



Pension Plan

Employees' Retirement System
of Milwaukee County
Monthly Update
July 31, 2017

Market Value: \$1,724.2 Million and 100.0% of Fund

Investment Manager	Asset Class	Status	Reason
Mellon Capital	Core Fixed Income	In Compliance	---
Galliard	Core Fixed Income	In Compliance	---
Boston Partners	Large-Cap Value	Alert	Performance
Mellon Capital	Large-Cap Core	In Compliance	---
Artisan Partners	Mid-Cap Growth	Alert	Performance
Vanguard S&P Mid-Cap 400 Growth	Mid-Cap Growth	In Compliance	---
Silvercrest Asset Management	Small-Cap Value	In Compliance	---
Mesirow	Small-Cap Value	On Notice	Performance & Organizational Issues
NTGI ACWI Ex-US IMI	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: \$1,724.2 Million and 100.0% of Fund

Ending July 31, 2017

	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
Total Fund Composite		1,724,159,688	-31,825,950	100.0	100.0	0
Fixed Income Composite		266,948,911	0	15.5	18.0	-43,399,833
Mellon Capital	Core Fixed Income	95,704,541	0	5.6		
Galliard	Core Fixed Income	171,235,510	144,027	9.9		
U.S. Equity Composite		414,906,966	-10,000,000	24.1	25.0	-16,132,956
Boston Partners	Large-Cap Value	118,692,388	0	6.9	8.0	-19,240,387
Mellon Capital	Large-Cap Core	96,628,753	-10,000,000	5.6	6.0	-6,820,828
Artisan Partners	Mid-Cap Growth	49,722,051	0	2.9	2.5	6,618,058
Vanguard S&P Mid-Cap 400 Growth	Mid-Cap Growth	46,284,308	0	2.7	2.5	3,180,316
Mesirow	Small-Cap Value	53,200,190	0	3.1	3.0	1,475,399
Silvercrest Asset Management	Small-Cap Value	50,371,108	0	2.9	3.0	-1,353,683
International Equity Composite		362,177,391	-20,127,793	21.0	20.0	17,345,454
NTGI ACWI Ex-US IMI	Non-U.S. All-Cap Core	228,096,637	-20,000,000	13.2	13.0	3,955,877
OFI Institutional Asset Management	Emerging Markets	65,171,723	-127,793	3.8	3.0	13,446,932
Segall Bryant & Hamill Intl Sm Cap	Non-U.S. Small-Cap Value	68,909,032	0	4.0	4.0	-57,356
Hedged Equity Composite		159,960,525	0	9.3	8.5	13,406,951
ABS	Hedged Equity Hedge FoF	70,190,419	0	4.1		
Parametric Defensive Equity	Long/Short Hedge Fund	89,770,106	0	5.2		
Real Estate Composite		174,083,461	-2,199,897	10.1	10.0	1,667,492
American Realty Advisors	Core Real Estate	40,854,809	-609,874	2.4		
Morgan Stanley	Core Real Estate	92,321,523	-1,160,456	5.4		
UBS	Core Real Estate	40,902,079	-429,567	2.4		
Infrastructure Composite		159,170,754	-4,706,953	9.2	8.5	12,617,181
IFM	Core Infrastructure	80,953,353	-3,163,208	4.7		
J.P. Morgan Infrastructure	Core Infrastructure	78,217,401	-1,543,745	4.5		
Private Equity Composite		142,380,473	2,778,195	8.3	10.0	-30,035,496
Progress	U.S. Private Equity FoF	25,924	0	0.0		

Total Fund Composite

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Ending July 31, 2017

	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
Brinson 1998	U.S. Private Equity FoF	74,744	0	0.0		
Brinson 1999	U.S. Private Equity FoF	99,099	0	0.0		
Brinson 2000	U.S. Private Equity FoF	157,140	-118,150	0.0		
Brinson 2001	U.S. Private Equity FoF	514,423	-126,155	0.0		
Brinson 2002	U.S. Private Equity FoF	230,490	0	0.0		
Brinson 2003	U.S. Private Equity FoF	405,315	-60,102	0.0		
Brinson 2004	U.S. Private Equity FoF	584,733	0	0.0		
Adams Street 2005	U.S. Private Equity FoF	3,660,084	-337,469	0.2		
Adams Street 2009	U.S. Private Equity FoF	23,452,366	-382,800	1.4		
Adams Street 2012	Global Divers. Private Equity FoF	28,494,130	0	1.7		
Adams Street Co-Investment III	Private Equity Co- Investment	19,541,293	5,013,000	1.1		
Siguler Guff II	U.S. Private Equity FoF	35,645,263	389,871	2.1		
Siguler Guff III	U.S. Private Equity FoF	15,002,928	-2,800,000	0.9		
Mesirov VI	U.S. Private Equity FoF	14,492,541	1,200,000	0.8		
Total Cash Equivalents		44,531,207	2,430,498	2.6	0.0	44,531,207

Total Fund Composite

Annualized Performance (Net of Fees)

Market Value: \$1,724.2 Million and 100.0% of Fund

Ending July 31, 2017

	1 Mo	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs
Total Fund Composite	1.5%	3.8%	9.1%	11.7%	7.1%	6.7%	7.8%	9.0%	8.5%	5.5%
<i>Total Fund Benchmark</i>	1.3%	2.7%	7.6%	10.3%	6.4%	5.9%	7.1%	8.3%	8.2%	5.2%
Fixed Income Composite	0.3%	1.0%	1.8%	-1.4%	2.1%	2.5%	2.8%	2.0%	3.1%	4.6%
<i>BBgBarc US Aggregate TR</i>	0.4%	1.1%	2.7%	-0.5%	2.7%	2.7%	3.0%	2.0%	3.1%	4.4%
U.S. Equity Composite	1.6%	3.9%	9.5%	16.7%	8.5%	9.7%	10.5%	14.0%	13.5%	7.6%
<i>Wilshire 5000 Total Market</i>	1.9%	3.8%	10.8%	16.2%	10.6%	10.7%	12.1%	14.8%	14.5%	7.9%
International Equity Composite	4.1%	7.9%	20.2%	20.5%	8.6%	4.6%	7.3%	9.4%	7.1%	1.6%
<i>MSCI ACWI ex USA</i>	3.7%	7.4%	18.3%	19.0%	6.0%	2.4%	5.5%	7.7%	5.9%	1.5%
Hedged Equity Composite	1.6%	3.2%	7.7%	10.3%	2.5%	5.0%	6.4%	7.9%	6.4%	--
<i>HFRX Equity Hedge Index</i>	0.9%	1.2%	4.6%	6.9%	0.1%	1.3%	1.8%	3.5%	1.1%	-1.3%
<i>Russell 3000</i>	1.9%	3.9%	11.0%	16.1%	10.1%	10.5%	12.0%	14.8%	14.5%	7.8%
<i>MSCI ACWI</i>	2.8%	5.5%	14.6%	17.1%	8.0%	6.2%	8.6%	10.9%	9.7%	4.2%
Real Estate Composite	-0.1%	1.8%	3.5%	7.4%	9.0%	10.9%	11.4%	11.6%	12.9%	6.6%
<i>Custom Real Estate Benchmark</i>	0.0%	1.0%	3.0%	6.2%	8.2%	10.0%	10.4%	10.6%	11.4%	5.0%
<i>NFI</i>	0.0%	1.0%	3.0%	6.2%	8.2%	10.0%	10.4%	10.6%	11.8%	4.2%
Infrastructure Composite	0.4%	4.1%	9.5%	10.0%	7.2%	4.0%	5.2%	6.1%	6.8%	--
<i>CPI +4%</i>	0.3%	1.1%	3.7%	5.8%	5.3%	4.9%	5.2%	5.4%	5.7%	5.7%
Private Equity Composite	0.0%	0.9%	3.2%	11.4%	8.0%	7.7%	10.5%	10.0%	11.0%	7.1%
<i>Cambridge Associates All PE</i>	0.0%	0.0%	3.9%	9.4%	7.1%	7.8%	11.2%	11.8%	12.7%	8.3%

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$1,724.2 Million and 100.0% of Fund

Ending July 31, 2017

	1 Mo	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs
Total Fund Composite	1.5%	3.8%	9.1%	11.7%	7.1%	6.7%	7.8%	9.0%	8.5%	5.5%
<i>Total Fund Benchmark</i>	1.3%	2.7%	7.6%	10.3%	6.4%	5.9%	7.1%	8.3%	8.2%	5.2%
Fixed Income Composite	0.3%	1.0%	1.8%	-1.4%	2.1%	2.5%	2.8%	2.0%	3.1%	4.6%
<i>BBgBarc US Aggregate TR</i>	0.4%	1.1%	2.7%	-0.5%	2.7%	2.7%	3.0%	2.0%	3.1%	4.4%
Mellon Capital	0.4%	1.1%	2.7%	-0.6%	2.5%	2.6%	3.0%	1.9%	3.0%	4.4%
<i>BBgBarc US Aggregate TR</i>	0.4%	1.1%	2.7%	-0.5%	2.7%	2.7%	3.0%	2.0%	3.1%	4.4%
Galliard	0.3%	1.0%	--	--	--	--	--	--	--	--
<i>BBgBarc US Aggregate TR</i>	0.4%	1.1%	2.7%	-0.5%	2.7%	2.7%	3.0%	2.0%	3.1%	4.4%
U.S. Equity Composite	1.6%	3.9%	9.5%	16.7%	8.5%	9.7%	10.5%	14.0%	13.5%	7.6%
<i>Wilshire 5000 Total Market</i>	1.9%	3.8%	10.8%	16.2%	10.6%	10.7%	12.1%	14.8%	14.5%	7.9%
Boston Partners	1.4%	3.9%	8.3%	18.7%	8.4%	8.3%	9.9%	14.5%	14.0%	8.0%
<i>Russell 1000 Value</i>	1.3%	2.9%	6.0%	13.8%	9.5%	8.5%	10.2%	14.0%	13.5%	6.2%
Mellon Capital	2.1%	4.1%	11.6%	16.0%	10.7%	10.8%	12.3%	14.7%	14.6%	7.7%
<i>S&P 500</i>	2.1%	4.1%	11.6%	16.0%	10.7%	10.9%	12.4%	14.8%	14.6%	7.7%
Artisan Partners	1.6%	6.8%	17.2%	13.0%	5.2%	8.7%	9.5%	13.7%	14.5%	9.5%
<i>Russell MidCap Growth</i>	1.7%	4.4%	13.3%	13.4%	7.1%	9.5%	10.9%	14.6%	14.4%	8.3%
Vanguard S&P Mid-Cap 400 Growth	0.9%	2.5%	--	--	--	--	--	--	--	--
<i>S&P 400 MidCap Growth</i>	0.8%	2.4%	9.4%	13.7%	8.4%	11.0%	11.1%	14.8%	14.7%	9.8%
Mesirow	1.0%	2.4%	5.9%	16.2%	6.2%	9.3%	9.1%	13.0%	12.1%	--
<i>Russell 2000 Value</i>	0.6%	0.9%	1.2%	19.2%	12.2%	9.5%	9.2%	13.8%	12.5%	6.9%
Silvercrest Asset Management	2.4%	3.5%	4.8%	21.4%	13.4%	12.6%	--	--	--	--
<i>Russell 2000 Value</i>	0.6%	0.9%	1.2%	19.2%	12.2%	9.5%	9.2%	13.8%	12.5%	6.9%
International Equity Composite	4.1%	7.9%	20.2%	20.5%	8.6%	4.6%	7.3%	9.4%	7.1%	1.6%
<i>MSCI ACWI ex USA</i>	3.7%	7.4%	18.3%	19.0%	6.0%	2.4%	5.5%	7.7%	5.9%	1.5%
NTGI ACWI Ex-US IMI	3.7%	7.4%	18.7%	19.2%	6.8%	3.0%	6.1%	--	--	--
<i>MSCI ACWI ex USA IMI</i>	3.7%	7.3%	18.5%	18.9%	6.5%	2.7%	5.9%	8.1%	6.2%	1.8%
OFI Institutional Asset Management	5.3%	9.9%	25.2%	25.6%	10.6%	1.6%	--	--	--	--
<i>MSCI Emerging Markets</i>	6.0%	10.2%	25.5%	24.8%	11.3%	2.4%	5.5%	4.8%	3.5%	2.0%
Segall Bryant & Hamill Intl Sm Cap	4.3%	7.7%	21.0%	--	--	--	--	--	--	--
<i>MSCI EAFE Small Cap</i>	3.6%	7.4%	20.9%	20.3%	10.4%	7.7%	10.4%	13.7%	10.6%	3.8%

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$1,724.2 Million and 100.0% of Fund

Ending July 31, 2017

	1 Mo	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs
Hedged Equity Composite	1.6%	3.2%	7.7%	10.3%	2.5%	5.0%	6.4%	7.9%	6.4%	--
<i>HFRX Equity Hedge Index</i>	0.9%	1.2%	4.6%	6.9%	0.1%	1.3%	1.8%	3.5%	1.1%	-1.3%
<i>Russell 3000</i>	1.9%	3.9%	11.0%	16.1%	10.1%	10.5%	12.0%	14.8%	14.5%	7.8%
<i>MSCI ACWI</i>	2.8%	5.5%	14.6%	17.1%	8.0%	6.2%	8.6%	10.9%	9.7%	4.2%
ABS	2.0%	3.6%	9.1%	10.7%	1.5%	4.1%	5.8%	7.6%	6.0%	--
<i>HFRX Equity Hedge Index</i>	0.9%	1.2%	4.6%	6.9%	0.1%	1.3%	1.8%	3.5%	1.1%	-1.3%
<i>Russell 3000</i>	1.9%	3.9%	11.0%	16.1%	10.1%	10.5%	12.0%	14.8%	14.5%	7.8%
<i>MSCI ACWI</i>	2.8%	5.5%	14.6%	17.1%	8.0%	6.2%	8.6%	10.9%	9.7%	4.2%
Parametric Defensive Equity	1.3%	2.9%	6.8%	10.2%	--	--	--	--	--	--
<i>HFRX Equity Hedge Index</i>	0.9%	1.2%	4.6%	6.9%	0.1%	1.3%	1.8%	3.5%	1.1%	-1.3%
<i>S&P 500</i>	2.1%	4.1%	11.6%	16.0%	10.7%	10.9%	12.4%	14.8%	14.6%	7.7%
Real Estate Composite	-0.1%	1.8%	3.5%	7.4%	9.0%	10.9%	11.4%	11.6%	12.9%	6.6%
<i>Custom Real Estate Benchmark</i>	0.0%	1.0%	3.0%	6.2%	8.2%	10.0%	10.4%	10.6%	11.4%	5.0%
<i>NFI</i>	0.0%	1.0%	3.0%	6.2%	8.2%	10.0%	10.4%	10.6%	11.8%	4.2%
American Realty Advisors	0.0%	1.7%	3.8%	6.4%	8.0%	9.6%	10.1%	10.1%	--	--
<i>NFI</i>	0.0%	1.0%	3.0%	6.2%	8.2%	10.0%	10.4%	10.6%	11.8%	4.2%
Morgan Stanley	0.0%	2.2%	4.2%	9.1%	10.3%	12.1%	12.5%	12.9%	--	--
<i>NFI</i>	0.0%	1.0%	3.0%	6.2%	8.2%	10.0%	10.4%	10.6%	11.8%	4.2%
UBS	-0.2%	0.9%	1.6%	4.5%	7.0%	8.5%	8.7%	8.6%	--	--
<i>NFI</i>	0.0%	1.0%	3.0%	6.2%	8.2%	10.0%	10.4%	10.6%	11.8%	4.2%
Infrastructure Composite	0.4%	4.1%	9.5%	10.0%	7.2%	4.0%	5.2%	6.1%	6.8%	--
<i>CPI +4%</i>	0.3%	1.1%	3.7%	5.8%	5.3%	4.9%	5.2%	5.4%	5.7%	5.7%
IFM	0.9%	4.4%	12.8%	14.2%	11.1%	6.8%	6.7%	7.9%	8.3%	--
<i>CPI +4%</i>	0.3%	1.1%	3.7%	5.8%	5.3%	4.9%	5.2%	5.4%	5.7%	5.7%
J.P. Morgan Infrastructure	0.0%	3.7%	6.3%	6.0%	3.6%	1.5%	4.0%	4.5%	--	--
<i>CPI +4%</i>	0.3%	1.1%	3.7%	5.8%	5.3%	4.9%	5.2%	5.4%	5.7%	5.7%

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$1,724.2 Million and 100.0% of Fund

Ending July 31, 2017

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Total Fund Composite	7.0%	2.3%	5.4%	15.4%	11.2%	0.3%	12.2%	18.4%	-22.5%	6.0%
<i>Total Fund Benchmark</i>	7.6%	1.2%	5.3%	15.0%	10.8%	1.0%	12.5%	20.0%	-24.8%	6.6%
<i>InvestorForce Public DB Net Rank</i>	63	2	53	45	61	57	50	54	42	86
Fixed Income Composite	2.5%	1.1%	5.6%	-1.4%	4.7%	7.3%	6.8%	15.3%	-1.5%	6.1%
<i>BBgBarc US Aggregate TR</i>	2.6%	0.5%	6.0%	-2.0%	4.2%	7.8%	6.5%	5.9%	5.2%	7.0%
<i>InvestorForce Public DB Total Fix Inc Net Rank</i>	70	20	17	51	61	27	67	35	53	63
Mellon Capital	2.5%	0.5%	6.0%	-2.2%	4.2%	7.7%	6.6%	5.6%	5.5%	7.0%
<i>BBgBarc US Aggregate TR</i>	2.6%	0.5%	6.0%	-2.0%	4.2%	7.8%	6.5%	5.9%	5.2%	7.0%
<i>eA US Core Fixed Inc Net Rank</i>	76	60	33	80	88	28	73	81	29	27
Galliard	--	--	--	--	--	--	--	--	--	--
<i>BBgBarc US Aggregate TR</i>	2.6%	0.5%	6.0%	-2.0%	4.2%	7.8%	6.5%	5.9%	5.2%	7.0%
<i>eA US Core Fixed Inc Net Rank</i>	--	--	--	--	--	--	--	--	--	--
U.S. Equity Composite	12.9%	-0.7%	9.5%	34.4%	16.2%	-1.4%	19.2%	32.0%	-36.9%	5.5%
<i>Wilshire 5000 Total Market</i>	13.4%	0.7%	12.7%	33.1%	16.1%	1.0%	17.2%	28.3%	-37.2%	5.6%
<i>InvestorForce Public DB US Eq Net Rank</i>	45	64	73	44	40	82	31	22	41	41
Boston Partners	14.5%	-4.1%	11.6%	36.8%	21.0%	1.1%	13.4%	26.7%	-33.3%	5.1%
<i>Russell 1000 Value</i>	17.3%	-3.8%	13.5%	32.5%	17.5%	0.4%	15.5%	19.7%	-36.8%	-0.2%
<i>eA US Large Cap Value Equity Net Rank</i>	43	61	48	27	7	40	52	39	31	44
Mellon Capital	11.9%	1.3%	13.6%	32.4%	16.0%	2.1%	14.9%	26.5%	-37.0%	5.5%
<i>S&P 500</i>	12.0%	1.4%	13.7%	32.4%	16.0%	2.1%	15.1%	26.5%	-37.0%	5.5%
<i>eA US Large Cap Core Equity Net Rank</i>	21	37	33	44	31	26	24	42	63	65
Artisan Partners	-0.6%	2.5%	6.1%	38.5%	20.2%	-1.6%	32.3%	50.7%	-43.4%	21.1%
<i>Russell MidCap Growth</i>	7.3%	-0.2%	11.9%	35.7%	15.8%	-1.7%	26.4%	46.3%	-44.3%	11.4%
<i>eA US Mid Cap Growth Equity Net Rank</i>	95	20	63	23	2	40	11	11	44	43
Vanguard S&P Mid-Cap 400 Growth	--	--	--	--	--	--	--	--	--	--
<i>S&P 400 MidCap Growth</i>	14.8%	2.0%	7.6%	32.8%	17.3%	-0.9%	30.6%	41.1%	-37.6%	13.5%
<i>Mid-Cap Growth MStar MF Rank</i>	--	--	--	--	--	--	--	--	--	--
Mesirow	15.0%	-0.4%	5.7%	35.3%	10.7%	-4.4%	24.3%	--	--	--
<i>Russell 2000 Value</i>	31.7%	-7.5%	4.2%	34.5%	18.0%	-5.5%	24.5%	20.6%	-28.9%	-9.8%
<i>eA US Small Cap Value Equity Net Rank</i>	97	10	44	64	90	59	62	--	--	--
Silvercrest Asset Management	29.1%	-2.4%	5.1%	--	--	--	--	--	--	--
<i>Russell 2000 Value</i>	31.7%	-7.5%	4.2%	34.5%	18.0%	-5.5%	24.5%	20.6%	-28.9%	-9.8%
<i>eA US Small Cap Value Equity Net Rank</i>	27	20	50	--	--	--	--	--	--	--

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$1,724.2 Million and 100.0% of Fund

Ending July 31, 2017

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
International Equity Composite	4.1%	-2.0%	-2.2%	16.0%	16.5%	-13.0%	12.5%	29.1%	-43.9%	6.3%
MSCI ACWI ex USA	4.5%	-5.7%	-3.9%	15.3%	16.8%	-13.7%	11.2%	41.4%	-45.5%	16.7%
InvestorForce Public DB ex-US Eq Net Rank	54	27	24	58	84	39	41	84	58	94
NTGI ACWI Ex-US IMI	4.7%	-4.4%	-3.7%	16.1%	--	--	--	--	--	--
MSCI ACWI ex USA IMI	4.4%	-4.6%	-3.9%	15.8%	17.0%	-14.3%	12.7%	43.6%	-46.0%	16.1%
eA Non-US Diversified Eq Gross Rank	23	89	54	86	--	--	--	--	--	--
OFI Institutional Asset Management	7.1%	-13.6%	-4.6%	--	--	--	--	--	--	--
MSCI Emerging Markets	11.2%	-14.9%	-2.2%	-2.6%	18.2%	-18.4%	18.9%	78.5%	-53.3%	39.4%
Diversified Emerging Mkts MStar MF Rank	56	48	76	--	--	--	--	--	--	--
Segall Bryant & Hamill Intl Sm Cap	--	--	--	--	--	--	--	--	--	--
MSCI EAFE Small Cap	2.2%	9.6%	-4.9%	29.3%	20.0%	-15.9%	22.0%	46.8%	-47.0%	1.4%
eA EAFE Small Cap Value Net Rank	--	--	--	--	--	--	--	--	--	--
Hedged Equity Composite	1.7%	2.1%	5.2%	19.1%	6.9%	-4.3%	--	--	--	--
HFRX Equity Hedge Index	0.1%	-2.3%	1.4%	11.1%	4.8%	-19.1%	8.9%	13.1%	-25.5%	3.2%
Russell 3000	12.7%	0.5%	12.6%	33.6%	16.4%	1.0%	16.9%	28.3%	-37.3%	5.1%
MSCI ACWI	7.9%	-2.4%	4.2%	22.8%	16.1%	-7.3%	12.7%	34.6%	-42.2%	11.7%
InvestorForce Public DB Hedge Funds Net Rank	55	22	28	1	56	90	--	--	--	--
ABS	-4.3%	4.0%	4.9%	20.6%	5.2%	-3.0%	--	--	--	--
HFRX Equity Hedge Index	0.1%	-2.3%	1.4%	11.1%	4.8%	-19.1%	8.9%	13.1%	-25.5%	3.2%
Russell 3000	12.7%	0.5%	12.6%	33.6%	16.4%	1.0%	16.9%	28.3%	-37.3%	5.1%
MSCI ACWI	7.9%	-2.4%	4.2%	22.8%	16.1%	-7.3%	12.7%	34.6%	-42.2%	11.7%
Parametric Defensive Equity	8.2%	--	--	--	--	--	--	--	--	--
HFRX Equity Hedge Index	0.1%	-2.3%	1.4%	11.1%	4.8%	-19.1%	8.9%	13.1%	-25.5%	3.2%
S&P 500	12.0%	1.4%	13.7%	32.4%	16.0%	2.1%	15.1%	26.5%	-37.0%	5.5%
Real Estate Composite	7.8%	14.2%	13.0%	14.2%	11.0%	13.0%	14.4%	34.9%	-38.6%	-16.2%
Custom Real Estate Benchmark	7.8%	13.9%	11.5%	12.9%	9.8%	15.0%	15.1%	33.7%	-45.0%	-11.1%
NFI	7.8%	13.9%	11.5%	12.9%	9.8%	15.0%	15.3%	-30.4%	-10.7%	14.8%
InvestorForce All DB Real Estate Priv Net Rank	50	36	19	22	30	60	43	2	99	99
American Realty Advisors	6.1%	14.3%	10.6%	11.3%	10.2%	13.8%	--	--	--	--
NFI	7.8%	13.9%	11.5%	12.9%	9.8%	15.0%	15.3%	-30.4%	-10.7%	14.8%
Morgan Stanley	9.2%	14.6%	14.2%	16.2%	11.7%	16.5%	--	--	--	--
NFI	7.8%	13.9%	11.5%	12.9%	9.8%	15.0%	15.3%	-30.4%	-10.7%	14.8%
UBS	6.2%	11.7%	10.4%	9.2%	--	--	--	--	--	--
NFI	7.8%	13.9%	11.5%	12.9%	9.8%	15.0%	15.3%	-30.4%	-10.7%	14.8%

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$1,724.2 Million and 100.0% of Fund

Ending July 31, 2017

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Infrastructure Composite	3.5%	3.6%	-0.4%	6.6%	10.9%	7.6%	--	--	--	--
<i>CPI +4%</i>	6.2%	4.8%	4.8%	5.6%	5.8%	7.1%	5.6%	6.8%	4.1%	8.2%
IFM	6.1%	5.4%	1.1%	6.5%	11.5%	6.7%	--	--	--	--
<i>CPI +4%</i>	6.2%	4.8%	4.8%	5.6%	5.8%	7.1%	5.6%	6.8%	4.1%	8.2%
J.P. Morgan Infrastructure	1.1%	2.2%	-1.5%	6.9%	10.1%	6.7%	--	--	--	--
<i>CPI +4%</i>	6.2%	4.8%	4.8%	5.6%	5.8%	7.1%	5.6%	6.8%	4.1%	8.2%

Total Fund Composite

Fee Schedule

Market Value: \$1,724.2 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	0.04% on the first \$200 million 0.02% on the Balance	0.04% \$38,282	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% \$246,236	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	0.22% \$256,192	0.51%
Large-Cap Core	Mellon Capital	0.04% on the first \$200 million 0.02% on the Balance	0.04% \$38,652	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	0.80% \$397,776	0.79%
Mid-Cap Growth	Vanguard S&P Mid-Cap 400 Growth	0.08% on the Balance	0.08% \$37,027	0.22%
Small-Cap Value	Silvercrest Asset Management	0.65% on the first \$50 million 0.55% on the Balance	0.65% \$327,041	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	0.66% \$349,201	0.82%
Non-U.S. All-Cap Core	NTGI ACWI Ex-US IMI	0.08% on the Balance	0.08% \$182,477	0.10%
Non-U.S. Small-Cap Value	Segall Bryant & Hamill Intl Sm Cap	0.85% on the Balance	0.85% \$585,727	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% \$546,374	0.90%
Hedged Equity Hedge FoF	ABS	0.85% on the Balance *redemptions quarterly with 45 days notice	0.85% \$596,619	1.00%
Long/Short Hedge Fund	Parametric Defensive Equity	0.35% on the Balance	0.35% \$314,195	1.69%
Core Real Estate	American Realty Advisors	0.95% on the Balance	0.95% \$388,121	1.01%

Total Fund Composite

Fee Schedule

Market Value: \$1,724.2 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% \$830,894	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% \$347,262	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% \$785,248	2.00%
Core Infrastructure	J.P. Morgan Infrastructure	1.00% on the Balance Performance Fee: 15% with 7% Hurdle	1.00% \$782,174	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	0.77% \$276,000	1.40%
U.S. Private Equity FoF	Siguler Guff III	0.89% on commitment	2.37% \$355,200	3.33%
U.S. Private Equity FoF	Mesirow VI	0.70% on commitment	1.45% \$210,000	2.59%
Cash Overlay	Northern Trust	0.07% on the first \$100 million 0.06% on the next \$150 million 0.05% on the Balance	0.07% \$18,623	0.16%
Total Investment Management Fees			0.49% \$8,366,001	0.78%
Custodian	BNY Mellon	\$100,000 Annual Fee (approximate)	\$100,000	N/A
Total Fund			0.49% \$8,466,001	

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

² Source: 2016 Marquette Associates Investment Management Fee Study.