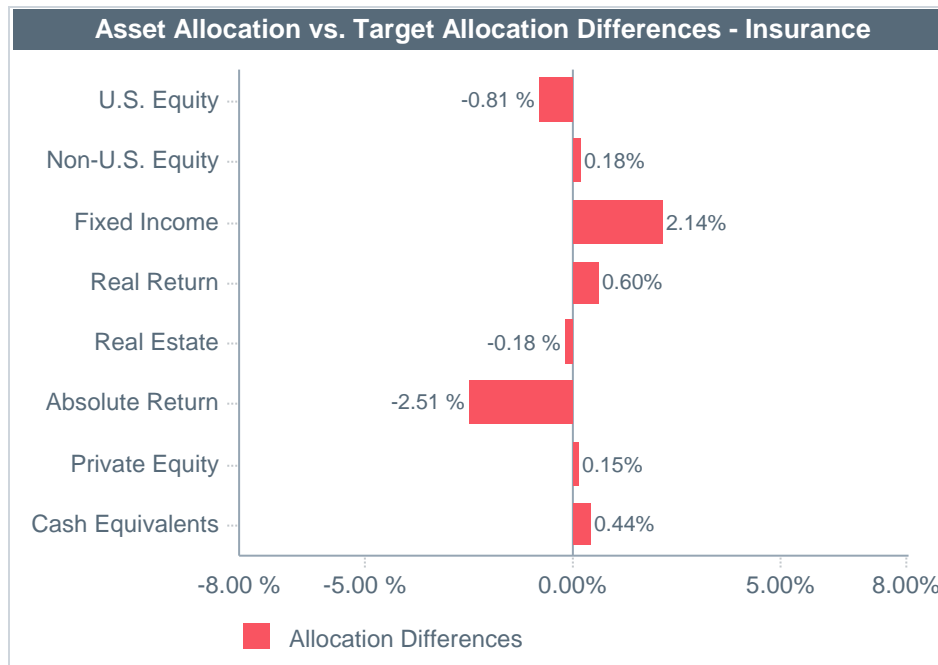
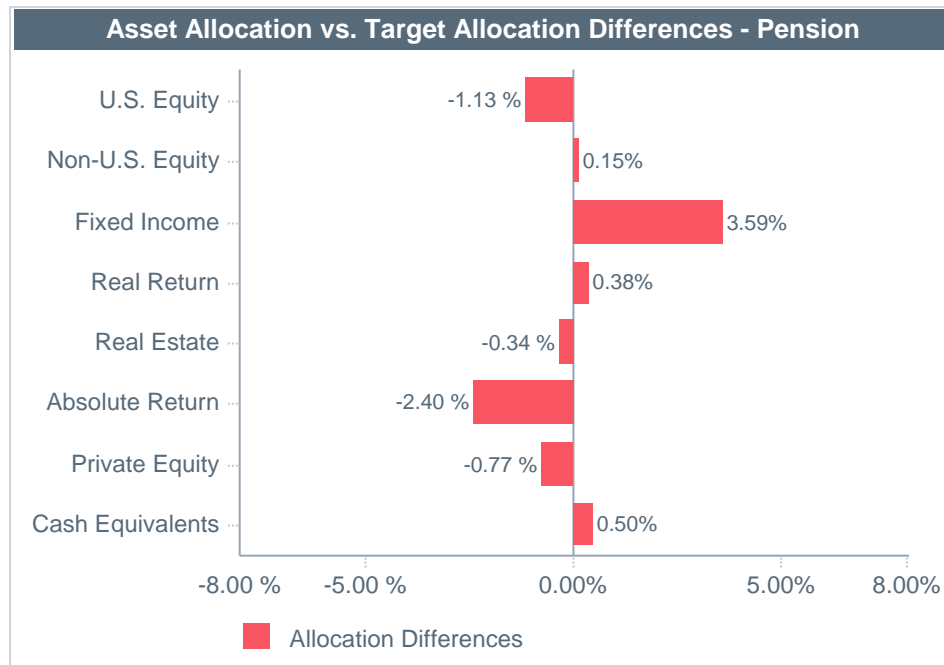
Allocations shown may not sum up to 100% exactly due to rounding.

CERS

Asset Allocation vs. Target Allocation

Asset Allocation vs. Target Allocation - Pension					
	Asset Allocation (\$)	Asset Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)	Target Allocation (%)
CERS (P)	6,688,757,843	100.00	-	-	100.00
U.S. Equity	1,696,693,476	25.37	21.50	31.50	26.50
Non-U.S. Equity	1,782,424,798	26.65	21.50	31.50	26.50
Fixed Income	1,042,868,733	15.59	8.00	16.00	12.00
Real Return	560,657,145	8.38	6.00	10.00	8.00
Real Estate	312,006,331	4.66	3.00	7.00	5.00
Absolute Return	508,090,748	7.60	8.00	12.00	10.00
Private Equity	617,304,639	9.23	7.00	13.00	10.00
Cash Equivalents	167,337,518	2.50	0.00	4.00	2.00

Asset Allocation vs. Target Allocation - Insurance					
	Asset Allocation (\$)	Asset Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)	Target Allocation (%)
CERS (I)	2,149,543,571	100.00	-	-	100.00
U.S. Equity	552,163,647	25.69	21.50	31.50	26.50
Non-U.S. Equity	573,600,091	26.68	21.50	31.50	26.50
Fixed Income	303,873,797	14.14	8.00	16.00	12.00
Real Return	184,939,331	8.60	6.00	10.00	8.00
Real Estate	103,678,537	4.82	3.00	7.00	5.00
Absolute Return	160,927,035	7.49	8.00	12.00	10.00
Private Equity	218,166,687	10.15	7.00	13.00	10.00
Cash Equivalents	52,356,433	2.44	0.00	4.00	2.00



Allocations shown may not sum up to 100% due to rounding and the exclusion of the Other Composite from this page. CERS (P) and CERS (I) Absolute Return Composites are under their minimum allocations.



Kentucky Retirement Systems  
Asset Allocation & Performance  
CERS - Pension

As of June 30, 2017

	Allocation		Performance (%)									
	Market Value (\$)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	2016	2015	Since Incep.	Inception Date
<b>CERS (P)</b>	<b>6,688,757,843</b>	<b>100.00</b>	<b>0.71</b>	<b>3.25</b>	<b>8.06</b>	<b>13.82</b>	<b>13.82</b>	<b>4.89</b>	<b>8.16</b>	<b>-0.20</b>	<b>9.16</b>	<b>04/01/1984</b>
Target Allocation Index (CERS P)			0.85	3.43	8.06	13.60	13.60	5.05	7.92	0.22	9.29	
Difference			-0.14	-0.18	0.00	0.22	0.22	-0.16	0.24	-0.42	-0.13	
<b>U.S. Equity Composite</b>	<b>1,696,693,476</b>	<b>25.37</b>	<b>1.08</b>	<b>2.63</b>	<b>7.72</b>	<b>17.94</b>	<b>17.94</b>	<b>8.11</b>	<b>14.15</b>	<b>-1.18</b>	<b>12.01</b>	<b>07/01/2013</b>
Russell 3000 Index			0.90	3.02	8.93	18.51	18.51	9.10	12.74	0.48	12.93	
Difference			0.18	-0.39	-1.21	-0.57	-0.57	-0.99	1.41	-1.66	-0.92	
<b>Non-U.S. Equity Composite</b>	<b>1,782,424,798</b>	<b>26.65</b>	<b>0.01</b>	<b>6.27</b>	<b>14.75</b>	<b>20.24</b>	<b>20.24</b>	<b>1.97</b>	<b>4.24</b>	<b>-3.32</b>	<b>6.45</b>	<b>07/01/2013</b>
MSCI ACW Ex US Investable Mkt Index (Gross)*			0.37	6.05	14.65	20.97	20.97	1.29	4.91	-5.25	6.17	
Difference			-0.36	0.22	0.10	-0.73	-0.73	0.68	-0.67	1.93	0.28	
<b>Fixed Income Composite</b>	<b>1,042,868,733</b>	<b>15.59</b>	<b>0.13</b>	<b>1.65</b>	<b>3.27</b>	<b>6.49</b>	<b>6.49</b>	<b>3.82</b>	<b>8.37</b>	<b>0.51</b>	<b>4.63</b>	<b>07/01/2013</b>
50/50 Bloomberg US Unv Bond/US Corp: Hi Yld Index*			0.03	1.85	3.78	6.66	6.66	5.24	10.38	0.43	5.23	
Difference			0.10	-0.20	-0.51	-0.17	-0.17	-1.42	-2.01	0.08	-0.60	
<b>Real Return Composite</b>	<b>560,657,145</b>	<b>8.38</b>	<b>0.11</b>	<b>0.65</b>	<b>5.59</b>	<b>7.48</b>	<b>7.48</b>	<b>1.49</b>	<b>10.36</b>	<b>-5.79</b>	<b>3.29</b>	<b>07/01/2013</b>
Real Return Actual Allocation Index (P)*			-0.30	-0.11	2.45	3.07	3.07	0.77	7.22	-4.07	1.97	
Difference			0.41	0.76	3.14	4.41	4.41	0.72	3.14	-1.72	1.32	
<b>Real Estate Composite</b>	<b>312,006,331</b>	<b>4.66</b>	<b>2.15</b>	<b>2.28</b>	<b>5.37</b>	<b>10.38</b>	<b>10.38</b>	<b>9.38</b>	<b>9.98</b>	<b>9.42</b>	<b>9.08</b>	<b>07/01/2013</b>
NCREIF ODCE Index (AWA) (Net) (1 Qtr Lag)			1.54	1.54	3.45	7.36	7.36	10.77	9.08	13.86	11.26	
Difference			0.61	0.74	1.92	3.02	3.02	-1.39	0.90	-4.44	-2.18	
<b>Absolute Return Composite</b>	<b>508,090,748</b>	<b>7.60</b>	<b>-0.05</b>	<b>0.44</b>	<b>1.98</b>	<b>5.41</b>	<b>5.41</b>	<b>1.39</b>	<b>-0.25</b>	<b>1.69</b>	<b>3.13</b>	<b>07/01/2013</b>
HFRI FOF: Dvf'd Index (1 Mo Lag)			0.24	0.91	3.69	5.11	5.11	1.74	-1.34	0.79	2.56	
Difference			-0.29	-0.47	-1.71	0.30	0.30	-0.35	1.09	0.90	0.57	
<b>Private Equity Composite</b>	<b>617,304,639</b>	<b>9.23</b>	<b>3.86</b>	<b>5.12</b>	<b>8.31</b>	<b>12.70</b>	<b>12.70</b>	<b>9.65</b>	<b>6.43</b>	<b>11.58</b>	<b>12.68</b>	<b>07/01/2013</b>
Private Equity Benchmark (CERS P) [Short Term]			3.86	5.12	8.31	12.70	12.70	9.65	6.43	11.58	12.68	
Difference			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
R 3000 Index+3% (Qtr Lag) (P)* [Long Term]			0.33	6.60	14.13	24.33	24.33	14.09	17.96	3.51	17.10	
Difference			3.53	-1.48	-5.82	-11.63	-11.63	-4.44	-11.53	8.07	-4.42	

Performance shown is net of fees. An index marked with an asterisk (\*) represents the current benchmark. Fiscal year ends June 30th. Allocations shown may not sum up to 100% due to the exclusion of Cash Equivalents and Other from this page; returns for Kentucky Retirement Systems Pension Fund's Cash Equivalents can be found in the manager performance section of this report.



Kentucky Retirement Systems  
Asset Allocation & Performance  
CERS - Insurance

As of June 30, 2017

	Allocation		Performance (%)									
	Market Value (\$)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	2016	2015	Since Incep.	Inception Date
<b>CERS (I)</b>	<b>2,149,543,571</b>	<b>100.00</b>	<b>0.77</b>	<b>3.28</b>	<b>8.01</b>	<b>13.67</b>	<b>13.67</b>	<b>5.03</b>	<b>8.31</b>	<b>-0.01</b>	<b>7.42</b>	<b>04/01/1987</b>
Target Allocation Index (CERS I)			0.86	3.48	8.31	13.72	13.72	5.55	8.15	0.96	7.83	
Difference			-0.09	-0.20	-0.30	-0.05	-0.05	-0.52	0.16	-0.97	-0.41	
<b>U.S. Equity Composite</b>	<b>552,163,647</b>	<b>25.69</b>	<b>1.11</b>	<b>2.69</b>	<b>7.85</b>	<b>18.05</b>	<b>18.05</b>	<b>8.69</b>	<b>14.65</b>	<b>-0.48</b>	<b>12.44</b>	<b>07/01/2013</b>
Russell 3000 Index			0.90	3.02	8.93	18.51	18.51	9.10	12.74	0.48	12.93	
Difference			0.21	-0.33	-1.08	-0.46	-0.46	-0.41	1.91	-0.96	-0.49	
<b>Non-U.S. Equity Composite</b>	<b>573,600,091</b>	<b>26.68</b>	<b>0.06</b>	<b>6.24</b>	<b>14.66</b>	<b>20.40</b>	<b>20.40</b>	<b>1.81</b>	<b>4.02</b>	<b>-3.43</b>	<b>6.31</b>	<b>07/01/2013</b>
MSCI ACW Ex US Investable Mkt Index (Gross)*			0.37	6.05	14.65	20.97	20.97	1.29	4.91	-5.25	6.17	
Difference			-0.31	0.19	0.01	-0.57	-0.57	0.52	-0.89	1.82	0.14	
<b>Fixed Income Composite</b>	<b>303,873,797</b>	<b>14.14</b>	<b>0.11</b>	<b>1.53</b>	<b>3.13</b>	<b>5.90</b>	<b>5.90</b>	<b>3.69</b>	<b>8.20</b>	<b>0.54</b>	<b>4.42</b>	<b>07/01/2013</b>
50/50 Bloomberg US Unv Bond/US Corp: Hi Yld Index*			0.03	1.85	3.78	6.66	6.66	5.24	10.38	0.43	5.23	
Difference			0.08	-0.32	-0.65	-0.76	-0.76	-1.55	-2.18	0.11	-0.81	
<b>Real Return Composite</b>	<b>184,939,331</b>	<b>8.60</b>	<b>0.03</b>	<b>0.67</b>	<b>5.13</b>	<b>6.65</b>	<b>6.65</b>	<b>1.30</b>	<b>9.69</b>	<b>-6.18</b>	<b>3.06</b>	<b>07/01/2013</b>
Real Return Actual Allocation Index (I)*			-0.30	0.08	2.61	2.99	2.99	0.95	6.87	-3.56	2.11	
Difference			0.33	0.59	2.52	3.66	3.66	0.35	2.82	-2.62	0.95	
<b>Real Estate Composite</b>	<b>103,678,537</b>	<b>4.82</b>	<b>2.26</b>	<b>2.26</b>	<b>5.48</b>	<b>10.86</b>	<b>10.86</b>	<b>9.47</b>	<b>10.12</b>	<b>9.02</b>	<b>8.87</b>	<b>07/01/2013</b>
NCREIF ODCE Index (AWA) (Net) (1 Qtr Lag)			1.54	1.54	3.45	7.36	7.36	10.77	9.08	13.86	11.26	
Difference			0.72	0.72	2.03	3.50	3.50	-1.30	1.04	-4.84	-2.39	
<b>Absolute Return Composite</b>	<b>160,927,035</b>	<b>7.49</b>	<b>-0.03</b>	<b>0.42</b>	<b>1.93</b>	<b>5.32</b>	<b>5.32</b>	<b>1.41</b>	<b>-0.26</b>	<b>1.80</b>	<b>3.11</b>	<b>07/01/2013</b>
HFRI FOF: Dvf'd Index (1 Mo Lag)			0.24	0.91	3.69	5.11	5.11	1.74	-1.34	0.79	2.56	
Difference			-0.27	-0.49	-1.76	0.21	0.21	-0.33	1.08	1.01	0.55	
<b>Private Equity Composite</b>	<b>218,166,687</b>	<b>10.15</b>	<b>4.17</b>	<b>4.82</b>	<b>8.26</b>	<b>12.34</b>	<b>12.34</b>	<b>12.85</b>	<b>9.23</b>	<b>16.43</b>	<b>14.92</b>	<b>07/01/2013</b>
Private Equity Benchmark (CERS I) [Short Term]			4.17	4.82	8.26	12.34	12.34	11.69	9.23	16.43	14.04	
Difference			0.00	0.00	0.00	0.00	0.00	1.16	0.00	0.00	0.88	
R 3000 Index+3% (Qtr Lag) (I)* [Long Term]			0.33	6.60	14.13	24.33	24.33	14.09	17.96	3.51	17.10	
Difference			3.84	-1.78	-5.87	-11.99	-11.99	-1.24	-8.73	12.92	-2.18	

Performance shown is net of fees. An index marked with an asterisk (\*) represents the current benchmark. Fiscal year ends June 30th. Allocations shown may not sum up to 100% due to the exclusion of Cash Equivalents and Other from this page; returns for Kentucky Retirement Systems Insurance Fund's Cash Equivalents can be found in the manager performance section of this report.



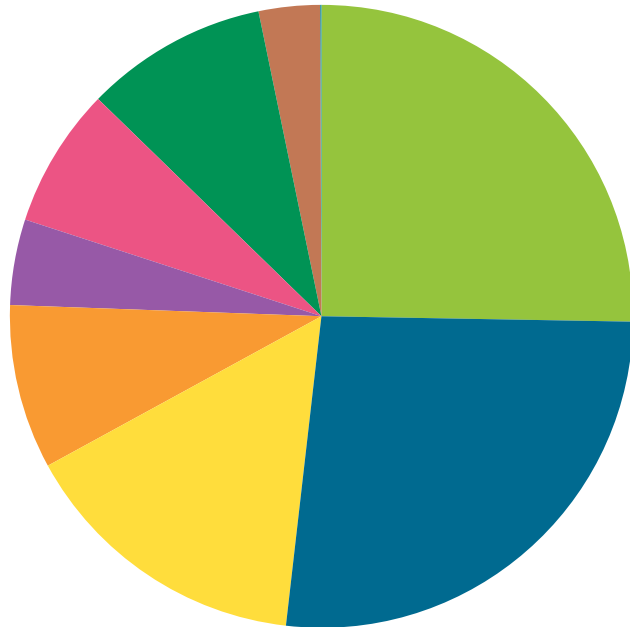


Pension	
<p><b>U.S. Equity Composite</b>  River Road Asset Management (SA)  River Road FAV (SA)  Westfield Capital (SA)  Scientific Beta (SA)  Internal S&amp;P 500 Index (SA)  Internal US Mid Cap (SA)  Systematic Financial Management (SA)  NT Structured Small Cap (SA)  Pension Transition (SA)</p> <p><b>Non-U.S. Equity Composite</b>  Lazard Int'l Strategic Equity (SA)  LSV Int'l Concentrated Value Equity (SA)  BTC ACWI Ex US Fund (CF)  American Century Non-US Growth Equity (SA)  Franklin Templeton Non-US Equity (SA)  NT Int'l Sm Cap Eq Index (SA)</p> <p><b>Fixed Income Composite</b>  <i>Core Fixed Income Composite</i>  IG Credit FI Unit  NISA Core Agg Fixed Income (SA)  <i>High Yield Fixed Income Composite</i>  Cerberus KRS Levered Loan Opps, L.P.  Columbia HY Fixed Income (SA)  Marathon Bluegrass Credit Fund  Shenkman Capital (SA)  Waterfall (SA)  <i>Global Fixed Income Composite</i>  Manulife Asset Mgmt (SA)</p> <p><b>Real Return Composite</b>  Internal TIPS (SA)  Nuveen Real Asset Income (SA)  PIMCO:All Asset;Inst (PAAIX)  Tortoise Capital (CF)  Amerra Ag Fund II (CF)  Amerra-AGRI Holding (CF)  BTG Pactual Brazil Timberland Fund I, L.P.  Magnetar MTP Energy Fund, L.P.  Magnetar MTP EOF II, L.P.  Oberland Capital Healthcare, L.P.  Taurus Mining Finance Fund  Tenaska Power Fund II (CF)</p> <p><b>Cash Equivalents Composite</b>  Cash Equivalents (SA)</p>	<p><b>Real Estate Composite</b>  H/2 Credit Partners (CF)  Harrison Street Core (CF)  Mesa West Core Lending, L.P.  Mesa West IV, L.P.  Prologis Targeted U.S. Logistics Fund (CF)  Stockbridge SmtMkts, L.P.  DivCoWest Fund IV, L.P.  Fundamental Partners III, L.P.  Greenfield Acquisition Partners VI, L.P.  Greenfield Acquisition Partners VII, L.P.  Lubert Adler Real Estate Fund VII, L.P.  Patron Capital V, L.P.  Rubenstein Properties Fund II, L.P.  Walton Street Real Estate Fund VI, L.P.  Walton Street Real Estate Fund VII, L.P.</p> <p><b>Absolute Return Composite</b>  BAAM (SA)  Davidson-Kemper, L.P.  PAAMCO (SA)  Prisma Capital Partners (SA)  Senator LP  Tourbillon Global Master Fund, Ltd  Anchorage Capital  Blackrock GAO Fund, Ltd (CF)  Coatue Qualified Partners, L.P.  Credit Suisse Fund  Finisterre Global Op  Gotham Neutral Strategies (CF)  Governors Lane Fund (CF)  HBK II (CF)  Karya Fund, LLC  Knighthead Capital (CF)  Liquidalts H2O Force (CF)  Luxor Capital (CF)  Myriad Opportunities  Pine River (CF)  Prudential Fund I (CF)  QMS Diversified Global Macro (CF)  Scopia PX, LLC  Systematica BlueMatrix Fund (CF)  Tide Point Partners (CF)</p> <p><b>Private Equity Composite</b></p> <p><b>Other Composite</b>  Perimeter Park (SA)  Custody Fee Accrual (SA)</p>

Insurance	
<p><b>U.S. Equity Composite</b>  River Road Asset Management (SA)  River Road FAV (SA)  Westfield Capital (SA)  Scientific Beta (SA)  Internal S&amp;P 500 Index (SA)  Internal US Mid Cap (SA)  Systematic Financial Management (SA)  NT Structured Small Cap (SA)  Insurance Transition (SA)</p> <p><b>Non-U.S. Equity Composite</b>  Lazard Int'l Strategic Equity (SA)  LSV Int'l Concentrated Value Equity (SA)  BTC ACWI Ex US Fund (CF)  American Century Non-US Growth Equity (SA)  Franklin Templeton Non-US Equity (SA)  BTC ACWI Ex US Small Cap Fund (CF)</p> <p><b>Fixed Income Composite</b>  <i>Core Fixed Income Composite</i>  IG Credit FI Unit  NISA Core Agg Fixed Income (SA)  <i>High Yield Fixed Income Composite</i>  Cerberus KRS Levered Loan Opps, L.P.  Columbia HY Fixed Income (SA)  Marathon Bluegrass Credit Fund  Shenkman Capital (SA)  Waterfall (SA)  <i>Global Fixed Income Composite</i>  Manulife Asset Mgmt (SA)</p> <p><b>Real Return Composite</b>  Internal TIPS (SA)  Nuveen Real Asset Income (SA)  PIMCO:All Asset;Inst (PAAIX)  Tortoise Capital (CF)  Amerra Ag Fund II (CF)  Amerra-AGRI Holding (CF)  BTG Pactual Brazil Timberland Fund I, L.P.  Magnetar MTP Energy Fund, L.P.  Magnetar MTP EOF II, L.P.  Oberland Capital Healthcare, L.P.  Taurus Mining Finance Fund  Tenaska Power Fund II (CF)</p> <p><b>Cash Equivalents Composite</b>  Cash Equivalents (SA)</p>	<p><b>Real Estate Composite</b>  H/2 Credit Partners (CF)  Harrison Street Core (CF)  Mesa West Core Lending, L.P.  Mesa West IV, L.P.  Prologis Targeted U.S. Logistics Fund (CF)  Stockbridge SmtMkts, L.P.  DivCoWest Fund IV, L.P.  Fundamental Partners III, L.P.  Greenfield Acquisition Partners VI, L.P.  Greenfield Acquisition Partners VII, L.P.  Lubert Adler Real Estate Fund VII, L.P.  Patron Capital V, L.P.  Rubenstein Properties Fund II, L.P.  Walton Street Real Estate Fund VI, L.P.  Walton Street Real Estate Fund VII, L.P.</p> <p><b>Absolute Return Composite</b>  BAAM (SA)  Davidson-Kemper, L.P.  PAAMCO (SA)  Prisma Capital Partners (SA)  Senator LP  Tourbillon Global Master Fund, Ltd  Anchorage Capital  Blackrock GAO Fund, Ltd (CF)  Coatue Qualified Partners, L.P.  Credit Suisse Fund  Finisterre Global Op  Gotham Neutral Strategies (CF)  Governors Lane Fund (CF)  HBK II (CF)  Karya Fund, LLC  Knighthead Capital (CF)  Liquidalts H2O Force (CF)  Luxor Capital (CF)  Myriad Opportunities  Pine River (CF)  Prudential Fund I (CF)  QMS Diversified Global Macro (CF)  Scopia PX, LLC  Systematica BlueMatrix Fund (CF)  Tide Point Partners (CF)</p> <p><b>Private Equity Composite</b></p> <p><b>Other Composite</b>  Custody Fee Accrual (SA)</p>

Asset Allocation by Asset Class - Pension

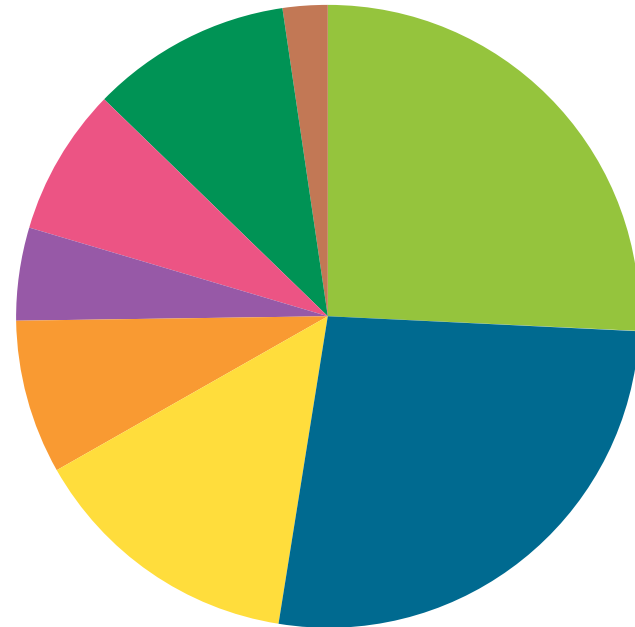
June 30, 2017 : \$2,216,699,660



	Market Value (\$)	Allocation (%)
U.S. Equity Composite	560,113,712	25.27
Non-U.S. Equity Composite	588,767,295	26.56
Fixed Income Composite	337,385,429	15.22
Real Return Composite	189,132,902	8.53
Real Estate Composite	98,401,862	4.44
Absolute Return Composite	161,004,126	7.26
Private Equity Composite	209,925,999	9.47
Cash Equivalents Composite	70,238,619	3.17
Other Composite	1,729,717	0.08

Asset Allocation by Asset Class - Insurance

June 30, 2017 : \$1,176,799,435



	Market Value (\$)	Allocation (%)
U.S. Equity Composite	303,147,553	25.76
Non-U.S. Equity Composite	315,120,024	26.78
Fixed Income Composite	167,776,452	14.26
Real Return Composite	93,995,412	7.99
Real Estate Composite	56,848,315	4.83
Absolute Return Composite	90,137,787	7.66
Private Equity Composite	122,541,477	10.41
Cash Equivalents Composite	27,321,235	2.32
Other Composite	-88,819	-0.01

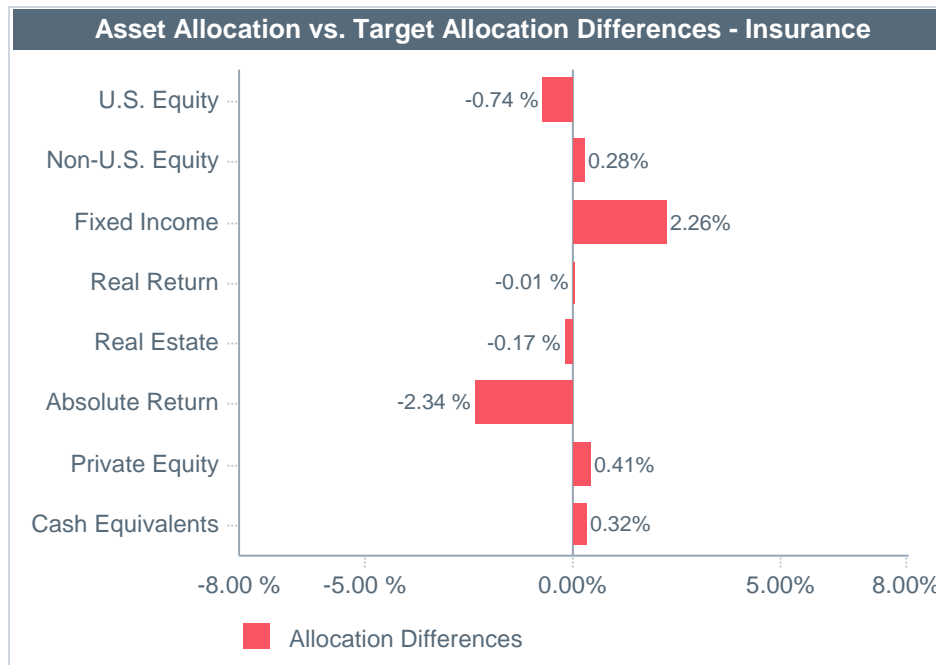
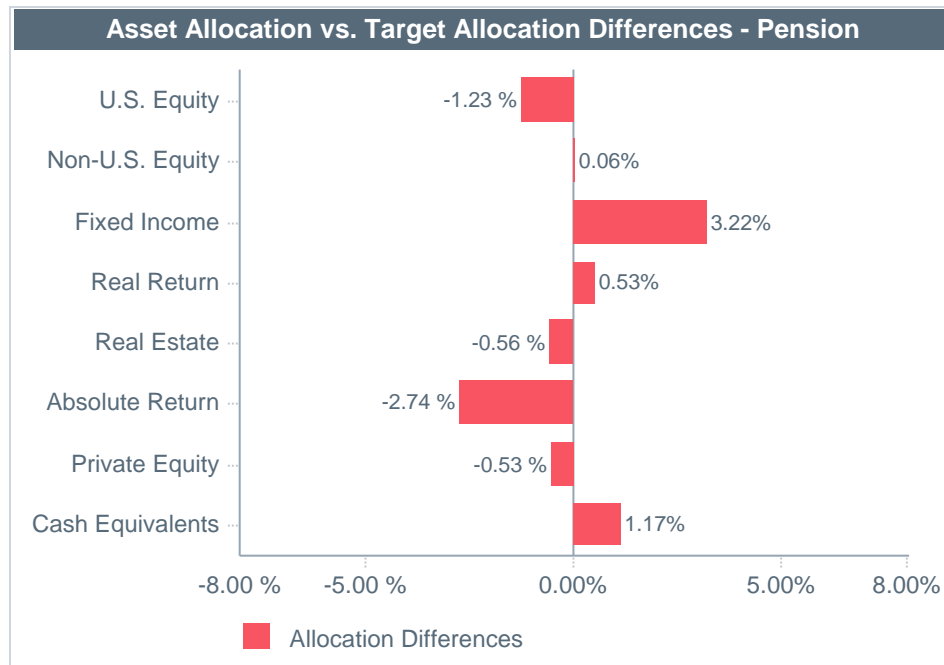
Allocations shown may not sum up to 100% exactly due to rounding.

CERS Haz

Asset Allocation vs. Target Allocation

Asset Allocation vs. Target Allocation - Pension					
	Asset Allocation (\$)	Asset Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)	Target Allocation (%)
CERS Haz (P)	2,216,699,660	100.00	-	-	100.00
U.S. Equity	560,113,712	25.27	21.50	31.50	26.50
Non-U.S. Equity	588,767,295	26.56	21.50	31.50	26.50
Fixed Income	337,385,429	15.22	8.00	16.00	12.00
Real Return	189,132,902	8.53	6.00	10.00	8.00
Real Estate	98,401,862	4.44	3.00	7.00	5.00
Absolute Return	161,004,126	7.26	8.00	12.00	10.00
Private Equity	209,925,999	9.47	7.00	13.00	10.00
Cash Equivalents	70,238,619	3.17	0.00	4.00	2.00

Asset Allocation vs. Target Allocation - Insurance					
	Asset Allocation (\$)	Asset Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)	Target Allocation (%)
CERS Haz (I)	1,176,799,435	100.00	-	-	100.00
U.S. Equity	303,147,553	25.76	21.50	31.50	26.50
Non-U.S. Equity	315,120,024	26.78	21.50	31.50	26.50
Fixed Income	167,776,452	14.26	8.00	16.00	12.00
Real Return	93,995,412	7.99	6.00	10.00	8.00
Real Estate	56,848,315	4.83	3.00	7.00	5.00
Absolute Return	90,137,787	7.66	8.00	12.00	10.00
Private Equity	122,541,477	10.41	7.00	13.00	10.00
Cash Equivalents	27,321,235	2.32	0.00	4.00	2.00



Allocations shown may not sum up to 100% due to rounding and the exclusion of the Other Composite from this page. CERS Haz (P) and CERS Haz (I) Absolute Return Composites are under their minimum allocations.



Kentucky Retirement Systems  
 Asset Allocation & Performance  
 CERS Haz - Pension

As of June 30, 2017

	Allocation		Performance (%)									
	Market Value (\$)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	2016	2015	Since Incep.	Inception Date
<b>CERS Haz (P)</b>	<b>2,216,699,660</b>	<b>100.00</b>	<b>0.73</b>	<b>3.25</b>	<b>8.02</b>	<b>13.73</b>	<b>13.73</b>	<b>4.93</b>	<b>8.19</b>	<b>-0.10</b>	<b>9.17</b>	<b>04/01/1984</b>
Target Allocation Index (CERS Haz P)			0.85	3.43	8.06	13.60	13.60	5.05	7.92	0.22	9.29	
Difference			-0.12	-0.18	-0.04	0.13	0.13	-0.12	0.27	-0.32	-0.12	
<b>U.S. Equity Composite</b>	<b>560,113,712</b>	<b>25.27</b>	<b>1.08</b>	<b>2.63</b>	<b>7.74</b>	<b>18.00</b>	<b>18.00</b>	<b>8.18</b>	<b>14.29</b>	<b>-1.19</b>	<b>12.05</b>	<b>07/01/2013</b>
Russell 3000 Index			0.90	3.02	8.93	18.51	18.51	9.10	12.74	0.48	12.93	
Difference			0.18	-0.39	-1.19	-0.51	-0.51	-0.92	1.55	-1.67	-0.88	
<b>Non-U.S. Equity Composite</b>	<b>588,767,295</b>	<b>26.56</b>	<b>0.01</b>	<b>6.27</b>	<b>14.74</b>	<b>20.22</b>	<b>20.22</b>	<b>1.96</b>	<b>4.23</b>	<b>-3.32</b>	<b>6.45</b>	<b>07/01/2013</b>
MSCI ACW Ex US Investable Mkt Index (Gross)*			0.37	6.05	14.65	20.97	20.97	1.29	4.91	-5.25	6.17	
Difference			-0.36	0.22	0.09	-0.75	-0.75	0.67	-0.68	1.93	0.28	
<b>Fixed Income Composite</b>	<b>337,385,429</b>	<b>15.22</b>	<b>0.13</b>	<b>1.64</b>	<b>3.27</b>	<b>6.44</b>	<b>6.44</b>	<b>3.82</b>	<b>8.30</b>	<b>0.47</b>	<b>4.62</b>	<b>07/01/2013</b>
50/50 Bloomberg US Unv Bond/US Corp: Hi Yld Index*			0.03	1.85	3.78	6.66	6.66	5.24	10.38	0.43	5.23	
Difference			0.10	-0.21	-0.51	-0.22	-0.22	-1.42	-2.08	0.04	-0.61	
<b>Real Return Composite</b>	<b>189,132,902</b>	<b>8.53</b>	<b>0.13</b>	<b>0.68</b>	<b>5.65</b>	<b>7.52</b>	<b>7.52</b>	<b>1.52</b>	<b>10.38</b>	<b>-5.77</b>	<b>3.41</b>	<b>07/01/2013</b>
Real Return Actual Allocation Index (P)*			-0.30	-0.11	2.45	3.07	3.07	0.77	7.22	-4.07	1.97	
Difference			0.43	0.79	3.20	4.45	4.45	0.75	3.16	-1.70	1.44	
<b>Real Estate Composite</b>	<b>98,401,862</b>	<b>4.44</b>	<b>2.14</b>	<b>2.28</b>	<b>5.36</b>	<b>10.33</b>	<b>10.33</b>	<b>9.37</b>	<b>9.92</b>	<b>9.41</b>	<b>9.06</b>	<b>07/01/2013</b>
NCREIF ODCE Index (AWA) (Net) (1 Qtr Lag)			1.54	1.54	3.45	7.36	7.36	10.77	9.08	13.86	11.26	
Difference			0.60	0.74	1.91	2.97	2.97	-1.40	0.84	-4.45	-2.20	
<b>Absolute Return Composite</b>	<b>161,004,126</b>	<b>7.26</b>	<b>-0.05</b>	<b>0.44</b>	<b>1.98</b>	<b>5.41</b>	<b>5.41</b>	<b>1.39</b>	<b>-0.25</b>	<b>1.69</b>	<b>3.13</b>	<b>07/01/2013</b>
HFRI FOF: Dvf'd Index (1 Mo Lag)			0.24	0.91	3.69	5.11	5.11	1.74	-1.34	0.79	2.56	
Difference			-0.29	-0.47	-1.71	0.30	0.30	-0.35	1.09	0.90	0.57	
<b>Private Equity Composite</b>	<b>209,925,999</b>	<b>9.47</b>	<b>3.98</b>	<b>5.15</b>	<b>8.36</b>	<b>12.66</b>	<b>12.66</b>	<b>10.16</b>	<b>6.80</b>	<b>12.46</b>	<b>13.14</b>	<b>07/01/2013</b>
Private Equity Benchmark (CERS Haz P) [Short Term]			3.98	5.15	8.36	12.66	12.66	10.16	6.80	12.46	13.14	
Difference			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
R 3000 Index+3% (Qtr Lag) (P)* [Long Term]			0.33	6.60	14.13	24.33	24.33	14.09	17.96	3.51	17.10	
Difference			3.65	-1.45	-5.77	-11.67	-11.67	-3.93	-11.16	8.95	-3.96	

Performance shown is net of fees. An index marked with an asterisk (\*) represents the current benchmark. Fiscal year ends June 30th. Allocations shown may not sum up to 100% due to the exclusion of Cash Equivalents and Other from this page; returns for Kentucky Retirement Systems Pension Fund's Cash Equivalents can be found in the manager performance section of this report.



Kentucky Retirement Systems  
Asset Allocation & Performance  
CERS Haz - Insurance

As of June 30, 2017

	Allocation		Performance (%)									
	Market Value (\$)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	2016	2015	Since Incep.	Inception Date
<b>CERS Haz (I)</b>	<b>1,176,799,435</b>	<b>100.00</b>	<b>0.78</b>	<b>3.31</b>	<b>8.05</b>	<b>13.71</b>	<b>13.71</b>	<b>5.08</b>	<b>8.38</b>	<b>0.06</b>	<b>7.43</b>	<b>04/01/1987</b>
Target Allocation Index (CERS Haz I)			0.86	3.48	8.31	13.72	13.72	5.55	8.15	0.96	7.83	
Difference			-0.08	-0.17	-0.26	-0.01	-0.01	-0.47	0.23	-0.90	-0.40	
<b>U.S. Equity Composite</b>	<b>303,147,553</b>	<b>25.76</b>	<b>1.11</b>	<b>2.69</b>	<b>7.86</b>	<b>18.04</b>	<b>18.04</b>	<b>8.71</b>	<b>14.73</b>	<b>-0.47</b>	<b>12.45</b>	<b>07/01/2013</b>
Russell 3000 Index			0.90	3.02	8.93	18.51	18.51	9.10	12.74	0.48	12.93	
Difference			0.21	-0.33	-1.07	-0.47	-0.47	-0.39	1.99	-0.95	-0.48	
<b>Non-U.S. Equity Composite</b>	<b>315,120,024</b>	<b>26.78</b>	<b>0.06</b>	<b>6.24</b>	<b>14.67</b>	<b>20.41</b>	<b>20.41</b>	<b>1.84</b>	<b>4.13</b>	<b>-3.44</b>	<b>6.34</b>	<b>07/01/2013</b>
MSCI ACW Ex US Investable Mkt Index (Gross)*			0.37	6.05	14.65	20.97	20.97	1.29	4.91	-5.25	6.17	
Difference			-0.31	0.19	0.02	-0.56	-0.56	0.55	-0.78	1.81	0.17	
<b>Fixed Income Composite</b>	<b>167,776,452</b>	<b>14.26</b>	<b>0.11</b>	<b>1.54</b>	<b>3.13</b>	<b>5.89</b>	<b>5.89</b>	<b>3.68</b>	<b>8.18</b>	<b>0.51</b>	<b>4.41</b>	<b>07/01/2013</b>
50/50 Bloomberg US Unv Bond/US Corp: Hi Yld Index*			0.03	1.85	3.78	6.66	6.66	5.24	10.38	0.43	5.23	
Difference			0.08	-0.31	-0.65	-0.77	-0.77	-1.56	-2.20	0.08	-0.82	
<b>Real Return Composite</b>	<b>93,995,412</b>	<b>7.99</b>	<b>0.01</b>	<b>0.64</b>	<b>5.09</b>	<b>6.60</b>	<b>6.60</b>	<b>1.28</b>	<b>9.65</b>	<b>-6.15</b>	<b>3.05</b>	<b>07/01/2013</b>
Real Return Actual Allocation Index (I)*			-0.30	0.08	2.61	2.99	2.99	0.95	6.87	-3.56	2.11	
Difference			0.31	0.56	2.48	3.61	3.61	0.33	2.78	-2.59	0.94	
<b>Real Estate Composite</b>	<b>56,848,315</b>	<b>4.83</b>	<b>2.25</b>	<b>2.26</b>	<b>5.48</b>	<b>10.86</b>	<b>10.86</b>	<b>9.46</b>	<b>10.12</b>	<b>9.01</b>	<b>8.86</b>	<b>07/01/2013</b>
NCREIF ODCE Index (AWA) (Net) (1 Qtr Lag)			1.54	1.54	3.45	7.36	7.36	10.77	9.08	13.86	11.26	
Difference			0.71	0.72	2.03	3.50	3.50	-1.31	1.04	-4.85	-2.40	
<b>Absolute Return Composite</b>	<b>90,137,787</b>	<b>7.66</b>	<b>-0.03</b>	<b>0.42</b>	<b>1.93</b>	<b>5.32</b>	<b>5.32</b>	<b>1.41</b>	<b>-0.26</b>	<b>1.79</b>	<b>3.11</b>	<b>07/01/2013</b>
HFRI FOF: Dvf'd Index (1 Mo Lag)			0.24	0.91	3.69	5.11	5.11	1.74	-1.34	0.79	2.56	
Difference			-0.27	-0.49	-1.76	0.21	0.21	-0.33	1.08	1.00	0.55	
<b>Private Equity Composite</b>	<b>122,541,477</b>	<b>10.41</b>	<b>4.22</b>	<b>4.84</b>	<b>8.28</b>	<b>12.35</b>	<b>12.35</b>	<b>13.11</b>	<b>9.39</b>	<b>16.94</b>	<b>15.12</b>	<b>07/01/2013</b>
Private Equity Benchmark (CERS Haz I) [Short Term]			4.22	4.84	8.28	12.35	12.35	13.11	9.39	16.94	15.12	
Difference			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
R 3000 Index+3% (Qtr Lag) (I)* [Long Term]			0.33	6.60	14.13	24.33	24.33	14.09	17.96	3.51	17.10	
Difference			3.89	-1.76	-5.85	-11.98	-11.98	-0.98	-8.57	13.43	-1.98	

Performance shown is net of fees. An index marked with an asterisk (\*) represents the current benchmark. Fiscal year ends June 30th. Allocations shown may not sum up to 100% due to the exclusion of Cash Equivalents and Other from this page; returns for Kentucky Retirement Systems Insurance Fund's Cash Equivalents can be found in the manager performance section of this report.

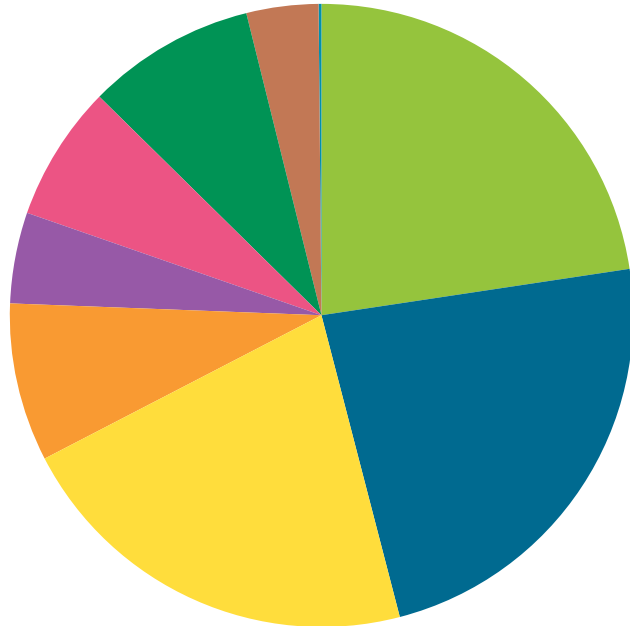


Pension	
<p><b>U.S. Equity Composite</b>  River Road Asset Management (SA)  River Road FAV (SA)  Westfield Capital (SA)  Scientific Beta (SA)  Internal S&amp;P 500 Index (SA)  Internal US Mid Cap (SA)  Systematic Financial Management (SA)  NT Structured Small Cap (SA)  Pension Transition (SA)</p> <p><b>Non-U.S. Equity Composite</b>  Lazard Int'l Strategic Equity (SA)  LSV Int'l Concentrated Value Equity (SA)  BTC ACWI Ex US Fund (CF)  American Century Non-US Growth Equity (SA)  Franklin Templeton Non-US Equity (SA)  NT Int'l Sm Cap Eq Index (SA)</p> <p><b>Fixed Income Composite</b>  <i>Core Fixed Income Composite</i>  IG Credit FI Unit  NISA Core Agg Fixed Income (SA)  <i>High Yield Fixed Income Composite</i>  Cerberus KRS Levered Loan Opps, L.P.  Columbia HY Fixed Income (SA)  Marathon Bluegrass Credit Fund  Shenkman Capital (SA)  Waterfall (SA)  <i>Global Fixed Income Composite</i>  Manulife Asset Mgmt (SA)</p> <p><b>Real Return Composite</b>  Internal TIPS (SA)  Nuveen Real Asset Income (SA)  PIMCO:All Asset;Inst (PAAIX)  Tortoise Capital (CF)  Amerra Ag Fund II (CF)  Amerra-AGRI Holding (CF)  BTG Pactual Brazil Timberland Fund I, L.P.  Magnetar MTP Energy Fund, L.P.  Magnetar MTP EOF II, L.P.  Oberland Capital Healthcare, L.P.  Taurus Mining Finance Fund  Tenaska Power Fund II (CF)</p> <p><b>Cash Equivalents Composite</b>  Cash Equivalents (SA)</p>	<p><b>Real Estate Composite</b>  H/2 Credit Partners (CF)  Harrison Street Core (CF)  Mesa West Core Lending, L.P.  Mesa West IV, L.P.  Prologis Targeted U.S. Logistics Fund (CF)  Stockbridge SmtMkts, L.P.  DivCoWest Fund IV, L.P.  Fundamental Partners III, L.P.  Greenfield Acquisition Partners VI, L.P.  Greenfield Acquisition Partners VII, L.P.  Lubert Adler Real Estate Fund VII, L.P.  Patron Capital V, L.P.  Rubenstein Properties Fund II, L.P.  Walton Street Real Estate Fund VI, L.P.  Walton Street Real Estate Fund VII, L.P.</p> <p><b>Absolute Return Composite</b>  BAAM (SA)  Davidson-Kemper, L.P.  PAAMCO (SA)  Prisma Capital Partners (SA)  Senator LP  Tourbillon Global Master Fund, Ltd  Anchorage Capital  Blackrock GAO Fund, Ltd (CF)  Coatue Qualified Partners, L.P.  Credit Suisse Fund  Finisterre Global Op  Gotham Neutral Strategies (CF)  Governors Lane Fund (CF)  HBK II (CF)  Karya Fund, LLC  Knighthead Capital (CF)  Liquidalts H2O Force (CF)  Luxor Capital (CF)  Myriad Opportunities  Pine River (CF)  Prudential Fund I (CF)  QMS Diversified Global Macro (CF)  Scopia PX, LLC  Systematica BlueMatrix Fund (CF)  Tide Point Partners (CF)</p> <p><b>Private Equity Composite</b></p> <p><b>Other Composite</b>  Perimeter Park (SA)  Custody Fee Accrual (SA)</p>

Insurance	
<p><b>U.S. Equity Composite</b>  River Road Asset Management (SA)  River Road FAV (SA)  Westfield Capital (SA)  Scientific Beta (SA)  Internal S&amp;P 500 Index (SA)  Internal US Mid Cap (SA)  Systematic Financial Management (SA)  NT Structured Small Cap (SA)  Insurance Transition (SA)</p> <p><b>Non-U.S. Equity Composite</b>  Lazard Int'l Strategic Equity (SA)  LSV Int'l Concentrated Value Equity (SA)  BTC ACWI Ex US Fund (CF)  American Century Non-US Growth Equity (SA)  Franklin Templeton Non-US Equity (SA)  BTC ACWI Ex US Small Cap Fund (CF)</p> <p><b>Fixed Income Composite</b>  <i>Core Fixed Income Composite</i>  IG Credit FI Unit  NISA Core Agg Fixed Income (SA)  <i>High Yield Fixed Income Composite</i>  Cerberus KRS Levered Loan Opps, L.P.  Columbia HY Fixed Income (SA)  Marathon Bluegrass Credit Fund  Shenkman Capital (SA)  Waterfall (SA)  <i>Global Fixed Income Composite</i>  Manulife Asset Mgmt (SA)</p> <p><b>Real Return Composite</b>  Internal TIPS (SA)  Nuveen Real Asset Income (SA)  PIMCO:All Asset;Inst (PAAIX)  Tortoise Capital (CF)  Amerra Ag Fund II (CF)  Amerra-AGRI Holding (CF)  BTG Pactual Brazil Timberland Fund I, L.P.  Magnetar MTP Energy Fund, L.P.  Magnetar MTP EOF II, L.P.  Oberland Capital Healthcare, L.P.  Taurus Mining Finance Fund  Tenaska Power Fund II (CF)</p> <p><b>Cash Equivalents Composite</b>  Cash Equivalents (SA)</p>	<p><b>Real Estate Composite</b>  H/2 Credit Partners (CF)  Harrison Street Core (CF)  Mesa West Core Lending, L.P.  Mesa West IV, L.P.  Prologis Targeted U.S. Logistics Fund (CF)  Stockbridge SmtMkts, L.P.  DivCoWest Fund IV, L.P.  Fundamental Partners III, L.P.  Greenfield Acquisition Partners VI, L.P.  Greenfield Acquisition Partners VII, L.P.  Lubert Adler Real Estate Fund VII, L.P.  Patron Capital V, L.P.  Rubenstein Properties Fund II, L.P.  Walton Street Real Estate Fund VI, L.P.  Walton Street Real Estate Fund VII, L.P.</p> <p><b>Absolute Return Composite</b>  BAAM (SA)  Davidson-Kemper, L.P.  PAAMCO (SA)  Prisma Capital Partners (SA)  Senator LP  Tourbillon Global Master Fund, Ltd  Anchorage Capital  Blackrock GAO Fund, Ltd (CF)  Coatue Qualified Partners, L.P.  Credit Suisse Fund  Finisterre Global Op  Gotham Neutral Strategies (CF)  Governors Lane Fund (CF)  HBK II (CF)  Karya Fund, LLC  Knighthead Capital (CF)  Liquidalts H2O Force (CF)  Luxor Capital (CF)  Myriad Opportunities  Pine River (CF)  Prudential Fund I (CF)  QMS Diversified Global Macro (CF)  Scopia PX, LLC  Systematica BlueMatrix Fund (CF)  Tide Point Partners (CF)</p> <p><b>Private Equity Composite</b></p> <p><b>Other Composite</b>  Custody Fee Accrual (SA)</p>

Asset Allocation by Asset Class - Pension

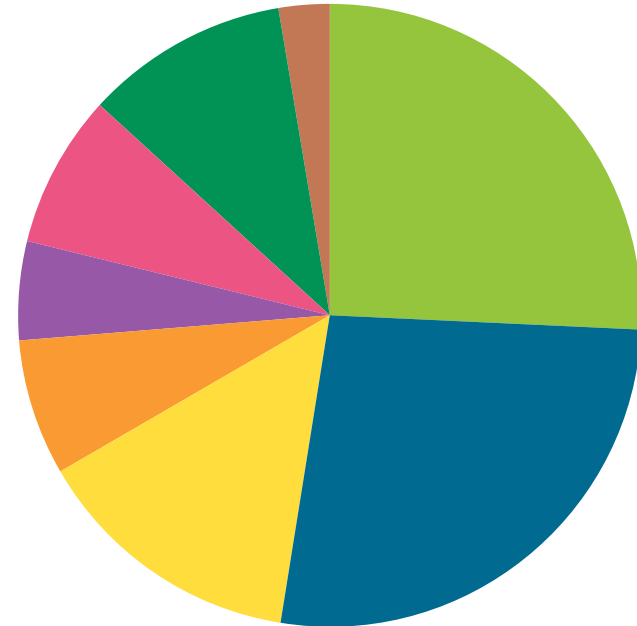
June 30, 2017 : \$243,605,360



	Market Value (\$)	Allocation (%)
U.S. Equity Composite	55,084,276	22.61
Non-U.S. Equity Composite	56,883,482	23.35
Fixed Income Composite	52,227,893	21.44
Real Return Composite	20,008,339	8.21
Real Estate Composite	11,485,693	4.71
Absolute Return Composite	17,171,996	7.05
Private Equity Composite	21,283,737	8.74
Cash Equivalents Composite	9,105,995	3.74
Other Composite	353,948	0.15

Asset Allocation by Asset Class - Insurance

June 30, 2017 : \$177,414,050



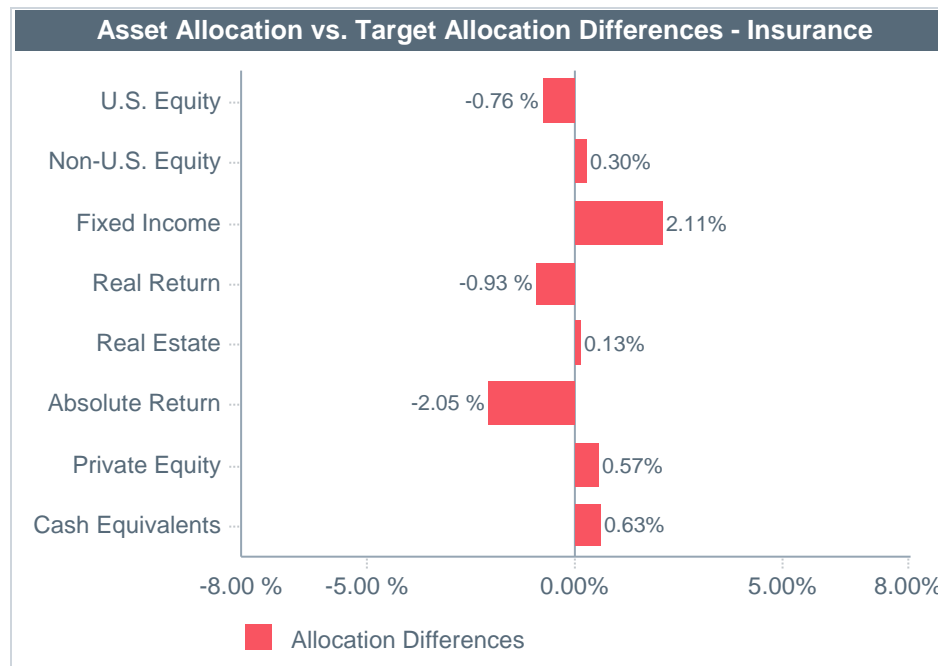
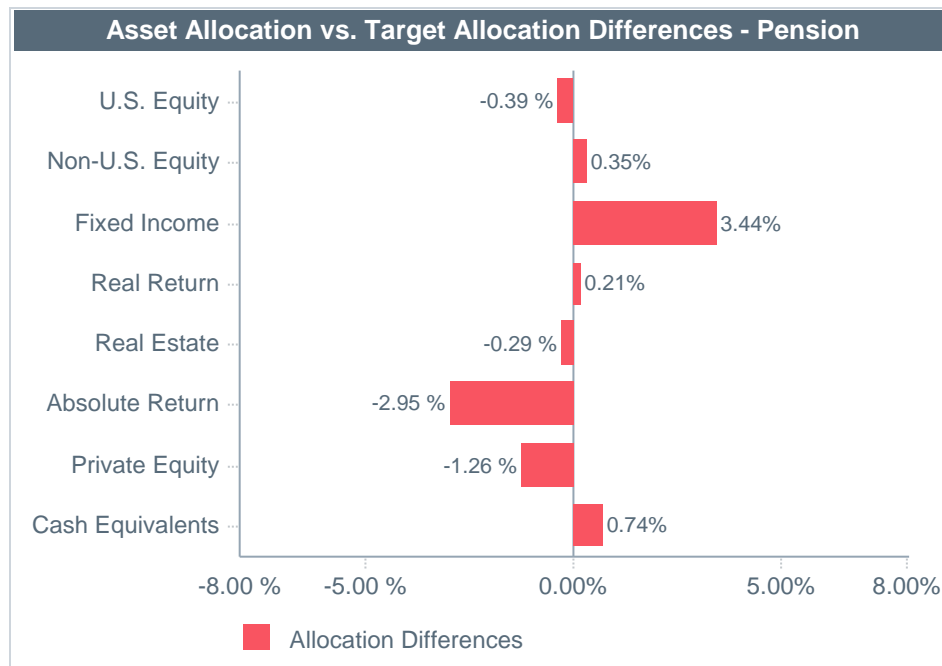
	Market Value (\$)	Allocation (%)
U.S. Equity Composite	45,666,960	25.74
Non-U.S. Equity Composite	47,539,658	26.80
Fixed Income Composite	25,038,588	14.11
Real Return Composite	12,539,848	7.07
Real Estate Composite	9,101,690	5.13
Absolute Return Composite	14,107,474	7.95
Private Equity Composite	18,758,899	10.57
Cash Equivalents Composite	4,674,333	2.63
Other Composite	-13,400	-0.01

Allocations shown may not sum up to 100% exactly due to rounding.

Asset Allocation vs. Target Allocation

Asset Allocation vs. Target Allocation - Pension					
	Asset Allocation (\$)	Asset Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)	Target Allocation (%)
SPRS (P)	243,605,360	100.00	-	-	100.00
U.S. Equity	55,084,276	22.61	18.00	28.00	23.00
Non-U.S. Equity	56,883,482	23.35	18.00	28.00	23.00
Fixed Income	52,227,893	21.44	14.00	22.00	18.00
Real Return	20,008,339	8.21	6.00	10.00	8.00
Real Estate	11,485,693	4.71	3.00	7.00	5.00
Absolute Return	17,171,996	7.05	8.00	12.00	10.00
Private Equity	21,283,737	8.74	7.00	13.00	10.00
Cash Equivalents	9,105,995	3.74	1.00	5.00	3.00

Asset Allocation vs. Target Allocation - Insurance					
	Asset Allocation (\$)	Asset Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)	Target Allocation (%)
SPRS (I)	177,414,050	100.00	-	-	100.00
U.S. Equity	45,666,960	25.74	21.50	31.50	26.50
Non-U.S. Equity	47,539,658	26.80	21.50	31.50	26.50
Fixed Income	25,038,588	14.11	8.00	16.00	12.00
Real Return	12,539,848	7.07	6.00	10.00	8.00
Real Estate	9,101,690	5.13	3.00	7.00	5.00
Absolute Return	14,107,474	7.95	8.00	12.00	10.00
Private Equity	18,758,899	10.57	7.00	13.00	10.00
Cash Equivalents	4,674,333	2.63	0.00	4.00	2.00



Allocations shown may not sum up to 100% due to rounding and the exclusion of the Other Composite from this page. SPRS (P) and SPRS (I) Absolute Return Composites are under their minimum allocations.



Kentucky Retirement Systems  
Asset Allocation & Performance  
SPRS - Pension

As of June 30, 2017

	Allocation		Performance (%)									
	Market Value (\$)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	2016	2015	Since Incep.	Inception Date
<b>SPRS (P)</b>	<b>243,605,360</b>	<b>100.00</b>	<b>1.18</b>	<b>3.52</b>	<b>7.90</b>	<b>13.08</b>	<b>13.08</b>	<b>4.30</b>	<b>6.75</b>	<b>-0.41</b>	<b>9.11</b>	<b>04/01/1984</b>
Target Allocation Index (SPRS P)			0.81	3.22	7.46	12.61	12.61	4.85	7.92	0.21	9.27	
Difference			0.37	0.30	0.44	0.47	0.47	-0.55	-1.17	-0.62	-0.16	
<b>U.S. Equity Composite</b>	<b>55,084,276</b>	<b>22.61</b>	<b>1.08</b>	<b>2.63</b>	<b>7.75</b>	<b>16.86</b>	<b>16.86</b>	<b>7.63</b>	<b>12.44</b>	<b>-1.20</b>	<b>11.72</b>	<b>07/01/2013</b>
Russell 3000 Index			0.90	3.02	8.93	18.51	18.51	9.10	12.74	0.48	12.93	
Difference			0.18	-0.39	-1.18	-1.65	-1.65	-1.47	-0.30	-1.68	-1.21	
<b>Non-U.S. Equity Composite</b>	<b>56,883,482</b>	<b>23.35</b>	<b>0.02</b>	<b>6.27</b>	<b>14.72</b>	<b>20.29</b>	<b>20.29</b>	<b>1.53</b>	<b>2.97</b>	<b>-3.33</b>	<b>6.09</b>	<b>07/01/2013</b>
MSCI ACW Ex US Investable Mkt Index (Gross)*			0.37	6.05	14.65	20.97	20.97	1.29	4.91	-5.25	6.17	
Difference			-0.35	0.22	0.07	-0.68	-0.68	0.24	-1.94	1.92	-0.08	
<b>Fixed Income Composite</b>	<b>52,227,893</b>	<b>21.44</b>	<b>0.10</b>	<b>1.62</b>	<b>3.18</b>	<b>6.22</b>	<b>6.22</b>	<b>3.74</b>	<b>8.23</b>	<b>0.48</b>	<b>4.59</b>	<b>07/01/2013</b>
50/50 Bloomberg US Unv Bond/US Corp: Hi Yld Index*			0.03	1.85	3.78	6.66	6.66	5.24	10.38	0.43	5.23	
Difference			0.07	-0.23	-0.60	-0.44	-0.44	-1.50	-2.15	0.05	-0.64	
<b>Real Return Composite</b>	<b>20,008,339</b>	<b>8.21</b>	<b>0.09</b>	<b>0.54</b>	<b>5.26</b>	<b>7.33</b>	<b>7.33</b>	<b>1.37</b>	<b>10.16</b>	<b>-5.77</b>	<b>3.28</b>	<b>07/01/2013</b>
Real Return Actual Allocation Index (P)*			-0.30	-0.11	2.45	3.07	3.07	0.77	7.22	-4.07	1.97	
Difference			0.39	0.65	2.81	4.26	4.26	0.60	2.94	-1.70	1.31	
<b>Real Estate Composite</b>	<b>11,485,693</b>	<b>4.71</b>	<b>2.15</b>	<b>2.30</b>	<b>5.38</b>	<b>10.40</b>	<b>10.40</b>	<b>9.11</b>	<b>9.91</b>	<b>8.75</b>	<b>9.01</b>	<b>07/01/2013</b>
NCREIF ODCE Index (AWA) (Net) (1 Qtr Lag)			1.54	1.54	3.45	7.36	7.36	10.77	9.08	13.86	11.26	
Difference			0.61	0.76	1.93	3.04	3.04	-1.66	0.83	-5.11	-2.25	
<b>Absolute Return Composite</b>	<b>17,171,996</b>	<b>7.05</b>	<b>-0.05</b>	<b>0.44</b>	<b>1.98</b>	<b>5.41</b>	<b>5.41</b>	<b>1.37</b>	<b>-0.24</b>	<b>1.64</b>	<b>3.08</b>	<b>07/01/2013</b>
HFRI FOF: Dvf'd Index (1 Mo Lag)			0.24	0.91	3.69	5.11	5.11	1.74	-1.34	0.79	2.56	
Difference			-0.29	-0.47	-1.71	0.30	0.30	-0.37	1.10	0.85	0.52	
<b>Private Equity Composite</b>	<b>21,283,737</b>	<b>8.74</b>	<b>3.52</b>	<b>5.24</b>	<b>8.00</b>	<b>12.23</b>	<b>12.23</b>	<b>7.76</b>	<b>4.26</b>	<b>9.28</b>	<b>11.45</b>	<b>07/01/2013</b>
Private Equity Benchmark (SPRS P) [Short Term]			3.52	5.24	8.00	12.23	12.23	7.76	4.26	9.28	11.45	
Difference			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
R 3000 Index+3% (Qtr Lag) (P)* [Long Term]			0.33	6.60	14.13	24.33	24.33	14.09	17.96	3.51	17.10	
Difference			3.19	-1.36	-6.13	-12.10	-12.10	-6.33	-13.70	5.77	-5.65	

Performance shown is net of fees. An index marked with an asterisk (\*) represents the current benchmark. Fiscal year ends June 30th. Allocations shown may not sum up to 100% due to the exclusion of Cash Equivalents and Other from this page; returns for Kentucky Retirement Systems Pension Fund's Cash Equivalents can be found in the manager performance section of this report.

Kentucky Retirement Systems  
Asset Allocation & Performance  
SPRS - Insurance

As of June 30, 2017

	Allocation		Performance (%)									
	Market Value (\$)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	2016	2015	Since Incep.	Inception Date
<b>SPRS (I)</b>	<b>177,414,050</b>	<b>100.00</b>	<b>0.77</b>	<b>3.33</b>	<b>8.05</b>	<b>13.71</b>	<b>13.71</b>	<b>5.04</b>	<b>8.30</b>	<b>0.02</b>	<b>7.42</b>	<b>04/01/1987</b>
Target Allocation Index (SPRS I)			0.86	3.48	8.31	13.72	13.72	5.55	8.15	0.96	7.83	
Difference			-0.09	-0.15	-0.26	-0.01	-0.01	-0.51	0.15	-0.94	-0.41	
<b>U.S. Equity Composite</b>	<b>45,666,960</b>	<b>25.74</b>	<b>1.11</b>	<b>2.69</b>	<b>7.86</b>	<b>18.02</b>	<b>18.02</b>	<b>8.69</b>	<b>14.69</b>	<b>-0.50</b>	<b>12.43</b>	<b>07/01/2013</b>
Russell 3000 Index			0.90	3.02	8.93	18.51	18.51	9.10	12.74	0.48	12.93	
Difference			0.21	-0.33	-1.07	-0.49	-0.49	-0.41	1.95	-0.98	-0.50	
<b>Non-U.S. Equity Composite</b>	<b>47,539,658</b>	<b>26.80</b>	<b>0.06</b>	<b>6.24</b>	<b>14.68</b>	<b>20.43</b>	<b>20.43</b>	<b>1.88</b>	<b>4.20</b>	<b>-3.42</b>	<b>6.36</b>	<b>07/01/2013</b>
MSCI ACW Ex US Investable Mkt Index (Gross)*			0.37	6.05	14.65	20.97	20.97	1.29	4.91	-5.25	6.17	
Difference			-0.31	0.19	0.03	-0.54	-0.54	0.59	-0.71	1.83	0.19	
<b>Fixed Income Composite</b>	<b>25,038,588</b>	<b>14.11</b>	<b>0.12</b>	<b>1.55</b>	<b>3.15</b>	<b>5.98</b>	<b>5.98</b>	<b>3.73</b>	<b>8.26</b>	<b>0.54</b>	<b>4.46</b>	<b>07/01/2013</b>
50/50 Bloomberg US Unv Bond/US Corp: Hi Yld Index*			0.03	1.85	3.78	6.66	6.66	5.24	10.38	0.43	5.23	
Difference			0.09	-0.30	-0.63	-0.68	-0.68	-1.51	-2.12	0.11	-0.77	
<b>Real Return Composite</b>	<b>12,539,848</b>	<b>7.07</b>	<b>-0.02</b>	<b>0.57</b>	<b>4.95</b>	<b>6.52</b>	<b>6.52</b>	<b>1.25</b>	<b>9.66</b>	<b>-6.13</b>	<b>3.03</b>	<b>07/01/2013</b>
Real Return Actual Allocation Index (I)*			-0.30	0.08	2.61	2.99	2.99	0.95	6.87	-3.56	2.11	
Difference			0.28	0.49	2.34	3.53	3.53	0.30	2.79	-2.57	0.92	
<b>Real Estate Composite</b>	<b>9,101,690</b>	<b>5.13</b>	<b>2.26</b>	<b>2.26</b>	<b>5.48</b>	<b>10.84</b>	<b>10.84</b>	<b>9.42</b>	<b>10.08</b>	<b>8.94</b>	<b>8.83</b>	<b>07/01/2013</b>
NCREIF ODCE Index (AWA) (Net) (1 Qtr Lag)			1.54	1.54	3.45	7.36	7.36	10.77	9.08	13.86	11.26	
Difference			0.72	0.72	2.03	3.48	3.48	-1.35	1.00	-4.92	-2.43	
<b>Absolute Return Composite</b>	<b>14,107,474</b>	<b>7.95</b>	<b>-0.03</b>	<b>0.42</b>	<b>1.93</b>	<b>5.32</b>	<b>5.32</b>	<b>1.41</b>	<b>-0.26</b>	<b>1.78</b>	<b>3.11</b>	<b>07/01/2013</b>
HFRI FOF: Dvf'd Index (1 Mo Lag)			0.24	0.91	3.69	5.11	5.11	1.74	-1.34	0.79	2.56	
Difference			-0.27	-0.49	-1.76	0.21	0.21	-0.33	1.08	0.99	0.55	
<b>Private Equity Composite</b>	<b>18,758,899</b>	<b>10.57</b>	<b>4.03</b>	<b>4.78</b>	<b>8.14</b>	<b>12.19</b>	<b>12.19</b>	<b>11.80</b>	<b>8.24</b>	<b>14.80</b>	<b>14.29</b>	<b>07/01/2013</b>
Private Equity Benchmark (SPRS I) [Short Term]			4.03	4.78	8.14	12.19	12.19	11.80	8.24	14.80	14.29	
Difference			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
R 3000 Index+3% (Qtr Lag) (I)* [Long Term]			0.33	6.60	14.13	24.33	24.33	14.09	17.96	3.51	17.10	
Difference			3.70	-1.82	-5.99	-12.14	-12.14	-2.29	-9.72	11.29	-2.81	

Performance shown is net of fees. An index marked with an asterisk (\*) represents the current benchmark. Fiscal year ends June 30th. Allocations shown may not sum up to 100% due to the exclusion of Cash Equivalents and Other from this page; returns for Kentucky Retirement Systems Insurance Fund's Cash Equivalents can be found in the manager performance section of this report.

Pension	
<p><b>U.S. Equity Composite</b>  River Road Asset Management (SA)  River Road FAV (SA)  Westfield Capital (SA)  Scientific Beta (SA)  Internal S&amp;P 500 Index (SA)  Internal US Mid Cap (SA)  Systematic Financial Management (SA)  NT Structured Small Cap (SA)  Pension Transition (SA)</p> <p><b>Non-U.S. Equity Composite</b>  Lazard Int'l Strategic Equity (SA)  LSV Int'l Concentrated Value Equity (SA)  BTC ACWI Ex US Fund (CF)  American Century Non-US Growth Equity (SA)  Franklin Templeton Non-US Equity (SA)  NT Int'l Sm Cap Eq Index (SA)</p> <p><b>Fixed Income Composite</b>  <i>Core Fixed Income Composite</i>  IG Credit FI Unit  NISA Core Agg Fixed Income (SA)  <i>High Yield Fixed Income Composite</i>  Cerberus KRS Levered Loan Opps, L.P.  Columbia HY Fixed Income (SA)  Marathon Bluegrass Credit Fund  Shenkman Capital (SA)  Waterfall (SA)  <i>Global Fixed Income Composite</i>  Manulife Asset Mgmt (SA)</p> <p><b>Real Return Composite</b>  Internal TIPS (SA)  Nuveen Real Asset Income (SA)  PIMCO:All Asset;Inst (PAAIX)  Tortoise Capital (CF)  Amerra Ag Fund II (CF)  Amerra-AGRI Holding (CF)  BTG Pactual Brazil Timberland Fund I, L.P.  Magnetar MTP Energy Fund, L.P.  Magnetar MTP EOF II, L.P.  Oberland Capital Healthcare, L.P.  Taurus Mining Finance Fund  Tenaska Power Fund II (CF)</p> <p><b>Cash Equivalents Composite</b>  Cash Equivalents (SA)</p>	<p><b>Real Estate Composite</b>  H/2 Credit Partners (CF)  Harrison Street Core (CF)  Mesa West Core Lending, L.P.  Mesa West IV, L.P.  Prologis Targeted U.S. Logistics Fund (CF)  Stockbridge SmtMkts, L.P.  DivCoWest Fund IV, L.P.  Fundamental Partners III, L.P.  Greenfield Acquisition Partners VI, L.P.  Greenfield Acquisition Partners VII, L.P.  Lubert Adler Real Estate Fund VII, L.P.  Patron Capital V, L.P.  Rubenstein Properties Fund II, L.P.  Walton Street Real Estate Fund VI, L.P.  Walton Street Real Estate Fund VII, L.P.</p> <p><b>Absolute Return Composite</b>  BAAM (SA)  Davidson-Kemper, L.P.  PAAMCO (SA)  Prisma Capital Partners (SA)  Senator LP  Tourbillon Global Master Fund, Ltd  Anchorage Capital  Blackrock GAO Fund, Ltd (CF)  Coatue Qualified Partners, L.P.  Credit Suisse Fund  Finisterre Global Op  Gotham Neutral Strategies (CF)  Governors Lane Fund (CF)  HBK II (CF)  Karya Fund, LLC  Knighthead Capital (CF)  Liquidalts H2O Force (CF)  Luxor Capital (CF)  Myriad Opportunities  Pine River (CF)  Prudential Fund I (CF)  QMS Diversified Global Macro (CF)  Scopia PX, LLC  Systematica BlueMatrix Fund (CF)  Tide Point Partners (CF)</p> <p><b>Private Equity Composite</b></p> <p><b>Other Composite</b>  Perimeter Park (SA)  Custody Fee Accrual (SA)</p>

Insurance	
<p><b>U.S. Equity Composite</b>  River Road Asset Management (SA)  River Road FAV (SA)  Westfield Capital (SA)  Scientific Beta (SA)  Internal S&amp;P 500 Index (SA)  Internal US Mid Cap (SA)  Systematic Financial Management (SA)  NT Structured Small Cap (SA)  Insurance Transition (SA)</p> <p><b>Non-U.S. Equity Composite</b>  Lazard Int'l Strategic Equity (SA)  LSV Int'l Concentrated Value Equity (SA)  BTC ACWI Ex US Fund (CF)  American Century Non-US Growth Equity (SA)  Franklin Templeton Non-US Equity (SA)  BTC ACWI Ex US Small Cap Fund (CF)</p> <p><b>Fixed Income Composite</b>  <i>Core Fixed Income Composite</i>  IG Credit FI Unit  NISA Core Agg Fixed Income (SA)  <i>High Yield Fixed Income Composite</i>  Cerberus KRS Levered Loan Opps, L.P.  Columbia HY Fixed Income (SA)  Marathon Bluegrass Credit Fund  Shenkman Capital (SA)  Waterfall (SA)  <i>Global Fixed Income Composite</i>  Manulife Asset Mgmt (SA)</p> <p><b>Real Return Composite</b>  Internal TIPS (SA)  Nuveen Real Asset Income (SA)  PIMCO:All Asset;Inst (PAAIX)  Tortoise Capital (CF)  Amerra Ag Fund II (CF)  Amerra-AGRI Holding (CF)  BTG Pactual Brazil Timberland Fund I, L.P.  Magnetar MTP Energy Fund, L.P.  Magnetar MTP EOF II, L.P.  Oberland Capital Healthcare, L.P.  Taurus Mining Finance Fund  Tenaska Power Fund II (CF)</p> <p><b>Cash Equivalents Composite</b>  Cash Equivalents (SA)</p>	<p><b>Real Estate Composite</b>  H/2 Credit Partners (CF)  Harrison Street Core (CF)  Mesa West Core Lending, L.P.  Mesa West IV, L.P.  Prologis Targeted U.S. Logistics Fund (CF)  Stockbridge SmtMkts, L.P.  DivCoWest Fund IV, L.P.  Fundamental Partners III, L.P.  Greenfield Acquisition Partners VI, L.P.  Greenfield Acquisition Partners VII, L.P.  Lubert Adler Real Estate Fund VII, L.P.  Patron Capital V, L.P.  Rubenstein Properties Fund II, L.P.  Walton Street Real Estate Fund VI, L.P.  Walton Street Real Estate Fund VII, L.P.</p> <p><b>Absolute Return Composite</b>  BAAM (SA)  Davidson-Kemper, L.P.  PAAMCO (SA)  Prisma Capital Partners (SA)  Senator LP  Tourbillon Global Master Fund, Ltd  Anchorage Capital  Blackrock GAO Fund, Ltd (CF)  Coatue Qualified Partners, L.P.  Credit Suisse Fund  Finisterre Global Op  Gotham Neutral Strategies (CF)  Governors Lane Fund (CF)  HBK II (CF)  Karya Fund, LLC  Knighthead Capital (CF)  Liquidalts H2O Force (CF)  Luxor Capital (CF)  Myriad Opportunities  Pine River (CF)  Prudential Fund I (CF)  QMS Diversified Global Macro (CF)  Scopia PX, LLC  Systematica BlueMatrix Fund (CF)  Tide Point Partners (CF)</p> <p><b>Private Equity Composite</b></p> <p><b>Other Composite</b>  Custody Fee Accrual (SA)</p>

**Performance Related Comments**

- Performance shown is net of fees and is annualized for periods greater than one year.
- Indices show N/A for Since Inception returns when the fund contains more history than the corresponding benchmark.
- All data reported for Kentucky Retirement Systems, including manager and composite market values and performance, is provided by BNY Mellon. Performance for managers assumes an interim return of 0.00% when current valuation is unavailable.
- An index marked with an asterisk (\*) represents the current benchmark.

**Asset Allocation Comments**

- Fixed Income target allocations represent merged sub-asset class targets (Core Fixed Income, High Yield Bonds, Global Bonds).
- Fixed Income target ranges are calculated using a weighted average of sub-asset class (Core Fixed Income, High Yield Bonds, Global Bonds) allowable ranges.

**Benchmark Comments**

***Manager Performance***

- Waterfall (SA) - The blended index is calculated monthly and consists of 60.00% Bloomberg US Corp: High Yield Index, 40.00% Bloomberg US ABS Floating Rate Index.
- Shenkman Capital (SA) - The blended index is calculated monthly and consists of 50.00% Bloomberg US Corp: High Yield Index, 50.00% Bloomberg US High Yield Loans Index through 6/30/2014 and 100.00% S&P/LSTA Leveraged Loan Index thereafter.
- Nuveen Real Asset Income (SA) - The blended index is calculated monthly and consists of 33.00% S&P Global Infrastructure Index, 20.00% Bloomberg US Corp: High Yield Index, 20.00% BofA Merrill Lynch REIT Preferred Index, 15.00% MSCI US REIT Index, and 12.00% BofA Merrill Lynch Preferred Stock, Fixed Rate Index .

***Plan Performance***

- Target Allocation Indices - These passive custom indices are calculated monthly and consist of target allocation weights applied to each corresponding primary benchmark return for each plan.
- Real Return Actual Allocation Index (P) - The custom index is calculated monthly and consists of 100.00% Consumer Price Index+3% through 10/31/2013 and beginning of month investment weights applied to each corresponding primary benchmark return for liquid managers and each corresponding manager return for illiquid managers.
- Real Return Actual Allocation Index (I) - The custom index is calculated monthly and consists of 100.00% Consumer Price Index+3% through 10/31/2013 and beginning of month investment weights applied to each corresponding primary benchmark return for liquid managers and each corresponding manager return for illiquid managers.
- Real Return Actual Allocation Index (KERS I) - The custom index is calculated monthly and consists of 100.00% Consumer Price Index+2.5% through 10/31/2013 and beginning of month investment weights applied to each corresponding primary benchmark return for liquid managers and each corresponding manager return for illiquid managers.
- Performance for the Private Equity Composite should be evaluated using the short-term benchmark for trailing periods less than five years and using the long-term benchmark for trailing periods five years or greater.
- Private Equity Benchmark (P) [Short Term] - The custom index is calculated monthly and consists of 100.00% of the respective Pension Private Equity Composite.
- Private Equity Benchmark (I) [Short Term] - The custom index is calculated monthly and consists of 100.00% of the respective Insurance Private Equity Composite.
- Russell 3000 Index+3% (Qtr Lag) (P\*) [Long Term] - The custom index is calculated monthly and consists of 60.00% S&P 1500 Composite Index, 40.00% Bloomberg US Corp: High Yield Index through 6/30/2011, 100.00% Russell 3000 Index+4% (Quarter Lag) through 12/31/2015, and 100.00% Russell 3000 Index+3% (Quarter Lag) thereafter.
- Russell 3000 Index+3% (Qtr Lag) (I\*) [Long Term] - The custom index is calculated monthly and consists of 80.00% S&P 1500 Composite Index, 20.00% Bloomberg US Corp: High Yield Index through 6/30/2011, 100.00% Russell 3000 Index+4% (Quarter Lag) through 12/31/2015, and 100.00% Russell 3000 Index+3% (Quarter Lag) thereafter.

**Investment Manager Fees**

***U.S. Equity***

**River Road Asset Management (SA)** - 0.650% on the first \$25 million, 0.500% on the next \$50 million, and 0.450% on the next \$50 million, and 0.350% thereafter.

**River Road FAV (SA)** - 0.350% on the first \$50 million, 0.300% on the next \$50 Million, and 0.250% thereafter.

**Westfield Capital (SA)** - 0.750% on the first \$25 million, 0.650% on the next \$50 million, and 0.500% thereafter.

**Systematic Financial Management (SA)** - 0.750% on the first \$25 million, 0.500% on the next \$50 million, and 0.400% thereafter.

**NT Structured Small Cap (SA)** - 0.120% on the first \$500 million, and 0.100% thereafter.

***Non-U.S. Equity***

**Lazard Int'l Strategic Equity (SA)** - 0.700% on the first \$100 million, 0.550% on next \$150 million, 0.450% over \$250 million.

**LSV Int'l Concentrated Value Equity (SA)** - 1.000% on the first \$25 million, 0.800% on next \$25 million, 0.700% on next \$50 million, 0.600% over \$100 million.

**BTC ACWI Ex US Fund (CF)** - 0.055%.

**American Century Non-US Growth Equity (SA)** - 0.495% on the first \$50 million, 0.450% on next \$50 million, 0.405% on next \$400 million, 0.360% over \$500 million.

**Franklin Templeton Non-US Equity (SA)** - 0.700% on the first \$25 million, 0.550% on next \$25 million, 0.500% on next \$50 million, 0.400% over \$100 million.

**NT Int'l Sm Cap Eq Index (SA)** - 0.120% on the first \$500 million, and 0.100% thereafter.

**BTC ACWI Ex US Small Cap Fund (CF)** - 0.120% on the first \$50 million, and 0.100% thereafter.

***Fixed Income***

**NISA Core Agg Fixed Income (SA)** - If account value is greater than \$1 billion, 0.125% on the first \$1.5 billion, 0.105% on next \$1.0 billion, 0.085% on the balance. If account value is less than \$1 billion, 0.165% on the first \$500 million, 0.125% thereafter.

**Cerberus KRS Levered Loan Opps, L.P.** - During the investment period, 1.000% of the greater of (a) aggregate capital commitments and (b) assets under management. After the investment period, 1.000% of assets under management. Performance fee of 15.000%.

**Columbia HY Fixed Income (SA)** - 0.500% on the first \$50 million, 0.400% on the next \$50 million, and 0.350% on all assets over \$100 million.

**Marathon Bluegrass Credit Fund** - 0.850% of NAV and a 15.000% incentive fee over a hurdle rate of 4.000%.

**Shenkman Capital (SA)** - 0.500%.

**Waterfall (SA)** - 0.550% of the fair market value of assets, billed quarterly in arrears, plus a 20% performance fee over an 8.00% hurdle rate.

**Manulife Asset Mgmt (SA)** - 0.350% on the first \$75 million, 0.300% on next \$75 million, and 0.250% thereafter.

***Real Return***

**Nuveen Real Asset Income (SA)** - 0.800% on first \$50 million, 0.750% on next \$50 million, 0.650% on next \$150 million, 0.600% over \$250 million.

**PIMCO:All Asset;Inst (PAAIX)** - 0.865%. Management fee of 0.225% per annum, total annual fee/fund expenses up to 0.905% per annum.

**Tortoise Capital (CF)** - 1.000% management fee on capital balance annually; fees payable quarterly.

**Amerra Ag Fund II (CF)** - 1.500% per annum management fee of fund commitments.

**Amerra-AGRI Holding (CF)** - 1.500% per annum management fee of fund commitments.

**BTG Pactual Brazil Timberland Fund I, L.P.** - 0.750% of committed capital during the commitment period and 1.500% of invested capital thereafter. Performance fee of 20.000%.

**Magnetar MTP Energy Fund, L.P.** - 1.500% of NAV and a 20.000% incentive fee over a 13 week T-bill hurdle. Standard high water mark applies; hurdle is non-cumulative since account inception.

**Magnetar MTP EOF II, L.P.** - 1.500% of NAV, 6% preferred return, and 20% carried interest.

**Oberland Capital Healthcare, L.P.** - 2.000% of committed capital on first \$350 million, 1.750% of committed capital on next \$75 million, 1.500% of committed capital over \$425 million.

**Taurus Mining Finance Fund** - 1.250% paid quarterly in advance with 20.000% carried interest and 8.000% preferred.

**Tenaska Power Fund II (CF)** - 1.500% of committed capital during the commitment period and 1.500% of invested capital thereafter.

**Real Estate**

**H/2 Credit Partners (CF)** - 1.000% of NAV and a performance fee of 10.000%.

**Harrison Street Core (CF)** - 0.750% of NAV.

**Mesa West Core Lending, L.P.** - 0.75% through March 31, 2015 and 0.800% thereafter.

**Prologis Targeted U.S. Logistics Fund (CF)** - 7.500% of net operating income.

**Stockbridge SmtMkts, L.P.** - 0.850% of NAV.

**DivCoWest IV, L.P.** - Management fee: 0.75% of partners' unfunded commitment; 1.50% on funded equity. A blended rate with the effect of lowering the fee occurs if the fund exceeds its target fund raise of \$750 million. The fund is capped at \$880 million. Carried Interest/Preferred Return: First, 6.00% preferred compound return on total contributions. Second, 100% return of capital contributions. Thereafter, 80% to limited partners and 20% to the general partner.

**Greenfield Acquisition Partners VI, L.P.** - During the commitment period, 1.0% of capital commitments and .5% of the weighted average capital contributions of the limited partners. After the commitment period, 1.5% of the weighted average of capital contributions excluding investments that have been sold or otherwise disposed of.

**Greenfield Acquisition Partners VII, L.P.** - During the commitment period, 1.0% of capital commitments and .5% of the weighted average capital contributions of the limited partners. After the commitment period, 1.5% of the weighted average of capital contributions excluding investments that have been sold or otherwise disposed of.

**Lubert Adler Real Estate Fund VII, L.P.** - Annual asset management fee equal to 1.500% of committed capital.

**Mesa West IV, L.P.** - Management fee equal to 1.35% of committed capital.

**Patron Capital** - During the commitment period, 1.75% of capital commitments. After the commitment period, 1.50% management fee on the aggregate cost of any unrealized investment for the remaining term of the fund. Additionally, there is a 20.00% performance fee over a 9.00% preferred return with a 50.00% catch-up provision.

**Rubenstein Properties Fund II, L.P.** - 1.500% on committed capital and 20.000% promote over 9.000% preferred.

**Walton Street Real Estate Fund VI, L.P.** - The General Partner will receive an Acquisition Fee of 1.000% of the gross asset cost of each Fund investment. Subject to certain exceptions, the General Partner will receive a Management Fee equal to, on a cumulative aggregate annual basis, 1.500% of the net invested capital for the investments held by the Fund.

**Walton Street Real Estate Fund VII, L.P.** - The General Partner will receive an Acquisition Fee of 1.000% of the gross asset cost of each Fund investment. Subject to certain exceptions, the General Partner will receive a Management Fee equal to, on a cumulative aggregate annual basis, 1.500% of the net invested capital for the investments held by the Fund.

**Absolute Return**

**BAAM (SA)** - 0.500% of NAV and a 10.00% incentive fee over a LIBOR hurdle. Standard high water mark applies; hurdle is non-cumulative since account inception.

**Davidson-Kemper, L.P.** - 1.500% of NAV and a 20.000% incentive fee. Standard high water mark applies; hurdle is non-cumulative since account inception.

**PAAMCO (SA)** - 0.750% of NAV and a 5.00% incentive fee over a LIBOR hurdle. Standard high water mark applies; hurdle is non-cumulative since account inception.

**Prisma Capital Partners (SA)** - 0.700% of NAV and a 5.00% incentive fee over a 13 week T-bill hurdle. Standard high water mark applies; hurdle is non-cumulative since account inception.

**Senator Investment Group, L.P.** - 1.500% of NAV and a 20.000% incentive fee. Standard high water mark applies.

**Tourbillon Global Master Fund, Ltd** - 1.750% of NAV and a 20.000% incentive fee. Standard high water mark applies; hurdle is non-cumulative since account inception.

**Anchorage Capital** - 1.500% of NAV and a 20.000% incentive fee. Standard high water mark applies; hurdle is non-cumulative since account inception.

**Blackrock GAO Fund, Ltd (CF)** - 0.500% of NAV and a 20.000% incentive fee. Standard high water mark applies; hurdle is non-cumulative since account inception.

**Coatue Qualified Partners, L.P.** - 1.500% of NAV and a 17.000% incentive fee. Standard high water mark applies; hurdle is non-cumulative since account inception.

**Finisterre Global Op** - 1.500% of NAV and a 20.000% incentive fee. Standard high water mark applies; hurdle is non-cumulative since account inception.

**Gotham Neutral Strategies (CF)** - 1.500% of NAV and a 20.000% incentive fee.

**HBK II (CF)** - 1.500% of NAV and a 20.000% incentive fee. Standard high water mark applies; hurdle is non-cumulative since account inception.

**Karya Fund LLC (CF)** - 1.000% of NAV and a 15.000% incentive fee.

**Knighthood Capital (CF)** - 2.000% of NAV and a 20.000% incentive fee. Standard high water mark applies; hurdle is non-cumulative since account inception.

**Liquidalts H2O Force (CF)** - 0.750% of NAV and a 20.000% incentive fee. Standard high water mark applies; hurdle is non-cumulative since account inception.

**Luxor Capital (CF)** - 1.500% of NAV and a 17.500% incentive fee. Standard high water mark applies; hurdle is non-cumulative since account inception.

**Myriad Opportunities** - 2.000% of NAV and a 20.000% incentive fee. Standard high water mark applies; hurdle is non-cumulative since account inception.

**Pine River (CF)** - 1.500% of NAV and a 20.000% incentive fee. Standard high water mark applies; hurdle is non-cumulative since account inception.

**QMS Diversified Global Macro (CF)** - 2.000% of NAV and a 20.000% incentive fee. Standard high water mark applies; hurdle is non-cumulative since account inception.

**Scopia PX, LLC** - 1.500% of NAV and a 20.000% incentive fee. Standard high water mark applies; hurdle is non-cumulative since account inception.

**Systematica BlueMatrix Fund (CF)** - 1.5000% of NAV and a 20.000% incentive fee. Standard high water mark applies; hurdle is non-cumulative since account inception.

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