



(Preliminary Subject to Change)



**Employees Retirement System**

City of Philadelphia  
Employees Retirement System  
Executive Summary  
**October 31, 2020**

# Total Fund Composite

Market Value: \$5,768.5 Million and 100.0% of Fund

Ending October 31, 2020

	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
<b>Total Fund Composite</b>		<b>5,768,473,515</b>	<b>-67,474,183</b>	<b>100.0</b>	<b>100.0</b>	<b>0</b>
<b>Total Fund w/o Alternative Assets</b>		<b>4,283,773,740</b>	<b>-68,414,495</b>	<b>74.3</b>	<b>71.0</b>	<b>188,157,544</b>
<b>Investment Grade Fixed Income Composite</b>		<b>743,069,943</b>	<b>5,218</b>	<b>12.9</b>	<b>13.0</b>	<b>-6,831,614</b>
Brandywine Global Investment Management	Global Fixed Income	148,417,619	0	2.6		
Garcia Hamilton & Associates	Int. Govt. Fixed Income	187,016,457	0	3.2		
MetLife Investment Management	Core Plus Fixed Income	51,822,704	5,218	0.9		
Longfellow	Core Plus Fixed Income	183,945,843	0	3.2		
RhumbLine Core Bond Index	Core Fixed Income	171,867,319	0	3.0		
<b>Opportunistic Fixed Income Composite</b>		<b>230,121,973</b>	<b>-410,179</b>	<b>4.0</b>	<b>4.0</b>	<b>-616,967</b>
T - Apollo Franklin Partnership, L.P.	Opportunistic Fixed Income	7,202,071	0	0.1		
T - Avenue Coppers Opportunity Fund LP	Opportunistic Fixed Income	13,757,060	0	0.2		
T - KKR-PBPR Capital Partners LP	Opportunistic Fixed Income	20,779,602	-418,326	0.4		
MetLife Investment Management - EMD	EM Fixed Income	77,820,123	90,000	1.3		
Strategic Income Management	High Yield Fixed Income	54,385,743	0	0.9		
Lord Abbett High Yield	High Yield Fixed Income	55,720,631	-97,655	1.0		
<b>U.S. Equity Composite</b>		<b>1,833,911,321</b>	<b>0</b>	<b>31.8</b>	<b>28.0</b>	<b>218,738,736</b>
RhumbLine Russell 1000 Index	Large-Cap Core	1,356,712,688	0	23.5		
O'Shaughnessy Asset Management	Large-Cap Value	27,052,798	0	0.5		
RhumbLine MidCap Index	Mid-Cap Core	165,999,739	-12,655	2.9		
RhumbLine Russell 2000 Index	Small-Cap Core	99,094,139	-7,510	1.7		
Emerald Advisors	Small-Cap Growth	96,468,944	0	1.7		
Fiera Capital	Smid-Cap Growth	36,171,265	0	0.6		
Ariel	Smid-Cap Value	52,242,555	0	0.9		
<b>Non-U.S. Equity Developed Composite</b>		<b>1,040,785,425</b>	<b>0</b>	<b>18.0</b>	<b>23.0</b>	<b>-285,963,483</b>
Causeway Capital Management	Non-U.S. Large-Cap Core	68,100,127	0	1.2		
Northern Trust MSCI EAFE+Canada	Non-U.S. Large-Cap Core	768,603,773	0	13.3		
Northern Trust International Small Cap	Non-U.S. Small-Cap Core	103,261,584	0	1.8		
Strategic Global Advisors	Non-U.S. Small-Cap Core	31,348,191	0	0.5		
Mackenzie Investments	Non-U.S. Small-Cap Core	65,355,118	0	1.1		
<b>Non-U.S. Equity Emerging Composite</b>		<b>237,628,883</b>	<b>0</b>	<b>4.1</b>	<b>3.0</b>	<b>64,574,678</b>
RhumbLine Emerging Markets Index	Emerging Markets	237,624,406	0	4.1		

## Total Fund Composite

Market Value: \$5,768.5 Million and 100.0% of Fund

Ending October 31, 2020

	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
<b>Cash Composite</b>		<b>198,256,194</b>	<b>-68,009,534</b>	<b>3.4</b>	<b>0.0</b>	<b>198,256,194</b>
Cash	Cash & Equivalents	197,620,133	-68,007,089	3.4		
Directed Commissions	Cash & Equivalents	636,060	-2,445	0.0		
<b>Absolute Return</b>		<b>20,453,119</b>	<b>0</b>	<b>0.4</b>	<b>0.0</b>	<b>20,453,119</b>
Elizabeth Park Capital Management	Long/Short Hedge Fund	19,288,208	0	0.3		
T - Archview Offshore Fund. LTD	Credit Hedge Fund	1,164,910	0	0.0		
<b>Real Assets Composite</b>		<b>886,852,374</b>	<b>-12,812,964</b>	<b>15.4</b>	<b>17.0</b>	<b>-93,788,124</b>
<b>Real Assets - Public Real Estate Composite</b>		<b>52,136,834</b>	<b>0</b>	<b>0.9</b>	<b>1.0</b>	<b>-5,547,901</b>
RhumbLine FTSE NAREIT	Real Assets	52,136,834	0	0.9		
<b>Real Assets - Open-End Real Estate Composite</b>		<b>514,190,665</b>	<b>-4,640,111</b>	<b>8.9</b>	<b>10.0</b>	<b>-62,656,686</b>
UBS Trumbull Fund	Core Real Estate	372,612,866	-4,349,387	6.5		
Clarion Lion Properties Fund	Core Real Estate	141,577,799	-290,724	2.5		
<b>Real Assets - Infrastructure Composite</b>		<b>254,992,832</b>	<b>0</b>	<b>4.4</b>	<b>5.0</b>	<b>-33,430,844</b>
RhumbLine Infrastructure Index	Publicly-Traded Infrastructure	166,838,742	0	2.9		
Rreef Global Infrastructure	Global Infrastructure	88,154,091	0	1.5		
<b>Real Assets - Private Real Estate Composite</b>		<b>65,532,042</b>	<b>-8,172,853</b>	<b>1.1</b>	<b>1.0</b>	<b>7,847,307</b>
<b>Private Assets Composite</b>		<b>577,394,283</b>	<b>13,753,276</b>	<b>10.0</b>	<b>12.0</b>	<b>-114,822,538</b>
Private Assets - Private Equity	U.S. Private Equity FoF	534,788,172	13,765,316	9.3		
Private Assets - Private Debt	Mezz. Private Equity	42,606,111	-12,039	0.7		

# Investment Manager

# Annualized Performance (Net of Fees)

Market Value: \$5,768.5 Million and 100.0% of Fund

Ending October 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
<b>Total Fund Composite</b>	<b>-1.2%</b>	<b>0.1%</b>	<b>-2.8%</b>	<b>3.2%</b>	<b>1.4%</b>	<b>6.2%</b>	<b>4.8%</b>	<b>7.3%</b>	<b>6.2%</b>	<b>5.4%</b>	<b>6.5%</b>	<b>7.3%</b>	<b>Jul-88</b>
<i>Total Fund Policy Benchmark</i>	<i>-1.2%</i>	<i>0.2%</i>	<i>-1.4%</i>	<i>3.2%</i>	<i>2.8%</i>	<i>7.5%</i>	<i>5.9%</i>	<i>7.8%</i>	<i>7.0%</i>	<i>6.3%</i>	<i>7.2%</i>	<i>8.2%</i>	<i>Jul-88</i>
<b>Total Fund w/o Alternative Assets</b>	<b>-1.4%</b>	<b>0.4%</b>	<b>-1.8%</b>	<b>4.5%</b>	<b>2.7%</b>	<b>6.7%</b>	<b>4.0%</b>	<b>7.2%</b>	<b>6.1%</b>	<b>--</b>	<b>--</b>	<b>5.2%</b>	<b>Jan-14</b>
<b>Investment Grade Fixed Income Composite</b>	<b>-0.1%</b>	<b>-1.1%</b>	<b>5.2%</b>	<b>1.3%</b>	<b>5.4%</b>	<b>7.7%</b>	<b>4.4%</b>	<b>3.8%</b>	<b>4.0%</b>	<b>3.2%</b>	<b>3.4%</b>	<b>6.0%</b>	<b>Jul-88</b>
<i>Fixed Income Custom Benchmark</i>	<i>-0.4%</i>	<i>-1.2%</i>	<i>6.5%</i>	<i>0.8%</i>	<i>6.1%</i>	<i>8.5%</i>	<i>4.9%</i>	<i>3.9%</i>	<i>4.0%</i>	<i>3.7%</i>	<i>3.5%</i>	<i>6.2%</i>	<i>Jul-88</i>
Brandywine Global Investment Management	0.6%	-1.4%	1.6%	4.4%	2.8%	6.5%	2.5%	3.2%	4.0%	2.7%	3.7%	6.3%	Jan-09
<i>FTSE WGBI TR</i>	<i>-0.2%</i>	<i>-0.8%</i>	<i>6.9%</i>	<i>2.8%</i>	<i>6.0%</i>	<i>7.9%</i>	<i>4.5%</i>	<i>3.4%</i>	<i>3.9%</i>	<i>2.1%</i>	<i>1.7%</i>	<i>2.8%</i>	<i>Jan-09</i>
Garcia Hamilton & Associates	-0.1%	-0.5%	5.4%	0.4%	5.3%	6.5%	4.3%	3.4%	3.5%	3.4%	3.6%	5.2%	Aug-00
<i>BBgBarc US Govt/Credit Int TR</i>	<i>-0.2%</i>	<i>-0.3%</i>	<i>5.7%</i>	<i>0.4%</i>	<i>5.7%</i>	<i>7.2%</i>	<i>4.4%</i>	<i>3.4%</i>	<i>3.4%</i>	<i>3.0%</i>	<i>2.8%</i>	<i>4.5%</i>	<i>Aug-00</i>
MetLife Investment Management	-0.5%	-1.2%	6.2%	0.5%	6.1%	9.0%	5.4%	4.6%	4.7%	--	--	4.2%	Oct-14
<i>BBgBarc US Aggregate TR</i>	<i>-0.4%</i>	<i>-1.3%</i>	<i>6.3%</i>	<i>0.2%</i>	<i>6.2%</i>	<i>8.8%</i>	<i>5.1%</i>	<i>4.0%</i>	<i>4.1%</i>	<i>3.8%</i>	<i>3.6%</i>	<i>3.7%</i>	<i>Oct-14</i>
Longfellow	-0.2%	-1.1%	6.7%	1.4%	6.6%	8.9%	5.3%	4.4%	4.4%	--	--	4.0%	Sep-14
<i>BBgBarc US Aggregate TR</i>	<i>-0.4%</i>	<i>-1.3%</i>	<i>6.3%</i>	<i>0.2%</i>	<i>6.2%</i>	<i>8.8%</i>	<i>5.1%</i>	<i>4.0%</i>	<i>4.1%</i>	<i>3.8%</i>	<i>3.6%</i>	<i>3.8%</i>	<i>Sep-14</i>
RhumbLine Core Bond Index	-0.5%	-1.4%	6.3%	0.0%	6.1%	8.6%	5.0%	3.9%	3.9%	3.6%	3.3%	4.4%	Jun-07
<i>BBgBarc US Aggregate TR</i>	<i>-0.4%</i>	<i>-1.3%</i>	<i>6.3%</i>	<i>0.2%</i>	<i>6.2%</i>	<i>8.8%</i>	<i>5.1%</i>	<i>4.0%</i>	<i>4.1%</i>	<i>3.8%</i>	<i>3.6%</i>	<i>4.5%</i>	<i>Jun-07</i>
<b>Opportunistic Fixed Income Composite</b>	<b>0.5%</b>	<b>0.7%</b>	<b>-9.9%</b>	<b>4.2%</b>	<b>-8.1%</b>	<b>-2.2%</b>	<b>-1.5%</b>	<b>0.5%</b>	<b>1.3%</b>	<b>1.3%</b>	<b>--</b>	<b>1.8%</b>	<b>Dec-12</b>
<i>Opportunistic FI Custom Benchmark</i>	<i>0.2%</i>	<i>0.7%</i>	<i>0.3%</i>	<i>4.1%</i>	<i>2.5%</i>	<i>4.4%</i>	<i>3.8%</i>	<i>4.6%</i>	<i>5.4%</i>	<i>4.4%</i>	<i>5.3%</i>	<i>4.6%</i>	<i>Dec-12</i>
T - Apollo Franklin Partnership, L.P.	0.0%	11.8%	-22.9%	12.1%	-23.6%	-12.7%	-6.6%	-5.8%	-5.8%	-6.0%	--	-5.3%	May-13
<i>50% BarCap HY / 50% CSFB Lev Loans</i>	<i>0.3%</i>	<i>1.4%</i>	<i>0.3%</i>	<i>4.7%</i>	<i>2.5%</i>	<i>4.0%</i>	<i>3.6%</i>	<i>4.5%</i>	<i>5.2%</i>	<i>4.3%</i>	<i>5.3%</i>	<i>4.3%</i>	<i>May-13</i>
T - Avenue Coppers Opportunity Fund LP	0.0%	-3.4%	-10.2%	-3.9%	-9.4%	-6.3%	-6.4%	-3.5%	-2.8%	--	--	-0.8%	Dec-13
<i>Actuarial Rate</i>	<i>0.6%</i>	<i>1.8%</i>	<i>6.3%</i>	<i>2.5%</i>	<i>7.6%</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>Dec-13</i>
T - KKR-PBPR Capital Partners LP	1.0%	1.0%	-48.4%	1.0%	-49.1%	-31.3%	-21.4%	-15.2%	-11.0%	-7.4%	--	-4.4%	Jun-12
<i>Actuarial Rate</i>	<i>0.6%</i>	<i>1.8%</i>	<i>6.3%</i>	<i>2.5%</i>	<i>7.6%</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>Jun-12</i>
MetLife Investment Management - EMD	0.6%	-0.4%	-1.4%	3.3%	2.0%	6.9%	2.5%	4.4%	6.1%	--	--	5.0%	Feb-15
<i>JP Morgan EMBI Global TR</i>	<i>-0.1%</i>	<i>-1.5%</i>	<i>0.3%</i>	<i>2.2%</i>	<i>2.0%</i>	<i>7.7%</i>	<i>3.2%</i>	<i>3.8%</i>	<i>5.3%</i>	<i>4.8%</i>	<i>5.0%</i>	<i>4.9%</i>	<i>Feb-15</i>
Strategic Income Management	0.1%	2.7%	-0.5%	6.4%	2.3%	4.2%	3.9%	5.2%	--	--	--	6.9%	Mar-16
<i>ICE BofA US High Yield TR</i>	<i>0.5%</i>	<i>0.4%</i>	<i>0.1%</i>	<i>5.2%</i>	<i>2.5%</i>	<i>5.4%</i>	<i>3.9%</i>	<i>5.2%</i>	<i>6.1%</i>	<i>4.9%</i>	<i>6.1%</i>	<i>7.1%</i>	<i>Mar-16</i>

## Investment Manager

## Annualized Performance (Net of Fees)

Market Value: \$5,768.5 Million and 100.0% of Fund

Ending October 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	0.8%	-0.1%	-0.4%	6.1%	2.2%	--	--	--	--	--	--	6.2%	Jan-19
ICE BofA US High Yield TR	0.5%	0.4%	0.1%	5.2%	2.5%	5.4%	3.9%	5.2%	6.1%	4.9%	6.1%	5.4%	Jan-19
<b>U.S. Equity Composite</b>	<b>-1.5%</b>	<b>1.6%</b>	<b>2.5%</b>	<b>7.3%</b>	<b>9.4%</b>	<b>11.2%</b>	<b>9.3%</b>	<b>12.8%</b>	<b>10.6%</b>	<b>10.0%</b>	<b>12.1%</b>	<b>9.7%</b>	<b>Jul-88</b>
U.S. Equity Custom Benchmark	-1.2%	1.7%	1.2%	7.1%	8.0%	10.4%	9.1%	12.7%	10.9%	10.7%	12.5%	10.3%	Jul-88
RhumbLine Russell 1000 Index	-2.4%	0.9%	3.9%	6.8%	10.9%	12.6%	10.7%	13.9%	11.9%	11.5%	12.9%	8.4%	May-07
Rhumbline Russell 1000 Custom Benchmark	-2.4%	0.9%	3.8%	6.8%	10.9%	12.6%	10.7%	13.8%	11.8%	11.5%	--	--	May-07
O'Shaughnessy Asset Management	-0.7%	0.1%	-15.6%	3.5%	-10.2%	-1.3%	1.0%	6.3%	5.0%	5.6%	--	9.7%	Jun-12
Russell 1000 Value	-1.3%	0.2%	-12.7%	4.2%	-7.6%	1.4%	1.9%	5.7%	5.8%	6.5%	9.5%	9.4%	Jun-12
RhumbLine MidCap Index	0.6%	2.1%	-1.6%	8.2%	4.2%	8.9%	6.8%	--	--	--	--	8.8%	Dec-16
Rhumbline Russell Mid Cap Custom Benchmark	0.6%	2.2%	-1.6%	8.2%	4.2%	9.0%	6.9%	--	--	--	--	8.9%	Dec-16
RhumbLine Russell 2000 Index	2.1%	4.4%	-6.7%	7.2%	-0.1%	2.5%	2.3%	--	--	--	--	4.9%	Dec-16
Rhumbline Russell 2000 Custom Benchmark	2.1%	4.3%	-6.8%	7.2%	-0.1%	2.4%	2.2%	--	--	--	--	4.8%	Dec-16
Emerald Advisors	1.9%	4.5%	11.6%	11.2%	19.0%	13.9%	10.9%	16.4%	11.9%	11.1%	14.7%	10.2%	Dec-04
Russell 2000 Growth	0.8%	4.4%	4.7%	8.0%	13.4%	9.8%	7.9%	13.3%	10.4%	9.1%	12.0%	8.6%	Dec-04
Fiera Capital	0.6%	8.2%	17.2%	14.5%	27.0%	18.6%	13.6%	17.1%	12.6%	11.2%	13.8%	14.8%	Dec-09
Russell 2500 Growth	1.2%	4.9%	12.9%	10.7%	21.7%	16.6%	12.8%	16.9%	13.3%	11.5%	13.8%	14.1%	Dec-09
Ariel	2.7%	3.8%	-11.5%	7.7%	-5.8%	0.4%	0.9%	5.4%	--	--	--	6.5%	Jan-16
Russell 2500 Value	2.3%	2.8%	-16.5%	5.9%	-11.9%	-3.3%	-2.1%	3.0%	3.9%	4.1%	7.8%	6.2%	Jan-16
<b>Non-U.S. Equity Developed Composite</b>	<b>-3.8%</b>	<b>-1.0%</b>	<b>-9.3%</b>	<b>2.3%</b>	<b>-4.8%</b>	<b>2.7%</b>	<b>-0.8%</b>	<b>4.8%</b>	<b>3.0%</b>	<b>1.8%</b>	<b>3.5%</b>	<b>5.2%</b>	<b>Jan-89</b>
Non-U.S. Equity Developed Custom Benchmark	-3.8%	-0.9%	-10.1%	1.9%	-5.7%	2.1%	-1.0%	4.7%	3.5%	2.3%	4.1%	--	Jan-89
Causeway Capital Management	-3.9%	-4.0%	-19.4%	-2.8%	-13.9%	-5.3%	-6.1%	1.0%	-0.3%	-0.2%	--	4.6%	Nov-11
MSCI EAFE	-4.0%	-1.7%	-10.8%	0.6%	-6.9%	1.7%	-1.2%	4.4%	2.8%	1.9%	3.8%	5.4%	Nov-11
MSCI EAFE Value	-4.0%	-3.1%	-21.6%	-2.9%	-18.4%	-7.2%	-7.4%	-0.5%	-1.1%	-1.5%	1.3%	2.7%	Nov-11
Northern Trust MSCI EAFE+Canada	-3.8%	-1.5%	-9.0%	1.5%	-5.0%	3.4%	0.0%	5.2%	3.7%	2.3%	4.1%	2.5%	Mar-07
Northern Trust MSCI EAFE + Canada Custom Benchmark	-3.8%	-1.5%	-9.0%	1.4%	-4.9%	3.5%	0.1%	5.4%	3.9%	2.9%	4.6%	2.2%	Mar-07

## Investment Manager

## Annualized Performance (Net of Fees)

Market Value: \$5,768.5 Million and 100.0% of Fund

Ending October 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	-3.5%	2.9%	-7.5%	6.3%	-1.4%	3.7%	--	--	--	--	--	-2.5%	Mar-18
<i>Northern Trust EAFE Small Cap Custom Benchmark</i>	-3.5%	3.0%	-7.3%	6.4%	-1.1%	4.1%	--	--	--	--	--	-2.0%	Mar-18
Strategic Global Advisors	-6.0%	-0.1%	-9.7%	5.0%	-3.7%	0.5%	--	--	--	--	--	-4.1%	Nov-17
<i>MSCI World ex USA Small Cap</i>	-3.2%	2.6%	-7.2%	6.6%	-0.7%	3.9%	-0.2%	5.8%	5.4%	4.2%	5.8%	-0.6%	Nov-17
Mackenzie Investments	-2.8%	2.1%	-3.1%	10.3%	1.7%	6.0%	--	--	--	--	--	0.0%	Nov-17
<i>MSCI EAFE Small Cap</i>	-3.5%	3.0%	-7.5%	6.4%	-1.4%	3.6%	-0.4%	6.0%	5.4%	4.7%	6.5%	-0.9%	Nov-17
<b>Non-U.S. Equity Emerging Composite</b>	<b>2.2%</b>	<b>4.0%</b>	<b>-0.3%</b>	<b>12.6%</b>	<b>7.5%</b>	<b>9.7%</b>	<b>1.7%</b>	<b>7.4%</b>	<b>7.9%</b>	<b>3.3%</b>	<b>1.4%</b>	<b>8.4%</b>	<b>Jan-09</b>
<i>MSCI Emerging Markets</i>	2.1%	2.6%	0.9%	11.8%	8.3%	10.0%	1.9%	7.6%	7.9%	3.3%	2.4%	9.0%	Jan-09
RhumbLine Emerging Markets Index	2.2%	4.0%	-0.3%	12.6%	7.5%	9.7%	1.8%	7.5%	8.0%	3.3%	--	2.8%	Feb-13
<i>MSCI Emerging Markets</i>	2.1%	2.6%	0.9%	11.8%	8.3%	10.0%	1.9%	7.6%	7.9%	3.3%	2.4%	2.9%	Feb-13

## Investment Manager

## Annualized Performance (Net of Fees)

Market Value: \$5,768.5 Million and 100.0% of Fund

Ending October 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
<b>Absolute Return</b>	<b>0.0%</b>	<b>-2.1%</b>	<b>-32.0%</b>	<b>-4.2%</b>	<b>-28.1%</b>	<b>-18.2%</b>	<b>-13.3%</b>	<b>-7.4%</b>	<b>-5.9%</b>	<b>-3.9%</b>	<b>-1.8%</b>	<b>-0.2%</b>	<b>Sep-05</b>
<i>HFRI Fund of Funds Composite Index</i>	0.2%	2.2%	2.8%	4.5%	5.4%	4.5%	2.6%	3.9%	3.0%	2.9%	2.8%	2.6%	Sep-05
Elizabeth Park Capital Management	0.0%	-2.2%	-32.8%	-4.4%	-28.6%	-17.5%	-12.8%	-4.5%	-2.4%	--	--	-0.6%	May-14
<i>HFRX Event Driven Index</i>	-0.2%	1.8%	4.3%	2.7%	8.7%	6.0%	0.5%	2.9%	3.1%	1.1%	2.1%	0.6%	May-14
T - Archview Offshore Fund. LTD	0.0%	0.0%	-16.1%	-0.8%	-17.7%	-27.8%	-19.4%	-13.9%	-11.2%	--	--	-8.9%	Mar-14
<i>HFRI ED: Distressed/Restructuring Index</i>	1.4%	5.0%	2.4%	5.7%	2.7%	0.5%	1.7%	3.5%	4.1%	2.4%	3.8%	1.8%	Mar-14
<b>Real Assets Composite</b>	<b>-0.6%</b>	<b>-1.5%</b>	<b>-5.8%</b>	<b>-0.7%</b>	<b>-4.4%</b>	<b>1.5%</b>	<b>2.3%</b>	<b>3.8%</b>	<b>3.7%</b>	<b>3.7%</b>	<b>--</b>	<b>4.9%</b>	<b>Dec-12</b>
<i>Real Assets Benchmark</i>	-0.6%	-0.8%	-4.2%	-0.1%	-3.0%	3.1%	3.3%	4.1%	3.2%	0.8%	--	2.2%	Dec-12
<b>Real Assets - Public Real Estate Composite</b>	<b>-3.3%</b>	<b>-5.8%</b>	<b>-15.2%</b>	<b>-2.2%</b>	<b>-16.0%</b>	<b>2.6%</b>	<b>2.3%</b>	<b>3.7%</b>	<b>4.5%</b>	<b>6.7%</b>	<b>--</b>	<b>6.5%</b>	<b>Jan-13</b>
<i>FTSE NAREIT All Equity REIT Custom Benchmark</i>	-3.3%	-5.8%	-15.1%	-2.2%	-16.0%	2.7%	2.4%	3.8%	4.6%	6.6%	--	--	Jan-13
RhumbLine FTSE NAREIT	-3.3%	-5.8%	-15.2%	-2.2%	-16.0%	2.6%	2.3%	3.7%	4.5%	6.5%	--	5.2%	May-13
<i>FTSE NAREIT All Equity REIT Custom Benchmark</i>	-3.3%	-5.8%	-15.1%	-2.2%	-16.0%	2.7%	2.4%	3.8%	4.6%	6.6%	--	5.3%	May-13
<b>Real Assets - Open-End Real Estate Composite</b>	<b>0.0%</b>	<b>-0.1%</b>	<b>-1.9%</b>	<b>-0.1%</b>	<b>-1.6%</b>	<b>-0.5%</b>	<b>2.0%</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2.5%</b>	<b>Jan-17</b>
<i>NFI</i>	0.0%	0.2%	-0.7%	0.3%	0.1%	2.3%	4.0%	4.7%	5.5%	7.5%	9.1%	4.5%	Jan-17
UBS Trumbull Fund	0.0%	-0.4%	-2.5%	-0.4%	-2.6%	-1.9%	0.9%	--	--	--	--	1.6%	Jan-17
<i>NFI</i>	0.0%	0.2%	-0.7%	0.3%	0.1%	2.3%	4.0%	4.7%	5.5%	7.5%	9.1%	4.5%	Jan-17
Clarion Lion Properties Fund	0.0%	0.5%	-0.4%	0.5%	1.4%	3.8%	--	--	--	--	--	5.4%	Feb-18
<i>NFI</i>	0.0%	0.2%	-0.7%	0.3%	0.1%	2.3%	4.0%	4.7%	5.5%	7.5%	9.1%	3.7%	Feb-18
<b>Real Assets - Infrastructure Composite</b>	<b>-1.3%</b>	<b>-4.5%</b>	<b>-12.1%</b>	<b>-2.4%</b>	<b>-8.5%</b>	<b>5.0%</b>	<b>2.2%</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>3.9%</b>	<b>Mar-17</b>
<i>Dow Jones Brookfield Global Infrastructure Index</i>	-1.6%	-5.1%	-14.7%	-3.2%	-11.5%	3.0%	0.6%	3.5%	3.8%	4.2%	7.2%	2.4%	Mar-17
RhumbLine Infrastructure Index	-1.5%	-4.9%	-14.1%	-3.1%	-10.8%	3.7%	1.3%	--	--	--	--	3.1%	Mar-17
<i>Dow Jones Brookfield Global Infrastructure Index</i>	-1.6%	-5.1%	-14.7%	-3.2%	-11.5%	3.0%	0.6%	3.5%	3.8%	4.2%	7.2%	2.4%	Mar-17
Rreef Global Infrastructure	-1.0%	-3.6%	-8.1%	-1.2%	-4.0%	8.0%	--	--	--	--	--	6.7%	Mar-18
<i>Dow Jones Brookfield Global Infrastructure Index</i>	-1.6%	-5.1%	-14.7%	-3.2%	-11.5%	3.0%	0.6%	3.5%	3.8%	4.2%	7.2%	2.6%	Mar-18

## Investment Manager

## Annualized Performance (Net of Fees)

Market Value: \$5,768.5 Million and 100.0% of Fund

Ending October 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
<b>Real Assets - Private Real Estate Composite</b>	<b>0.0%</b>	<b>3.2%</b>	<b>-0.3%</b>	<b>3.2%</b>	<b>0.4%</b>	<b>3.5%</b>	<b>4.8%</b>	<b>5.3%</b>	<b>6.4%</b>	<b>8.1%</b>	<b>9.2%</b>	<b>3.8%</b>	<b>May-06</b>
<i>Real Assets - Private Real Estate Benchmark</i>	<i>0.0%</i>	<i>3.2%</i>	<i>-0.3%</i>	<i>3.2%</i>	<i>0.4%</i>	<i>3.5%</i>	<i>4.8%</i>	<i>5.3%</i>	<i>6.4%</i>	<i>8.1%</i>	<i>9.2%</i>	<i>3.8%</i>	<i>May-06</i>
<b>Private Assets Composite</b>	<b>0.0%</b>	<b>0.0%</b>	<b>-4.8%</b>	<b>0.0%</b>	<b>1.1%</b>	<b>12.8%</b>	<b>15.8%</b>	<b>13.9%</b>	<b>12.9%</b>	<b>12.4%</b>	<b>13.1%</b>	<b>8.8%</b>	<b>Mar-87</b>
<i>Private Assets Composite Benchmark</i>	<i>0.0%</i>	<i>0.0%</i>	<i>-4.8%</i>	<i>0.0%</i>	<i>1.1%</i>	<i>12.8%</i>	<i>15.8%</i>	<i>13.9%</i>	<i>12.9%</i>	<i>12.4%</i>	<i>13.1%</i>	<i>8.8%</i>	<i>Mar-87</i>
<i>CPI +5%</i>	<i>0.4%</i>	<i>1.7%</i>	<i>5.5%</i>	<i>2.6%</i>	<i>6.2%</i>	<i>6.5%</i>	<i>6.9%</i>	<i>7.0%</i>	<i>6.9%</i>	<i>6.6%</i>	<i>6.8%</i>	<i>--</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.