



## TEACHER'S RETIREMENT FUND

Net of All Fees and Expenses  
Periods Ending October 31, 2017

Funds	Percent Holdings	Policy Weights	Lower Range	Upper Range	Market Value (mil.)	Month	Three Months	Fiscal YTD	Calendar YTD	One Year	Three Year <sup>(1)</sup>	Five Year <sup>(1)</sup>	Seven Year <sup>(1)</sup>	Ten Year <sup>(1)</sup>
<b>Teacher's Retirement Fund</b> <i>Custom Benchmark</i>	100.0%				\$17,952.3	1.38	3.47	5.01	14.06	15.90	7.51	8.95	8.10	5.06
						1.42	3.28	5.02	13.10	15.36	6.96	8.64	8.06	4.95
<b>Mutual Equity</b> <i>Russell 3000</i>	21.6%	21.0	17.0	25.0	\$3,878.7	2.38	4.99	7.06	17.35	24.37	10.76	15.28	13.95	7.20
						2.18	4.88	6.85	16.40	23.98	10.53	15.12	14.01	7.61
<b>Developed Markets ISF</b> <i>MSCI EAFE IMI 50% Hedged<sup>(5)</sup></i> <i>MSCI EAFE IMI Net</i>	20.8%	18.0	14.0	22.0	\$3,733.2	2.73	5.53	7.53	22.23	25.91	9.62	11.90	8.68	3.26
						2.31	5.25	7.30	19.56	23.71	8.69	11.22	8.13	2.64
						1.54	4.22	7.33	22.59	24.02	6.92	9.11	6.53	1.51
<b>Emerging Markets ISF</b> <i>MSCI Emerging Markets IMI</i>	10.1%	9.0	7.0	11.0	\$1,807.2	2.39	4.13	9.07	29.85	23.70	6.01	4.43	2.73	0.56
						3.51	5.42	11.37	31.54	25.68	5.59	4.91	2.53	0.75
<b>Core Fixed Income</b> <i>Barclays U.S. Aggregate Bond Index</i>	6.0%	7.0	6.0	8.0	\$1,072.4	0.05	0.47	0.58	3.11	1.63	2.18	1.90	2.97	4.04
						0.06	0.47	0.91	3.20	0.90	2.40	2.04	2.91	4.19
<b>Emerging Market Debt</b> <i>50% JPM EMBI Global Div / 50% JPM GBI EM Global Div<sup>(4)</sup></i>	5.8%	5.0	4.0	6.0	\$1,046.2	-1.16	0.87	2.53	12.10	8.60	3.89	2.10	3.85	5.53
						-1.22	0.37	1.83	10.25	5.78	2.43	1.61	4.01	5.76
<b>High Yield</b> <i>Citigroup US High Yield Market Capped</i>	5.6%	5.0	4.0	6.0	\$997.5	0.49	1.30	2.36	7.14	9.22	4.66	5.74	6.60	7.08
						0.43	1.17	2.35	6.82	8.52	5.00	5.78	6.80	7.28
<b>Inflation Linked Bonds</b> <i>Barclays World Gov't Inflation Linked Bond Index<sup>(6)</sup></i>	3.3%	3.0	2.0	4.0	\$599.6	-0.38	0.22	1.81	5.97	3.14	1.35	-0.30	2.17	4.04
						0.00	0.96	2.17	5.52	3.20	1.22	-0.22	2.21	3.75
<b>Liquidity Fund<sup>(3)</sup></b> <i>One Month Libor</i>	5.9%	6.0	5.0	7.0	\$1,064.2	0.02	0.23	0.49	1.49	1.15	0.48	0.25	0.36	0.82
						0.10	0.31	0.41	0.86	0.96	0.52	0.38	0.34	0.66
<b>Real Estate</b> <i>NCREIF Property<sup>(2)</sup></i>	6.8%	7.0	5.0	9.0	\$1,223.3	1.11	3.15	3.11	6.73	8.86	10.39	10.94	10.98	2.37
						N/A	1.75	1.75	5.11	6.97	10.17	10.49	11.58	6.42
<b>Private Investment</b> <i>S&amp;P 500</i>	8.2%	11.0	8.0	14.0	\$1,466.0	0.48	5.02	5.04	11.55	13.53	12.51	12.68	12.62	9.28
						2.33	4.76	6.92	16.91	23.63	10.77	15.18	14.14	7.51
<b>Alternative Investment Fund</b> <i>90-Day T-Bill</i>	5.9%	8.0	6.0	10.0	\$1,063.9	0.33	1.49	1.65	6.17	7.20	1.96	4.17	N/A	N/A
						0.09	0.27	0.35	0.66	0.72	0.35	0.24	N/A	N/A

<sup>(1)</sup> Compound, annualized returns.

<sup>(2)</sup> Calculated on a quarterly basis only.

<sup>(3)</sup> The Liquidity Fund does not include manager cash and cash held within the other Combined Investment Funds.

<sup>(4)</sup> Benchmarks effective September 2012 linked to the former benchmarks.

<sup>(5)</sup> Benchmark effective July 2014 linked to the former benchmark.

<sup>(6)</sup> Benchmark effective January 2015 linked to the former benchmark.

Sum of individual totals may not equal grand total presented due to rounding.



## STATE EMPLOYEES' RETIREMENT FUND

Net of All Fees and Expenses  
Periods Ending October 31, 2017

Funds	Percent Holdings	Policy Weights	Lower Range	Upper Range	Market Value (mil.)	Month	Three Months	Fiscal YTD	Calendar YTD	One Year	Three Year <sup>(1)</sup>	Five Year <sup>(1)</sup>	Seven Year <sup>(1)</sup>	Ten Year <sup>(1)</sup>
<b>State Employees' Retirement Fund</b> <i>Custom Benchmark</i>	100.0%				\$12,456.5	1.40 1.43	3.53 3.29	5.07 5.05	14.19 13.12	15.97 15.36	7.52 6.98	8.96 8.63	8.14 8.11	4.97 4.95
<b>Mutual Equity</b> <i>Russell 3000</i>	21.6%	21.0	17.0	25.0	\$2,693.2	2.38 2.18	4.99 4.88	7.06 6.85	17.35 16.40	24.37 23.98	10.76 10.53	15.28 15.12	13.95 14.01	7.20 7.61
<b>Developed Markets ISF</b> <i>MSCI EAFE IMI 50% Hedged<sup>(5)</sup></i> <i>MSCI EAFE IMI Net</i>	20.9%	18.0	14.0	22.0	\$2,604.9	2.73 2.31 1.54	5.53 5.25 4.22	7.53 7.30 7.33	22.24 19.56 22.59	25.91 23.71 24.02	9.62 8.69 6.92	11.90 11.22 9.11	8.67 8.13 6.53	3.26 2.64 1.51
<b>Emerging Markets ISF</b> <i>MSCI Emerging Markets IMI</i>	9.9%	9.0	7.0	11.0	\$1,235.1	2.39 3.51	4.13 5.42	9.07 11.37	29.85 31.54	23.70 25.68	6.01 5.59	4.43 4.91	2.73 2.53	0.56 0.75
<b>Core Fixed Income</b> <i>Barclays U.S. Aggregate Bond Index</i>	6.0%	8.0	6.0	10.0	\$746.0	0.05 0.06	0.47 0.47	0.58 0.91	3.11 3.20	1.63 0.90	2.18 2.40	1.90 2.04	2.97 2.91	4.04 4.19
<b>Emerging Market Debt</b> <i>50% JPM EMBI Global Div / 50% JPM GBI EM Global Div<sup>(4)</sup></i>	4.9%	4.0	3.0	5.0	\$607.0	-1.16 -1.22	0.87 0.37	2.53 1.83	12.10 10.25	8.60 5.78	3.89 2.43	2.10 1.61	3.85 4.01	5.53 5.76
<b>High Yield</b> <i>Citigroup US High Yield Market Capped</i>	5.3%	5.0	4.0	6.0	\$655.6	0.49 0.43	1.30 1.17	2.36 2.35	7.14 6.82	9.22 8.52	4.66 5.00	5.74 5.78	6.60 6.80	7.08 7.28
<b>Inflation Linked Bonds</b> <i>Barclays World Gov't Inflation Linked Bond Index<sup>(6)</sup></i>	5.0%	5.0	4.0	6.0	\$619.5	-0.38 0.00	0.22 0.96	1.81 2.17	5.97 5.52	3.14 3.20	1.35 1.22	-0.30 -0.22	2.17 2.21	4.04 3.75
<b>Liquidity Fund<sup>(3)</sup></b> <i>One Month Libor</i>	4.0%	4.0	3.0	5.0	\$501.0	0.03 0.10	0.25 0.31	0.51 0.41	1.52 0.86	1.18 0.96	0.49 0.52	0.26 0.38	0.37 0.34	0.83 0.66
<b>Real Estate</b> <i>NCREIF Property<sup>(2)</sup></i>	6.8%	7.0	5.0	9.0	\$844.3	1.11 N/A	3.15 1.75	3.11 1.75	6.73 5.11	8.86 6.97	10.39 10.17	10.94 10.49	10.98 11.58	2.37 6.42
<b>Private Investment</b> <i>S&amp;P 500</i>	9.7%	11.0	8.0	14.0	\$1,205.5	0.48 2.33	5.02 4.76	5.04 6.92	11.55 16.91	13.53 23.63	12.52 10.77	12.68 15.18	12.62 14.14	9.28 7.51
<b>Alternative Investment Fund</b> <i>90-Day T-Bill</i>	6.0%	8.0	6.0	10.0	\$744.6	0.33 0.09	1.49 0.27	1.65 0.35	6.17 0.66	7.20 0.72	1.96 0.35	4.17 0.24	N/A N/A	N/A N/A

<sup>(1)</sup> Compound, annualized returns.

<sup>(2)</sup> Calculated on a quarterly basis only.

<sup>(3)</sup> The Liquidity Fund does not include manager cash and cash held within the other Combined Investment Funds.

<sup>(4)</sup> Benchmarks effective September 2012 linked to the former benchmarks.

<sup>(5)</sup> Benchmark effective July 2014 linked to the former benchmark.

<sup>(6)</sup> Benchmark effective January 2015 linked to the former benchmark.

Sum of individual totals may not equal grand total presented due to rounding.



**MUNICIPAL EMPLOYEES RETIREMENT FUND**

Net of All Fees and Expenses  
Periods Ending October 31, 2017

<b>Funds</b>	<b>Percent Holdings</b>	<b>Policy Weights</b>	<b>Lower Range</b>	<b>Upper Range</b>	<b>Market Value (mil.)</b>	<b>Month</b>	<b>Three Months</b>	<b>Fiscal YTD</b>	<b>Calendar YTD</b>	<b>One Year</b>	<b>Three Year<sup>(1)</sup></b>	<b>Five Year<sup>(1)</sup></b>	<b>Seven Year<sup>(1)</sup></b>	<b>Ten Year<sup>(1)</sup></b>
<b>Municipal Employees' Retirement Fund</b> <i>Custom Benchmark</i>	100.0%				\$2,515.7	1.05 1.13	3.02 2.80	4.37 4.40	12.54 11.77	13.88 13.47	7.03 6.41	7.94 7.75	7.40 7.58	4.77 4.91
<b>Mutual Equity</b> <i>Russell 3000</i>	16.4%	16.0	13.0	19.0	\$411.9	2.38 2.18	4.99 4.88	7.07 6.85	17.36 16.40	24.38 23.98	10.76 10.53	15.28 15.12	13.95 14.01	7.20 7.61
<b>Developed Markets ISF</b> <i>MSCI EAFE IMI 50% Hedged<sup>(5)</sup></i> <i>MSCI EAFE IMI Net</i>	14.4%	14.0	11.0	17.0	\$362.2	2.73 2.31 1.54	5.53 5.25 4.22	7.53 7.30 7.33	22.24 19.56 22.59	25.91 23.71 24.02	9.62 8.69 6.92	11.90 11.22 9.11	8.68 8.13 6.53	3.26 2.64 1.51
<b>Emerging Markets ISF</b> <i>MSCI Emerging Markets IMI</i>	7.1%	7.0	6.0	8.0	\$179.0	2.39 3.51	4.13 5.42	9.07 11.37	29.85 31.54	23.70 25.68	6.01 5.59	4.44 4.91	2.74 2.53	0.56 0.75
<b>Core Fixed Income</b> <i>Barclays U.S. Aggregate Bond Index</i>	7.8%	8.0	6.0	10.0	\$197.0	0.05 0.06	0.47 0.47	0.58 0.91	3.11 3.20	1.63 0.90	2.18 2.40	1.90 2.04	2.97 2.91	4.04 4.19
<b>Emerging Market Debt</b> <i>50% JPM EMBI Global Div / 50% JPM GBI EM Global Div<sup>(4)</sup></i>	7.9%	8.0	6.0	10.0	\$197.9	-1.16 -1.22	0.87 0.37	2.53 1.83	12.10 10.25	8.60 5.78	3.89 2.43	2.10 1.61	3.85 4.01	5.53 5.76
<b>High Yield</b> <i>Citigroup US High Yield Market Capped</i>	13.8%	14.0	11.0	17.0	\$347.7	0.49 0.43	1.30 1.17	2.36 2.35	7.14 6.82	9.22 8.52	4.66 5.00	5.74 5.78	6.60 6.80	7.08 7.28
<b>Inflation Linked Bonds</b> <i>Barclays World Gov't Inflation Linked Bond Index<sup>(6)</sup></i>	4.9%	5.0	4.0	6.0	\$122.9	-0.38 0.00	0.22 0.96	1.81 2.17	5.97 5.52	3.14 3.20	1.35 1.22	-0.30 -0.22	2.17 2.21	4.04 3.75
<b>Liquidity Fund<sup>(3)</sup></b> <i>One Month Libor</i>	2.5%	3.0	2.0	4.0	\$63.7	0.03 0.10	0.25 0.31	0.51 0.41	1.52 0.86	1.17 0.96	0.48 0.52	0.25 0.38	0.37 0.34	0.84 0.66
<b>Real Estate</b> <i>NCREIF Property<sup>(2)</sup></i>	7.0%	7.0	5.0	9.0	\$177.0	1.11 N/A	3.15 1.75	3.11 1.75	6.73 5.11	8.86 6.97	10.39 10.17	10.94 10.49	10.98 11.58	2.36 6.42
<b>Private Investment</b> <i>S&amp;P 500</i>	10.2%	10.0	7.0	13.0	\$257.5	0.48 2.33	5.02 4.76	5.04 6.92	11.55 16.91	13.53 23.63	12.52 10.77	12.68 15.18	12.62 14.14	9.27 7.51
<b>Alternative Investment Fund</b> <i>90-Day T-Bill</i>	7.9%	8.0	6.0	10.0	\$199.0	0.33 0.09	1.49 0.27	1.65 0.35	6.17 0.66	7.20 0.72	1.96 0.35	4.17 0.24	N/A N/A	N/A N/A

<sup>(1)</sup> Compound, annualized returns.

<sup>(2)</sup> Calculated on a quarterly basis only.

<sup>(3)</sup> The Liquidity Fund does not include manager cash and cash held within the other Combined Investment Funds.

<sup>(4)</sup> Benchmarks effective September 2012 linked to the former benchmarks.

<sup>(5)</sup> Benchmark effective July 2014 linked to the former benchmark.

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