



TEACHER'S RETIREMENT FUND

Net of All Fees and Expenses

10/31/2024

Funds <i>Benchmark</i>	Percent Holdings	Policy Weights	Lower Range	Upper Range	Market Value (mil.)	Compound, annualized returns								
						Month	Three Months	Fiscal YTD	Calendar YTD	One Year	Three Year	Five Year	Seven Year	Ten Year
Teacher's Retirement Fund <i>Policy Benchmark</i> <i>Excess Return</i>					\$26,987.6	-1.50	1.55	2.73	9.28	18.37	3.79	7.30	6.61	6.88
						-0.79	2.76	3.35	11.09	17.27	4.17	7.50	7.06	7.03
						(0.71)	(1.21)	(0.62)	(1.81)	1.10	(0.38)	(0.20)	(0.44)	(0.15)
Global Equities <i>MSCI All Country World IMI Index</i>	49.1%	37.0	23.0	52.0	\$13,254.5	-2.33	2.08	3.65	15.89	32.63	5.34	10.94	9.01	9.18
						-2.32	2.27	4.37	15.10	32.33	5.08	10.81	9.37	8.93
Domestic Equity <i>MSCI USA IMI Index</i>	30.7%				\$8,283.6	-0.83	3.34	4.74	20.37	38.00	7.97	14.77	13.26	12.51
						-0.76	3.42	5.26	19.38	37.40	7.41	14.45	13.16	12.37
Developed Markets Equity <i>MSCI EAFE + Canada Index</i>	13.1%				\$3,526.3	-5.23	-1.12	1.90	7.64	24.06	3.54	7.31	5.41	6.66
						-5.10	-0.85	2.26	7.33	23.84	1.97	6.01	5.21	6.25
Emerging Markets Equity <i>MSCI Emerging Markets IMI</i>	5.4%				\$1,444.5	-3.60	2.89	1.85	11.81	24.67	-0.48	6.16	4.29	4.80
						-4.40	3.23	3.48	11.15	25.09	-0.79	4.70	2.90	3.70
Global Fixed Income <i>Dynamic weighted blend of Core, Non-Core and Emerging Debt</i>	19.9%	15.0	8.0	25.0	\$5,360.5	-1.87	1.07	2.84	3.51	11.43	-0.68	1.05	1.72	2.24
						-1.67	0.94	3.01	3.45	10.77	-1.01	0.79	1.77	2.19
Core Fixed Income <i>50% Barclays U.S. Aggregate Bond / 50% Intermediate Treasury</i>	14.7%	13.0	8.0	18.0	\$3,967.2	-2.17	0.64	2.46	2.45	10.19	-1.94	0.11	1.15	1.45
						-2.06	0.33	2.42	2.17	8.74	-2.42	-0.37	1.00	1.42
Non-Core Fixed Income <i>Bloomberg Barclays U.S. High Yield 2% Issuer Cap Index</i>	5.2%	2.0	0.0	7.0	\$1,393.3	-1.00	2.30	3.94	6.67	14.89	3.17	5.07	4.58	4.60
						-0.54	2.72	4.71	7.42	16.47	2.97	4.44	4.41	4.58
Liquidity Fund <i>U.S. 3-Month T-Bill</i>	0.7%	1.0	0.0	3.0	\$179.1	0.43	1.35	1.78	4.60	5.56	4.05	2.62	2.48	1.88
						0.38	1.30	1.75	4.43	5.39	2.68	1.94	1.98	1.54
Real Estate⁽¹⁾ <i>Open End Diversified Core Equity (NFI-ODCE Index) 1Q in Arrears[^]</i>	6.3%	10.0	5.0	15.0	\$1,697.5	N/A	0.52	0.44	-2.80	-2.76	1.79	3.83	4.70	6.38
						N/A	-0.66	-0.66	-8.06	-9.99	1.02	2.27	3.45	5.47
Infrastructure and Natural Resources⁽¹⁾ <i>U.S. CPI + 400 basis points 1Q in Arrears[^]</i>	3.1%	7.0	2.0	12.0	\$830.3	N/A	1.32	1.27	4.05	4.66	7.38	N/A	N/A	N/A
						N/A	1.30	2.03	5.58	7.00	8.99	N/A	N/A	N/A
Private Investment⁽¹⁾ <i>Russell 3000 + 250 basis points 1Q in Arrears[^]</i>	11.4%	15.0	10.0	20.0	\$3,066.1	N/A	1.25	1.25	6.04	6.85	7.23	14.79	14.75	14.08
						N/A	10.63	5.99	32.26	24.05	10.77	17.23	15.59	14.12
Private Credit⁽¹⁾ <i>S&P / LSTA Leveraged Loan Index + 150 basis points 1Q in Arrears[^]</i>	5.3%	10.0	5.0	15.0	\$1,431.7	N/A	2.51	2.61	7.81	11.11	7.07	N/A	N/A	N/A
						N/A	2.36	3.10	9.47	12.09	7.98	N/A	N/A	N/A
Absolute Return (Risk Mitigating) <i>Dynamic weighted blend of HFRX and public indices ⁽²⁾</i>	4.3%	5.0	0.0	10.0	\$1,168.1	-0.39	-0.65	-0.27	-0.19	-0.13	-1.08	0.19	1.30	1.50
						-1.54	-0.48	-0.41	0.13	-0.69	-1.14	0.64	1.60	1.22

⁽¹⁾ Actual performance, reported one quarter in arrears.

⁽²⁾ A blended benchmark comprised of the weightings of each of the investments utilized within the strategy
Emerging Market Debt legacy asset class rolls up into Non-Core Fixed Income as of April 1, 2024



STATE EMPLOYEES' RETIREMENT FUND

Net of All Fees and Expenses

10/31/2024

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					\$24,121.0	-1.50	1.54	2.70	9.23	18.55	3.98	7.44	6.75	6.98
<i>Policy Benchmark</i>						-0.79	2.76	3.35	11.09	17.27	4.17	7.50	7.06	7.03
<i>Excess Return</i>						(0.71)	(1.22)	(0.64)	(1.86)	1.28	(0.20)	(0.05)	(0.31)	(0.05)
Global Equities	48.9%	37.0	23.0	52.0	\$11,800.8	-2.33	2.08	3.66	15.90	32.69	5.32	10.92	9.00	9.18
<i>MSCI All Country World IMI Index</i>						-2.32	2.27	4.37	15.10	32.33	5.08	10.81	9.37	8.93
Domestic Equity	30.6%				\$7,371.7	-0.83	3.34	4.74	20.37	38.00	8.01	14.80	13.28	12.52
<i>MSCI USA IMI Index</i>						-0.76	3.42	5.26	19.38	37.40	7.41	14.45	13.16	12.37
Developed Markets Equity	13.0%				\$3,144.6	-5.23	-1.12	1.90	7.65	24.08	3.59	7.35	5.44	6.67
<i>MSCI EAFE + Canada Index</i>						-5.10	-0.85	2.26	7.33	23.84	1.97	6.01	5.21	6.25
Emerging Markets Equity	5.3%				\$1,284.6	-3.60	2.89	1.85	11.81	24.67	-0.45	6.18	4.30	4.81
<i>MSCI Emerging Markets IMI</i>						-4.40	3.23	3.48	11.15	25.09	-0.79	4.70	2.90	3.70
Global Fixed Income	19.8%	15.0	8.0	25.0	\$4,781.1	-1.87	1.06	2.84	3.50	11.39	-0.78	0.99	1.70	2.19
<i>Dynamic weighted blend of Core, Non-Core and Emerging Debt</i>						-1.67	0.94	3.01	3.45	10.77	-1.01	0.79	1.77	2.19
Core Fixed Income	14.7%	13.0	8.0	18.0	\$3,538.8	-2.17	0.64	2.46	2.45	10.15	-1.96	0.09	1.14	1.45
<i>50% Barclays U.S. Aggregate Bond / 50% Intermediate Treasury</i>						-2.06	0.33	2.42	2.17	8.74	-2.42	-0.37	1.00	1.42
Non-Core Fixed Income	5.2%	2.0	0.0	7.0	\$1,242.4	-1.00	2.30	3.94	6.67	14.89	3.17	5.07	4.58	4.60
<i>Bloomberg Barclays U.S. High Yield 2% Issuer Cap Index</i>						-0.54	2.72	4.71	7.42	16.47	2.97	4.44	4.41	4.58
Liquidity Fund	1.0%	1.0	0.0	3.0	\$243.9	0.43	1.34	1.81	4.61	5.57	4.02	2.59	2.47	1.87
<i>U.S. 3-Month T-Bill</i>						0.38	1.30	1.75	4.43	5.39	2.68	1.94	1.98	1.54
Real Estate⁽¹⁾	6.3%	10.0	5.0	15.0	\$1,513.3	N/A	0.52	0.44	-2.80	-2.76	1.79	3.83	4.70	6.38
<i>Open End Diversified Core Equity (NFI-ODCE Index) 1Q in Arrears[^]</i>						N/A	-0.66	-0.66	-8.06	-9.99	1.02	2.27	3.45	5.47
Infrastructure and Natural Resources⁽¹⁾	3.1%	7.0	2.0	12.0	\$745.7	N/A	1.32	1.27	4.06	4.67	7.38	N/A	N/A	N/A
<i>U.S. CPI + 400 basis points 1Q in Arrears[^]</i>						N/A	1.30	2.03	5.58	7.00	8.99	N/A	N/A	N/A
Private Investment⁽¹⁾	11.3%	15.0	10.0	20.0	\$2,725.8	N/A	1.25	1.25	6.04	6.85	7.23	14.79	14.75	14.08
<i>Russell 3000 + 250 basis points 1Q in Arrears[^]</i>						N/A	10.63	5.99	32.26	24.05	10.77	17.23	15.59	14.12
Private Credit⁽¹⁾	5.3%	10.0	5.0	15.0	\$1,272.3	N/A	2.51	2.61	7.81	11.11	7.06	N/A	N/A	N/A
<i>S&P / LSTA Leveraged Loan Index + 150 basis points 1Q in Arrears[^]</i>						N/A	2.36	3.10	9.47	12.09	7.98	N/A	N/A	N/A
Absolute Return (Risk Mitigating)	4.3%	5.0	0.0	10.0	\$1,038.0	-0.39	-0.65	-0.27	-0.19	-0.13	-1.07	0.19	1.31	1.50
<i>Dynamic weighted blend of HFRX and public indices ⁽²⁾</i>						-1.54	-0.48	-0.41	0.13	-0.69	-1.14	0.64	1.60	1.22

⁽¹⁾ Actual performance, reported one quarter in arrears.

⁽²⁾ A blended benchmark comprised of the weightings of each of the investments utilized within the strategy
Emerging Market Debt legacy asset class rolls up into Non-Core Fixed Income as of April 1, 2024



MUNICIPAL EMPLOYEES RETIREMENT FUND

Net of All Fees and Expenses

10/31/2024

Funds <i>Benchmark</i>	Percent Holdings	Policy Weights	Lower Range	Upper Range	Market Value (mil.)	Compound, annualized returns								
						Month	Three Months	Fiscal YTD	Calendar YTD	One Year	Three Year	Five Year	Seven Year	Ten Year
Municipal Employees' Retirement Fund					\$3,547.2	-1.50	1.56	2.72	9.24	18.31	3.66	7.28	6.63	6.75
<i>Policy Benchmark</i>						-0.79	2.76	3.35	11.09	17.27	4.17	7.50	7.00	6.83
<i>Excess Return</i>						(0.71)	(1.20)	(0.63)	(1.85)	1.04	(0.51)	(0.22)	(0.38)	(0.08)
Global Equities	48.9%	37.0	23.0	52.0	\$1,734.5	-2.34	2.07	3.65	15.86	32.58	5.38	10.97	9.07	9.22
<i>MSCI All Country World IMI Index</i>						-2.32	2.27	4.37	15.10	32.33	5.08	10.81	9.37	8.93
Domestic Equity	30.5%				\$1,083.3	-0.83	3.34	4.74	20.37	37.99	7.96	14.77	13.26	12.50
<i>MSCI USA IMI Index</i>						-0.76	3.42	5.26	19.38	37.40	7.41	14.45	13.16	12.37
Developed Markets Equity	13.0%				\$462.3	-5.23	-1.12	1.90	7.66	24.08	3.55	7.32	5.42	6.66
<i>MSCI EAFE + Canada Index</i>						-5.10	-0.85	2.26	7.33	23.84	1.97	6.01	5.21	6.25
Emerging Markets Equity	5.3%				\$188.9	-3.60	2.89	1.85	11.81	24.68	-0.50	6.15	4.27	4.79
<i>MSCI Emerging Markets IMI</i>						-4.40	3.23	3.48	11.15	25.09	-0.79	4.70	2.90	3.70
Global Fixed Income	19.8%	15.0	8.0	25.0	\$702.3	-1.87	1.06	2.84	3.50	11.41	-0.66	1.05	1.72	2.36
<i>Dynamic weighted blend of Core, Non-Core and Emerging Debt</i>						-1.67	0.94	3.01	3.45	10.77	-1.01	0.79	1.77	2.19
Core Fixed Income	14.7%	13.0	8.0	18.0	\$519.9	-2.17	0.64	2.46	2.45	10.17	-1.95	0.10	1.14	1.45
<i>50% Barclays U.S. Aggregate Bond / 50% Intermediate Treasury</i>						-2.06	0.33	2.42	2.17	8.74	-2.42	-0.37	1.00	1.42
Non-Core Fixed Income	5.1%	2.0	0.0	7.0	\$182.4	-1.00	2.30	3.94	6.67	14.89	3.17	5.07	4.58	4.59
<i>Bloomberg Barclays U.S. High Yield 2% Issuer Cap Index</i>						-0.54	2.72	4.71	7.42	16.47	2.97	4.44	4.41	4.58
Liquidity Fund	1.1%	1.0	0.0	3.0	\$37.2	0.43	1.33	1.80	4.61	5.57	3.76	2.44	2.36	1.80
<i>U.S. 3-Month T-Bill</i>						0.38	1.30	1.75	4.43	5.39	2.68	1.94	1.98	1.54
Real Estate⁽¹⁾	6.3%	10.0	5.0	15.0	\$221.9	N/A	0.52	0.44	-2.80	-2.76	1.79	3.83	4.70	6.38
<i>Open End Diversified Core Equity (NFI-ODCE Index) 1Q in Arrears[^]</i>						N/A	-0.66	-0.66	-8.06	-9.99	1.02	2.27	3.45	5.47
Infrastructure and Natural Resources⁽¹⁾	3.1%	7.0	2.0	12.0	\$109.8	N/A	1.32	1.27	4.07	4.68	7.38	N/A	N/A	N/A
<i>U.S. CPI + 400 basis points 1Q in Arrears[^]</i>						N/A	1.30	2.03	5.58	7.00	8.99	N/A	N/A	N/A
Private Investment⁽¹⁾	11.3%	15.0	10.0	20.0	\$401.6	N/A	1.25	1.24	6.03	6.85	7.23	14.79	14.75	14.08
<i>Russell 3000 + 250 basis points 1Q in Arrears[^]</i>						N/A	10.63	5.99	32.26	24.05	10.77	17.23	15.59	14.12
Private Credit⁽¹⁾	5.3%	10.0	5.0	15.0	\$187.1	N/A	2.51	2.61	7.81	11.11	7.09	N/A	N/A	N/A
<i>S&P / LSTA Leveraged Loan Index + 150 basis points 1Q in Arrears[^]</i>						N/A	2.36	3.10	9.47	12.09	7.98	N/A	N/A	N/A
Absolute Return (Risk Mitigating)	4.3%	5.0	0.0	10.0	\$152.8	-0.39	-0.65	-0.27	-0.19	-0.13	-1.07	0.19	1.31	1.50
<i>Dynamic weighted blend of HFRX and public indices ⁽²⁾</i>						-1.54	-0.48	-0.41	0.13	-0.69	-1.14	0.64	1.60	1.22

⁽¹⁾ Actual performance, reported one quarter in arrears.

⁽²⁾ A blended benchmark comprised of the weightings of each of the investments utilized within the strategy
Emerging Market Debt legacy asset class rolls up into Non-Core Fixed Income as of April 1, 2024