



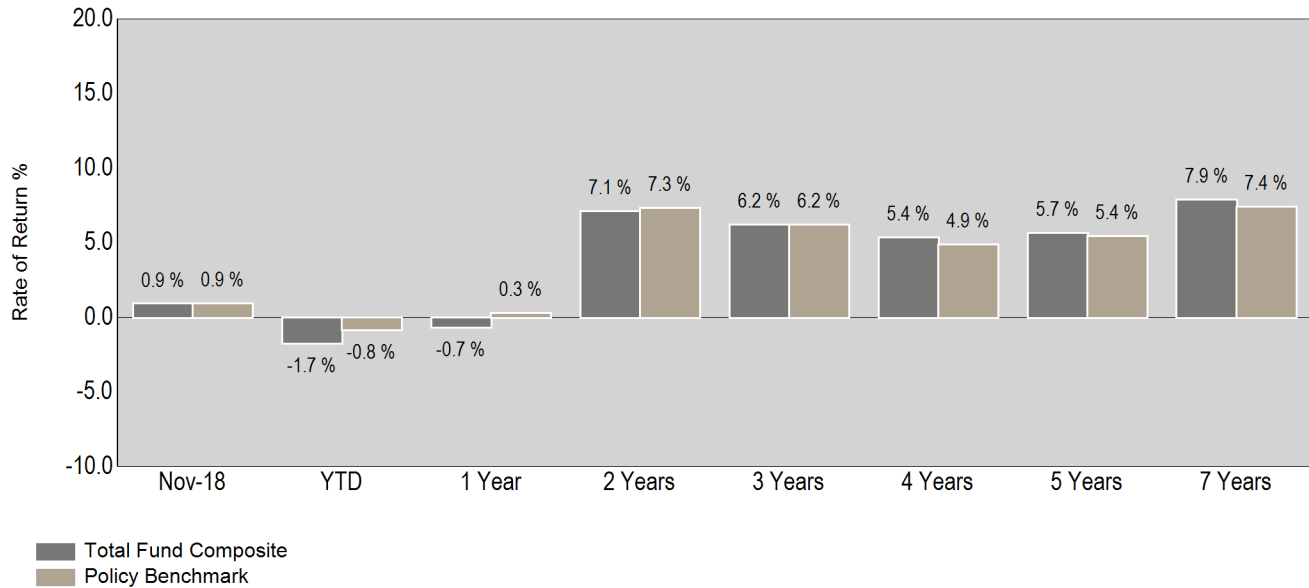
MEABF

Municipal Employees'
Annuity & Benefit Fund of Chicago

Monthly Update

November 30, 2018

**Net Return Summary
Ending November 30, 2018**



Net Return Summary YTD

Asset Allocation vs. Target

	Total Return	Current	Current	Policy	Difference	%
Total Fund Composite	-1.7%	Fixed Income	\$965,068,547	25.6%	27.0%	-\$54,629,576 -1.4%
Fixed Income Composite	0.2%	U.S. Equity	\$943,881,120	25.0%	26.0%	-\$38,050,406 -1.0%
U.S. Equity Composite	1.9%	Non-U.S. Equity	\$775,821,868	20.5%	22.0%	-\$55,043,270 -1.5%
International Equity Composite	-12.5%	Hedge Funds	\$412,215,868	10.9%	10.0%	\$34,549,896 0.9%
Hedge Fund Composite	-1.7%	Real Assets	\$409,678,559	10.8%	10.0%	\$32,012,587 0.8%
Real Estate Composite	4.7%	Private Equity	\$169,681,809	4.5%	5.0%	-\$19,151,177 -0.5%
Open-End Real Estate Comp	6.0%	Other	\$100,311,946	2.7%	0.0%	\$100,311,946 2.7%
		Total	\$3,776,659,718	100.0%	100.0%	

Summary of Cash Flows

	Last Month	Year-To-Date	One Year	Three Years	Five Years	Seven Years
Beginning Market Value	\$3,806,126,946.53	\$4,298,382,813.93	\$4,313,533,340.09	\$4,683,165,570.07	\$5,279,483,191.85	\$4,929,907,390.99
Net Cash Flow	-\$64,004,499.90	-\$464,227,808.07	-\$526,996,727.84	-\$1,717,158,397.18	-\$2,813,437,094.24	-\$3,779,974,118.53
Net Investment Change	\$34,537,271.45	-\$57,495,287.78	-\$9,876,894.17	\$810,652,545.19	\$1,310,613,620.47	\$2,626,726,445.62
Ending Market Value	\$3,776,659,718.08	\$3,776,659,718.08	\$3,776,659,718.08	\$3,776,659,718.08	\$3,776,659,718.08	\$3,776,659,718.08

Total Fund Composite

Market Value: \$3,776.7 Million and 100.0% of Fund

Ending November 30, 2018

	Asset Class	Market Value 10/31/18 (\$)	1 Mo Net Cash Flows (\$)	Market Value 11/30/18 (\$)	% of Portfolio	Policy %
Total Fund Composite		3,806,126,947	-64,372,477	3,776,659,718	100.0	100.0
Fixed Income Composite		983,176,322	-20,651,995	965,042,909	25.6	27.0
LM Capital	Core Fixed Income	223,065,701	-217	223,778,018	5.9	
Garcia Hamilton	Core Fixed Income	74,321,462	-10,937	74,730,013	2.0	
NIS	Core Fixed Income	74,116,216	-10,621	74,607,180	2.0	
Segall Bryant & Hamill	Int. Fixed Income	231,950,580	-184	233,194,369	6.2	
MacKay Shields	High Yield Fixed Income	142,232,545	-20,045,421	124,649,593	3.3	
Crescent High Income Fund	High Yield Fixed Income	56,534,228	0	56,004,270	1.5	
Symphony	Senior Secured Loans	180,955,589	-584,616	178,079,467	4.7	
U.S. Equity Composite		950,145,392	-29,612,070	943,881,120	25.0	26.0
Attucks U.S. Equity		69,967,485	-9,537,167	63,526,879	1.7	--
Great Lakes	Large-Cap Value	69,870,104	-53	71,319,830	1.9	
RhumbLine S&P 500 Index	Large-Cap Core	471,166,043	-40	480,625,152	12.7	
RhumbLine S&P 400 Growth	Mid-Cap Growth	138,390,137	-5	143,009,815	3.8	
Ariel Investments	Smid-Cap Value	108,316,380	-20,032,141	91,405,157	2.4	
Kayne Anderson	Small-Cap Value	48,197,732	-116	49,186,537	1.3	
Nuveen	Small-Cap Value	44,167,155	-22	44,737,278	1.2	
International Equity Composite		781,512,529	-12,860,509	775,821,868	20.5	22.0
Attucks Non-U.S. Equity		72,123,835	7,182,433	79,926,225	2.1	--
NTGI MSCI ACWI ex. U.S. Index Fund	Non-U.S. All-Cap Core	151,841,891	-82	153,340,489	4.1	
LSV	Non-U.S. Large-Cap Value	99,666,776	-20,042,709	78,631,378	2.1	
Cornerstone	Non-U.S. Large-Cap Core	75,289,759	-4	76,918,789	2.0	
Walter Scott & Partners	Non-U.S. Large-Cap Growth	78,373,672	0	80,178,703	2.1	
NTGI Small Cap International Index	Non-U.S. Small-Cap Core	83,110,250	-22	82,343,495	2.2	
Segall Bryant & Hamill	Non-U.S. Small-Cap Core	98,898,611	-13	96,682,768	2.6	
William Blair	Emerging Markets	122,207,735	-111	127,800,021	3.4	
Hedge Fund Composite		408,988,897	-166,393	412,215,868	10.9	10.0
Rock Creek Georgetown Fund	Hedged Equity Hedge FoF	202,756,372	-110,749	204,459,525	5.4	
K2 Long Short Fund	Hedged Equity Hedge FoF	102,839,964	-55,644	102,727,108	2.7	
Parametric Defensive Equity	Defensive Equity	52,595,329	0	53,452,633	1.4	
Neuberger Berman S&P 500 PutWrite	Defensive Equity	50,797,232	0	51,576,602	1.4	

Total Fund Composite

Market Value: \$3,776.7 Million and 100.0% of Fund

Ending November 30, 2018

	Asset Class	Market Value 10/31/18 (\$)	1 Mo Net Cash Flows (\$)	Market Value 11/30/18 (\$)	% of Portfolio	Policy %
Real Estate Composite		409,136,528	-452,336	409,678,559	10.8	10.0
Open-End Real Estate Comp		359,318,552	0	360,312,918	9.5	--
American Core Realty Fund, LLC	Core Real Estate	94,163,357	0	94,163,357	2.5	
AFL-CIO Building Investment Trust	Core Real Estate	127,203,843	0	127,203,843	3.4	
JPMorgan Strategic Property Fund	Core Real Estate	137,951,353	0	138,945,719	3.7	
Closed-End Real Estate Composite		49,817,976	-452,336	49,365,640	1.3	--
Private Equity Composite		175,417,091	-5,735,283	169,681,809	4.5	5.0
Fund of Funds Private Equity Composite		74,194,893	-931,979	73,262,914	1.9	--
Direct Investment Private Equity Composite		101,222,199	-4,803,304	96,418,895	2.6	--
Cash Accounts		97,750,187	5,029,197	100,337,585	2.7	0.0

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$3,776.7 Million and 100.0% of Fund

Ending November 30, 2018

	1 Mo	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
Total Fund Composite	0.9	-4.0	-1.7	-0.7	7.1	6.2	5.4	5.7	7.9	8.9	--	
Policy Benchmark	0.9	-3.4	-0.8	0.3	7.3	6.2	4.9	5.4	7.4	7.8	--	
Actuarial Rate	0.6	1.7	6.5	7.1	7.3	7.4	7.4	7.4	7.5	7.6	--	
Fixed Income Composite	0.2	-0.4	0.2	0.6	2.4	3.3	2.7	3.0	3.4	5.2	--	
BBgBarc US Aggregate TR	0.6	-0.8	-1.8	-1.3	0.9	1.3	1.2	2.0	2.0	3.7	--	
LM Capital	0.3	-1.0	-2.2	-1.9	0.5	1.0	1.2	1.9	2.1	--	3.6	Mar-09
BBgBarc US Aggregate TR	0.6	-0.8	-1.8	-1.3	0.9	1.3	1.2	2.0	2.0	3.7	3.4	Mar-09
Garcia Hamilton	0.5	-0.6	--	--	--	--	--	--	--	--	-0.6	Aug-18
BBgBarc US Aggregate TR	0.6	-0.8	-1.8	-1.3	0.9	1.3	1.2	2.0	2.0	3.7	-0.8	Aug-18
NIS	0.6	-0.8	--	--	--	--	--	--	--	--	-0.8	Aug-18
BBgBarc US Aggregate TR	0.6	-0.8	-1.8	-1.3	0.9	1.3	1.2	2.0	2.0	3.7	-0.8	Aug-18
Segall Bryant & Hamill	0.5	0.1	-0.3	-0.1	1.0	1.3	1.3	1.6	1.9	--	3.3	Apr-09
BBgBarc US Govt/Credit Int TR	0.5	-0.1	-0.5	-0.3	0.9	1.1	1.1	1.5	1.7	3.1	2.8	Apr-09
MacKay Shields	1.7	1.1	3.3	3.8	6.1	8.0	5.9	5.5	7.1	--	9.3	Apr-09
BBgBarc US High Yield TR	-0.9	-1.9	0.1	0.4	4.7	7.1	4.4	4.4	6.7	12.2	9.9	Apr-09
BarCap Ba High Yield	-0.3	-1.4	-1.1	-1.0	3.6	5.5	4.2	4.6	6.3	11.0	9.0	Apr-09
Crescent High Income Fund	-0.9	-1.3	-0.1	0.1	3.5	--	--	--	--	--	4.8	Jul-16
50% BarCap HY / 50% CSFB Lev Loans	-0.8	-1.0	1.8	2.1	4.6	6.3	4.2	4.2	5.9	10.2	5.8	Jul-16
Symphony	-1.3	-0.9	2.7	2.9	3.4	4.5	3.5	3.5	4.9	--	6.0	Aug-09
Credit Suisse Leveraged Loans	-0.8	-0.1	3.5	3.9	4.5	5.5	4.0	3.9	5.0	8.1	5.8	Aug-09
S&P/LSTA U.S. Leveraged Loan 100 Index	-1.1	-0.6	2.6	2.9	3.6	5.1	3.0	3.0	4.4	8.4	5.1	Aug-09
U.S. Equity Composite	2.3	-6.2	1.9	2.4	11.2	9.7	7.8	8.5	12.4	14.1	--	
Wilshire 5000 Total Market	1.9	-5.4	4.4	5.6	13.6	12.0	9.6	10.8	14.2	14.5	--	
S&P 500	2.0	-4.4	5.1	6.3	14.3	12.2	9.7	11.1	14.4	14.3	--	
Russell 2000	1.6	-11.6	1.0	0.6	9.1	10.1	8.4	7.5	12.6	14.0	--	
Attucks U.S. Equity	2.6	--	--	--	--	--	--	--	--	--	-6.7	Sep-18
U.S. Equity Benchmark	2.2	-7.8	0.7	1.0	8.3	9.0	7.3	8.1	12.6	13.7	-6.5	Sep-18
Great Lakes	2.1	-4.8	-3.0	-1.8	7.9	9.1	6.9	8.4	12.3	12.9	10.1	Mar-91
Russell 1000 Value	3.0	-2.2	1.5	3.0	8.7	9.8	7.0	8.7	13.0	12.5	10.0	Mar-91
RhumbLine S&P 500 Index	2.0	-4.4	5.2	6.3	14.2	12.2	9.7	11.1	14.4	14.3	10.2	Aug-08
S&P 500	2.0	-4.4	5.1	6.3	14.3	12.2	9.7	11.1	14.4	14.3	10.1	Aug-08
RhumbLine S&P 400 Growth	3.3	-8.3	1.1	0.9	--	--	--	--	--	--	7.0	Sep-17
S&P 400 MidCap Growth	3.4	-8.3	1.1	0.9	11.4	10.4	9.2	9.5	12.9	16.3	7.0	Sep-17
Ariel Investments	3.2	-6.3	-0.6	-0.3	8.9	8.2	6.9	8.6	14.4	17.5	12.4	Jun-84
Russell 2500 Value	1.9	-8.3	-1.5	-1.1	5.8	9.1	6.9	7.1	12.1	13.6	11.4	Jun-84

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$3,776.7 Million and 100.0% of Fund

Ending November 30, 2018

	1 Mo	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
Kayne Anderson	2.1	-9.7	--	--	--	--	--	--	--	--	-1.8	May-18
<i>Russell 2000 Value</i>	1.6	-9.8	-0.9	-1.8	5.5	10.1	7.6	6.7	11.9	12.5	-5.4	May-18
Nuveen	1.3	-12.7	--	--	--	--	--	--	--	--	-10.4	May-18
<i>Russell 2000 Value</i>	1.6	-9.8	-0.9	-1.8	5.5	10.1	7.6	6.7	11.9	12.5	-5.4	May-18
International Equity Composite	0.9	-9.0	-12.5	-10.4	8.5	5.5	3.4	2.9	6.6	9.0	--	--
<i>MSCI ACWI ex USA</i>	0.9	-6.8	-10.1	-8.1	8.3	5.4	2.1	1.8	5.4	7.7	--	--
<i>MSCI EAFE</i>	-0.1	-7.3	-9.4	-7.9	8.2	4.1	2.3	1.8	6.4	7.5	--	--
Attucks Non-U.S. Equity	0.3	--	--	--	--	--	--	--	--	--	-8.6	Sep-18
<i>Non-U.S. Equity Benchmark</i>	0.8	-7.9	-11.1	-8.8	8.9	5.1	2.8	2.3	--	--	-7.9	Sep-18
NTGI MSCI ACWI ex. U.S. Index Fund	1.0	-6.8	-9.9	-8.0	8.5	5.7	2.4	2.0	5.7	7.9	7.2	Oct-08
<i>MSCI ACWI ex USA</i>	0.9	-6.8	-10.1	-8.1	8.3	5.4	2.1	1.8	5.4	7.7	7.0	Oct-08
LSV	-1.0	-8.0	-13.2	-11.7	6.4	4.9	3.9	2.4	7.1	8.7	4.8	Apr-05
<i>MSCI EAFE Value</i>	-0.6	-5.2	-10.4	-9.0	6.7	3.9	1.0	0.7	5.6	6.6	3.6	Apr-05
Cornerstone	2.2	-11.4	-5.9	-3.3	12.7	5.6	5.8	5.0	8.4	7.9	6.4	Nov-04
<i>MSCI EAFE</i>	-0.1	-7.3	-9.4	-7.9	8.2	4.1	2.3	1.8	6.4	7.5	4.4	Nov-04
Walter Scott & Partners	2.3	-6.5	-4.7	-3.3	10.7	8.2	5.8	4.4	7.3	8.7	6.3	Nov-04
<i>MSCI EAFE</i>	-0.1	-7.3	-9.4	-7.9	8.2	4.1	2.3	1.8	6.4	7.5	4.4	Nov-04
<i>MSCI EAFE Growth</i>	0.3	-9.2	-8.4	-6.9	9.8	4.3	3.5	3.0	7.0	8.3	5.1	Nov-04
NTGI Small Cap International Index	-0.9	-10.9	-12.2	-9.7	8.7	6.3	5.9	4.2	8.2	11.7	11.0	Oct-08
<i>MSCI World ex USA Small Cap</i>	-1.0	-11.1	-12.5	-9.9	8.6	6.2	5.8	4.1	8.1	11.5	10.9	Oct-08
Segall Bryant & Hamill	-2.2	-11.6	-17.3	-15.3	6.0	--	--	--	--	--	3.2	Sep-16
<i>MSCI EAFE Small Cap</i>	-0.7	-10.9	-12.2	-9.9	9.6	6.3	6.8	4.9	9.5	12.0	6.0	Sep-16
William Blair	4.6	-9.6	-19.5	-17.0	9.4	6.2	0.5	2.3	4.9	10.9	6.8	Jul-05
<i>MSCI Emerging Markets IMI</i>	4.3	-5.8	-12.8	-9.7	9.3	8.7	1.9	1.8	3.5	9.4	6.3	Jul-05

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$3,776.7 Million and 100.0% of Fund

Ending November 30, 2018

	1 Mo	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
Hedge Fund Composite	0.8	-4.4	-1.7	-1.3	4.8	2.3	3.0	3.7	6.1	--	--	
<i>HFRX Equity Hedge Index</i>	-0.6	-6.1	-5.4	-4.4	2.1	1.0	0.3	0.9	2.5	1.6	--	
Rock Creek Georgetown Fund	0.8	-4.6	-2.1	-1.9	5.0	2.3	3.3	3.8	6.2	--	5.3	Jan-09
<i>HFRX Equity Hedge Index</i>	-0.6	-6.1	-5.4	-4.4	2.1	1.0	0.3	0.9	2.5	1.6	1.9	Jan-09
K2 Long Short Fund	-0.1	-5.9	-3.5	-3.1	2.3	0.9	1.5	2.6	5.2	--	4.3	Jan-09
<i>HFRX Equity Hedge Index</i>	-0.6	-6.1	-5.4	-4.4	2.1	1.0	0.3	0.9	2.5	1.6	1.9	Jan-09
Parametric Defensive Equity	1.6	-2.5	2.3	3.0	--	--	--	--	--	--	5.1	Jul-17
<i>50% S&P 500/50% 91 Day T-Bill</i>	1.1	-1.9	3.6	4.2	7.7	6.6	5.3	5.9	7.3	7.4	6.3	Jul-17
Neuberger Berman S&P 500 PutWrite	1.5	-2.3	0.1	0.7	--	--	--	--	--	--	2.5	Aug-17
<i>CBOE Put Write Index</i>	1.7	-3.8	1.8	2.2	6.5	6.6	6.9	6.9	8.1	10.1	3.9	Aug-17
<i>CBOE Putwrite One-Week Index</i>	-1.5	-6.9	-9.0	-8.1	0.9	2.7	1.7	2.0	5.1	6.9	-3.7	Aug-17
Real Estate Composite	0.2	1.6	4.7	6.8	6.5	7.5	9.0	9.5	9.7	4.2	--	
<i>NFI</i>	0.0	0.6	5.3	5.9	6.4	7.1	8.6	9.2	9.7	7.0	--	
Open-End Real Estate Comp	0.3	1.9	6.0	7.4	6.6	7.3	9.0	9.6	10.2	4.5	--	
<i>NFI</i>	0.0	0.6	5.8	6.4	6.5	7.1	8.8	9.3	9.9	5.4	--	
American Core Realty Fund, LLC	0.0	2.0	6.0	7.6	7.1	7.4	8.7	9.3	9.7	4.1	6.4	Nov-03
<i>NFI</i>	0.0	0.6	5.8	6.4	6.5	7.1	8.8	9.3	9.9	5.4	7.2	Nov-03
AFL-CIO Building Investment Trust	0.0	1.7	5.4	7.0	5.6	6.6	8.3	9.0	9.6	4.4	6.3	Jun-02
<i>NFI</i>	0.0	0.6	5.8	6.4	6.5	7.1	8.8	9.3	9.9	5.4	7.2	Jun-02
JPMorgan Strategic Property Fund	0.7	2.1	6.6	7.7	6.9	7.1	9.0	9.2	10.2	5.6	8.0	Jun-02
<i>NFI</i>	0.0	0.6	5.8	6.4	6.5	7.1	8.8	9.3	9.9	5.4	7.2	Jun-02

Investment Manager

Calendar Performance (Net of Fees)

Market Value: \$3,776.7 Million and 100.0% of Fund

Ending November 30, 2018

	YTD	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Total Fund Composite	-1.7	15.2	6.6	2.1	5.1	16.1	12.8	0.1	14.2	19.6	-28.6
Policy Benchmark	-0.8	14.8	6.4	0.6	5.8	14.3	11.4	-0.4	12.8	13.2	-26.7
Actuarial Rate	6.5	7.5	7.5	7.5	7.5	7.5	7.5	8.0	8.0	8.0	8.0
Fixed Income Composite	0.2	4.0	6.5	0.6	4.3	0.4	7.0	6.7	8.0	10.6	-4.6
BBgBarc US Aggregate TR	-1.8	3.5	2.6	0.5	6.0	-2.0	4.2	7.8	6.5	5.9	5.2
LM Capital	-2.2	3.3	2.2	1.5	5.5	-1.7	5.3	7.3	6.2	--	--
BBgBarc US Aggregate TR	-1.8	3.5	2.6	0.5	6.0	-2.0	4.2	7.8	6.5	5.9	5.2
Garcia Hamilton	--	--	--	--	--	--	--	--	--	--	--
BBgBarc US Aggregate TR	-1.8	3.5	2.6	0.5	6.0	-2.0	4.2	7.8	6.5	5.9	5.2
NIS	--	--	--	--	--	--	--	--	--	--	--
BBgBarc US Aggregate TR	-1.8	3.5	2.6	0.5	6.0	-2.0	4.2	7.8	6.5	5.9	5.2
Segall Bryant & Hamill	-0.3	2.3	2.1	1.3	3.4	-0.8	4.7	6.3	6.7	--	--
BBgBarc US Govt/Credit Int TR	-0.5	2.1	2.1	1.1	3.1	-0.9	3.9	5.8	5.9	5.2	5.1
MacKay Shields	3.3	7.4	16.2	-1.0	2.1	6.4	13.9	6.6	12.4	--	--
BBgBarc US High Yield TR	0.1	7.5	17.1	-4.5	2.5	7.4	15.8	5.0	15.1	58.2	-26.2
BarCap Ba High Yield	-1.1	7.3	12.8	-1.0	5.4	5.1	14.6	6.8	14.6	46.1	-17.5
Crescent High Income Fund	-0.1	5.5	--	--	--	--	--	--	--	--	--
50% BarCap HY / 50% CSFB Lev Loans	1.8	5.9	13.5	-2.4	2.3	6.8	12.6	3.4	12.5	51.5	-27.3
Symphony	2.7	3.2	8.2	1.2	1.8	7.2	9.7	3.8	11.7	--	--
Credit Suisse Leveraged Loans	3.5	4.2	9.9	-0.4	2.1	6.2	9.4	1.8	10.0	44.9	-28.8
S&P/LSTA U.S. Leveraged Loan 100 Index	2.6	3.3	10.9	-2.8	1.0	5.0	10.5	0.6	9.7	52.2	-28.2
U.S. Equity Composite	1.9	19.8	11.3	-0.7	8.6	33.6	16.2	0.4	20.5	34.2	-38.7
Wilshire 5000 Total Market	4.4	21.0	13.4	0.7	12.7	33.1	16.1	1.0	17.2	28.3	-37.2
S&P 500	5.1	21.8	12.0	1.4	13.7	32.4	16.0	2.1	15.1	26.5	-37.0
Russell 2000	1.0	14.6	21.3	-4.4	4.9	38.8	16.3	-4.2	26.9	27.2	-33.8
Attucks U.S. Equity	--	--	--	--	--	--	--	--	--	--	--
U.S. Equity Benchmark	0.7	13.8	16.5	-1.6	9.8	35.2	16.8	-1.3	21.4	28.0	-35.6
Great Lakes	-3.0	18.3	15.4	-1.4	11.4	34.9	13.5	4.8	17.7	22.5	-37.2
Russell 1000 Value	1.5	13.7	17.3	-3.8	13.5	32.5	17.5	0.4	15.5	19.7	-36.8
RhumbLine S&P 500 Index	5.2	21.6	11.8	1.6	13.6	32.3	16.3	2.4	14.8	26.6	--
S&P 500	5.1	21.8	12.0	1.4	13.7	32.4	16.0	2.1	15.1	26.5	-37.0
RhumbLine S&P 400 Growth	1.1	--	--	--	--	--	--	--	--	--	--
S&P 400 MidCap Growth	1.1	19.9	14.8	2.0	7.6	32.8	17.3	-0.9	30.6	41.1	-37.6
Ariel Investments	-0.6	17.1	12.9	-2.5	13.2	43.5	20.0	-9.3	26.1	65.7	-46.8
Russell 2500 Value	-1.5	10.4	25.2	-5.5	7.1	33.3	19.2	-3.4	24.8	27.7	-32.0

Investment Manager

Calendar Performance (Net of Fees)

Market Value: \$3,776.7 Million and 100.0% of Fund

Ending November 30, 2018

	YTD	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Kayne Anderson	--	--	--	--	--	--	--	--	--	--	--
<i>Russell 2000 Value</i>	-0.9	7.8	31.7	-7.5	4.2	34.5	18.0	-5.5	24.5	20.6	-28.9
Nuveen	--	--	--	--	--	--	--	--	--	--	--
<i>Russell 2000 Value</i>	-0.9	7.8	31.7	-7.5	4.2	34.5	18.0	-5.5	24.5	20.6	-28.9
International Equity Composite	-12.5	32.1	2.6	-1.1	-2.9	17.6	18.3	-13.8	15.3	41.6	-36.6
<i>MSCI ACWI ex USA</i>	-10.1	27.2	4.5	-5.7	-3.9	15.3	16.8	-13.7	11.2	41.4	-45.5
<i>MSCI EAFE</i>	-9.4	25.0	1.0	-0.8	-4.9	22.8	17.3	-12.1	7.8	31.8	-43.4
Attucks Non-U.S. Equity	--	--	--	--	--	--	--	--	--	--	--
<i>Non-U.S. Equity Benchmark</i>	-11.1	29.2	2.7	-2.2	-4.6	20.5	--	--	--	--	--
NTGI MSCI ACWI ex. U.S. Index Fund	-9.9	27.4	4.8	-5.3	-3.7	15.6	17.1	-13.5	11.3	41.6	--
<i>MSCI ACWI ex USA</i>	-10.1	27.2	4.5	-5.7	-3.9	15.3	16.8	-13.7	11.2	41.4	-45.5
LSV	-13.2	25.7	6.3	3.4	-7.6	25.8	17.2	-12.0	12.0	34.5	-44.4
<i>MSCI EAFE Value</i>	-10.4	21.4	5.0	-5.7	-5.4	23.0	17.7	-12.2	3.2	34.2	-44.1
Cornerstone	-5.9	32.5	-5.1	7.6	-0.6	18.6	19.1	-12.9	5.4	21.3	-24.8
<i>MSCI EAFE</i>	-9.4	25.0	1.0	-0.8	-4.9	22.8	17.3	-12.1	7.8	31.8	-43.4
Walter Scott & Partners	-4.7	27.3	4.8	0.5	-3.1	11.5	20.2	-10.5	11.3	29.5	-33.1
<i>MSCI EAFE</i>	-9.4	25.0	1.0	-0.8	-4.9	22.8	17.3	-12.1	7.8	31.8	-43.4
<i>MSCI EAFE Growth</i>	-8.4	28.9	-3.0	4.1	-4.4	22.5	16.9	-12.1	12.2	29.4	-42.7
NTGI Small Cap International Index	-12.2	31.0	4.3	5.5	-5.2	25.6	17.7	-15.2	24.4	50.9	--
<i>MSCI World ex USA Small Cap</i>	-12.5	31.0	4.3	5.5	-5.3	25.6	17.5	-15.8	24.5	50.8	-48.0
Segall Bryant & Hamill	-17.3	32.6	--	--	--	--	--	--	--	--	--
<i>MSCI EAFE Small Cap</i>	-12.2	33.0	2.2	9.6	-4.9	29.3	20.0	-15.9	22.0	46.8	-47.0
William Blair	-19.5	49.8	1.8	-14.0	6.2	4.1	22.1	-16.8	23.9	79.0	-62.1
<i>MSCI Emerging Markets IMI</i>	-12.8	36.8	9.9	-13.9	-1.8	-2.2	18.7	-19.5	19.9	82.4	-53.8

Investment Manager

Calendar Performance (Net of Fees)

Market Value: \$3,776.7 Million and 100.0% of Fund

Ending November 30, 2018

	YTD	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Hedge Fund Composite	-1.7	10.9	-1.1	3.8	5.4	17.6	9.3	-4.7	5.3	--	--
<i>HFRX Equity Hedge Index</i>	-5.4	10.0	0.1	-2.3	1.4	11.1	4.8	-19.1	8.9	13.1	-25.5
Rock Creek Georgetown Fund	-2.1	11.2	-0.9	4.8	5.2	17.6	9.8	-4.0	6.0	--	--
<i>HFRX Equity Hedge Index</i>	-5.4	10.0	0.1	-2.3	1.4	11.1	4.8	-19.1	8.9	13.1	-25.5
K2 Long Short Fund	-3.5	8.5	-1.5	2.5	5.5	17.6	8.8	-5.5	4.5	--	--
<i>HFRX Equity Hedge Index</i>	-5.4	10.0	0.1	-2.3	1.4	11.1	4.8	-19.1	8.9	13.1	-25.5
Parametric Defensive Equity	2.3	--	--	--	--	--	--	--	--	--	--
<i>50% S&P 500/50% 91 Day T-Bill</i>	3.6	10.9	6.1	0.9	6.7	15.3	7.9	1.4	7.8	13.3	-19.4
Neuberger Berman S&P 500 PutWrite	0.1	--	--	--	--	--	--	--	--	--	--
<i>CBOE Put Write Index</i>	1.8	10.8	7.8	6.4	6.4	12.3	8.1	6.2	9.0	31.5	-26.8
<i>CBOE Putwrite One-Week Index</i>	-9.0	11.4	7.7	0.4	0.2	14.4	11.5	3.9	6.9	15.2	-15.2
Real Estate Composite	4.7	6.4	7.6	14.2	11.7	12.4	9.3	15.3	16.9	-31.8	-16.2
<i>NFI</i>	5.3	7.0	8.0	13.3	11.8	11.0	10.5	14.3	13.1	-16.9	-6.5
Open-End Real Estate Comp	6.0	5.8	7.4	14.6	11.5	12.7	10.7	15.0	14.8	-31.6	-11.1
<i>NFI</i>	5.8	6.7	7.8	13.9	11.5	12.9	9.8	15.0	15.3	-30.4	-10.7
American Core Realty Fund, LLC	6.0	7.2	6.1	14.3	10.6	11.3	10.2	13.8	10.0	-30.8	-6.3
<i>NFI</i>	5.8	6.7	7.8	13.9	11.5	12.9	9.8	15.0	15.3	-30.4	-10.7
AFL-CIO Building Investment Trust	5.4	4.5	6.8	14.3	12.0	9.7	10.8	12.5	13.0	-25.5	-10.1
<i>NFI</i>	5.8	6.7	7.8	13.9	11.5	12.9	9.8	15.0	15.3	-30.4	-10.7
JPMorgan Strategic Property Fund	6.6	6.3	7.3	14.1	10.1	14.8	11.0	14.9	13.0	-27.1	-9.0
<i>NFI</i>	5.8	6.7	7.8	13.9	11.5	12.9	9.8	15.0	15.3	-30.4	-10.7

Attucks Composite

Annualized Performance (Net of Fees)

Market Value: \$143.5 Million and 3.8% of Fund

Ending November 30, 2018

	Market Value	% of Portfolio	1 Mo	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Attucks Composite	143,476,088	100.0	0.8	--	--	--	--	--	--	--	--	-8.2	Sep-18
<i>Dynamic Benchmark</i>			1.5	-7.8	-5.6	-4.2	8.2	7.8	6.1	6.7	12.7	-7.2	Sep-18
Attucks U.S. Equity	63,526,879	44.3	6.5	--	--	--	--	--	--	--	--	-3.2	Sep-18
<i>U.S. Equity Benchmark</i>			2.2	-7.8	0.7	1.0	8.3	9.0	7.3	8.1	13.7	-6.5	Sep-18
Mar Vista Investment Partners	14,382,858	10.0	--	--	--	--	--	--	--	--	--	--	Nov-18
<i>Russell 1000 Growth</i>			1.1	-7.5	7.8	8.6	19.2	14.0	12.0	13.0	16.5	--	Nov-18
Lisanti Capital Growth	23,037,457	16.1	--	--	--	--	--	--	--	--	--	--	Nov-18
<i>Russell 2500 Growth</i>			1.9	-11.7	3.8	4.1	14.2	11.0	9.4	9.2	16.7	--	Nov-18
Channing	26,050,610	18.2	2.4	-12.1	-4.4	-6.9	2.8	7.1	6.6	6.4	14.0	9.3	Aug-08
<i>Russell 2000 Value</i>			1.6	-9.8	-0.9	-1.8	5.5	10.1	7.6	6.7	12.5	7.9	Aug-08
Attucks Non-U.S. Equity	79,926,225	55.7	1.0	--	--	--	--	--	--	--	--	-7.9	Sep-18
<i>Non-U.S. Equity Benchmark</i>			0.8	-7.9	-11.1	-8.8	8.9	5.1	2.8	2.3	--	-7.9	Sep-18
GlobeFlex Capital	22,626,144	15.8	--	--	--	--	--	--	--	--	--	--	Nov-18
<i>MSCI EAFE IMI NR USD</i>			-0.2	-7.8	-9.8	-8.2	8.4	4.4	2.9	2.2	8.0	--	Nov-18
Redwood Investments	22,747,371	15.9	--	--	--	--	--	--	--	--	--	--	Nov-18
<i>MSCI EAFE Growth</i>			0.3	-9.2	-8.4	-6.9	9.8	4.3	3.5	3.0	8.3	--	Nov-18
Strategic Global	16,818,340	11.7	-0.8	-11.7	-15.9	-13.9	--	--	--	--	--	6.5	Jan-17
<i>MSCI World ex USA Small Cap</i>			-1.0	-11.1	-12.5	-9.9	8.6	6.2	5.8	4.1	11.5	5.7	Jan-17
Ativo	17,524,928	12.2	3.3	-6.1	-14.6	-11.4	--	--	--	--	--	5.1	Jan-17
<i>MSCI Emerging Markets</i>			4.1	-5.5	-12.2	-9.1	9.9	9.4	2.1	1.9	9.1	7.5	Jan-17

* The Dynamic Benchmark is updated monthly account benchmark weightings from the beginning of each month.

Attucks Composite

Calendar Performance (Net of Fees)

Market Value: \$143.5 Million and 3.8% of Fund

Ending November 30, 2018

	Market Value	% of Portfolio	2017	2016	2015	2014	2013	2012
Attucks Composite	143,476,088	100.0	--	--	--	--	--	--
<i>Dynamic Benchmark</i>			20.9	13.1	-1.9	6.6	30.3	18.5
Attucks U.S. Equity	63,526,879	44.3	--	--	--	--	--	--
<i>U.S. Equity Benchmark</i>			13.8	16.5	-1.6	9.8	35.2	16.8
Mar Vista Investment Partners	14,382,858	10.0	--	--	--	--	--	--
<i>Russell 1000 Growth</i>			30.2	7.1	5.7	13.0	33.5	15.3
Lisanti Capital Growth	23,037,457	16.1	--	--	--	--	--	--
<i>Russell 2500 Growth</i>			24.5	9.7	-0.2	7.1	40.6	16.1
Channing	26,050,610	18.2	7.2	29.5	-4.4	5.4	39.6	23.6
<i>Russell 2000 Value</i>			7.8	31.7	-7.5	4.2	34.5	18.0
Attucks Non-U.S. Equity	79,926,225	55.7	--	--	--	--	--	--
<i>Non-U.S. Equity Benchmark</i>			29.2	2.7	-2.2	-4.6	20.5	--
GlobeFlex Capital	22,626,144	15.8	--	--	--	--	--	--
<i>MSCI EAFE IMI NR USD</i>			26.2	1.2	0.5	-4.9	23.5	17.6
Redwood Investments	22,747,371	15.9	--	--	--	--	--	--
<i>MSCI EAFE Growth</i>			28.9	-3.0	4.1	-4.4	22.5	16.9
Strategic Global	16,818,340	11.7	--	--	--	--	--	--
<i>MSCI World ex USA Small Cap</i>			31.0	4.3	5.5	-5.3	25.6	17.5
Ativo	17,524,928	12.2	--	--	--	--	--	--
<i>MSCI Emerging Markets</i>			37.3	11.2	-14.9	-2.2	-2.6	18.2

* The Dynamic Benchmark is updated monthly account benchmark weightings from the beginning of each month.

Ending November 30, 2018

Asset Class	Benchmark	Manager	From	Performance		Difference
				Manager	Benchmark	
SMID-Cap Value Equity	Custom Benchmark ¹	Ariel	July-84	12.4%	11.4%	1.0%
Large-Cap Value Equity	Russell 1000 Value	Great Lakes	April-91	10.1%	9.9%	0.2%
International Growth Equity	MSCI EAFE	Cornerstone	December-04	6.3%	4.4%	1.9%
International Growth Equity	MSCI EAFE	Walter Scott	December-04	6.2%	4.4%	1.8%
International Value Equity	MSCI EAFE Value	LSV	May-05	4.9%	3.7%	1.2%
Int'l Emerging Core Equity	MSCI EM IMI	William Blair	August-05	6.5%	6.1%	0.4%
Large-Cap Core Equity	S&P 500	Rhumblin	September-08	10.1%	10.0%	0.1%
International Core Equity	MSCI ACWI ex. U.S.	NTGI ACWI ex. U.S.	November-08	7.2%	6.9%	0.3%
Int'l Small-Cap Equity	MSCI Small-Cap International	MSCI World Ex USA Small Cap	November-08	11.2%	11.1%	0.1%
Hedged Equity Fund of Funds	HFRX Hedged Equity	K2 Advisors	February-09	4.3%	1.9%	2.4%
Hedged Equity Fund of Funds	HFRX Hedged Equity	Rock Creek	February-09	5.3%	1.9%	3.4%
Core Fixed Income	BarCap Aggregate	LM Capital	April-09	3.6%	3.4%	0.2%
Fixed Income - Intermediate	BarCap Int. Gov/Credit	Segall, Bryant, & Hamill	May-09	4.4%	6.6%	-2.2%
Fixed Income - High Yield	BarCap High Yield	MacKay Shields	May-09	9.2%	10.1%	-0.9%
Fixed Income - Senior Loan	CSFB Leveraged Loan	Symphony	September-09	6.2%	5.9%	0.3%
Opportunistic Fixed Income	50% BarCap HY/50% CSFB LL	Crescent Capital	July-16	5.9%	6.4%	-0.5%
Int'l Small-Cap Equity	MSCI EAFE Small Cap	Segall, Bryant, & Hamill	September-16	3.2%	2.8%	0.4%
Defensive Equity	50% S&P 500/50% 91 Day T-Bill	Parametric	July-17	4.1%	5.8%	-1.7%
Defensive Equity	CBOE S&P 500 Putwrite Index	Neuberger Berman	August-17	1.5%	2.7%	-1.2%
Mid-Cap Growth Equity	S&P 400 Growth	Rhumblin	September-17	4.4%	4.3%	0.1%
Small-Cap Value Equity	Russell 2000 Value	Kayne Anderson	May-18	-3.9%	-6.9%	3.0%
Small-Cap Value Equity	Russell 2000 Value	Nuveen	May-18	-11.6%	-6.9%	-4.7%
Core Fixed Income	BarCap Aggregate	Garcia Hamilton	August-18	-1.1%	-1.4%	0.3%
Core Fixed Income	BarCap Aggregate	NIS	August-18	-1.4%	-1.4%	0.0%

¹ Return is net of fees.¹ Ariel Custom Benchmark is Russell 2500 Value, and prior to March 2002, the Russell 2000 Value.

Market Value: \$3,776.7 Million and 100.0% of Fund

RISK RETURN STATISTICS

December 01, 2013 Through November 30, 2018

Total Fund Composite

Policy Benchmark

RETURN SUMMARY STATISTICS

Number of Periods	60	60
Maximum Return	4.34	4.22
Minimum Return	-4.83	-4.35
Annualized Return	5.66	5.44
Total Return	31.66	30.31
Annualized Excess Return Over Risk Free	5.06	4.84
Annualized Excess Return	0.22	0.00

RISK SUMMARY STATISTICS

Beta	1.01	1.00
Upside Deviation	3.37	3.38
Downside Deviation	4.71	4.24

RISK/RETURN SUMMARY STATISTICS

Annualized Standard Deviation	5.67	5.51
Alpha	0.01	0.00
Sharpe Ratio	0.89	0.88
Excess Return Over Market / Risk	0.04	0.00
Tracking Error	0.97	0.00
Information Ratio	0.23	--

CORRELATION STATISTICS

R-Squared	0.97	1.00
Correlation	0.99	1.00

Market Proxy: Policy Benchmark

Risk-Free Proxy: 91 Day T-Bills

- The Policy Benchmark is 27% BarCap Aggregate, 26% Wilshire 5000, 22% MSCI ACWI ex-US, 10% HFRX Hedged Equity, 10% NCREIF Property Index, 5% Venture Economics Private Equity Index. Prior to September 2013, the Policy Benchmark is 25% BarCap Aggregate, 25% Wilshire 5000, 20% MSCI ACWI ex-US, 10% HFRX Hedged Equity, 10% NCREIF Property Index, 10% Venture Economics Private Equity Index. Prior to February 2009, the Policy Benchmark is 25% BarCap Aggregate, 55% Wilshire 5000, 10% MSCI ACWI ex-US, 6% NCREIF Property Index, 4% Venture Economics Private Equity Index.

- All Data is to be considered preliminary until the release of the final quarterly report.

- Closed End Real Estate and Private Equity Composites may not include current performance, due to reporting cycle limitations.