



(Preliminary Subject to Change)



Employees Retirement System

City of Philadelphia
Employees Retirement System
Executive Summary
January 31, 2020

Total Fund Composite

Market Value: \$5,696.0 Million and 100.0% of Fund

Ending January 31, 2020

	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
Total Fund Composite		5,696,022,023	-113,332,688	100.0	100.0	0
Total Fund w/o Alternative Assets		4,210,184,240	-84,680,497	73.9	71.0	166,008,604
Investment Grade Fixed Income Composite		714,437,595	1,039	12.5	13.0	-26,045,268
Brandywine Global Investment Management	Global Fixed Income	144,464,650	0	2.5		
Garcia Hamilton & Associates	Int. Govt. Fixed Income	179,600,635	-157	3.2		
MetLife Investment Management	Core Plus Fixed Income	49,714,187	1,196	0.9		
Longfellow	Core Plus Fixed Income	175,718,950	0	3.1		
RhumbLine Core Bond Index	Core Fixed Income	164,939,173	0	2.9		
Opportunistic Fixed Income Composite		257,566,242	-4,686,881	4.5	4.0	29,725,361
T - Apollo Franklin Partnership, L.P.	Opportunistic Fixed Income	9,341,224	0	0.2		
T - Avenue Coppers Opportunity Fund LP	Opportunistic Fixed Income	15,330,746	-1,395,985	0.3		
T - KKR-PBPR Capital Partners LP	Opportunistic Fixed Income	42,054,485	-2,579,527	0.7		
MetLife Investment Management - EMD	EM Fixed Income	80,008,500	-340,103	1.4		
Strategic Income Management	High Yield Fixed Income	54,247,849	-371,266	1.0		
Lord Abbett High Yield	High Yield Fixed Income	56,137,547	0	1.0		
U.S. Equity Composite		1,781,444,428	0	31.3	28.0	186,558,262
RhumbLine Russell 1000 Index	Large-Cap Core	1,306,972,425	0	22.9		
O'Shaughnessy Asset Management	Large-Cap Value	30,484,605	0	0.5		
RhumbLine MidCap Index	Mid-Cap Core	167,441,285	-6,641	2.9		
RhumbLine Russell 2000 Index	Small-Cap Core	102,798,259	-4,160	1.8		
Emerald Advisors	Small-Cap Growth	86,125,463	0	1.5		
Fiera Capital	Smid-Cap Growth	29,956,267	0	0.5		
Ariel	Smid-Cap Value	57,519,925	0	1.0		
Non-U.S. Equity Developed Composite		1,122,480,547	-35,000,000	19.7	23.0	-187,604,518
Causeway Capital Management	Non-U.S. Large-Cap Core	80,525,667	-35,000,000	1.4		
Northern Trust MSCI EAFE+Canada	Non-U.S. Large-Cap Core	830,511,403	0	14.6		
Northern Trust International Small Cap	Non-U.S. Small-Cap Core	108,178,301	0	1.9		
Strategic Global Advisors	Non-U.S. Small-Cap Core	33,492,168	0	0.6		
Mackenzie Investments	Non-U.S. Small-Cap Core	65,835,986	0	1.2		
Non-U.S. Equity Emerging Composite		225,329,365	-12	4.0	3.0	54,448,705
RhumbLine Emerging Markets Index	Emerging Markets	225,325,166	-12	4.0		

Total Fund Composite

Market Value: \$5,696.0 Million and 100.0% of Fund

Ending January 31, 2020

	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
Cash Composite		108,926,063	-44,994,643	1.9	0.0	108,926,063
Cash	Cash & Equivalents	108,264,626	-44,988,755	1.9		
Directed Commissions	Cash & Equivalents	661,438	-5,888	0.0		
Absolute Return		28,668,487	0	0.5	0.0	28,668,487
Elizabeth Park Capital Management	Long/Short Hedge Fund	27,240,105	0	0.5		
T - Archview Offshore Fund. LTD	Credit Hedge Fund	1,428,382	0	0.0		
Real Assets Composite		986,631,858	-11,285,897	17.3	17.0	18,308,115
Real Assets - Public Real Estate Composite		62,227,563	0	1.1	1.0	5,267,343
RhumbLine FTSE NAREIT	Real Assets	62,227,563	0	1.1		
Real Assets - Open-End Real Estate Composite		533,874,848	-4,715,938	9.4	10.0	-35,727,354
UBS Trumbull Fund	Core Real Estate	391,793,249	-4,428,096	6.9		
Clarion Lion Properties Fund	Core Real Estate	142,081,599	-287,842	2.5		
Real Assets - Infrastructure Composite		292,971,385	-5	5.1	5.0	8,170,283
RhumbLine Infrastructure Index	Publicly-Traded Infrastructure	196,996,432	-5	3.5		
Rreef Global Infrastructure	Global Infrastructure	95,974,953	0	1.7		
Real Assets - Private Real Estate Composite		80,270,413	-6,569,954	1.4	1.0	23,310,193
Real Assets - Private Energy/Infrastructure Composite		17,287,649	0	0.3	--	17,287,649
Private Assets Composite		470,537,437	-17,366,294	8.3	12.0	-212,985,205
Private Assets - Private Equity	U.S. Private Equity FoF	444,327,458	-17,363,532	7.8		
Private Assets - Private Debt	Mezz. Private Equity	26,209,979	-2,762	0.5		

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$5,696.0 Million and 100.0% of Fund

Ending January 31, 2020

	1 Mo	3 Mo	YTD	Fiscal YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
Total Fund Composite	-0.5%	3.1%	-0.5%	5.2%	11.8%	4.5%	8.8%	9.9%	6.5%	6.9%	7.8%	7.5%	Jul-88
<i>Total Fund Policy Benchmark</i>	<i>-0.5%</i>	<i>3.1%</i>	<i>-0.5%</i>	<i>5.2%</i>	<i>12.4%</i>	<i>5.5%</i>	<i>8.9%</i>	<i>10.3%</i>	<i>7.2%</i>	<i>7.5%</i>	<i>8.9%</i>	<i>8.4%</i>	<i>Jul-88</i>
Total Fund w/o Alternative Assets	-0.7%	3.9%	-0.7%	6.3%	13.0%	3.3%	8.6%	9.9%	6.2%	--	--	6.1%	Jan-14
Investment Grade Fixed Income Composite	1.3%	1.4%	1.3%	3.5%	7.9%	4.1%	4.4%	4.1%	2.4%	2.5%	3.7%	6.1%	Jul-88
<i>Fixed Income Custom Benchmark</i>	<i>1.8%</i>	<i>1.5%</i>	<i>1.8%</i>	<i>3.8%</i>	<i>8.8%</i>	<i>5.5%</i>	<i>4.4%</i>	<i>3.6%</i>	<i>2.9%</i>	<i>3.0%</i>	<i>3.7%</i>	<i>6.2%</i>	<i>Jul-88</i>
Brandywine Global Investment Management	-0.8%	0.4%	-0.8%	1.2%	4.2%	-0.6%	4.3%	4.8%	2.0%	1.9%	4.8%	6.5%	Jan-09
<i>FTSE WGBI TR</i>	<i>1.6%</i>	<i>0.7%</i>	<i>1.6%</i>	<i>2.1%</i>	<i>6.1%</i>	<i>2.5%</i>	<i>4.3%</i>	<i>3.5%</i>	<i>2.4%</i>	<i>1.2%</i>	<i>2.0%</i>	<i>2.5%</i>	<i>Jan-09</i>
Garcia Hamilton & Associates	1.3%	1.3%	1.3%	3.1%	6.6%	4.7%	3.6%	2.9%	2.7%	2.9%	3.9%	5.2%	Aug-00
<i>BBgBarc US Govt/Credit Int TR</i>	<i>1.4%</i>	<i>1.4%</i>	<i>1.4%</i>	<i>3.2%</i>	<i>7.4%</i>	<i>5.0%</i>	<i>3.6%</i>	<i>3.0%</i>	<i>2.5%</i>	<i>2.4%</i>	<i>3.1%</i>	<i>4.4%</i>	<i>Aug-00</i>
MetLife Investment Management	2.1%	2.1%	2.1%	5.0%	10.6%	6.2%	5.4%	5.0%	3.6%	--	--	4.0%	Oct-14
<i>BBgBarc US Aggregate TR</i>	<i>1.9%</i>	<i>1.8%</i>	<i>1.9%</i>	<i>4.4%</i>	<i>9.6%</i>	<i>5.9%</i>	<i>4.6%</i>	<i>3.8%</i>	<i>3.0%</i>	<i>3.1%</i>	<i>3.8%</i>	<i>3.4%</i>	<i>Oct-14</i>
Longfellow	2.1%	2.0%	2.1%	4.7%	10.1%	6.0%	5.0%	4.1%	3.4%	--	--	3.8%	Sep-14
<i>BBgBarc US Aggregate TR</i>	<i>1.9%</i>	<i>1.8%</i>	<i>1.9%</i>	<i>4.4%</i>	<i>9.6%</i>	<i>5.9%</i>	<i>4.6%</i>	<i>3.8%</i>	<i>3.0%</i>	<i>3.1%</i>	<i>3.8%</i>	<i>3.6%</i>	<i>Sep-14</i>
RhumbLine Core Bond Index	2.1%	1.8%	2.1%	4.5%	9.5%	5.8%	4.5%	3.6%	2.8%	2.8%	3.6%	4.3%	Jun-07
<i>BBgBarc US Aggregate TR</i>	<i>1.9%</i>	<i>1.8%</i>	<i>1.9%</i>	<i>4.4%</i>	<i>9.6%</i>	<i>5.9%</i>	<i>4.6%</i>	<i>3.8%</i>	<i>3.0%</i>	<i>3.1%</i>	<i>3.8%</i>	<i>4.4%</i>	<i>Jun-07</i>
Opportunistic Fixed Income Composite	0.3%	2.3%	0.3%	3.0%	6.6%	2.3%	3.9%	5.7%	3.3%	3.4%	--	3.5%	Dec-12
<i>Opportunistic FI Custom Benchmark</i>	<i>0.7%</i>	<i>2.8%</i>	<i>0.7%</i>	<i>4.1%</i>	<i>8.9%</i>	<i>5.4%</i>	<i>5.5%</i>	<i>8.0%</i>	<i>5.5%</i>	<i>5.0%</i>	<i>6.3%</i>	<i>5.1%</i>	<i>Dec-12</i>
T - Apollo Franklin Partnership, L.P.	0.0%	-1.0%	0.0%	-0.1%	6.0%	2.6%	1.2%	1.3%	-2.0%	--	--	-2.1%	May-13
<i>50% BarCap HY / 50% CSFB Lev Loans</i>	<i>0.3%</i>	<i>2.5%</i>	<i>0.3%</i>	<i>3.6%</i>	<i>7.9%</i>	<i>4.9%</i>	<i>5.2%</i>	<i>7.8%</i>	<i>5.3%</i>	<i>5.0%</i>	<i>6.3%</i>	<i>4.8%</i>	<i>May-13</i>
T - Avenue Coppers Opportunity Fund LP	0.0%	0.9%	0.0%	2.1%	1.6%	-5.1%	-1.8%	0.7%	0.2%	--	--	0.8%	Dec-13
<i>Actuarial Rate</i>	<i>0.6%</i>	<i>1.8%</i>	<i>0.6%</i>	<i>4.4%</i>	<i>7.6%</i>	<i>7.6%</i>	<i>7.7%</i>	<i>7.7%</i>	<i>7.7%</i>	<i>7.7%</i>	<i>7.7%</i>	<i>7.7%</i>	<i>Dec-13</i>
T - KKR-PBPR Capital Partners LP	0.0%	-1.3%	0.0%	-2.4%	-4.6%	-3.2%	0.1%	2.6%	1.6%	3.2%	--	3.8%	Jun-12
<i>Actuarial Rate</i>	<i>0.6%</i>	<i>1.8%</i>	<i>0.6%</i>	<i>4.4%</i>	<i>7.6%</i>	<i>7.6%</i>	<i>7.7%</i>	<i>7.7%</i>	<i>7.7%</i>	<i>7.7%</i>	<i>7.7%</i>	<i>7.7%</i>	<i>Jun-12</i>
MetLife Investment Management - EMD	1.2%	4.7%	1.2%	4.9%	10.4%	3.5%	6.7%	9.3%	--	--	--	6.3%	Feb-15
<i>JP Morgan EMBI Global TR</i>	<i>1.7%</i>	<i>3.5%</i>	<i>1.7%</i>	<i>5.3%</i>	<i>11.5%</i>	<i>5.5%</i>	<i>6.2%</i>	<i>7.6%</i>	<i>6.2%</i>	<i>4.4%</i>	<i>6.7%</i>	<i>6.0%</i>	<i>Feb-15</i>
Strategic Income Management	-0.5%	2.3%	-0.5%	3.7%	8.9%	4.8%	5.6%	--	--	--	--	8.3%	Mar-16
<i>ICE BofAML US High Yield TR</i>	<i>0.0%</i>	<i>2.4%</i>	<i>0.0%</i>	<i>3.9%</i>	<i>9.4%</i>	<i>5.4%</i>	<i>5.9%</i>	<i>9.5%</i>	<i>6.0%</i>	<i>5.6%</i>	<i>7.3%</i>	<i>8.5%</i>	<i>Mar-16</i>

Investment Manager

Annualized Performance (Net of Fees)

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Ending January 31, 2020

	1 Mo	3 Mo	YTD	Fiscal YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
Lord Abbett High Yield	0.2%	2.8%	0.2%	4.9%	11.7%	--	--	--	--	--	--	11.7%	Jan-19
ICE BofAML US High Yield TR	0.0%	2.4%	0.0%	3.9%	9.4%	5.4%	5.9%	9.5%	6.0%	5.6%	7.3%	9.4%	Jan-19
U.S. Equity Composite	-0.4%	6.3%	-0.4%	9.1%	19.2%	7.7%	13.1%	15.2%	10.9%	12.5%	13.3%	9.8%	Jul-88
U.S. Equity Custom Benchmark	-0.6%	6.1%	-0.6%	8.9%	18.4%	7.9%	13.4%	15.4%	11.6%	13.3%	13.7%	10.5%	Jul-88
RhumbLine Russell 1000 Index	0.1%	6.9%	0.1%	10.7%	21.4%	9.1%	14.4%	16.1%	12.2%	13.8%	13.8%	8.6%	May-07
Rhumbline Russell 1000 Custom Benchmark	0.1%	6.9%	0.1%	10.7%	21.4%	9.1%	14.4%	16.0%	12.2%	13.8%	--	--	May-07
O'Shaughnessy Asset Management	-4.7%	1.5%	-4.7%	3.5%	12.1%	1.3%	10.1%	12.7%	7.6%	12.0%	--	12.5%	Jun-12
Russell 1000 Value	-2.2%	3.6%	-2.2%	6.5%	14.9%	4.6%	8.6%	12.4%	8.7%	10.9%	11.9%	12.0%	Jun-12
RhumbLine MidCap Index	-0.8%	5.1%	-0.8%	6.7%	17.0%	6.6%	10.9%	--	--	--	--	11.4%	Dec-16
Rhumbline Russell Mid Cap Custom Benchmark	-0.8%	5.1%	-0.8%	6.7%	17.0%	6.6%	10.9%	--	--	--	--	11.5%	Dec-16
RhumbLine Russell 2000 Index	-3.2%	3.6%	-3.2%	3.9%	9.3%	2.8%	7.5%	--	--	--	--	7.4%	Dec-16
Rhumbline Russell 2000 Custom Benchmark	-3.2%	3.6%	-3.2%	2.8%	8.1%	2.1%	7.0%	--	--	--	--	6.9%	Dec-16
Emerald Advisors	0.1%	6.8%	0.1%	3.5%	13.6%	6.4%	13.4%	15.9%	11.4%	14.4%	15.6%	9.9%	Dec-04
Russell 2000 Growth	-1.1%	7.1%	-1.1%	5.6%	13.9%	5.3%	11.5%	15.1%	9.6%	11.9%	13.4%	8.7%	Dec-04
Fiera Capital	-2.6%	5.6%	-2.6%	2.8%	14.8%	5.3%	12.8%	14.4%	9.0%	11.6%	14.6%	13.9%	Dec-09
Russell 2500 Growth	0.1%	7.9%	0.1%	7.2%	18.7%	8.2%	14.3%	16.8%	11.2%	13.1%	14.5%	13.9%	Dec-09
Ariel	-2.2%	4.0%	-2.2%	4.2%	10.8%	0.0%	6.3%	10.5%	--	--	--	10.5%	Jan-16
Russell 2500 Value	-3.6%	1.7%	-3.6%	3.3%	7.1%	1.5%	4.6%	11.3%	6.9%	8.9%	11.1%	11.3%	Jan-16
Non-U.S. Equity Developed Composite	-2.0%	2.8%	-2.0%	5.9%	12.4%	-0.9%	7.5%	8.8%	4.8%	4.7%	5.6%	5.6%	Jan-89
Non-U.S. Equity Developed Custom Benchmark	-2.1%	2.7%	-2.1%	5.4%	12.2%	-1.1%	7.8%	9.3%	5.5%	5.5%	6.1%	--	Jan-89
Causeway Capital Management	-4.2%	2.3%	-4.2%	3.9%	7.1%	-4.0%	5.7%	6.9%	3.3%	4.8%	--	7.3%	Nov-11
MSCI EAFE	-2.1%	2.2%	-2.1%	4.8%	12.1%	-1.0%	7.8%	8.8%	5.1%	5.3%	5.8%	7.1%	Nov-11
MSCI EAFE Value	-3.6%	0.3%	-3.6%	2.1%	4.9%	-4.9%	4.2%	7.3%	2.8%	3.4%	4.1%	5.6%	Nov-11
Northern Trust MSCI EAFE+Canada	-1.6%	2.7%	-1.6%	5.5%	13.3%	0.3%	8.3%	9.6%	5.6%	5.3%	6.3%	3.3%	Mar-07
Northern Trust MSCI EAFE + Canada Custom Benchmark	-1.6%	2.7%	-1.6%	5.6%	13.5%	0.4%	8.5%	9.8%	5.8%	6.0%	6.6%	3.0%	Mar-07

Investment Manager

Annualized Performance (Net of Fees)

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Ending January 31, 2020

	1 Mo	3 Mo	YTD	Fiscal YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
Northern Trust International Small Cap	-2.9%	3.5%	-2.9%	7.7%	12.4%	--	--	--	--	--	--	-0.9%	Mar-18
<i>Northern Trust EAFE Small Cap Custom Benchmark</i>	-2.9%	3.6%	-2.9%	8.2%	12.9%	--	--	--	--	--	--	-0.3%	Mar-18
Strategic Global Advisors	-2.9%	3.6%	-2.9%	4.9%	7.6%	-5.6%	--	--	--	--	--	-2.2%	Nov-17
<i>MSCI World ex USA Small Cap</i>	-2.9%	3.9%	-2.9%	7.9%	12.3%	-2.4%	8.1%	10.2%	7.7%	7.2%	7.9%	1.2%	Nov-17
Mackenzie Investments	-1.8%	3.0%	-1.8%	11.0%	12.9%	-3.1%	--	--	--	--	--	0.6%	Nov-17
<i>MSCI EAFE Small Cap</i>	-2.9%	3.6%	-2.9%	7.8%	12.3%	-2.6%	8.6%	10.1%	8.2%	8.2%	8.5%	1.1%	Nov-17
Non-U.S. Equity Emerging Composite	-5.4%	2.0%	-5.4%	1.9%	2.4%	-6.1%	8.1%	11.8%	4.6%	2.6%	2.9%	8.5%	Jan-09
<i>MSCI Emerging Markets</i>	-4.7%	2.3%	-4.7%	2.1%	3.8%	-5.6%	7.9%	12.0%	4.5%	2.4%	3.8%	9.1%	Jan-09
RhumbLine Emerging Markets Index	-5.4%	2.0%	-5.4%	1.9%	2.4%	-6.1%	8.1%	11.8%	4.6%	2.4%	--	2.4%	Feb-13
<i>MSCI Emerging Markets</i>	-4.7%	2.3%	-4.7%	2.1%	3.8%	-5.6%	7.9%	12.0%	4.5%	2.4%	3.8%	2.4%	Feb-13

Investment Manager

Annualized Performance (Net of Fees)

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Ending January 31, 2020

	1 Mo	3 Mo	YTD	Fiscal YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
Absolute Return	-4.8%	0.8%	-4.8%	-1.5%	0.3%	-7.1%	-0.8%	1.8%	0.2%	1.7%	2.0%	2.2%	Sep-05
<i>HFRI Fund of Funds Composite Index</i>	0.3%	2.9%	0.3%	2.5%	6.0%	1.0%	3.7%	3.8%	2.4%	3.2%	2.9%	2.6%	Sep-05
Elizabeth Park Capital Management	-5.0%	0.8%	-5.0%	-0.1%	2.0%	-6.0%	0.2%	6.5%	6.4%	--	--	5.6%	May-14
<i>HFRI Event Driven Index</i>	0.5%	4.7%	0.5%	7.8%	7.8%	-2.1%	0.9%	4.7%	1.8%	1.8%	1.8%	0.0%	May-14
T - Archview Offshore Fund, LTD	0.0%	0.9%	0.0%	-21.7%	-24.1%	-22.0%	-13.1%	-7.7%	-8.2%	--	--	-6.8%	Mar-14
<i>HFRI ED: Distressed/Restructuring Index</i>	-0.1%	0.2%	-0.1%	-1.9%	-0.2%	-0.1%	1.8%	6.3%	3.0%	3.2%	4.3%	1.6%	Mar-14
Real Assets Composite	0.4%	1.7%	0.4%	3.8%	6.4%	5.9%	5.7%	8.9%	3.6%	5.9%	--	6.3%	Dec-12
<i>Real Assets Benchmark</i>	0.4%	1.5%	0.4%	3.9%	8.1%	6.6%	4.3%	9.1%	0.2%	2.4%	--	3.1%	Dec-12
Real Assets - Public Real Estate Composite	1.3%	0.3%	1.3%	9.3%	16.8%	13.4%	10.6%	11.2%	7.4%	10.0%	--	10.0%	Jan-13
<i>FTSE NAREIT All Equity REIT Custom Benchmark</i>	1.3%	0.3%	1.3%	3.0%	10.1%	10.2%	8.5%	9.6%	6.2%	--	--	--	Jan-13
RhumbLine FTSE NAREIT	1.3%	0.3%	1.3%	9.3%	16.8%	13.4%	10.6%	11.2%	7.4%	--	--	8.6%	May-13
<i>FTSE NAREIT All Equity REIT Custom Benchmark</i>	1.3%	0.3%	1.3%	3.0%	10.1%	10.2%	8.5%	9.6%	6.2%	--	--	7.7%	May-13
Real Assets - Open-End Real Estate Composite	0.0%	0.4%	0.0%	1.3%	-0.6%	3.0%	3.8%	--	--	--	--	3.8%	Jan-17
<i>NFI</i>	0.0%	0.8%	0.0%	2.4%	4.0%	5.5%	6.0%	6.4%	7.8%	9.0%	10.4%	6.0%	Jan-17
UBS Trumbull Fund	0.0%	-0.1%	0.0%	0.6%	-2.8%	1.6%	2.9%	--	--	--	--	2.9%	Jan-17
<i>NFI</i>	0.0%	0.8%	0.0%	2.4%	4.0%	5.5%	6.0%	6.4%	7.8%	9.0%	10.4%	6.0%	Jan-17
Clarion Lion Properties Fund	0.0%	1.8%	0.0%	3.3%	6.2%	7.6%	--	--	--	--	--	7.6%	Feb-18
<i>NFI</i>	0.0%	0.8%	0.0%	2.4%	4.0%	5.5%	6.0%	6.4%	7.8%	9.0%	10.4%	5.5%	Feb-18
Real Assets - Infrastructure Composite	1.0%	5.1%	1.0%	8.3%	19.9%	10.3%	--	--	--	--	--	10.2%	Mar-17
<i>Dow Jones Brookfield Global Infrastructure Index</i>	1.5%	5.2%	1.5%	8.2%	19.4%	9.7%	11.2%	12.0%	6.2%	8.3%	10.9%	9.6%	Mar-17
RhumbLine Infrastructure Index	1.5%	5.4%	1.5%	8.5%	20.1%	10.4%	--	--	--	--	--	10.3%	Mar-17
<i>Dow Jones Brookfield Global Infrastructure Index</i>	1.5%	5.2%	1.5%	8.2%	19.4%	9.7%	11.2%	12.0%	6.2%	8.3%	10.9%	9.6%	Mar-17
Rreef Global Infrastructure	0.0%	4.6%	0.0%	7.9%	20.2%	--	--	--	--	--	--	14.7%	Mar-18
<i>Dow Jones Brookfield Global Infrastructure Index</i>	1.5%	5.2%	1.5%	8.2%	19.4%	9.7%	11.2%	12.0%	6.2%	8.3%	10.9%	13.9%	Mar-18

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$5,696.0 Million and 100.0% of Fund

Ending January 31, 2020

	1 Mo	3 Mo	YTD	Fiscal YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
Real Assets - Private Real Estate Composite	0.0%	0.0%	0.0%	1.9%	5.2%	5.4%	6.2%	6.4%	7.9%	9.5%	9.2%	4.0%	May-06
<i>Real Assets - Private Real Estate Benchmark</i>	<i>0.0%</i>	<i>0.0%</i>	<i>0.0%</i>	<i>1.9%</i>	<i>5.2%</i>	<i>5.4%</i>	<i>6.2%</i>	<i>6.4%</i>	<i>7.9%</i>	<i>9.6%</i>	<i>--</i>	<i>--</i>	<i>May-06</i>
Real Assets - Private Energy/Infrastructure Composite	0.0%	0.0%	0.0%	1.0%	10.8%	20.4%	18.3%	15.2%	5.0%	9.9%	--	8.1%	May-12
<i>Real Assets - Private Energy/Infrastructure Benchmark</i>	<i>0.0%</i>	<i>-0.1%</i>	<i>0.0%</i>	<i>1.0%</i>	<i>10.8%</i>	<i>20.4%</i>	<i>18.3%</i>	<i>15.2%</i>	<i>5.0%</i>	<i>9.9%</i>	<i>--</i>	<i>8.1%</i>	<i>May-12</i>
Private Assets Composite	0.0%	0.0%	0.0%	0.0%	14.2%	15.4%	15.0%	13.4%	12.2%	12.2%	13.1%	8.9%	Mar-87
<i>Private Assets Composite Benchmark</i>	<i>0.0%</i>	<i>0.0%</i>	<i>0.0%</i>	<i>0.0%</i>	<i>14.2%</i>	<i>15.4%</i>	<i>15.0%</i>	<i>13.4%</i>	<i>12.2%</i>	<i>12.2%</i>	<i>13.1%</i>	<i>8.9%</i>	<i>Mar-87</i>

Please note: As of January 1, 2019, the total fund policy index incorporates the adjustments as approved by the Board of Trustees to reflect the fundamental changes adopted as a result of the approved asset allocation. T represents any investment terminated by the Board of Trustees.

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