

(Preliminary Subject to Change)



Employees Retirement System

City of Philadelphia
Employees Retirement System
Executive Summary

August 31, 2017

Total Fund Composite

Market Value: \$4,770.9 Million and 100.0% of Fund

Ending August 31, 2017

		EI	iding August 3	1, 2011		
	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
Total Fund Composite		4,770,891,147	-178,090,979	100.0	100.0	0
Total Fund w/o Alternative Assets		3,848,282,778	-74,355,393	80.7	79.4	60,195,208
Investment Grade Fixed Income Composite		695,456,523	-3,589,210	14.6	19.0	-211,012,795
Brandywine Global Investment Management	Global Fixed Income	165,247,989	-3,500,000	3.5		
Garcia Hamilton & Associates	Int. Govt. Fixed Income	164,955,331	0	3.5		
Logan Circle	Core Plus Fixed Income	44,031,589	0	0.9		
Longfellow	Core Plus Fixed Income	156,829,736	-89,210	3.3		
Rhumbline Core Bond Index	Core Fixed Income	164,391,878	0	3.4		
Opportunistic Fixed Income Composite		367,112,118	-17,700,468	7.7	7.5	9,295,282
Apollo Franklin Partnership, L.P.	Opportunistic Fixed Income	26,294,962	-6,272,727	0.6		
Avenue Coppers Opportunity Fund LP	Opportunistic Fixed Income	42,155,306	-10,397,408	0.9		
KKR-PBPR Capital Partners LP	Opportunistic Fixed Income	109,607,001	2,462,058	2.3		
Logan Circle - EMD	EM Fixed Income	77,105,704	-3,500,000	1.6		
Strategic Income Management	High Yield Fixed Income	111,744,143	0	2.3		
U.S. Equity Composite		1,517,752,307	-24,971,572	31.8	29.8	96,026,745
Rhumbline Russell 1000 Index	Large-Cap Core	1,072,514,230	-22,000,000	22.5		
Rhumbline Russell 2000 Index	Small-Cap Core	36,307,087	0	0.8		
Aronson+Johnson+Ortiz LP	Large-Cap Value	41,168,216	28,428	0.9		
O'Shaughnessy Asset Management	Large-Cap Value	26,186,697	-3,000,000	0.5		
Rhumbline MidCap Index	Mid-Cap Core	152,265,065	0	3.2		
Apex Capital Management	Smid-Cap Growth	22,651,435	0	0.5		
Emerald Advisors	Small-Cap Growth	64,555,975	0	1.4		
Fisher Asset Management	Small-Cap Value	53,897,370	0	1.1		
Ariel	Smid-Cap Value	48,147,700	0	1.0		
Non-U.S. Equity Developed Composite		948,620,642	-13,000,000	19.9	16.8	147,110,929
Causeway Capital Management	Non-U.S. Large-Cap Core	226,994,309	-10,000,000	4.8		
Northern Trust MSCI EAFE+Canada	Non-U.S. Large-Cap Core	717,335,800	-3,000,000	15.0		
Non-U.S. Equity Emerging Composite		274,597,302	-5,022,882	5.8	5.2	26,510,963
Rhumbline Emerging Markets Index	Emerging Markets	274,587,443	-5,000,000	5.8		
Cash Composite		44,743,887	-10,094,144	0.9	1.1	-7,735,916
Cash	Cash & Equivalents	43,986,239	-10,081,018	0.9		
Directed Commissions	Cash & Equivalents	757,648	-13,126	0.0		

Total Fund Composite

Market Value: \$4,770.9 Million and 100.0% of Fund

Ending August 31, 2017

	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
Absolute Return		46,041,997	-20,238,483	1.0	0.5	22,187,542
400 Capital Credit Opportunity Fund	Relative Value Hedge Fund	2,834,858	-12,840,012	0.1		
Elizabeth Park Capital Management	Long/Short Hedge Fund	27,684,467	0	0.6		
Archview Offshore Fund. LTD	Credit Hedge Fund	14,992,815	-7,398,470	0.3		
Real Assets Composite		464,913,604	-72,514,095	9.7	9.1	30,762,509
Real Assets - Public Real Estate Composite		113,898,841	0	2.4	1.4	47,106,365
Rhumbline FTSE NAREIT	Real Assets	113,898,841	0	2.4		
Real Assets - Open-End Real Estate Composite		100,199,794	-1,052,331	2.1	1.7	19,094,644
UBS Trumbull Fund	Core Real Estate	100,199,794	-1,052,331	2.1		
Real Assets - Infrastructure Composite		107,313,356	24,991,188	2.2	3.4	-54,896,943
Rhumbline Infrastructure Index	Publicly-Traded Infrastructure	107,313,356	25,000,000	2.2		
Real Assets - Private Real Estate Composite		137,510,427	-13,490,387	2.9	2.6	13,467,258
Real Assets - Private Energy/Infrastructure Composite		5,991,185	1,887,904	0.1		5,991,185
Private Assets Composite		411,652,767	-10,983,007	8.6	11.0	-113,145,259
Private Assets - Private Equity	U.S. Private Equity FoF	397,389,692	-10,276,845	8.3		
Private Assets - Private Debt	Mezz. Private Equity	14,263,075	-706,162	0.3		

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$4,770.9 Million and 100.0% of Fund

Ending August 31, 2017

Inception

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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	Return	Since
Total Fund Composite	0.3%	2.7%	9.6%	2.0%	11.8%	7.5%	3.7%	6.5%	7.3%	8.0%	4.8%	7.5%	Jul-88
Total Fund Policy Benchmark	0.1%	2.0%	7.5%	1.6%	10.2%	7.6%	4.4%	7.0%	7.8%	8.6%	5.8%	8.4%	Jul-88
Total Fund w/o Alternative Assets	0.3%	3.0%	11.3%	2.4%	12.7%	8.8%	3.7%	-	-	-		5.6%	Jan-14
Investment Grade Fixed Income Composite	0.8%	2.1%	5.7%	1.8%	2.2%	4.2%	1.6%	3.2%	2.1%	3.1%	4.5%	6.3%	Jul-88
BBgBarc US Aggregate TR	0.9%	1.2%	3.6%	1.3%	0.5%	3.2%	2.6%	3.4%	2.2%	3.0%	4.4%	6.4%	Jul-88
Brandywine Global Investment Management	0.8%	5.3%	13.2%	3.5%	7.1%	7.9%	2.0%	4.4%	3.3%	5.2%		8.1%	Jan-09
Citi WGBI	1.2%	2.9%	7.7%	3.1%	-0.9%	4.3%	0.2%	1.4%	0.1%	1.3%	3.3%	2.4%	Jan-09
Garcia Hamilton & Associates	0.6%	0.6%	2.4%	0.8%	0.7%	2.8%	2.5%	3.3%	2.8%	3.6%	5.2%	5.4%	Aug-00
BBgBarc US Govt/Credit Int TR	0.6%	0.9%	2.8%	1.1%	0.8%	2.4%	2.1%	2.5%	1.8%	2.4%	3.8%	4.6%	Aug-00
Logan Circle	0.9%	1.6%	4.8%	1.5%	2.0%	4.2%						3.2%	Oct-14
BBgBarc US Aggregate TR	0.9%	1.2%	3.6%	1.3%	0.5%	3.2%	2.6%	3.4%	2.2%	3.0%	4.4%	2.7%	Oct-14
Longfellow	0.9%	1.5%	4.1%	1.5%	1.5%	3.5%				-		3.1%	Sep-14
BBgBarc US Aggregate TR	0.9%	1.2%	3.6%	1.3%	0.5%	3.2%	2.6%	3.4%	2.2%	3.0%	4.4%		Sep-14
Rhumbline Core Bond Index	0.9%	1.2%	3.7%	1.3%	0.2%	2.8%	2.2%	3.1%	1.7%	2.7%	4.2%	4.3%	Jun-07
BBgBarc US Aggregate TR	0.9%	1.2%	3.6%	1.3%	0.5%	3.2%	2.6%	3.4%	2.2%	3.0%	4.4%	4.5%	Jun-07
Opportunistic Fixed Income Composite	0.2%	1.1%	4.8%	1.0%	6.5%	4.1%	1.7%	4.1%				3.7%	Dec-12
Opportunistic Fixed Income Benchmark	0.0%	0.9%	4.3%	0.9%	7.2%	6.8%	4.2%	5.0%	5.4%	6.4%		5.0%	Dec-12
Apollo Franklin Partnership, L.P.	0.0%	-0.1%	-1.9%	2.2%	-3.5%	-5.5%	-9.0%	-5.3%				-4.6%	May-13
50% BarCap HY / 50% CSFB Lev Loans	-0.1%	0.9%	4.3%	0.9%	7.2%	6.8%	4.2%	5.1%	5.5%	6.5%	6.3%	4.7%	May-13
Avenue Coppers Opportunity Fund LP	0.0%	0.4%	0.8%	-0.1%	3.5%	1.4%	0.8%					3.0%	Dec-13
Actuarial Rate 7.70%	0.6%	1.9%	5.1%	1.2%	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%	0.8%	6.1%	0.1%	7.9%	5.7%	3.6%	5.5%	6.7%			6.8%	Jun-12
Actuarial Rate 7.70%	0.6%	1.9%	5.1%	1.2%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	Jun-12
Logan Circle - EMD	1.7%	3.8%	11.7%	3.4%	10.6%	12.2%						8.2%	Feb-15
JP Morgan EMBI Global TR	1.7%	2.1%	8.7%	2.4%	4.5%	9.5%	5.2%	7.3%	4.6%	6.3%	7.5%		Feb-15
Strategic Income Management	-0.4%	0.1%	4.2%	0.4%	8.0%		-					12.7%	Mar-16
BofA Merrill Lynch US High Yield Master II TR	0.0%	1.2%	6.1%	1.1%	8.8%	9.0%	4.8%	6.2%	6.5%	7.7%	7.9%	14.2%	Mar-16

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$4,770.9 Million and 100.0% of Fund

Ending August 31, 2017

Inception

	Ending August 31, 2017 Inception											otion	
	1 Mo	3 Mo	YTD	Fiscal YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs	Return	Since
U.S. Equity Composite	0.0%	2.9%	10.9%	1.8%	16.1%	12.0%	7.8%	11.5%	13.3%	14.7%	7.5%	9.6%	Jul-88
Russell 3000	0.2%	3.0%	11.2%	2.1%	16.1%	13.7%	9.1%	12.8%	14.3%	15.4%	7.7%	10.3%	Jul-88
Rhumbline Russell 1000 Index	0.4%	3.2%	12.0%	2.4%	16.4%	14.0%	9.2%	13.0%	14.4%	15.2%	7.7%	7.4%	May-07
Rhumbline Russell 1000 Custom Benchmark	0.4%	3.2%	12.0%	2.4%	16.4%	14.0%	9.3%	13.1%	14.5%				<i>May-</i> 07
Rhumbline Russell 2000 Index	-1.1%	3.1%	4.8%	-0.4%								4.8%	Dec-16
Rhumbline Russell 2000 Custom Benchmark	-1.3%	3.0%	4.5%	-0.5%								4.5%	Dec-16
Aronson+Johnson+Ortiz LP	-0.5%	3.5%	5.1%	1.8%	15.2%	8.3%	5.0%	9.6%	12.7%	13.9%	6.2%	7.8%	May-01
Russell 1000 Value	-1.2%	1.8%	4.8%	0.1%	11.6%	12.2%	6.7%	10.9%	13.2%	14.0%	6.0%	6.7%	May-01
O'Shaughnessy Asset Management	-1.7%	3.8%	9.8%	1.6%	16.7%	10.2%	4.9%	10.6%	14.1%			14.3%	Jun-12
Russell 1000 Value	-1.2%	1.8%	4.8%	0.1%	11.6%	12.2%	6.7%	10.9%	13.2%	14.0%	6.0%	13.5%	Jun-12
Rhumbline MidCap Index	-0.8%	1.7%	8.7%	0.7%	-			-	-			8.7%	Dec-16
Russell MidCap	-0.8%	1.7%	8.7%	0.7%	12.4%	11.2%	7.3%	11.6%	14.1%	15.0%	8.1%	8.7%	Dec-16
Apex Capital Management	-0.1%	2.4%	13.4%	2.0%	13.6%	6.2%	4.1%	10.3%	13.1%	15.3%		14.6%	Dec-09
Russell 2500 Growth	0.2%	3.8%	12.3%	1.5%	15.6%	10.0%	8.1%	11.0%	14.0%	15.7%	8.6%	14.0%	Dec-09
Emerald Advisors	0.7%	4.6%	12.6%	1.0%	19.8%	7.4%	11.2%	11.9%	15.8%	17.9%	9.1%	9.5%	Dec-04
Russell 2000 Growth	-0.1%	4.2%	10.8%	0.7%	16.4%	9.8%	8.2%	10.4%	13.7%	15.5%	8.2%	8.3%	Dec-04
Fisher Asset Management	-2.1%	1.8%	6.9%	-1.0%	18.7%	13.9%	10.3%	12.0%	14.2%	14.9%			May-08
Russell 2000 Value	-2.5%	1.6%	-1.3%	-1.8%	13.5%	13.6%	7.1%	9.7%	12.5%	13.3%	6.5%	8.2%	May-08
Ariel	-3.0%	-1.1%	4.1%	-3.3%	10.2%			-	-			15.7%	Jan-16
Russell 2500 Value	-1.7%	1.7%	1.0%	-1.0%	11.1%	11.9%	6.1%	10.0%	12.8%	13.7%	7.2%	20.7%	Jan-16
Non-U.S. Equity Developed Composite	-0.1%	3.2%	16.5%	3.0%	17.5%	7.8%	2.1%	5.1%	7.0%	6.8%	1.5%	5.7%	Jan-89
MSCI EAFE	0.0%	2.7%	17.0%	2.8%	17.6%	8.4%	2.8%	6.1%	8.5%	7.4%	1.6%	4.6%	Jan-89
Causeway Capital Management	-0.3%	2.8%	16.6%	3.1%	18.2%	6.5%	2.4%	5.6%	8.9%			9.8%	Nov-11
MSCI EAFE	0.0%	2.7%	17.0%	2.8%	17.6%	8.4%	2.8%	6.1%	8.5%	7.4%	1.6%	8.4%	Nov-11
Northern Trust MSCI EAFE+Canada	0.0%	3.3%	16.5%	3.0%	17.2%	8.7%	2.5%	5.8%	8.0%	7.4%	2.5%	3.0%	Mar-07
Northern Trust MSCI EAFE + Canada Custom Benchmark	0.0%	3.3%	16.7%	3.0%	17.5%	9.2%	3.1%	6.8%	9.1%	8.0%	2.3%	2.5%	Mar-07
Non-U.S. Equity Emerging Composite	2.2%	9.2%	28.9%	8.1%	23.9%	18.4%	3.1%	5.9%	3.8%	2.7%	-	10.5%	Jan-09
MSCI Emerging Markets	2.2%	9.4%	28.3%	8.3%	24.5%	18.0%	2.4%	6.5%	5.3%	4.2%	2.4%	11.4%	Jan-09
Rhumbline Emerging Markets Index	2.2%	9.2%	28.9%	8.1%	23.9%	18.4%	2.7%	6.5%				2.9%	
MSCI Emerging Markets	2.2%	9.4%	28.3%	8.3%	24.5%	18.0%	2.4%	6.5%	5.3%	4.2%	2.4%	2.9%	Feb-13

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$4,770.9 Million and 100.0% of Fund

Ending August 31, 2017

Inception

	Ending August 31, 2017											incep	inception	
	1 Mo	3 Mo	YTD	Fiscal YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs	Return	Since	
Absolute Return	-1.0%	1.0%	3.6%	-0.6%	10.9%	3.0%	1.3%	3.1%	4.0%	3.5%	2.2%	3.1%	Sep-05	
HFRI Fund of Funds Composite Index	1.0%	2.0%	5.3%	2.0%	6.5%	2.3%	2.1%	3.5%	4.0%	3.2%	1.3%	2.6%	Sep-05	
400 Capital Credit Opportunity Fund	0.0%	1.7%	7.1%	0.0%	12.1%	2.0%	3.1%	5.8%				5.3%	Jun-13	
HFRI ED: Distressed/Restructuring Index	0.2%	1.2%	4.2%	1.1%	11.3%	6.7%	1.2%	3.6%	5.5%	5.2%	3.7%	3.3%	Jun-13	
HFRX Distressed Securities Index	-0.8%	0.3%	2.2%	-0.3%	8.0%	5.4%	1.1%	2.5%	2.4%	1.8%	-2.7%	2.4%	Jun-13	
Elizabeth Park Capital Management	-1.1%	1.6%	3.8%	-0.6%	21.1%	13.7%	11.5%					10.5%	May-14	
HFRX Event Driven Index	0.1%	1.1%	5.7%	1.1%	9.7%	6.3%	0.0%	2.4%	4.0%	3.0%	1.0%	0.6%	May-14	
Archview Offshore Fund. LTD	-1.1%	0.6%	-0.3%	-0.2%	5.4%	0.0%	-1.3%					-0.2%	Mar-14	
HFRI ED: Distressed/Restructuring Index	0.2%	1.2%	4.2%	1.1%	11.3%	6.7%	1.2%	3.6%	5.5%	5.2%	3.7%	1.8%	Mar-14	
Real Assets Composite	0.5%	2.3%	4.8%	1.4%	7.4%	4.3%	-0.2%	5.4%		-		6.7%	Dec-12	
Real Assets Benchmark	0.3%	2.7%	1.1%	1.0%	4.4%	0.7%	-5.7%	-0.3%				1.7%	Dec-12	
Real Assets - Public Real Estate Composite	0.6%	3.9%	7.2%	1.9%	2.2%	13.2%	10.0%	11.6%				9.8%	Jan-13	
FTSE NAREIT All Equity REIT	0.6%	3.9%	6.9%	1.9%	1.9%	13.0%	8.4%	12.1%	9.9%	12.5%	6.6%	9.5%	Jan-13	
Rhumbline FTSE NAREIT	0.6%	3.9%	7.2%	1.9%	2.2%	13.2%	8.5%	12.2%				7.8%	May-13	
FTSE NAREIT All Equity REIT	0.6%	3.9%	6.9%	1.9%	1.9%	13.0%	8.4%	12.1%	9.9%	12.5%	6.6%	7.5%	May-13	
Real Assets - Open-End Real Estate Composite	0.0%	1.0%	-	-0.2%	-		-	-	-		-	1.9%	Jan-17	
NFI	0.0%	0.5%	3.0%	0.0%	5.6%	7.6%	9.6%	10.1%	10.4%	11.5%	4.0%	2.5%	Jan-17	
UBS Trumbull Fund	0.0%	1.0%	-	-0.2%	-			-	-			1.9%	Jan-17	
NFI	0.0%	0.5%	3.0%	0.0%	5.6%	7.6%	9.6%	10.1%	10.4%	11.5%	4.0%	2.5%	Jan-17	
Real Assets - Infrastructure Composite	1.5%	4.3%	-	4.8%	-			-			-	8.8%	Mar-17	
Dow Jones Brookfield Global Infrastructure Index	0.4%	2.9%	13.6%	3.3%	11.3%	9.1%	1.6%	8.3%	9.2%	11.7%	7.9%	6.0%	Mar-17	
Rhumbline Infrastructure Index	1.5%	4.3%		4.8%								8.8%	Mar-17	
Dow Jones Brookfield Global Infrastructure Index	0.4%	2.9%	13.6%	3.3%	11.3%	9.1%	1.6%	8.3%	9.2%	11.7%	7.9%	6.0%	Mar-17	
Real Assets - Private Real Estate Composite	0.0%	1.5%	4.4%	0.0%	9.3%	8.7%	8.8%	10.6%	11.6%	11.5%	2.3%	3.6%	May-06	
Real Assets - Private Real Estate Benchmark	0.0%	1.5%	4.4%	0.0%	9.3%	9.8%	9.5%	11.2%	12.1%				May-06	
Real Assets - Private Energy/Infrastructure Composite	0.0%	7.9%	2.4%	0.0%	2.2%	-5.8%	-18.4%	0.6%	2.4%	-	-	2.3%	May-12	
Real Assets - Private Energy/Infrastructure Benchmark	0.0%	7.9%	2.4%	0.0%	2.2%	-5.8%	-18.4%	0.6%	2.4%	-		2.3%	<i>May-</i> 12	
Private Assets Composite	0.0%	0.0%	0.0%	0.0%	5.8%	4.7%				-			Mar-87	