

(Preliminary Subject to Change)



Employees Retirement System

City of Philadelphia
Employees Retirement System
Executive Summary

September 30, 2016

Total Fund Composite

Market Value: \$4,274.0 Million and 100.0% of Fund

Ending September 30, 2016

	Ending September 30, 2016								
	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)			
Total Fund Composite		4,274,044,054	-192,435,677	100.0	100.0	0			
Total Fund w/o Alternative Assets		3,423,720,427	5,182,710	80.1	80.8	-29,707,169			
Investment Grade Fixed Income Composite		684,538,237	78,002,911	16.0	19.0	-127,530,133			
Brandywine Global Investment Management	Global Fixed Income	158,023,868	0	3.7					
Garcia Hamilton & Associates	Core Fixed Income	110,429,644	7,300,000	2.6					
Logan Circle	Core Plus Fixed Income	43,073,968	0	1.0					
Longfellow	Core Plus Fixed Income	99,070,695	0	2.3					
Rhumbline Core Bond Index	Core Fixed Income	273,445,517	70,803,392	6.4					
Opportunistic Fixed Income Composite		455,825,159	-131,116,727	10.7	7.5	135,271,855			
Apollo Franklin Partnership, L.P.	Opportunistic Fixed Income	62,540,256	-19,090,909	1.5					
Avenue Coppers Opportunity Fund LP	Opportunistic Fixed Income	100,660,901	0	2.4					
KKR-PBPR Capital Partners LP	Opportunistic Fixed Income	164,263,567	0	3.8					
Logan Circle - EMD	EM Fixed Income	49,290,837	0	1.2					
Strategic Income Management	High Yield Fixed Income	80,190,378	0	1.9					
U.S. Equity Composite		1,291,167,184	35,787,907	30.2	29.8	17,502,056			
Rhumbline Russell 1000 Index	Large-Cap Core	759,512,467	37,349,062	17.8					
Rhumbline Russell 1000 Growth Index	Large-Cap Growth	113,897,102	0	2.7					
Aronson+Johnson+Ortiz LP	Large-Cap Value	35,801,746	0	0.8					
Brandywine LCV	Large-Cap Value	23,840,049	0	0.6					
Lyrical LCV	Large-Cap Value	32,330,950	0	0.8					
O'Shaughnessy Asset Management	Large-Cap Value	36,742,483	0	0.9					
Ceredex Value Advisors	Mid-Cap Value	80,331,264	0	1.9					
Hahn Capital	Mid-Cap Value	52,085,551	0	1.2					
Apex Capital Management	Smid-Cap Growth	19,848,265	0	0.5					
Emerald Advisors	Small-Cap Growth	38,535,588	7	0.9					
Rhumbline Russell 2000 Growth	Small-Cap Growth	33,411,475	0	0.8					
Fisher Asset Management	Small-Cap Value	29,881,036	0	0.7					
Ariel	Smid-Cap Value	34,682,363	0	0.8					
Non-U.S. Equity Developed Composite		737,755,798	-96,930	17.3	16.8	19,716,397			
Causeway Capital Management	Non-U.S. Large-Cap Core	201,683,461	0	4.7					
Northern Trust MSCI EAFE+Canada	Non-U.S. Large-Cap Core	531,895,811	819,713	12.4					
Non-U.S. Equity Emerging Composite		212,215,724	-168	5.0	5.2	-10,034,566			
Rhumbline Emerging Markets Index	Emerging Markets	212,204,717	-168	5.0					

Total Fund Composite

Market Value: \$4,274.0 Million and 100.0% of Fund

Ending September 30, 2016

Cash Cash & Equivalents 39,831,369 22,473,525 0.9 Directed Commissions Cash & Equivalents 805,280 -11,891 0.0 Absolute Return 163,298,715 -116,092,194 3.8 3.7 5,159,00 400 Capital Credit Opportunity Fund Relative Value Hedge Fund 55,911,501 0 1.3		Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
Directed Commissions Cash & Equivalents 805,280 -11,891 0.0	Cash Composite		40,636,649	22,461,634	1.0	1.1	-6,377,835
Absolute Return	Cash	Cash & Equivalents	39,831,369	22,473,525	0.9		
Avonic Capital LLC Credit Hedge Fund 2,831,377 -53,797,357 0.1 Blue Harbour Strategic Value Partners Master Fund, LD Congonly Hedge Fund 2,831,377 -53,797,357 0.1 Elizabeth Park Capital Management LD LOng Only Hedge Fund 23,219,609 0 0.5 Archview Offshore Fund. LTD Credit Hedge Fund 29,254,107 0 0.7 Real Assets Composite 279,532,298 -65,514,886 6.5 5.9 27,363,61 Real Assets - MLPs Composite 85,169,452 -76,824,874 2.0 1.9 3,962,61 Harvest Fund Advisors LLC MLP 42,321,343 -21,105,450 1.0 Tortoise Capital Advisors LLC MLP 42,847,035 -1,894,500 1.0 Real Assets - Public Real Estate Composite 58,893,065 0 1.4 1.4 -943,51 Rhumbline FTSE NAREIT Real Assets 58,893,065 0 1.4 Real Assets - Private Real Estate Composite 7,057,476 1,551,440 0.2 - 7,057,476 Private Assets - Private Equity U.S. Private Equity FoF 389,507,024 -13,037,566 9.1	Directed Commissions	Cash & Equivalents	805,280	-11,891	0.0		
Axonic Capital LLC Credit Hedge Fund 2,831,377 -53,797,357 0.1 Blue Harbour Strategic Value Partners Master Fund, LP Long Only Hedge Fund 52,082,120 0 1.2 Elizabeth Park Capital Management Long/Short Hedge Fund 23,219,609 0 0.5 Archview Offshore Fund. LTD Credit Hedge Fund 29,254,107 0 0.7 Real Assets Composite 279,532,298 -65,514,886 6.5 5.9 27,363,69 Real Assets - MLPs Composite 85,169,452 -76,824,874 2.0 1.9 3,962,69 Harvest Fund Advisors LLC MLP 42,321,343 -21,105,450 1.0 Tortoise Capital Advisors LLC MLP 42,847,035 -1,894,500 1.0 Real Assets - Public Real Estate Composite 58,893,065 0 1.4 Real Assets - Private Real Estate Composite 128,412,305 9,758,548 3.0 2.6 17,287,11 Real Assets - Private Energy/Infrastructure 7,057,476 1,551,440 0.2 - 7,057,476 Private Assets - Private Equity U.S. Private Equity FoF 389,507,024 -13,037,566 9.1	Absolute Return		163,298,715	-116,092,194	3.8	3.7	5,159,085
Blue Harbour Strategic Value Partners Master Fund, Long Only Hedge Fund 52,082,120 0 1.2	400 Capital Credit Opportunity Fund	•	55,911,501	0	1.3		
Elizabeth Park Capital Management Long/Short Hedge Fund 23,219,609 0 0.5 Archview Offshore Fund. LTD Credit Hedge Fund 29,254,107 0 0.7 Real Assets Composite 279,532,298 -65,514,886 6.5 5.9 27,363,69 Real Assets - MLPs Composite 85,169,452 -76,824,874 2.0 1.9 3,962,69 Harvest Fund Advisors LLC MLP 42,321,343 -21,105,450 1.0 Tortoise Capital Advisors LLC MLP 42,847,035 -1,894,500 1.0 Real Assets - Public Real Estate Composite 58,893,065 0 1.4 1.4 1.4 -943,59 Real Assets - Private Real Estate Composite 128,412,305 9,758,548 3.0 2.6 17,287,19 Real Assets - Private Energy/Infrastructure 7,057,476 1,551,440 0.2 7,057,476 Private Assets - Private Equity U.S. Private Equity FoF 389,507,024 -13,037,566 9.1	Axonic Capital LLC	Credit Hedge Fund	2,831,377	-53,797,357	0.1		
Archview Offshore Fund. LTD Credit Hedge Fund 29,254,107 0 0.7 Real Assets Composite 279,532,298 -65,514,886 6.5 5.9 27,363,68 Real Assets - MLPs Composite 85,169,452 -76,824,874 2.0 1.9 3,962,69 Harvest Fund Advisors LLC MLP 42,321,343 -21,105,450 1.0 1.0 Tortoise Capital Advisors LLC MLP 42,847,035 -1,894,500 1.0 1.0 Real Assets - Public Real Estate Composite 58,893,065 0 1.4 1.4 -943,58 Rhumbline FTSE NAREIT Real Assets 58,893,065 0 1.4 1.4 -943,58 Real Assets - Private Real Estate Composite 128,412,305 9,758,548 3.0 2.6 17,287,19 Private Assets 407,492,614 -16,011,307 9.5 11.0 -62,652,23 Private Assets Private Equity U.S. Private Equity FoF 389,507,024 -13,037,566 9.1		Long Only Hedge Fund	52,082,120	0	1.2		
Real Assets Composite 279,532,298 -65,514,886 6.5 5.9 27,363,69 Real Assets - MLPs Composite 85,169,452 -76,824,874 2.0 1.9 3,962,69 Harvest Fund Advisors LLC MLP 42,321,343 -21,105,450 1.0 Tortoise Capital Advisors LLC MLP 42,847,035 -1,894,500 1.0 Real Assets - Public Real Estate Composite 58,893,065 0 1.4 1.4 -943,50 Rhumbline FTSE NAREIT Real Assets 58,893,065 0 1.4 1.4 -943,50 Real Assets - Private Real Estate Composite 128,412,305 9,758,548 3.0 2.6 17,287,10 Real Assets - Private Energy/Infrastructure 7,057,476 1,551,440 0.2 7,057,47 Private Assets 407,492,614 -16,011,307 9.5 11.0 -62,652,23 Private Assets - Private Equity U.S. Private Equity FoF 389,507,024 -13,037,566 9.1	Elizabeth Park Capital Management	Long/Short Hedge Fund	23,219,609	0	0.5		
Real Assets - MLPs Composite 85,169,452 -76,824,874 2.0 1.9 3,962,67 Harvest Fund Advisors LLC MLP 42,321,343 -21,105,450 1.0 Tortoise Capital Advisors LLC MLP 42,847,035 -1,894,500 1.0 Real Assets - Public Real Estate Composite 58,893,065 0 1.4 1.4 -943,53 Rhumbline FTSE NAREIT Real Assets 58,893,065 0 1.4 -14 -943,53 Real Assets - Private Real Estate Composite 128,412,305 9,758,548 3.0 2.6 17,287,13 Real Assets - Private Energy/Infrastructure 7,057,476 1,551,440 0.2 7,057,47 Private Assets 407,492,614 -16,011,307 9.5 11.0 -62,652,23 Private Assets - Private Equity U.S. Private Equity FoF 389,507,024 -13,037,566 9.1	Archview Offshore Fund. LTD	Credit Hedge Fund	29,254,107	0	0.7		
Harvest Fund Advisors LLC MLP 42,321,343 -21,105,450 1.0 Tortoise Capital Advisors LLC MLP 42,847,035 -1,894,500 1.0 Real Assets - Public Real Estate Composite 58,893,065 0 1.4 1.4 -943,53 Rhumbline FTSE NAREIT Real Assets 58,893,065 0 1.4 Real Assets - Private Real Estate Composite 128,412,305 9,758,548 3.0 2.6 17,287,13 Real Assets - Private Energy/Infrastructure 7,057,476 1,551,440 0.2 7,057,476 Private Assets 407,492,614 -16,011,307 9.5 11.0 -62,652,23 Private Assets - Private Equity U.S. Private Equity FoF 389,507,024 -13,037,566 9.1	Real Assets Composite		279,532,298	-65,514,886	6.5	5.9	27,363,699
Tortoise Capital Advisors LLC MLP 42,847,035 -1,894,500 1.0 Real Assets - Public Real Estate Composite 58,893,065 0 1.4 1.4 -943,53 Rhumbline FTSE NAREIT Real Assets 58,893,065 0 1.4 Real Assets - Private Real Estate Composite 128,412,305 9,758,548 3.0 2.6 17,287,19 Real Assets - Private Energy/Infrastructure 7,057,476 1,551,440 0.2 7,057,47 Private Assets 407,492,614 -16,011,307 9.5 11.0 -62,652,23 Private Assets - Private Equity U.S. Private Equity FoF 389,507,024 -13,037,566 9.1	Real Assets - MLPs Composite		85,169,452	-76,824,874	2.0	1.9	3,962,615
Real Assets - Public Real Estate Composite 58,893,065 0 1.4 1.4 -943,53 Rhumbline FTSE NAREIT Real Assets 58,893,065 0 1.4 Real Assets - Private Real Estate Composite 128,412,305 9,758,548 3.0 2.6 17,287,13 Real Assets - Private Energy/Infrastructure 7,057,476 1,551,440 0.2 7,057,476 Private Assets 407,492,614 -16,011,307 9.5 11.0 -62,652,23 Private Assets - Private Equity U.S. Private Equity FoF 389,507,024 -13,037,566 9.1	Harvest Fund Advisors LLC	MLP	42,321,343	-21,105,450	1.0		
Rhumbline FTSE NAREIT Real Assets 58,893,065 0 1.4 Real Assets - Private Real Estate Composite 128,412,305 9,758,548 3.0 2.6 17,287,15 Real Assets - Private Energy/Infrastructure 7,057,476 1,551,440 0.2 7,057,476 Private Assets 407,492,614 -16,011,307 9.5 11.0 -62,652,23 Private Assets - Private Equity U.S. Private Equity FoF 389,507,024 -13,037,566 9.1	Tortoise Capital Advisors LLC	MLP	42,847,035	-1,894,500	1.0		
Real Assets - Private Real Estate Composite 128,412,305 9,758,548 3.0 2.6 17,287,15 Real Assets - Private Energy/Infrastructure 7,057,476 1,551,440 0.2 7,057,476 Private Assets 407,492,614 -16,011,307 9.5 11.0 -62,652,23 Private Assets - Private Equity U.S. Private Equity FoF 389,507,024 -13,037,566 9.1	Real Assets - Public Real Estate Composite		58,893,065	0	1.4	1.4	-943,551
Real Assets - Private Energy/Infrastructure 7,057,476 1,551,440 0.2 7,057,476 Private Assets 407,492,614 -16,011,307 9.5 11.0 -62,652,23 Private Assets - Private Equity U.S. Private Equity FoF 389,507,024 -13,037,566 9.1	Rhumbline FTSE NAREIT	Real Assets	58,893,065	0	1.4		
Private Assets 407,492,614 -16,011,307 9.5 11.0 -62,652,23 Private Assets - Private Equity U.S. Private Equity FoF 389,507,024 -13,037,566 9.1	Real Assets - Private Real Estate Composite		128,412,305	9,758,548	3.0	2.6	17,287,159
Private Assets - Private Equity U.S. Private Equity FoF 389,507,024 -13,037,566 9.1	Real Assets - Private Energy/Infrastructure		7,057,476	1,551,440	0.2		7,057,476
	Private Assets		407,492,614	-16,011,307	9.5	11.0	-62,652,232
Private Assets - Private Debt Mezz. Private Equity 17,985,590 -2,973,742 0.4	Private Assets - Private Equity	U.S. Private Equity FoF	389,507,024	-13,037,566	9.1		
	Private Assets - Private Debt	Mezz. Private Equity	17,985,590	-2,973,742	0.4		

Annualized Performance (Net of Fees)

Market Value: \$4,274.0 Million and 100.0% of Fund

	Ending September 30, 2016										Inception	
	1 Mo	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs	Return	Since
Total Fund Composite	0.4%	3.6%	5.2%	6.7%	1.0%	3.9%	5.6%	7.4%	7.2%	4.8%	7.4%	Jul-88
Total Fund Policy Benchmark	0.5%	3.4%	6.7%	8.2%	2.6%	5.0%	6.6%	8.8%	8.3%	5.9%	8.3%	Jul-88
Total Fund w/o Alternative Assets	0.5%	4.4%	5.8%	8.9%	1.0%	-	-	-	-		3.0%	Jan-14
Investment Grade Fixed Income Composite	0.1%	0.7%	7.2%	6.6%	2.2%	3.1%	1.9%	2.9%	4.1%	4.7%	6.4%	Jul-88
Barclays Aggregate	-0.1%	0.5%	5.8%	5.2%	4.1%	4.0%	2.6%	3.1%	4.1%	4.8%	6.6%	Jul-88
Brandywine Global Investment Management	0.6%	1.4%	11.3%	10.4%	1.3%	2.8%	2.0%	3.9%	5.9%	-	8.3%	Jan-09
Citi WGBI	0.7%	0.3%	11.1%	9.7%	2.7%	1.8%	0.1%	0.8%	1.9%	4.1%	2.9%	Jan-09
Garcia Hamilton & Associates	0.0%	0.2%	4.5%	4.0%	3.7%	3.9%	3.1%	4.4%	4.6%	5.6%	5.7%	Aug-00
Barclays Aggregate	-0.1%	0.5%	5.8%	5.2%	4.1%	4.0%	2.6%	3.1%	4.1%	4.8%	5.3%	Aug-00
Logan Circle	0.1%	1.3%	6.9%	6.3%	4.0%				-		3.7%	Oct-14
Barclays Aggregate	-0.1%	0.5%	5.8%	5.2%	4.1%	4.0%	2.6%	3.1%	4.1%	4.8%	3.7%	Oct-14
Longfellow	-0.1%	0.5%	5.2%	4.7%	3.7%				-		3.7%	Sep-14
Barclays Aggregate	-0.1%	0.5%	5.8%	5.2%	4.1%	4.0%	2.6%	3.1%	4.1%	4.8%	4.1%	Sep-14
Rhumbline Core Bond Index	-0.1%	0.2%	5.2%	4.6%	3.6%	3.7%	2.1%	2.6%	3.9%		4.7%	Jun-07
Barclays Aggregate	-0.1%	0.5%	5.8%	5.2%	4.1%	4.0%	2.6%	3.1%	4.1%	4.8%	4.9%	Jun-07
Opportunistic Fixed Income Composite	0.2%	3.7%	6.1%	3.9%	-0.1%	2.6%			-	-	2.9%	Dec-12
Opportunistic Fixed Income Benchmark	0.8%	4.3%	11.4%	9.1%	3.8%	4.4%	4.8%	6.8%			4.5%	Dec-12
Apollo Franklin Partnership, L.P.	0.0%	2.1%	2.2%	-5.2%	-11.0%	-6.1%					-4.8%	May-13
50% BarCap HY / 50% CSFB Lev Loans	0.8%	4.3%	11.2%	9.0%	3.8%	4.5%	5.0%	6.9%	7.2%	6.0%	4.1%	<i>May-13</i>
Avenue Coppers Opportunity Fund LP	0.0%	3.7%	2.3%	-0.8%	0.0%						2.8%	Dec-13
Actuarial Rate 7.75%	0.6%	1.9%	5.8%	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%	2.4%	7.3%	6.4%	1.7%	4.1%	6.0%				6.4%	Jun-12
Actuarial Rate 7.75%	0.6%	1.9%	5.8%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%	Jun-12
Logan Circle - EMD	1.3%	4.5%	17.1%	18.1%					-			Feb-15
JP Morgan EMBI Global TR	0.3%	3.7%	15.0%	16.8%	7.0%	7.4%	4.4%	7.4%	7.7%	7.6%	9.3%	Feb-15
Strategic Income Management	0.7%	4.3%							-	-	10.4%	Mar-16
BofA Merrill Lynch US High Yield	0.6%	5.5%	15.3%	12.8%	4.3%	5.3%	5.7%	8.2%	8.6%	7.6%	11.7%	Mar-16

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Annualized Performance (Net of Fees)

Market Value: \$4,274.0 Million and 100.0% of Fund

Ending September 30, 2016

Inception

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	1 Mo	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs	Return	Since
U.S. Equity Composite	0.2%	5.1%	6.6%	12.2%	5.4%	8.6%	12.0%	15.2%	12.8%	7.2%	9.3%	Jul-88
Russell 3000	0.2%	4.4%	8.2%	15.0%	7.0%	10.4%	13.1%	16.4%	13.2%	7.4%	10.1%	Jul-88
Rhumbline Russell 1000 Index	0.1%	4.2%	8.1%	15.1%	6.9%	10.7%	13.2%	16.0%	13.0%		6.4%	May-07
Rhumbline Russell 1000 Custom Benchmark	0.1%	4.2%	7.8%	14.9%	6.9%	10.8%	13.3%			-		<i>May-</i> 07
Rhumbline Russell 1000 Growth Index	0.4%	4.7%	5.9%	13.6%	8.1%	11.5%	13.5%	16.1%	13.7%		7.8%	May-07
Rhumbline Russell 1000 Growth Custom Benchmark	0.5%	4.9%	6.0%	13.8%	8.3%	11.8%	13.7%			-		<i>May-</i> 07
Aronson+Johnson+Ortiz LP	0.6%	4.7%	0.7%	6.2%	1.9%	7.0%	11.4%	15.0%	11.8%	5.9%	7.3%	May-01
Russell 1000 Value	-0.2%	3.5%	10.0%	16.2%	5.4%	9.7%	12.7%	16.2%	12.3%	5.9%	6.3%	May-01
Brandywine LCV	0.6%	9.6%	4.5%	8.4%	-1.9%						-1.9%	Sep-14
Russell 1000 Value	-0.2%	3.5%	10.0%	16.2%	5.4%	9.7%	12.7%	16.2%	12.3%	5.9%	5.4%	Sep-14
Lyrical LCV	0.6%	6.7%	8.0%	10.4%	3.9%				-		3.9%	Sep-14
Russell 1000 Value	-0.2%	3.5%	10.0%	16.2%	5.4%	9.7%	12.7%	16.2%	12.3%	5.9%	5.4%	Sep-14
O'Shaughnessy Asset Management	0.3%	6.4%	7.1%	9.7%	0.6%	6.9%	13.1%	-	-		13.5%	Jun-12
Russell 1000 Value	-0.2%	3.5%	10.0%	16.2%	5.4%	9.7%	12.7%	16.2%	12.3%	5.9%	13.6%	Jun-12
Ceredex Value Advisors	0.2%	6.5%	11.8%	18.6%	5.4%	8.5%	13.1%				14.3%	Dec-11
Russell MidCap Value	0.4%	4.4%	13.7%	17.3%	7.2%	10.5%	14.6%	17.4%	14.3%	7.9%	15.3%	Dec-11
Hahn Capital	-0.4%	4.2%	6.8%	7.0%	2.7%						2.7%	Sep-14
Russell MidCap Value	0.4%	4.4%	13.7%	17.3%	7.2%	10.5%	14.6%	17.4%	14.3%	7.9%	7.2%	Sep-14
Apex Capital Management	0.2%	6.7%	2.9%	5.7%	1.9%	6.7%	12.3%	16.5%			14.6%	Dec-09
Russell 2500 Growth	0.3%	7.0%	7.0%	11.0%	7.1%	7.4%	13.1%	16.2%	14.0%	8.8%	13.6%	Dec-09
Emerald Advisors	2.5%	10.0%	5.2%	4.0%	10.5%	7.3%	14.7%	18.8%	15.7%	8.8%	8.9%	Dec-04
Russell 2000 Growth	1.4%	9.2%	7.5%	12.1%	8.0%	6.6%	12.7%	16.1%	13.3%	8.3%	7.8%	Dec-04
Rhumbline Russell 2000 Growth	1.4%	9.2%	7.4%	12.0%	7.8%	6.5%	12.5%				13.5%	Aug-12
Rhumbline Russell 2000 Growth Custom Benchmark	1.4%	9.2%	7.4%	12.0%	7.8%	6.4%	12.5%				13.5%	Aug-12
Fisher Asset Management	0.3%	5.6%	7.7%	14.2%	8.8%	8.1%	12.8%	16.9%	12.6%		9.0%	May-08
Russell 2000 Value	0.8%	8.9%	15.5%	18.8%	8.1%	6.8%	11.5%	15.4%	11.6%	5.8%	7.6%	<i>May-08</i>
Ariel	-0.6%	8.1%									13.7%	Jan-16
Russell 2500 Value	0.7%	6.2%	14.5%	17.7%	7.1%	8.1%	12.6%	16.3%	12.8%	6.9%	22.0%	Jan-16

Annualized Performance (Net of Fees)

Market Value: \$4,274.0 Million and 100.0% of Fund

	Ending September 30, 2016										Incep	tion
	1 Mo	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs	Return	Since
Non-U.S. Equity Developed Composite	1.2%	6.5%	2.4%	5.6%	-2.5%	-0.4%	3.8%	6.5%	4.2%	1.8%	5.3%	Jan-89
MSCI EAFE	1.2%	6.4%	1.7%	6.5%	-1.4%	0.5%	5.9%	7.4%	4.2%	1.8%	4.2%	Jan-89
Causeway Capital Management	1.0%	6.9%	-0.6%	2.5%	-3.2%	-0.2%	5.8%		-		8.2%	Nov-11
MSCI EAFE	1.2%	6.4%	1.7%	6.5%	-1.4%	0.5%	5.9%	7.4%	4.2%	1.8%	6.7%	Nov-11
Northern Trust MSCI EAFE+Canada	1.2%	6.4%	3.3%	7.4%	-1.5%	0.4%	5.4%	7.1%	4.8%		1.7%	Mar-07
Northern Trust MSCI EAFE + Canada Custom Benchmark	1.2%	6.3%	3.6%	7.9%	-1.0%	1.5%	6.5%	8.1%	5.0%		1.2%	Mar-07
Non-U.S. Equity Emerging Composite	1.2%	8.0%	16.5%	17.4%	-2.3%	-0.8%	-1.7%	1.2%	1.1%		8.9%	Jan-09
MSCI Emerging Markets	1.3%	9.0%	16.0%	16.8%	-2.9%	-0.6%	-0.2%	3.0%	2.3%	3.9%	9.9%	Jan-09
Rhumbline Emerging Markets Index	1.2%	8.0%	16.5%	17.4%	-2.2%	-0.6%					-2.0%	Feb-13
MSCI Emerging Markets	1.3%	9.0%	16.0%	16.8%	-2.9%	-0.6%	-0.2%	3.0%	2.3%	3.9%	-2.0%	Feb-13

Annualized Performance (Net of Fees)

Market Value: \$4,274.0 Million and 100.0% of Fund

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	1 Mo	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs	Return	Since
Absolute Return	0.9%	3.4%	-0.2%	-3.0%	-3.1%	0.5%	2.1%	2.8%	2.4%	2.2%	2.4%	Sep-05
HFRI Fund of Funds Composite Index	0.4%	2.4%	-0.3%	0.5%	0.2%	2.2%	3.2%	3.2%	2.5%	1.8%	2.2%	Sep-05
400 Capital Credit Opportunity Fund	0.0%	2.6%	-4.3%	-6.1%	-1.9%	3.6%			-		3.2%	Jun-13
HFRI ED: Distressed/Restructuring Index	1.0%	5.5%	9.1%	5.5%	-1.8%	1.1%	4.1%	4.9%	5.4%	3.8%	1.3%	Jun-13
HFRX Distressed Securities Index	0.2%	5.7%	13.6%	5.9%	-0.9%	0.7%	1.0%	1.5%	1.5%	-2.6%	0.8%	Jun-13
Axonic Capital LLC	0.0%	-0.2%	-2.3%	-4.3%	0.2%	4.0%		-	-		5.6%	Jan-13
HFRI ED: Distressed/Restructuring Index	1.0%	5.5%	9.1%	5.5%	-1.8%	1.1%	4.1%	4.9%	5.4%	3.8%	2.7%	Jan-13
Blue Harbour Strategic Value Partners Master Fund, LP	0.4%	5.6%	2.6%	3.9%	1.9%				-		1.9%	Jan-14
HFRX Event Driven Index	0.1%	3.8%	7.2%	6.5%	-2.9%	-0.6%	2.4%	3.0%	1.9%	1.1%	-1.6%	Jan-14
Elizabeth Park Capital Management	1.6%	9.0%	3.9%	8.0%	8.6%				-		6.5%	May-14
HFRX Event Driven Index	0.1%	3.8%	7.2%	6.5%	-2.9%	-0.6%	2.4%	3.0%	1.9%	1.1%	-3.0%	May-14
Archview Offshore Fund. LTD	3.3%	6.6%	4.1%	-0.5%	-2.5%				-		-1.0%	Mar-14
HFRI ED: Distressed/Restructuring Index	1.0%	5.5%	9.1%	5.5%	-1.8%	1.1%	4.1%	4.9%	5.4%	3.8%	-1.3%	Mar-14
Real Assets Composite	0.3%	0.7%	8.1%	11.0%	-2.7%	4.8%					6.7%	Dec-12
Real Assets Benchmark	1.0%	0.6%	11.5%	8.9%	-9.3%	-1.9%					1.3%	Dec-12
Real Assets - MLPs Composite	2.0%	3.3%	13.0%	10.7%	-14.5%	-1.1%	4.3%	8.4%	-		8.4%	Sep-11
Alerian MLP Index	1.9%	1.1%	15.9%	12.7%	-17.2%	-4.8%	0.2%	5.0%	10.2%	9.0%	5.0%	Sep-11
Harvest Fund Advisors LLC	2.0%	4.8%	16.8%	12.1%	-12.9%	0.4%	5.7%	9.8%			9.0%	Sep-11
Alerian MLP Index	1.9%	1.1%	15.9%	12.7%	-17.2%	-4.8%	0.2%	5.0%	10.2%	9.0%	4.0%	Sep-11
Tortoise Capital Advisors LLC	2.1%	2.4%	12.8%	15.4%	-12.8%	0.9%	5.9%				5.8%	Feb-12
Alerian MLP Index	1.9%	1.1%	15.9%	12.7%	-17.2%	-4.8%	0.2%	5.0%	10.2%	9.0%	0.7%	Feb-12
Real Assets - Public Real Estate Composite	-1.5%	-1.3%	12.4%	20.9%	14.1%	13.6%	-	-	-	-	11.3%	Jan-13
NAREIT Equity	-1.8%	-1.4%	11.8%	19.9%	14.8%	14.2%	12.1%	15.9%	15.6%	6.3%	11.3%	Jan-13
Rhumbline FTSE NAREIT	-1.5%	-1.3%	12.4%	21.0%	14.2%	13.8%			-		8.8%	May-13
NAREIT Equity	-1.8%	-1.4%	11.8%	19.9%	14.8%	14.2%	12.1%	15.9%	15.6%	6.3%	8.8%	May-13
Real Assets - Private Real Estate Composite	0.0%	0.0%	2.2%	10.3%	9.6%	11.7%	12.3%	10.8%	9.3%	3.9%	3.3%	May-06
Real Assets - Private Real Estate Benchmark	0.0%	0.0%	2.2%	10.3%	9.6%	11.7%	12.3%					<i>May-</i> 06
Real Assets - Private Energy/Infrastructure	0.0%	0.0%	6.2%	-13.0%	-27.1%	0.0%	3.2%	-	-	-	2.2%	May-12
Real Assets - Private Energy/Infrastructure Benchmark	0.0%	0.0%	6.2%	-13.0%	-27.1%	0.0%	3.2%				2.2%	May-12