



(Preliminary Subject to Change)



Employees Retirement System

City of Philadelphia
Employees Retirement System
Executive Summary
August 31, 2019

Total Fund Composite

Market Value: \$5,373.4 Million and 100.0% of Fund

Ending August 31, 2019

	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
Total Fund Composite		5,373,444,523	-187,057,163	100.0	100.0	0
Total Fund w/o Alternative Assets		3,920,699,797	-159,816,051	73.0	69.0	213,023,076
Investment Grade Fixed Income Composite		701,128,982	0	13.0	10.0	163,784,530
Brandywine Global Investment Management	Global Fixed Income	140,109,061	0	2.6		
Garcia Hamilton & Associates	Int. Govt. Fixed Income	177,217,277	0	3.3		
Logan Circle	Core Plus Fixed Income	48,751,212	0	0.9		
Longfellow	Core Plus Fixed Income	172,611,692	0	3.2		
Rhumblin Core Bond Index	Core Fixed Income	162,439,741	0	3.0		
Opportunistic Fixed Income Composite		256,958,964	-7,276,476	4.8	4.0	42,021,183
T - Apollo Franklin Partnership, L.P.	Opportunistic Fixed Income	9,359,721	-2,636,364	0.2		
T - Avenue Coppers Opportunity Fund LP	Opportunistic Fixed Income	19,364,591	-465,328	0.4		
T - KKR-PBPR Capital Partners LP	Opportunistic Fixed Income	46,605,956	-3,934,784	0.9		
Logan Circle - EMD	EM Fixed Income	74,509,313	-240,000	1.4		
Strategic Income Management	High Yield Fixed Income	52,610,935	0	1.0		
Lord Abbett High Yield	High Yield Fixed Income	54,079,338	0	1.0		
U.S. Equity Composite		1,628,667,595	0	30.3	30.0	16,634,238
Rhumblin Russell 1000 Index	Large-Cap Core	1,191,757,928	0	22.2		
O'Shaughnessy Asset Management	Large-Cap Value	28,147,221	0	0.5		
Rhumblin MidCap Index	Mid-Cap Core	154,622,703	-6,252	2.9		
Rhumblin Russell 2000 Index	Small-Cap Core	39,761,257	-1,664	0.7		
Emerald Advisors	Small-Cap Growth	79,858,965	0	1.5		
Fisher Asset Management	Small-Cap Value	54,422,450	0	1.0		
Fiera Capital	Smid-Cap Growth	28,107,716	0	0.5		
Ariel	Smid-Cap Value	51,880,534	0	1.0		
Non-U.S. Equity Developed Composite		1,065,941,375	0	19.8	21.0	-62,481,975
Causeway Capital Management	Non-U.S. Large-Cap Core	103,666,193	0	1.9		
Northern Trust MSCI EAFE+Canada	Non-U.S. Large-Cap Core	771,779,446	0	14.4		
Northern Trust International Small Cap	Non-U.S. Small-Cap Core	96,970,648	0	1.8		
Strategic Global Advisors	Non-U.S. Small-Cap Core	30,349,085	0	0.6		
Mackenzie Investments	Non-U.S. Small-Cap Core	59,351,621	0	1.1		
Non-U.S. Equity Emerging Composite		207,488,144	-35	3.9	4.0	-7,449,637
Rhumblin Emerging Markets Index	Emerging Markets	207,483,955	-35	3.9		

Total Fund Composite

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Ending August 31, 2019

	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
Cash Composite		60,514,738	-152,539,540	1.1	0.0	60,514,738
Cash	Cash & Equivalents	59,852,466	-152,532,416	1.1		
Directed Commissions	Cash & Equivalents	662,272	-7,124	0.0		
Absolute Return		27,682,965	0	0.5	0.0	27,682,965
Elizabeth Park Capital Management	Long/Short Hedge Fund	25,888,678	0	0.5		
T - Archview Offshore Fund. LTD	Credit Hedge Fund	1,794,286	0	0.0		
Real Assets Composite		985,471,282	-8,474,893	18.3	19.0	-35,483,177
Real Assets - Public Real Estate Composite		65,171,152	0	1.2	1.0	11,436,707
Rhumblin FTSE NAREIT	Real Assets	65,171,152	0	1.2		
Real Assets - Open-End Real Estate Composite		534,455,545	-4,715,735	9.9	11.0	-56,623,353
UBS Trumbull Fund	Core Real Estate	396,867,343	-4,428,096	7.4		
Clarion Lion Properties Fund	Core Real Estate	137,588,202	-287,639	2.6		
Real Assets - Infrastructure Composite		274,413,646	0	5.1	5.0	5,741,419
Rhumblin Infrastructure Index	Publicly-Traded Infrastructure	184,148,944	0	3.4		
Rreef Global Infrastructure	Global Infrastructure	90,264,701	0	1.7		
Real Assets - Private Real Estate Composite		96,973,432	-5,100,271	1.8	2.0	-10,495,459
Real Assets - Private Energy/Infrastructure Composite		14,457,508	1,341,114	0.3	--	14,457,508
Private Assets Composite		439,590,479	-18,766,219	8.2	12.0	-205,222,863
Private Assets - Private Equity	U.S. Private Equity FoF	410,431,332	-18,532,918	7.6		
Private Assets - Private Debt	Mezz. Private Equity	29,159,147	-233,301	0.5		

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$5,373.4 Million and 100.0% of Fund

Ending August 31, 2019

	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	-1.2%	2.6%	9.9%	-0.9%	1.9%	5.6%	7.6%	6.6%	4.5%	6.8%	7.6%	7.4%	Jul-88
<i>Total Fund Policy Benchmark</i>	<i>-1.1%</i>	<i>2.7%</i>	<i>10.2%</i>	<i>-0.9%</i>	<i>3.0%</i>	<i>6.2%</i>	<i>7.8%</i>	<i>7.2%</i>	<i>5.3%</i>	<i>7.5%</i>	<i>8.5%</i>	<i>8.3%</i>	<i>Jul-88</i>
Total Fund w/o Alternative Assets	-1.7%	3.5%	11.5%	-1.4%	0.2%	4.3%	7.0%	6.5%	4.0%	--	--	5.1%	Jan-14
Investment Grade Fixed Income Composite	1.8%	3.3%	7.5%	1.7%	8.3%	3.3%	2.9%	3.7%	2.2%	2.4%	3.8%	6.1%	Jul-88
<i>Fixed Income Custom Benchmark</i>	<i>2.6%</i>	<i>4.2%</i>	<i>8.7%</i>	<i>2.7%</i>	<i>9.8%</i>	<i>4.2%</i>	<i>3.0%</i>	<i>3.7%</i>	<i>3.3%</i>	<i>2.8%</i>	<i>3.9%</i>	<i>6.3%</i>	<i>Jul-88</i>
Brandywine Global Investment Management	-0.3%	1.9%	4.9%	-1.6%	4.6%	-0.2%	2.2%	3.8%	1.1%	2.3%	4.9%	6.5%	Jan-09
<i>FTSE WGBI TR</i>	<i>2.7%</i>	<i>4.6%</i>	<i>7.7%</i>	<i>2.2%</i>	<i>8.4%</i>	<i>3.2%</i>	<i>1.9%</i>	<i>3.8%</i>	<i>1.4%</i>	<i>1.0%</i>	<i>2.1%</i>	<i>2.6%</i>	<i>Jan-09</i>
Garcia Hamilton & Associates	1.6%	2.6%	6.2%	1.8%	7.2%	3.5%	2.6%	3.2%	2.9%	3.0%	4.2%	5.2%	Aug-00
<i>BBgBarc US Govt/Credit Int TR</i>	<i>1.8%</i>	<i>2.8%</i>	<i>6.8%</i>	<i>1.7%</i>	<i>8.1%</i>	<i>3.5%</i>	<i>2.6%</i>	<i>2.9%</i>	<i>2.6%</i>	<i>2.2%</i>	<i>3.2%</i>	<i>4.4%</i>	<i>Aug-00</i>
Logan Circle	2.7%	4.5%	10.2%	3.1%	10.5%	5.0%	4.0%	4.6%	--	--	--	3.9%	Oct-14
<i>BBgBarc US Aggregate TR</i>	<i>2.6%</i>	<i>4.1%</i>	<i>9.1%</i>	<i>2.8%</i>	<i>10.2%</i>	<i>4.4%</i>	<i>3.1%</i>	<i>3.8%</i>	<i>3.3%</i>	<i>2.8%</i>	<i>3.9%</i>	<i>3.4%</i>	<i>Oct-14</i>
Longfellow	2.7%	4.1%	9.3%	2.9%	10.1%	4.7%	3.6%	4.1%	--	--	--	3.7%	Sep-14
<i>BBgBarc US Aggregate TR</i>	<i>2.6%</i>	<i>4.1%</i>	<i>9.1%</i>	<i>2.8%</i>	<i>10.2%</i>	<i>4.4%</i>	<i>3.1%</i>	<i>3.8%</i>	<i>3.3%</i>	<i>2.8%</i>	<i>3.9%</i>	<i>3.5%</i>	<i>Sep-14</i>
Rhumblin Core Bond Index	2.7%	4.1%	8.8%	2.9%	9.9%	4.3%	3.0%	3.6%	3.1%	2.5%	3.7%	4.3%	Jun-07
<i>BBgBarc US Aggregate TR</i>	<i>2.6%</i>	<i>4.1%</i>	<i>9.1%</i>	<i>2.8%</i>	<i>10.2%</i>	<i>4.4%</i>	<i>3.1%</i>	<i>3.8%</i>	<i>3.3%</i>	<i>2.8%</i>	<i>3.9%</i>	<i>4.5%</i>	<i>Jun-07</i>
Opportunistic Fixed Income Composite	-1.1%	1.7%	5.5%	-0.5%	2.2%	1.9%	3.5%	3.1%	1.9%	--	--	3.2%	Dec-12
<i>Opportunistic FI Custom Benchmark</i>	<i>0.2%</i>	<i>2.7%</i>	<i>9.6%</i>	<i>1.0%</i>	<i>5.9%</i>	<i>5.0%</i>	<i>5.7%</i>	<i>5.9%</i>	<i>4.5%</i>	<i>5.3%</i>	<i>--</i>	<i>5.0%</i>	<i>Dec-12</i>
T - Apollo Franklin Partnership, L.P.	0.0%	2.1%	8.4%	0.1%	1.1%	1.8%	0.7%	-1.4%	-4.4%	--	--	-2.2%	May-13
<i>50% BarCap HY / 50% CSFB Lev Loans</i>	<i>0.1%</i>	<i>2.0%</i>	<i>8.5%</i>	<i>0.7%</i>	<i>5.0%</i>	<i>4.7%</i>	<i>5.5%</i>	<i>5.7%</i>	<i>4.4%</i>	<i>5.3%</i>	<i>7.1%</i>	<i>4.7%</i>	<i>May-13</i>
T - Avenue Coppers Opportunity Fund LP	0.0%	-0.2%	-0.9%	0.0%	-9.8%	-4.2%	-1.5%	-1.3%	-1.1%	--	--	0.5%	Dec-13
<i>Actuarial Rate</i>	<i>0.6%</i>	<i>1.9%</i>	<i>5.0%</i>	<i>1.2%</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>7.7%</i>	<i>Dec-13</i>
T - KKR-PBPR Capital Partners LP	0.0%	-0.1%	-2.1%	0.1%	-7.6%	-1.6%	1.5%	2.0%	1.5%	4.3%	--	4.4%	Jun-12
<i>Actuarial Rate</i>	<i>0.6%</i>	<i>1.9%</i>	<i>5.0%</i>	<i>1.2%</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>7.7%</i>	<i>Jun-12</i>
Logan Circle - EMD	-3.6%	1.6%	8.1%	-2.6%	9.6%	1.5%	4.4%	6.7%	--	--	--	5.2%	Feb-15
<i>JP Morgan EMBI Global TR</i>	<i>0.5%</i>	<i>4.8%</i>	<i>12.5%</i>	<i>1.7%</i>	<i>13.1%</i>	<i>3.9%</i>	<i>4.1%</i>	<i>6.7%</i>	<i>4.7%</i>	<i>4.4%</i>	<i>7.1%</i>	<i>5.8%</i>	<i>Feb-15</i>
Strategic Income Management	-0.2%	2.2%	7.5%	0.1%	4.8%	5.2%	6.1%	--	--	--	--	8.2%	Mar-16
<i>ICE BofAML US High Yield TR</i>	<i>0.4%</i>	<i>3.4%</i>	<i>11.2%</i>	<i>0.9%</i>	<i>6.7%</i>	<i>4.9%</i>	<i>6.2%</i>	<i>6.9%</i>	<i>4.9%</i>	<i>6.0%</i>	<i>8.5%</i>	<i>8.7%</i>	<i>Mar-16</i>

Investment Manager

Annualized Performance (Net of Fees)

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Ending August 31, 2019

	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 Abnett High Yield	0.2%	3.9%	--	1.0%	--	--	--	--	--	--	--	7.6%	Jan-19
ICE BofAML US High Yield TR	0.4%	3.4%	11.2%	0.9%	6.7%	4.9%	6.2%	6.9%	4.9%	6.0%	8.5%	6.3%	Jan-19
U.S. Equity Composite	-2.6%	5.8%	18.1%	-1.1%	0.0%	9.7%	11.8%	10.9%	8.6%	12.3%	13.0%	9.6%	Jul-88
U.S. Equity Custom Benchmark	-2.6%	5.7%	17.3%	-1.2%	0.7%	10.0%	12.0%	11.9%	9.5%	13.0%	13.3%	10.3%	Jul-88
Rhumbline Russell 1000 Index	-1.8%	6.7%	18.6%	-0.3%	2.5%	10.8%	12.7%	12.4%	9.9%	13.4%	13.3%	7.9%	May-07
Rhumbline Russell 1000 Custom Benchmark	-1.8%	6.7%	18.6%	-0.3%	2.5%	10.8%	12.7%	12.4%	9.9%	13.4%	--	--	May-07
O'Shaughnessy Asset Management	-5.6%	3.4%	13.2%	-4.3%	-6.9%	6.3%	9.9%	8.4%	5.6%	11.9%	--	12.1%	Jun-12
Russell 1000 Value	-2.9%	4.9%	13.8%	-2.1%	0.6%	6.4%	8.1%	9.3%	6.6%	11.2%	11.5%	11.5%	Jun-12
Rhumbline MidCap Index	-2.9%	5.3%	19.6%	-1.5%	0.6%	8.9%	--	--	--	--	--	10.0%	Dec-16
Rhumbline Russell Mid Cap Custom Benchmark	-2.9%	5.3%	19.7%	-1.5%	0.8%	9.0%	--	--	--	--	--	10.1%	Dec-16
Rhumbline Russell 2000 Index	-4.9%	2.5%	11.9%	-4.3%	-12.6%	4.7%	--	--	--	--	--	5.3%	Dec-16
Rhumbline Russell 2000 Custom Benchmark	-4.9%	2.5%	11.9%	-4.3%	-12.8%	4.6%	--	--	--	--	--	5.2%	Dec-16
Emerald Advisors	-5.7%	1.6%	20.7%	-3.8%	-8.7%	10.5%	13.6%	9.0%	11.0%	14.3%	15.3%	9.7%	Dec-04
Russell 2000 Growth	-4.3%	4.1%	16.3%	-3.4%	-11.0%	7.8%	10.6%	8.8%	8.1%	12.0%	13.1%	8.3%	Dec-04
Fisher Asset Management	-6.3%	3.4%	11.0%	-4.5%	-12.1%	2.9%	8.0%	8.3%	7.3%	10.9%	11.9%	8.7%	May-08
Russell 2000 Value	-5.6%	0.6%	7.3%	-5.4%	-14.9%	1.1%	5.0%	7.2%	4.6%	9.1%	10.0%	6.9%	May-08
Fiera Capital	-4.7%	4.4%	20.6%	-3.4%	-3.8%	10.7%	11.7%	8.5%	6.7%	12.4%	--	13.8%	Dec-09
Russell 2500 Growth	-2.8%	6.4%	22.3%	-1.3%	-3.7%	12.0%	13.2%	11.0%	9.6%	13.4%	14.4%	13.6%	Dec-09
Ariel	-6.5%	1.0%	11.1%	-5.9%	-8.7%	3.3%	5.6%	--	--	--	--	8.6%	Jan-16
Russell 2500 Value	-4.9%	1.9%	10.4%	-4.3%	-10.0%	2.8%	5.5%	7.3%	4.8%	9.9%	11.1%	10.4%	Jan-16
Non-U.S. Equity Developed Composite	-2.3%	2.0%	10.2%	-3.3%	-4.1%	0.1%	5.6%	3.9%	1.3%	5.0%	5.0%	5.3%	Jan-89
Non-U.S. Equity Developed Custom Benchmark	-2.5%	1.8%	10.1%	-3.6%	-4.2%	0.3%	6.0%	4.8%	2.0%	6.3%	5.4%	--	Jan-89
Causeway Capital Management	-4.2%	-1.3%	3.7%	-6.5%	-10.5%	-3.2%	3.4%	1.5%	0.1%	5.3%	--	6.3%	Nov-11
MSCI EAFE	-2.6%	1.9%	9.7%	-3.8%	-3.3%	0.5%	5.9%	4.4%	1.9%	6.1%	5.0%	6.3%	Nov-11
Northern Trust MSCI EAFE+Canada	-2.1%	2.6%	11.5%	-3.1%	-1.7%	1.5%	6.5%	5.0%	2.1%	6.1%	5.7%	2.7%	Mar-07
Northern Trust MSCI EAFE + Canada Custom Benchmark	-2.1%	2.6%	11.6%	-3.1%	-1.6%	1.6%	6.6%	5.3%	2.5%	6.9%	5.8%	2.4%	Mar-07

Investment Manager

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Ending August 31, 2019

	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	-2.7%	0.7%	9.0%	-3.3%	-9.0%	--	--	--	--	--	--	-8.4%	Mar-18
<i>Northern Trust EAFE Small Cap Custom Benchmark</i>	-2.4%	1.1%	9.4%	-3.0%	-8.8%	--	--	--	--	--	--	-7.8%	Mar-18
Strategic Global Advisors	-4.1%	0.0%	6.8%	-4.6%	-12.1%	--	--	--	--	--	--	-7.9%	Nov-17
<i>MSCI World ex USA Small Cap</i>	-2.3%	1.7%	9.8%	-2.8%	-8.6%	-1.1%	5.6%	5.8%	3.3%	7.8%	7.3%	-4.3%	Nov-17
Mackenzie Investments	-0.8%	3.8%	10.0%	0.4%	-8.9%	--	--	--	--	--	--	-4.9%	Nov-17
<i>MSCI EAFE Small Cap</i>	-2.5%	0.9%	9.0%	-3.2%	-9.2%	-1.2%	6.0%	5.8%	4.3%	8.9%	7.7%	-4.7%	Nov-17
Non-U.S. Equity Emerging Composite	-4.8%	-0.2%	3.5%	-6.2%	-4.3%	-2.3%	5.7%	7.5%	0.9%	2.0%	3.2%	8.0%	Jan-09
<i>MSCI Emerging Markets</i>	-4.9%	-0.2%	3.9%	-6.0%	-4.4%	-2.5%	5.8%	7.2%	0.4%	3.0%	4.1%	8.6%	Jan-09
Rhumblin Emerging Markets Index	-4.8%	-0.2%	3.5%	-6.2%	-4.2%	-2.3%	5.7%	7.6%	0.6%	--	--	1.3%	Feb-13
<i>MSCI Emerging Markets</i>	-4.9%	-0.2%	3.9%	-6.0%	-4.4%	-2.5%	5.8%	7.2%	0.4%	3.0%	4.1%	1.2%	Feb-13

Investment Manager

Annualized Performance (Net of Fees)

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Ending August 31, 2019

	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	-5.8%	-1.3%	0.9%	-4.9%	-18.0%	-4.3%	0.5%	-0.7%	-1.0%	1.6%	2.0%	2.0%	Sep-05
<i>HFRI Fund of Funds Composite Index</i>	-0.7%	1.1%	5.7%	-0.5%	0.3%	2.0%	3.4%	2.1%	2.0%	3.4%	2.9%	2.5%	Sep-05
Elizabeth Park Capital Management	-6.2%	-0.8%	1.6%	-5.1%	-17.7%	-3.3%	4.2%	4.8%	5.3%	--	--	5.0%	May-14
<i>HFRX Event Driven Index</i>	0.5%	2.3%	3.2%	0.7%	-4.0%	-4.2%	0.2%	0.9%	-1.7%	1.6%	1.6%	-1.3%	May-14
T - Archview Offshore Fund. LTD	-1.2%	-7.9%	-8.0%	-1.6%	-22.9%	-8.7%	-4.2%	-4.5%	-4.3%	--	--	-3.3%	Mar-14
<i>HFRI ED: Distressed/Restructuring Index</i>	-1.9%	-1.5%	2.5%	-2.2%	-2.3%	1.5%	4.6%	4.0%	1.3%	4.3%	5.5%	1.6%	Mar-14
Real Assets Composite	0.8%	0.7%	6.0%	0.8%	6.0%	5.1%	5.9%	4.7%	1.9%	--	--	6.2%	Dec-12
<i>Real Assets Benchmark</i>	0.7%	1.8%	7.6%	0.7%	7.3%	5.5%	5.2%	3.0%	-1.4%	--	--	2.8%	Dec-12
Real Assets - Public Real Estate Composite	4.1%	7.3%	26.2%	5.8%	15.8%	10.9%	7.8%	11.9%	10.3%	--	--	10.1%	Jan-13
<i>FTSE NAREIT All Equity REIT Custom Benchmark</i>	4.1%	7.3%	26.2%	5.8%	15.8%	11.0%	7.9%	12.0%	9.4%	--	--	--	Jan-13
Rhumblin FTSE NAREIT	4.1%	7.3%	26.2%	5.8%	15.8%	10.9%	7.8%	11.9%	9.4%	--	--	8.7%	May-13
<i>FTSE NAREIT All Equity REIT Custom Benchmark</i>	4.1%	7.3%	26.2%	5.8%	15.8%	11.0%	7.9%	12.0%	9.4%	--	--	8.7%	May-13
Real Assets - Open-End Real Estate Composite	0.0%	-2.6%	-1.9%	0.0%	1.2%	4.1%	--	--	--	--	--	3.9%	Jan-17
<i>NFI</i>	0.0%	0.3%	2.0%	0.0%	4.2%	5.9%	6.2%	7.0%	8.3%	9.3%	9.4%	6.0%	Jan-17
UBS Trumbull Fund	0.0%	-3.9%	-3.4%	0.0%	-0.6%	3.0%	--	--	--	--	--	3.1%	Jan-17
<i>NFI</i>	0.0%	0.3%	2.0%	0.0%	4.2%	5.9%	6.2%	7.0%	8.3%	9.3%	9.4%	6.0%	Jan-17
Clarion Lion Properties Fund	0.0%	1.1%	2.9%	0.0%	7.0%	--	--	--	--	--	--	7.5%	Feb-18
<i>NFI</i>	0.0%	0.3%	2.0%	0.0%	4.2%	5.9%	6.2%	7.0%	8.3%	9.3%	9.4%	5.5%	Feb-18
Real Assets - Infrastructure Composite	1.8%	5.6%	22.8%	1.5%	14.3%	6.5%	--	--	--	--	--	9.1%	Mar-17
<i>Dow Jones Brookfield Global Infrastructure Index</i>	1.8%	4.2%	21.2%	1.4%	12.6%	5.2%	8.0%	8.0%	3.9%	8.5%	11.4%	7.9%	Mar-17
Rhumblin Infrastructure Index	1.9%	5.4%	22.8%	1.5%	14.4%	6.5%	--	--	--	--	--	9.1%	Mar-17
<i>Dow Jones Brookfield Global Infrastructure Index</i>	1.8%	4.2%	21.2%	1.4%	12.6%	5.2%	8.0%	8.0%	3.9%	8.5%	11.4%	7.9%	Mar-17
Rreef Global Infrastructure	1.8%	5.9%	23.4%	1.5%	14.6%	--	--	--	--	--	--	14.4%	Mar-18
<i>Dow Jones Brookfield Global Infrastructure Index</i>	1.8%	4.2%	21.2%	1.4%	12.6%	5.2%	8.0%	8.0%	3.9%	8.5%	11.4%	12.3%	Mar-18

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$5,373.4 Million and 100.0% of Fund

Ending August 31, 2019

	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%	1.9%	3.3%	0.0%	6.3%	6.2%	7.2%	7.4%	7.7%	10.0%	8.3%	4.0%	May-06
<i>Real Assets - Private Real Estate Benchmark</i>	<i>0.0%</i>	<i>1.9%</i>	<i>3.3%</i>	<i>0.0%</i>	<i>6.3%</i>	<i>6.2%</i>	<i>7.2%</i>	<i>7.4%</i>	<i>7.7%</i>	<i>10.0%</i>	<i>--</i>	<i>--</i>	<i>May-06</i>
Real Assets - Private Energy/Infrastructure Composite	0.0%	2.4%	9.6%	0.0%	21.2%	26.6%	17.9%	9.2%	-2.7%	8.8%	--	8.5%	May-12
<i>Real Assets - Private Energy/Infrastructure Benchmark</i>	<i>0.0%</i>	<i>2.4%</i>	<i>9.6%</i>	<i>0.0%</i>	<i>21.2%</i>	<i>26.6%</i>	<i>17.9%</i>	<i>9.2%</i>	<i>-2.7%</i>	<i>8.8%</i>	<i>--</i>	<i>8.5%</i>	<i>May-12</i>
Private Assets Composite	0.0%	-0.6%	5.8%	0.0%	10.5%	15.6%	13.8%	11.6%	11.2%	12.4%	13.3%	8.7%	Mar-87

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.