

#### (Preliminary Subject to Change)



#### **Employees Retirement System**

City of Philadelphia
Employees Retirement System
Executive Summary

August 31, 2018

# **Total Fund Composite**

Market Value: \$5,170.4 Million and 100.0% of Fund

		Eli	iding August 3			
	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
Total Fund Composite		5,170,415,623	-184,649,650	100.0	100.0	0
Total Fund w/o Alternative Assets		3,937,448,768	-151,344,738	76.2	72.9	168,215,779
Investment Grade Fixed Income Composite		661,265,907	-25,000,000	12.8	14.0	-62,592,280
Brandywine Global Investment Management	Global Fixed Income	148,026,835	-10,000,000	2.9		
Garcia Hamilton & Associates	Int. Govt. Fixed Income	165,085,075	0	3.2		
Logan Circle	Core Plus Fixed Income	44,002,260	0	0.9		
Longfellow	Core Plus Fixed Income	156,447,259	0	3.0		
Rhumbline Core Bond Index	Core Fixed Income	147,704,478	-15,000,000	2.9		
Opportunistic Fixed Income Composite		287,340,320	-16,865,946	5.6	6.0	-22,884,618
Apollo Franklin Partnership, L.P.	Opportunistic Fixed Income	16,074,299	-1,363,636	0.3		
Avenue Coppers Opportunity Fund LP	Opportunistic Fixed Income	28,640,306	0	0.6		
KKR-PBPR Capital Partners LP	Opportunistic Fixed Income	74,005,801	-18,002,252	1.4		
Logan Circle - EMD	EM Fixed Income	67,936,254	0	1.3		
Strategic Income Management	High Yield Fixed Income	100,389,077	0	1.9		
U.S. Equity Composite		1,627,094,020	-110,000,000	31.5	29.8	86,310,164
Rhumbline Russell 1000 Index	Large-Cap Core	1,111,608,623	-95,000,000	21.5		
Aronson+Johnson+Ortiz LP	Large-Cap Value	47,221,557	0	0.9		
O'Shaughnessy Asset Management	Large-Cap Value	30,128,145	0	0.6		
Rhumbline MidCap Index	Mid-Cap Core	158,654,816	-15,006,667	3.1		
Rhumbline Russell 2000 Index	Small-Cap Core	45,505,539	-1,732	0.9		
Emerald Advisors	Small-Cap Growth	86,888,033	0	1.7		
Fisher Asset Management	Small-Cap Value	61,394,107	0	1.2		
Fiera Capital	Smid-Cap Growth	29,057,645	0	0.6		
Ariel	Smid-Cap Value	56,565,618	0	1.1		
Non-U.S. Equity Developed Composite		1,061,791,011	-2,594,996	20.5	16.8	193,161,186
Causeway Capital Management	Non-U.S. Large-Cap Core	115,127,956	-75,070,417	2.2		
Northern Trust MSCI EAFE+Canada	Non-U.S. Large-Cap Core	737,368,893	-330	14.3		
Northern Trust International Small Cap	Non-U.S. Small-Cap Core	106,439,567	48,435,079	2.1		
Strategic Global Advisors	Non-U.S. Small-Cap Core	34,267,568	9,638,148	0.7		
Investors Group	Non-U.S. Small-Cap Core	64,622,870	14,402,524	1.2		
Non-U.S. Equity Emerging Composite		236,682,482	-15,000,056	4.6	5.2	-32,179,131
Rhumbline Emerging Markets Index	Emerging Markets	236,679,308	-15,000,056	4.6		

## **Total Fund Composite**

Market Value: \$5,170.4 Million and 100.0% of Fund

	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
Cash Composite		63,275,029	18,059,688	1.2	1.1	6,400,458
Cash	Cash & Equivalents	62,565,186	18,070,160	1.2		
Directed Commissions	Cash & Equivalents	709,843	-10,472	0.0		
Absolute Return		34,359,781	-652,347	0.7	0.5	8,507,703
Elizabeth Park Capital Management	Long/Short Hedge Fund	31,210,974	0	0.6		
Archview Offshore Fund. LTD	Credit Hedge Fund	3,148,807	-651,697	0.1		
Real Assets Composite		765,722,755	-21,156,942	14.8	15.6	-40,862,083
Real Assets - Public Real Estate Composite		76,920,677	-25,000,000	1.5	1.4	4,534,858
Rhumbline FTSE NAREIT	Real Assets	76,920,677	-25,000,000	1.5		
Real Assets - Open-End Real Estate Composite		368,257,129	-3,136,754	7.1	7.6	-24,694,458
UBS Trumbull Fund	Core Real Estate	285,917,298	-2,951,816	5.5		
Clarion Lion Properties Fund	Core Real Estate	82,339,831	-184,938	1.6		
Real Assets - Infrastructure Composite		187,575,042	0	3.6	4.0	-19,241,583
Rhumbline Infrastructure Index	Publicly-Traded Infrastructure	134,768,380	0	2.6		
Rreef Global Infrastructure	Global Infrastructure	52,806,662	0	1.0		
Real Assets - Private Real Estate Composite		121,762,223	5,160,474	2.4	2.6	-12,668,583
Real Assets - Private Energy/Infrastructure Composite		11,207,683	1,819,338	0.2		11,207,683
Private Assets Composite		432,884,319	-11,495,624	8.4	11.0	-135,861,399
Private Assets - Private Equity	U.S. Private Equity FoF	422,100,128	-10,852,162	8.2		
Private Assets - Private Debt	Mezz. Private Equity	10,784,191	-643,462	0.2		

### Annualized Performance (Net of Fees)

Market Value: \$5,170.4 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	0.6%	2.2%	2.8%	2.1%	8.7%	10.4%	8.0%	5.0%	7.0%	7.4%	6.1%	7.6%	Jul-88
Total Fund Policy Benchmark	0.6%	2.2%	3.1%	2.2%	9.0%	10.1%	8.3%	5.7%	7.5%	8.2%	7.3%	8.4%	Jul-88
Total Fund w/o Alternative Assets	0.7%	2.3%	2.5%	2.7%	8.7%	10.7%	8.8%	5.0%		-		6.2%	Jan-14
Investment Grade Fixed Income Composite	-0.2%	-0.2%	-1.3%	0.1%	-1.5%	0.3%	2.3%	0.8%	2.2%	2.2%	3.7%	6.0%	Jul-88
BBgBarc US Aggregate TR	0.6%	0.5%	-1.0%	0.7%	-1.0%	-0.3%	1.8%	1.7%	2.5%	2.2%	3.7%	6.2%	Jul-88
Brandywine Global Investment Management	-3.0%	-2.6%	-4.3%	-1.7%	-4.8%	1.0%	3.5%	0.2%	2.5%	2.6%		6.7%	Jan-09
Citi WGBI	-0.2%	-0.9%	-1.5%	-0.6%	-1.7%	-1.3%	2.3%	-0.3%	0.8%	-0.2%	2.2%	2.0%	Jan-09
Garcia Hamilton & Associates	0.6%	0.5%	0.2%	0.5%	0.0%	0.3%	1.8%	1.9%	2.6%	3.1%	4.5%	5.1%	Aug-00
BBgBarc US Govt/Credit Int TR	0.6%	0.6%	-0.4%	0.6%	-1.0%	-0.1%	1.3%	1.3%	1.8%	1.7%	3.0%	4.2%	Aug-00
Logan Circle	0.6%	0.6%	-0.6%	0.8%	-0.3%	0.8%	2.7%					2.3%	Oct-14
BBgBarc US Aggregate TR	0.6%	0.5%	-1.0%	0.7%	-1.0%	-0.3%	1.8%	1.7%	2.5%	2.2%	3.7%	1.7%	Oct-14
Longfellow	0.7%	0.6%	-0.6%	0.7%	-0.5%	0.5%	2.1%					2.2%	Sep-14
BBgBarc US Aggregate TR	0.6%	0.5%	-1.0%	0.7%	-1.0%	-0.3%	1.8%	1.7%	2.5%	2.2%	3.7%	1.9%	Sep-14
Rhumbline Core Bond Index	0.7%	0.5%	-0.8%	0.6%	-1.0%	-0.3%	1.6%	1.4%	2.3%	1.9%	3.5%	3.8%	Jun-07
BBgBarc US Aggregate TR	0.6%	0.5%	-1.0%	0.7%	-1.0%	-0.3%	1.8%	1.7%	2.5%	2.2%	3.7%	4.0%	Jun-07
Opportunistic Fixed Income Composite	-1.1%	-1.1%	-0.5%	-0.6%	1.2%	4.0%	3.2%	1.7%	3.6%	-		3.3%	Dec-12
Opportunistic Fixed Income Benchmark	0.6%	1.8%	2.7%	1.5%	4.1%	5.7%	5.9%	4.2%	4.8%	6.1%		4.8%	Dec-12
Apollo Franklin Partnership, L.P.	0.0%	0.8%	3.1%	-1.1%	-1.3%	-1.4%	-3.4%	-6.7%	-4.1%	-		-3.6%	May-13
50% BarCap HY / 50% CSFB Lev Loans	0.6%	1.8%	2.8%	1.5%	4.3%	5.8%	6.0%	4.3%	5.0%	6.2%	6.9%	4.6%	May-13
Avenue Coppers Opportunity Fund LP	0.0%	-4.3%	-3.3%	-3.6%	0.6%	2.3%	1.3%	0.9%				2.6%	Dec-13
Actuarial Rate	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%	0.1%	3.8%	0.0%	4.6%	6.4%	5.4%	3.9%	5.4%	-		6.5%	Jun-12
Actuarial Rate	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	-4.4%	-3.7%	-7.4%	-1.8%	-6.1%	2.0%	5.8%			-		4.0%	Feb-15
JP Morgan EMBI Global TR	-1.9%	-0.9%	-5.1%	0.1%	-4.6%	-0.2%	4.6%	2.7%	4.8%	4.5%	6.3%	3.8%	Feb-15
Strategic Income Management	-0.1%	1.5%	2.1%	0.8%	5.6%	6.7%						9.6%	Mar-16
ICE BofAML US High Yield TR	0.7%	2.2%	1.9%	1.8%	3.3%	6.0%	7.0%	4.4%	5.6%	6.9%	8.4%	9.6%	Mar-16

### Annualized Performance (Net of Fees)

Market Value: \$5,170.4 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	3.6%	7.5%	10.3%	6.7%	20.3%	18.2%	14.7%	10.8%	13.2%	14.6%	10.5%	9.9%	Jul-88
Russell 3000	3.5%	7.6%	10.4%	6.9%	20.2%	18.1%	15.9%	11.8%	14.3%	15.5%	10.9%	10.6%	Jul-88
Rhumbline Russell 1000 Index	3.4%	7.8%	10.4%	7.0%	19.9%	18.1%	15.9%	11.8%	14.4%	15.3%	10.9%	8.4%	May-07
Rhumbline Russell 1000 Custom Benchmark	3.5%	7.7%	10.3%	7.0%	19.8%	18.1%	15.9%	11.9%	14.4%				<i>May-</i> 07
Aronson+Johnson+Ortiz LP	1.9%	5.0%	4.0%	5.5%	14.4%	14.8%	10.3%	7.3%	10.6%	13.5%	9.3%	8.1%	May-01
Russell 1000 Value	1.5%	5.8%	3.7%	5.5%	12.5%	12.0%	12.3%	8.1%	11.2%	13.7%	8.9%	7.0%	May-01
O'Shaughnessy Asset Management	1.6%	4.9%	7.9%	5.9%	21.4%	19.4%	14.0%	9.0%	12.8%			15.5%	Jun-12
Russell 1000 Value	1.5%	5.8%	3.7%	5.5%	12.5%	12.0%	12.3%	8.1%	11.2%	13.7%	8.9%	13.3%	Jun-12
Rhumbline MidCap Index	3.1%	6.5%	8.2%	5.6%	18.0%							16.1%	Dec-16
Rhumbline Russell Mid Cap Custom Benchmark	3.1%	6.4%	8.1%	5.7%	17.9%							16.1%	Dec-16
Rhumbline Russell 2000 Index	4.3%	6.9%	14.4%	6.2%	25.3%		-	-	-			17.8%	Dec-16
Rhumbline Russell 2000 Custom Benchmark	4.3%	6.9%	14.3%	6.2%	25.5%			-				17.7%	Dec-16
Emerald Advisors	9.0%	11.2%	17.6%	9.8%	33.8%	26.7%	15.6%	16.5%	16.0%	18.2%	13.8%	11.2%	Dec-04
Russell 2000 Growth	6.2%	8.9%	18.5%	8.1%	30.7%	23.3%	16.4%	13.4%	14.2%	15.9%	11.6%	9.8%	Dec-04
Fisher Asset Management	3.9%	5.7%	10.9%	4.8%	20.5%	19.6%	16.1%	12.8%	13.7%	15.0%	11.3%	11.0%	May-08
Russell 2000 Value	2.4%	4.8%	9.9%	4.2%	20.0%	16.7%	15.7%	10.2%	11.7%	13.8%	9.3%	9.3%	<i>May-08</i>
Fiera Capital	5.7%	7.0%	13.7%	7.7%	27.4%	20.3%	12.9%	9.5%	13.5%	15.8%		16.0%	Dec-09
Russell 2500 Growth	6.8%	9.7%	17.5%	8.8%	30.2%	22.7%	16.3%	13.3%	14.6%	16.0%	12.2%	15.7%	Dec-09
Ariel	0.5%	5.1%	5.2%	3.0%	17.0%	13.5%						16.2%	Jan-16
Russell 2500 Value	2.3%	4.9%	7.4%	4.3%	17.4%	14.2%	13.7%	8.8%	11.4%	13.7%	9.9%	19.4%	Jan-16
Non-U.S. Equity Developed Composite	-1.7%	-0.8%	-2.4%	0.4%	4.6%	10.8%	6.7%	2.7%	5.0%	5.6%	3.5%	5.7%	Jan-89
MSCI EAFE	-1.9%	-0.7%	-2.3%	0.5%	4.4%	10.8%	7.0%	3.2%	5.7%	6.6%	3.7%	4.6%	Jan-89
Causeway Capital Management	-2.1%	-1.0%	-4.3%	0.1%	4.6%	11.2%	5.9%	2.9%	5.4%			9.0%	Nov-11
MSCI EAFE	-1.9%	-0.7%	-2.3%	0.5%	4.4%	10.8%	7.0%	3.2%	5.7%	6.6%	3.7%	7.8%	Nov-11
Northern Trust MSCI EAFE+Canada	-1.7%	-0.3%	-1.8%	0.8%	4.8%	10.8%	7.4%	3.1%	5.6%	6.3%	4.3%	3.1%	Mar-07
Northern Trust MSCI EAFE + Canada Custom Benchmark	-1.7%	-0.3%	-1.7%	0.8%	4.9%	11.0%	7.7%	3.5%	6.4%	7.2%	4.2%	2.7%	Mar-07
Northern Trust International Small Cap	-0.8%	-2.8%		-0.1%								-3.0%	Mar-18
Northern Trust EAFE Small Cap Custom Benchmark	-0.8%	-2.1%		-0.1%								-2.3%	Mar-18



### Annualized Performance (Net of Fees)

Market Value: \$5,170.4 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	-2.3%	-4.6%	-3.8%	-1.6%					-			-1.4%	Nov-17
MSCI World ex USA Small Cap	-0.7%	-1.9%	-1.6%	-0.1%	7.0%	13.6%	11.1%	6.5%	9.0%	8.5%	7.0%	1.3%	Nov-17
Investors Group	-2.0%	-4.5%	-2.2%	-2.0%		-	-		-	-		1.0%	Nov-17
MSCI EAFE Small Cap	-0.8%	-2.1%	-1.5%	-0.2%	7.5%	14.5%	11.4%	7.9%	10.0%	9.8%	7.7%	1.1%	Nov-17
Non-U.S. Equity Emerging Composite	-2.5%	-5.0%	-7.6%	-0.7%	-0.4%	11.1%	11.8%	2.2%	4.6%	1.6%		9.3%	Jan-09
MSCI Emerging Markets	-2.7%	-4.7%	-7.2%	-0.6%	-0.7%	11.2%	11.4%	1.6%	5.0%	2.8%	3.4%	10.1%	Jan-09
Rhumbline Emerging Markets Index	-2.5%	-5.0%	-7.6%	-0.7%	-0.4%	11.1%	11.8%	1.9%	5.1%		-	2.3%	Feb-13
MSCI Emerging Markets	-2.7%	-4.7%	-7.2%	-0.6%	-0.7%	11.2%	11.4%	1.6%	5.0%	2.8%	3.4%	2.3%	Feb-13

### Annualized Performance (Net of Fees)

Market Value: \$5,170.4 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
Absolute Return	0.0%	-1.1%	4.5%	-0.1%	11.1%	11.0%	5.7%	3.6%	4.6%	4.7%	3.5%	3.7%	Sep-05
HFRI Fund of Funds Composite Index	0.3%	0.1%	1.3%	0.6%	3.8%	5.1%	2.7%	2.5%	3.5%	3.2%	1.9%	2.7%	Sep-05
Elizabeth Park Capital Management	0.0%	-1.1%	5.1%	0.0%	12.7%	16.9%	13.4%	11.8%				11.0%	May-14
HFRX Event Driven Index	0.0%	-1.0%	-5.0%	-0.6%	-4.4%	2.4%	2.6%	-1.1%	1.0%	2.5%	1.2%	-0.6%	May-14
Archview Offshore Fund. LTD	0.0%	-1.8%	2.7%	-1.0%	9.4%	7.4%	3.1%	1.3%				1.9%	Mar-14
HFRI ED: Distressed/Restructuring Index	-0.4%	2.1%	3.8%	0.8%	6.1%	8.6%	6.4%	2.4%	4.0%	5.1%	4.9%	2.7%	Mar-14
Real Assets Composite	0.1%	3.0%	2.1%	0.6%	4.3%	5.8%	4.3%	0.9%	5.2%			6.3%	Dec-12
Real Assets Benchmark	0.3%	3.2%	2.7%	0.8%	4.7%	4.7%	2.0%	-3.2%	0.7%			2.2%	Dec-12
Real Assets - Public Real Estate Composite	2.6%	7.4%	4.3%	3.1%	6.1%	4.0%	10.7%	8.9%	10.4%	-	-	9.1%	Jan-13
FTSE NAREIT All Equity REIT Custom Benchmark	2.8%	7.7%	4.6%	3.4%	6.4%	4.1%	10.8%	7.9%	10.9%				Jan-13
Rhumbline FTSE NAREIT	2.6%	7.4%	4.3%	3.1%	6.1%	4.0%	10.7%	7.8%	10.8%			7.4%	May-13
FTSE NAREIT All Equity REIT Custom Benchmark	2.8%	7.7%	4.6%	3.4%	6.4%	4.1%	10.8%	7.9%	10.9%			7.4%	May-13
Real Assets - Open-End Real Estate Composite	0.0%	1.9%	3.6%	0.0%	7.2%	-	-	-	-	-	-	5.8%	Jan-17
NFI	0.0%	0.6%	3.8%	0.0%	6.3%	6.5%	7.6%	9.1%	9.6%	10.0%	4.4%	6.3%	Jan-17
UBS Trumbull Fund	0.0%	1.8%	3.5%	0.0%	7.1%							5.7%	Jan-17
NFI	0.0%	0.6%	3.8%	0.0%	6.3%	6.5%	7.6%	9.1%	9.6%	10.0%	4.4%	6.3%	Jan-17
Clarion Lion Properties Fund	0.0%	2.4%		0.0%								4.0%	Feb-18
NFI	0.0%	0.6%	3.8%	0.0%	6.3%	6.5%	7.6%	9.1%	9.6%	10.0%	4.4%	3.1%	Feb-18
Real Assets - Infrastructure Composite	-0.9%	3.6%	-0.2%	0.8%	-0.8%							5.6%	Mar-17
Dow Jones Brookfield Global Infrastructure Index	-1.4%	3.2%	-0.8%	0.5%	-1.7%	5.8%	6.5%	1.9%	7.3%	8.7%	8.1%	4.7%	Mar-17
Rhumbline Infrastructure Index	-1.2%	3.3%	-0.4%	0.6%	-1.0%							5.4%	Mar-17
Dow Jones Brookfield Global Infrastructure Index	-1.4%	3.2%	-0.8%	0.5%	-1.7%	5.8%	6.5%	1.9%	7.3%	8.7%	8.1%	4.7%	Mar-17
Rreef Global Infrastructure	-0.2%	4.2%	-	1.2%	-	-						5.6%	Mar-18
Dow Jones Brookfield Global Infrastructure Index	-1.4%	3.2%	-0.8%	0.5%	-1.7%	5.8%	6.5%	1.9%	7.3%	8.7%	8.1%	4.7%	Mar-18



### Annualized Performance (Net of Fees)

Market Value: \$5,170.4 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%	1.5%	2.5%	0.0%	6.1%	7.7%	7.8%	8.1%	9.7%	9.7%	2.6%	3.8%	May-06
Real Assets - Private Real Estate Benchmark	0.0%	1.5%	2.5%	0.0%	6.1%	7.7%	7.8%	8.1%	9.7%				<i>May-06</i>
Real Assets - Private Energy/Infrastructure Composite	0.0%	13.5%	18.5%	0.0%	32.2%	16.3%	5.5%	-7.9%	6.2%			6.5%	May-12
Real Assets - Private Energy/Infrastructure Benchmark	0.0%	13.5%	18.5%	0.0%	32.2%	16.3%	5.5%	-7.9%	6.2%			6.5%	May-12
Private Assets Composite	0.0%	0.0%	4.4%	0.0%	12.9%	11.7%	8.9%						Mar-87