

(Preliminary Subject to Change)



Employees Retirement System

City of Philadelphia
Employees Retirement System
Executive Summary

September 30, 2018

Total Fund Composite

Market Value: \$5,117.9 Million and 100.0% of Fund

		Ena	ing September	*		
	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
Total Fund Composite		5,117,868,351	-183,066,734	100.0	100.0	0
Total Fund w/o Alternative Assets		3,880,734,770	-156,261,403	75.8	72.9	149,808,742
Investment Grade Fixed Income Composite		644,949,456	-40,000,000	12.6	14.0	-71,552,113
Brandywine Global Investment Management	Global Fixed Income	134,505,720	-25,000,000	2.6		
Garcia Hamilton & Associates	Int. Govt. Fixed Income	164,445,220	0	3.2		
Logan Circle	Core Plus Fixed Income	43,808,064	0	0.9		
Longfellow	Core Plus Fixed Income	155,506,627	0	3.0		
Rhumbline Core Bond Index	Core Fixed Income	146,683,825	-15,000,000	2.9		
Opportunistic Fixed Income Composite		285,249,907	-7,303,040	5.6	6.0	-21,822,194
Apollo Franklin Partnership, L.P.	Opportunistic Fixed Income	16,712,346	-1,363,636	0.3		
Avenue Coppers Opportunity Fund LP	Opportunistic Fixed Income	25,269,905	-3,722,628	0.5		
KKR-PBPR Capital Partners LP	Opportunistic Fixed Income	71,923,508	-2,191,924	1.4		
Logan Circle - EMD	EM Fixed Income	69,793,703	0	1.4		
Strategic Income Management	High Yield Fixed Income	101,258,122	0	2.0		
U.S. Equity Composite		1,580,260,810	-105,000,000	30.9	29.8	55,136,041
Rhumbline Russell 1000 Index	Large-Cap Core	1,075,636,954	-95,000,000	21.0		
Aronson+Johnson+Ortiz LP	Large-Cap Value	46,798,071	0	0.9		
O'Shaughnessy Asset Management	Large-Cap Value	29,955,519	0	0.6		
Rhumbline MidCap Index	Mid-Cap Core	152,713,149	-10,006,667	3.0		
Rhumbline Russell 2000 Index	Small-Cap Core	44,442,761	-1,732	0.9		
Emerald Advisors	Small-Cap Growth	84,644,752	0	1.7		
Fisher Asset Management	Small-Cap Value	60,376,682	0	1.2		
Fiera Capital	Smid-Cap Growth	28,547,111	0	0.6		
Ariel	Smid-Cap Value	57,073,526	0	1.1		
Non-U.S. Equity Developed Composite		1,026,573,576	-40,013,630	20.1	16.8	166,771,693
Causeway Capital Management	Non-U.S. Large-Cap Core	116,574,836	0	2.3		
Northern Trust MSCI EAFE+Canada	Non-U.S. Large-Cap Core	702,901,619	-40,000,330	13.7		
Northern Trust International Small Cap	Non-U.S. Small-Cap Core	105,758,854	13,817	2.1		
Strategic Global Advisors	Non-U.S. Small-Cap Core	33,602,412	2,778	0.7		
Investors Group	Non-U.S. Small-Cap Core	63,763,416	-29,895	1.2		
Non-U.S. Equity Emerging Composite		216,138,319	-35,000,056	4.2	5.2	-49,990,835
Rhumbline Emerging Markets Index	Emerging Markets	216,135,214	-35,000,056	4.2		

Total Fund Composite

Market Value: \$5,117.9 Million and 100.0% of Fund

	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
Cash Composite		127,562,702	71,055,322	2.5	1.1	71,266,150
Cash	Cash & Equivalents	126,857,762	71,066,707	2.5		
Directed Commissions	Cash & Equivalents	704,940	-11,385	0.0		
Absolute Return		34,568,491	-651,697	0.7	0.5	8,979,149
Elizabeth Park Capital Management	Long/Short Hedge Fund	31,459,399	0	0.6		
Archview Offshore Fund. LTD	Credit Hedge Fund	3,109,092	-651,697	0.1		
Real Assets Composite		769,317,568	-23,828,588	15.0	15.6	-29,069,895
Real Assets - Public Real Estate Composite		54,893,587	-45,000,000	1.1	1.4	-16,756,570
Rhumbline FTSE NAREIT	Real Assets	54,893,587	-45,000,000	1.1		
Real Assets - Open-End Real Estate Composite		398,759,260	21,810,337	7.8	7.6	9,801,266
UBS Trumbull Fund	Core Real Estate	289,454,037	-2,959,651	5.7		
Clarion Lion Properties Fund	Core Real Estate	109,305,223	24,769,988	2.1		
Real Assets - Infrastructure Composite		185,160,595	0	3.6	4.0	-19,554,139
Rhumbline Infrastructure Index	Publicly-Traded Infrastructure	133,126,975	0	2.6		
Rreef Global Infrastructure	Global Infrastructure	52,033,619	0	1.0		
Real Assets - Private Real Estate Composite		119,296,443	-1,006,887	2.3	2.6	-13,768,134
Real Assets - Private Energy/Infrastructure Composite		11,207,683	367,962	0.2		11,207,683
Private Assets Composite		433,247,522	-2,325,046	8.5	11.0	-129,717,996
Private Assets - Private Equity	U.S. Private Equity FoF	422,506,772	-1,857,567	8.3		
Private Assets - Private Debt	Mezz. Private Equity	10,740,750	-467,479	0.2		

Annualized Performance (Net of Fees)

Market Value: \$5,117.9 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	0.1%	2.3%	2.9%	2.3%	7.1%	9.9%	9.0%	5.5%	6.4%	8.2%	7.0%	7.6%	Jul-88
Total Fund Policy Benchmark	0.1%	2.4%	3.4%	2.4%	7.7%	9.6%	9.5%	6.3%	7.0%	9.2%	8.2%	8.4%	Jul-88
Total Fund w/o Alternative Assets	0.1%	2.8%	2.6%	2.8%	6.9%	10.4%	9.9%	5.6%				6.2%	Jan-14
Investment Grade Fixed Income Composite	-0.2%	-0.1%	-1.5%	-0.1%	-1.3%	0.1%	2.2%	1.2%	1.9%	2.1%	3.8%	6.0%	Jul-88
BBgBarc US Aggregate TR	-0.6%	0.0%	-1.6%	0.0%	-1.2%	-0.6%	1.3%	1.7%	2.2%	2.0%	3.8%	6.1%	Jul-88
Brandywine Global Investment Management	1.0%	-0.7%	-3.4%	-0.7%	-3.5%	1.1%	4.1%	1.2%	2.2%	3.1%		6.7%	Jan-09
FTSE WGBI TR	-1.0%	-1.6%	-2.5%	-1.6%	-1.5%	-2.1%	1.7%	0.3%	0.2%	-0.1%	2.2%	1.9%	Jan-09
Garcia Hamilton & Associates	-0.4%	0.1%	-0.2%	0.1%	-0.1%	0.2%	1.4%	1.9%	2.4%	3.2%	4.7%	5.1%	Aug-00
BBgBarc US Govt/Credit Int TR	-0.4%	0.2%	-0.8%	0.2%	-1.0%	-0.4%	0.9%	1.3%	1.5%	1.6%	3.2%	4.2%	Aug-00
Logan Circle	-0.5%	0.3%	-1.0%	0.3%	-0.5%	0.6%	2.4%	2.3%				2.1%	Oct-14
BBgBarc US Aggregate TR	-0.6%	0.0%	-1.6%	0.0%	-1.2%	-0.6%	1.3%	1.7%	2.2%	2.0%	3.8%	1.5%	Oct-14
Longfellow	-0.6%	0.1%	-1.2%	0.1%	-0.6%	0.3%	1.7%	2.0%				2.0%	Sep-14
BBgBarc US Aggregate TR	-0.6%	0.0%	-1.6%	0.0%	-1.2%	-0.6%	1.3%	1.7%	2.2%	2.0%	3.8%	1.7%	Sep-14
Rhumbline Core Bond Index	-0.7%	-0.1%	-1.5%	-0.1%	-1.2%	-0.6%	1.1%	1.4%	1.9%	1.7%	3.5%	3.7%	Jun-07
BBgBarc US Aggregate TR	-0.6%	0.0%	-1.6%	0.0%	-1.2%	-0.6%	1.3%	1.7%	2.2%	2.0%	3.8%	3.9%	Jun-07
Opportunistic Fixed Income Composite	0.9%	0.7%	0.8%	0.7%	1.7%	4.1%	4.3%	2.2%	3.4%	-		3.5%	Dec-12
Opportunistic Fixed Income Benchmark	0.6%	2.1%	3.3%	2.1%	4.1%	5.6%	6.7%	4.7%	4.8%	6.5%		4.9%	Dec-12
Apollo Franklin Partnership, L.P.	0.0%	2.9%	7.2%	2.9%	5.5%	0.3%	-1.4%	-5.4%	-3.5%	-		-2.8%	May-13
50% BarCap HY / 50% CSFB Lev Loans	0.6%	2.2%	3.5%	2.2%	4.3%	5.7%	6.8%	4.8%	5.0%	6.6%	7.7%	4.7%	<i>May-13</i>
Avenue Coppers Opportunity Fund LP	0.0%	-2.4%	-2.2%	-2.4%	-0.6%	2.4%	1.6%	1.5%				2.8%	Dec-13
Actuarial Rate	0.6%	1.9%	5.7%	1.9%	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%	0.1%	3.9%	0.1%	4.5%	5.6%	6.4%	4.1%	5.0%	-		6.4%	Jun-12
Actuarial Rate	0.6%	1.9%	5.7%	1.9%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	Jun-12
Logan Circle - EMD	2.7%	0.9%	-4.9%	0.9%	-4.0%	2.7%	7.6%			-		4.6%	Feb-15
JP Morgan EMBI Global TR	1.8%	1.9%	-3.5%	1.9%	-2.9%	0.5%	5.7%	3.7%	4.6%	5.4%	7.3%	4.2%	Feb-15
Strategic Income Management	0.8%	1.6%	3.0%	1.6%	4.7%	6.8%						9.6%	Mar-16
ICE BofAML US High Yield TR	0.5%	2.4%	2.5%	2.4%	2.9%	5.9%	8.2%	5.1%	5.5%	7.6%	9.4%	9.5%	Mar-16

Annualized Performance (Net of Fees)

Market Value: \$5,117.9 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	-0.1%	6.6%	10.1%	6.6%	17.2%	18.0%	16.0%	11.5%	12.2%	16.0%	11.7%	9.9%	Jul-88
Russell 3000	0.2%	7.1%	10.6%	7.1%	17.6%	18.1%	17.1%	12.4%	13.5%	16.9%	12.0%	10.6%	Jul-88
Rhumbline Russell 1000 Index	0.4%	7.4%	10.8%	7.4%	17.9%	18.3%	17.2%	12.4%	13.7%	16.7%	12.0%	8.4%	May-07
Rhumbline Russell 1000 Custom Benchmark	0.4%	7.4%	10.7%	7.4%	17.8%	18.3%	17.1%	12.5%	13.7%				<i>May-</i> 07
Aronson+Johnson+Ortiz LP	-0.9%	4.6%	3.0%	4.6%	10.0%	13.9%	11.3%	7.8%	9.7%	14.7%	10.0%	8.0%	May-01
Russell 1000 Value	0.2%	5.7%	3.9%	5.7%	9.5%	12.3%	13.6%	8.8%	10.7%	15.0%	9.8%	7.0%	May-01
O'Shaughnessy Asset Management	-0.6%	5.2%	7.3%	5.2%	16.6%	18.9%	15.7%	9.4%	11.5%	-		15.2%	Jun-12
Russell 1000 Value	0.2%	5.7%	3.9%	5.7%	9.5%	12.3%	13.6%	8.8%	10.7%	15.0%	9.8%	13.2%	Jun-12
Rhumbline MidCap Index	-0.6%	5.0%	7.6%	5.0%	14.2%							14.9%	Dec-16
Rhumbline Russell Mid Cap Custom Benchmark	-0.6%	5.0%	7.5%	5.0%	14.0%							14.8%	Dec-16
Rhumbline Russell 2000 Index	-2.3%	3.7%	11.7%	3.7%	15.4%		-					15.3%	Dec-16
Rhumbline Russell 2000 Custom Benchmark	-2.3%	3.7%	11.6%	3.7%	15.4%							15.2%	Dec-16
Emerald Advisors	-2.6%	6.9%	14.5%	6.9%	23.3%	23.4%	16.6%	16.8%	13.5%	20.1%	14.5%	10.9%	Dec-04
Russell 2000 Growth	-2.3%	5.5%	15.8%	5.5%	21.1%	21.0%	18.0%	14.3%	12.1%	17.5%	12.7%	9.6%	Dec-04
Fisher Asset Management	-1.7%	3.0%	9.0%	3.0%	13.6%	18.4%	17.0%	13.5%	12.1%	17.3%	12.1%	10.7%	May-08
Russell 2000 Value	-2.5%	1.6%	7.1%	1.6%	9.3%	14.8%	16.1%	11.4%	9.9%	15.3%	9.5%	8.9%	<i>May-</i> 08
Fiera Capital	-1.8%	5.7%	11.6%	5.7%	21.5%	19.1%	14.5%	10.2%	11.5%	17.3%		15.6%	Dec-09
Russell 2500 Growth	-1.5%	7.2%	15.8%	7.2%	23.1%	21.6%	18.0%	14.1%	12.9%	17.7%	13.6%	15.4%	Dec-09
Ariel	0.9%	3.9%	6.1%	3.9%	14.3%	14.3%						16.0%	Jan-16
Russell 2500 Value	-1.6%	2.7%	5.7%	2.7%	10.2%	13.0%	14.5%	10.0%	10.0%	15.3%	10.5%	18.0%	Jan-16
Non-U.S. Equity Developed Composite	0.4%	0.8%	-2.0%	0.8%	2.1%	10.4%	8.8%	3.7%	3.8%	7.6%	5.1%	5.7%	Jan-89
MSCI EAFE	0.9%	1.4%	-1.4%	1.4%	2.7%	10.6%	9.2%	4.5%	4.4%	8.3%	5.4%	4.6%	Jan-89
Causeway Capital Management	1.2%	1.4%	-3.1%	1.4%	1.3%	11.3%	8.3%	3.8%	4.2%			9.1%	Nov-11
MSCI EAFE	0.9%	1.4%	-1.4%	1.4%	2.7%	10.6%	9.2%	4.5%	4.4%	8.3%	5.4%	7.8%	Nov-11
Northern Trust MSCI EAFE+Canada	0.8%	1.5%	-1.1%	1.5%	3.0%	10.6%	9.5%	4.4%	4.3%	8.1%	6.0%	3.2%	Mar-07
Northern Trust MSCI EAFE + Canada Custom Benchmark	0.7%	1.5%	-1.0%	1.5%	3.1%	10.8%	9.8%	4.7%	5.1%	8.9%	5.9%	2.8%	Mar-07
Northern Trust International Small Cap	-0.6%	-0.7%		-0.7%								-3.6%	Mar-18
Northern Trust EAFE Small Cap Custom Benchmark	-0.7%	-0.8%		-0.8%								-2.9%	Mar-18



Annualized Performance (Net of Fees)

Market Value: \$5,117.9 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
Strategic Global Advisors	-1.9%	-3.5%	-5.7%	-3.5%								-3.3%	Nov-17
MSCI World ex USA Small Cap	-0.7%	-0.9%	-2.3%	-0.9%	3.4%	11.6%	12.2%	8.0%	7.1%	10.3%	9.0%	0.6%	Nov-17
Investors Group	-1.3%	-3.3%	-3.5%	-3.3%		-	-	-	-	-		-0.3%	Nov-17
MSCI EAFE Small Cap	-0.7%	-0.9%	-2.2%	-0.9%	3.7%	12.4%	12.4%	9.2%	8.0%	11.5%	9.7%	0.4%	Nov-17
Non-U.S. Equity Emerging Composite	-0.2%	-0.9%	-7.8%	-0.9%	-1.0%	10.3%	12.6%	3.8%	3.5%	3.8%		9.2%	Jan-09
MSCI Emerging Markets	-0.5%	-1.1%	-7.7%	-1.1%	-0.8%	10.2%	12.4%	3.4%	3.6%	5.0%	5.4%	9.9%	Jan-09
Rhumbline Emerging Markets Index	-0.2%	-0.9%	-7.8%	-0.9%	-1.0%	10.3%	12.6%	3.9%	3.6%			2.2%	Feb-13
MSCI Emerging Markets	-0.5%	-1.1%	-7.7%	-1.1%	-0.8%	10.2%	12.4%	3.4%	3.6%	5.0%	5.4%	2.1%	Feb-13

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
Absolute Return	0.0%	0.5%	5.2%	0.5%	7.8%	10.6%	6.4%	3.9%	4.7%	5.2%	4.3%	3.7%	Sep-05
HFRI Fund of Funds Composite Index	-0.2%	0.3%	1.0%	0.3%	3.1%	4.8%	3.3%	2.4%	3.2%	3.6%	2.6%	2.6%	Sep-05
Elizabeth Park Capital Management	0.0%	0.8%	6.0%	0.8%	8.7%	16.6%	13.5%	12.4%				11.0%	May-14
HFRX Event Driven Index	-0.5%	-1.1%	-5.5%	-1.1%	-5.6%	2.1%	3.6%	-0.4%	0.5%	2.8%	2.0%	-0.7%	May-14
Archview Offshore Fund. LTD	0.0%	-2.3%	1.4%	-2.3%	5.0%	5.0%	3.1%	1.2%				1.6%	Mar-14
HFRI ED: Distressed/Restructuring Index	1.1%	1.4%	4.3%	1.4%	6.0%	8.2%	7.3%	3.1%	3.8%	5.8%	5.6%	2.7%	Mar-14
Real Assets Composite	0.1%	0.6%	2.2%	0.6%	4.5%	5.1%	7.2%	1.2%	5.0%			6.2%	Dec-12
Real Assets Benchmark	-0.8%	0.3%	2.2%	0.3%	4.5%	4.1%	5.4%	-3.0%	0.3%			2.1%	Dec-12
Real Assets - Public Real Estate Composite	-2.7%	0.3%	1.5%	0.3%	4.0%	3.3%	8.9%	8.6%	9.4%	-	-	8.4%	Jan-13
FTSE NAREIT All Equity REIT Custom Benchmark	-2.7%	0.6%	1.8%	0.6%	4.3%	3.4%	9.0%	8.7%	9.6%				Jan-13
Rhumbline FTSE NAREIT	-2.7%	0.3%	1.5%	0.3%	4.0%	3.3%	8.9%	8.6%	9.5%			6.7%	May-13
FTSE NAREIT All Equity REIT Custom Benchmark	-2.7%	0.6%	1.8%	0.6%	4.3%	3.4%	9.0%	8.7%	9.6%			6.8%	May-13
Real Assets - Open-End Real Estate Composite	1.4%	1.4%	5.1%	1.4%	7.1%	-	-	-	-	-	-	6.3%	Jan-17
NFI	0.6%	1.9%	5.8%	1.9%	7.7%	7.2%	7.8%	9.3%	9.7%	10.1%	4.6%	7.2%	Jan-17
UBS Trumbull Fund	1.2%	1.2%	4.8%	1.2%	6.8%							6.2%	Jan-17
NFI	0.6%	1.9%	5.8%	1.9%	7.7%	7.2%	7.8%	9.3%	9.7%	10.1%	4.6%	7.2%	Jan-17
Clarion Lion Properties Fund	1.9%	1.9%		1.9%								5.9%	Feb-18
NFI	0.6%	1.9%	5.8%	1.9%	7.7%	7.2%	7.8%	9.3%	9.7%	10.1%	4.6%	5.1%	Feb-18
Real Assets - Infrastructure Composite	-1.3%	-0.5%	-1.5%	-0.5%	-0.8%							4.3%	Mar-17
Dow Jones Brookfield Global Infrastructure Index	-1.3%	-0.8%	-2.1%	-0.8%	-1.6%	3.6%	7.4%	2.6%	6.1%	9.2%	9.1%	3.6%	Mar-17
Rhumbline Infrastructure Index	-1.2%	-0.6%	-1.6%	-0.6%	-0.9%							4.3%	Mar-17
Dow Jones Brookfield Global Infrastructure Index	-1.3%	-0.8%	-2.1%	-0.8%	-1.6%	3.6%	7.4%	2.6%	6.1%	9.2%	9.1%	3.6%	Mar-17
Rreef Global Infrastructure	-1.5%	-0.2%		-0.2%					-			4.1%	Mar-18
Dow Jones Brookfield Global Infrastructure Index	-1.3%	-0.8%	-2.1%	-0.8%	-1.6%	3.6%	7.4%	2.6%	6.1%	9.2%	9.1%	3.3%	Mar-18



Annualized Performance (Net of Fees)

Market Value: \$5,117.9 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%	0.0%	2.5%	0.0%	6.0%	6.4%	7.8%	8.1%	9.6%	9.6%	2.6%	3.8%	May-06
Real Assets - Private Real Estate Benchmark	0.0%	0.0%	2.5%	0.0%	6.0%	6.4%	7.8%	8.1%	9.6%				<i>May-</i> 06
Real Assets - Private Energy/Infrastructure Composite	-3.3%	-3.3%	14.6%	-3.3%	25.4%	16.6%	4.4%	-8.7%	5.5%			5.9%	May-12
Real Assets - Private Energy/Infrastructure Benchmark	-3.3%	-3.3%	14.6%	-3.3%	25.4%	16.6%	4.4%	-8.7%	5.5%	-	_	5.9%	May-12
Private Assets Composite	0.0%	0.0%	4.4%	0.0%	11.1%	9.6%	8.9%			-		-	Mar-87