



(Preliminary Subject to Change)



**Employees Retirement System**

City of Philadelphia  
Employees Retirement System  
Executive Summary

**April 30, 2019**

# Total Fund Composite

Market Value: \$5,728.6 Million and 100.0% of Fund

Ending April 30, 2019

	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
<b>Total Fund Composite</b>		<b>5,728,612,377</b>	<b>467,969,928</b>	<b>100.0</b>	<b>100.0</b>	<b>0</b>
<b>Total Fund w/o Alternative Assets</b>		<b>4,252,139,265</b>	<b>345,495,562</b>	<b>74.2</b>	<b>69.0</b>	<b>299,396,724</b>
<b>Investment Grade Fixed Income Composite</b>		<b>668,597,370</b>	<b>228,509</b>	<b>11.7</b>	<b>10.0</b>	<b>95,736,132</b>
Brandywine Global Investment Management	Global Fixed Income	136,226,560	229,467	2.4		
Garcia Hamilton & Associates	Int. Govt. Fixed Income	170,554,200	-704	3.0		
Logan Circle	Core Plus Fixed Income	45,826,990	-255	0.8		
Longfellow	Core Plus Fixed Income	162,730,442	0	2.8		
Rhumblin Core Bond Index	Core Fixed Income	153,259,179	0	2.7		
<b>Opportunistic Fixed Income Composite</b>		<b>260,235,687</b>	<b>-3,476,588</b>	<b>4.5</b>	<b>4.0</b>	<b>31,091,192</b>
T - Apollo Franklin Partnership, L.P.	Opportunistic Fixed Income	11,518,082	-1,090,909	0.2		
T - Avenue Coppers Opportunity Fund LP	Opportunistic Fixed Income	19,768,359	0	0.3		
T - KKR-PBPR Capital Partners LP	Opportunistic Fixed Income	50,494,389	-2,385,679	0.9		
Logan Circle - EMD	EM Fixed Income	73,365,717	0	1.3		
Strategic Income Management	High Yield Fixed Income	52,172,125	0	0.9		
Lord Abbett High Yield	High Yield Fixed Income	52,507,047	0	0.9		
<b>U.S. Equity Composite</b>		<b>1,648,096,415</b>	<b>43,381,699</b>	<b>28.8</b>	<b>30.0</b>	<b>-70,487,298</b>
Rhumblin Russell 1000 Index	Large-Cap Core	1,192,965,196	87,931,271	20.8		
O'Shaughnessy Asset Management	Large-Cap Value	29,782,363	0	0.5		
Rhumblin MidCap Index	Mid-Cap Core	156,388,892	-6,059	2.7		
Rhumblin Russell 2000 Index	Small-Cap Core	42,075,330	-1,672	0.7		
Emerald Advisors	Small-Cap Growth	82,643,962	0	1.4		
Fisher Asset Management	Small-Cap Value	58,315,024	0	1.0		
Fiera Capital	Smid-Cap Growth	28,711,004	0	0.5		
Ariel	Smid-Cap Value	57,113,453	0	1.0		
<b>Non-U.S. Equity Developed Composite</b>		<b>1,097,529,452</b>	<b>84,000,327</b>	<b>19.2</b>	<b>21.0</b>	<b>-105,479,148</b>
Causeway Capital Management	Non-U.S. Large-Cap Core	113,140,979	0	2.0		
Northern Trust MSCI EAFE+Canada	Non-U.S. Large-Cap Core	787,806,295	84,000,000	13.8		
Northern Trust International Small Cap	Non-U.S. Small-Cap Core	101,344,195	0	1.8		
Strategic Global Advisors	Non-U.S. Small-Cap Core	31,962,538	327	0.6		
Investors Group	Non-U.S. Small-Cap Core	59,402,030	0	1.0		
<b>Non-U.S. Equity Emerging Composite</b>		<b>225,265,243</b>	<b>1,774</b>	<b>3.9</b>	<b>4.0</b>	<b>-3,879,252</b>
Rhumblin Emerging Markets Index	Emerging Markets	225,260,911	1,774	3.9		

## Total Fund Composite

Market Value: \$5,728.6 Million and 100.0% of Fund

Ending April 30, 2019

	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
<b>Cash Composite</b>		<b>352,415,098</b>	<b>221,359,841</b>	<b>6.2</b>	<b>0.0</b>	<b>352,415,098</b>
Cash	Cash & Equivalents	351,749,635	221,393,555	6.1		
Directed Commissions	Cash & Equivalents	665,464	-33,714	0.0		
<b>Absolute Return</b>		<b>28,961,659</b>	<b>0</b>	<b>0.5</b>	<b>0.0</b>	<b>28,961,659</b>
Elizabeth Park Capital Management	Long/Short Hedge Fund	27,102,823	0	0.5		
T - Archview Offshore Fund. LTD	Credit Hedge Fund	1,858,836	0	0.0		
<b>Real Assets Composite</b>		<b>982,289,799</b>	<b>123,093,943</b>	<b>17.1</b>	<b>19.0</b>	<b>-106,146,553</b>
<b>Real Assets - Public Real Estate Composite</b>		<b>60,369,891</b>	<b>0</b>	<b>1.1</b>	<b>1.0</b>	<b>3,083,767</b>
Rhumblin FTSE NAREIT	Real Assets	60,369,891	0	1.1		
<b>Real Assets - Open-End Real Estate Composite</b>		<b>552,813,109</b>	<b>68,861,168</b>	<b>9.7</b>	<b>11.0</b>	<b>-77,334,252</b>
UBS Trumbull Fund	Core Real Estate	416,699,152	45,092,607	7.3		
Clarion Lion Properties Fund	Core Real Estate	136,113,957	23,768,561	2.4		
<b>Real Assets - Infrastructure Composite</b>		<b>260,162,144</b>	<b>55,999,984</b>	<b>4.5</b>	<b>5.0</b>	<b>-26,268,475</b>
Rhumblin Infrastructure Index	Publicly-Traded Infrastructure	174,868,327	27,999,984	3.1		
Rreef Global Infrastructure	Global Infrastructure	85,293,817	28,000,000	1.5		
<b>Real Assets - Private Real Estate Composite</b>		<b>96,995,416</b>	<b>-2,394,231</b>	<b>1.7</b>	<b>2.0</b>	<b>-17,576,831</b>
<b>Real Assets - Private Energy/Infrastructure Composite</b>		<b>11,949,238</b>	<b>627,022</b>	<b>0.2</b>	<b>--</b>	<b>11,949,238</b>
<b>Private Assets Composite</b>		<b>465,221,655</b>	<b>-619,576</b>	<b>8.1</b>	<b>12.0</b>	<b>-222,211,830</b>
Private Assets - Private Equity	U.S. Private Equity FoF	435,532,368	580,499	7.6		
Private Assets - Private Debt	Mezz. Private Equity	29,689,287	-1,200,075	0.5		

## Investment Manager

## Annualized Performance (Net of Fees)

Market Value: \$5,728.6 Million and 100.0% of Fund

Ending April 30, 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
<b>Total Fund Composite</b>	<b>1.8%</b>	<b>4.4%</b>	<b>9.8%</b>	<b>3.4%</b>	<b>4.6%</b>	<b>7.5%</b>	<b>8.9%</b>	<b>5.3%</b>	<b>5.3%</b>	<b>6.8%</b>	<b>8.9%</b>	<b>7.5%</b>	<b>Jul-88</b>
<i>Total Fund Policy Benchmark</i>	1.8%	4.4%	9.6%	4.2%	5.7%	7.5%	9.0%	5.8%	6.1%	7.4%	9.9%	8.3%	Jul-88
<b>Total Fund w/o Alternative Assets</b>	<b>2.4%</b>	<b>5.5%</b>	<b>12.3%</b>	<b>3.7%</b>	<b>3.5%</b>	<b>7.1%</b>	<b>8.7%</b>	<b>5.0%</b>	<b>5.0%</b>	<b>--</b>	<b>--</b>	<b>5.6%</b>	<b>Jan-14</b>
<b>Investment Grade Fixed Income Composite</b>	<b>-0.1%</b>	<b>1.1%</b>	<b>2.6%</b>	<b>3.4%</b>	<b>2.7%</b>	<b>2.4%</b>	<b>1.8%</b>	<b>1.8%</b>	<b>1.9%</b>	<b>2.2%</b>	<b>3.8%</b>	<b>6.0%</b>	<b>Jul-88</b>
<i>Fixed Income Custom Benchmark</i>	-0.1%	1.4%	2.5%	4.2%	4.8%	2.2%	1.8%	2.0%	2.5%	2.3%	3.7%	6.1%	Jul-88
Brandywine Global Investment Management	-0.7%	-1.4%	2.1%	0.1%	-4.1%	1.8%	1.3%	1.4%	1.4%	2.4%	6.1%	6.4%	Jan-09
<i>FTSE WGBI TR</i>	-0.5%	-0.2%	1.2%	1.3%	-0.2%	2.4%	0.4%	1.8%	0.3%	0.2%	2.1%	2.0%	Jan-09
Garcia Hamilton & Associates	0.1%	1.3%	2.2%	3.7%	4.4%	2.1%	1.8%	2.1%	2.4%	2.9%	4.4%	5.1%	Aug-00
<i>BBgBarc US Govt/Credit Int TR</i>	0.2%	1.6%	2.5%	4.4%	5.0%	2.1%	1.6%	1.8%	2.1%	1.9%	3.1%	4.3%	Aug-00
Logan Circle	0.1%	2.2%	3.7%	4.8%	5.3%	3.1%	2.9%	2.7%	--	--	--	2.8%	Oct-14
<i>BBgBarc US Aggregate TR</i>	0.0%	1.9%	3.0%	4.7%	5.3%	2.4%	1.9%	2.1%	2.6%	2.3%	3.7%	2.3%	Oct-14
Longfellow	0.2%	2.1%	3.2%	4.6%	5.2%	2.8%	2.5%	2.4%	--	--	--	2.7%	Sep-14
<i>BBgBarc US Aggregate TR</i>	0.0%	1.9%	3.0%	4.7%	5.3%	2.4%	1.9%	2.1%	2.6%	2.3%	3.7%	2.5%	Sep-14
Rhumblin Core Bond Index	0.0%	1.7%	2.7%	4.4%	4.9%	2.3%	1.7%	1.9%	2.3%	2.0%	3.6%	3.9%	Jun-07
<i>BBgBarc US Aggregate TR</i>	0.0%	1.9%	3.0%	4.7%	5.3%	2.4%	1.9%	2.1%	2.6%	2.3%	3.7%	4.1%	Jun-07
<b>Opportunistic Fixed Income Composite</b>	<b>0.8%</b>	<b>1.4%</b>	<b>3.9%</b>	<b>0.5%</b>	<b>-0.4%</b>	<b>2.1%</b>	<b>4.6%</b>	<b>2.6%</b>	<b>2.1%</b>	<b>--</b>	<b>--</b>	<b>3.1%</b>	<b>Dec-12</b>
<i>Opportunistic FI Custom Benchmark</i>	1.2%	3.2%	7.1%	5.0%	5.4%	4.6%	6.6%	4.7%	4.4%	5.4%	--	4.9%	Dec-12
T - Apollo Franklin Partnership, L.P.	0.8%	1.8%	3.9%	-0.4%	2.4%	1.3%	0.0%	-3.3%	-5.0%	--	--	-3.1%	May-13
<i>50% BarCap HY / 50% CSFB Lev Loans</i>	1.5%	3.6%	7.1%	5.3%	5.6%	4.8%	6.7%	4.8%	4.5%	5.5%	8.7%	4.7%	May-13
T - Avenue Coppers Opportunity Fund LP	0.0%	-0.9%	-1.2%	-12.2%	-11.7%	-3.9%	-0.9%	-1.5%	-0.3%	--	--	0.5%	Dec-13
<i>Actuarial Rate</i>	0.6%	1.9%	2.5%	6.3%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	Dec-13
T - KKR-PBPR Capital Partners LP	0.0%	-2.3%	-2.2%	-7.6%	-7.0%	-1.1%	3.2%	2.3%	1.8%	--	--	4.6%	Jun-12
<i>Actuarial Rate</i>	0.6%	1.9%	2.5%	6.3%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	Jun-12
Logan Circle - EMD	0.2%	0.7%	6.2%	5.8%	0.6%	3.0%	5.9%	4.9%	--	--	--	5.2%	Feb-15
<i>JP Morgan EMBI Global TR</i>	0.1%	2.2%	6.7%	7.4%	5.2%	2.7%	4.6%	4.5%	4.5%	4.5%	7.6%	4.9%	Feb-15
Strategic Income Management	1.8%	4.3%	6.8%	4.8%	5.4%	5.1%	7.6%	--	--	--	--	8.8%	Mar-16
<i>ICE BofAML US High Yield TR</i>	1.4%	4.1%	8.9%	6.4%	6.7%	5.0%	7.8%	5.4%	4.9%	6.3%	10.2%	8.9%	Mar-16

## Investment Manager

## Annualized Performance (Net of Fees)

Market Value: \$5,728.6 Million and 100.0% of Fund

Ending April 30, 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 Abbett High Yield	1.6%	4.5%	--	--	--	--	--	--	--	--	--	4.5%	Jan-19
ICE BofAML US High Yield TR	1.4%	4.1%	8.9%	6.4%	6.7%	5.0%	7.8%	5.4%	4.9%	6.3%	10.2%	4.1%	Jan-19
<b>U.S. Equity Composite</b>	<b>4.1%</b>	<b>9.4%</b>	<b>19.5%</b>	<b>8.0%</b>	<b>11.9%</b>	<b>12.5%</b>	<b>14.5%</b>	<b>9.8%</b>	<b>10.2%</b>	<b>12.4%</b>	<b>14.9%</b>	<b>9.7%</b>	<b>Jul-88</b>
U.S. Equity Custom Benchmark	3.9%	8.8%	18.8%	9.1%	12.9%	13.0%	14.8%	10.9%	11.2%	13.4%	15.3%	10.5%	Jul-88
Rhumbline Russell 1000 Index	4.1%	9.4%	18.7%	9.8%	13.5%	13.4%	15.0%	11.1%	11.4%	13.6%	15.2%	8.2%	May-07
Rhumbline Russell 1000 Custom Benchmark	4.1%	9.5%	18.7%	9.8%	13.4%	13.4%	14.9%	11.1%	11.5%	13.6%	--	--	May-07
O'Shaughnessy Asset Management	6.8%	9.9%	19.9%	4.4%	4.3%	12.4%	13.4%	7.7%	8.4%	--	--	13.7%	Jun-12
Russell 1000 Value	3.5%	7.5%	15.9%	8.2%	9.1%	8.3%	11.0%	8.0%	8.3%	11.9%	13.8%	12.4%	Jun-12
Rhumbline MidCap Index	3.8%	9.3%	21.0%	7.5%	10.8%	10.9%	--	--	--	--	--	12.0%	Dec-16
Rhumbline Russell Mid Cap Custom Benchmark	3.8%	9.3%	21.1%	7.6%	10.9%	11.0%	--	--	--	--	--	12.1%	Dec-16
Rhumbline Russell 2000 Index	3.4%	6.5%	18.5%	-1.8%	4.8%	8.3%	--	--	--	--	--	8.7%	Dec-16
Rhumbline Russell 2000 Custom Benchmark	3.4%	6.5%	18.5%	-2.0%	4.7%	8.1%	--	--	--	--	--	8.5%	Dec-16
Emerald Advisors	3.3%	9.5%	25.2%	4.0%	13.1%	16.3%	18.8%	11.2%	12.9%	14.1%	17.6%	10.2%	Dec-04
Russell 2000 Growth	3.0%	8.2%	20.7%	-0.2%	6.9%	11.6%	15.6%	9.1%	10.2%	12.5%	15.2%	8.8%	Dec-04
Fisher Asset Management	3.8%	7.5%	19.2%	-1.0%	4.0%	7.5%	13.3%	9.3%	9.6%	11.8%	14.7%	9.7%	May-08
Russell 2000 Value	3.8%	4.7%	16.2%	-4.0%	2.2%	4.3%	11.5%	7.5%	6.9%	10.4%	12.9%	7.9%	May-08
Fiera Capital	4.0%	10.5%	23.4%	6.0%	9.3%	13.5%	15.0%	8.5%	9.6%	12.2%	--	14.6%	Dec-09
Russell 2500 Growth	3.5%	10.0%	23.2%	5.5%	12.0%	14.5%	16.6%	10.2%	11.3%	13.3%	16.3%	14.2%	Dec-09
Ariel	4.8%	10.4%	22.5%	3.7%	6.9%	6.9%	10.9%	--	--	--	--	12.9%	Jan-16
Russell 2500 Value	3.5%	5.3%	17.1%	-0.4%	4.3%	5.6%	10.4%	7.2%	7.0%	10.9%	13.7%	13.5%	Jan-16
<b>Non-U.S. Equity Developed Composite</b>	<b>2.8%</b>	<b>5.8%</b>	<b>13.6%</b>	<b>-0.8%</b>	<b>-3.7%</b>	<b>4.9%</b>	<b>7.0%</b>	<b>2.2%</b>	<b>1.9%</b>	<b>5.2%</b>	<b>7.7%</b>	<b>5.5%</b>	<b>Jan-89</b>
Non-U.S. Equity Developed Custom Benchmark	2.9%	5.9%	13.6%	-0.8%	-3.8%	5.4%	7.3%	3.1%	2.8%	6.4%	8.5%	--	Jan-89
Causeway Capital Management	2.4%	5.4%	13.4%	-2.0%	-5.3%	4.1%	6.7%	1.7%	1.9%	6.7%	--	7.8%	Nov-11
MSCI EAFE	2.8%	6.1%	13.1%	0.2%	-3.2%	5.3%	7.2%	2.8%	2.6%	6.4%	8.0%	7.0%	Nov-11
Northern Trust MSCI EAFE+Canada	3.0%	6.2%	13.9%	1.1%	-1.7%	6.0%	7.5%	3.1%	2.8%	6.2%	8.5%	3.0%	Mar-07
Northern Trust MSCI EAFE + Canada Custom Benchmark	3.0%	6.2%	13.9%	1.2%	-1.6%	6.1%	7.8%	3.4%	3.3%	7.0%	8.8%	2.6%	Mar-07

## Investment Manager

## Annualized Performance (Net of Fees)

Market Value: \$5,728.6 Million and 100.0% of Fund

Ending April 30, 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	3.0%	5.6%	14.0%	-4.9%	-8.4%	--	--	--	--	--	--	-7.1%	Mar-18
<i>Northern Trust EAFE Small Cap Custom Benchmark</i>	3.0%	5.6%	14.1%	-4.9%	-7.7%	--	--	--	--	--	--	-6.4%	Mar-18
Strategic Global Advisors	0.7%	3.4%	12.9%	-8.6%	-12.2%	--	--	--	--	--	--	-6.1%	Nov-17
<i>MSCI World ex USA Small Cap</i>	2.7%	5.0%	14.0%	-5.3%	-7.6%	4.8%	7.1%	5.3%	4.3%	7.5%	10.9%	-2.8%	Nov-17
Investors Group	2.7%	2.5%	10.4%	-10.5%	-13.1%	--	--	--	--	--	--	-5.8%	Nov-17
<i>MSCI EAFE Small Cap</i>	3.0%	5.5%	14.0%	-5.1%	-7.9%	5.2%	7.8%	6.0%	5.3%	8.7%	11.5%	-2.8%	Nov-17
<b>Non-U.S. Equity Emerging Composite</b>	<b>2.1%</b>	<b>2.4%</b>	<b>12.4%</b>	<b>3.2%</b>	<b>-4.9%</b>	<b>8.4%</b>	<b>11.3%</b>	<b>3.6%</b>	<b>4.1%</b>	<b>2.2%</b>	<b>7.0%</b>	<b>9.1%</b>	<b>Jan-09</b>
<i>MSCI Emerging Markets</i>	2.1%	3.2%	12.2%	2.7%	-5.0%	7.5%	11.3%	3.1%	4.0%	3.2%	7.5%	9.8%	Jan-09
Rhumblin Emerging Markets Index	2.1%	2.4%	12.4%	3.3%	-4.9%	8.4%	11.3%	3.5%	4.3%	--	--	2.7%	Feb-13
<i>MSCI Emerging Markets</i>	2.1%	3.2%	12.2%	2.7%	-5.0%	7.5%	11.3%	3.1%	4.0%	3.2%	7.5%	2.5%	Feb-13

## Investment Manager

## Annualized Performance (Net of Fees)

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Ending April 30, 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
<b>Absolute Return</b>	<b>2.9%</b>	<b>1.3%</b>	<b>5.5%</b>	<b>-13.8%</b>	<b>-13.0%</b>	<b>-1.7%</b>	<b>3.3%</b>	<b>0.1%</b>	<b>0.2%</b>	<b>2.3%</b>	<b>3.1%</b>	<b>2.4%</b>	<b>Sep-05</b>
<i>HFRI Fund of Funds Composite Index</i>	1.0%	3.0%	5.7%	0.7%	0.9%	3.1%	4.1%	1.6%	2.5%	3.3%	3.5%	2.5%	Sep-05
Elizabeth Park Capital Management	3.1%	1.5%	6.3%	-13.2%	-12.5%	-0.5%	7.1%	6.5%	--	--	--	6.3%	May-14
<i>HFRX Event Driven Index</i>	0.5%	-1.2%	1.3%	-6.3%	-6.4%	-4.2%	2.2%	-0.9%	-1.6%	1.1%	2.1%	-1.7%	May-14
T - Archview Offshore Fund. LTD	-0.3%	-1.2%	-4.6%	-21.9%	-20.6%	-7.1%	-1.3%	-4.6%	-3.2%	--	--	-2.9%	Mar-14
<i>HFRI ED: Distressed/Restructuring Index</i>	1.6%	1.7%	4.8%	0.1%	2.1%	2.9%	7.7%	3.3%	2.1%	4.6%	7.0%	2.2%	Mar-14
<b>Real Assets Composite</b>	<b>0.2%</b>	<b>2.2%</b>	<b>5.0%</b>	<b>5.4%</b>	<b>8.4%</b>	<b>5.5%</b>	<b>7.2%</b>	<b>2.3%</b>	<b>3.5%</b>	<b>--</b>	<b>--</b>	<b>6.4%</b>	<b>Dec-12</b>
<i>Real Assets Benchmark</i>	0.1%	1.9%	4.8%	5.4%	7.6%	4.3%	7.2%	-1.7%	-0.5%	--	--	2.5%	Dec-12
<b>Real Assets - Public Real Estate Composite</b>	<b>-0.3%</b>	<b>4.8%</b>	<b>16.9%</b>	<b>10.3%</b>	<b>18.9%</b>	<b>8.5%</b>	<b>8.2%</b>	<b>8.2%</b>	<b>9.7%</b>	<b>--</b>	<b>--</b>	<b>9.3%</b>	<b>Jan-13</b>
<i>FTSE NAREIT All Equity REIT Custom Benchmark</i>	-0.3%	4.8%	16.9%	10.9%	19.6%	8.8%	8.4%	8.4%	9.3%	--	--	--	Jan-13
Rhumblin FTSE NAREIT	-0.3%	4.8%	16.9%	10.7%	19.4%	8.7%	8.3%	8.3%	9.2%	--	--	7.8%	May-13
<i>FTSE NAREIT All Equity REIT Custom Benchmark</i>	-0.3%	4.8%	16.9%	10.9%	19.6%	8.8%	8.4%	8.4%	9.3%	--	--	7.8%	May-13
<b>Real Assets - Open-End Real Estate Composite</b>	<b>0.0%</b>	<b>0.8%</b>	<b>0.8%</b>	<b>4.0%</b>	<b>5.8%</b>	<b>6.0%</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>5.8%</b>	<b>Jan-17</b>
<i>NFI</i>	0.0%	0.8%	1.2%	4.7%	5.9%	6.6%	6.8%	8.1%	9.0%	9.6%	8.1%	6.5%	Jan-17
UBS Trumbull Fund	0.0%	0.5%	0.5%	3.3%	5.0%	5.6%	--	--	--	--	--	5.4%	Jan-17
<i>NFI</i>	0.0%	0.8%	1.2%	4.7%	5.9%	6.6%	6.8%	8.1%	9.0%	9.6%	8.1%	6.5%	Jan-17
Clarion Lion Properties Fund	0.0%	1.8%	1.8%	5.9%	8.5%	--	--	--	--	--	--	8.7%	Feb-18
<i>NFI</i>	0.0%	0.8%	1.2%	4.7%	5.9%	6.6%	6.8%	8.1%	9.0%	9.6%	8.1%	6.3%	Feb-18
<b>Real Assets - Infrastructure Composite</b>	<b>0.8%</b>	<b>6.5%</b>	<b>16.4%</b>	<b>9.2%</b>	<b>12.4%</b>	<b>7.3%</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>7.8%</b>	<b>Mar-17</b>
<i>Dow Jones Brookfield Global Infrastructure Index</i>	0.7%	6.6%	16.5%	8.8%	11.7%	6.7%	8.2%	4.0%	5.2%	8.3%	12.8%	7.2%	Mar-17
Rhumblin Infrastructure Index	0.8%	6.7%	16.7%	9.4%	12.4%	7.4%	--	--	--	--	--	7.9%	Mar-17
<i>Dow Jones Brookfield Global Infrastructure Index</i>	0.7%	6.6%	16.5%	8.8%	11.7%	6.7%	8.2%	4.0%	5.2%	8.3%	12.8%	7.2%	Mar-17
Rreef Global Infrastructure	0.9%	6.9%	16.6%	9.6%	13.3%	--	--	--	--	--	--	13.2%	Mar-18
<i>Dow Jones Brookfield Global Infrastructure Index</i>	0.7%	6.6%	16.5%	8.8%	11.7%	6.7%	8.2%	4.0%	5.2%	8.3%	12.8%	12.2%	Mar-18

## Investment Manager

## Annualized Performance (Net of Fees)

Market Value: \$5,728.6 Million and 100.0% of Fund

Ending April 30, 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
<b>Real Assets - Private Real Estate Composite</b>	<b>0.0%</b>	<b>-1.1%</b>	<b>-1.1%</b>	<b>0.7%</b>	<b>2.2%</b>	<b>4.1%</b>	<b>6.1%</b>	<b>6.7%</b>	<b>7.7%</b>	<b>9.3%</b>	<b>6.3%</b>	<b>3.7%</b>	<b>May-06</b>
<i>Real Assets - Private Real Estate Benchmark</i>	<i>0.0%</i>	<i>-1.1%</i>	<i>-1.1%</i>	<i>0.7%</i>	<i>2.2%</i>	<i>4.1%</i>	<i>6.1%</i>	<i>6.7%</i>	<i>7.7%</i>	<i>9.3%</i>	<i>--</i>	<i>--</i>	<i>May-06</i>
<b>Real Assets - Private Energy/Infrastructure Composite</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>10.5%</b>	<b>25.5%</b>	<b>25.6%</b>	<b>21.3%</b>	<b>3.8%</b>	<b>2.4%</b>	<b>--</b>	<b>--</b>	<b>7.4%</b>	<b>May-12</b>
<i>Real Assets - Private Energy/Infrastructure Benchmark</i>	<i>0.0%</i>	<i>0.0%</i>	<i>0.0%</i>	<i>10.5%</i>	<i>25.5%</i>	<i>25.6%</i>	<i>21.3%</i>	<i>3.8%</i>	<i>2.4%</i>	<i>7.4%</i>	<i>--</i>	<i>7.4%</i>	<i>May-12</i>
<b>Private Assets Composite</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>-2.0%</b>	<b>8.4%</b>	<b>11.9%</b>	<b>11.3%</b>	<b>9.8%</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>Mar-87</b>

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.