



(Preliminary Subject to Change)



Employees Retirement System

City of Philadelphia
Employees Retirement System
Executive Summary
February 28, 2017

Total Fund Composite

Market Value: \$4,340.7 Million and 100.0% of Fund

Ending February 28, 2017

	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
Total Fund Composite		4,340,697,892	-133,111,680	100.0	100.0	0
Total Fund w/o Alternative Assets		3,448,631,144	-148,827,366	79.4	79.4	2,117,018
Investment Grade Fixed Income Composite		670,670,456	0	15.5	19.0	-154,062,144
Brandywine Global Investment Management	Global Fixed Income	153,928,210	0	3.5		
Garcia Hamilton & Associates	Int. Govt. Fixed Income	162,127,481	52,215,646	3.7		
Logan Circle	Core Plus Fixed Income	42,558,839	0	1.0		
Longfellow	Core Plus Fixed Income	152,088,433	53,678,566	3.5		
Rhumblin Core Bond Index	Core Fixed Income	159,967,492	-105,894,212	3.7		
Opportunistic Fixed Income Composite		335,884,422	-87,754,530	7.7	7.5	10,332,081
Apollo Franklin Partnership, L.P.	Opportunistic Fixed Income	39,970,407	-12,181,818	0.9		
Avenue Coppers Opportunity Fund LP	Opportunistic Fixed Income	54,023,672	-49,336,400	1.2		
KKR-PBPR Capital Partners LP	Opportunistic Fixed Income	106,644,698	-25,918,999	2.5		
Logan Circle - EMD	EM Fixed Income	50,395,228	0	1.2		
Strategic Income Management	High Yield Fixed Income	84,668,798	0	2.0		
U.S. Equity Composite		1,423,319,974	-334,585	32.8	29.8	129,792,002
Rhumblin Russell 1000 Index	Large-Cap Core	1,035,674,969	0	23.9		
Aronson+Johnson+Ortiz LP	Large-Cap Value	40,480,706	26,597	0.9		
O'Shaughnessy Asset Management	Large-Cap Value	27,488,813	0	0.6		
Rhumblin MidCap Index	Mid-Cap Core	147,479,659	143,469,446	3.4		
Apex Capital Management	Smid-Cap Growth	21,200,344	25,741	0.5		
Rhumblin Russell 2000 Index	Small-Cap Core	35,453,950	35,429,712	0.8		
Emerald Advisors	Small-Cap Growth	41,448,980	0	1.0		
Fisher Asset Management	Small-Cap Value	35,025,557	0	0.8		
Ariel	Smid-Cap Value	39,016,182	43,024	0.9		
Non-U.S. Equity Developed Composite		764,682,192	0	17.6	16.8	35,444,947
Causeway Capital Management	Non-U.S. Large-Cap Core	209,278,080	0	4.8		
Northern Trust MSCI EAFE+Canada	Non-U.S. Large-Cap Core	551,227,977	0	12.7		
Non-U.S. Equity Emerging Composite		219,382,041	-19	5.1	5.2	-6,334,250
Rhumblin Emerging Markets Index	Emerging Markets	219,370,308	-19	5.1		
Cash Composite		34,692,059	-60,783,083	0.8	1.1	-13,055,617
Cash	Cash & Equivalents	33,901,880	-60,772,659	0.8		
Directed Commissions	Cash & Equivalents	790,180	-10,424	0.0		

Total Fund Composite

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Ending February 28, 2017

	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
Absolute Return		100,430,806	-59,154,692	2.3	2.0	13,616,848
400 Capital Credit Opportunity Fund	Relative Value Hedge Fund	29,609,160	-14,636,367	0.7		
Axonix Capital LLC	Credit Hedge Fund	2,831,377	0	0.1		
Blue Harbour Strategic Value Partners Master Fund, LP	Long Only Hedge Fund	10,520,749	-44,518,325	0.2		
Elizabeth Park Capital Management	Long/Short Hedge Fund	27,527,160	0	0.6		
Archview Offshore Fund. LTD	Credit Hedge Fund	29,942,360	0	0.7		
Real Assets Composite		371,338,373	73,447,048	8.6	7.6	41,445,334
Real Assets - MLPs Composite		91,920,078	0	2.1	1.9	9,446,818
Harvest Fund Advisors LLC	MLP	44,976,014	0	1.0		
Tortoise Capital Advisors LLC	MLP	46,944,064	0	1.1		
Real Assets - Public Real Estate Composite		59,384,104	0	1.4	1.4	-1,385,667
Rhumblin FTSE NAREIT	Real Assets	59,384,104	0	1.4		
Real Assets - Open-End Real Estate Composite		75,000,000	75,000,000	1.7	1.7	1,208,136
UBS Trumbull Fund	Core Real Estate	75,000,000	75,000,000	1.7		
Real Assets - Private Real Estate Composite		140,107,399	-2,313,558	3.2	2.6	27,249,254
Real Assets - Private Energy/Infrastructure Composite		4,926,792	760,606	0.1	--	4,926,792
Private Assets Composite		420,297,568	1,423,330	9.7	11.0	-57,179,200
Private Assets - Private Equity	U.S. Private Equity FoF	403,700,791	3,838,302	9.3		
Private Assets - Private Debt	Mezz. Private Equity	16,596,777	-2,414,972	0.4		

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$4,340.7 Million and 100.0% of Fund

	Ending February 28, 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
Total Fund Composite	1.7%	4.7%	3.4%	8.5%	15.2%	2.7%	3.5%	5.8%	6.3%	7.4%	4.6%	7.4%	Jul-88
<i>Total Fund Policy Benchmark</i>	1.5%	4.6%	3.1%	8.3%	16.5%	3.8%	4.8%	6.7%	6.9%	8.3%	5.8%	8.3%	Jul-88
Total Fund w/o Alternative Assets	2.1%	5.4%	4.0%	9.4%	16.3%	2.4%	3.2%	--	--	--	--	4.2%	Jan-14
Investment Grade Fixed Income Composite	0.8%	1.7%	1.5%	-1.4%	2.7%	0.5%	1.8%	1.2%	2.0%	3.4%	4.2%	6.2%	Jul-88
<i>BBgBarc US Aggregate TR</i>	0.7%	1.0%	0.9%	-1.7%	1.4%	1.5%	2.6%	2.0%	2.2%	3.5%	4.3%	6.4%	Jul-88
Brandywine Global Investment Management	1.3%	4.0%	3.5%	-1.4%	5.5%	-0.7%	1.3%	0.7%	2.3%	5.2%	--	7.4%	Jan-09
<i>Citi WGBI</i>	0.4%	0.7%	1.4%	-7.0%	-1.2%	0.4%	-1.3%	-0.7%	-0.8%	1.0%	3.0%	1.8%	Jan-09
Garcia Hamilton & Associates	0.6%	0.8%	0.7%	-0.7%	0.8%	2.1%	2.6%	2.5%	3.3%	4.1%	5.3%	5.5%	Aug-00
<i>BBgBarc US Govt/Credit Int TR</i>	0.5%	0.8%	0.7%	-1.2%	1.1%	1.5%	1.9%	1.5%	1.8%	2.8%	3.8%	4.6%	Aug-00
Logan Circle	0.9%	1.8%	1.4%	-0.1%	4.0%	1.8%	--	--	--	--	--	2.4%	Oct-14
<i>BBgBarc US Aggregate TR</i>	0.7%	1.0%	0.9%	-1.7%	1.4%	1.5%	2.6%	2.0%	2.2%	3.5%	4.3%	2.1%	Oct-14
Longfellow	0.7%	1.2%	1.0%	-0.9%	1.6%	1.9%	--	--	--	--	--	2.5%	Sep-14
<i>BBgBarc US Aggregate TR</i>	0.7%	1.0%	0.9%	-1.7%	1.4%	1.5%	2.6%	2.0%	2.2%	3.5%	4.3%	2.4%	Sep-14
Rhumblin Core Bond Index	0.6%	0.9%	0.9%	-2.2%	0.7%	1.0%	2.2%	1.6%	1.7%	3.2%	--	4.2%	Jun-07
<i>BBgBarc US Aggregate TR</i>	0.7%	1.0%	0.9%	-1.7%	1.4%	1.5%	2.6%	2.0%	2.2%	3.5%	4.3%	4.4%	Jun-07
Opportunistic Fixed Income Composite	0.6%	2.0%	1.2%	6.3%	12.0%	2.3%	1.8%	3.0%	--	--	--	3.2%	Dec-12
<i>Opportunistic Fixed Income Benchmark</i>	1.0%	3.5%	2.0%	8.5%	17.2%	5.0%	4.2%	4.8%	5.8%	6.7%	--	5.0%	Dec-12
Apollo Franklin Partnership, L.P.	0.0%	-0.3%	0.0%	0.4%	2.7%	-7.0%	-7.9%	--	--	--	--	-4.7%	May-13
<i>50% BarCap HY / 50% CSFB Lev Loans</i>	1.0%	3.5%	2.0%	8.6%	17.1%	5.0%	4.3%	5.0%	5.9%	6.8%	5.9%	4.7%	May-13
Avenue Coppers Opportunity Fund LP	0.0%	1.6%	0.0%	6.5%	9.7%	3.1%	2.9%	--	--	--	--	3.3%	Dec-13
<i>Actuarial Rate 7.75%</i>	0.6%	1.9%	1.3%	5.1%	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%	-0.5%	0.2%	4.4%	10.7%	3.7%	3.0%	5.4%	--	--	--	6.2%	Jun-12
<i>Actuarial Rate 7.75%</i>	0.6%	1.9%	1.3%	5.1%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	Jun-12
Logan Circle - EMD	2.2%	6.5%	4.4%	6.6%	18.7%	6.7%	--	--	--	--	--	6.7%	Feb-15
<i>JP Morgan EMBI Global TR</i>	2.1%	5.0%	3.5%	2.9%	12.1%	6.6%	6.1%	3.7%	5.2%	7.1%	7.0%	6.6%	Feb-15
Strategic Income Management	1.1%	4.4%	2.4%	9.9%	--	--	--	--	--	--	--	16.4%	Mar-16
<i>BofA Merrill Lynch US High Yield Master II TR</i>	1.6%	4.9%	2.9%	10.6%	22.3%	5.8%	4.8%	5.7%	6.9%	8.2%	7.4%	17.1%	Mar-16

Investment Manager

Annualized Performance (Net of Fees)

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Ending February 28, 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
U.S. Equity Composite	3.6%	7.4%	5.6%	15.8%	26.2%	6.4%	8.3%	12.7%	12.6%	13.4%	7.4%	9.6%	Jul-88
<i>Russell 3000</i>	3.7%	7.7%	5.7%	15.0%	26.3%	7.9%	9.9%	13.9%	13.9%	13.9%	7.6%	10.3%	Jul-88
Rhumblin Russell 1000 Index	3.9%	8.0%	6.0%	14.6%	25.9%	8.0%	10.1%	14.0%	13.9%	13.6%	--	7.2%	May-07
<i>Rhumblin Russell 1000 Custom Benchmark</i>	3.9%	8.0%	6.0%	14.7%	25.7%	8.0%	10.2%	14.1%	14.0%	--	--	--	May-07
Aronson+Johnson+Ortiz LP	3.1%	7.2%	3.6%	18.2%	25.6%	5.0%	7.6%	12.2%	13.1%	13.1%	6.4%	7.9%	May-01
<i>Russell 1000 Value</i>	3.6%	6.9%	4.3%	15.2%	29.1%	8.2%	9.9%	13.1%	14.0%	13.4%	6.2%	6.9%	May-01
O'Shaughnessy Asset Management	3.2%	3.8%	3.7%	17.0%	21.8%	2.1%	5.5%	14.0%	--	--	--	14.5%	Jun-12
<i>Russell 1000 Value</i>	3.6%	6.9%	4.3%	15.2%	29.1%	8.2%	9.9%	13.1%	14.0%	13.4%	6.2%	14.9%	Jun-12
Rhumblin MidCap Index	2.8%	--	5.2%	--	--	--	--	--	--	--	--	5.2%	Dec-16
<i>Russell MidCap</i>	2.8%	6.5%	5.3%	13.6%	26.8%	6.1%	8.4%	13.3%	13.6%	14.3%	8.0%	5.3%	Dec-16
Apex Capital Management	3.3%	4.7%	6.4%	13.6%	23.6%	1.8%	4.5%	11.4%	11.4%	15.1%	--	14.6%	Dec-09
<i>Russell 2500 Growth</i>	3.0%	6.4%	5.5%	15.8%	28.0%	4.5%	6.2%	12.8%	12.4%	14.3%	8.5%	14.0%	Dec-09
Rhumblin Russell 2000 Index	2.0%	--	2.3%	--	--	--	--	--	--	--	--	2.3%	Dec-16
<i>Russell 2000</i>	1.9%	5.2%	2.3%	21.4%	36.1%	7.6%	6.9%	12.6%	12.9%	13.5%	7.2%	2.3%	Dec-16
Emerald Advisors	1.8%	4.2%	3.4%	18.0%	28.1%	4.7%	4.9%	15.0%	13.6%	16.2%	8.7%	9.2%	Dec-04
<i>Russell 2000 Growth</i>	2.5%	5.5%	4.1%	17.8%	30.9%	4.5%	5.4%	12.6%	12.3%	13.9%	8.0%	8.2%	Dec-04
Fisher Asset Management	4.3%	8.7%	5.5%	23.4%	38.4%	10.7%	9.9%	14.5%	13.7%	14.2%	--	10.4%	May-08
<i>Russell 2000 Value</i>	1.4%	4.9%	0.7%	25.1%	41.3%	10.6%	8.4%	12.6%	13.4%	13.0%	6.3%	8.9%	May-08
Ariel	2.7%	7.0%	5.2%	21.1%	27.7%	--	--	--	--	--	--	25.0%	Jan-16
<i>Russell 2500 Value</i>	1.9%	5.3%	2.4%	18.9%	35.2%	9.0%	8.3%	12.4%	13.7%	13.6%	7.0%	33.4%	Jan-16
Non-U.S. Equity Developed Composite	1.0%	6.9%	3.9%	10.3%	15.8%	-1.5%	-1.6%	3.2%	4.0%	4.9%	1.1%	5.4%	Jan-89
<i>MSCI EAFE</i>	1.4%	7.9%	4.4%	10.3%	15.8%	-0.9%	-0.6%	4.0%	5.2%	5.2%	1.0%	4.3%	Jan-89
Causeway Capital Management	0.4%	5.4%	3.2%	10.7%	13.4%	-2.0%	-1.8%	4.6%	6.0%	--	--	8.2%	Nov-11
<i>MSCI EAFE</i>	1.4%	7.9%	4.4%	10.3%	15.8%	-0.9%	-0.6%	4.0%	5.2%	5.2%	1.0%	6.9%	Nov-11
Northern Trust MSCI EAFE+Canada	1.2%	7.5%	4.2%	10.2%	16.6%	-0.7%	-0.5%	3.7%	4.8%	5.6%	--	2.0%	Mar-07
<i>Northern Trust MSCI EAFE + Canada Custom Benchmark</i>	1.2%	7.5%	4.2%	10.2%	17.0%	-0.3%	0.3%	4.8%	5.9%	6.0%	--	1.5%	Mar-07
Non-U.S. Equity Emerging Composite	2.8%	8.4%	8.8%	11.6%	27.6%	-0.5%	0.7%	-0.4%	-1.8%	1.2%	--	8.9%	Jan-09
<i>MSCI Emerging Markets</i>	3.1%	8.9%	8.7%	13.6%	29.5%	-0.4%	1.4%	-0.5%	-0.4%	2.5%	2.9%	9.9%	Jan-09
Rhumblin Emerging Markets Index	2.8%	8.4%	8.8%	11.6%	27.6%	-0.6%	1.2%	-0.7%	--	--	--	-1.0%	Feb-13
<i>MSCI Emerging Markets</i>	3.1%	8.9%	8.7%	13.6%	29.5%	-0.4%	1.4%	-0.5%	-0.4%	2.5%	2.9%	-0.8%	Feb-13

Investment Manager

Annualized Performance (Net of Fees)

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	Ending February 28, 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	0.2%	3.1%	1.1%	10.8%	10.8%	1.9%	1.2%	3.1%	3.6%	3.1%	2.1%	2.9%	Sep-05
<i>HFRI Fund of Funds Composite Index</i>	0.9%	2.8%	1.9%	5.2%	6.5%	0.2%	1.4%	3.0%	3.1%	2.7%	1.3%	2.4%	Sep-05
400 Capital Credit Opportunity Fund	0.0%	2.0%	1.1%	8.7%	9.3%	-0.2%	3.5%	--	--	--	--	4.4%	Jun-13
<i>HFRI ED: Distressed/Restructuring Index</i>	0.8%	5.8%	2.9%	14.5%	23.4%	4.2%	1.7%	4.5%	5.4%	5.5%	3.8%	3.4%	Jun-13
<i>HFRX Distressed Securities Index</i>	2.2%	4.5%	2.5%	14.3%	30.1%	4.2%	2.2%	3.4%	2.1%	1.9%	-2.6%	2.9%	Jun-13
Axonic Capital LLC	0.0%	0.0%	0.0%	-0.2%	0.2%	-1.0%	2.0%	4.2%	--	--	--	5.0%	Jan-13
<i>HFRI ED: Distressed/Restructuring Index</i>	0.8%	5.8%	2.9%	14.5%	23.4%	4.2%	1.7%	4.5%	5.4%	5.5%	3.8%	4.5%	Jan-13
Blue Harbour Strategic Value Partners Master Fund, LP	0.0%	2.5%	0.7%	12.2%	11.3%	0.6%	1.8%	--	--	--	--	3.7%	Jan-14
<i>HFRX Event Driven Index</i>	1.6%	4.6%	2.6%	10.4%	18.4%	2.4%	-0.4%	2.8%	3.1%	2.4%	1.0%	0.6%	Jan-14
Elizabeth Park Capital Management	1.7%	8.9%	3.2%	29.2%	35.9%	15.8%	--	--	--	--	--	12.2%	May-14
<i>HFRX Event Driven Index</i>	1.6%	4.6%	2.6%	10.4%	18.4%	2.4%	-0.4%	2.8%	3.1%	2.4%	1.0%	-0.4%	May-14
Archview Offshore Fund, LTD	-0.9%	1.3%	0.1%	9.1%	13.1%	-1.5%	-0.1%	--	--	--	--	-0.1%	Mar-14
<i>HFRI ED: Distressed/Restructuring Index</i>	0.8%	5.8%	2.9%	14.5%	23.4%	4.2%	1.7%	4.5%	5.4%	5.5%	3.8%	1.7%	Mar-14
Real Assets Composite	0.9%	4.2%	1.9%	3.8%	19.0%	0.2%	3.3%	6.0%	--	--	--	6.8%	Dec-12
<i>Real Assets Benchmark</i>	0.2%	5.5%	2.9%	4.5%	23.7%	-6.3%	-2.0%	0.7%	--	--	--	2.1%	Dec-12
Real Assets - MLPs Composite	1.2%	9.7%	5.3%	11.1%	40.4%	-7.6%	-1.9%	3.4%	5.5%	--	--	9.2%	Sep-11
<i>Alerian MLP Index</i>	0.4%	9.9%	5.3%	8.6%	40.8%	-7.9%	-4.3%	-0.3%	2.1%	8.1%	7.8%	6.0%	Sep-11
Harvest Fund Advisors LLC	0.7%	8.1%	4.2%	11.0%	40.4%	-7.0%	-0.8%	4.1%	6.5%	--	--	9.4%	Sep-11
<i>Alerian MLP Index</i>	0.4%	9.9%	5.3%	8.6%	40.8%	-7.9%	-4.3%	-0.3%	2.1%	8.1%	7.8%	5.1%	Sep-11
Tortoise Capital Advisors LLC	1.7%	11.2%	6.4%	12.0%	38.5%	-5.3%	-0.3%	5.5%	7.2%	--	--	7.2%	Feb-12
<i>Alerian MLP Index</i>	0.4%	9.9%	5.3%	8.6%	40.8%	-7.9%	-4.3%	-0.3%	2.1%	8.1%	7.8%	2.1%	Feb-12
Real Assets - Public Real Estate Composite	4.0%	8.8%	4.2%	-0.4%	17.9%	6.3%	11.8%	9.6%	--	--	--	10.3%	Jan-13
<i>NAREIT Equity</i>	3.4%	8.4%	3.5%	-0.9%	16.7%	6.1%	11.3%	10.1%	11.6%	14.2%	4.8%	10.3%	Jan-13
Rhumblin FTSE NAREIT	4.0%	8.8%	4.2%	-0.4%	17.9%	6.4%	11.3%	--	--	--	--	8.0%	May-13
<i>NAREIT Equity</i>	3.4%	8.4%	3.5%	-0.9%	16.7%	6.1%	11.3%	10.1%	11.6%	14.2%	4.8%	7.9%	May-13
Real Assets - Open-End Real Estate Composite	0.0%	--	--	--	--	--	--	--	--	--	--	0.0%	Jan-17
<i>NFI</i>	0.0%	0.6%	0.0%	3.7%	6.4%	9.7%	10.5%	11.1%	10.8%	12.2%	4.6%	0.0%	Jan-17
UBS Trumbull Fund	0.0%	--	--	--	--	--	--	--	--	--	--	0.0%	Jan-17
<i>NFI</i>	0.0%	0.6%	0.0%	3.7%	6.4%	9.7%	10.5%	11.1%	10.8%	12.2%	4.6%	0.0%	Jan-17

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$4,340.7 Million and 100.0% of Fund

	Ending February 28, 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
Real Assets - Private Real Estate Composite	0.0%	0.3%	0.0%	2.6%	4.8%	10.1%	10.9%	12.1%	11.3%	10.8%	-2.1%	3.4%	May-06
<i>Real Assets - Private Real Estate Benchmark</i>	0.0%	0.3%	0.0%	2.6%	4.8%	10.1%	10.9%	12.1%	--	--	--	--	May-06
Real Assets - Private Energy/Infrastructure Composite	0.0%	0.0%	0.0%	-3.8%	2.2%	-13.8%	-10.3%	2.0%	--	--	--	1.2%	May-12
<i>Real Assets - Private Energy/Infrastructure Benchmark</i>	0.0%	0.0%	0.0%	-3.8%	2.2%	-13.8%	-10.3%	2.0%	--	--	--	1.2%	May-12
Private Assets Composite	0.0%	0.0%	0.0%	3.8%	7.9%	7.1%	--	--	--	--	--	--	Mar-87