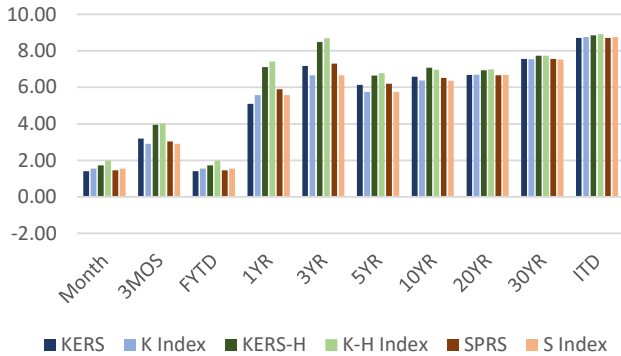


K,KH,S Pension Performance - 07/31/23

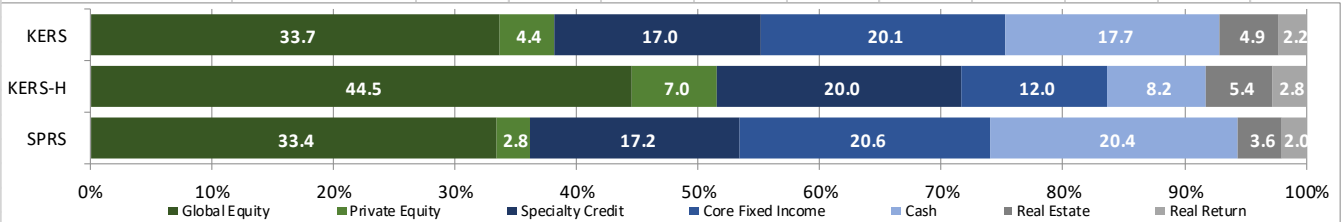


KERS, KERS-HAZ, & SPRS - PENSION FUND - PLAN NET RETURNS - 07/31/23

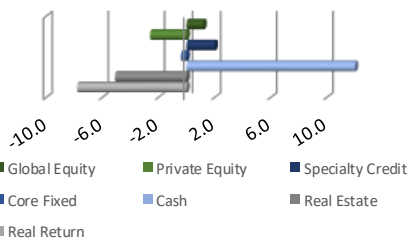
Plan	Market Value	Month	3 Months	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	ITD
<b>KERS</b>	<b>3,639,430,102.76</b>	<b>1.41</b>	<b>3.19</b>	<b>1.41</b>	<b>5.10</b>	<b>7.17</b>	<b>6.14</b>	<b>6.58</b>	<b>6.68</b>	<b>7.56</b>	<b>8.71</b>
KY Ret. KERS Plan IPS Index		1.55	2.91	1.55	5.57	6.66	5.75	6.37	6.69	7.54	8.76
<b>KERS- H</b>	<b>914,983,255.21</b>	<b>1.73</b>	<b>3.95</b>	<b>1.73</b>	<b>7.11</b>	<b>8.48</b>	<b>6.65</b>	<b>7.08</b>	<b>6.94</b>	<b>7.73</b>	<b>8.85</b>
KY Ret. KERS Haz Plan IPS Index		1.98	4.03	1.98	7.41	8.69	6.77	6.96	6.98	7.73	8.91
<b>SPRS</b>	<b>595,368,148.92</b>	<b>1.45</b>	<b>3.03</b>	<b>1.45</b>	<b>5.89</b>	<b>7.30</b>	<b>6.20</b>	<b>6.52</b>	<b>6.66</b>	<b>7.55</b>	<b>8.70</b>
KY Ret. SPRS Plan IPS Index		1.55	2.91	1.55	5.57	6.66	5.75	6.35	6.68	7.53	8.75

KPPA PENSION FUND UNIT - NET RETURNS - 07/31/23 - PROXY PLAN ASSET PERFORMANCE

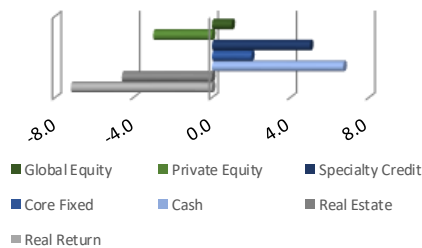
Structure	Month	3 Months	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	ITD
<b>PUBLIC EQUITY</b>	<b>3.37</b>	<b>7.77</b>	<b>3.37</b>	<b>13.10</b>	<b>10.29</b>	<b>7.70</b>	<b>8.42</b>	<b>7.90</b>	<b>8.73</b>	<b>10.28</b>
MSCI ACWI	3.66	8.50	3.66	12.91	10.32	7.71	8.36	7.88	8.56	10.13
<b>PRIVATE EQUITY</b>	<b>0.04</b>	<b>3.33</b>	<b>0.04</b>	<b>-1.50</b>	<b>19.58</b>	<b>13.88</b>	<b>13.39</b>	<b>12.02</b>		<b>11.77</b>
Russell 3000 + 3%(Qtr Lag)	1.35	2.38	1.35	4.50	17.12	13.64	14.88	12.00		11.85
<b>SPECIALTY CREDIT</b>	<b>0.76</b>	<b>2.04</b>	<b>0.76</b>	<b>6.36</b>	<b>7.22</b>	<b>5.64</b>				<b>5.75</b>
50% BB US HY / 50% SP LSTA Leveraged Loan	1.33	2.76	1.33	7.10	4.09	3.86				3.90
<b>CORE FIXED INCOME</b>	<b>0.52</b>	<b>-0.08</b>	<b>0.52</b>	<b>0.46</b>	<b>-0.50</b>	<b>2.28</b>				<b>2.43</b>
Bloomberg Barclays US Aggregate	-0.07	-1.51	-0.07	-3.37	-4.46	0.75				1.50
<b>CASH</b>	<b>0.34</b>	<b>1.07</b>	<b>0.34</b>	<b>3.57</b>	<b>1.35</b>	<b>1.62</b>	<b>1.20</b>	<b>1.71</b>	<b>2.71</b>	<b>3.31</b>
Citigroup Treasury Bill-3 Month	0.46	1.31	0.46	4.11	1.48	1.62	1.02	1.32	2.33	2.92
<b>REAL ESTATE</b>	<b>-1.26</b>	<b>-3.32</b>	<b>-1.26</b>	<b>-6.80</b>	<b>10.78</b>	<b>9.78</b>	<b>9.68</b>	<b>8.16</b>	<b>6.58</b>	<b>6.59</b>
NCREIF NFI-ODCE Net 1 Qtr in Arrears Index^	0.00	-3.38	0.00	-3.91	7.46	6.56	8.47	7.13	7.60	6.46
<b>REAL RETURN</b>	<b>2.73</b>	<b>4.54</b>	<b>2.73</b>	<b>11.35</b>	<b>12.86</b>	<b>6.71</b>	<b>4.92</b>			<b>5.03</b>
US CPI +3%	0.56	1.79	0.56	5.97	12.10	6.28	4.06			4.15



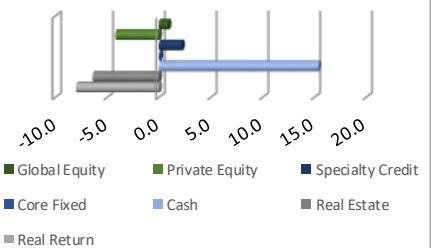
KERS PEN Relative Weights



KERS-HAZ PEN Relative Weights



SPRS PEN Relative Weights

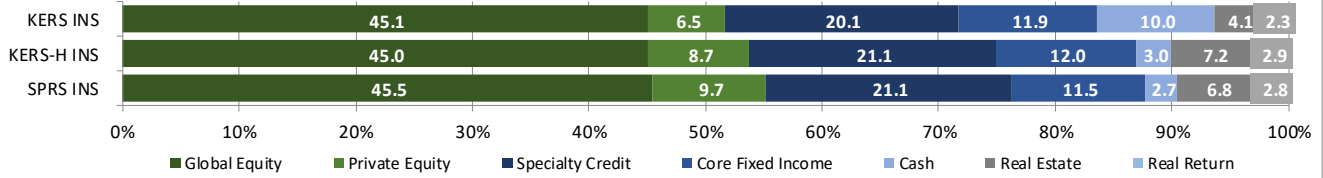


KERS INS, KERS-HAZ INS, SPRS INS - INSURANCE FUND - PLAN NET RETURNS - 07/31/23

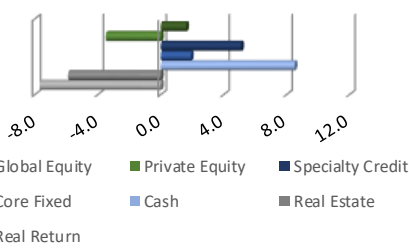
Plan	Market Value	Month	3 Months	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	ITD
<b>KERS INS</b>	<b>1,481,892,871.01</b>	<b>1.74</b>	<b>4.05</b>	<b>1.74</b>	<b>7.61</b>	<b>8.44</b>	<b>6.51</b>	<b>6.80</b>	<b>6.55</b>	<b>6.77</b>	<b>7.30</b>
KY Ins. KERS Plan IPS Index		1.98	4.03	1.98	7.41	8.35	6.61	6.96	6.99	7.12	7.62
<b>KERS - H INS</b>	<b>624,989,135.02</b>	<b>1.69</b>	<b>3.80</b>	<b>1.69</b>	<b>7.03</b>	<b>8.90</b>	<b>6.72</b>	<b>7.10</b>	<b>6.70</b>	<b>6.87</b>	<b>7.38</b>
KY Ins. KERS Haz Plan IPS Index		1.98	4.03	1.98	7.41	8.53	6.55	6.94	6.98	7.12	7.62
<b>SPRS INS</b>	<b>249,700,934.22</b>	<b>1.71</b>	<b>3.93</b>	<b>1.71</b>	<b>7.17</b>	<b>9.09</b>	<b>6.94</b>	<b>7.29</b>	<b>6.79</b>	<b>6.93</b>	<b>7.43</b>
KY Ins. SPRS Plan IPS Index		1.98	4.03	1.98	7.41	8.53	6.55	6.96	6.99	7.13	7.62

KPPA INSURANCE FUND UNIT - NET RETURNS - 07/31/23 - PROXY PLAN ASSET PERFORMANCE

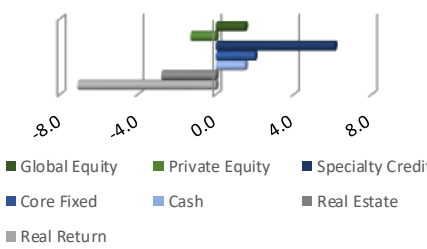
Structure	Month	3 Months	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	ITD
<b>PUBLIC EQUITY</b>	<b>3.37</b>	<b>7.75</b>	<b>3.37</b>	<b>12.93</b>	<b>10.28</b>	<b>7.68</b>	<b>8.48</b>	<b>7.88</b>		<b>8.66</b>
MSCI ACWI	3.66	8.50	3.66	12.91	10.30	7.68	8.37	7.64		8.47
<b>PRIVATE EQUITY</b>	<b>0.04</b>	<b>2.43</b>	<b>0.04</b>	<b>2.12</b>	<b>21.17</b>	<b>13.22</b>	<b>14.42</b>	<b>11.60</b>		<b>10.92</b>
Russell 3000 + 3%(Qtr Lag)	1.35	2.38	1.35	4.50	17.12	13.64	14.88	11.74		11.41
<b>SPECIALTY CREDIT</b>	<b>0.79</b>	<b>2.13</b>	<b>0.79</b>	<b>6.66</b>	<b>7.31</b>	<b>5.61</b>				<b>5.63</b>
50% BB US HY / 50% SP LSTA Leveraged Loan	1.33	2.76	1.33	7.10	4.09	3.86				3.90
<b>CORE FIXED INCOME</b>	<b>0.48</b>	<b>-0.16</b>	<b>0.48</b>	<b>0.24</b>	<b>-0.66</b>	<b>2.10</b>				<b>2.14</b>
Bloomberg Barclays US Aggregate	-0.07	-1.51	-0.07	-3.37	-4.46	0.75				1.50
<b>CASH</b>	<b>0.31</b>	<b>1.03</b>	<b>0.31</b>	<b>3.54</b>	<b>1.32</b>	<b>1.51</b>	<b>1.06</b>	<b>1.54</b>		<b>2.46</b>
Citigroup Treasury Bill-3 Month	0.46	1.31	0.46	4.11	1.48	1.62	1.02	1.32		2.36
<b>REAL ESTATE</b>	<b>-1.13</b>	<b>-3.41</b>	<b>-1.13</b>	<b>-7.02</b>	<b>10.51</b>	<b>9.72</b>	<b>9.64</b>			<b>9.45</b>
NCREIF NFI-ODCE Net 1 Qtr in Arrears Index^	0.00	-3.38	0.00	-3.91	7.46	6.56	8.47			6.14
<b>REAL RETURN</b>	<b>2.25</b>	<b>4.50</b>	<b>2.25</b>	<b>10.07</b>	<b>11.49</b>	<b>6.52</b>	<b>4.77</b>			<b>4.76</b>
US CPI +3%	0.56	1.79	0.56	5.97	11.17	6.33	4.12			4.20



KERS Insurance Relative Weights



KERS-HAZ Insurance Relative Weights



SPRS Insurance Relative Weights

