

(Preliminary Subject to Change)



**Employees Retirement System** 

City of Philadelphia Employees Retirement System Executive Summary July 31, 2018 **Total Fund Composite** 

#### Ending July 31, 2018 3 Mo Net Cash Flows (\$) % of Portfolio Market Value Policy Difference Asset Class Policy % (\$) (\$) **Total Fund Composite** 5,210,245,694 -176,403,719 100.0 100.0 0 Total Fund w/o Alternative Assets 3,956,765,709 -167,417,798 75.9 72.9 158,496,598 Investment Grade Fixed Income Composite 687,545,227 0 13.2 14.0 -41,889,170 0 Brandywine Global Investment Management **Global Fixed Income** 162,774,066 3.1 0 3.2 Garcia Hamilton & Associates Int. Govt. Fixed Income 164,154,380 Logan Circle 0 Core Plus Fixed Income 43,738,443 0.8 Longfellow Core Plus Fixed Income 155,291,580 0 3.0 Rhumbline Core Bond Index Core Fixed Income 161,586,758 0 3.1 **Opportunistic Fixed Income Composite** 291,709,545 -23,841,229 5.6 6.0 -20,905,196 Opportunistic Fixed Apollo Franklin Partnership, L.P. 16,250,672 -2,909,091 0.3 Income Opportunistic Fixed 29,709,147 0.6 Avenue Coppers Opportunity Fund LP -5,414,975 Income Opportunistic Fixed KKR-PBPR Capital Partners LP 74,005,801 -18,002,252 1.4 Income 0 EM Fixed Income 71,007,093 1.4 Logan Circle - EMD 0 1.9 Strategic Income Management High Yield Fixed Income 100,456,424 U.S. Equity Composite 1,614,486,948 -80,000,000 31.0 29.8 61,833,731 Rhumbline Russell 1000 Index Large-Cap Core 1,113,641,439 -65.000.000 21.4 Aronson+Johnson+Ortiz LP 46.339.084 0 0.9 Large-Cap Value Large-Cap Value 29,638,564 0 0.6 O'Shaughnessy Asset Management Rhumbline MidCap Index Mid-Cap Core 158,782,196 -15,006,667 3.0 Rhumbline Russell 2000 Index Small-Cap Core 43,612,665 -1,732 0.8 **Emerald Advisors** Small-Cap Growth 79,651,821 0 1.5 59,029,524 Fisher Asset Management Small-Cap Value 0 1.1 Fiera Capital Smid-Cap Growth 27,469,834 0 0.5 Ariel Smid-Cap Value 56,252,066 0 1.1 204,299,494 Non-U.S. Equity Developed Composite 20.7 16.8 1,079,620,770 -2,594,996 Non-U.S. Large-Cap Causeway Capital Management 117,490,514 -75,070,417 2.3 Core Non-U.S. Large-Cap Northern Trust MSCI EAFE+Canada 749,832,148 -330 14.4 Core Non-U.S. Small-Cap Northern Trust International Small Cap 107,336,554 48,435,079 2.1 Core Non-U.S. Small-Cap Strategic Global Advisors 35,066,134 9,638,148 0.7 Core Non-U.S. Small-Cap Investors Group 65,920,471 14,402,524 1.3 Core Non-U.S. Equity Emerging Composite 242,735,890 -15,000,056 4.7 5.2 -28,196,887 Rhumbline Emerging Markets Index **Emerging Markets** 242,732,748 -15,000,056 4.7

Market Value: \$5,210.2 Million and 100.0% of Fund

Total Fund Composite

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	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
Cash Composite		40,667,329	-46,038,089	0.8	1.1	-16,645,374
Cash	Cash & Equivalents	39,955,546	-46,027,348	0.8		
Directed Commissions	Cash & Equivalents	711,783	-10,741	0.0		
Absolute Return		34,394,415	-652,347	0.7	0.5	8,343,186
Elizabeth Park Capital Management	Long/Short Hedge Fund	31,212,601	0	0.6		
Archview Offshore Fund. LTD	Credit Hedge Fund	3,181,814	-651,697	0.1		
Real Assets Composite		775,468,987	-8,333,574	14.9	15.6	-37,329,342
Real Assets - Public Real Estate Composite		89,541,809	-10,000,000	1.7	1.4	16,598,370
Rhumbline FTSE NAREIT	Real Assets	89,541,809	-10,000,000	1.7		
Real Assets - Open-End Real Estate Composite		368,257,129	-3,136,754	7.1	7.6	-27,721,544
UBS Trumbull Fund	Core Real Estate	285,917,298	-2,951,816	5.5		
Clarion Lion Properties Fund	Core Real Estate	82,339,831	-184,938	1.6		
Real Assets - Infrastructure Composite		188,611,035	0	3.6	4.0	-19,798,793
Rhumbline Infrastructure Index	Publicly-Traded Infrastructure	136,453,166	0	2.6		
Rreef Global Infrastructure	Global Infrastructure	52,157,869	0	1.0		
Real Assets - Private Real Estate Composite		117,859,518	2,983,842	2.3	2.6	-17,606,870
Real Assets - Private Energy/Infrastructure Composite		11,199,495	1,819,338	0.2		11,199,495
Private Assets Composite		443,616,584	0	8.5	11.0	-129,510,442
Private Assets - Private Equity	U.S. Private Equity FoF	432,306,341	0	8.3		
Private Assets - Private Debt	Mezz. Private Equity	11,310,243	0	0.2		

#### Ending July 31, 2018

Market Value: \$5,210.2 Million and 100.0% of Fund



## Annualized Performance (Net of Fees)

Market Value: \$5,210.2 Million and 100.0% of Fund

	1 Mo	3 Mo	YTD	Fiscal YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
tal Fund Composite	1.6%	1.9%	1.7%	1.6%	7.9%	10.1%	6.3%	5.2%	6.5%	6.7%	6.0%	7.6%	Jul-88
Total Fund Policy Benchmark	1.7%	1.9%	1.9%	1.7%	7.8%	9.7%	6.9%	5.9%	7.1%	7.3%	7.2%	8.4%	Jul-88
Total Fund w/o Alternative Assets	2.0%	1.9%	1.8%	2.0%	8.2%	10.6%	6.6%	5.3%				6.2%	Jan-14
Investment Grade Fixed Income Composite	0.3%	-0.3%	-1.1%	0.3%	-0.5%	0.3%	2.0%	1.2%	<b>2</b> .1%	2.5%	3.9%	6.0%	Jul-88
BBgBarc US Aggregate TR	0.0%	0.6%	-1.6%	0.0%	-0.8%	-0.7%	1.5%	1.8%	2.2%	2.3%	3.7%	6.2%	Jul-88
Brandywine Global Investment Management	1.3%	-3.0%	-1.4%	1.3%	-1.1%	2.2%	3.7%	1.4%	2.7%	3.4%		7.1%	Jan-09
Citi WGBI	-0.4%	-1.9%	-1.3%	-0.4%	-0.4%	-1.6%	2.5%	-0.1%	0.8%	0.1%	2.0%	2.0%	Jan-0
Garcia Hamilton & Associates	-0.1%	0.6%	-0.3%	-0.1%	0.0%	0.0%	1.7%	1.9%	2.4%	2.9%	4.5%	5.1%	Aug-00
BBgBarc US Govt/Credit Int TR	0.0%	0.6%	-0.9%	0.0%	-1.0%	-0.5%	1.0%	1.3%	1.5%	1.7%	3.1%	4.2%	Aug-00
Logan Circle	0.2%	0.6%	-1.2%	0.2%	0.0%	0.7%	2.4%					2.2%	Oct-14
BBgBarc US Aggregate TR	0.0%	0.6%	-1.6%	0.0%	-0.8%	-0.7%	1.5%	1.8%	2.2%	2.3%	3.7%	1.6%	Oct-1
Longfellow	0.0%	0.5%	-1.3%	0.0%	-0.3%	0.1%	1.8%					2.0%	Sep-1
BBgBarc US Aggregate TR	0.0%	0.6%	-1.6%	0.0%	-0.8%	-0.7%	1.5%	1.8%	2.2%	2.3%	3.7%	1.8%	Sep-1
Rhumbline Core Bond Index	-0.1%	0.5%	-1.5%	-0.1%	-0.8%	-0.8%	1.3%	1.5%	2.0%	2.0%	3.5%	3.8%	Jun-0
BBgBarc US Aggregate TR	0.0%	0.6%	-1.6%	0.0%	-0.8%	-0.7%	1.5%	1.8%	2.2%	2.3%	3.7%	3.9%	Jun-0
Opportunistic Fixed Income Composite	0.9%	0.0%	1.0%	0.9%	3.3%	5.4%	3.3%	2.2%	3.7%			3.6%	Dec-12
Opportunistic Fixed Income Benchmark	0.9%	1.2%	2.1%	0.9%	3.5%	6.1%	5.3%	4.2%	4.7%	5.4%		4.8%	Dec-12
Apollo Franklin Partnership, L.P.	0.0%	2.8%	4.2%	0.0%	2.0%	-0.2%	-3.7%	-6.4%	-3.8%			-3.4%	May-1
50% BarCap HY / 50% CSFB Lev Loans	1.0%	1.3%	2.2%	1.0%	3.7%	6.2%	5.4%	4.3%	4.8%	5.5%	6.9%	4.6%	May-1
Avenue Coppers Opportunity Fund LP	0.0%	0.6%	0.3%	0.0%	4.8%	5.0%	2.1%	2.1%				3.5%	Dec-1
Actuarial Rate	0.6%	1.9%	4.4%	0.6%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	Dec-1
KKR-PBPR Capital Partners LP	0.0%	0.6%	3.8%	0.0%	4.8%	6.8%	5.3%	4.0%	5.3%			6.6%	Jun-1
Actuarial Rate	0.6%	1.9%	4.4%	0.6%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	Jun-1
Logan Circle - EMD	2.7%	-2.4%	-3.1%	2.7%	0.0%	5.1%	6.5%					5.4%	Feb-1
JP Morgan EMBI Global TR	2.1%	-0.1%	-3.3%	2.1%	-1.1%	1.7%	4.9%	3.3%	4.6%	4.9%	6.6%	4.5%	Feb-1
Strategic Income Management	0.9%	1.4%	2.3%	0.9%	5.4%	7.8%						10.0%	Mar-1
ICE BofAML US High Yield TR	1.1%	1.5%	1.2%	1.1%	2.5%	6.8%	6.2%	4.6%	5.3%	6.2%	8.3%	9.6%	Mar-1

## Annualized Performance (Net of Fees)

Market Value: \$5,210.2 Million and 100.0% of Fund

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	1 Mo	3 Mo	YTD	Fiscal YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
U.S. Equity Composite	3.0%	6.7%	6.5%	3.0%	16.1%	16.5%	11.1%	11.0%	11.9%	13.0%	10.3%	9.8%	Jul-88
Russell 3000	3.3%	6.9%	6.6%	3.3%	16.4%	16.3%	12.2%	12.0%	12.8%	13.9%	10.7%	10.5%	Jul-88
Rhumbline Russell 1000 Index	3.4%	6.9%	6.8%	3.4%	16.3%	16.3%	12.3%	12.0%	13.0%	13.8%	10.6%	8.2%	May-07
Rhumbline Russell 1000 Custom Benchmark	3.4%	6.8%	6.6%	3.4%	16.3%	16.2%	12.3%	12.0%	13.0%				May-07
Aronson+Johnson+Ortiz LP	3.6%	4.5%	2.1%	3.6%	11.7%	14.2%	7.7%	8.1%	9.4%	12.1%	9.2%	8.1%	May-01
Russell 1000 Value	4.0%	4.8%	2.2%	4.0%	9.5%	11.6%	9.5%	8.7%	10.0%	12.4%	9.0%	7.0%	May-01
O'Shaughnessy Asset Management	4.2%	4.1%	6.2%	4.2%	17.5%	19.6%	11.4%	9.7%	12.2%			15.4%	Jun-12
Russell 1000 Value	4.0%	4.8%	2.2%	4.0%	9.5%	11.6%	9.5%	8.7%	10.0%	12.4%	9.0%	13.2%	Jun-12
Rhumbline MidCap Index	2.5%	5.7%	5.0%	2.5%	13.6%							14.8%	Dec-16
Rhumbline Russell Mid Cap Custom Benchmark	2.5%	5.5%	4.9%	2.5%	13.4%							14.7%	Dec-16
Rhumbline Russell 2000 Index	1.8%	8.6%	9.6%	1.8%	18.8%							15.6%	Dec-16
Rhumbline Russell 2000 Custom Benchmark	1.8%	8.7%	9.6%	1.8%	18.8%							15.5%	Dec-16
Emerald Advisors	0.7%	9.6%	7.9%	0.7%	23.5%	22.1%	9.5%	15.9%	14.2%	15.1%	13.2%	10.5%	Dec-04
Russell 2000 Growth	1.7%	9.0%	11.6%	1.7%	22.9%	20.3%	11.1%	13.3%	12.4%	13.4%	11.2%	9.4%	Dec-04
Fisher Asset Management	0.8%	5.9%	6.7%	0.8%	13.5%	17.9%	11.9%	12.9%	12.1%	12.9%	11.3%	10.7%	May-08
Russell 2000 Value	1.8%	8.3%	7.3%	1.8%	14.4%	16.8%	12.9%	10.7%	10.2%	11.9%	9.5%	9.1%	<i>May-</i> 08
Fiera Capital	1.8%	4.9%	7.5%	1.8%	20.4%	17.6%	8.1%	9.8%	11.8%	13.4%		15.4%	Dec-09
Russell 2500 Growth	1.9%	8.2%	10.1%	1.9%	22.2%	19.1%	11.1%	12.9%	12.7%	13.6%	11.6%	15.0%	Dec-09
Ariel	2.5%	5.7%	4.6%	2.5%	12.9%	14.9%						16.6%	Jan-16
Russell 2500 Value	2.0%	6.7%	5.0%	2.0%	12.8%	13.5%	11.0%	9.4%	10.0%	12.0%	10.1%	19.0%	Jan-16
Non-U.S. Equity Developed Composite	2.0%	-0.9%	-0.8%	2.0%	6.2%	12.1%	4.7%	3.2%	4.9%	4.6%	3.3%	5.8%	Jan-89
MSCI EAFE	2.5%	-1.1%	-0.4%	2.5%	6.4%	11.9%	5.0%	3.7%	5.9%	5.5%	3.4%	4.7%	Jan-89
Causeway Capital Management	2.3%	-1.3%	-2.3%	2.3%	6.4%	13.3%	4.3%	3.6%	5.5%			9.5%	Nov-11
MSCI EAFE	2.5%	-1.1%	-0.4%	2.5%	6.4%	11.9%	5.0%	3.7%	5.9%	5.5%	3.4%	8.2%	Nov-11
Northern Trust MSCI EAFE+Canada	2.5%	-0.4%	-0.1%	2.5%	6.5%	11.8%	5.3%	3.5%	5.6%	5.3%	4.0%	3.3%	Mar-07
Northern Trust MSCI EAFE + Canada Custom Benchmark	2.5%	-0.4%	0.0%	2.5%	6.6%	12.0%	5.7%	4.0%	6.5%	6.1%	4.0%	2.9%	Mar-07
Northern Trust International Small Cap	0.7%	-3.0%		0.7%								-2.2%	Mar-18
Northern Trust EAFE Small Cap Custom Benchmark	0.7%	-2.2%		0.7%								-1.4%	Mar-18

## Annualized Performance (Net of Fees)

Market Value: \$5,210.2 Million and 100.0% of Fund

### Ending July 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	0.7%	-3.2%	-1.6%	0.7%								0.9%	Nov-17
MSCI World ex USA Small Cap	0.6%	-1.9%	-0.9%	0.6%	8.7%	13.5%	9.7%	6.8%	9.1%	7.3%	6.7%	2.0%	Nov-17
Investors Group	-0.1%	-2.9%	-0.2%	-0.1%								3.0%	Nov-17
MSCI EAFE Small Cap	0.7%	-2.3%	-0.7%	0.7%	9.2%	14.6%	10.0%	8.1%	10.2%	8.6%	7.4%	2.0%	Nov-17
Non-U.S. Equity Emerging Composite	1.9%	-6.2%	-5.2%	1.9%	4.4%	13.8%	9.4%	3.3%	5.0%	0.7%		9.7%	Jan-09
MSCI Emerging Markets	2.2%	-5.5%	-4.6%	2.2%	4.4%	14.1%	8.9%	2.9%	5.3%	1.8%	2.9%	10.5%	Jan-09
Rhumbline Emerging Markets Index	1.9%	-6.2%	-5.2%	1.9%	4.4%	13.8%	9.4%	3.2%	5.3%			2.8%	Feb-13
MSCI Emerging Markets	2.2%	-5.5%	-4.6%	2.2%	4.4%	14.1%	8.9%	2.9%	5.3%	1.8%	2.9%	2.8%	Feb-13

Investment Manager

## Annualized Performance (Net of Fees)

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Absolute Return HFRI Fund of Funds Composite Index Elizabeth Park Capital Management	1 Mo 0.0% 0.1% 0.0% -0.5%	3 Mo 0.9% 0.3% 0.8%	YTD 4.6% 0.8% 5.1%	Fiscal YTD 0.0% 0.1%	1 Yr 10.1% 4.2%	2 Yrs 12.2%	3 Yrs 5.2%	4 Yrs 3.6%	5 Yrs <b>4.8%</b>	7 Yrs <b>4.2%</b>	10 Yrs 3.3%	Inception 3.7%	Inception Date Sep-05
HFRI Fund of Funds Composite Index Elizabeth Park Capital	0.1% 0.0%	0.3% 0.8%	0.8%				5.2%	3.6%	4.8%	4.2%	3.3%	3.7%	Sep-05
Index Elizabeth Park Capital	0.0%	0.8%		0.1%	4.2%								
-			5 1%			5.1%	1.9%	2.6%	3.3%	2.8%	1.7%	2.6%	Sep-05
Management	-0.5%		0.170	0.0%	11.5%	18.4%	12.5%	12.1%				11.2%	May-14
HFRX Event Driven Index		-0.6%	-5.0%	-0.5%	-4.3%	3.1%	1.6%	-0.8%	0.9%	1.9%	1.1%	-0.6%	May-14
Archview Offshore Fund. LTD	0.0%	1.7%	3.7%	0.0%	9.4%	8.9%	2.5%	1.7%				2.2%	Mar-14
HFRI ED: Distressed/Restructuring Index	1.6%	3.7%	4.6%	1.6%	7.0%	9.9%	5.7%	2.6%	4.1%	4.7%	4.9%	2.9%	Mar-14
Real Assets Composite	0.4%	2.9%	1.6%	0.4%	4.2%	5.2%	2.9%	1.7%	4.9%			6.3%	Dec-12
Real Assets Benchmark	0.6%	3.3%	1.8%	0.6%	4.4%	3.9%	0.7%	-2.6%	0.2%			2.1%	Dec-12
Real Assets - Public Real Estate Composite	0.5%	8.3%	1.6%	0.5%	4.0%	0.8%	7.5%	8.8%	9.2%			8.7%	Jan-1
FTSE NAREIT All Equity REIT Custom Benchmark	0.5%	8.4%	1.7%	0.5%	4.0%	0.8%	7.5%	8.0%	8.8%				Jan-13
Rhumbline FTSE NAREIT	0.5%	8.3%	1.6%	0.5%	4.0%	0.8%	7.5%	7.9%	8.8%			7.0%	May-1
FTSE NAREIT All Equity REIT Custom Benchmark	0.5%	8.4%	1.7%	0.5%	4.0%	0.8%	7.5%	8.0%	8.8%			7.0%	May-1
Real Assets - Open-End Real Estate Composite	0.0%	1.9%	3.6%	0.0%	7.2%			-				6.1%	Jan-1
NFI	0.0%	1.2%	3.8%	0.0%	6.9%	6.9%	8.0%	9.3%	9.8%	10.2%	4.4%	6.7%	Jan-1
UBS Trumbull Fund	0.0%	1.8%	3.5%	0.0%	7.1%							6.0%	Jan-1
NFI	0.0%	1.2%	3.8%	0.0%	6.9%	6.9%	8.0%	9.3%	9.8%	10.2%	4.4%	6.7%	Jan-1
Clarion Lion Properties Fund	0.0%	2.4%		0.0%								4.0%	Feb-1
NFI	0.0%	1.2%	3.8%	0.0%	6.9%	6.9%	8.0%	9.3%	9.8%	10.2%	4.4%	3.1%	Feb-1
Real Assets - Infrastructure Composite	1.3%	4.4%	0.3%	1.3%	1.2%							6.4%	Mar-1
Dow Jones Brookfield Global Infrastructure Index	1.9%	4.6%	0.5%	1.9%	1.1%	5.6%	5.3%	3.2%	6.8%	8.8%	8.0%	6.1%	Mar-1
Rhumbline Infrastructure Index	1.9%	4.7%	0.9%	1.9%	1.8%							6.8%	Mar-1
Dow Jones Brookfield Global Infrastructure Index	1.9%	4.6%	0.5%	1.9%	1.1%	5.6%	5.3%	3.2%	6.8%	8.8%	8.0%	6.1%	Mar-1
Rreef Global Infrastructure	0.0%	3.3%		0.0%								4.3%	Mar-1
Dow Jones Brookfield Global Infrastructure Index	1.9%	4.6%	0.5%	1.9%	1.1%	5.6%	5.3%	3.2%	6.8%	8.8%	8.0%	6.1%	Mar-1

## Annualized Performance (Net of Fees)

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	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%	-0.1%	0.9%	0.0%	4.4%	6.8%	7.7%	7.9%	9.6%	11.1%	2.2%	3.7%	May-06
Real Assets - Private Real Estate Benchmark	0.0%	-0.1%	0.9%	0.0%	4.4%	6.8%	7.7%	7.9%	9.7%				May-06
Real Assets - Private Energy/Infrastructure Composite	0.0%	0.0%	4.4%	0.0%	16.5%	9.1%	-1.0%	-10.8%	4.4%			4.5%	May-12
Real Assets - Private Energy/Infrastructure Benchmark	0.0%	0.0%	4.4%	0.0%	16.5%	9.1%	-1.0%	-10.8%	4.4%			4.5%	May-12
Private Assets Composite	0.0%	0.0%	0.0%	0.0%	8.0%	9.3%	7.3%	-				-	Mar-87