



TEACHER'S RETIREMENT FUND

Net of All Fees and Expenses
Periods Ending November 30, 2017

Funds <i>Benchmark</i>	Percent Holdings	Policy Weights	Lower Range	Upper Range	Market Value (mil.)	Month	Three Months	Fiscal YTD	Calendar YTD	One Year	Compound, annualized returns			
											Three Year	Five Year	Seven Year	Ten Year
Teacher's Retirement Fund <i>Custom Benchmark</i>	100.0%				\$17,995.3	0.99 <i>1.17</i>	3.60 <i>3.96</i>	6.05 <i>6.25</i>	15.19 <i>14.42</i>	16.81 <i>16.36</i>	7.42 <i>6.99</i>	8.90 <i>8.69</i>	8.33 <i>8.38</i>	5.44 <i>5.36</i>
Mutual Equity <i>Russell 3000</i>	22.1%	21.0	17.0	25.0	\$3,977.2	2.88 <i>3.04</i>	7.87 <i>7.85</i>	10.14 <i>10.10</i>	20.73 <i>19.93</i>	22.87 <i>22.27</i>	10.92 <i>10.75</i>	15.76 <i>15.63</i>	14.31 <i>14.40</i>	8.06 <i>8.43</i>
Developed Markets ISF <i>MSCI EAFE IMI 50% Hedged</i> <i>MSCI EAFE IMI Net</i>	20.8%	18.0	14.0	22.0	\$3,741.1	0.52 <i>0.40</i> <i>1.13</i>	6.34 <i>5.50</i> <i>5.30</i>	8.08 <i>7.73</i> <i>8.54</i>	22.87 <i>20.04</i> <i>23.97</i>	27.04 <i>24.78</i> <i>28.12</i>	9.34 <i>8.03</i> <i>6.89</i>	11.51 <i>10.77</i> <i>8.87</i>	9.15 <i>8.60</i> <i>7.43</i>	3.82 <i>3.11</i> <i>1.99</i>
Emerging Markets ISF <i>MSCI Emerging Markets IMI</i>	9.5%	9.0	7.0	11.0	\$1,707.1	0.05 <i>0.40</i>	1.88 <i>3.57</i>	9.12 <i>11.82</i>	29.92 <i>32.07</i>	30.90 <i>32.29</i>	6.12 <i>6.13</i>	4.20 <i>4.72</i>	3.09 <i>2.97</i>	1.29 <i>1.53</i>
Core Fixed Income⁽¹⁾ <i>Barclays U.S. Aggregate Bond Index</i>	5.9%	7.0	6.0	8.0	\$1,054.0	-0.11 <i>-0.13</i>	-0.32 <i>-0.55</i>	0.47 <i>0.78</i>	3.00 <i>3.07</i>	3.25 <i>3.21</i>	2.00 <i>2.11</i>	1.82 <i>1.98</i>	3.04 <i>2.98</i>	3.85 <i>3.99</i>
Emerging Market Debt <i>50% JPM EMBI Global Div / 50% JPM GBI EM Global Div</i>	5.8%	5.0	4.0	6.0	\$1,042.2	0.36 <i>0.87</i>	-0.73 <i>-0.53</i>	2.90 <i>2.72</i>	12.51 <i>11.21</i>	14.89 <i>12.99</i>	4.44 <i>2.94</i>	1.93 <i>1.49</i>	4.35 <i>4.62</i>	5.68 <i>5.89</i>
High Yield <i>Citigroup US High Yield Market Capped</i>	5.2%	5.0	4.0	6.0	\$940.2	-0.09 <i>-0.17</i>	1.28 <i>1.12</i>	2.28 <i>2.17</i>	7.04 <i>6.63</i>	9.15 <i>8.65</i>	4.96 <i>5.20</i>	5.63 <i>5.61</i>	6.78 <i>6.92</i>	7.43 <i>7.48</i>
Inflation Linked Bonds <i>Barclays World Gov't Inflation Linked Bond Index</i>	3.3%	3.0	2.0	4.0	\$596.7	1.92 <i>1.60</i>	1.31 <i>0.94</i>	3.77 <i>3.80</i>	8.00 <i>7.21</i>	8.44 <i>8.09</i>	1.48 <i>1.66</i>	-0.03 <i>0.00</i>	2.70 <i>2.69</i>	3.79 <i>3.51</i>
Liquidity Fund⁽²⁾ <i>One Month Libor</i>	8.9%	6.0	5.0	7.0	\$1,602.2	0.16 <i>0.10</i>	0.22 <i>0.31</i>	0.65 <i>0.51</i>	1.65 <i>0.96</i>	1.78 <i>1.02</i>	0.61 <i>0.55</i>	0.26 <i>0.40</i>	0.42 <i>0.35</i>	0.79 <i>0.63</i>
Real Estate <i>NCREIF Property⁽³⁾</i>	6.1%	7.0	5.0	9.0	\$1,104.3	0.61 <i>N/A</i>	1.73 <i>1.75</i>	3.74 <i>1.75</i>	7.39 <i>5.11</i>	7.50 <i>6.97</i>	9.61 <i>10.17</i>	10.52 <i>10.49</i>	10.38 <i>11.58</i>	2.28 <i>6.42</i>
Private Investment⁽²⁾ <i>S&P 500</i>	6.9%	11.0	8.0	14.0	\$1,244.6	1.04 <i>3.07</i>	2.00 <i>7.65</i>	6.13 <i>10.20</i>	12.71 <i>20.49</i>	12.67 <i>22.87</i>	11.69 <i>10.91</i>	12.48 <i>15.74</i>	12.23 <i>14.63</i>	9.04 <i>8.30</i>
Alternative Investment Fund⁽²⁾ <i>90-Day T-Bill</i>	5.5%	8.0	6.0	10.0	\$985.7	0.79 <i>0.08</i>	1.95 <i>0.26</i>	2.45 <i>0.44</i>	7.01 <i>0.74</i>	7.33 <i>0.79</i>	2.25 <i>0.37</i>	4.09 <i>0.25</i>	N/A <i>N/A</i>	N/A <i>N/A</i>

⁽¹⁾ Funding of fixed income investments with existing managers was completed on January 2, 2018.

⁽²⁾ Overweight to Liquidity Fund due to pending commitments to Private and Alternative Investments

⁽³⁾ Calculated on a quarterly basis



STATE EMPLOYEES' RETIREMENT FUND

Net of All Fees and Expenses
Periods Ending November 30, 2017

Funds <i>Benchmark</i>	Percent Holdings	Policy Weights	Lower Range	Upper Range	Market Value (mil.)	Month	Three Months	Fiscal YTD	Calendar YTD	One Year	Compound, annualized returns			
											Three Year	Five Year	Seven Year	Ten Year
State Employees' Retirement Fund <i>Custom Benchmark</i>	100.0%				\$12,505.3	1.03	3.65	6.16	15.37	16.94	7.44	8.91	8.38	5.35
						1.19	3.97	6.30	14.47	16.41	7.00	8.69	8.44	5.36
Mutual Equity <i>Russell 3000</i>	22.1%	21.0	17.0	25.0	\$2,761.5	2.88	7.87	10.14	20.73	22.87	10.92	15.76	14.31	8.06
						3.04	7.85	10.10	19.93	22.27	10.75	15.63	14.40	8.43
Developed Markets ISF <i>MSCI EAFE IMI 50% Hedged</i> <i>MSCI EAFE IMI Net</i>	20.9%	18.0	14.0	22.0	\$2,610.4	0.52	6.34	8.08	22.87	27.05	9.34	11.51	9.15	3.82
						0.40	5.50	7.73	20.04	24.78	8.03	10.77	8.60	3.11
						1.13	5.30	8.54	23.97	28.12	6.89	8.87	7.43	1.99
Emerging Markets ISF <i>MSCI Emerging Markets IMI</i>	9.5%	9.0	7.0	11.0	\$1,183.1	0.05	1.88	9.12	29.92	30.90	6.12	4.20	3.09	1.29
						0.40	3.57	11.82	32.07	32.29	6.13	4.72	2.97	1.53
Core Fixed Income⁽¹⁾ <i>Barclays U.S. Aggregate Bond Index</i>	5.9%	8.0	6.0	10.0	\$733.2	-0.11	-0.32	0.47	3.00	3.25	2.00	1.82	3.04	3.85
						-0.13	-0.55	0.78	3.07	3.21	2.11	1.98	2.98	3.99
Emerging Market Debt <i>50% JPM EMBI Global Div / 50% JPM GBI EM Global Div</i>	4.8%	4.0	3.0	5.0	\$604.6	0.36	-0.73	2.90	12.51	14.89	4.44	1.93	4.35	5.68
						0.87	-0.53	2.72	11.21	12.99	2.94	1.49	4.62	5.89
High Yield <i>Citigroup US High Yield Market Capped</i>	4.9%	5.0	4.0	6.0	\$617.9	-0.09	1.28	2.28	7.04	9.15	4.96	5.63	6.78	7.43
						-0.17	1.12	2.17	6.63	8.65	5.20	5.61	6.92	7.48
Inflation Linked Bonds <i>Barclays World Gov't Inflation Linked Bond Index</i>	4.9%	5.0	4.0	6.0	\$616.4	1.92	1.31	3.77	8.00	8.44	1.48	-0.02	2.71	3.79
						1.60	0.94	3.80	7.21	8.09	1.66	0.00	2.69	3.51
Liquidity Fund⁽²⁾ <i>One Month Libor</i>	7.2%	4.0	3.0	5.0	\$901.2	0.16	0.24	0.67	1.68	1.81	0.62	0.27	0.43	0.80
						0.10	0.31	0.51	0.96	1.02	0.55	0.40	0.35	0.63
Real Estate <i>NCREIF Property⁽³⁾</i>	6.1%	7.0	5.0	9.0	\$762.2	0.61	1.73	3.74	7.39	7.50	9.61	10.52	10.38	2.28
						N/A	1.75	1.75	5.11	6.97	10.17	10.49	11.58	6.42
Private Investment <i>S&P 500</i>	8.2%	11.0	8.0	14.0	\$1,023.5	1.04	2.00	6.13	12.71	12.67	11.69	12.49	12.23	9.04
						3.07	7.65	10.20	20.49	22.87	10.91	15.74	14.63	8.30
Alternative Investment Fund⁽²⁾ <i>90-Day T-Bill</i>	5.5%	8.0	6.0	10.0	\$691.2	0.79	1.95	2.45	7.01	7.33	2.25	4.09	N/A	N/A
						0.08	0.26	0.44	0.74	0.79	0.37	0.25	N/A	N/A

⁽¹⁾ Funding of fixed income investments with existing managers was completed on January 2, 2018.

⁽²⁾ Overweight to Liquidity Fund due to pending commitments to Private and Alternative Investments

⁽³⁾ Calculated on a quarterly basis



MUNICIPAL EMPLOYEES RETIREMENT FUND

Net of All Fees and Expenses
Periods Ending November 30, 2017

Funds <i>Benchmark</i>	Percent Holdings	Policy Weights	Lower Range	Upper Range	Market Value (mil.)	Month	Three Months	Fiscal YTD	Calendar YTD	One Year	Compound, annualized returns			
											Three Year	Five Year	Seven Year	Ten Year
Municipal Employees' Retirement Fund <i>Custom Benchmark</i>	100.0%				\$2,532.5	0.87	2.91	5.27	13.52	15.02	7.00	7.88	7.61	5.12
						1.00	3.29	5.45	12.88	14.75	6.48	7.78	7.88	5.30
Mutual Equity <i>Russell 3000</i>	16.7%	16.0	13.0	19.0	\$422.3	2.88	7.87	10.15	20.73	22.87	10.93	15.76	14.31	8.06
						3.04	7.85	10.10	19.93	22.27	10.75	15.63	14.40	8.43
Developed Markets ISF <i>MSCI EAFE IMI 50% Hedged</i> <i>MSCI EAFE IMI Net</i>	14.3%	14.0	11.0	17.0	\$362.9	0.52	6.34	8.08	22.87	27.05	9.34	11.51	9.15	3.82
						0.40	5.50	7.73	20.04	24.78	8.03	10.77	8.60	3.11
						1.13	5.30	8.54	23.97	28.12	6.89	8.87	7.43	1.99
Emerging Markets ISF <i>MSCI Emerging Markets IMI</i>	7.0%	7.0	6.0	8.0	\$177.9	0.05	1.88	9.12	29.92	30.90	6.12	4.21	3.09	1.30
						0.40	3.57	11.82	32.07	32.29	6.13	4.72	2.97	1.53
Core Fixed Income <i>Barclays U.S. Aggregate Bond Index</i>	7.6%	8.0	6.0	10.0	\$193.7	-0.11	-0.32	0.47	3.00	3.25	2.00	1.82	3.05	3.86
						-0.13	-0.55	0.78	3.07	3.21	2.11	1.98	2.98	3.99
Emerging Market Debt <i>50% JPM EMBI Global Div / 50% JPM GBI EM Global Div</i>	7.8%	8.0	6.0	10.0	\$197.1	0.36	-0.73	2.90	12.51	14.89	4.44	1.93	4.35	5.68
						0.87	-0.53	2.72	11.21	12.99	2.94	1.49	4.62	5.89
High Yield <i>Citigroup US High Yield Market Capped</i>	12.9%	14.0	11.0	17.0	\$327.7	-0.09	1.28	2.28	7.04	9.15	4.96	5.63	6.78	7.42
						-0.17	1.12	2.17	6.63	8.65	5.20	5.61	6.92	7.48
Inflation Linked Bonds <i>Barclays World Gov't Inflation Linked Bond Index</i>	4.8%	5.0	4.0	6.0	\$122.2	1.92	1.31	3.77	8.00	8.44	1.48	-0.02	2.70	3.79
						1.60	0.94	3.80	7.21	8.09	1.66	0.00	2.69	3.51
Liquidity Fund ⁽¹⁾ <i>One Month Libor</i>	6.6%	3.0	2.0	4.0	\$166.7	0.16	0.24	0.67	1.68	1.80	0.61	0.26	0.44	0.81
						0.10	0.31	0.51	0.96	1.02	0.55	0.40	0.35	0.63
Real Estate <i>NCREIF Property</i> ⁽²⁾	6.3%	7.0	5.0	9.0	\$159.8	0.61	1.73	3.74	7.39	7.50	9.61	10.52	10.38	2.27
						N/A	1.75	1.75	5.11	6.97	10.17	10.49	11.58	6.42
Private Investment <i>S&P 500</i>	8.6%	10.0	7.0	13.0	\$218.6	1.04	2.00	6.13	12.71	12.67	11.69	12.49	12.23	9.03
						3.07	7.65	10.20	20.49	22.87	10.91	15.74	14.63	8.30
Alternative Investment Fund <i>90-Day T-Bill</i>	7.2%	8.0	6.0	10.0	\$183.5	0.79	1.95	2.45	7.01	7.33	2.25	4.09	N/A	N/A
						0.08	0.26	0.44	0.74	0.79	0.37	0.25	N/A	N/A

⁽¹⁾ Overweight to Liquidity Fund due to pending commitments to Private and Alternative Investments

⁽²⁾ Calculated on a quarterly basis