



(Preliminary Subject to Change)



Employees Retirement System

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

Total Fund Composite

Market Value: \$4,325.0 Million and 100.0% of Fund

Ending January 31, 2017

	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
Total Fund Composite		4,325,048,249	-123,475,260	100.0	100.0	0
Total Fund w/o Alternative Assets		3,434,869,971	-142,697,719	79.4	79.4	781,661
Investment Grade Fixed Income Composite		665,223,267	25,107	15.4	19.0	-156,535,900
Brandywine Global Investment Management	Global Fixed Income	151,972,054	0	3.5		
Garcia Hamilton & Associates	Int. Govt. Fixed Income	161,155,831	52,215,646	3.7		
Logan Circle	Core Plus Fixed Income	42,152,609	38,941	1.0		
Longfellow	Core Plus Fixed Income	151,005,783	53,678,566	3.5		
Rhumblin Core Bond Index	Core Fixed Income	158,936,990	-105,894,212	3.7		
Opportunistic Fixed Income Composite		337,821,202	-89,097,636	7.8	7.5	13,442,584
Apollo Franklin Partnership, L.P.	Opportunistic Fixed Income	42,697,680	-16,727,273	1.0		
Avenue Coppers Opportunity Fund LP	Opportunistic Fixed Income	55,241,305	-46,451,364	1.3		
KKR-PBPR Capital Partners LP	Opportunistic Fixed Income	106,432,427	-25,918,999	2.5		
Logan Circle - EMD	EM Fixed Income	49,302,883	0	1.1		
Strategic Income Management	High Yield Fixed Income	83,716,622	0	1.9		
U.S. Equity Composite		1,373,634,890	-476,945	31.8	29.8	84,770,511
Rhumblin Russell 1000 Index	Large-Cap Core	996,606,938	183,097,478	23.0		
Aronson+Johnson+Ortiz LP	Large-Cap Value	39,244,545	26,597	0.9		
O'Shaughnessy Asset Management	Large-Cap Value	26,624,642	-12,000,000	0.6		
Rhumblin MidCap Index	Mid-Cap Core	143,403,380	143,469,446	3.3		
Apex Capital Management	Smid-Cap Growth	20,520,314	25,741	0.5		
Rhumblin Russell 2000 Index	Small-Cap Core	34,774,635	35,429,712	0.8		
Emerald Advisors	Small-Cap Growth	40,699,706	0	0.9		
Fisher Asset Management	Small-Cap Value	33,569,378	0	0.8		
Ariel	Smid-Cap Value	37,933,651	0	0.9		
Non-U.S. Equity Developed Composite		757,079,762	-1,968	17.5	16.8	30,471,656
Causeway Capital Management	Non-U.S. Large-Cap Core	208,278,028	0	4.8		
Northern Trust MSCI EAFE+Canada	Non-U.S. Large-Cap Core	544,655,229	-161	12.6		
Non-U.S. Equity Emerging Composite		213,329,735	-19	4.9	5.2	-11,572,774
Rhumblin Emerging Markets Index	Emerging Markets	213,317,977	-19	4.9		
Cash Composite		87,764,754	-53,146,259	2.0	1.1	40,189,224
Cash	Cash & Equivalents	86,972,665	-53,134,709	2.0		
Directed Commissions	Cash & Equivalents	792,090	-11,550	0.0		

Total Fund Composite

Market Value: \$4,325.0 Million and 100.0% of Fund

Ending January 31, 2017

	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
Absolute Return		99,818,752	-59,181,325	2.3	2.0	13,317,787
400 Capital Credit Opportunity Fund	Relative Value Hedge Fund	29,272,735	-14,636,367	0.7		
Axonic Capital LLC	Credit Hedge Fund	2,831,377	0	0.1		
Blue Harbour Strategic Value Partners Master Fund, LP	Long Only Hedge Fund	10,450,844	-44,518,325	0.2		
Elizabeth Park Capital Management	Long/Short Hedge Fund	27,061,699	-26,633	0.6		
Archview Offshore Fund. LTD	Credit Hedge Fund	30,202,098	0	0.7		
Real Assets Composite		370,061,958	80,039,396	8.6	7.6	41,358,291
Real Assets - MLPs Composite		90,824,724	-1,074	2.1	1.9	8,648,807
Harvest Fund Advisors LLC	MLP	44,669,169	0	1.0		
Tortoise Capital Advisors LLC	MLP	46,155,555	0	1.1		
Real Assets - Public Real Estate Composite		57,098,355	0	1.3	1.4	-3,452,320
Rhumblin FTSE NAREIT	Real Assets	57,098,355	0	1.3		
Real Assets - Open-End Real Estate Composite		75,000,000	75,000,000	1.7	1.7	1,474,180
UBS Trumbull Fund	Core Real Estate	75,000,000	75,000,000	1.7		
Real Assets - Private Real Estate Composite		142,212,087	4,480,427	3.3	2.6	29,760,832
Real Assets - Private Energy/Infrastructure Composite		4,926,792	560,043	0.1	--	4,926,792
Private Assets Composite		420,297,568	-1,635,612	9.7	11.0	-55,457,740
Private Assets - Private Equity	U.S. Private Equity FoF	403,700,791	792,633	9.3		
Private Assets - Private Debt	Mezz. Private Equity	16,596,777	-2,428,245	0.4		

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$4,325.0 Million and 100.0% of Fund

	Ending January 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
Total Fund Composite	1.6%	3.6%	1.6%	6.6%	12.8%	3.0%	3.8%	5.4%	6.5%	7.3%	4.4%	7.4%	Jul-88
<i>Total Fund Policy Benchmark</i>	1.6%	3.4%	1.6%	6.7%	14.5%	4.4%	5.2%	6.4%	7.3%	8.8%	5.6%	8.3%	Jul-88
Total Fund w/o Alternative Assets	1.9%	4.0%	1.9%	7.2%	13.5%	2.7%	3.6%	--	--	--	--	3.6%	Jan-14
Investment Grade Fixed Income Composite	0.7%	-2.0%	0.7%	-2.2%	3.0%	-0.5%	1.9%	1.0%	1.8%	3.3%	4.2%	6.2%	Jul-88
<i>BBgBarc US Aggregate TR</i>	0.2%	-2.0%	0.2%	-2.3%	1.5%	0.6%	2.6%	2.0%	2.1%	3.4%	4.4%	6.4%	Jul-88
Brandywine Global Investment Management	2.2%	-2.6%	2.2%	-2.6%	6.2%	-1.5%	1.7%	0.0%	2.2%	5.0%	--	7.4%	Jan-09
<i>Citi WGBI</i>	1.0%	-4.3%	1.0%	-7.3%	1.2%	-0.4%	-0.9%	-1.1%	-1.1%	1.0%	3.2%	1.8%	Jan-09
Garcia Hamilton & Associates	0.1%	-1.2%	0.1%	-1.3%	1.0%	1.3%	2.7%	2.4%	3.3%	4.1%	5.4%	5.5%	Aug-00
<i>BBgBarc US Govt/Credit Int TR</i>	0.3%	-1.4%	0.3%	-1.6%	1.1%	0.9%	1.9%	1.5%	1.7%	2.8%	3.9%	4.6%	Aug-00
Logan Circle	0.4%	-1.7%	0.4%	-1.0%	3.6%	1.0%	--	--	--	--	--	2.1%	Oct-14
<i>BBgBarc US Aggregate TR</i>	0.2%	-2.0%	0.2%	-2.3%	1.5%	0.6%	2.6%	2.0%	2.1%	3.4%	4.4%	1.9%	Oct-14
Longfellow	0.3%	-1.6%	0.3%	-1.6%	1.5%	1.2%	--	--	--	--	--	2.3%	Sep-14
<i>BBgBarc US Aggregate TR</i>	0.2%	-2.0%	0.2%	-2.3%	1.5%	0.6%	2.6%	2.0%	2.1%	3.4%	4.4%	2.2%	Sep-14
Rhumblin Core Bond Index	0.2%	-2.2%	0.2%	-2.8%	0.6%	0.2%	2.1%	1.5%	1.6%	3.1%	--	4.2%	Jun-07
<i>BBgBarc US Aggregate TR</i>	0.2%	-2.0%	0.2%	-2.3%	1.5%	0.6%	2.6%	2.0%	2.1%	3.4%	4.4%	4.4%	Jun-07
Opportunistic Fixed Income Composite	0.5%	0.5%	0.5%	5.2%	10.3%	2.0%	2.0%	2.8%	--	--	--	3.0%	Dec-12
<i>Opportunistic Fixed Income Benchmark</i>	1.0%	2.4%	1.0%	7.5%	16.1%	5.5%	4.3%	4.6%	5.9%	6.6%	--	4.9%	Dec-12
Apollo Franklin Partnership, L.P.	0.0%	-1.7%	0.0%	0.4%	1.7%	-6.7%	-7.7%	--	--	--	--	-4.8%	May-13
<i>50% BarCap HY / 50% CSFB Lev Loans</i>	1.0%	2.4%	1.0%	7.5%	15.9%	5.5%	4.3%	4.8%	6.1%	6.7%	5.9%	4.5%	May-13
Avenue Coppers Opportunity Fund LP	0.0%	0.1%	0.0%	4.8%	6.6%	2.3%	3.0%	--	--	--	--	2.8%	Dec-13
<i>Actuarial Rate 7.75%</i>	0.6%	1.9%	0.6%	4.5%	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%	-0.3%	0.0%	4.2%	10.6%	3.8%	3.3%	5.6%	--	--	--	6.3%	Jun-12
<i>Actuarial Rate 7.75%</i>	0.6%	1.9%	0.6%	4.5%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	Jun-12
Logan Circle - EMD	2.1%	0.4%	2.1%	4.4%	17.8%	--	--	--	--	--	--	5.8%	Feb-15
<i>JP Morgan EMBI Global TR</i>	1.4%	-1.4%	1.4%	0.8%	12.0%	6.2%	6.5%	3.1%	5.4%	7.0%	6.9%	5.8%	Feb-15
Strategic Income Management	1.3%	3.9%	1.3%	8.7%	--	--	--	--	--	--	--	15.1%	Mar-16
<i>BofA Merrill Lynch US High Yield Master II TR</i>	1.3%	2.9%	1.3%	8.9%	21.0%	6.2%	4.9%	5.4%	7.0%	8.0%	7.4%	15.3%	Mar-16

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$4,325.0 Million and 100.0% of Fund

	Ending January 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
U.S. Equity Composite	1.9%	9.0%	1.9%	11.8%	21.6%	7.7%	8.6%	12.1%	12.8%	13.4%	6.9%	9.5%	Jul-88
<i>Russell 3000</i>	1.9%	8.5%	1.9%	10.8%	21.7%	9.0%	10.3%	13.2%	14.0%	13.8%	7.1%	10.2%	<i>Jul-88</i>
Rhumblin Russell 1000 Index	2.0%	8.0%	2.0%	10.3%	21.2%	9.0%	10.4%	13.3%	14.0%	13.5%	--	6.8%	May-07
<i>Rhumblin Russell 1000 Custom Benchmark</i>	2.0%	8.1%	2.0%	10.3%	20.9%	8.9%	10.5%	13.4%	14.1%	--	--	--	<i>May-07</i>
Aronson+Johnson+Ortiz LP	0.4%	10.7%	0.4%	14.6%	21.5%	6.2%	7.9%	11.9%	13.3%	13.1%	5.8%	7.7%	May-01
<i>Russell 1000 Value</i>	0.7%	9.1%	0.7%	11.2%	24.6%	8.8%	10.2%	12.5%	14.1%	13.3%	5.7%	6.7%	<i>May-01</i>
O'Shaughnessy Asset Management	0.5%	7.3%	0.5%	13.3%	20.1%	3.7%	6.4%	13.2%	--	--	--	14.0%	Jun-12
<i>Russell 1000 Value</i>	0.7%	9.1%	0.7%	11.2%	24.6%	8.8%	10.2%	12.5%	14.1%	13.3%	5.7%	14.3%	<i>Jun-12</i>
Rhumblin MidCap Index	2.3%	--	2.3%	--	--	--	--	--	--	--	--	2.3%	Dec-16
<i>Russell MidCap</i>	2.4%	9.2%	2.4%	10.5%	24.7%	7.5%	9.5%	12.9%	13.9%	14.6%	7.8%	2.4%	<i>Dec-16</i>
Apex Capital Management	3.0%	9.0%	3.0%	10.0%	19.2%	3.4%	5.4%	10.7%	12.2%	15.4%	--	14.3%	Dec-09
<i>Russell 2500 Growth</i>	2.4%	10.8%	2.4%	12.4%	24.7%	6.7%	7.0%	12.1%	12.7%	14.6%	8.2%	13.7%	<i>Dec-09</i>
Rhumblin Russell 2000 Index	0.3%	--	0.3%	--	--	--	--	--	--	--	--	0.3%	Dec-16
<i>Russell 2000</i>	0.4%	14.7%	0.4%	19.1%	33.5%	9.7%	7.9%	12.4%	13.0%	13.9%	6.9%	0.4%	<i>Dec-16</i>
Emerald Advisors	1.6%	13.0%	1.6%	15.9%	23.6%	8.5%	5.9%	15.2%	14.6%	16.6%	8.6%	9.1%	Dec-04
<i>Russell 2000 Growth</i>	1.6%	12.2%	1.6%	15.0%	26.9%	6.8%	6.2%	12.2%	12.5%	14.2%	7.7%	8.0%	<i>Dec-04</i>
Fisher Asset Management	1.1%	14.8%	1.1%	18.3%	31.9%	10.7%	10.2%	13.8%	14.0%	14.6%	--	10.0%	May-08
<i>Russell 2000 Value</i>	-0.7%	17.1%	-0.7%	23.3%	40.2%	12.4%	9.5%	12.5%	13.4%	13.5%	6.0%	8.8%	<i>May-08</i>
Ariel	2.4%	13.6%	2.4%	17.9%	24.0%	--	--	--	--	--	--	24.0%	Jan-16
<i>Russell 2500 Value</i>	0.5%	13.3%	0.5%	16.7%	34.1%	10.5%	9.4%	12.3%	13.9%	14.1%	6.8%	34.1%	<i>Jan-16</i>
Non-U.S. Equity Developed Composite	2.9%	4.6%	2.9%	9.2%	12.7%	0.7%	-0.2%	2.6%	4.9%	4.8%	1.0%	5.4%	Jan-89
<i>MSCI EAFE</i>	2.9%	4.3%	2.9%	8.7%	12.0%	1.3%	0.7%	3.4%	6.0%	4.9%	1.0%	4.3%	<i>Jan-89</i>
Causeway Capital Management	2.8%	4.9%	2.8%	10.2%	10.6%	-0.1%	-0.2%	4.2%	7.3%	--	--	8.3%	Nov-11
<i>MSCI EAFE</i>	2.9%	4.3%	2.9%	8.7%	12.0%	1.3%	0.7%	3.4%	6.0%	4.9%	1.0%	6.7%	<i>Nov-11</i>
Northern Trust MSCI EAFE+Canada	3.0%	4.5%	3.0%	8.9%	13.5%	1.6%	0.9%	3.2%	5.7%	5.4%	--	1.8%	Mar-07
<i>Northern Trust MSCI EAFE + Canada Custom Benchmark</i>	2.9%	4.5%	2.9%	8.9%	13.9%	2.0%	1.7%	4.2%	6.8%	5.8%	--	1.4%	<i>Mar-07</i>
Non-U.S. Equity Emerging Composite	5.8%	0.2%	5.8%	8.6%	23.8%	-0.3%	0.5%	-1.4%	-1.2%	0.8%	--	8.6%	Jan-09
<i>MSCI Emerging Markets</i>	5.5%	0.8%	5.5%	10.2%	25.4%	-0.4%	1.4%	-1.6%	0.2%	2.1%	2.5%	9.6%	<i>Jan-09</i>
Rhumblin Emerging Markets Index	5.8%	0.2%	5.8%	8.6%	23.8%	-0.4%	1.5%	-1.7%	--	--	--	-1.7%	Feb-13
<i>MSCI Emerging Markets</i>	5.5%	0.8%	5.5%	10.2%	25.4%	-0.4%	1.4%	-1.6%	0.2%	2.1%	2.5%	-1.6%	<i>Feb-13</i>

Investment Manager

Annualized Performance (Net of Fees)

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	Ending January 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	0.5%	5.2%	0.5%	10.2%	8.8%	1.1%	1.4%	3.4%	3.8%	3.1%	2.1%	2.9%	Sep-05
<i>HFRI Fund of Funds Composite Index</i>	0.9%	2.0%	0.9%	4.1%	4.2%	0.5%	1.6%	2.8%	3.2%	2.6%	1.3%	2.3%	Sep-05
400 Capital Credit Opportunity Fund	0.0%	1.5%	0.0%	7.5%	5.1%	0.0%	3.5%	--	--	--	--	4.2%	Jun-13
<i>HFRI ED: Distressed/Restructuring Index</i>	2.3%	6.6%	2.3%	13.9%	21.6%	5.0%	2.2%	4.5%	5.6%	5.5%	3.9%	3.3%	Jun-13
<i>HFRX Distressed Securities Index</i>	0.3%	4.0%	0.3%	11.9%	24.3%	4.2%	2.0%	2.9%	2.0%	1.6%	-2.7%	2.3%	Jun-13
Axonic Capital LLC	0.0%	0.0%	0.0%	-0.2%	-1.9%	-0.8%	3.0%	5.1%	--	--	--	5.1%	Jan-13
<i>HFRI ED: Distressed/Restructuring Index</i>	2.3%	6.6%	2.3%	13.9%	21.6%	5.0%	2.2%	4.5%	5.6%	5.5%	3.9%	4.5%	Jan-13
Blue Harbour Strategic Value Partners Master Fund, LP	0.0%	4.8%	0.0%	11.5%	12.2%	3.5%	4.0%	--	--	--	--	3.5%	Jan-14
<i>HFRX Event Driven Index</i>	1.1%	4.9%	1.1%	8.7%	16.7%	3.0%	-0.1%	2.5%	3.3%	2.2%	0.9%	0.1%	Jan-14
Elizabeth Park Capital Management	1.5%	16.7%	1.5%	27.0%	28.0%	16.4%	--	--	--	--	--	11.9%	May-14
<i>HFRX Event Driven Index</i>	1.1%	4.9%	1.1%	8.7%	16.7%	3.0%	-0.1%	2.5%	3.3%	2.2%	0.9%	-1.0%	May-14
Archview Offshore Fund, LTD	0.9%	2.6%	0.9%	10.1%	10.7%	-0.3%	--	--	--	--	--	0.2%	Mar-14
<i>HFRI ED: Distressed/Restructuring Index</i>	2.3%	6.6%	2.3%	13.9%	21.6%	5.0%	2.2%	4.5%	5.6%	5.5%	3.9%	1.5%	Mar-14
Real Assets Composite	1.0%	3.5%	1.0%	2.7%	17.7%	0.3%	3.9%	6.0%	--	--	--	6.7%	Dec-12
<i>Real Assets Benchmark</i>	2.7%	6.6%	2.7%	4.2%	23.0%	-6.1%	-1.9%	0.8%	--	--	--	2.1%	Dec-12
Real Assets - MLPs Composite	4.1%	11.6%	4.1%	9.8%	38.7%	-6.5%	-1.6%	3.4%	6.2%	--	--	9.1%	Sep-11
<i>Alerian MLP Index</i>	4.9%	12.0%	4.9%	8.2%	39.6%	-7.1%	-4.5%	-0.2%	2.8%	8.8%	8.0%	6.0%	Sep-11
Harvest Fund Advisors LLC	3.5%	10.9%	3.5%	10.2%	39.4%	-5.9%	-0.6%	4.6%	7.4%	--	--	9.4%	Sep-11
<i>Alerian MLP Index</i>	4.9%	12.0%	4.9%	8.2%	39.6%	-7.1%	-4.5%	-0.2%	2.8%	8.8%	8.0%	5.1%	Sep-11
Tortoise Capital Advisors LLC	4.6%	12.3%	4.6%	10.1%	39.0%	-4.2%	0.1%	5.4%	--	--	--	7.0%	Feb-12
<i>Alerian MLP Index</i>	4.9%	12.0%	4.9%	8.2%	39.6%	-7.1%	-4.5%	-0.2%	2.8%	8.8%	8.0%	2.0%	Feb-12
Real Assets - Public Real Estate Composite	0.2%	2.1%	0.2%	-4.3%	12.9%	2.7%	11.3%	9.5%	--	--	--	9.5%	Jan-13
<i>NAREIT Equity</i>	0.1%	3.0%	0.1%	-4.2%	12.4%	2.5%	11.9%	9.6%	10.6%	14.5%	4.2%	9.6%	Jan-13
Rhumblin FTSE NAREIT	0.2%	2.1%	0.2%	-4.3%	12.9%	2.7%	11.5%	--	--	--	--	7.1%	May-13
<i>NAREIT Equity</i>	0.1%	3.0%	0.1%	-4.2%	12.4%	2.5%	11.9%	9.6%	10.6%	14.5%	4.2%	7.1%	May-13
<i>FTSE NAREIT All Equity REIT</i>	0.2%	2.1%	0.2%	-4.3%	12.8%	2.7%	11.5%	9.2%	10.6%	14.5%	4.2%	6.8%	May-13
Real Assets - Open-End Real Estate Composite	--	--	--	--	--	--	--	--	--	--	--	--	Jan-17
<i>NFI</i>	0.0%	1.2%	0.0%	3.7%	7.1%	10.3%	10.8%	11.3%	11.0%	12.2%	4.7%	--	Jan-17
UBS Trumbull Fund	--	--	--	--	--	--	--	--	--	--	--	--	Jan-17
<i>NFI</i>	0.0%	1.2%	0.0%	3.7%	7.1%	10.3%	10.8%	11.3%	11.0%	12.2%	4.7%	--	Jan-17

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$4,325.0 Million and 100.0% of Fund

	Ending January 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
Real Assets - Private Real Estate Composite	0.0%	0.0%	0.0%	2.3%	4.5%	10.4%	11.1%	12.0%	11.3%	10.5%	-1.6%	3.4%	May-06
Real Assets - Private Real Estate Benchmark	0.0%	0.0%	0.0%	2.3%	4.5%	10.4%	11.1%	12.0%	--	--	--	--	May-06
Real Assets - Private Energy/Infrastructure Composite	0.0%	0.0%	0.0%	-3.8%	2.2%	-13.8%	-2.1%	3.0%	--	--	--	1.2%	May-12
Real Assets - Private Energy/Infrastructure Benchmark	0.0%	0.0%	0.0%	-3.8%	2.2%	-13.8%	-2.1%	3.0%	--	--	--	1.2%	May-12