



(Preliminary Subject to Change)



**Employees Retirement System**

City of Philadelphia  
Employees Retirement System  
Executive Summary  
**October 31, 2018**

# Total Fund Composite

Market Value: \$5,034.8 Million and 100.0% of Fund

Ending October 31, 2018

	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
<b>Total Fund Composite</b>		<b>5,034,830,112</b>	<b>2,406,557</b>	<b>100.0</b>	<b>100.0</b>	<b>0</b>
<b>Total Fund w/o Alternative Assets</b>		<b>3,689,441,891</b>	<b>-60,023,167</b>	<b>73.3</b>	<b>72.9</b>	<b>19,050,739</b>
<b>Investment Grade Fixed Income Composite</b>		<b>637,550,082</b>	<b>-40,000,000</b>	<b>12.7</b>	<b>14.0</b>	<b>-67,326,134</b>
Brandywine Global Investment Management	Global Fixed Income	129,577,110	-25,000,000	2.6		
Garcia Hamilton & Associates	Int. Govt. Fixed Income	164,443,318	0	3.3		
Logan Circle	Core Plus Fixed Income	43,421,737	0	0.9		
Longfellow	Core Plus Fixed Income	154,461,032	0	3.1		
Rhumblin Core Bond Index	Core Fixed Income	145,646,885	-15,000,000	2.9		
<b>Opportunistic Fixed Income Composite</b>		<b>281,267,328</b>	<b>-7,164,590</b>	<b>5.6</b>	<b>6.0</b>	<b>-20,822,478</b>
Apollo Franklin Partnership, L.P.	Opportunistic Fixed Income	15,714,520	-1,363,636	0.3		
Avenue Coppers Opportunity Fund LP	Opportunistic Fixed Income	25,432,427	-3,722,628	0.5		
KKR-PBPR Capital Partners LP	Opportunistic Fixed Income	70,881,747	-2,191,924	1.4		
Logan Circle - EMD	EM Fixed Income	68,354,626	0	1.4		
Strategic Income Management	High Yield Fixed Income	100,512,057	0	2.0		
<b>U.S. Equity Composite</b>		<b>1,453,509,420</b>	<b>-89,966,738</b>	<b>28.9</b>	<b>29.8</b>	<b>-46,869,954</b>
Rhumblin Russell 1000 Index	Large-Cap Core	998,478,326	-80,000,000	19.8		
Aronson+Johnson+Ortiz LP	Large-Cap Value	43,376,220	33,263	0.9		
O'Shaughnessy Asset Management	Large-Cap Value	27,558,051	0	0.5		
Rhumblin MidCap Index	Mid-Cap Core	140,008,631	-10,006,377	2.8		
Rhumblin Russell 2000 Index	Small-Cap Core	39,639,719	-1,819	0.8		
Emerald Advisors	Small-Cap Growth	73,420,186	0	1.5		
Fisher Asset Management	Small-Cap Value	54,135,241	0	1.1		
Fiera Capital	Smid-Cap Growth	25,440,026	0	0.5		
Ariel	Smid-Cap Value	51,373,898	0	1.0		
<b>Non-U.S. Equity Developed Composite</b>		<b>941,733,585</b>	<b>-40,000,000</b>	<b>18.7</b>	<b>16.8</b>	<b>95,882,126</b>
Causeway Capital Management	Non-U.S. Large-Cap Core	107,558,907	0	2.1		
Northern Trust MSCI EAFE+Canada	Non-U.S. Large-Cap Core	646,892,119	-40,000,000	12.8		
Northern Trust International Small Cap	Non-U.S. Small-Cap Core	95,634,216	0	1.9		
Strategic Global Advisors	Non-U.S. Small-Cap Core	30,477,297	0	0.6		
Investors Group	Non-U.S. Small-Cap Core	57,259,699	0	1.1		
<b>Non-U.S. Equity Emerging Composite</b>		<b>197,234,152</b>	<b>-20,000,000</b>	<b>3.9</b>	<b>5.2</b>	<b>-64,577,014</b>
Rhumblin Emerging Markets Index	Emerging Markets	197,229,890	-20,000,000	3.9		

## Total Fund Composite

Market Value: \$5,034.8 Million and 100.0% of Fund

Ending October 31, 2018

	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
<b>Cash Composite</b>		<b>178,147,324</b>	<b>137,108,162</b>	<b>3.5</b>	<b>1.1</b>	<b>122,764,193</b>
Cash	Cash & Equivalents	177,445,975	137,121,975	3.5		
Directed Commissions	Cash & Equivalents	701,349	-13,813	0.0		
<b>Absolute Return</b>		<b>31,415,616</b>	<b>0</b>	<b>0.6</b>	<b>0.5</b>	<b>6,241,465</b>
Elizabeth Park Capital Management	Long/Short Hedge Fund	28,333,465	0	0.6		
Archview Offshore Fund. LTD	Credit Hedge Fund	3,082,151	0	0.1		
<b>Real Assets Composite</b>		<b>833,971,793</b>	<b>62,066,521</b>	<b>16.6</b>	<b>15.6</b>	<b>48,538,295</b>
<b>Real Assets - Public Real Estate Composite</b>		<b>53,474,823</b>	<b>-35,000,000</b>	<b>1.1</b>	<b>1.4</b>	<b>-17,012,799</b>
Rhumblin FTSE NAREIT	Real Assets	53,474,823	-35,000,000	1.1		
<b>Real Assets - Open-End Real Estate Composite</b>		<b>474,675,341</b>	<b>101,850,032</b>	<b>9.4</b>	<b>7.6</b>	<b>92,028,253</b>
UBS Trumbull Fund	Core Real Estate	366,502,221	77,048,184	7.3		
Clarion Lion Properties Fund	Core Real Estate	108,173,120	24,801,848	2.1		
<b>Real Assets - Infrastructure Composite</b>		<b>180,460,577</b>	<b>-6</b>	<b>3.6</b>	<b>4.0</b>	<b>-20,932,628</b>
Rhumblin Infrastructure Index	Publicly-Traded Infrastructure	129,823,392	-6	2.6		
Rreef Global Infrastructure	Global Infrastructure	50,637,184	0	1.0		
<b>Real Assets - Private Real Estate Composite</b>		<b>116,306,976</b>	<b>-2,997,859</b>	<b>2.3</b>	<b>2.6</b>	<b>-14,598,607</b>
<b>Real Assets - Private Energy/Infrastructure Composite</b>		<b>9,054,076</b>	<b>-1,785,645</b>	<b>0.2</b>	<b>--</b>	<b>9,054,076</b>
<b>Private Assets Composite</b>		<b>480,000,812</b>	<b>363,203</b>	<b>9.5</b>	<b>11.0</b>	<b>-73,830,500</b>
Private Assets - Private Equity	U.S. Private Equity FoF	469,003,955	406,644	9.3		
Private Assets - Private Debt	Mezz. Private Equity	10,996,857	-43,441	0.2		

# Investment Manager

# Annualized Performance (Net of Fees)

Market Value: \$5,034.8 Million and 100.0% of Fund

Ending October 31, 2018

	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>-4.7%</b>	<b>-4.2%</b>	<b>-1.2%</b>	<b>-2.7%</b>	<b>1.8%</b>	<b>8.4%</b>	<b>6.2%</b>	<b>4.4%</b>	<b>5.1%</b>	<b>6.8%</b>	<b>7.9%</b>	<b>7.4%</b>	<b>Jul-88</b>
<i>Total Fund Policy Benchmark</i>	<i>-4.4%</i>	<i>-3.7%</i>	<i>-0.1%</i>	<i>-2.0%</i>	<i>2.7%</i>	<i>8.0%</i>	<i>6.6%</i>	<i>5.2%</i>	<i>5.8%</i>	<i>7.5%</i>	<i>9.2%</i>	<i>8.2%</i>	<i>Jul-88</i>
<b>Total Fund w/o Alternative Assets</b>	<b>-6.2%</b>	<b>-5.4%</b>	<b>-3.7%</b>	<b>-3.5%</b>	<b>-1.0%</b>	<b>7.7%</b>	<b>5.7%</b>	<b>3.8%</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>4.6%</b>	<b>Jan-14</b>
<b>Investment Grade Fixed Income Composite</b>	<b>-1.2%</b>	<b>-1.6%</b>	<b>-2.7%</b>	<b>-1.3%</b>	<b>-2.0%</b>	<b>0.0%</b>	<b>1.6%</b>	<b>0.6%</b>	<b>1.5%</b>	<b>1.9%</b>	<b>3.9%</b>	<b>5.9%</b>	<b>Jul-88</b>
<i>BBgBarc US Aggregate TR</i>	<i>-0.8%</i>	<i>-0.8%</i>	<i>-2.4%</i>	<i>-0.8%</i>	<i>-2.1%</i>	<i>-0.6%</i>	<i>1.0%</i>	<i>1.3%</i>	<i>1.8%</i>	<i>1.9%</i>	<i>3.9%</i>	<i>6.1%</i>	<i>Jul-88</i>
Brandywine Global Investment Management	-3.7%	-5.7%	-6.9%	-4.4%	-4.9%	0.0%	2.3%	0.0%	1.2%	2.2%	--	6.3%	Jan-09
<i>FTSE WGBI TR</i>	<i>-1.1%</i>	<i>-2.3%</i>	<i>-3.6%</i>	<i>-2.7%</i>	<i>-2.1%</i>	<i>-0.9%</i>	<i>1.3%</i>	<i>0.1%</i>	<i>-0.2%</i>	<i>-0.3%</i>	<i>2.3%</i>	<i>1.7%</i>	<i>Jan-09</i>
Garcia Hamilton & Associates	0.0%	0.1%	-0.2%	0.1%	-0.1%	0.3%	1.5%	1.7%	2.1%	2.9%	4.9%	5.0%	Aug-00
<i>BBgBarc US Govt/Credit Int TR</i>	<i>-0.1%</i>	<i>0.0%</i>	<i>-0.9%</i>	<i>0.1%</i>	<i>-1.1%</i>	<i>-0.2%</i>	<i>0.9%</i>	<i>1.1%</i>	<i>1.4%</i>	<i>1.6%</i>	<i>3.3%</i>	<i>4.2%</i>	<i>Aug-00</i>
Logan Circle	-0.9%	-0.8%	-1.9%	-0.6%	-1.5%	0.4%	2.0%	1.8%	--	--	--	1.8%	Oct-14
<i>BBgBarc US Aggregate TR</i>	<i>-0.8%</i>	<i>-0.8%</i>	<i>-2.4%</i>	<i>-0.8%</i>	<i>-2.1%</i>	<i>-0.6%</i>	<i>1.0%</i>	<i>1.3%</i>	<i>1.8%</i>	<i>1.9%</i>	<i>3.9%</i>	<i>1.3%</i>	<i>Oct-14</i>
Longfellow	-0.7%	-0.6%	-1.9%	-0.6%	-1.4%	0.2%	1.5%	1.7%	--	--	--	1.8%	Sep-14
<i>BBgBarc US Aggregate TR</i>	<i>-0.8%</i>	<i>-0.8%</i>	<i>-2.4%</i>	<i>-0.8%</i>	<i>-2.1%</i>	<i>-0.6%</i>	<i>1.0%</i>	<i>1.3%</i>	<i>1.8%</i>	<i>1.9%</i>	<i>3.9%</i>	<i>1.5%</i>	<i>Sep-14</i>
Rhumblin Core Bond Index	-0.7%	-0.7%	-2.2%	-0.8%	-1.9%	-0.6%	0.9%	1.0%	1.7%	1.6%	3.7%	3.6%	Jun-07
<i>BBgBarc US Aggregate TR</i>	<i>-0.8%</i>	<i>-0.8%</i>	<i>-2.4%</i>	<i>-0.8%</i>	<i>-2.1%</i>	<i>-0.6%</i>	<i>1.0%</i>	<i>1.3%</i>	<i>1.8%</i>	<i>1.9%</i>	<i>3.9%</i>	<i>3.8%</i>	<i>Jun-07</i>
<b>Opportunistic Fixed Income Composite</b>	<b>-0.9%</b>	<b>-0.8%</b>	<b>-0.2%</b>	<b>-0.3%</b>	<b>0.5%</b>	<b>3.5%</b>	<b>3.9%</b>	<b>1.9%</b>	<b>2.8%</b>	<b>--</b>	<b>--</b>	<b>3.2%</b>	<b>Dec-12</b>
<i>Opportunistic Fixed Income Benchmark</i>	<i>-0.8%</i>	<i>0.4%</i>	<i>2.5%</i>	<i>1.3%</i>	<i>2.7%</i>	<i>4.8%</i>	<i>6.0%</i>	<i>4.3%</i>	<i>4.3%</i>	<i>5.7%</i>	<i>--</i>	<i>4.6%</i>	<i>Dec-12</i>
Apollo Franklin Partnership, L.P.	-1.1%	6.2%	9.5%	5.0%	7.0%	1.6%	-0.8%	-4.6%	-3.2%	--	--	-2.4%	May-13
<i>50% BarCap HY / 50% CSFB Lev Loans</i>	<i>-0.8%</i>	<i>0.4%</i>	<i>2.6%</i>	<i>1.4%</i>	<i>2.9%</i>	<i>5.0%</i>	<i>6.0%</i>	<i>4.4%</i>	<i>4.4%</i>	<i>5.8%</i>	<i>9.3%</i>	<i>4.5%</i>	<i>May-13</i>
Avenue Coppers Opportunity Fund LP	0.0%	1.8%	-1.6%	-1.9%	-0.2%	2.7%	1.9%	1.6%	--	--	--	2.9%	Dec-13
<i>Actuarial Rate</i>	<i>0.6%</i>	<i>1.9%</i>	<i>6.4%</i>	<i>2.5%</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>7.7%</i>	<i>Dec-13</i>
KKR-PBPR Capital Partners LP	0.0%	-1.4%	2.5%	-1.3%	2.9%	4.6%	5.8%	3.9%	4.4%	--	--	6.1%	Jun-12
<i>Actuarial Rate</i>	<i>0.6%</i>	<i>1.9%</i>	<i>6.4%</i>	<i>2.5%</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>7.7%</i>	<i>Jun-12</i>
Logan Circle - EMD	-2.1%	-3.8%	-6.8%	-1.2%	-5.7%	1.8%	5.5%	--	--	--	--	3.9%	Feb-15
<i>JP Morgan EMBI Global TR</i>	<i>-2.2%</i>	<i>-2.4%</i>	<i>-5.6%</i>	<i>-0.4%</i>	<i>-5.3%</i>	<i>0.2%</i>	<i>3.8%</i>	<i>2.7%</i>	<i>3.6%</i>	<i>4.4%</i>	<i>8.8%</i>	<i>3.5%</i>	<i>Feb-15</i>
Strategic Income Management	-0.8%	-0.1%	2.2%	0.8%	3.2%	6.2%	--	--	--	--	--	9.0%	Mar-16
<i>ICE BofAML US High Yield TR</i>	<i>-1.6%</i>	<i>-0.3%</i>	<i>0.9%</i>	<i>0.8%</i>	<i>0.9%</i>	<i>4.9%</i>	<i>6.7%</i>	<i>4.4%</i>	<i>4.7%</i>	<i>6.5%</i>	<i>11.2%</i>	<i>8.5%</i>	<i>Mar-16</i>

## Investment Manager

## Annualized Performance (Net of Fees)

Market Value: \$5,034.8 Million and 100.0% of Fund

Ending October 31, 2018

	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>U.S. Equity Composite</b>	<b>-8.0%</b>	<b>-4.9%</b>	<b>1.3%</b>	<b>-2.0%</b>	<b>5.5%</b>	<b>14.5%</b>	<b>10.2%</b>	<b>8.5%</b>	<b>9.5%</b>	<b>12.8%</b>	<b>13.1%</b>	<b>9.6%</b>	<b>Jul-88</b>
<i>Russell 3000</i>	<i>-7.4%</i>	<i>-4.0%</i>	<i>2.4%</i>	<i>-0.8%</i>	<i>6.6%</i>	<i>15.0%</i>	<i>11.3%</i>	<i>9.5%</i>	<i>10.8%</i>	<i>13.8%</i>	<i>13.3%</i>	<i>10.3%</i>	<i>Jul-88</i>
Rhumblin Russell 1000 Index	-7.2%	-3.7%	2.9%	-0.3%	7.0%	15.1%	11.4%	9.7%	11.0%	13.7%	13.3%	7.6%	May-07
<i>Rhumblin Russell 1000 Custom Benchmark</i>	<i>-7.2%</i>	<i>-3.6%</i>	<i>2.7%</i>	<i>-0.3%</i>	<i>6.9%</i>	<i>15.1%</i>	<i>11.3%</i>	<i>9.7%</i>	<i>11.1%</i>	--	--	--	<i>May-07</i>
Aronson+Johnson+Ortiz LP	-7.4%	-6.5%	-4.6%	-3.2%	-0.4%	10.2%	5.6%	5.2%	7.1%	11.6%	11.2%	7.5%	May-01
<i>Russell 1000 Value</i>	<i>-5.2%</i>	<i>-3.6%</i>	<i>-1.5%</i>	<i>0.2%</i>	<i>3.0%</i>	<i>10.2%</i>	<i>8.9%</i>	<i>6.7%</i>	<i>8.6%</i>	<i>12.4%</i>	<i>11.3%</i>	<i>6.6%</i>	<i>May-01</i>
O'Shaughnessy Asset Management	-8.0%	-7.1%	-1.3%	-3.2%	5.8%	14.4%	9.4%	7.0%	8.6%	--	--	13.4%	Jun-12
<i>Russell 1000 Value</i>	<i>-5.2%</i>	<i>-3.6%</i>	<i>-1.5%</i>	<i>0.2%</i>	<i>3.0%</i>	<i>10.2%</i>	<i>8.9%</i>	<i>6.7%</i>	<i>8.6%</i>	<i>12.4%</i>	<i>11.3%</i>	<i>12.0%</i>	<i>Jun-12</i>
Rhumblin MidCap Index	-8.3%	-6.1%	-1.4%	-3.7%	2.9%	--	--	--	--	--	--	8.9%	Dec-16
<i>Rhumblin Russell Mid Cap Custom Benchmark</i>	<i>-8.3%</i>	<i>-6.1%</i>	<i>-1.5%</i>	<i>-3.7%</i>	<i>2.8%</i>	--	--	--	--	--	--	<i>8.8%</i>	<i>Dec-16</i>
Rhumblin Russell 2000 Index	-10.8%	-9.1%	-0.4%	-7.5%	2.1%	--	--	--	--	--	--	7.6%	Dec-16
<i>Rhumblin Russell 2000 Custom Benchmark</i>	<i>-10.9%</i>	<i>-9.3%</i>	<i>-0.6%</i>	<i>-7.6%</i>	<i>1.9%</i>	--	--	--	--	--	--	<i>7.4%</i>	<i>Dec-16</i>
Emerald Advisors	-13.3%	-8.0%	-0.7%	-7.3%	5.1%	19.0%	10.6%	11.3%	10.0%	15.4%	15.6%	9.7%	Dec-04
<i>Russell 2000 Growth</i>	<i>-12.7%</i>	<i>-9.4%</i>	<i>1.1%</i>	<i>-7.8%</i>	<i>4.1%</i>	<i>16.8%</i>	<i>10.7%</i>	<i>8.9%</i>	<i>8.8%</i>	<i>12.9%</i>	<i>13.9%</i>	<i>8.5%</i>	<i>Dec-04</i>
Fisher Asset Management	-10.4%	-8.5%	-2.3%	-7.7%	-0.7%	13.5%	10.6%	8.8%	8.9%	12.9%	13.5%	9.5%	May-08
<i>Russell 2000 Value</i>	<i>-9.0%</i>	<i>-9.1%</i>	<i>-2.5%</i>	<i>-7.5%</i>	<i>-0.6%</i>	<i>11.4%</i>	<i>10.5%</i>	<i>7.0%</i>	<i>7.2%</i>	<i>11.6%</i>	<i>10.9%</i>	<i>7.9%</i>	<i>May-08</i>
Fiera Capital	-10.9%	-7.5%	-0.6%	-5.8%	4.3%	15.7%	8.7%	6.4%	8.4%	12.6%	--	13.9%	Dec-09
<i>Russell 2500 Growth</i>	<i>-12.0%</i>	<i>-7.4%</i>	<i>1.9%</i>	<i>-5.7%</i>	<i>5.5%</i>	<i>17.2%</i>	<i>11.1%</i>	<i>9.3%</i>	<i>9.5%</i>	<i>13.2%</i>	<i>15.1%</i>	<i>13.6%</i>	<i>Dec-09</i>
Ariel	-10.0%	-8.8%	-4.6%	-6.5%	2.1%	10.7%	--	--	--	--	--	11.2%	Jan-16
<i>Russell 2500 Value</i>	<i>-8.5%</i>	<i>-7.9%</i>	<i>-3.3%</i>	<i>-6.1%</i>	<i>0.3%</i>	<i>9.7%</i>	<i>9.0%</i>	<i>6.4%</i>	<i>7.2%</i>	<i>11.8%</i>	<i>12.1%</i>	<i>13.7%</i>	<i>Jan-16</i>
<b>Non-U.S. Equity Developed Composite</b>	<b>-8.3%</b>	<b>-9.4%</b>	<b>-10.1%</b>	<b>-7.5%</b>	<b>-7.5%</b>	<b>6.8%</b>	<b>3.2%</b>	<b>2.0%</b>	<b>1.4%</b>	<b>4.8%</b>	<b>6.6%</b>	<b>5.4%</b>	<b>Jan-89</b>
<i>MSCI EAFE</i>	<i>-8.0%</i>	<i>-9.0%</i>	<i>-9.3%</i>	<i>-6.7%</i>	<i>-6.9%</i>	<i>7.2%</i>	<i>3.6%</i>	<i>2.7%</i>	<i>2.0%</i>	<i>5.6%</i>	<i>6.9%</i>	<i>4.3%</i>	<i>Jan-89</i>
Causeway Capital Management	-7.8%	-8.6%	-10.7%	-6.5%	-7.6%	7.8%	3.1%	2.2%	1.9%	--	--	7.7%	Nov-11
<i>MSCI EAFE</i>	<i>-8.0%</i>	<i>-9.0%</i>	<i>-9.3%</i>	<i>-6.7%</i>	<i>-6.9%</i>	<i>7.2%</i>	<i>3.6%</i>	<i>2.7%</i>	<i>2.0%</i>	<i>5.6%</i>	<i>6.9%</i>	<i>6.5%</i>	<i>Nov-11</i>
Northern Trust MSCI EAFE+Canada	-8.0%	-8.8%	-9.0%	-6.6%	-6.4%	7.2%	4.0%	2.6%	1.9%	5.4%	7.7%	2.4%	Mar-07
<i>Northern Trust MSCI EAFE + Canada Custom Benchmark</i>	<i>-8.0%</i>	<i>-8.8%</i>	<i>-8.9%</i>	<i>-6.6%</i>	<i>-6.3%</i>	<i>7.3%</i>	<i>4.2%</i>	<i>2.9%</i>	<i>2.7%</i>	<i>6.2%</i>	<i>7.7%</i>	<i>2.0%</i>	<i>Mar-07</i>
Northern Trust International Small Cap	-9.6%	-10.9%	--	-10.2%	--	--	--	--	--	--	--	-12.8%	Mar-18
<i>Northern Trust EAFE Small Cap Custom Benchmark</i>	<i>-9.6%</i>	<i>-10.9%</i>	<i>--</i>	<i>-10.3%</i>	<i>--</i>	<i>--</i>	<i>--</i>	<i>--</i>	<i>--</i>	<i>--</i>	<i>--</i>	<i>-12.3%</i>	<i>Mar-18</i>

## Investment Manager

## Annualized Performance (Net of Fees)

Market Value: \$5,034.8 Million and 100.0% of Fund

Ending October 31, 2018

	1 Mo	3 Mo	YTD	Fiscal YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
Strategic Global Advisors	-9.3%	-13.1%	-14.5%	-12.5%	--	--	--	--	--	--	--	-12.3%	Nov-17
<i>MSCI World ex USA Small     Cap</i>	-9.5%	-10.8%	-11.6%	-10.3%	-7.7%	7.8%	6.5%	6.0%	4.3%	7.5%	11.1%	-9.0%	Nov-17
Investors Group	-10.2%	-13.1%	-13.3%	-13.2%	--	--	--	--	--	--	--	-10.5%	Nov-17
<i>MSCI EAFE Small Cap</i>	-9.6%	-11.0%	-11.6%	-10.4%	-7.8%	8.4%	6.6%	7.0%	5.2%	8.8%	11.6%	-9.3%	Nov-17
<b>Non-U.S. Equity Emerging Composite</b>	<b>-8.8%</b>	<b>-11.3%</b>	<b>-15.9%</b>	<b>-9.6%</b>	<b>-12.5%</b>	<b>5.3%</b>	<b>6.8%</b>	<b>1.2%</b>	<b>0.9%</b>	<b>0.8%</b>	<b>--</b>	<b>8.1%</b>	<b>Jan-09</b>
<i>MSCI Emerging Markets</i>	-8.7%	-11.6%	-15.7%	-9.7%	-12.5%	5.2%	6.5%	0.8%	0.8%	1.8%	7.8%	8.8%	Jan-09
Rhumblin Emerging Markets Index	-8.8%	-11.3%	-15.9%	-9.6%	-12.5%	5.3%	6.8%	1.1%	0.8%	--	--	0.5%	Feb-13
<i>MSCI Emerging Markets</i>	-8.7%	-11.6%	-15.7%	-9.7%	-12.5%	5.2%	6.5%	0.8%	0.8%	1.8%	7.8%	0.5%	Feb-13

## Investment Manager

## Annualized Performance (Net of Fees)

Market Value: \$5,034.8 Million and 100.0% of Fund

Ending October 31, 2018

	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>-6.2%</b>	<b>-8.6%</b>	<b>-4.4%</b>	<b>-8.7%</b>	<b>-2.4%</b>	<b>5.0%</b>	<b>3.5%</b>	<b>1.7%</b>	<b>2.5%</b>	<b>3.6%</b>	<b>3.7%</b>	<b>2.9%</b>	<b>Sep-05</b>
<i>HFRI Fund of Funds Composite Index</i>	-3.0%	-3.0%	-2.1%	-2.8%	-1.2%	3.3%	1.9%	1.8%	2.3%	3.0%	2.9%	2.4%	Sep-05
Elizabeth Park Capital Management	-6.9%	-9.2%	-4.6%	-9.2%	-2.5%	10.6%	9.2%	8.7%	--	--	--	8.2%	May-14
<i>HFRI Event Driven Index</i>	-4.6%	-5.1%	-9.8%	-5.6%	-9.8%	-0.2%	1.2%	-0.3%	-0.8%	1.8%	2.3%	-1.7%	May-14
Archview Offshore Fund, LTD	0.0%	-2.1%	0.5%	-3.1%	3.7%	4.2%	3.1%	1.0%	--	--	--	1.4%	Mar-14
<i>HFRI ED: Distressed/Restructuring Index</i>	-2.3%	-2.0%	1.9%	-0.9%	3.3%	6.2%	6.4%	3.0%	3.0%	5.1%	6.2%	2.2%	Mar-14
<b>Real Assets Composite</b>	<b>-0.7%</b>	<b>-0.8%</b>	<b>1.2%</b>	<b>-0.3%</b>	<b>3.5%</b>	<b>5.9%</b>	<b>5.0%</b>	<b>1.2%</b>	<b>4.5%</b>	<b>--</b>	<b>--</b>	<b>5.9%</b>	<b>Dec-12</b>
<i>Real Assets Benchmark</i>	-0.7%	-0.7%	0.8%	0.1%	2.9%	4.7%	3.1%	-3.2%	-0.3%	--	--	1.8%	Dec-12
<b>Real Assets - Public Real Estate Composite</b>	<b>-2.6%</b>	<b>-2.8%</b>	<b>-1.2%</b>	<b>-2.3%</b>	<b>1.2%</b>	<b>4.6%</b>	<b>5.7%</b>	<b>5.6%</b>	<b>8.4%</b>	<b>--</b>	<b>--</b>	<b>7.8%</b>	<b>Jan-13</b>
<i>FTSE NAREIT All Equity REIT Custom Benchmark</i>	-2.6%	-2.3%	-0.6%	-1.8%	1.7%	4.9%	5.9%	5.7%	8.1%	--	--	--	Jan-13
Rhumblin FTSE NAREIT	-2.6%	-2.3%	-0.7%	-1.8%	1.7%	4.9%	5.9%	5.7%	8.1%	--	--	6.2%	May-13
<i>FTSE NAREIT All Equity REIT Custom Benchmark</i>	-2.6%	-2.3%	-0.6%	-1.8%	1.7%	4.9%	5.9%	5.7%	8.1%	--	--	6.2%	May-13
<b>Real Assets - Open-End Real Estate Composite</b>	<b>0.0%</b>	<b>1.1%</b>	<b>4.6%</b>	<b>1.1%</b>	<b>6.9%</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>5.8%</b>	<b>Jan-17</b>
<i>NFI</i>	0.0%	1.2%	5.8%	1.9%	7.1%	6.9%	7.5%	9.0%	9.5%	10.0%	5.0%	6.8%	Jan-17
UBS Trumbull Fund	0.0%	1.1%	4.6%	1.1%	6.8%	--	--	--	--	--	--	5.8%	Jan-17
<i>NFI</i>	0.0%	1.2%	5.8%	1.9%	7.1%	6.9%	7.5%	9.0%	9.5%	10.0%	5.0%	6.8%	Jan-17
Clarion Lion Properties Fund	0.0%	1.5%	--	1.5%	--	--	--	--	--	--	--	4.8%	Feb-18
<i>NFI</i>	0.0%	1.2%	5.8%	1.9%	7.1%	6.9%	7.5%	9.0%	9.5%	10.0%	5.0%	5.1%	Feb-18
<b>Real Assets - Infrastructure Composite</b>	<b>-2.5%</b>	<b>-4.7%</b>	<b>-4.0%</b>	<b>-3.1%</b>	<b>-3.2%</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2.4%</b>	<b>Mar-17</b>
<i>Dow Jones Brookfield Global Infrastructure Index</i>	-2.6%	-5.1%	-4.6%	-3.4%	-4.0%	4.0%	4.3%	1.4%	4.7%	7.9%	10.5%	1.7%	Mar-17
Rhumblin Infrastructure Index	-2.5%	-4.9%	-4.0%	-3.1%	-3.2%	--	--	--	--	--	--	2.4%	Mar-17
<i>Dow Jones Brookfield Global Infrastructure Index</i>	-2.6%	-5.1%	-4.6%	-3.4%	-4.0%	4.0%	4.3%	1.4%	4.7%	7.9%	10.5%	1.7%	Mar-17
Rreef Global Infrastructure	-2.7%	-4.3%	--	-2.9%	--	--	--	--	--	--	--	1.3%	Mar-18
<i>Dow Jones Brookfield Global Infrastructure Index</i>	-2.6%	-5.1%	-4.6%	-3.4%	-4.0%	4.0%	4.3%	1.4%	4.7%	7.9%	10.5%	0.7%	Mar-18

## Investment Manager

## Annualized Performance (Net of Fees)

Market Value: \$5,034.8 Million and 100.0% of Fund

Ending October 31, 2018

	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>	0.0%	-0.4%	2.1%	-0.4%	5.5%	6.1%	7.7%	8.0%	9.5%	9.4%	2.6%	3.7%	May-06
<i>Real Assets - Private Real Estate Benchmark</i>	0.0%	-0.4%	2.1%	-0.4%	5.5%	6.1%	7.7%	8.0%	9.5%	--	--	--	May-06
<b>Real Assets - Private Energy/Infrastructure Composite</b>	0.0%	-3.3%	14.6%	-3.3%	25.4%	16.6%	4.4%	-8.6%	5.6%	--	--	5.8%	May-12
<i>Real Assets - Private Energy/Infrastructure Benchmark</i>	0.0%	-3.3%	14.6%	-3.3%	25.4%	16.6%	4.4%	-8.6%	5.6%	--	--	5.8%	May-12
<b>Private Assets Composite</b>	0.0%	0.0%	15.4%	0.0%	22.8%	15.2%	12.6%	--	--	--	--	--	Mar-87