

(Preliminary Subject to Change)



Employees Retirement System

City of Philadelphia
Employees Retirement System
Executive Summary
October 31, 2017

Total Fund Composite

Market Value: \$4,892.7 Million and 100.0% of Fund

Ending October 31, 2017

		L11	uning October 5	1, 2011		
	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
Total Fund Composite		4,892,662,742	-65,218,682	100.0	100.0	0
Total Fund w/o Alternative Assets		3,986,059,727	-37,013,750	81.5	79.4	101,285,510
Investment Grade Fixed Income Composite		689,310,640	-3,500,000	14.1	19.0	-240,295,281
Brandywine Global Investment Management	Global Fixed Income	161,036,309	-3,500,000	3.3		
Garcia Hamilton & Associates	Int. Govt. Fixed Income	164,379,444	0	3.4		
Logan Circle	Core Plus Fixed Income	43,988,730	0	0.9		
Longfellow	Core Plus Fixed Income	156,323,730	0	3.2		
Rhumbline Core Bond Index	Core Fixed Income	163,582,428	0	3.3		
Opportunistic Fixed Income Composite		337,922,623	-48,285,545	6.9	7.5	-29,027,083
Apollo Franklin Partnership, L.P.	Opportunistic Fixed Income	26,232,958	-4,090,909	0.5		
Avenue Coppers Opportunity Fund LP	Opportunistic Fixed Income	38,690,314	-8,373,649	0.8		
KKR-PBPR Capital Partners LP	Opportunistic Fixed Income	103,289,454	-9,816,747	2.1		
Logan Circle - EMD	EM Fixed Income	72,302,956	-8,500,000	1.5		
Strategic Income Management	High Yield Fixed Income	97,197,294	-17,500,000	2.0		
U.S. Equity Composite		1,564,354,405	-25,003,964	32.0	29.8	106,340,908
Rhumbline Russell 1000 Index	Large-Cap Core	1,099,253,747	-20,000,000	22.5		
Aronson+Johnson+Ortiz LP	Large-Cap Value	43,385,691	0	0.9		
O'Shaughnessy Asset Management	Large-Cap Value	25,952,005	-1,500,000	0.5		
Rhumbline MidCap Index	Mid-Cap Core	159,036,952	0	3.3		
Rhumbline Russell 2000 Index	Small-Cap Core	38,820,895	0	0.8		
Emerald Advisors	Small-Cap Growth	69,407,720	0	1.4		
Fisher Asset Management	Small-Cap Value	54,102,977	-3,500,000	1.1		
Apex Capital Management	Smid-Cap Growth	24,238,123	0	0.5		
Ariel	Smid-Cap Value	50,117,408	0	1.0		
Non-U.S. Equity Developed Composite		988,356,013	-13,061,430	20.2	16.8	166,388,672
Causeway Capital Management	Non-U.S. Large-Cap Core	239,819,663	-10,000,000	4.9		
Northern Trust MSCI EAFE+Canada	Non-U.S. Large-Cap Core	744,498,437	-3,000,000	15.2		
Non-U.S. Equity Emerging Composite		263,943,555	-25,029,715	5.4	5.2	9,525,093
Rhumbline Emerging Markets Index	Emerging Markets	263,940,678	-25,000,000	5.4		
Cash Composite		142,172,491	77,844,021	2.9	1.1	88,353,201
Cash	Cash & Equivalents	141,420,200	77,855,583	2.9		
Directed Commissions	Cash & Equivalents	752,291	-11,561	0.0		

Total Fund Composite

Market Value: \$4,892.7 Million and 100.0% of Fund

Ending October 31, 2017

	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
Absolute Return		40,171,268	-7,716,822	0.8	0.5	15,707,954
400 Capital Credit Opportunity Fund	Relative Value Hedge Fund	2,834,858	0	0.1		
Elizabeth Park Capital Management	Long/Short Hedge Fund	29,068,895	0	0.6		
Archview Offshore Fund. LTD	Credit Hedge Fund	7,737,658	-7,716,822	0.2		
Real Assets Composite		452,302,481	-14,325,478	9.2	9.1	7,070,171
Real Assets - Public Real Estate Composite		95,610,523	-17,500,000	2.0	1.4	27,113,245
Rhumbline FTSE NAREIT	Real Assets	95,610,523	-17,500,000	2.0		
Real Assets - Open-End Real Estate Composite		125,629,872	23,947,669	2.6	1.7	42,454,605
UBS Trumbull Fund	Core Real Estate	125,629,872	23,947,669	2.6		
Real Assets - Infrastructure Composite		105,814,665	0	2.2	3.4	-60,535,868
Rhumbline Infrastructure Index	Publicly-Traded Infrastructure	105,814,665	0	2.2		
Real Assets - Private Real Estate Composite		119,168,964	-20,771,540	2.4	2.6	-8,040,267
Real Assets - Private Energy/Infrastructure Composite		6,078,456	0	0.1		6,078,456
Private Assets Composite		414,129,266	-6,162,632	8.5	11.0	-124,063,635
Private Assets - Private Equity	U.S. Private Equity FoF	399,384,807	-6,116,420	8.2		
Private Assets - Private Debt	Mezz. Private Equity	14,744,460	-46,212	0.3		

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$4,892.7 Million and 100.0% of Fund

Ending October 31, 2017

Inception

	Enang Goldser of, 2017										,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
	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	1.0%	2.8%	12.4%	4.6%	14.9%	8.3%	5.1%	5.8%	7.3%	7.2%	4.5%	7.6%	Jul-88
Total Fund Policy Benchmark	1.0%	2.3%	10.4%	3.9%	12.9%	8.3%	5.8%	6.3%	7.9%	7.6%	5.5%	8.4%	Jul-88
Total Fund w/o Alternative Assets	1.3%	3.4%	14.8%	5.6%	17.2%	9.2%	5.5%	-	-	-		6.2%	Jan-14
Investment Grade Fixed Income Composite	-0.5%	-0.1%	4.7%	0.8%	1.9%	3.4%	1.5%	2.4%	1.7%	2.9%	4.2%	6.2%	Jul-88
BBgBarc US Aggregate TR	0.1%	0.5%	3.2%	0.9%	0.9%	2.6%	2.4%	2.8%	2.0%	2.9%	4.2%	6.4%	Jul-88
Brandywine Global Investment Management	-2.2%	-1.8%	10.3%	0.8%	5.1%	6.2%	1.7%	2.8%	2.2%	4.3%		7.6%	Jan-09
Citi WGBI	-0.5%	-0.6%	5.8%	1.3%	0.2%	3.1%	0.8%	0.3%	-0.4%	0.5%	2.7%	2.2%	Jan-09
Garcia Hamilton & Associates	0.0%	0.2%	2.1%	0.4%	0.7%	2.3%	2.3%	2.7%	2.4%	3.3%	5.0%	5.3%	Aug-00
BBgBarc US Govt/Credit Int TR	0.0%	0.1%	2.3%	0.6%	0.6%	1.9%	1.9%	2.0%	1.6%	2.2%	3.6%	4.5%	Aug-00
Logan Circle	0.1%	0.7%	4.6%	1.4%	2.4%	3.8%	3.0%					3.0%	Oct-14
BBgBarc US Aggregate TR	0.1%	0.5%	3.2%	0.9%	0.9%	2.6%	2.4%	2.8%	2.0%	2.9%	4.2%	2.4%	Oct-14
Longfellow	0.1%	0.6%	3.7%	1.1%	1.8%	3.0%	2.8%					2.8%	Sep-14
BBgBarc US Aggregate TR	0.1%	0.5%	3.2%	0.9%	0.9%	2.6%	2.4%	2.8%	2.0%	2.9%	4.2%	2.7%	Sep-14
Rhumbline Core Bond Index	0.0%	0.4%	3.1%	0.8%	0.6%	2.2%	2.0%	2.5%	1.6%	2.6%	4.0%	4.2%	Jun-07
BBgBarc US Aggregate TR	0.1%	0.5%	3.2%	0.9%	0.9%	2.6%	2.4%	2.8%	2.0%	2.9%	4.2%	4.4%	Jun-07
Opportunistic Fixed Income Composite	0.2%	2.0%	6.6%	2.8%	7.1%	5.9%	2.5%	3.5%	-	-	-	3.9%	Dec-12
Opportunistic Fixed Income Benchmark	0.5%	1.1%	5.5%	2.0%	7.0%	7.7%	4.8%	4.7%	5.2%	5.9%	-	5.0%	Dec-12
Apollo Franklin Partnership, L.P.	0.0%	-0.6%	-2.5%	1.7%	-4.2%	-4.8%	-8.4%	-5.8%				-4.6%	May-13
50% BarCap HY / 50% CSFB Lev Loans	0.5%	1.1%	5.6%	2.1%	7.1%	7.6%	4.8%	4.8%	5.4%	6.0%	6.2%	4.8%	May-13
Avenue Coppers Opportunity Fund LP	0.0%	2.9%	3.7%	2.7%	5.5%	2.8%	2.2%					3.7%	Dec-13
Actuarial Rate 7.70%	0.6%	1.9%	6.4%	2.5%	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%	2.1%	8.3%	2.2%	8.0%	8.0%	4.7%	5.2%	6.7%			7.0%	Jun-12
Actuarial Rate 7.70%	0.6%	1.9%	6.4%	2.5%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	Jun-12
Logan Circle - EMD	-0.3%	2.0%	12.0%	3.7%	10.0%	11.7%						7.8%	Feb-15
JP Morgan EMBI Global TR	0.2%	1.9%	8.9%	2.6%	5.9%	8.7%	5.5%	6.0%	4.2%	5.8%	7.0%		Feb-15
Strategic Income Management	0.9%	2.3%	7.0%	3.2%	9.7%					-		13.1%	Mar-16
BofA Merrill Lynch US High Yield Master II TR	0.4%	1.3%	7.5%	2.4%	9.1%	9.7%	5.6%	5.7%	6.3%	7.0%	7.7%	13.5%	Mar-16

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$4,892.7 Million and 100.0% of Fund

Ending October 31, 2017

Inception

	Ending October 31, 2017 Incep										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	2.1%	4.7%	16.2%	6.6%	24.3%	12.6%	9.5%	10.5%	14.1%	13.3%	7.4%	9.7%	Jul-88
Russell 3000	2.2%	4.9%	16.4%	6.9%	24.0%	13.7%	10.5%	11.9%	15.1%	14.0%	7.6%	10.4%	Jul-88
Rhumbline Russell 1000 Index	2.3%	4.8%	17.0%	6.9%	23.9%	13.7%	10.6%	12.1%	15.2%	13.8%	7.5%	7.7%	May-07
Rhumbline Russell 1000 Custom Benchmark	2.3%	4.8%	17.0%	6.9%	23.9%	13.6%	10.7%	12.2%	15.3%				<i>May-</i> 07
Aronson+Johnson+Ortiz LP	2.3%	4.9%	10.7%	7.2%	22.0%	8.8%	7.1%	9.0%	13.3%	12.9%	6.4%	8.0%	May-01
Russell 1000 Value	0.7%	2.5%	8.7%	3.9%	17.8%	11.9%	8.0%	10.1%	13.5%	12.9%	6.0%	6.9%	May-01
O'Shaughnessy Asset Management	1.3%	3.2%	15.2%	6.6%	23.0%	10.9%	7.2%	9.1%	14.7%	-		14.8%	Jun-12
Russell 1000 Value	0.7%	2.5%	8.7%	3.9%	17.8%	11.9%	8.0%	10.1%	13.5%	12.9%	6.0%	13.8%	Jun-12
Rhumbline MidCap Index	1.7%	3.6%	13.5%	5.2%								13.5%	Dec-16
Rhumbline Russell Mid Cap Custom Benchmark	1.7%	3.6%	13.6%	5.2%								13.6%	Dec-16
Rhumbline Russell 2000 Index	0.8%	5.8%	12.0%	6.5%								12.0%	Dec-16
Rhumbline Russell 2000 Custom Benchmark	0.8%	5.6%	11.7%	6.4%								11.7%	Dec-16
Emerald Advisors	1.7%	8.1%	20.9%	8.5%	34.5%	13.4%	13.3%	11.3%	17.7%	16.3%	9.4%	10.0%	Dec-04
Russell 2000 Growth	1.5%	7.0%	18.6%	7.9%	31.0%	14.2%	10.5%	9.9%	15.4%	13.7%	8.2%	8.8%	Dec-04
Fisher Asset Management	2.6%	4.7%	14.3%	5.9%	29.7%	16.8%	12.2%	11.5%	16.0%	13.6%		10.6%	May-08
Russell 2000 Value	0.1%	4.6%	5.8%	5.2%	24.8%	16.5%	9.7%	9.2%	13.6%	12.2%	7.0%	8.8%	May-08
Apex Capital Management	3.8%	6.8%	21.2%	9.0%	28.3%	11.0%	7.1%	9.4%	14.4%	13.9%		15.2%	Dec-09
Russell 2500 Growth	2.7%	7.2%	20.2%	8.6%	30.1%	14.0%	10.7%	10.6%	15.5%	14.2%	8.6%	14.7%	Dec-09
Ariel	0.8%	0.9%	8.3%	0.6%	20.1%							16.7%	Jan-16
Russell 2500 Value	0.5%	3.6%	6.4%	4.4%	20.0%	13.7%	8.6%	9.0%	13.5%	12.4%	7.6%	22.2%	Jan-16
Non-U.S. Equity Developed Composite	1.2%	4.0%	21.4%	7.3%	23.3%	9.0%	5.4%	3.8%	7.0%	5.4%	1.0%	5.8%	Jan-89
MSCI EAFE	1.5%	4.0%	21.8%	7.0%	23.4%	9.3%	6.1%	4.4%	8.5%	6.1%	1.1%	4.8%	Jan-89
Causeway Capital Management	1.1%	5.2%	23.1%	8.9%	25.7%	8.9%	5.7%	4.5%	8.8%			10.5%	Nov-11
MSCI EAFE	1.5%	4.0%	21.8%	7.0%	23.4%	9.3%	6.1%	4.4%	8.5%	6.1%	1.1%	8.9%	Nov-11
Northern Trust MSCI EAFE+Canada	1.3%	3.7%	20.9%	6.9%	22.7%	9.5%	5.8%	4.1%	8.0%	6.0%	1.7%	3.3%	Mar-07
Northern Trust MSCI EAFE + Canada Custom Benchmark	1.3%	3.7%	21.1%	6.9%	22.9%	9.9%	6.2%	5.1%	9.0%	6.6%	1.7%	2.8%	<i>Mar-</i> 07
Non-U.S. Equity Emerging Composite	3.2%	5.9%	33.6%	12.1%	26.6%	18.0%	6.2%	4.5%	3.5%	1.2%	-	10.8%	Jan-09
MSCI Emerging Markets	3.5%	5.4%	32.3%	11.7%	26.5%	17.5%	5.7%	4.4%	4.8%	2.6%	0.6%	11.6%	Jan-09
Rhumbline Emerging Markets Index	3.2%	5.9%	33.6%	12.1%	26.6%	18.0%	6.1%	4.5%				3.5%	Feb-13
MSCI Emerging Markets	3.5%	5.4%	32.3%	11.7%	26.5%	17.5%	5.7%	4.4%	4.8%	2.6%	0.6%	3.5%	Feb-13

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$4,892.7 Million and 100.0% of Fund

Ending October 31, 2017

Inception

	Ending October 31, 2017											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	0.4%	3.0%	7.7%	3.5%	12.8%	6.5%	3.1%	3.8%	4.5%	3.6%	2.2%	3.4%	Sep-05
HFRI Fund of Funds Composite Index	1.1%	2.4%	6.7%	3.4%	8.0%	3.5%	2.8%	3.2%	4.1%	2.8%	0.9%	2.7%	Sep-05
400 Capital Credit Opportunity Fund	0.0%	0.0%	7.1%	0.0%	8.7%	3.0%	2.7%	5.2%				5.1%	Jun-13
HFRI ED: Distressed/Restructuring Index	-0.3%	0.4%	4.3%	1.2%	8.7%	7.7%	2.7%	2.8%	5.0%	4.7%	3.5%	3.2%	Jun-13
HFRX Distressed Securities Index	-0.7%	-1.3%	1.7%	-0.8%	5.5%	6.5%	2.5%	2.1%	2.9%	1.1%	-2.9%	2.2%	Jun-13
Elizabeth Park Capital Management	0.5%	3.9%	9.0%	4.3%	25.4%	15.6%	12.7%					11.5%	May-14
HFRX Event Driven Index	-0.1%	0.7%	6.4%	1.7%	10.5%	7.2%	3.1%	1.6%	4.1%	2.9%	0.8%	0.8%	May-14
Archview Offshore Fund. LTD	0.3%	2.1%	2.9%	3.0%	4.6%	2.7%	0.1%					0.7%	Mar-14
HFRI ED: Distressed/Restructuring Index	-0.3%	0.4%	4.3%	1.2%	8.7%	7.7%	2.7%	2.8%	5.0%	4.7%	3.5%	1.7%	Mar-14
Real Assets Composite	-0.1%	0.2%	4.5%	1.0%	8.2%	5.7%	0.4%	4.7%				6.4%	Dec-12
Real Assets Benchmark	-0.2%	-0.2%	0.7%	0.5%	5.8%	2.8%	-5.4%	-1.2%				1.5%	Dec-12
Real Assets - Public Real Estate Composite	0.1%	0.0%	6.5%	1.2%	8.6%	8.2%	7.2%	10.3%	-	-	-	9.3%	Jan-13
FTSE NAREIT All Equity REIT	0.1%	0.0%	6.2%	1.2%	8.2%	8.0%	7.1%	9.8%	10.1%	11.0%	6.0%	9.0%	Jan-13
Rhumbline FTSE NAREIT	0.1%	0.0%	6.5%	1.2%	8.6%	8.2%	7.2%	9.9%				7.3%	May-13
FTSE NAREIT All Equity REIT	0.1%	0.0%	6.2%	1.2%	8.2%	8.0%	7.1%	9.8%	10.1%	11.0%	6.0%	7.0%	May-13
Real Assets - Open-End Real Estate Composite	-0.2%	1.3%	-	1.1%		-	-	-	-	-	-	3.3%	Jan-17
NFI	0.0%	1.1%	4.7%	1.6%	6.0%	7.3%	9.5%	10.0%	10.4%	11.2%	4.0%	4.2%	Jan-17
UBS Trumbull Fund	-0.2%	1.3%		1.1%								3.3%	Jan-17
NFI	0.0%	1.1%	4.7%	1.6%	6.0%	7.3%	9.5%	10.0%	10.4%	11.2%	4.0%	4.2%	Jan-17
Real Assets - Infrastructure Composite	-0.2%	0.0%	-	3.3%			-	-	-			7.3%	Mar-17
Dow Jones Brookfield Global Infrastructure Index	-0.8%	-1.4%	11.5%	1.4%	10.5%	7.2%	1.9%	5.9%	8.0%	9.7%	6.7%	4.0%	Mar-17
Rhumbline Infrastructure Index	-0.2%	0.0%		3.3%								7.3%	Mar-17
Dow Jones Brookfield Global Infrastructure Index	-0.8%	-1.4%	11.5%	1.4%	10.5%	7.2%	1.9%	5.9%	8.0%	9.7%	6.7%	4.0%	Mar-17
Real Assets - Private Real Estate Composite	0.0%	-0.3%	4.1%	-0.3%	6.3%	8.5%	8.7%	10.5%	11.1%	11.0%	1.6%	3.5%	May-06
Real Assets - Private Real Estate Benchmark	0.0%	-0.3%	4.1%	-0.3%	6.3%	8.5%	8.7%	10.5%	11.1%				May-06
Real Assets - Private Energy/Infrastructure Composite	0.0%	1.5%	3.9%	1.5%	7.9%	-5.0%	-17.9%	1.1%	3.4%			2.5%	May-12
Real Assets - Private Energy/Infrastructure Benchmark	0.0%	1.5%	3.9%	1.5%	7.9%	-5.0%	-17.9%	1.1%	3.4%			2.5%	May-12
Private Assets Composite	0.0%	0.0%	1.9%	0.0%	3.9%	5.7%	-	-				-	Mar-87