

(Preliminary Subject to Change)



Employees Retirement System

City of Philadelphia Employees Retirement System Executive Summary November 30, 2020 Total Fund Composite

	Ending November 30, 2020										
	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)					
Total Fund Composite		6,192,955,301	-60,782,404	100.0	100.0	0					
Total Fund w/o Alternative Assets		4,629,115,475	-81,800,144	74.7	71.0	232,117,211					
Investment Grade Fixed Income Composite		757,277,379	-10,852	12.2	13.0	-47,806,811					
Brandywine Global Investment Management	Global Fixed Income	156,348,378	0	2.5							
Garcia Hamilton & Associates	Int. Govt. Fixed Income	188,121,077	0	3.0							
MetLife Investment Management	Core Plus Fixed Income	52,462,823	-10,852	0.8							
Longfellow	Core Plus Fixed Income	186,948,220	0	3.0							
RhumbLine Core Bond Index	Core Fixed Income	173,396,879	0	2.8							
Opportunistic Fixed Income Composite		238,333,404	-453,155	3.8	4.0	-9,384,808					
T - Apollo Franklin Partnership, L.P.	Opportunistic Fixed Income	7,204,869	0	0.1							
T - Avenue Coppers Opportunity Fund LP	Opportunistic Fixed Income	13,723,845	0	0.2							
T - KKR-PBPR Capital Partners LP	Opportunistic Fixed Income	20,779,602	-468,957	0.3							
MetLife Investment Management - EMD	EM Fixed Income	81,388,922	0	1.3							
Strategic Income Management	High Yield Fixed Income	56,883,761	0	0.9							
Lord Abbett High Yield	High Yield Fixed Income	57,850,846	0	0.9							
U.S. Equity Composite		2,064,403,328	0	33.3	28.0	330,375,843					
RhumbLine Russell 1000 Index	Large-Cap Core	1,516,405,967	0	24.5							
O'Shaughnessy Asset Management	Large-Cap Value	31,424,319	0	0.5							
RhumbLine MidCap Index	Mid-Cap Core	188,860,432	-6,642	3.0							
RhumbLine Russell 2000 Index	Small-Cap Core	117,514,990	-3,920	1.9							
Emerald Advisors	Small-Cap Growth	108,499,423	0	1.8							
Fiera Capital	Smid-Cap Growth	41,025,562	0	0.7							
Ariel	Smid-Cap Value	60,499,958	0	1.0							
Non-U.S. Equity Developed Composite		1,197,639,664	0	19.3	23.0	-226,740,055					
Causeway Capital Management	Non-U.S. Large-Cap Core	86,095,819	0	1.4							
Northern Trust MSCI EAFE+Canada	Non-U.S. Large-Cap Core	882,831,733	0	14.3							
Northern Trust International Small Cap	Non-U.S. Small-Cap Core	117,435,170	0	1.9							
Strategic Global Advisors	Non-U.S. Small-Cap Core	34,861,665	0	0.6							
Mackenzie Investments	Non-U.S. Small-Cap Core	72,262,567	0	1.2							
Non-U.S. Equity Emerging Composite		262,734,798	0	4.2	3.0	76,946,139					
RhumbLine Emerging Markets Index	Emerging Markets	262,730,136	0	4.2							

Total Fund Composite

Market Value: \$6,193.0 Million and 100.0% of Fund

	Asset Class	Market Value	3 Mo Net	% of Portfolio	Policy %	Policy Difference
	Assel Class	(\$)	Cash Flows (\$)		Policy %	(\$)
Cash Composite		108,726,903	-81,336,137	1.8	0.0	108,726,903
Cash	Cash & Equivalents	108,093,582	-81,331,788	1.7		
Directed Commissions	Cash & Equivalents	633,321	-4,349	0.0		
Absolute Return		20,452,954	0	0.3	0.0	20,452,954
Elizabeth Park Capital Management	Long/Short Hedge Fund	19,288,208	0	0.3		
T - Archview Offshore Fund. LTD	Credit Hedge Fund	1,164,746	0	0.0		
Real Assets Composite		906,932,931	-20,085,504	14.6	17.0	-145,869,470
Real Assets - Public Real Estate Composite		56,899,521	0	0.9	1.0	-5,030,032
RhumbLine FTSE NAREIT	Real Assets	56,899,521	0	0.9		
Real Assets - Open-End Real Estate Composite		514,190,665	-4,640,111	8.3	10.0	-105,104,865
UBS Trumbull Fund	Core Real Estate	372,612,866	-4,349,387	6.0		
Clarion Lion Properties Fund	Core Real Estate	141,577,799	-290,724	2.3		
Real Assets - Infrastructure Composite		277,893,596	0	4.5	5.0	-31,754,169
RhumbLine Infrastructure Index	Publicly-Traded Infrastructure	182,328,261	0	2.9		
Rreef Global Infrastructure	Global Infrastructure	95,565,335	0	1.5		
Real Assets - Private Real Estate Composite		57,949,149	-15,445,393	0.9	1.0	-3,980,404
Private Assets Composite		636,453,942	41,103,243	10.3	12.0	-106,700,694
Private Assets - Private Equity	U.S. Private Equity FoF	593,403,507	41,115,282	9.6		
Private Assets - Private Debt	Mezz. Private Equity	43,050,435	-12,039	0.7		

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$6,193.0 Million and 100.0% of Fund

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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
Total Fund Composite	8.0%	4.9%	5.5%	11.5%	8.5%	10.2%	7.1%	9.3%	8.2%	6.5%	7.4%	7.6%	Jul-88
Total Fund Policy Benchmark	8.1%	5.0%	7.1%	11.6%	10.1%	11.6%	8.5%	9.9%	9.1%	7.4%	8.2%	8.5%	Jul-88
Total Fund w/o Alternative Assets	10.2%	6.3%	8.2%	15.2%	11.1%	11.4%	6.9%	9.6%	8.3%			6.7%	Jan-14
Investment Grade Fixed Income Composite	1.9%	1.4%	7.2%	3.3%	7.8%	8.5%	5.0%	5.0%	4.6%	3.6%	3.6%	6.1%	Jul-88
Fixed Income Custom Benchmark	1.1%	0.6%	7.7%	2.0%	7.7%	8.8%	5.3%	4.8%	4.3%	3.9%	3.7%	6.2%	Jul-88
Brandywine Global Investment Management	5.3%	4.5%	7.0%	9.9%	10.6%	9.0%	3.9%	5.9%	5.3%	3.7%	4.5%	6.7%	Jan-09
FTSE WGBI TR	1.6%	1.2%	8.6%	4.4%	8.9%	8.5%	4.5%	5.1%	4.7%	2.4%	2.4%	2.9%	Jan-09
Garcia Hamilton & Associates	0.6%	0.3%	6.0%	1.0%	6.0%	6.6%	4.5%	3.9%	3.6%	3.4%	3.7%	5.2%	Aug-00
BBgBarc US Govt/Credit Int TR	0.5%	0.3%	6.2%	0.9%	6.3%	7.2%	4.6%	4.0%	3.5%	3.1%	3.0%	4.5%	Aug-00
MetLife Investment Management	1.2%	0.6%	7.5%	1.8%	7.5%	9.4%	5.8%	5.6%	5.1%			4.3%	Oct-14
BBgBarc US Aggregate TR	1.0%	0.5%	7.4%	1.2%	7.3%	9.0%	5.5%	4.9%	4.3%	4.0%	3.7%	3.8%	Oct-14
Longfellow	1.6%	1.4%	8.4%	3.0%	8.2%	9.5%	5.9%	5.4%	4.7%			4.3%	Sep-14
BBgBarc US Aggregate TR	1.0%	0.5%	7.4%	1.2%	7.3%	9.0%	5.5%	4.9%	4.3%	4.0%	3.7%	3.9%	Sep-14
RhumbLine Core Bond Index	0.9%	0.3%	7.3%	0.9%	7.1%	8.7%	5.3%	4.8%	4.1%	3.8%	3.4%	4.4%	Jun-07
BBgBarc US Aggregate TR	1.0%	0.5%	7.4%	1.2%	7.3%	9.0%	5.5%	4.9%	4.3%	4.0%	3.7%	4.6%	Jun-07
Opportunistic Fixed Income Composite	3.8%	3.2%	-6.7%	7.9%	-4.9%	0.0%	-0.5%	1.5%	2.1%	1.8%		2.2%	Dec-12
Opportunistic FI Custom Benchmark	3.3%	2.9%	3.6%	7.5%	5.5%	6.5%	5.0%	5.5%	6.4%	4.8%	5.6%	4.9%	Dec-12
T - Apollo Franklin Partnership, L.P.	0.0%	11.9%	-22.9%	12.2%	-23.4%	-12.2%	-7.1%	-5.5%	-5.3%	-6.2%		-5.2%	May-13
50% BarCap HY / 50% CSFB Lev Loans	3.0%	3.2%	3.3%	7.9%	5.2%	6.0%	4.7%	5.3%	6.2%	4.7%	5.6%	4.7%	May-13
T - Avenue Coppers Opportunity Fund LP	0.0%	-2.2%	-10.5%	-4.1%	-9.3%	-4.8%	-6.7%	-3.6%	-2.5%			-0.9%	Dec-13
Actuarial Rate	0.6%	1.8%	6.9%	3.1%	7.6%	7.6%	7.6%	7.7%	7.7%	7.7%	7.7%	7.7%	Dec-13
T - KKR-PBPR Capital Partners LP	0.0%	1.0%	-48.4%	1.0%	-49.1%	-31.4%	-21.5%	-15.3%	-10.9%	-7.5%		-4.4%	Jun-12
Actuarial Rate	0.6%	1.8%	6.9%	3.1%	7.6%	7.6%	7.6%	7.7%	7.7%	7.7%	7.7%	7.7%	Jun-12
MetLife Investment Management - EMD	5.2%	3.2%	3.1%	8.0%	6.7%	9.5%	4.0%	6.5%	7.1%			5.7%	Feb-15
JP Morgan EMBI Global TR	3.7%	1.9%	4.0%	6.0%	6.0%	9.9%	4.5%	5.9%	6.1%	5.7%	5.7%	5.5%	Feb-15
Strategic Income Management	4.6%	4.4%	4.0%	11.2%	7.0%	7.2%	5.2%	6.2%				7.8%	Mar-16
ICE BofA US High Yield TR	4.0%	3.4%	4.2%	9.4%	6.4%	8.0%	5.3%	6.3%	7.5%	5.4%	6.6%	7.9%	Mar-16

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$6,193.0 Million and 100.0% of Fund

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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
Lord Abbett High Yield	3.8%	3.4%	3.4%	10.2%	5.4%							8.1%	Jan-19
ICE BofA US High Yield TR	4.0%	3.4%	4.2%	9.4%	6.4%	8.0%	5.3%	6.3%	7.5%	5.4%	6.6%	7.4%	Jan-19
U.S. Equity Composite	12.6%	7.3%	15.4%	20.8%	18.5%	16.8%	12.5%	14.8%	13.0%	11.4%	13.3%	10.0%	Jul-88
U.S. Equity Custom Benchmark	13.3%	8.1%	14.7%	21.3%	17.9%	16.4%	12.6%	15.0%	13.6%	12.2%	13.9%	10.7%	Jul-88
RhumbLine Russell 1000 Index	11.8%	5.1%	16.1%	19.4%	19.5%	17.8%	13.8%	15.9%	14.3%	12.8%	14.1%	9.2%	May-07
Rhumbline Russell 1000 Custom Benchmark	11.8%	5.1%	16.1%	19.4%	19.4%	17.8%	13.7%	15.9%	14.2%	12.8%			May-07
O'Shaughnessy Asset Management	16.1%	12.1%	-2.0%	20.2%	-0.4%	5.8%	4.7%	8.4%	8.3%	7.5%		11.6%	Jun-12
Russell 1000 Value	13.5%	9.2%	-1.0%	18.2%	1.7%	6.4%	5.3%	7.6%	8.4%	8.0%	10.9%	10.9%	Jun-12
RhumbLine MidCap Index	13.8%	12.3%	11.9%	23.0%	14.5%	14.7%	10.3%					12.3%	Dec-16
Rhumbline Russell Mid Cap Custom Benchmark	13.8%	12.3%	11.9%	23.0%	14.5%	14.8%	10.3%	11.6%				12.3%	Dec-16
RhumbLine Russell 2000 Index	18.6%	17.1%	10.6%	27.1%	13.8%	10.7%	7.3%					9.4%	Dec-16
Rhumbline Russell 2000 Custom Benchmark	18.6%	17.1%	10.6%	27.2%	13.8%	10.7%	7.2%	9.0%				9.4%	Dec-16
Emerald Advisors	12.4%	12.1%	25.4%	25.0%	28.2%	21.0%	13.8%	17.0%	13.9%	12.8%	15.4%	11.0%	Dec-04
Russell 2000 Growth	17.6%	16.0%	23.1%	27.0%	25.9%	18.2%	12.8%	15.5%	13.2%	11.0%	13.3%	9.7%	Dec-04
Fiera Capital	13.4%	17.8%	32.9%	29.8%	33.5%	24.8%	17.2%	18.7%	14.9%	12.8%	14.9%	16.0%	Dec-09
Russell 2500 Growth	14.6%	15.0%	29.3%	26.8%	30.5%	23.7%	16.8%	18.8%	15.9%	13.2%	14.9%	15.5%	Dec-09
Ariel	15.8%	15.7%	2.4%	24.7%	4.8%	6.2%	3.7%	7.0%				9.6%	Jan-16
Russell 2500 Value	17.5%	15.5%	-1.9%	24.4%	1.0%	3.8%	2.2%	4.8%	7.0%	6.2%	9.4%	9.7%	Jan-16
Non-U.S. Equity Developed Composite	15.1%	8.1%	4.4%	17.6%	7.9%	10.2%	3.6%	8.8%	6.4%	3.7%	5.4%	5.6%	Jan-89
Non-U.S. Equity Developed Custom Benchmark	15.0%	8.0%	3.4%	17.2%	7.0%	9.7%	3.4%	8.9%	6.7%	4.2%	6.0%		Jan-89
Causeway Capital Management	26.4%	14.5%	1.8%	22.9%	5.9%	6.8%	1.1%	7.1%	4.9%	2.9%		7.3%	Nov-11
MSCI EAFE	15.5%	8.0%	3.0%	16.2%	6.4%	9.4%	3.3%	8.8%	6.2%	3.9%	5.9%	7.0%	Nov-11
MSCI EAFE Value	18.9%	8.9%	-6.8%	15.5%	-3.4%	1.5%	-2.2%	4.0%	2.9%	0.9%	3.8%	4.7%	Nov-11
Northern Trust MSCI EAFE+Canada	14.9%	7.6%	4.5%	16.5%	7.8%	10.6%	4.4%	9.4%	7.0%	4.3%	6.0%	3.6%	Mar-07
Northern Trust MSCI EAFE + Canada Custom Benchmark	14.9%	7.5%	4.6%	16.5%	7.8%	10.7%	4.5%	9.5%	7.2%	4.9%	6.6%	3.3%	Mar-07

Annualized Performance (Net of Fees)

Market Value: \$6,193.0 Million and 100.0% of Fund

Ending November 30, 2020

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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
Northern Trust International Small Cap	13.7%	8.9%	5.2%	20.9%	9.8%	11.0%						2.4%	Mar-18
Northern Trust EAFE Small Cap Custom Benchmark	13.7%	9.0%	5.4%	21.0%	10.0%	11.4%						2.9%	Mar-18
Strategic Global Advisors	11.1%	5.3%	0.4%	16.7%	4.8%	6.7%	-0.5%					-0.5%	Nov-17
MSCI World ex USA Small Cap	13.8%	8.8%	5.6%	21.2%	10.5%	11.3%	3.7%	10.0%	8.2%	6.1%	7.4%	3.7%	Nov-17
Mackenzie Investments	10.5%	8.8%	7.1%	21.8%	11.5%	12.0%	3.4%					3.4%	Nov-17
MSCI EAFE Small Cap	13.7%	9.0%	5.2%	21.0%	9.8%	10.9%	3.5%	10.2%	8.1%	6.6%	8.3%	3.5%	Nov-17
Non-U.S. Equity Emerging Composite	10.6%	11.4%	10.2%	24.5%	18.8%	12.9%	5.1%	11.6%	10.9%	5.0%	2.7%	9.2%	Jan-09
MSCI Emerging Markets	9.2%	9.7%	10.2%	22.2%	18.4%	12.7%	4.9%	11.3%	10.7%	4.9%	3.6%	9.8%	Jan-09
RhumbLine Emerging Markets Index	10.6%	11.4%	10.2%	24.5%	18.8%	12.9%	5.1%	11.6%	10.9%	5.0%		4.1%	Feb-13
MSCI Emerging Markets	9.2%	9.7%	10.2%	22.2%	18.4%	12.7%	4.9%	11.3%	10.7%	4.9%	3.6%	4.0%	Feb-13

Investment Manager

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$6,193.0 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%	-3.8%	-32.0%	-4.2%	-30.9%	-18.0%	-13.9%	-8.0%	-5.8%	-4.1%	-1.8%	-0.2%	Sep-05
HFRI Fund of Funds Composite Index	3.7%	3.9%	6.7%	8.5%	8.5%	6.7%	3.9%	4.8%	3.7%	3.3%	3.2%	2.9%	Sep-05
Elizabeth Park Capital Management	0.0%	-4.0%	-32.8%	-4.4%	-31.5%	-17.5%	-13.3%	-6.5%	-3.2%			-0.6%	May-14
HFRX Event Driven Index	2.1%	2.3%	6.6%	4.9%	8.7%	7.6%	1.3%	3.0%	3.9%	1.3%	2.4%	0.9%	May-14
T - Archview Offshore Fund. LTD	0.0%	0.0%	-16.1%	-0.8%	-18.5%	-25.8%	-20.0%	-14.0%	-11.0%			-8.8%	Mar-14
HFRI ED: Distressed/Restructuring Index	5.2%	6.8%	5.8%	9.2%	7.1%	3.1%	2.8%	4.0%	5.1%	2.7%	4.1%	2.2%	Mar-14
Real Assets Composite	3.1%	1.6%	-2.8%	2.4%	-1.1%	2.7%	3.0%	4.5%	4.9%	3.9%		5.2%	Dec-12
Real Assets Benchmark	2.5%	1.6%	-1.9%	2.4%	-0.4%	3.9%	3.7%	4.3%	4.4%	1.0%		2.5%	Dec-12
Real Assets - Public Real Estate Composite	9.1%	2.7%	-7.5%	6.7%	-6.9%	4.7%	4.3%	6.6%	6.4%	8.2%		7.6%	Jan-13
FTSE NAREIT All Equity REIT Custom Benchmark	9.1%	2.7%	-7.4%	6.8%	-6.8%	4.9%	4.5%	6.8%	6.5%	8.7%			Jan-13
RhumbLine FTSE NAREIT	9.1%	2.7%	-7.5%	6.7%	-6.9%	4.7%	4.3%	6.6%	6.4%	8.6%		6.3%	May-13
FTSE NAREIT All Equity REIT Custom Benchmark	9.1%	2.7%	-7.4%	6.8%	-6.8%	4.9%	4.5%	6.8%	6.5%	8.7%		6.4%	May-13
Real Assets - Open-End Real Estate Composite	0.0%	-0.1%	-1.9%	-0.1%	-1.6%	-0.5%	2.0%					2.4%	Jan-17
NFI	0.0%	0.1%	-0.7%	0.3%	-0.3%	2.1%	3.8%	4.5%	5.3%	7.3%	8.9%	4.4%	Jan-17
UBS Trumbull Fund	0.0%	-0.4%	-2.5%	-0.4%	-2.6%	-1.9%	0.9%					1.6%	Jan-17
NFI	0.0%	0.1%	-0.7%	0.3%	-0.3%	2.1%	3.8%	4.5%	5.3%	7.3%	8.9%	4.4%	Jan-17
Clarion Lion Properties Fund	0.0%	0.5%	-0.4%	0.5%	1.4%	3.8%						5.2%	Feb-18
NFI	0.0%	0.1%	-0.7%	0.3%	-0.3%	2.1%	3.8%	4.5%	5.3%	7.3%	8.9%	3.6%	Feb-18
Real Assets - Infrastructure Composite	9.0%	4.4%	-4.3%	6.3%	0.8%	8.8%	4.5%					6.2%	Mar-17
Dow Jones Brookfield Global Infrastructure Index	9.2%	4.1%	-6.8%	5.7%	-1.8%	6.9%	3.0%	7.0%	6.6%	5.8%	8.6%	4.9%	Mar-17
RhumbLine Infrastructure Index	9.3%	4.3%	-6.2%	5.9%	-1.1%	7.6%	3.7%					5.6%	Mar-17
Dow Jones Brookfield Global Infrastructure Index	9.2%	4.1%	-6.8%	5.7%	-1.8%	6.9%	3.0%	7.0%	6.6%	5.8%	8.6%	4.9%	Mar-17
Rreef Global Infrastructure	8.4%	4.6%	-0.4%	7.1%	4.6%	11.5%						9.7%	Mar-18
Dow Jones Brookfield Global Infrastructure Index	9.2%	4.1%	-6.8%	5.7%	-1.8%	6.9%	3.0%	7.0%	6.6%	5.8%	8.6%	6.0%	Mar-18

Annualized Performance (Net of Fees)

Market Value: \$6,193.0 Million and 100.0% of Fund

Ending November 30, 2020

	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%	2.8%	-0.7%	2.8%	0.0%	3.2%	4.7%	5.2%	6.2%	7.4%	8.9%	3.8%	May-06
Real Assets - Private Real Estate Benchmark	0.0%	2.8%	-0.7%	2.8%	0.0%	3.2%	4.7%	5.2%	6.2%	7.4%	8.9%	3.8%	<i>May-</i> 06
Private Assets Composite	0.0%	0.0%	-0.4%	0.0%	5.8%	15.4%	17.6%	15.2%	13.9%	13.2%	13.6%	8.9%	Mar-87
Private Assets Composite Benchmark	0.0%	0.0%	-0.4%	0.0%	5.8%	15.4%	17.6%	15.2%	13.9%	13.2%	13.6%	8.9%	Mar-87
CPI +5%	0.3%	1.3%	5.9%	3.0%	6.2%	6.7%	6.9%	7.0%	6.9%	6.7%	6.8%		Mar-87

Please note: As of January 1, 2019, the total fund policy index incorporates the adjustments as approved by the Board of Trustees to reflect the fundamental changes adopted as a result of the approved asset allocation. T represents any investment terminated by the Board of Trustees.

Investment Manager