



Pension Plan

Employees' Retirement System
of Milwaukee County
Monthly Update
January 31, 2018

Market Value: \$1,812.8 Million and 100.0% of Fund

Investment Manager	Asset Class	Status	Reason
Mellon Capital (Index)	Core Fixed Income	In Compliance	---
Galliard	Core Fixed Income	In Compliance	---
Boston Partners	Large-Cap Value	In Compliance	---
Mellon Capital (Index)	Large-Cap Core	In Compliance	---
Artisan Partners	Mid-Cap Growth	Alert	Performance
NTGI S&P 400 Mid-Cap (Index)	Mid-Cap Core	In Compliance	---
Silvercrest Asset Management	Small-Cap Value	In Compliance	---
Mesirow	Small-Cap Value	On Notice	Performance & Organizational Issues
NTGI ACWI Ex-US IMI (Index)	Non-U.S. All-Cap Core	In Compliance	---
Segall Bryant & Hamill Intl Sm Cap	Non-U.S. Small-Cap Value	In Compliance	---
OFI Institutional Asset Management	Emerging Markets	Alert	Professional Turnover
ABS	Hedged Equity Hedge FoF	Alert	Performance
Parametric Defensive Equity	Long/Short Hedge Fund	In Compliance	---
American Realty Advisors	Core Real Estate	In Compliance	---
Morgan Stanley	Core Real Estate	In Compliance	---
UBS	Core Real Estate	In Compliance	---
IFM	Core Infrastructure	In Compliance	---
J.P. Morgan Infrastructure	Core Infrastructure	In Compliance	---
Adams Street	Private Equity	In Compliance	---
Siguler Guff II	U.S. Private Equity FoF	In Compliance	---
Siguler Guff III	U.S. Private Equity FoF	In Compliance	---
Mesirow VI	U.S. Private Equity FoF	In Compliance	---

Investment Manager Evaluation Terminology

The following terminology has been developed by Marquette Associates to facilitate efficient communication among the Investment Manager, Investment Consultant, and the Plan Sponsor. Each term signifies a particular status with the Fund and any conditions that may require improvement. In each case, communication is made only after consultation with the Trustees and/or the Investment Committee of the Plan.

In Compliance – The investment manager states it is acting in accordance with the Investment Policy Guidelines.

Alert – The investment manager is notified of a problem in performance (usually related to a benchmark or volatility measure), a change in investment characteristics, an alteration in management style or key investment professionals, and/or any other irregularities.

On Notice – The investment manager is notified of continued concern with one or more Alert issues. Failure to improve upon stated issues within a specific time frame justifies termination.

Termination – The Trustees have decided to terminate the investment manager. The investment manager is notified and transition plans are in place.

Total Fund Composite

Market Value: \$1,812.8 Million and 100.0% of Fund

Ending January 31, 2018

	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
Total Fund Composite		1,812,798,687	-31,515,800	100.0	100.0	0
Fixed Income Composite		267,044,615	0	14.7	18.0	-59,259,149
Mellon Capital (Index)	Core Fixed Income	95,341,218	0	5.3		
Galliard	Core Fixed Income	171,694,641	0	9.5		
U.S. Equity Composite		455,062,206	-14,015,921	25.1	25.0	1,862,534
Boston Partners	Large-Cap Value	138,410,932	0	7.6	7.0	11,515,024
Mellon Capital (Index)	Large-Cap Core	105,006,973	-6,000,000	5.8	6.0	-3,760,948
Artisan Partners	Mid-Cap Growth	54,854,580	0	3.0	2.5	9,534,612
NTGI S&P 400 Mid-Cap (Index)	Mid-Cap Core	43,274,653	-8,007,726	2.4	3.5	-20,173,301
Mesirow	Small-Cap Value	58,586,446	0	3.2	3.0	4,202,485
Silvercrest Asset Management	Small-Cap Value	54,928,622	0	3.0	3.0	544,661
International Equity Composite		360,152,064	-34,144,600	19.9	20.0	-2,407,673
NTGI ACWI Ex-US IMI (Index)	Non-U.S. All-Cap Core	221,537,787	-19,000,000	12.2	13.0	-14,126,042
OFI Institutional Asset Management	Emerging Markets	61,148,244	-15,144,600	3.4	3.0	6,764,283
Segall Bryant & Hamill Intl Sm Cap	Non-U.S. Small-Cap Value	77,466,033	0	4.3	4.0	4,954,086
Hedged Equity Composite		169,681,359	0	9.4	8.5	15,593,471
ABS	Hedged Equity Hedge FoF	74,620,741	0	4.1		
Parametric Defensive Equity	Long/Short Hedge Fund	95,060,618	0	5.2		
Real Estate Composite		177,221,080	-2,197,650	9.8	10.0	-4,058,789
American Realty Advisors	Core Real Estate	41,104,606	-615,168	2.3		
Morgan Stanley	Core Real Estate	94,501,281	-1,147,847	5.2		
UBS	Core Real Estate	41,615,193	-429,567	2.3		
Infrastructure Composite		169,117,880	-2,531,587	9.3	8.5	15,029,992
IFM	Core Infrastructure	88,745,024	-49,717	4.9		
J.P. Morgan Infrastructure	Core Infrastructure	80,372,856	-2,481,870	4.4		

Total Fund Composite

Market Value: \$1,812.8 Million and 100.0% of Fund

Ending January 31, 2018

	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
Private Equity Composite		152,142,090	2,608,212	8.4	10.0	-29,137,779
Progress	U.S. Private Equity FoF	25,924	0	0.0		
Brinson 1998	U.S. Private Equity FoF	75,184	0	0.0		
Brinson 1999	U.S. Private Equity FoF	97,526	0	0.0		
Brinson 2000	U.S. Private Equity FoF	165,320	0	0.0		
Brinson 2001	U.S. Private Equity FoF	382,539	-131,201	0.0		
Brinson 2002	U.S. Private Equity FoF	140,582	0	0.0		
Brinson 2003	U.S. Private Equity FoF	342,029	-93,910	0.0		
Brinson 2004	U.S. Private Equity FoF	349,938	-173,913	0.0		
Adams Street 2005	U.S. Private Equity FoF	3,282,575	-95,471	0.2		
Adams Street 2009	U.S. Private Equity FoF	23,681,791	-1,411,555	1.3		
Adams Street 2012	Global Divers. Private Equity FoF	31,545,234	0	1.7		
Adams Street Co-Investment III	Private Equity Co- Investment	23,420,819	2,563,016	1.3		
Siguler Guff II	U.S. Private Equity FoF	36,771,162	-55,941	2.0		
Siguler Guff III	U.S. Private Equity FoF	13,611,539	507,186	0.8		
Mesirov VI	U.S. Private Equity FoF	18,249,928	1,500,000	1.0		
Total Cash Equivalents		62,377,393	18,765,746	3.4	0.0	62,377,393

Total Fund Composite

Annualized Performance (Net of Fees)

Market Value: \$1,812.8 Million and 100.0% of Fund

Ending January 31, 2018

	1 Mo	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs
Total Fund Composite	2.5%	5.0%	2.5%	17.0%	14.3%	9.3%	8.5%	9.1%	8.3%	6.5%
<i>Total Fund Benchmark</i>	2.3%	4.3%	2.3%	14.7%	13.6%	8.3%	7.8%	8.4%	7.8%	6.1%
Fixed Income Composite	-1.1%	-0.7%	-1.1%	1.6%	1.4%	1.1%	2.4%	2.0%	3.0%	4.0%
<i>BBgBarc US Aggregate TR</i>	-1.2%	-0.8%	-1.2%	2.1%	1.8%	1.1%	2.5%	2.0%	3.0%	3.7%
U.S. Equity Composite	4.5%	8.3%	4.5%	22.3%	22.4%	12.9%	11.9%	14.1%	12.6%	9.5%
<i>Wilshire 5000 Total Market</i>	5.2%	9.6%	5.2%	25.1%	23.6%	14.3%	14.0%	15.6%	14.0%	9.9%
International Equity Composite	5.9%	8.9%	5.9%	32.0%	22.7%	11.8%	9.3%	8.9%	7.0%	3.8%
<i>MSCI ACWI ex USA</i>	5.6%	8.8%	5.6%	29.7%	22.7%	9.9%	7.5%	7.1%	5.6%	3.4%
Hedged Equity Composite	1.9%	3.4%	1.9%	12.8%	9.9%	5.9%	5.8%	7.6%	6.2%	--
<i>HFRX Equity Hedge Index</i>	3.4%	5.4%	3.4%	12.8%	9.2%	3.8%	3.3%	4.1%	0.9%	0.1%
<i>Russell 3000</i>	5.3%	9.6%	5.3%	25.2%	23.4%	14.1%	13.8%	15.5%	14.0%	9.8%
<i>MSCI ACWI</i>	5.6%	9.4%	5.6%	27.5%	22.6%	11.9%	10.6%	11.0%	9.3%	6.1%
Real Estate Composite	-0.1%	2.0%	-0.1%	7.5%	7.6%	9.8%	10.6%	11.3%	11.5%	7.5%
<i>Custom Real Estate Benchmark</i>	0.0%	1.2%	0.0%	6.1%	6.9%	9.0%	9.7%	10.3%	10.8%	6.2%
<i>NFI</i>	0.0%	1.2%	0.0%	6.1%	6.9%	9.0%	9.7%	10.3%	10.8%	4.0%
Infrastructure Composite	1.5%	5.5%	1.5%	18.5%	11.7%	9.1%	6.4%	6.4%	7.1%	--
<i>CPI +4%</i>	0.3%	0.9%	0.3%	5.6%	6.1%	5.9%	5.4%	5.4%	5.7%	5.6%
Private Equity Composite	0.0%	0.6%	0.0%	10.3%	10.5%	9.2%	9.7%	9.7%	9.8%	7.2%
<i>Cambridge Associates All PE</i>	0.0%	0.0%	0.0%	11.6%	11.3%	9.8%	10.0%	12.0%	11.4%	8.2%

Investment Manager

Annualized Performance (Net of Fees)

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Ending January 31, 2018

	1 Mo	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs
Total Fund Composite	2.5%	5.0%	2.5%	17.0%	14.3%	9.3%	8.5%	9.1%	8.3%	6.5%
<i>Total Fund Benchmark</i>	2.3%	4.3%	2.3%	14.7%	13.6%	8.3%	7.8%	8.4%	7.8%	6.1%
Fixed Income Composite	-1.1%	-0.7%	-1.1%	1.6%	1.4%	1.1%	2.4%	2.0%	3.0%	4.0%
<i>BBgBarc US Aggregate TR</i>	-1.2%	-0.8%	-1.2%	2.1%	1.8%	1.1%	2.5%	2.0%	3.0%	3.7%
Mellon Capital (Index)	-1.2%	-0.8%	-1.2%	2.1%	1.7%	1.0%	2.4%	1.9%	2.9%	3.7%
<i>BBgBarc US Aggregate TR</i>	-1.2%	-0.8%	-1.2%	2.1%	1.8%	1.1%	2.5%	2.0%	3.0%	3.7%
Galliard	-1.0%	-0.6%	-1.0%	--	--	--	--	--	--	--
<i>BBgBarc US Aggregate TR</i>	-1.2%	-0.8%	-1.2%	2.1%	1.8%	1.1%	2.5%	2.0%	3.0%	3.7%
U.S. Equity Composite	4.5%	8.3%	4.5%	22.3%	22.4%	12.9%	11.9%	14.1%	12.6%	9.5%
<i>Wilshire 5000 Total Market</i>	5.2%	9.6%	5.2%	25.1%	23.6%	14.3%	14.0%	15.6%	14.0%	9.9%
Boston Partners	5.4%	10.6%	5.4%	25.4%	24.3%	13.3%	12.3%	14.8%	14.1%	10.1%
<i>Russell 1000 Value</i>	3.9%	8.6%	3.9%	17.2%	20.9%	11.5%	11.9%	13.5%	12.7%	8.0%
Mellon Capital (Index)	5.7%	10.2%	5.7%	26.4%	23.1%	14.6%	14.5%	15.9%	14.2%	9.7%
<i>S&P 500</i>	5.7%	10.2%	5.7%	26.4%	23.2%	14.7%	14.5%	15.9%	14.3%	9.8%
Artisan Partners	6.3%	7.3%	6.3%	23.0%	19.7%	10.0%	8.5%	12.8%	12.3%	11.0%
<i>Russell MidCap Growth</i>	5.7%	9.8%	5.7%	28.1%	24.0%	13.0%	12.8%	15.2%	13.4%	10.6%
NTGI S&P 400 Mid-Cap (Index)	2.9%	6.9%	2.9%	--	--	--	--	--	--	--
<i>S&P 400 MidCap</i>	2.9%	6.9%	2.9%	17.6%	23.7%	12.6%	12.2%	14.1%	13.0%	11.0%
Mesirow	2.2%	5.8%	2.2%	16.0%	20.0%	11.0%	9.8%	12.2%	10.4%	--
<i>Russell 2000 Value</i>	1.2%	3.2%	1.2%	10.0%	24.2%	11.6%	9.6%	12.0%	11.0%	8.8%
Silvercrest Asset Management	1.8%	4.3%	1.8%	14.3%	26.4%	14.3%	11.9%	--	--	--
<i>Russell 2000 Value</i>	1.2%	3.2%	1.2%	10.0%	24.2%	11.6%	9.6%	12.0%	11.0%	8.8%
International Equity Composite	5.9%	8.9%	5.9%	32.0%	22.7%	11.8%	9.3%	8.9%	7.0%	3.8%
<i>MSCI ACWI ex USA</i>	5.6%	8.8%	5.6%	29.7%	22.7%	9.9%	7.5%	7.1%	5.6%	3.4%
NTGI ACWI Ex-US IMI (Index)	5.5%	8.8%	5.5%	30.2%	23.2%	10.6%	8.0%	7.7%	--	--
<i>MSCI ACWI ex USA IMI</i>	5.5%	8.9%	5.5%	30.1%	23.0%	10.4%	7.7%	7.5%	5.8%	3.8%
OFI Institutional Asset Management	8.1%	10.9%	8.1%	39.4%	28.9%	11.1%	8.9%	--	--	--
<i>MSCI Emerging Markets</i>	8.3%	12.4%	8.3%	41.0%	33.0%	11.8%	10.1%	5.7%	4.1%	3.9%
Segall Bryant & Hamill Intl Sm Cap	4.1%	6.9%	4.1%	30.5%	--	--	--	--	--	--
<i>MSCI EAFE Small Cap</i>	5.1%	9.6%	5.1%	35.0%	24.5%	16.1%	10.9%	12.8%	9.8%	7.4%

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$1,812.8 Million and 100.0% of Fund

Ending January 31, 2018

	1 Mo	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs
Hedged Equity Composite	1.9%	3.4%	1.9%	12.8%	9.9%	5.9%	5.8%	7.6%	6.2%	--
<i>HFRX Equity Hedge Index</i>	3.4%	5.4%	3.4%	12.8%	9.2%	3.8%	3.3%	4.1%	0.9%	0.1%
<i>Russell 3000</i>	5.3%	9.6%	5.3%	25.2%	23.4%	14.1%	13.8%	15.5%	14.0%	9.8%
<i>MSCI ACWI</i>	5.6%	9.4%	5.6%	27.5%	22.6%	11.9%	10.6%	11.0%	9.3%	6.1%
ABS	2.8%	3.6%	2.8%	14.4%	8.2%	5.0%	5.1%	7.2%	5.9%	--
<i>HFRX Equity Hedge Index</i>	3.4%	5.4%	3.4%	12.8%	9.2%	3.8%	3.3%	4.1%	0.9%	0.1%
<i>Russell 3000</i>	5.3%	9.6%	5.3%	25.2%	23.4%	14.1%	13.8%	15.5%	14.0%	9.8%
<i>MSCI ACWI</i>	5.6%	9.4%	5.6%	27.5%	22.6%	11.9%	10.6%	11.0%	9.3%	6.1%
Parametric Defensive Equity	1.3%	3.4%	1.3%	11.7%	12.0%	--	--	--	--	--
<i>HFRX Equity Hedge Index</i>	3.4%	5.4%	3.4%	12.8%	9.2%	3.8%	3.3%	4.1%	0.9%	0.1%
<i>S&P 500</i>	5.7%	10.2%	5.7%	26.4%	23.2%	14.7%	14.5%	15.9%	14.3%	9.8%
Real Estate Composite	-0.1%	2.0%	-0.1%	7.5%	7.6%	9.8%	10.6%	11.3%	11.5%	7.5%
<i>Custom Real Estate Benchmark</i>	0.0%	1.2%	0.0%	6.1%	6.9%	9.0%	9.7%	10.3%	10.8%	6.2%
<i>NFI</i>	0.0%	1.2%	0.0%	6.1%	6.9%	9.0%	9.7%	10.3%	10.8%	4.0%
American Realty Advisors	0.0%	1.5%	0.0%	7.1%	6.6%	9.1%	9.4%	9.8%	10.5%	--
<i>NFI</i>	0.0%	1.2%	0.0%	6.1%	6.9%	9.0%	9.7%	10.3%	10.8%	4.0%
Morgan Stanley	0.0%	2.1%	0.0%	8.8%	9.0%	10.8%	11.7%	12.6%	13.0%	--
<i>NFI</i>	0.0%	1.2%	0.0%	6.1%	6.9%	9.0%	9.7%	10.3%	10.8%	4.0%
UBS	-0.2%	2.1%	-0.2%	5.3%	5.7%	7.7%	8.4%	8.5%	--	--
<i>NFI</i>	0.0%	1.2%	0.0%	6.1%	6.9%	9.0%	9.7%	10.3%	10.8%	4.0%
Infrastructure Composite	1.5%	5.5%	1.5%	18.5%	11.7%	9.1%	6.4%	6.4%	7.1%	--
<i>CPI +4%</i>	0.3%	0.9%	0.3%	5.6%	6.1%	5.9%	5.4%	5.4%	5.7%	5.6%
IFM	3.1%	8.4%	3.1%	22.9%	16.3%	12.8%	9.2%	8.6%	8.5%	--
<i>CPI +4%</i>	0.3%	0.9%	0.3%	5.6%	6.1%	5.9%	5.4%	5.4%	5.7%	5.6%
J.P. Morgan Infrastructure	0.0%	2.6%	0.0%	14.3%	7.5%	5.7%	3.8%	4.4%	5.6%	--
<i>CPI +4%</i>	0.3%	0.9%	0.3%	5.6%	6.1%	5.9%	5.4%	5.4%	5.7%	5.6%

Investment Manager

Annualized Performance (Net of Fees)

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Ending January 31, 2018

	1 Mo	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs
Private Equity Composite	0.0%	0.6%	0.0%	10.3%	10.5%	9.2%	9.7%	9.7%	9.8%	7.2%
Cambridge Associates All PE	0.0%	0.0%	0.0%	11.6%	11.3%	9.8%	10.0%	12.0%	11.4%	8.2%
Progress	0.0%	0.0%	0.0%	0.0%	0.0%	-4.5%	-0.4%	-1.7%	-0.8%	-4.7%
Cambridge Associates All PE	0.0%	0.0%	0.0%	11.6%	11.3%	9.8%	10.0%	12.0%	11.4%	8.2%
Brinson 1998	0.0%	0.0%	0.0%	0.5%	-0.1%	1.2%	1.1%	1.0%	-0.4%	0.4%
Cambridge Associates All PE	0.0%	0.0%	0.0%	11.6%	11.3%	9.8%	10.0%	12.0%	11.4%	8.2%
Brinson 1999	0.0%	0.0%	0.0%	-0.2%	-1.1%	1.7%	-2.3%	0.9%	1.9%	-0.1%
Cambridge Associates All PE	0.0%	0.0%	0.0%	11.6%	11.3%	9.8%	10.0%	12.0%	11.4%	8.2%
Brinson 2000	0.0%	0.0%	0.0%	4.6%	0.8%	0.9%	-1.2%	0.4%	2.2%	1.6%
Cambridge Associates All PE	0.0%	0.0%	0.0%	11.6%	11.3%	9.8%	10.0%	12.0%	11.4%	8.2%
Brinson 2001	0.0%	0.0%	0.0%	1.9%	-1.8%	-2.7%	-0.5%	2.7%	4.0%	2.9%
Cambridge Associates All PE	0.0%	0.0%	0.0%	11.6%	11.3%	9.8%	10.0%	12.0%	11.4%	8.2%
Brinson 2002	0.0%	0.0%	0.0%	5.3%	8.1%	5.2%	1.6%	4.5%	5.4%	3.3%
Cambridge Associates All PE	0.0%	0.0%	0.0%	11.6%	11.3%	9.8%	10.0%	12.0%	11.4%	8.2%
Brinson 2003	0.0%	0.0%	0.0%	10.1%	6.3%	6.0%	8.3%	10.6%	7.5%	5.7%
Cambridge Associates All PE	0.0%	0.0%	0.0%	11.6%	11.3%	9.8%	10.0%	12.0%	11.4%	8.2%
Brinson 2004	0.0%	0.0%	0.0%	13.3%	8.7%	5.5%	5.2%	7.7%	8.5%	6.8%
Cambridge Associates All PE	0.0%	0.0%	0.0%	11.6%	11.3%	9.8%	10.0%	12.0%	11.4%	8.2%
Adams Street 2005	0.0%	0.0%	0.0%	9.5%	7.2%	6.5%	6.9%	8.6%	8.8%	6.5%
Cambridge Associates All PE	0.0%	0.0%	0.0%	11.6%	11.3%	9.8%	10.0%	12.0%	11.4%	8.2%
Adams Street 2009	0.0%	0.0%	0.0%	12.1%	10.1%	10.1%	11.6%	12.5%	11.9%	--
Cambridge Associates All PE	0.0%	0.0%	0.0%	11.6%	11.3%	9.8%	10.0%	12.0%	11.4%	8.2%
Adams Street 2012	0.0%	0.0%	0.0%	12.2%	9.0%	8.1%	8.8%	7.2%	--	--
Cambridge Associates All PE	0.0%	0.0%	0.0%	11.6%	11.3%	9.8%	10.0%	12.0%	11.4%	8.2%
Adams Street Co-Investment III	0.0%	0.0%	0.0%	9.4%	18.7%	11.1%	--	--	--	--
Cambridge Associates All PE	0.0%	0.0%	0.0%	11.6%	11.3%	9.8%	10.0%	12.0%	11.4%	8.2%
Siguler Guff II	0.0%	0.1%	0.0%	10.3%	12.1%	10.3%	11.0%	8.7%	--	--
Cambridge Associates All PE	0.0%	0.0%	0.0%	11.6%	11.3%	9.8%	10.0%	12.0%	11.4%	8.2%
Siguler Guff III	0.0%	7.2%	0.0%	6.8%	--	--	--	--	--	--
Cambridge Associates All PE	0.0%	0.0%	0.0%	11.6%	11.3%	9.8%	10.0%	12.0%	11.4%	8.2%
Mesirow VI	0.0%	0.0%	0.0%	10.5%	8.9%	4.9%	--	--	--	--
Cambridge Associates All PE	0.0%	0.0%	0.0%	11.6%	11.3%	9.8%	10.0%	12.0%	11.4%	8.2%

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$1,812.8 Million and 100.0% of Fund

Ending January 31, 2018

	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Total Fund Composite	15.6%	7.0%	2.3%	5.4%	15.4%	11.2%	0.3%	12.2%	18.4%	-22.5%
<i>Total Fund Benchmark</i>	13.7%	7.6%	1.2%	5.3%	15.0%	10.8%	1.0%	12.5%	20.0%	-24.8%
<i>InvestorForce Public DB Net Rank</i>	31	63	2	53	45	61	57	50	54	42
Fixed Income Composite	2.9%	2.5%	1.1%	5.6%	-1.4%	4.7%	7.3%	6.8%	15.3%	-1.5%
<i>BBgBarc US Aggregate TR</i>	3.5%	2.6%	0.5%	6.0%	-2.0%	4.2%	7.8%	6.5%	5.9%	5.2%
<i>InvestorForce Public DB Total Fix Inc Net Rank</i>	75	70	20	17	51	61	27	67	35	53
<i>Mellon Capital (Index)</i>	3.5%	2.5%	0.5%	6.0%	-2.2%	4.2%	7.7%	6.6%	5.6%	5.5%
<i>BBgBarc US Aggregate TR</i>	3.5%	2.6%	0.5%	6.0%	-2.0%	4.2%	7.8%	6.5%	5.9%	5.2%
<i>eV US Core Fixed Inc Net Rank</i>	70	76	60	33	80	88	28	73	81	29
<i>Galliard</i>	--	--	--	--	--	--	--	--	--	--
<i>BBgBarc US Aggregate TR</i>	3.5%	2.6%	0.5%	6.0%	-2.0%	4.2%	7.8%	6.5%	5.9%	5.2%
<i>eV US Core Fixed Inc Net Rank</i>	--	--	--	--	--	--	--	--	--	--
U.S. Equity Composite	18.5%	12.9%	-0.7%	9.5%	34.4%	16.2%	-1.4%	19.2%	32.0%	-36.9%
<i>Wilshire 5000 Total Market</i>	21.0%	13.4%	0.7%	12.7%	33.1%	16.1%	1.0%	17.2%	28.3%	-37.2%
<i>InvestorForce Public DB US Eq Net Rank</i>	85	45	64	73	44	40	82	31	22	41
<i>Boston Partners</i>	19.7%	14.5%	-4.1%	11.6%	36.8%	21.0%	1.1%	13.4%	26.7%	-33.3%
<i>Russell 1000 Value</i>	13.7%	17.3%	-3.8%	13.5%	32.5%	17.5%	0.4%	15.5%	19.7%	-36.8%
<i>eV US Large Cap Value Equity Net Rank</i>	25	43	61	48	27	7	40	52	39	31
<i>Mellon Capital (Index)</i>	21.8%	11.9%	1.3%	13.6%	32.4%	16.0%	2.1%	14.9%	26.5%	-37.0%
<i>S&P 500</i>	21.8%	12.0%	1.4%	13.7%	32.4%	16.0%	2.1%	15.1%	26.5%	-37.0%
<i>eV US Large Cap Core Equity Net Rank</i>	46	21	37	33	44	31	26	24	42	63
<i>Artisan Partners</i>	21.1%	-0.6%	2.5%	6.1%	38.5%	20.2%	-1.6%	32.3%	50.7%	-43.4%
<i>Russell MidCap Growth</i>	25.3%	7.3%	-0.2%	11.9%	35.7%	15.8%	-1.7%	26.4%	46.3%	-44.3%
<i>eV US Mid Cap Growth Equity Net Rank</i>	86	95	20	63	23	2	40	11	11	44
<i>NTGI S&P 400 Mid-Cap (Index)</i>	--	--	--	--	--	--	--	--	--	--
<i>S&P 400 MidCap</i>	16.2%	20.7%	-2.2%	9.8%	33.5%	17.9%	-1.7%	26.6%	37.4%	-36.2%
<i>eV US Mid Cap Core Equity Net Rank</i>	--	--	--	--	--	--	--	--	--	--
<i>Mesirow</i>	13.7%	15.0%	-0.4%	5.7%	35.3%	10.7%	-4.4%	24.3%	--	--
<i>Russell 2000 Value</i>	7.8%	31.7%	-7.5%	4.2%	34.5%	18.0%	-5.5%	24.5%	20.6%	-28.9%
<i>eV US Small Cap Value Equity Net Rank</i>	23	97	10	44	64	90	59	62	--	--
<i>Silvercrest Asset Management</i>	11.9%	29.1%	-2.4%	5.1%	--	--	--	--	--	--
<i>Russell 2000 Value</i>	7.8%	31.7%	-7.5%	4.2%	34.5%	18.0%	-5.5%	24.5%	20.6%	-28.9%
<i>eV US Small Cap Value Equity Net Rank</i>	38	27	20	50	--	--	--	--	--	--

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$1,812.8 Million and 100.0% of Fund

Ending January 31, 2018

	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
International Equity Composite	29.6%	4.1%	-2.0%	-2.2%	16.0%	16.5%	-13.0%	12.5%	29.1%	-43.9%
MSCI ACWI ex USA	27.2%	4.5%	-5.7%	-3.9%	15.3%	16.8%	-13.7%	11.2%	41.4%	-45.5%
InvestorForce Public DB ex-US Eq Net Rank	30	54	27	24	58	84	39	41	84	58
NTGI ACWI Ex-US IMI (Index)	27.8%	4.7%	-4.4%	-3.7%	16.1%	--	--	--	--	--
MSCI ACWI ex USA IMI	27.8%	4.4%	-4.6%	-3.9%	15.8%	17.0%	-14.3%	12.7%	43.6%	-46.0%
eV Non-US Diversified Eq Gross Rank	56	23	89	54	86	--	--	--	--	--
OFI Institutional Asset Management	35.4%	7.1%	-13.6%	-4.6%	--	--	--	--	--	--
MSCI Emerging Markets	37.3%	11.2%	-14.9%	-2.2%	-2.6%	18.2%	-18.4%	18.9%	78.5%	-53.3%
Diversified Emerging Mkts MStar MF Rank	57	56	48	76	--	--	--	--	--	--
Segall Bryant & Hamill Intl Sm Cap	30.7%	--	--	--	--	--	--	--	--	--
MSCI EAFE Small Cap	33.0%	2.2%	9.6%	-4.9%	29.3%	20.0%	-15.9%	22.0%	46.8%	-47.0%
eV EAFE Small Cap Value Net Rank	70	--	--	--	--	--	--	--	--	--
Hedged Equity Composite	12.0%	1.7%	2.1%	5.2%	19.1%	6.9%	-4.3%	--	--	--
HFRX Equity Hedge Index	10.0%	0.1%	-2.3%	1.4%	11.1%	4.8%	-19.1%	8.9%	13.1%	-25.5%
Russell 3000	21.1%	12.7%	0.5%	12.6%	33.6%	16.4%	1.0%	16.9%	28.3%	-37.3%
MSCI ACWI	24.0%	7.9%	-2.4%	4.2%	22.8%	16.1%	-7.3%	12.7%	34.6%	-42.2%
InvestorForce Public DB Hedge Funds Net Rank	2	55	22	28	1	56	90	--	--	--
ABS	12.7%	-4.3%	4.0%	4.9%	20.6%	5.2%	-3.0%	--	--	--
HFRX Equity Hedge Index	10.0%	0.1%	-2.3%	1.4%	11.1%	4.8%	-19.1%	8.9%	13.1%	-25.5%
Russell 3000	21.1%	12.7%	0.5%	12.6%	33.6%	16.4%	1.0%	16.9%	28.3%	-37.3%
MSCI ACWI	24.0%	7.9%	-2.4%	4.2%	22.8%	16.1%	-7.3%	12.7%	34.6%	-42.2%
Parametric Defensive Equity	11.7%	8.2%	--	--	--	--	--	--	--	--
HFRX Equity Hedge Index	10.0%	0.1%	-2.3%	1.4%	11.1%	4.8%	-19.1%	8.9%	13.1%	-25.5%
S&P 500	21.8%	12.0%	1.4%	13.7%	32.4%	16.0%	2.1%	15.1%	26.5%	-37.0%
Real Estate Composite	7.5%	7.8%	14.2%	13.0%	14.2%	11.0%	13.0%	14.4%	34.9%	-38.6%
Custom Real Estate Benchmark	6.7%	7.8%	13.9%	11.5%	12.9%	9.8%	15.0%	15.1%	33.7%	-45.0%
NFI	6.7%	7.8%	13.9%	11.5%	12.9%	9.8%	15.0%	15.3%	-30.4%	-10.7%
InvestorForce All DB Real Estate Priv Net Rank	28	50	36	19	22	30	60	43	2	99
American Realty Advisors	7.1%	6.1%	14.3%	10.6%	11.3%	10.2%	13.8%	--	--	--
NFI	6.7%	7.8%	13.9%	11.5%	12.9%	9.8%	15.0%	15.3%	-30.4%	-10.7%
Morgan Stanley	8.8%	9.2%	14.6%	14.2%	16.2%	11.7%	16.5%	--	--	--
NFI	6.7%	7.8%	13.9%	11.5%	12.9%	9.8%	15.0%	15.3%	-30.4%	-10.7%
UBS	5.3%	6.2%	11.7%	10.4%	9.2%	--	--	--	--	--
NFI	6.7%	7.8%	13.9%	11.5%	12.9%	9.8%	15.0%	15.3%	-30.4%	-10.7%

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$1,812.8 Million and 100.0% of Fund

Ending January 31, 2018

	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Infrastructure Composite	17.7%	3.5%	3.6%	-0.4%	6.6%	10.9%	7.6%	--	--	--
CPI +4%	6.2%	6.2%	4.8%	4.8%	5.6%	5.8%	7.1%	5.6%	6.8%	4.1%
IFM	21.1%	6.1%	5.4%	1.1%	6.5%	11.5%	6.7%	--	--	--
CPI +4%	6.2%	6.2%	4.8%	4.8%	5.6%	5.8%	7.1%	5.6%	6.8%	4.1%
J.P. Morgan Infrastructure	14.3%	1.1%	2.2%	-1.5%	6.9%	10.1%	6.7%	--	--	--
CPI +4%	6.2%	6.2%	4.8%	4.8%	5.6%	5.8%	7.1%	5.6%	6.8%	4.1%
Private Equity Composite	10.3%	10.8%	6.6%	11.2%	9.8%	11.6%	8.6%	18.0%	12.1%	-21.5%
Cambridge Associates All PE	13.1%	9.7%	7.3%	11.1%	20.4%	12.5%	8.0%	19.7%	14.1%	-25.6%
Progress	0.0%	0.0%	-12.8%	13.0%	-7.0%	44.1%	-28.4%	2.7%	-22.3%	-17.6%
Cambridge Associates All PE	13.1%	9.7%	7.3%	11.1%	20.4%	12.5%	8.0%	19.7%	14.1%	-25.6%
Brinson 1998	0.5%	-0.8%	3.8%	0.7%	1.0%	5.2%	-12.4%	5.7%	6.1%	-4.7%
Cambridge Associates All PE	13.1%	9.7%	7.3%	11.1%	20.4%	12.5%	8.0%	19.7%	14.1%	-25.6%
Brinson 1999	-0.2%	-2.0%	7.5%	-13.5%	14.7%	5.8%	3.3%	8.1%	5.5%	-24.0%
Cambridge Associates All PE	13.1%	9.7%	7.3%	11.1%	20.4%	12.5%	8.0%	19.7%	14.1%	-25.6%
Brinson 2000	4.6%	-2.9%	1.0%	-7.3%	7.1%	5.2%	8.3%	10.7%	14.8%	-20.6%
Cambridge Associates All PE	13.1%	9.7%	7.3%	11.1%	20.4%	12.5%	8.0%	19.7%	14.1%	-25.6%
Brinson 2001	1.9%	-5.3%	-4.4%	6.5%	16.5%	9.2%	5.6%	11.9%	13.2%	-20.4%
Cambridge Associates All PE	13.1%	9.7%	7.3%	11.1%	20.4%	12.5%	8.0%	19.7%	14.1%	-25.6%
Brinson 2002	5.3%	11.1%	-0.3%	-8.6%	17.2%	7.1%	8.4%	23.5%	14.5%	-32.2%
Cambridge Associates All PE	13.1%	9.7%	7.3%	11.1%	20.4%	12.5%	8.0%	19.7%	14.1%	-25.6%
Brinson 2003	10.1%	2.7%	5.4%	15.3%	21.3%	2.6%	-3.2%	11.0%	12.0%	-15.5%
Cambridge Associates All PE	13.1%	9.7%	7.3%	11.1%	20.4%	12.5%	8.0%	19.7%	14.1%	-25.6%
Brinson 2004	13.3%	4.4%	-0.8%	4.3%	18.4%	7.2%	13.8%	24.5%	11.4%	-20.8%
Cambridge Associates All PE	13.1%	9.7%	7.3%	11.1%	20.4%	12.5%	8.0%	19.7%	14.1%	-25.6%
Adams Street 2005	9.5%	4.9%	5.2%	7.9%	15.8%	10.2%	8.3%	17.8%	11.5%	-20.5%
Cambridge Associates All PE	13.1%	9.7%	7.3%	11.1%	20.4%	12.5%	8.0%	19.7%	14.1%	-25.6%
Adams Street 2009	12.1%	8.2%	9.9%	16.3%	16.1%	7.0%	14.2%	29.6%	--	--
Cambridge Associates All PE	13.1%	9.7%	7.3%	11.1%	20.4%	12.5%	8.0%	19.7%	14.1%	-25.6%
Adams Street 2012	12.2%	5.9%	6.3%	11.0%	0.9%	--	--	--	--	--
Cambridge Associates All PE	13.1%	9.7%	7.3%	11.1%	20.4%	12.5%	8.0%	19.7%	14.1%	-25.6%
Adams Street Co-Investment III	9.4%	28.9%	-2.8%	--	--	--	--	--	--	--
Cambridge Associates All PE	13.1%	9.7%	7.3%	11.1%	20.4%	12.5%	8.0%	19.7%	14.1%	-25.6%
Siguler Guff II	10.3%	13.9%	6.9%	13.1%	-0.2%	--	--	--	--	--
Cambridge Associates All PE	13.1%	9.7%	7.3%	11.1%	20.4%	12.5%	8.0%	19.7%	14.1%	-25.6%

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$1,812.8 Million and 100.0% of Fund

Ending January 31, 2018

	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Siguler Guff III	6.8%	--	--	--	--	--	--	--	--	--
<i>Cambridge Associates All PE</i>	13.1%	9.7%	7.3%	11.1%	20.4%	12.5%	8.0%	19.7%	14.1%	-25.6%
Mesirow VI	10.5%	7.4%	-2.6%	--	--	--	--	--	--	--
<i>Cambridge Associates All PE</i>	13.1%	9.7%	7.3%	11.1%	20.4%	12.5%	8.0%	19.7%	14.1%	-25.6%

Total Fund Composite

Fee Schedule

Market Value: \$1,812.8 Million and 100.0% of Fund

Asset Class	Investment Manager	Fee Schedule	Expense Ratio & Estimated Annual Fee ¹	Industry Average ²
Core Fixed Income	Mellon Capital (Index)	0.04% on the first \$200 million 0.02% on the Balance	0.04% \$38,136	0.07%
Core Fixed Income	Galliard	0.20% on the first \$50 million 0.15% on the next \$50 million 0.10% on the Balance	0.14% \$246,695	0.23%
Large-Cap Value	Boston Partners	0.40% on the first \$15 million 0.30% on the next \$25 million 0.20% on the next \$25 million 0.15% on the next \$35 million 0.10% on the Balance	0.20% \$275,911	0.51%
Large-Cap Core	Mellon Capital (Index)	0.04% on the first \$200 million 0.02% on the Balance	0.04% \$42,003	0.05%
Mid-Cap Growth	Artisan Partners	0.80% on the first \$50 million 0.60% on the next \$50 million 0.50% on the Balance	0.78% \$429,127	0.68%
Mid-Cap Core	NTGI S&P 400 Mid-Cap (Index)	0.08% on the Balance	0.08% \$34,620	0.22%
Small-Cap Value	Silvercrest Asset Management	0.65% on the first \$50 million 0.55% on the Balance	0.64% \$352,107	0.82%
Small-Cap Value	Mesirow	0.70% on the first \$10 million 0.65% on the next \$40 million 0.60% on the next \$25 million 0.50% on the Balance	0.65% \$381,519	0.82%
Non-U.S. All-Cap Core	NTGI ACWI Ex-US IMI (Index)	0.08% on the Balance	0.08% \$177,230	0.10%
Non-U.S. Small-Cap Value	Segall Bryant & Hamill Intl Sm Cap	0.85% on the Balance	0.85% \$658,461	1.08%
Emerging Markets	OFI Institutional Asset Management	0.85% on the first \$50 million 0.80% on the next \$50 million 0.70% on the Balance	0.84% \$514,186	0.90%
Hedged Equity Hedge FoF	ABS	0.85% on the Balance *redemptions quarterly with 45 days notice	0.85% \$634,276	1.00%
Long/Short Hedge Fund	Parametric Defensive Equity	0.35% on the Balance	0.35% \$332,712	1.69%
Core Real Estate	American Realty Advisors	0.95% on the Balance	0.95% \$390,494	1.01%

Total Fund Composite

Fee Schedule

Market Value: \$1,812.8 Million and 100.0% of Fund

Asset Class	Investment Manager	Fee Schedule	Expense Ratio & Estimated Annual Fee ¹	Industry Average ²
Core Real Estate	Morgan Stanley	0.90% on the Balance	0.90% \$850,512	1.01%
Core Real Estate	UBS	0.955% on the first \$10 million 0.825% on the next \$15 million 0.805% on the next \$25 million 0.79% on the next \$50 million 0.67% on the next \$150 million 0.60% on the Balance	0.85% \$353,002	1.01%
Core Infrastructure	IFM	0.97% on the Balance Performance Fee: 20% of return above 8% on a rolling three year basis	0.97% \$860,827	2.00%
Core Infrastructure	J.P. Morgan Infrastructure	1.00% on the Balance Performance Fee: 15% with 7% Hurdle	1.00% \$803,729	2.00%
Private Equity	Adams Street	0.67% on the first \$50 million 0.60% on the Balance 10% carry on secondaries and co-invest (Effective Rate Over 15 Yr Term)	0.65% \$456,681	1.25%
U.S. Private Equity FoF	Siguler Guff II	0.69% on commitment	0.75% \$276,000	1.36%
U.S. Private Equity FoF	Siguler Guff III	0.89% on commitment	2.61% \$355,200	3.67%
U.S. Private Equity FoF	Mesirow VI	0.70% on commitment	1.15% \$210,000	2.05%
Cash Overlay	Northern Trust	0.07% on the first \$100 million 0.06% on the next \$150 million 0.05% on the Balance	0.06% \$131,175	0.16%
Total Investment Management Fees			0.49% \$8,804,604	0.77%
Custodian	BNY Mellon	\$100,000 Annual Fee (approximate)	\$100,000	N/A
Total Fund			0.49% \$8,904,604	

¹ Expense Ratio & Estimated Annual Fee are Based on Market Value at Month End.

² Source: 2016 Marquette Associates Investment Management Fee Study.