

(Preliminary Subject to Change)



Employees Retirement System

City of Philadelphia
Employees Retirement System
Executive Summary

May 31, 2018

Total Fund Composite

Market Value: \$5,203.5 Million and 100.0% of Fund

	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
Total Fund Composite		5,203,495,820	331,475,847	100.0	100.0	0
Total Fund w/o Alternative Assets		3,997,035,894	40,832,135	76.8	72.9	203,687,441
Investment Grade Fixed Income Composite		687,384,304	21	13.2	14.0	-41,105,111
Brandywine Global Investment Management	Global Fixed Income	162,139,087	21	3.1		
Garcia Hamilton & Associates	Int. Govt. Fixed Income	164,170,339	0	3.2		
Logan Circle	Core Plus Fixed Income	43,713,583	0	0.8		
Longfellow	Core Plus Fixed Income	155,448,356	0	3.0		
Rhumbline Core Bond Index	Core Fixed Income	161,912,939	0	3.1		
Opportunistic Fixed Income Composite		307,813,703	-14,041,360	5.9	6.0	-4,396,046
Apollo Franklin Partnership, L.P.	Opportunistic Fixed Income	17,124,179	-4,818,182	0.3		
Avenue Coppers Opportunity Fund LP	Opportunistic Fixed Income	29,752,514	-7,319,200	0.6		
KKR-PBPR Capital Partners LP	Opportunistic Fixed Income	91,434,881	-1,893,978	1.8		
Logan Circle - EMD	EM Fixed Income	70,480,021	-10,000	1.4		
Strategic Income Management	High Yield Fixed Income	98,779,120	0	1.9		
U.S. Equity Composite		1,619,823,528	-14,965,279	31.1	29.8	69,181,773
Rhumbline Russell 1000 Index	Large-Cap Core	1,123,096,216	-10,000,000	21.6		
Aronson+Johnson+Ortiz LP	Large-Cap Value	44,948,094	0	0.9		
O'Shaughnessy Asset Management	Large-Cap Value	28,682,978	0	0.6		
Rhumbline MidCap Index	Mid-Cap Core	163,627,966	-5,006,845	3.1		
Rhumbline Russell 2000 Index	Small-Cap Core	42,582,279	-1,635	0.8		
Emerald Advisors	Small-Cap Growth	77,987,816	0	1.5		
Fisher Asset Management	Small-Cap Value	57,976,907	0	1.1		
Fiera Capital	Smid-Cap Growth	27,122,389	34,721	0.5		
Ariel	Smid-Cap Value	53,739,618	0	1.0		
Non-U.S. Equity Developed Composite		1,072,588,263	59,881,112	20.6	16.8	198,400,965
Causeway Capital Management	Non-U.S. Large-Cap Core	189,923,044	0	3.6		
Northern Trust MSCI EAFE+Canada	Non-U.S. Large-Cap Core	739,786,586	0	14.2		
Northern Trust International Small Cap	Non-U.S. Small-Cap Core	59,901,503	60,000,000	1.2		
Strategic Global Advisors	Non-U.S. Small-Cap Core	26,075,364	0	0.5		
Investors Group	Non-U.S. Small-Cap Core	52,868,211	0	1.0		
Non-U.S. Equity Emerging Composite		264,429,999	0	5.1	5.2	-6,151,783
Rhumbline Emerging Markets Index	Emerging Markets	264,426,972	0	5.1		

Total Fund Composite

Market Value: \$5,203.5 Million and 100.0% of Fund

	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
Cash Composite		44,996,097	9,838,752	0.9	1.1	-12,242,357
Cash	Cash & Equivalents	44,278,954	9,859,625	0.9		
Directed Commissions	Cash & Equivalents	717,144	-20,873	0.0		
Absolute Return		35,311,503	-5,209,941	0.7	0.5	9,294,024
Elizabeth Park Capital Management	Long/Short Hedge Fund	31,542,891	0	0.6		
Archview Offshore Fund. LTD	Credit Hedge Fund	3,767,962	-1,838,903	0.1		
Real Assets Composite		768,074,565	292,567,400	14.8	15.6	-43,670,783
Real Assets - Public Real Estate Composite		95,144,876	0	1.8	1.4	22,295,935
Rhumbline FTSE NAREIT	Real Assets	95,144,876	0	1.8		
Real Assets - Open-End Real Estate Composite		363,715,428	208,617,604	7.0	7.6	-31,750,255
UBS Trumbull Fund	Core Real Estate	283,336,835	153,662,981	5.4		
Clarion Lion Properties Fund	Core Real Estate	80,378,593	54,954,623	1.5		
Real Assets - Infrastructure Composite		185,378,073	81,989,311	3.6	4.0	-22,761,759
Rhumbline Infrastructure Index	Publicly-Traded Infrastructure	130,378,073	27,000,000	2.5		
Rreef Global Infrastructure	Global Infrastructure	55,000,000	55,000,000	1.1		
Real Assets - Private Real Estate Composite		114,456,031	740,157	2.2	2.6	-20,834,861
Real Assets - Private Energy/Infrastructure Composite		9,380,157	975,060	0.2		9,380,157
Private Assets Composite		403,073,859	3,520,833	7.7	11.0	-169,310,681
Private Assets - Private Equity	U.S. Private Equity FoF	392,431,139	3,536,371	7.5		
Private Assets - Private Debt	Mezz. Private Equity	10,642,720	-15,538	0.2		

Annualized Performance (Net of Fees)

Market Value: \$5,203.5 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
Total Fund Composite	0.3%	0.1%	0.2%	7.6%	8.4%	10.5%	5.2%	4.8%	6.2%	6.3%	5.2%	7.5%	Jul-88
Total Fund Policy Benchmark	0.5%	0.2%	0.4%	6.8%	7.7%	10.2%	5.6%	5.5%	6.7%	6.7%	6.2%	8.4%	Jul-88
Total Fund w/o Alternative Assets	0.3%	-0.2%	0.2%	8.8%	9.4%	11.4%	5.6%	5.0%	-	-	-	6.1%	Jan-14
Investment Grade Fixed Income Composite	-0.3%	-0.5%	-1.1%	0.4%	0.8%	1.7%	1.6%	1.1%	1.7%	2.7%	3.9%	6.1%	Jul-88
BBgBarc US Aggregate TR	0.7%	0.6%	-1.5%	-0.3%	-0.4%	0.6%	1.4%	1.8%	2.0%	2.5%	3.7%	6.2%	Jul-88
Brandywine Global Investment Management	-3.3%	-4.1%	-1.7%	1.3%	3.0%	4.4%	2.9%	1.3%	2.1%	3.6%		7.2%	Jan-09
Citi WGBI	-1.2%	-1.6%	-0.7%	2.2%	2.1%	0.8%	2.8%	0.0%	1.0%	0.6%	2.1%	2.1%	Jan-09
Garcia Hamilton & Associates	0.6%	0.7%	-0.3%	0.2%	0.1%	0.9%	1.6%	1.9%	2.3%	3.0%	4.5%	5.1%	Aug-00
BBgBarc US Govt/Credit Int TR	0.6%	0.4%	-0.9%	-0.5%	-0.7%	0.3%	1.0%	1.3%	1.4%	1.9%	3.1%	4.3%	Aug-00
Logan Circle	0.6%	0.5%	-1.2%	0.6%	0.7%	2.1%	2.1%					2.3%	Oct-14
BBgBarc US Aggregate TR	0.7%	0.6%	-1.5%	-0.3%	-0.4%	0.6%	1.4%	1.8%	2.0%	2.5%	3.7%	1.7%	Oct-14
Longfellow	0.7%	0.6%	-1.1%	0.4%	0.5%	1.4%	1.8%					2.2%	Sep-14
BBgBarc US Aggregate TR	0.7%	0.6%	-1.5%	-0.3%	-0.4%	0.6%	1.4%	1.8%	2.0%	2.5%	3.7%	1.9%	Sep-14
Rhumbline Core Bond Index	0.7%	0.7%	-1.3%	-0.2%	-0.4%	0.5%	1.2%	1.6%	1.7%	2.2%	3.6%	3.9%	Jun-07
BBgBarc US Aggregate TR	0.7%	0.6%	-1.5%	-0.3%	-0.4%	0.6%	1.4%	1.8%	2.0%	2.5%	3.7%	4.0%	Jun-07
Opportunistic Fixed Income Composite	-0.8%	0.1%	0.3%	3.4%	3.5%	6.3%	2.9%	2.3%	3.3%			3.6%	Dec-12
Opportunistic Fixed Income Benchmark	0.1%	0.4%	0.9%	3.2%	3.3%	6.8%	4.5%	3.9%	4.4%	5.2%		4.7%	Dec-12
Apollo Franklin Partnership, L.P.	0.0%	-0.4%	1.4%	1.4%	-1.0%	-1.4%	-5.4%	-6.8%	-4.1%			-4.1%	May-13
50% BarCap HY / 50% CSFB Lev Loans	0.1%	0.5%	1.0%	3.4%	3.4%	6.9%	4.5%	4.0%	4.5%	5.3%	6.5%	4.5%	May-13
Avenue Coppers Opportunity Fund LP	0.0%	0.6%	0.5%	4.9%	5.4%	5.0%	2.3%	2.5%				3.7%	Dec-13
Actuarial Rate 7.70%	0.6%	1.9%	3.1%	7.0%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	Dec-13
KKR-PBPR Capital Partners LP	0.0%	3.0%	3.1%	4.3%	5.0%	8.1%	5.4%	4.0%	5.6%			6.6%	Jun-12
Actuarial Rate 7.70%	0.6%	1.9%	3.1%	7.0%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	Jun-12
Logan Circle - EMD	-3.1%	-4.3%	-3.8%	0.9%	1.3%	7.8%	5.5%					5.5%	Feb-15
JP Morgan EMBI Global TR	-1.1%	-2.2%	-4.3%	-1.5%	-1.7%	3.9%	4.1%	3.2%	3.6%	5.2%	6.4%	4.4%	Feb-15
Strategic Income Management	-0.2%	0.7%	0.6%	4.6%	4.2%	8.1%						10.0%	Mar-16
ICE BofAML US High Yield TR	0.0%	0.0%	-0.3%	2.2%	2.3%	7.9%	4.9%	4.1%	4.9%	6.0%	7.7%	9.6%	Mar-16

Annualized Performance (Net of Fees)

Market Value: \$5,203.5 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
U.S. Equity Composite	2.8%	1.4%	2.6%	13.9%	15.2%	16.5%	9.6%	10.0%	11.9%	11.7%	8.9%	9.7%	Jul-88
Russell 3000	2.8%	1.1%	2.5%	14.0%	15.1%	16.4%	10.7%	11.0%	12.9%	12.6%	9.2%	10.5%	Jul-88
Rhumbline Russell 1000 Index	2.6%	0.7%	2.4%	13.9%	14.8%	16.3%	10.8%	11.0%	12.9%	12.5%	9.1%	7.9%	May-07
Rhumbline Russell 1000 Custom Benchmark	2.6%	0.7%	2.4%	14.0%	14.9%	16.2%	10.8%	11.1%	13.0%				<i>May-</i> 07
Aronson+Johnson+Ortiz LP	1.4%	1.4%	-0.9%	10.9%	12.8%	13.6%	6.0%	7.2%	10.0%	10.9%	7.9%	7.9%	May-01
Russell 1000 Value	0.6%	-0.8%	-1.9%	6.5%	8.2%	11.4%	7.4%	7.8%	10.1%	10.9%	7.4%	6.8%	May-01
O'Shaughnessy Asset Management	0.8%	1.2%	2.9%	17.6%	20.1%	19.5%	9.3%	9.1%	12.8%	-		15.3%	Jun-12
Russell 1000 Value	0.6%	-0.8%	-1.9%	6.5%	8.2%	11.4%	7.4%	7.8%	10.1%	10.9%	7.4%	12.9%	Jun-12
Rhumbline MidCap Index	2.3%	2.2%	1.6%	11.5%	12.6%							14.0%	Dec-16
Rhumbline Russell Mid Cap Custom Benchmark	2.3%	2.2%	1.6%	11.5%	12.6%		-	-			-	14.0%	Dec-16
Rhumbline Russell 2000 Index	6.1%	8.4%	7.0%	16.8%	21.0%							15.7%	Dec-16
Rhumbline Russell 2000 Custom Benchmark	6.1%	8.4%	6.9%	16.8%	20.9%							15.5%	Dec-16
Emerald Advisors	7.4%	7.0%	5.7%	21.4%	25.8%	24.5%	10.9%	14.9%	15.8%	13.9%	12.5%	10.5%	Dec-04
Russell 2000 Growth	6.3%	7.8%	8.8%	20.9%	25.1%	22.4%	10.8%	12.5%	13.3%	12.0%	10.5%	9.3%	Dec-04
Fisher Asset Management	4.2%	6.3%	5.0%	12.9%	16.1%	18.8%	11.4%	12.0%	12.9%	11.5%	10.4%	10.7%	May-08
Russell 2000 Value	5.8%	9.0%	4.8%	12.4%	16.4%	18.7%	11.0%	9.5%	11.0%	10.6%	8.7%	9.0%	May-08
Fiera Capital	3.7%	3.2%	6.2%	21.5%	21.9%	18.9%	8.0%	10.1%	12.6%	12.1%		15.6%	Dec-09
Russell 2500 Growth	5.3%	5.5%	7.1%	20.5%	23.3%	20.5%	10.4%	12.2%	13.4%	12.2%	10.5%	15.0%	Dec-09
Ariel	1.0%	-3.2%	0.0%	7.6%	10.0%	13.0%						15.6%	Jan-16
Russell 2500 Value	4.1%	6.4%	2.5%	10.9%	13.8%	14.9%	9.2%	8.5%	10.4%	10.6%	9.0%	19.2%	Jan-16
Non-U.S. Equity Developed Composite	-1.7%	-1.1%	-1.6%	8.7%	8.8%	12.2%	4.0%	2.6%	5.2%	4.2%	1.9%	5.8%	Jan-89
MSCI EAFE	-2.2%	-1.8%	-1.5%	8.2%	8.0%	12.1%	4.3%	3.1%	5.9%	4.9%	2.1%	4.7%	Jan-89
Causeway Capital Management	-2.3%	-0.6%	-3.3%	8.9%	8.6%	11.9%	3.6%	2.9%	6.1%			9.5%	Nov-11
MSCI EAFE	-2.2%	-1.8%	-1.5%	8.2%	8.0%	12.1%	4.3%	3.1%	5.9%	4.9%	2.1%	8.2%	Nov-11
Northern Trust MSCI EAFE+Canada	-1.7%	-1.3%	-1.5%	8.3%	8.6%	12.0%	4.4%	3.1%	5.7%	4.7%	2.6%	3.2%	Mar-07
Northern Trust MSCI EAFE + Canada Custom Benchmark	-1.7%	-1.2%	-1.4%	8.4%	8.7%	12.3%	4.7%	3.6%	6.5%	5.4%	2.6%	2.8%	Mar-07
Northern Trust International Small Cap	-1.0%			-						-		-0.2%	Mar-18
Northern Trust EAFE Small Cap Custom Benchmark	-1.0%											-0.2%	Mar-18



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
Strategic Global Advisors	-0.9%	0.8%	0.8%				-					3.3%	Nov-17
MSCI World ex USA Small Cap	-0.7%	-0.3%	0.3%	13.8%	14.2%	14.9%	9.5%	7.0%	9.8%	7.1%	5.4%	3.2%	Nov-17
Investors Group	-0.4%	0.7%	2.4%									5.7%	Nov-17
MSCI EAFE Small Cap	-1.0%	-0.7%	0.6%	14.7%	14.7%	15.7%	10.3%	8.2%	10.9%	8.4%	6.1%	3.3%	Nov-17
Non-U.S. Equity Emerging Composite	-3.7%	-6.5%	-2.7%	13.4%	14.5%	20.3%	6.8%	4.9%	4.6%	0.8%		10.2%	Jan-09
MSCI Emerging Markets	-3.5%	-5.8%	-2.6%	12.9%	14.0%	20.5%	6.2%	4.6%	4.5%	1.8%	1.6%	10.9%	Jan-09
Rhumbline Emerging Markets Index	-3.7%	-6.5%	-2.7%	13.4%	14.5%	20.3%	6.7%	5.0%	4.7%	-	-	3.4%	Feb-13
MSCI Emerging Markets	-3.5%	-5.8%	-2.6%	12.9%	14.0%	20.5%	6.2%	4.6%	4.5%	1.8%	1.6%	3.3%	Feb-13

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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
Absolute Return	1.6%	2.7%	5.4%	11.4%	13.2%	13.0%	5.3%	4.2%	5.0%	4.1%	3.1%	3.8%	Sep-05
HFRI Fund of Funds Composite Index	0.7%	0.4%	1.2%	5.7%	5.6%	5.8%	1.7%	2.8%	3.3%	2.7%	1.4%	2.7%	Sep-05
Elizabeth Park Capital Management	1.8%	3.4%	6.2%	13.2%	15.8%	18.7%	14.2%	12.0%				12.0%	May-14
HFRX Event Driven Index	0.4%	-1.4%	-4.1%	-2.3%	-2.4%	5.6%	1.0%	-0.4%	1.2%	1.8%	0.8%	-0.4%	May-14
Archview Offshore Fund. LTD	0.0%	-1.4%	2.0%	8.5%	9.4%	9.1%	0.8%	1.6%				1.9%	Mar-14
HFRI ED: Distressed/Restructuring Index	0.9%	1.1%	1.9%	5.0%	5.2%	9.9%	3.9%	2.1%	3.6%	4.2%	4.4%	2.4%	Mar-14
Real Assets Composite	0.4%	2.4%	-1.2%	2.3%	3.3%	6.0%	0.7%	1.7%	4.4%			6.0%	Dec-12
Real Assets Benchmark	0.9%	3.0%	-0.7%	2.5%	4.3%	6.6%	-2.0%	-2.8%	-0.1%			1.7%	Dec-12
Real Assets - Public Real Estate Composite	3.6%	7.9%	-2.9%	0.7%	2.7%	3.8%	6.2%	8.0%	7.9%	-		8.1%	Jan-13
FTSE NAREIT All Equity REIT Custom Benchmark	3.6%	8.0%	-2.8%	0.7%	2.7%	3.9%	6.1%	7.0%	7.5%				Jan-13
Rhumbline FTSE NAREIT	3.6%	7.9%	-2.9%	0.7%	2.7%	3.8%	6.2%	7.0%	7.5%			6.3%	May-13
FTSE NAREIT All Equity REIT Custom Benchmark	3.6%	8.0%	-2.8%	0.7%	2.7%	3.9%	6.1%	7.0%	7.5%			6.3%	May-13
Real Assets - Open-End Real Estate Composite	0.0%	1.6%	1.6%	4.9%	6.2%	-	-	-	-	-	-	5.4%	Jan-17
NFI	0.0%	0.7%	2.0%	5.6%	6.1%	6.6%	8.2%	9.4%	9.9%	10.3%	4.2%	6.1%	Jan-17
UBS Trumbull Fund	0.0%	1.7%	1.7%	5.0%	6.2%							5.4%	Jan-17
NFI	0.0%	0.7%	2.0%	5.6%	6.1%	6.6%	8.2%	9.4%	9.9%	10.3%	4.2%	6.1%	Jan-17
Clarion Lion Properties Fund	0.0%	1.5%			-			-		-		1.5%	Feb-18
NFI	0.0%	0.7%	2.0%	5.6%	6.1%	6.6%	8.2%	9.4%	9.9%	10.3%	4.2%	1.3%	Feb-18
Real Assets - Infrastructure Composite	0.1%	2.3%	-4.0%	0.0%	-0.5%							3.3%	Mar-17
Dow Jones Brookfield Global Infrastructure Index	0.0%	2.6%	-3.9%	-0.2%	-0.8%	6.4%	2.2%	2.8%	6.1%	7.8%	6.5%	3.0%	Mar-17
Rhumbline Infrastructure Index	0.1%	2.8%	-3.6%	0.4%	-0.1%							3.7%	Mar-17
Dow Jones Brookfield Global Infrastructure Index	0.0%	2.6%	-3.9%	-0.2%	-0.8%	6.4%	2.2%	2.8%	6.1%	7.8%	6.5%	3.0%	Mar-17
Rreef Global Infrastructure	0.0%		-						-			0.0%	Mar-18
Dow Jones Brookfield Global Infrastructure Index	0.0%	2.6%	-3.9%	-0.2%	-0.8%	6.4%	2.2%	2.8%	6.1%	7.8%	6.5%	1.5%	Mar-18



Annualized Performance (Net of Fees)

Market Value: \$5,203.5 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
	Real Assets - Private Real Estate Composite	0.0%	1.0%	1.0%	4.5%	6.0%	8.1%	8.0%	8.4%	9.7%	9.8%	1.8%	3.8%	May-06
	Real Assets - Private Real Estate Benchmark	0.0%	1.0%	1.0%	4.5%	6.0%	8.1%	8.0%	8.4%	9.7%				May-06
	Real Assets - Private Energy/Infrastructure Composite	0.0%	4.4%	4.4%	16.5%	25.7%	19.3%	-1.8%	-3.6%	4.4%	-		4.6%	May-12
	Real Assets - Private Energy/Infrastructure Benchmark	0.0%	4.4%	4.4%	16.5%	25.7%	19.3%	-1.8%	-3.6%	4.4%			4.6%	May-12
	Private Assets Composite	0.0%	0.0%	0.0%	1.6%	4.0%	7.0%	6.5%						Mar-87