



Pension Plan

Employees' Retirement System
of Milwaukee County
Monthly Update
April 30, 2019

Investment Manager	Asset Class	Status	Reason
NTGI Agg Bond Index	Core Fixed Income	In Compliance	---
Galliard	Core Fixed Income	In Compliance	---
Boston Partners	Large-Cap Value	In Compliance	---
NTGI S&P 500 (Index)	Large-Cap Core	In Compliance	---
NTGI S&P 400 Mid-Cap (Index)	Mid-Cap Core	In Compliance	---
Silvercrest Asset Management	Small-Cap Value	In Compliance	---
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	Termination	Professional Turnover
QMA Emerging Markets Small Cap	Emerging Markets	In Compliance	---
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	---
Siguler Guff II	U.S. Private Equity FoF	In Compliance	---
Siguler Guff III	U.S. Private Equity FoF	In Compliance	---
Adams Street	U.S. Private Equity FoF	In Compliance	---
Mesirow VI	U.S. Private Equity FoF	In Compliance	---
Mesirow Private Equity Fund VII-A	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: \$1,684.0 Million and 100.0% of Fund

Ending April 30, 2019

	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
Total Fund Composite		1,683,996,767	-49,890,703	100.0	100.0	0
Fixed Income Composite		311,791,138	-4,006,466	18.5	23.0	-75,528,119
NTGI Agg Bond Index	Core Fixed Income	105,335,114	-4,005,759	6.3		
Galliard	Core Fixed Income	206,447,262	-857	12.3		
U.S. Equity Composite		385,466,124	-9,007,383	22.9	23.0	-1,853,132
Boston Partners	Large-Cap Value	95,211,500	-539	5.7	5.5	2,591,678
NTGI S&P 500 (Index)	Large-Cap Core	134,844,231	-1,599	8.0	8.0	124,489
NTGI S&P 400 Mid-Cap (Index)	Mid-Cap Core	111,305,108	-9,005,111	6.6	7.0	-6,574,666
Silvercrest Asset Management	Small-Cap Value	44,105,286	-133	2.6	2.5	2,005,367
International Equity Composite		270,091,100	-33,130,161	16.0	15.5	9,071,601
NTGI ACWI Ex-US IMI (Index)	Non-U.S. All-Cap Core	171,637,046	-15,019,967	10.2	12.0	-30,442,566
Segall Bryant & Hamill Intl Sm Cap	Non-U.S. Small-Cap Value	43,259,578	-18,000,000	2.6	2.5	1,159,659
OFI Institutional Asset Management	Emerging Markets	40,708,816	-82,488	2.4	1.5	15,448,865
QMA Emerging Markets Small Cap	Emerging Markets	14,485,659	-27,707	0.9	1.0	-2,354,308
Hedged Equity Composite		157,542,727	0	9.4	8.5	14,403,002
ABS	Hedged Equity Hedge FoF	73,884,139	0	4.4	4.0	6,524,268
Parametric Defensive Equity	Long/Short Hedge Fund	83,658,588	0	5.0	4.5	7,878,733
Real Estate Composite		183,206,377	-2,343,049	10.9	10.0	14,806,700
American Realty Advisors	Core Real Estate	42,221,222	-631,753	2.5		
Morgan Stanley	Core Real Estate	98,415,038	-1,258,920	5.8		
UBS	Core Real Estate	42,570,118	-452,376	2.5		
Infrastructure Composite		150,929,683	-176,985	9.0	10.0	-17,469,993
IFM	Core Infrastructure	78,976,440	0	4.7		
J.P. Morgan Infrastructure	Core Infrastructure	71,953,244	-176,985	4.3		

TCW Emerging Markets Debt has not yet been funded but a 5% allocation is included in the Policy % under the Fixed Income Composite

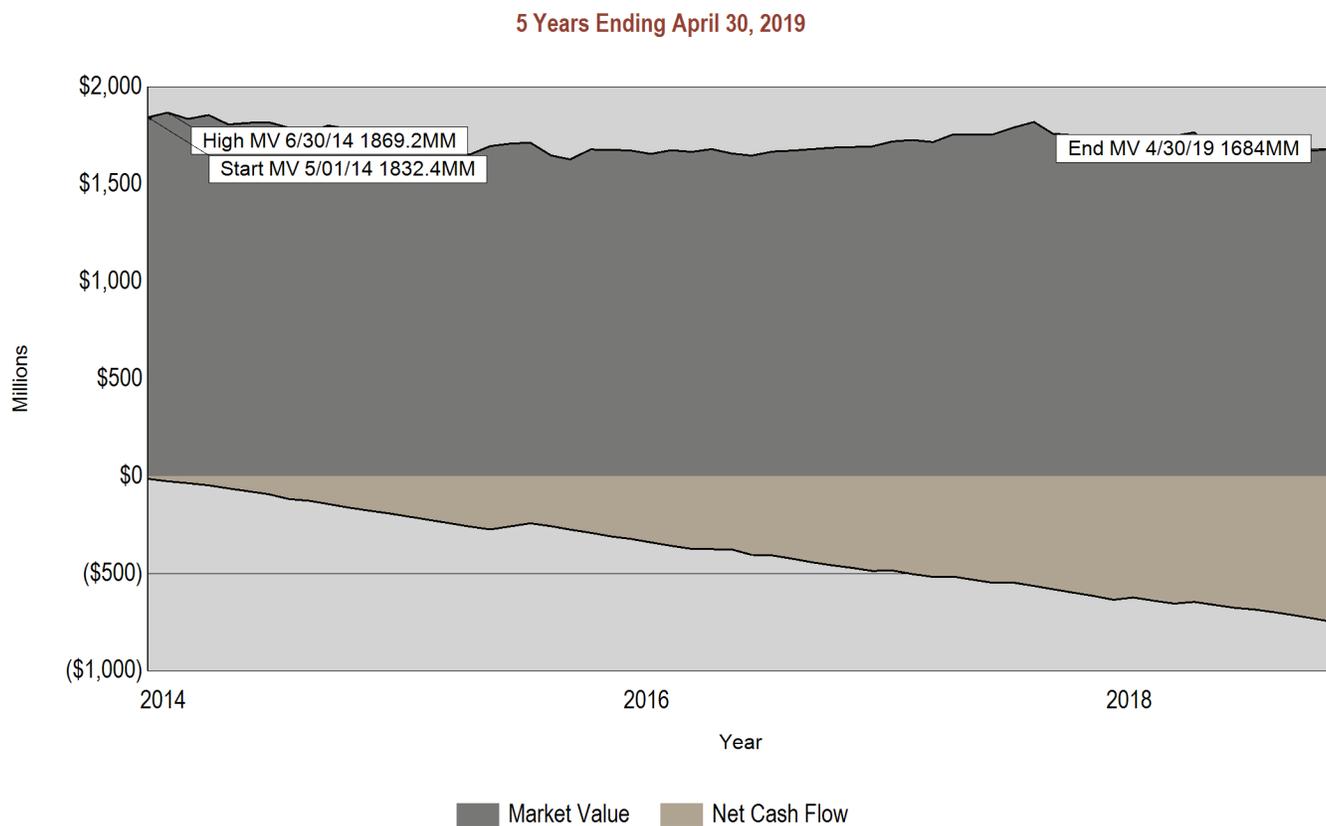
Total Fund Composite

Market Value: \$1,684.0 Million and 100.0% of Fund

Ending April 30, 2019

	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
Private Equity Composite		185,497,506	589,572	11.0	10.0	17,097,830
Progress	U.S. Private Equity FoF	398	0	0.0		
Brinson 1998	U.S. Private Equity FoF	8,057	0	0.0		
Brinson 1999	U.S. Private Equity FoF	38,641	0	0.0		
Brinson 2000	U.S. Private Equity FoF	96,829	0	0.0		
Brinson 2001	U.S. Private Equity FoF	264,661	-147,854	0.0		
Brinson 2002	U.S. Private Equity FoF	117,431	0	0.0		
Brinson 2003	U.S. Private Equity FoF	232,122	0	0.0		
Brinson 2004	U.S. Private Equity FoF	317,611	0	0.0		
Adams Street 2005	U.S. Private Equity FoF	2,022,810	-205,284	0.1		
Adams Street 2009	U.S. Private Equity FoF	23,028,433	-918,684	1.4		
Adams Street 2012	Global Divers. Private Equity FoF	35,072,967	-1,445,687	2.1		
Adams Street Co-Investment III	Private Equity Co- Investment	35,375,553	0	2.1		
Siguler Guff II	U.S. Private Equity FoF	30,878,610	-1,759,219	1.8		
Siguler Guff III	U.S. Private Equity FoF	24,577,318	2,866,301	1.5		
Mesirov VI	U.S. Private Equity FoF	25,824,881	600,000	1.5		
Mesirov Private Equity Fund VII-A	U.S. Private Equity FoF	7,641,184	1,600,000	0.5		
Total Cash Equivalents		39,472,112	-1,816,231	2.3	0.0	39,472,112

Market Value: \$1,684.0 Million and 100.0% of Fund



Summary of Cash Flows

	Last Month	Year-To-Date	One Year	Three Years	Five Years
Beginning Market Value	\$1,673,816,129	\$1,619,796,133	\$1,738,157,866	\$1,678,229,348	\$1,832,364,515
Net Cash Flow	-\$17,427,719	-\$64,278,976	-\$133,994,970	-\$436,494,100	-\$740,923,597
Net Investment Change	\$27,608,357	\$128,479,610	\$79,833,871	\$442,261,518	\$592,555,849
Ending Market Value	\$1,683,996,767	\$1,683,996,767	\$1,683,996,767	\$1,683,996,767	\$1,683,996,767

Total Fund Composite

Annualized Performance (Net of Fees)

Market Value: \$1,684.0 Million and 100.0% of Fund

Ending April 30, 2019

	1 Mo	YTD	3 Mo	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs
Total Fund Composite	1.6%	7.9%	3.9%	4.6%	7.8%	8.7%	6.8%	6.8%	7.9%	9.3%
<i>Total Fund Benchmark</i>	1.5%	8.1%	3.7%	3.5%	6.5%	7.9%	5.7%	5.9%	7.3%	8.9%
Fixed Income Composite	0.1%	3.6%	2.3%	5.7%	2.8%	1.8%	2.1%	2.6%	2.4%	4.4%
<i>BBgBarc US Aggregate TR</i>	0.0%	3.0%	1.9%	5.3%	2.4%	1.9%	2.1%	2.6%	2.3%	3.7%
U.S. Equity Composite	4.2%	17.3%	7.6%	8.3%	9.9%	12.5%	8.8%	9.4%	11.6%	14.1%
<i>Wilshire 5000 Total Market</i>	4.0%	18.7%	9.2%	12.8%	12.9%	14.8%	11.0%	11.4%	13.4%	15.3%
International Equity Composite	2.6%	13.0%	4.8%	-6.5%	4.6%	7.4%	3.9%	3.4%	6.0%	7.9%
<i>MSCI ACWI ex USA</i>	2.6%	13.2%	5.3%	-3.2%	5.9%	8.1%	2.9%	2.8%	5.4%	7.7%
Hedged Equity Composite	2.2%	8.8%	4.8%	4.4%	5.5%	6.7%	3.8%	5.1%	6.4%	--
<i>HFRX Equity Hedge Index</i>	0.7%	6.7%	2.6%	-4.0%	1.4%	3.1%	0.1%	1.1%	2.4%	1.8%
<i>Russell 3000</i>	4.0%	18.6%	9.2%	12.7%	12.9%	14.7%	10.8%	11.2%	13.4%	15.3%
<i>MSCI ACWI</i>	3.4%	16.0%	7.5%	5.1%	9.5%	11.4%	6.8%	7.0%	9.1%	11.1%
Real Estate Composite	0.0%	1.1%	1.1%	6.6%	7.2%	7.3%	8.7%	9.6%	10.5%	14.5%
<i>Custom Real Estate Benchmark</i>	0.0%	1.2%	0.8%	5.9%	6.6%	6.8%	8.1%	9.0%	9.6%	14.4%
<i>NFI</i>	0.0%	1.2%	0.8%	5.9%	6.6%	6.8%	8.1%	9.0%	9.6%	8.1%
Infrastructure Composite	0.0%	2.3%	2.3%	9.4%	13.8%	11.1%	10.2%	7.5%	7.5%	--
<i>CPI +4%</i>	0.9%	3.1%	2.5%	6.1%	6.3%	6.3%	6.0%	5.6%	5.6%	5.9%
Private Equity Composite	0.0%	0.6%	0.6%	11.8%	14.7%	14.4%	12.4%	11.4%	10.9%	12.4%
<i>Cambridge Associates All PE</i>	0.0%	0.0%	0.0%	5.7%	11.8%	12.7%	10.7%	10.5%	12.1%	13.6%

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$1,684.0 Million and 100.0% of Fund

Ending April 30, 2019

	1 Mo	YTD	3 Mo	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs
Total Fund Composite	1.6%	7.9%	3.9%	4.6%	7.8%	8.7%	6.8%	6.8%	7.9%	9.3%
<i>Total Fund Benchmark</i>	1.5%	8.1%	3.7%	3.5%	6.5%	7.9%	5.7%	5.9%	7.3%	8.9%
Fixed Income Composite	0.1%	3.6%	2.3%	5.7%	2.8%	1.8%	2.1%	2.6%	2.4%	4.4%
<i>BBgBarc US Aggregate TR</i>	0.0%	3.0%	1.9%	5.3%	2.4%	1.9%	2.1%	2.6%	2.3%	3.7%
NTGI Agg Bond Index	0.0%	3.0%	1.9%	--	--	--	--	--	--	--
<i>BBgBarc US Aggregate TR</i>	0.0%	3.0%	1.9%	5.3%	2.4%	1.9%	2.1%	2.6%	2.3%	3.7%
Galliard	0.2%	4.0%	2.5%	6.0%	3.1%	--	--	--	--	--
<i>BBgBarc US Aggregate TR</i>	0.0%	3.0%	1.9%	5.3%	2.4%	1.9%	2.1%	2.6%	2.3%	3.7%
U.S. Equity Composite	4.2%	17.3%	7.6%	8.3%	9.9%	12.5%	8.8%	9.4%	11.6%	14.1%
<i>Wilshire 5000 Total Market</i>	4.0%	18.7%	9.2%	12.8%	12.9%	14.8%	11.0%	11.4%	13.4%	15.3%
Boston Partners	3.8%	13.6%	5.3%	4.3%	9.1%	11.7%	7.8%	8.4%	12.0%	14.1%
<i>Russell 1000 Value</i>	3.5%	15.9%	7.5%	9.1%	8.3%	11.0%	8.0%	8.3%	11.9%	13.8%
NTGI S&P 500 (Index)	4.1%	18.3%	9.5%	--	--	--	--	--	--	--
<i>S&P 500</i>	4.0%	18.2%	9.5%	13.5%	13.4%	14.9%	11.3%	11.6%	13.6%	15.3%
NTGI S&P 400 Mid-Cap (Index)	4.0%	19.1%	7.8%	7.1%	--	--	--	--	--	--
<i>S&P 400 MidCap</i>	4.0%	19.1%	7.8%	7.0%	8.4%	12.3%	8.8%	9.5%	12.1%	15.1%
Silvercrest Asset Management	5.7%	17.6%	6.4%	3.7%	4.7%	11.5%	8.4%	8.4%	--	--
<i>Russell 2000 Value</i>	3.8%	16.2%	4.7%	2.2%	4.3%	11.5%	7.5%	6.9%	10.4%	12.9%
International Equity Composite	2.6%	13.0%	4.8%	-6.5%	4.6%	7.4%	3.9%	3.4%	6.0%	7.9%
<i>MSCI ACWI ex USA</i>	2.6%	13.2%	5.3%	-3.2%	5.9%	8.1%	2.9%	2.8%	5.4%	7.7%
NTGI ACWI Ex-US IMI (Index)	2.9%	13.5%	5.4%	-3.2%	6.0%	8.3%	3.4%	3.3%	--	--
<i>MSCI ACWI ex USA IMI</i>	2.6%	13.2%	5.2%	-4.0%	5.7%	7.9%	3.0%	3.0%	5.5%	8.1%
Segall Bryant & Hamill Intl Sm Cap	1.8%	10.2%	2.1%	-17.1%	-1.8%	--	--	--	--	--
<i>MSCI EAFE Small Cap</i>	3.0%	14.0%	5.5%	-7.9%	5.2%	7.8%	6.0%	5.3%	8.7%	11.5%
OFI Institutional Asset Management	3.0%	16.2%	7.0%	0.6%	10.2%	12.9%	5.7%	4.5%	--	--
<i>MSCI Emerging Markets</i>	2.1%	12.2%	3.2%	-5.0%	7.5%	11.3%	3.1%	4.0%	3.2%	7.5%
QMA Emerging Markets Small Cap	0.2%	9.7%	2.6%	--	--	--	--	--	--	--
<i>MSCI Emerging Markets Small Cap</i>	0.2%	8.0%	2.5%	-12.1%	1.5%	5.5%	-0.2%	1.7%	2.9%	8.2%

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$1,684.0 Million and 100.0% of Fund

Ending April 30, 2019

	1 Mo	YTD	3 Mo	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs
Hedged Equity Composite	2.2%	8.8%	4.8%	4.4%	5.5%	6.7%	3.8%	5.1%	6.4%	--
<i>HFRX Equity Hedge Index</i>	0.7%	6.7%	2.6%	-4.0%	1.4%	3.1%	0.1%	1.1%	2.4%	1.8%
<i>Russell 3000</i>	4.0%	18.6%	9.2%	12.7%	12.9%	14.7%	10.8%	11.2%	13.4%	15.3%
<i>MSCI ACWI</i>	3.4%	16.0%	7.5%	5.1%	9.5%	11.4%	6.8%	7.0%	9.1%	11.1%
ABS	2.7%	8.5%	4.6%	1.5%	4.3%	5.5%	2.5%	3.9%	5.6%	--
<i>HFRX Equity Hedge Index</i>	0.7%	6.7%	2.6%	-4.0%	1.4%	3.1%	0.1%	1.1%	2.4%	1.8%
<i>Russell 3000</i>	4.0%	18.6%	9.2%	12.7%	12.9%	14.7%	10.8%	11.2%	13.4%	15.3%
<i>MSCI ACWI</i>	3.4%	16.0%	7.5%	5.1%	9.5%	11.4%	6.8%	7.0%	9.1%	11.1%
Parametric Defensive Equity	1.8%	9.0%	4.9%	7.1%	6.7%	8.1%	--	--	--	--
<i>HFRX Equity Hedge Index</i>	0.7%	6.7%	2.6%	-4.0%	1.4%	3.1%	0.1%	1.1%	2.4%	1.8%
<i>S&P 500</i>	4.0%	18.2%	9.5%	13.5%	13.4%	14.9%	11.3%	11.6%	13.6%	15.3%
Real Estate Composite	0.0%	1.1%	1.1%	6.6%	7.2%	7.3%	8.7%	9.6%	10.5%	14.5%
<i>Custom Real Estate Benchmark</i>	0.0%	1.2%	0.8%	5.9%	6.6%	6.8%	8.1%	9.0%	9.6%	14.4%
<i>NFI</i>	0.0%	1.2%	0.8%	5.9%	6.6%	6.8%	8.1%	9.0%	9.6%	8.1%
American Realty Advisors	0.0%	1.5%	1.5%	7.2%	7.1%	6.6%	8.0%	8.8%	9.4%	--
<i>NFI</i>	0.0%	1.2%	0.8%	5.9%	6.6%	6.8%	8.1%	9.0%	9.6%	8.1%
Morgan Stanley	0.0%	1.3%	1.3%	7.2%	8.0%	8.4%	9.7%	10.6%	11.6%	--
<i>NFI</i>	0.0%	1.2%	0.8%	5.9%	6.6%	6.8%	8.1%	9.0%	9.6%	8.1%
UBS	-0.2%	0.3%	0.5%	4.8%	5.5%	5.3%	6.7%	7.5%	7.9%	--
<i>NFI</i>	0.0%	1.2%	0.8%	5.9%	6.6%	6.8%	8.1%	9.0%	9.6%	8.1%
Infrastructure Composite	0.0%	2.3%	2.3%	9.4%	13.8%	11.1%	10.2%	7.5%	7.5%	--
<i>CPI +4%</i>	0.9%	3.1%	2.5%	6.1%	6.3%	6.3%	6.0%	5.6%	5.6%	5.9%
IFM	0.1%	2.7%	2.6%	13.8%	17.7%	15.4%	13.5%	10.4%	9.8%	--
<i>CPI +4%</i>	0.9%	3.1%	2.5%	6.1%	6.3%	6.3%	6.0%	5.6%	5.6%	5.9%
J.P. Morgan Infrastructure	0.0%	1.9%	1.9%	5.0%	9.9%	6.9%	7.0%	4.7%	5.4%	--
<i>CPI +4%</i>	0.9%	3.1%	2.5%	6.1%	6.3%	6.3%	6.0%	5.6%	5.6%	5.9%

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$1,684.0 Million and 100.0% of Fund

Ending April 30, 2019

	1 Mo	YTD	3 Mo	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs
Private Equity Composite	0.0%	0.6%	0.6%	11.8%	14.7%	14.4%	12.4%	11.4%	10.9%	12.4%
Cambridge Associates All PE	0.0%	0.0%	0.0%	5.7%	11.8%	12.7%	10.7%	10.5%	12.1%	13.6%
Progress	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.5%	0.6%	-1.4%
Cambridge Associates All PE	0.0%	0.0%	0.0%	5.7%	11.8%	12.7%	10.7%	10.5%	12.1%	13.6%
Brinson 1998	0.0%	0.0%	0.0%	3.3%	2.3%	1.1%	2.1%	1.5%	1.9%	1.8%
Cambridge Associates All PE	0.0%	0.0%	0.0%	5.7%	11.8%	12.7%	10.7%	10.5%	12.1%	13.6%
Brinson 1999	0.0%	0.0%	0.0%	2.7%	1.4%	-0.2%	3.3%	-1.2%	1.5%	3.8%
Cambridge Associates All PE	0.0%	0.0%	0.0%	5.7%	11.8%	12.7%	10.7%	10.5%	12.1%	13.6%
Brinson 2000	0.0%	0.0%	0.0%	3.8%	7.7%	4.7%	3.6%	0.9%	1.8%	5.2%
Cambridge Associates All PE	0.0%	0.0%	0.0%	5.7%	11.8%	12.7%	10.7%	10.5%	12.1%	13.6%
Brinson 2001	0.0%	0.0%	0.0%	0.4%	2.9%	3.3%	-0.3%	-0.1%	3.2%	6.1%
Cambridge Associates All PE	0.0%	0.0%	0.0%	5.7%	11.8%	12.7%	10.7%	10.5%	12.1%	13.6%
Brinson 2002	0.0%	0.0%	0.0%	-10.2%	-6.2%	-1.8%	0.2%	-2.7%	0.4%	6.1%
Cambridge Associates All PE	0.0%	0.0%	0.0%	5.7%	11.8%	12.7%	10.7%	10.5%	12.1%	13.6%
Brinson 2003	0.0%	0.0%	0.0%	-0.7%	5.6%	6.7%	4.6%	6.2%	7.9%	8.2%
Cambridge Associates All PE	0.0%	0.0%	0.0%	5.7%	11.8%	12.7%	10.7%	10.5%	12.1%	13.6%
Brinson 2004	0.0%	0.0%	0.0%	15.3%	11.8%	11.0%	7.2%	6.0%	7.9%	11.2%
Cambridge Associates All PE	0.0%	0.0%	0.0%	5.7%	11.8%	12.7%	10.7%	10.5%	12.1%	13.6%
Adams Street 2005	0.0%	0.0%	0.0%	-1.1%	5.3%	6.6%	5.3%	5.7%	7.2%	9.9%
Cambridge Associates All PE	0.0%	0.0%	0.0%	5.7%	11.8%	12.7%	10.7%	10.5%	12.1%	13.6%
Adams Street 2009	0.0%	0.0%	0.0%	8.2%	13.5%	13.1%	11.9%	12.2%	11.9%	15.9%
Cambridge Associates All PE	0.0%	0.0%	0.0%	5.7%	11.8%	12.7%	10.7%	10.5%	12.1%	13.6%
Adams Street 2012	0.0%	0.0%	0.0%	12.0%	14.3%	13.1%	11.5%	10.3%	--	--
Cambridge Associates All PE	0.0%	0.0%	0.0%	5.7%	11.8%	12.7%	10.7%	10.5%	12.1%	13.6%
Adams Street Co-Investment III	0.0%	0.0%	0.0%	13.9%	18.7%	21.7%	14.9%	--	--	--
Cambridge Associates All PE	0.0%	0.0%	0.0%	5.7%	11.8%	12.7%	10.7%	10.5%	12.1%	13.6%
Siguler Guff II	0.0%	1.8%	1.8%	11.5%	14.1%	14.7%	13.1%	12.4%	--	--
Cambridge Associates All PE	0.0%	0.0%	0.0%	5.7%	11.8%	12.7%	10.7%	10.5%	12.1%	13.6%
Siguler Guff III	0.0%	2.3%	2.3%	20.3%	16.6%	15.2%	--	--	--	--
Cambridge Associates All PE	0.0%	0.0%	0.0%	5.7%	11.8%	12.7%	10.7%	10.5%	12.1%	13.6%
Mesirow VI	0.0%	0.0%	0.0%	11.7%	15.9%	14.5%	10.2%	--	--	--
Cambridge Associates All PE	0.0%	0.0%	0.0%	5.7%	11.8%	12.7%	10.7%	10.5%	12.1%	13.6%
Mesirow Private Equity Fund VII-A	0.0%	0.0%	0.0%	-8.2%	--	--	--	--	--	--
Cambridge Associates All PE	0.0%	0.0%	0.0%	5.7%	11.8%	12.7%	10.7%	10.5%	12.1%	13.6%

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$1,684.0 Million and 100.0% of Fund

Ending April 30, 2019

	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
Total Fund Composite	-2.4%	16.1%	7.0%	2.3%	5.4%	15.4%	11.2%	0.3%	12.2%	18.4%
Total Fund Benchmark	-3.7%	14.3%	7.6%	1.1%	5.3%	15.0%	10.8%	1.0%	12.5%	20.0%
InvestorForce Public DB Net Rank	9	21	63	2	53	45	61	57	50	54
Fixed Income Composite	-0.1%	2.9%	2.5%	1.1%	5.6%	-1.4%	4.7%	7.3%	6.8%	15.3%
BBgBarc US Aggregate TR	0.0%	3.5%	2.6%	0.5%	6.0%	-2.0%	4.2%	7.8%	6.5%	5.9%
InvestorForce Public DB Total Fix Inc Net Rank	46	75	70	20	17	51	61	27	67	35
NTGI Agg Bond Index	--	--	--	--	--	--	--	--	--	--
BBgBarc US Aggregate TR	0.0%	3.5%	2.6%	0.5%	6.0%	-2.0%	4.2%	7.8%	6.5%	5.9%
eV US Core Fixed Inc Net Rank	--	--	--	--	--	--	--	--	--	--
Galliard	-0.1%	--	--	--	--	--	--	--	--	--
BBgBarc US Aggregate TR	0.0%	3.5%	2.6%	0.5%	6.0%	-2.0%	4.2%	7.8%	6.5%	5.9%
eV US Core Fixed Inc Net Rank	42	--	--	--	--	--	--	--	--	--
U.S. Equity Composite	-8.4%	18.5%	12.9%	-0.7%	9.5%	34.4%	16.2%	-1.4%	19.2%	32.0%
Wilshire 5000 Total Market	-5.3%	21.0%	13.4%	0.7%	12.7%	33.1%	16.1%	1.0%	17.2%	28.3%
InvestorForce Public DB US Eq Net Rank	88	85	45	64	73	44	40	82	31	22
Boston Partners	-8.8%	19.7%	14.5%	-4.1%	11.6%	36.8%	21.0%	1.1%	13.4%	26.7%
Russell 1000 Value	-8.3%	13.7%	17.3%	-3.8%	13.5%	32.5%	17.5%	0.4%	15.5%	19.7%
eV US Large Cap Value Equity Net Rank	48	25	43	61	48	27	7	40	52	39
NTGI S&P 500 (Index)	--	--	--	--	--	--	--	--	--	--
S&P 500	-4.4%	21.8%	12.0%	1.4%	13.7%	32.4%	16.0%	2.1%	15.1%	26.5%
eV US Large Cap Core Equity Net Rank	--	--	--	--	--	--	--	--	--	--
NTGI S&P 400 Mid-Cap (Index)	-11.0%	--	--	--	--	--	--	--	--	--
S&P 400 MidCap	-11.1%	16.2%	20.7%	-2.2%	9.8%	33.5%	17.9%	-1.7%	26.6%	37.4%
eV US Mid Cap Core Equity Net Rank	51	--	--	--	--	--	--	--	--	--
Silvercrest Asset Management	-15.8%	11.9%	29.1%	-2.4%	5.1%	--	--	--	--	--
Russell 2000 Value	-12.9%	7.8%	31.7%	-7.5%	4.2%	34.5%	18.0%	-5.5%	24.5%	20.6%
eV US Small Cap Value Equity Net Rank	59	38	27	20	50	--	--	--	--	--

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$1,684.0 Million and 100.0% of Fund

Ending April 30, 2019

	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
International Equity Composite	-16.7%	29.6%	4.1%	-2.0%	-2.2%	16.0%	16.5%	-13.0%	12.5%	29.1%
MSCI ACWI ex USA	-14.2%	27.2%	4.5%	-5.7%	-3.9%	15.3%	16.8%	-13.7%	11.2%	41.4%
InvestorForce Public DB ex-US Eq Net Rank	79	30	54	27	24	58	84	39	41	84
NTGI ACWI Ex-US IMI (Index)	-14.3%	27.8%	4.7%	-4.4%	-3.7%	16.1%	--	--	--	--
MSCI ACWI ex USA IMI	-14.8%	27.8%	4.4%	-4.6%	-3.9%	15.8%	17.0%	-14.3%	12.7%	43.6%
eV Non-US Diversified Eq Gross Rank	44	56	23	89	54	86	--	--	--	--
Segall Bryant & Hamill Intl Sm Cap	-24.7%	30.7%	--	--	--	--	--	--	--	--
MSCI EAFE Small Cap	-17.9%	33.0%	2.2%	9.6%	-4.9%	29.3%	20.0%	-15.9%	22.0%	46.8%
eV EAFE Small Cap Equity Net Rank	97	85	--	--	--	--	--	--	--	--
OFI Institutional Asset Management	-12.1%	35.4%	7.1%	-13.6%	-4.6%	--	--	--	--	--
MSCI Emerging Markets	-14.6%	37.3%	11.2%	-14.9%	-2.2%	-2.6%	18.2%	-18.4%	18.9%	78.5%
Diversified Emerging Mkts MStar MF Rank	11	57	56	48	76	--	--	--	--	--
QMA Emerging Markets Small Cap	--	--	--	--	--	--	--	--	--	--
MSCI Emerging Markets Small Cap	-18.6%	33.8%	2.3%	-6.8%	1.0%	1.0%	22.2%	-27.2%	27.2%	113.8%
eV Emg Mkts Small Cap Equity Net Rank	--	--	--	--	--	--	--	--	--	--
Hedged Equity Composite	-4.6%	12.0%	1.7%	2.1%	5.2%	19.1%	6.9%	-4.3%	--	--
HFRX Equity Hedge Index	-9.4%	10.0%	0.1%	-2.3%	1.4%	11.1%	4.8%	-19.1%	8.9%	13.1%
Russell 3000	-5.2%	21.1%	12.7%	0.5%	12.6%	33.6%	16.4%	1.0%	16.9%	28.3%
MSCI ACWI	-9.4%	24.0%	7.9%	-2.4%	4.2%	22.8%	16.1%	-7.3%	12.7%	34.6%
InvestorForce Public DB Hedge Funds Net Rank	81	2	55	22	28	1	56	90	--	--
ABS	-6.4%	12.7%	-4.3%	4.0%	4.9%	20.6%	5.2%	-3.0%	--	--
HFRX Equity Hedge Index	-9.4%	10.0%	0.1%	-2.3%	1.4%	11.1%	4.8%	-19.1%	8.9%	13.1%
Russell 3000	-5.2%	21.1%	12.7%	0.5%	12.6%	33.6%	16.4%	1.0%	16.9%	28.3%
MSCI ACWI	-9.4%	24.0%	7.9%	-2.4%	4.2%	22.8%	16.1%	-7.3%	12.7%	34.6%
Parametric Defensive Equity	-2.9%	11.7%	8.2%	--	--	--	--	--	--	--
HFRX Equity Hedge Index	-9.4%	10.0%	0.1%	-2.3%	1.4%	11.1%	4.8%	-19.1%	8.9%	13.1%
S&P 500	-4.4%	21.8%	12.0%	1.4%	13.7%	32.4%	16.0%	2.1%	15.1%	26.5%

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$1,684.0 Million and 100.0% of Fund

Ending April 30, 2019

	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
Real Estate Composite	7.5%	7.5%	7.8%	14.2%	13.0%	14.2%	11.0%	13.0%	14.4%	34.9%
Custom Real Estate Benchmark	7.4%	6.7%	7.8%	13.9%	11.5%	12.9%	9.8%	15.0%	15.1%	33.7%
NFI	7.4%	6.7%	7.8%	13.9%	11.5%	12.9%	9.8%	15.0%	15.3%	-30.4%
InvestorForce All DB Real Estate Priv Net Rank	42	28	50	36	19	22	30	60	43	2
American Realty Advisors	7.7%	7.1%	6.1%	14.3%	10.6%	11.3%	10.2%	13.8%	--	--
NFI	7.4%	6.7%	7.8%	13.9%	11.5%	12.9%	9.8%	15.0%	15.3%	-30.4%
Morgan Stanley	8.0%	8.8%	9.2%	14.6%	14.2%	16.2%	11.7%	16.5%	--	--
NFI	7.4%	6.7%	7.8%	13.9%	11.5%	12.9%	9.8%	15.0%	15.3%	-30.4%
UBS	6.1%	5.3%	6.2%	11.7%	10.4%	9.2%	--	--	--	--
NFI	7.4%	6.7%	7.8%	13.9%	11.5%	12.9%	9.8%	15.0%	15.3%	-30.4%
Infrastructure Composite	13.1%	17.7%	3.5%	3.6%	-0.4%	6.6%	10.9%	7.6%	--	--
CPI +4%	6.0%	6.2%	6.2%	4.8%	4.8%	5.6%	5.8%	7.1%	5.6%	6.8%
IFM	20.2%	21.1%	6.1%	5.4%	1.1%	6.5%	11.5%	6.7%	--	--
CPI +4%	6.0%	6.2%	6.2%	4.8%	4.8%	5.6%	5.8%	7.1%	5.6%	6.8%
J.P. Morgan Infrastructure	6.3%	14.3%	1.1%	2.2%	-1.5%	6.9%	10.1%	6.7%	--	--
CPI +4%	6.0%	6.2%	6.2%	4.8%	4.8%	5.6%	5.8%	7.1%	5.6%	6.8%
Private Equity Composite	15.4%	16.0%	10.8%	6.7%	11.2%	9.8%	11.6%	8.6%	18.0%	12.1%
Cambridge Associates All PE	10.5%	19.3%	9.8%	7.3%	11.3%	20.7%	12.7%	8.2%	19.6%	14.0%
Progress	0.0%	0.0%	0.0%	0.0%	13.0%	-7.0%	44.1%	-28.4%	2.7%	-22.3%
Cambridge Associates All PE	10.5%	19.3%	9.8%	7.3%	11.3%	20.7%	12.7%	8.2%	19.6%	14.0%
Brinson 1998	3.6%	1.0%	-0.8%	3.8%	0.7%	1.0%	5.2%	-12.4%	5.7%	6.1%
Cambridge Associates All PE	10.5%	19.3%	9.8%	7.3%	11.3%	20.7%	12.7%	8.2%	19.6%	14.0%
Brinson 1999	3.2%	1.1%	-2.0%	7.5%	-13.5%	14.7%	5.8%	3.3%	8.1%	5.5%
Cambridge Associates All PE	10.5%	19.3%	9.8%	7.3%	11.3%	20.7%	12.7%	8.2%	19.6%	14.0%
Brinson 2000	6.4%	8.4%	-2.9%	1.0%	-7.3%	7.1%	5.2%	8.3%	10.7%	14.8%
Cambridge Associates All PE	10.5%	19.3%	9.8%	7.3%	11.3%	20.7%	12.7%	8.2%	19.6%	14.0%
Brinson 2001	0.5%	7.5%	-5.3%	-4.4%	6.5%	16.5%	9.2%	5.6%	11.9%	13.2%
Cambridge Associates All PE	10.5%	19.3%	9.8%	7.3%	11.3%	20.7%	12.7%	8.2%	19.6%	14.0%
Brinson 2002	-14.9%	3.3%	11.1%	-0.3%	-8.6%	17.2%	7.1%	8.4%	23.5%	14.5%
Cambridge Associates All PE	10.5%	19.3%	9.8%	7.3%	11.3%	20.7%	12.7%	8.2%	19.6%	14.0%
Brinson 2003	1.7%	12.2%	2.7%	5.4%	15.3%	21.3%	2.6%	-3.2%	11.0%	12.0%
Cambridge Associates All PE	10.5%	19.3%	9.8%	7.3%	11.3%	20.7%	12.7%	8.2%	19.6%	14.0%
Brinson 2004	15.4%	11.4%	4.4%	-0.8%	4.3%	18.4%	7.2%	13.8%	24.5%	11.4%
Cambridge Associates All PE	10.5%	19.3%	9.8%	7.3%	11.3%	20.7%	12.7%	8.2%	19.6%	14.0%

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$1,684.0 Million and 100.0% of Fund

Ending April 30, 2019

	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
Adams Street 2005	0.5%	13.2%	4.9%	5.2%	7.9%	15.8%	10.2%	8.3%	17.8%	11.5%
<i>Cambridge Associates All PE</i>	10.5%	19.3%	9.8%	7.3%	11.3%	20.7%	12.7%	8.2%	19.6%	14.0%
Adams Street 2009	12.4%	18.6%	8.2%	9.9%	16.3%	16.1%	7.0%	14.2%	29.6%	--
<i>Cambridge Associates All PE</i>	10.5%	19.3%	9.8%	7.3%	11.3%	20.7%	12.7%	8.2%	19.6%	14.0%
Adams Street 2012	16.1%	16.8%	5.9%	6.3%	11.0%	0.9%	--	--	--	--
<i>Cambridge Associates All PE</i>	10.5%	19.3%	9.8%	7.3%	11.3%	20.7%	12.7%	8.2%	19.6%	14.0%
Adams Street Co-Investment III	22.5%	15.5%	28.9%	-2.8%	--	--	--	--	--	--
<i>Cambridge Associates All PE</i>	10.5%	19.3%	9.8%	7.3%	11.3%	20.7%	12.7%	8.2%	19.6%	14.0%
Siguler Guff II	12.9%	15.5%	13.9%	6.9%	13.1%	-0.2%	--	--	--	--
<i>Cambridge Associates All PE</i>	10.5%	19.3%	9.8%	7.3%	11.3%	20.7%	12.7%	8.2%	19.6%	14.0%
Siguler Guff III	19.1%	10.9%	--	--	--	--	--	--	--	--
<i>Cambridge Associates All PE</i>	10.5%	19.3%	9.8%	7.3%	11.3%	20.7%	12.7%	8.2%	19.6%	14.0%
Mesirow VI	16.3%	19.9%	7.4%	-2.6%	--	--	--	--	--	--
<i>Cambridge Associates All PE</i>	10.5%	19.3%	9.8%	7.3%	11.3%	20.7%	12.7%	8.2%	19.6%	14.0%
Mesirow Private Equity Fund VII-A	--	--	--	--	--	--	--	--	--	--
<i>Cambridge Associates All PE</i>	10.5%	19.3%	9.8%	7.3%	11.3%	20.7%	12.7%	8.2%	19.6%	14.0%

Total Fund Composite

Fee Schedule

Market Value: \$1,684.0 Million and 100.0% of Fund

Asset Class	Investment Manager	Fee Schedule	Expense Ratio & Estimated Annual Fee ¹	Industry Average ²
Core Fixed Income	NTGI Agg Bond Index	0.0175% on the Balance	0.0175% \$18,434	0.28%
Core Fixed Income	Gallard	0.20% on the first \$50 million 0.15% on the next \$50 million 0.10% on the Balance	0.14% \$281,447	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	0.24% \$230,317	0.51%
Large-Cap Core	NTGI S&P 500 (Index)	0.005% on the Balance	0.005% \$6,742	0.05%
Mid-Cap Core	NTGI S&P 400 Mid-Cap (Index)	0.01% on the Balance	0.01% \$11,131	0.22%
Small-Cap Value	Silvercrest Asset Management	0.65% on the first \$50 million 0.55% on the Balance	0.65% \$286,684	0.96%
Non-U.S. All-Cap Core	NTGI ACWI Ex-US IMI (Index)	0.04% on the Balance	0.04% \$68,655	0.10%
Non-U.S. Small-Cap Value	Segall Bryant & Hamill Intl Sm Cap	0.85% on the Balance	0.85% \$367,706	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	0.85% \$346,025	0.95%
Emerging Markets	QMA Emerging Markets Small Cap	0.80% on the Balance	0.80% \$115,885	1.25%
Hedged Equity Hedge FoF	ABS	0.85% on the Balance *redemptions quarterly with 45 days notice	0.85% \$628,015	1.00%
Long/Short Hedge Fund	Parametric Defensive Equity	0.325% on the first \$50 million 0.30% on the next \$50 million 0.275% on the Balance	0.31% \$263,476	1.69%
Core Real Estate	American Realty Advisors	0.95% on the Balance	0.95% \$401,102	1.01%
Core Real Estate	Morgan Stanley	0.90% on the Balance	0.90% \$885,735	1.01%

Total Fund Composite

Fee Schedule

Market Value: \$1,684.0 Million and 100.0% of Fund

Asset Class	Investment Manager	Fee Schedule	Expense Ratio & Estimated Annual Fee ¹	Industry Average ²
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	0.85% \$360,689	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% \$766,071	2.00%
Core Infrastructure	J.P. Morgan Infrastructure	1.00% on the Balance Performance Fee: 15% with 7% Hurdle	1.00% \$719,532	2.00%
Private Equity	Siguler Guff III	0.67% on the first \$50 million 0.60% on the Balance 10% carry on secondaries and co-invest	0.64% \$614,451	1.25%
U.S. Private Equity FoF	Siguler Guff II	0.69% on commitment	0.89% \$276,000	1.62%
U.S. Private Equity FoF	Adams Street	0.89% on commitment	1.45% \$355,200	2.03%
U.S. Private Equity FoF	Mesirow VI	0.70% on commitment	0.81% \$210,000	1.45%
U.S. Private Equity FoF	Mesirow Private Equity Fund VII-A	0.70% on commitment	3.66% \$280,000	6.54%
Cash Overlay	Northern Trust - Cash Overlay	0.07% on the first \$100 million 0.06% on the next \$150 million 0.05% on the Balance	0.07% \$21,297	0.16%
Total Investment Management Fees			0.45% \$7,514,595	0.79%
Custodian	Northern Trust	\$150,000 Annual Fee (approximate)	\$150,000	N/A
Total Fund			0.46% \$7,664,595	