



#### **Pension Plan**

Employees' Retirement System
of Milwaukee County
Monthly Update
October 31, 2019

#### Manager Status

Market Value: \$1,689.5 Million and 100.0% of Fund

Investment Manager	Asset Class	Status	Reason
Galliard	Core Fixed Income	In Compliance	
NTGI Agg Bond Index	Core Fixed Income	In Compliance	
TCW Emerging Markets Debt	EM 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	Alert	Performance
QMA Emerging Markets Small Cap	Emerging Markets	In Compliance	
ABS	Hedged Equity Hedge FoF	In Compliance	
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	Alert	Performance
IFM	Core Infrastructure	In Compliance	
J.P. Morgan Infrastructure	Core Infrastructure	In Compliance	
Adams Street - Private Equity	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	
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.

Market Value: \$1,689.5 Million and 100.0% of Fund

	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
Total Fund Composite		1,689,498,138	-28,579,857	100.0	100.0	0
Fixed Income Composite		361,928,100	-18,000,663	21.4	23.0	-26,656,471
NTGI Agg Bond Index	Core Fixed Income	103,390,201	-8,000,000	6.1	6.0	2,020,312
Galliard	Core Fixed Income	208,382,099	-10,000,663	12.3	14.0	-28,147,640
TCW Emerging Markets Debt	EM Fixed Income	50,146,932	0	3.0	3.0	-538,012
U.S. Equity Composite		381,221,603	-730	22.6	23.0	-7,362,968
Boston Partners	Large-Cap Value	97,737,448	-552	5.8	5.5	4,815,050
NTGI S&P 500 (Index)	Large-Cap Core	134,394,254	0	8.0	8.0	-765,598
NTGI S&P 400 Mid-Cap (Index)	Mid-Cap Core	111,435,390	0	6.6	7.0	-6,829,480
Silvercrest Asset Management	Small-Cap Value	37,654,512	-179	2.2	2.5	-4,582,941
International Equity Composite		232,303,742	-44,929	13.7	15.5	-29,568,469
NTGI ACWI Ex-US IMI (Index)	Non-U.S. All-Cap Core	175,055,667	-17,169	10.4	12.0	-27,684,110
Segall Bryant & Hamill Intl Sm Cap	Non-U.S. Small-Cap Value	43,259,578	0	2.6	2.5	1,022,125
QMA Emerging Markets Small Cap	Emerging Markets	13,988,498	-27,760	0.8	1.0	-2,906,484
Hedged Equity Composite		140,275,429	0	8.3	8.5	-3,331,913
ABS	Hedged Equity Hedge FoF	74,321,943	0	4.4	4.0	6,742,018
Parametric Defensive Equity	Long/Short Hedge Fund	65,953,486	0	3.9	4.5	-10,073,930
Real Estate Composite		179,235,582	-5,459,104	10.6	10.0	10,285,768
American Realty Advisors	Core Real Estate	42,206,763	-633,482	2.5		
Morgan Stanley	Core Real Estate	99,660,279	-1,282,668	5.9		
UBS	Core Real Estate	37,368,540	-3,542,954	2.2		
Infrastructure Composite		160,151,219	-186,210	9.5	10.0	-8,798,594
IFM	Core Infrastructure	83,764,733	0	5.0		
J.P. Morgan Infrastructure	Core Infrastructure	76,386,487	-186,210	4.5		

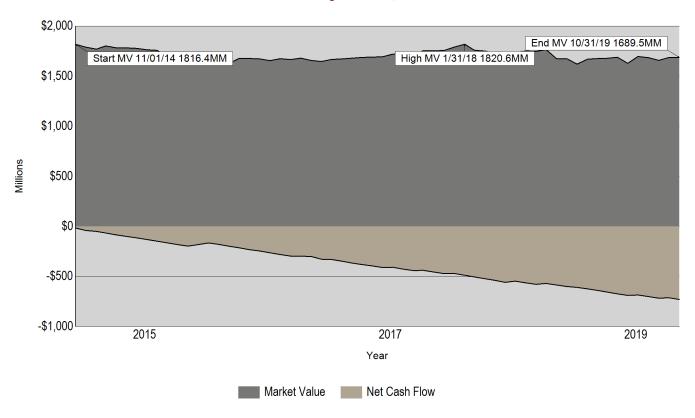
Market Value: \$1,689.5 Million and 100.0% of Fund

	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
Private Equity Composite		196,916,826	-312,638	11.7	10.0	27,967,012
Brinson 1998	U.S. Private Equity FoF	8,059	0	0.0		
Brinson 1999	U.S. Private Equity FoF	35,648	0	0.0		
Brinson 2000	U.S. Private Equity FoF	98,225	0	0.0		
Brinson 2001	U.S. Private Equity FoF	272,495	0	0.0		
Brinson 2002	U.S. Private Equity FoF	119,708	0	0.0		
Brinson 2003	U.S. Private Equity FoF	218,155	-16,342	0.0		
Brinson 2004	U.S. Private Equity FoF	244,598	-76,727	0.0		
Adams Street 2005	U.S. Private Equity FoF	1,978,696	-270,911	0.1		
Adams Street 2009	U.S. Private Equity FoF	23,513,049	-841,419	1.4		
Adams Street 2012	Global Divers. Private Equity FoF	36,007,464	-1,779,132	2.1		
Adams Street Co-Investment III	Private Equity Co- Investment	34,248,709	-631,982	2.0		
Siguler Guff II	U.S. Private Equity FoF	28,895,102	195,239	1.7		
Siguler Guff III	U.S. Private Equity FoF	28,958,557	758,636	1.7		
Mesirow VI	U.S. Private Equity FoF	29,232,879	-1,050,000	1.7		
Mesirow Private Equity Fund VII-A	U.S. Private Equity FoF	13,085,084	3,400,000	0.8		
Total Cash Equivalents		37,465,635	-4,575,583	2.2	0.0	37,465,635

# Market Value History

Market Value: \$1,689.5 Million and 100.0% of Fund

#### 5 Years Ending October 31, 2019



## **Summary of Cash Flows**

	Last Month	Year-To-Date	One Year	Three Years	Five Years
<b>Beginning Market Value</b>	\$1,687,563,904	\$1,621,888,253	\$1,675,587,308	\$1,658,530,895	\$1,816,390,539
Net Cash Flow	-\$16,297,360	-\$119,317,547	-\$143,031,362	-\$424,619,590	-\$719,728,671
Net Investment Change	\$18,231,593	\$186,927,431	\$156,942,191	\$455,586,833	\$592,836,270
<b>Ending Market Value</b>	\$1,689,498,138	\$1,689,498,138	\$1,689,498,138	\$1,689,498,138	\$1,689,498,138

# Annualized Performance (Net of Fees)

Market Value: \$1,689.5 Million and 100.0% of Fund

					•					
	1 Mo	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs
Total Fund Composite	1.1%	1.8%	11.6%	9.6%	5.9%	9.0%	7.6%	6.9%	8.1%	8.2%
Total Fund Benchmark	1.1%	1.6%	11.7%	8.8%	4.9%	7.9%	7.0%	6.1%	7.5%	7.8%
Fixed Income Composite	0.3%	1.9%	9.2%	11.4%	4.6%	3.1%	3.3%	3.2%	2.8%	3.8%
BBgBarc US Aggregate TR	0.3%	2.4%	8.8%	11.5%	4.5%	3.3%	3.6%	3.2%	2.7%	3.7%
U.S. Equity Composite	1.8%	1.5%	20.0%	10.8%	6.7%	12.3%	9.4%	8.3%	12.0%	12.3%
Wilshire 5000 Total Market	2.2%	1.9%	22.7%	13.5%	10.0%	14.5%	12.0%	10.5%	13.7%	13.6%
International Equity Composite	3.8%	3.8%	14.3%	9.8%	-1.0%	6.9%	5.7%	4.1%	5.9%	5.4%
MSCI ACWI ex USA	3.5%	2.9%	15.5%	11.3%	1.0%	8.1%	6.1%	3.8%	5.5%	4.9%
Hedged Equity Composite	0.8%	1.0%	10.9%	7.4%	3.6%	6.5%	4.9%	4.8%	6.7%	
HFRX Equity Hedge Index	0.5%	1.2%	8.4%	3.2%	0.0%	3.2%	1.7%	1.2%	2.7%	1.2%
Russell 3000	2.2%	1.8%	22.7%	13.5%	10.0%	14.5%	11.8%	10.3%	13.6%	13.6%
MSCI ACWI	2.7%	2.4%	19.4%	12.6%	5.8%	11.3%	8.9%	7.1%	9.4%	8.8%
Real Estate Composite	0.0%	1.2%	2.7%	4.6%	6.1%	6.5%	7.1%	8.6%	9.9%	11.1%
Custom Real Estate Benchmark	0.0%	0.7%	3.1%	4.1%	5.8%	6.1%	6.8%	8.1%	9.2%	11.1%
NFI	0.0%	0.7%	3.1%	4.1%	5.8%	6.1%	6.8%	8.1%	9.2%	10.0%
Infrastructure Composite	0.0%	3.0%	8.6%	11.8%	13.0%	13.1%	10.6%	8.7%	7.8%	
CPI +4%	0.0%	0.7%	5.2%	5.2%	5.9%	6.0%	5.9%	5.6%	5.5%	5.8%
Private Equity Composite	0.0%	-0.1%	6.8%	10.6%	14.8%	14.5%	12.6%	11.7%	11.4%	12.0%
Cambridge Associates All PE	0.0%	0.0%	8.9%	8.1%	11.5%	13.5%	12.4%	11.5%	12.8%	13.2%

## Annualized Performance (Net of Fees)

Market Value: \$1,689.5 Million and 100.0% of Fund

					-iiaiiig O	OLOBOI O	1, 2010			
	1 Mo	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs
Total Fund Composite	1.1%	1.8%	11.6%	9.6%	5.9%	9.0%	7.6%	6.9%	8.1%	8.2%
Total Fund Benchmark	1.1%	1.6%	11.7%	8.8%	4.9%	7.9%	7.0%	6.1%	7.5%	7.8%
Fixed Income Composite	0.3%	1.9%	9.2%	11.4%	4.6%	3.1%	3.3%	3.2%	2.8%	3.8%
BBgBarc US Aggregate TR	0.3%	2.4%	8.8%	11.5%	4.5%	3.3%	3.6%	3.2%	2.7%	3.7%
NTGI Agg Bond Index	0.3%	2.3%	8.9%							
BBgBarc US Aggregate TR	0.3%	2.4%	8.8%	11.5%	4.5%	3.3%	3.6%	3.2%	2.7%	3.7%
Galliard	0.3%	2.3%	9.8%	11.9%	4.9%				_	
BBgBarc US Aggregate TR	0.3%	2.4%	8.8%	11.5%	4.5%	3.3%	3.6%	3.2%	2.7%	3.7%
TCW Emerging Markets Debt	0.6%	-0.4%								
JP Morgan EMBI Global TR	0.4%	0.6%	12.5%	13.7%	3.8%	4.5%	6.2%	4.8%	4.1%	6.5%
U.S. Equity Composite	1.8%	1.5%	20.0%	10.8%	6.7%	12.3%	9.4%	8.3%	12.0%	12.3%
Wilshire 5000 Total Market	2.2%	1.9%	22.7%	13.5%	10.0%	14.5%	12.0%	10.5%	13.7%	13.6%
Boston Partners	1.6%	1.9%	16.5%	7.0%	5.6%	11.8%	9.1%	7.5%	11.8%	12.2%
Russell 1000 Value	1.4%	1.9%	19.5%	11.2%	7.0%	10.5%	9.5%	7.6%	11.6%	12.0%
NTGI S&P 500 (Index)	2.2%	2.4%	23.2%						_	
S&P 500	2.2%	2.4%	23.2%	14.3%	10.8%	14.9%	12.2%	10.8%	13.9%	13.7%
NTGI S&P 400 Mid-Cap (Index)	1.1%	-0.1%	19.3%	9.1%	5.0%				-	-
S&P 400 MidCap	1.1%	-0.1%	19.2%	9.0%	4.9%	10.8%	9.6%	8.4%	12.1%	13.2%
Silvercrest Asset Management	2.6%	2.1%	19.7%	8.7%	1.6%	9.5%	8.8%	7.6%		
Russell 2000 Value	2.4%	1.7%	15.5%	3.2%	1.3%	8.6%	8.6%	6.2%	9.9%	11.1%
International Equity Composite	3.8%	3.8%	14.3%	9.8%	-1.0%	6.9%	5.7%	4.1%	5.9%	5.4%
MSCI ACWI ex USA	3.5%	2.9%	15.5%	11.3%	1.0%	8.1%	6.1%	3.8%	5.5%	4.9%
NTGI ACWI Ex-US IMI (Index)	3.6%	3.8%	15.8%	11.4%	1.1%	8.2%	6.4%	4.3%	5.9%	-
MSCI ACWI ex USA IMI	3.6%	3.0%	15.4%	10.9%	0.8%	7.9%	6.1%	4.0%	5.6%	5.2%
Segall Bryant & Hamill Intl Sm Cap	4.7%	5.1%	10.2%	0.2%	-7.7%	2.4%			-	
MSCI EAFE Small Cap	4.5%	4.8%	17.1%	8.8%	0.2%	8.6%	7.1%	7.4%	9.2%	8.1%
QMA Emerging Markets Small Cap	3.7%	0.0%	6.0%	8.5%						
MSCI Emerging Markets Small Cap	3.8%	0.6%	5.7%	9.7%	-4.7%	3.1%	3.5%	1.0%	2.6%	3.5%

<sup>\*</sup>Certain values have been lagged including: ABS, American Realty, MS Prime, UBS Real Estate, JPM Infra, Siguler Guff II and Siguler Guff III are valued as of September 30, 2019. Mesirow VI & VII-A and AdamsStreet Private Equity are valued as of June 30, 2019. All lagged values have been updated for corresponding cash flows.

## Annualized Performance (Net of Fees)

Market Value: \$1,689.5 Million and 100.0% of Fund

					5		,			
	1 Mo	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs
Hedged Equity Composite	0.8%	1.0%	10.9%	7.4%	3.6%	6.5%	4.9%	4.8%	6.7%	
HFRX Equity Hedge Index	0.5%	1.2%	8.4%	3.2%	0.0%	3.2%	1.7%	1.2%	2.7%	1.2%
Russell 3000	2.2%	1.8%	22.7%	13.5%	10.0%	14.5%	11.8%	10.3%	13.6%	13.6%
MSCI ACWI	2.7%	2.4%	19.4%	12.6%	5.8%	11.3%	8.9%	7.1%	9.4%	8.8%
ABS	0.0%	-0.3%	9.1%	6.0%	1.4%	5.1%	2.6%	3.4%	5.8%	-
HFRX Equity Hedge Index	0.5%	1.2%	8.4%	3.2%	0.0%	3.2%	1.7%	1.2%	2.7%	1.2%
Russell 3000	2.2%	1.8%	22.7%	13.5%	10.0%	14.5%	11.8%	10.3%	13.6%	13.6%
MSCI ACWI	2.7%	2.4%	19.4%	12.6%	5.8%	11.3%	8.9%	7.1%	9.4%	8.8%
Parametric Defensive Equity	1.6%	2.5%	12.8%	8.9%	5.8%	8.0%	7.4%	-		
HFRX Equity Hedge Index	0.5%	1.2%	8.4%	3.2%	0.0%	3.2%	1.7%	1.2%	2.7%	1.2%
S&P 500	2.2%	2.4%	23.2%	14.3%	10.8%	14.9%	12.2%	10.8%	13.9%	13.7%
Real Estate Composite	0.0%	1.2%	2.7%	4.6%	6.1%	6.5%	7.1%	8.6%	9.9%	11.1%
Custom Real Estate Benchmark	0.0%	0.7%	3.1%	4.1%	5.8%	6.1%	6.8%	8.1%	9.2%	11.1%
NFI	0.0%	0.7%	3.1%	4.1%	5.8%	6.1%	6.8%	8.1%	9.2%	10.0%
American Realty Advisors	0.0%	1.2%	4.0%	5.8%	6.6%	6.6%	6.9%	8.1%	9.0%	
NFI	0.0%	0.7%	3.1%	4.1%	5.8%	6.1%	6.8%	8.1%	9.2%	10.0%
Morgan Stanley	0.0%	1.4%	4.6%	6.6%	7.4%	7.9%	8.4%	9.9%	11.1%	-
NFI	0.0%	0.7%	3.1%	4.1%	5.8%	6.1%	6.8%	8.1%	9.2%	10.0%
UBS	-0.2%	0.7%	-3.0%	-1.3%	2.6%	3.2%	4.3%	5.8%	6.7%	-
NFI	0.0%	0.7%	3.1%	4.1%	5.8%	6.1%	6.8%	8.1%	9.2%	10.0%
Infrastructure Composite	0.0%	3.0%	8.6%	11.8%	13.0%	13.1%	10.6%	8.7%	7.8%	-
CPI +4%	0.0%	0.7%	5.2%	5.2%	5.9%	6.0%	5.9%	5.6%	5.5%	5.8%
IFM	0.0%	2.5%	8.9%	12.6%	17.4%	17.4%	13.9%	11.8%	10.0%	
CPI +4%	0.0%	0.7%	5.2%	5.2%	5.9%	6.0%	5.9%	5.6%	5.5%	5.8%
J.P. Morgan Infrastructure	0.0%	3.5%	8.2%	10.9%	8.6%	8.9%	7.3%	5.7%	5.8%	
CPI +4%	0.0%	0.7%	5.2%	5.2%	5.9%	6.0%	5.9%	5.6%	5.5%	5.8%
Private Equity Composite	0.0%	-0.1%	6.8%	10.6%	14.8%	14.5%	12.6%	11.7%	11.4%	12.0%
Cambridge Associates All PE	0.0%	0.0%	8.9%	8.1%	11.5%	13.5%	12.4%	11.5%	12.8%	13.2%
Brinson 1998	0.0%	0.0%	0.0%	0.9%	2.1%	1.4%	1.3%	1.7%	1.5%	0.5%
Cambridge Associates All PE	0.0%	0.0%	8.9%	8.1%	11.5%	13.5%	12.4%	11.5%	12.8%	13.2%
Brinson 1999	0.0%	0.0%	-7.7%	-9.8%	-1.8%	-2.0%	-1.0%	-1.8%	0.1%	1.8%
Cambridge Associates All PE	0.0%	0.0%	8.9%	8.1%	11.5%	13.5%	12.4%	11.5%	12.8%	13.2%

<sup>\*</sup>Certain values have been lagged including: ABS, American Realty, MS Prime, UBS Real Estate, JPM Infra, Siguler Guff II and Siguler Guff III are valued as of September 30, 2019. Mesirow VI & VII-A and AdamsStreet Private Equity are valued as of June 30, 2019. All lagged values have been updated for corresponding cash flows.

## Annualized Performance (Net of Fees)

Market Value: \$1,689.5 Million and 100.0% of Fund

					Linding O	Clobel 3	1, 2013			
	1 Mo	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs
Brinson 2000	0.0%	0.0%	1.4%	-3.8%	5.8%	5.2%	4.3%	2.2%	1.7%	4.5%
Cambridge Associates All PE	0.0%	0.0%	8.9%	8.1%	11.5%	13.5%	12.4%	11.5%	12.8%	13.2%
Brinson 2001	0.0%	0.0%	2.1%	-5.9%	4.0%	2.1%	2.7%	0.3%	3.2%	5.4%
Cambridge Associates All PE	0.0%	0.0%	8.9%	8.1%	11.5%	13.5%	12.4%	11.5%	12.8%	13.2%
Brinson 2002	0.0%	0.0%	1.9%	-12.9%	-7.7%	-3.6%	0.8%	-0.6%	0.7%	4.8%
Cambridge Associates All PE	0.0%	0.0%	8.9%	8.1%	11.5%	13.5%	12.4%	11.5%	12.8%	13.2%
Brinson 2003	0.0%	0.0%	1.0%	-5.2%	2.4%	4.5%	5.3%	5.7%	8.1%	7.3%
Cambridge Associates All PE	0.0%	0.0%	8.9%	8.1%	11.5%	13.5%	12.4%	11.5%	12.8%	13.2%
Brinson 2004	0.0%	0.0%	1.2%	0.4%	7.1%	9.6%	7.8%	6.4%	8.0%	10.3%
Cambridge Associates All PE	0.0%	0.0%	8.9%	8.1%	11.5%	13.5%	12.4%	11.5%	12.8%	13.2%
Adams Street 2005	0.0%	0.0%	10.7%	4.5%	7.3%	8.0%	7.5%	7.2%	8.6%	9.8%
Cambridge Associates All PE	0.0%	0.0%	8.9%	8.1%	11.5%	13.5%	12.4%	11.5%	12.8%	13.2%
Adams Street 2009	0.0%	0.0%	9.8%	10.4%	14.2%	14.1%	12.6%	13.0%	13.5%	12.6%
Cambridge Associates All PE	0.0%	0.0%	8.9%	8.1%	11.5%	13.5%	12.4%	11.5%	12.8%	13.2%
Adams Street 2012	0.0%	0.0%	7.6%	9.6%	14.0%	14.3%	11.7%	10.9%	8.9%	
Cambridge Associates All PE	0.0%	0.0%	8.9%	8.1%	11.5%	13.5%	12.4%	11.5%	12.8%	13.2%
Adams Street Co-Investment III	0.0%	0.0%	3.5%	11.8%	15.7%	18.6%	16.2%	10.0%		
Cambridge Associates All PE	0.0%	0.0%	8.9%	8.1%	11.5%	13.5%	12.4%	11.5%	12.8%	13.2%
Siguler Guff II	0.0%	-1.0%	3.2%	6.5%	11.1%	12.5%	11.3%	10.9%	9.8%	
Cambridge Associates All PE	0.0%	0.0%	8.9%	8.1%	11.5%	13.5%	12.4%	11.5%	12.8%	13.2%
Siguler Guff III	0.0%	0.5%	6.5%	13.5%	21.0%	14.7%				
Cambridge Associates All PE	0.0%	0.0%	8.9%	8.1%	11.5%	13.5%	12.4%	11.5%	12.8%	13.2%
Mesirow VI	0.0%	0.0%	13.7%	16.6%	21.3%	19.0%	15.2%		-	
Cambridge Associates All PE	0.0%	0.0%	8.9%	8.1%	11.5%	13.5%	12.4%	11.5%	12.8%	13.2%
Mesirow Private Equity Fund VII-A	0.0%	0.0%	0.0%	3.8%						
Cambridge Associates All PE	0.0%	0.0%	8.9%	8.1%	11.5%	13.5%	12.4%	11.5%	12.8%	13.2%

<sup>\*</sup>Certain values have been lagged including: ABS, American Realty, MS Prime, UBS Real Estate, JPM Infra, Siguler Guff II and Siguler Guff III are valued as of September 30, 2019. Mesirow VI & VII-A and AdamsStreet Private Equity are valued as of June 30, 2019. All lagged values have been updated for corresponding cash flows.



# Annualized Performance (Net of Fees)

Market Value: \$1,689.5 Million and 100.0% of Fund

	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
<b>Total Fund Composite</b>	-2.3%	16.1%	7.0%	2.3%	5.4%	15.4%	11.2%	0.3%	12.2%	18.4%
Total Fund Benchmark	-3.8%	14.4%	7.6%	1.2%	5.3%	15.0%	10.8%	1.0%	12.5%	20.0%
InvMetrics Public DB Net Rank	9	21	63	2	53	45	61	57	50	54
Fixed Income Composite	-0.2%	2.8%	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%
InvMetrics Public DB Total Fix Inc Net Rank	48	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	-0.2%				-			-		
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	52									
TCW Emerging Markets Debt										
JP Morgan EMBI Global TR	-4.6%	9.3%	10.2%	1.2%	5.5%	-6.6%	18.5%	8.5%	12.0%	28.2%
eV Emg Mkt Fixed Inc Hedged Net Rank				-						
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%
	-5.3% 88	21.0% 85	13.4% 45	0.7% 64	12.7% 73	33.1% 44	16.1% 40	1.0% 82	17.2% 31	28.3% 22
Wilshire 5000 Total Market										
Wilshire 5000 Total Market InvMetrics Public DB US Eq Net Rank	88	85	45	64	73	44	40	82	31	22
Wilshire 5000 Total Market InvMetrics Public DB US Eq Net Rank Boston Partners	-8.8%	85 19.7%	45 14.5%	64 -4.1%	73 11.6%	44 36.8%	40 21.0%	82 1.1%	31 13.4%	22 26.7%
Wilshire 5000 Total Market InvMetrics Public DB US Eq Net Rank Boston Partners Russell 1000 Value eV US Large Cap Value Equity Net Rank	-8.8% -8.3%	85 19.7% 13.7%	45 14.5% 17.3%	-4.1% -3.8%	73 11.6% 13.5%	36.8% 32.5%	40 21.0% 17.5%	82 1.1% 0.4%	31 13.4% 15.5%	22 26.7% 19.7%
Wilshire 5000 Total Market InvMetrics Public DB US Eq Net Rank Boston Partners Russell 1000 Value eV US Large Cap Value Equity Net	-8.8% -8.3% 48	85 19.7% 13.7% 25	45 14.5% 17.3%	-4.1% -3.8%	73 11.6% 13.5% 48	36.8% 32.5% 27	40 21.0% 17.5%	82 1.1% 0.4% 40	31 13.4% 15.5% 52	22 26.7% 19.7%
Wilshire 5000 Total Market InvMetrics Public DB US Eq Net Rank  Boston Partners Russell 1000 Value eV US Large Cap Value Equity Net Rank  NTGI S&P 500 (Index)	-8.8% -8.3% 48	85 19.7% 13.7% 25	45 14.5% 17.3% 43	-4.1% -3.8% -5.8%	73 11.6% 13.5% 48	36.8% 32.5% 27	40 21.0% 17.5% 7	82 1.1% 0.4% 40	31 13.4% 15.5% 52	22 26.7% 19.7% 39
Wilshire 5000 Total Market InvMetrics Public DB US Eq Net Rank  Boston Partners Russell 1000 Value eV US Large Cap Value Equity Net Rank  NTGI S&P 500 (Index) S&P 500 eV US Large Cap Core Equity Net Rank	-8.8% -8.3% 48	85 19.7% 13.7% 25	45 14.5% 17.3% 43	-4.1% -3.8% -5.8%	73 11.6% 13.5% 48	36.8% 32.5% 27	40 21.0% 17.5% 7	82 1.1% 0.4% 40	31 13.4% 15.5% 52	22 26.7% 19.7% 39
Wilshire 5000 Total Market InvMetrics Public DB US Eq Net Rank  Boston Partners Russell 1000 Value eV US Large Cap Value Equity Net Rank  NTGI S&P 500 (Index) S&P 500 eV US Large Cap Core Equity Net	-8.8% -8.3% 48  -4.4%	85 19.7% 13.7% 25	45 14.5% 17.3% 43	-4.1% -3.8% -5.8%	73 11.6% 13.5% 48	36.8% 32.5% 27	40 21.0% 17.5% 7	82 1.1% 0.4% 40	31 13.4% 15.5% 52	22 26.7% 19.7% 39
Wilshire 5000 Total Market InvMetrics Public DB US Eq Net Rank  Boston Partners Russell 1000 Value eV US Large Cap Value Equity Net Rank  NTGI S&P 500 (Index) S&P 500 eV US Large Cap Core Equity Net Rank  NTGI S&P 400 Mid-Cap (Index)	88 -8.8% -8.3% 484.4%11.0%	85 19.7% 13.7% 25 21.8%	45 14.5% 17.3% 43 12.0%	64 -4.1% -3.8% 61 1.4%	73 11.6% 13.5% 48 13.7%	44 36.8% 32.5% 27  32.4% 	40 21.0% 17.5% 7  16.0%	82 1.1% 0.4% 40  2.1% 	31 13.4% 15.5% 52  15.1% 	22 26.7% 19.7% 39  26.5%
Wilshire 5000 Total Market InvMetrics Public DB US Eq Net Rank  Boston Partners Russell 1000 Value eV US Large Cap Value Equity Net Rank  NTGI S&P 500 (Index) S&P 500 eV US Large Cap Core Equity Net Rank  NTGI S&P 400 Mid-Cap (Index) S&P 400 MidCap	-8.8% -8.3% -4.4%  -11.0% -11.1%	85 19.7% 13.7% 25 21.8% 16.2%	45 14.5% 17.3% 43 12.0%	64 -4.1% -3.8% 61 1.4%	73 11.6% 13.5% 48 13.7% 9.8%	44 36.8% 32.5% 27  32.4% 	40 21.0% 17.5% 7  16.0%  17.9%	82 1.1% 0.4% 40  2.1% 	31 13.4% 15.5% 52  15.1%  26.6%	22 26.7% 19.7% 39  26.5%
Wilshire 5000 Total Market InvMetrics Public DB US Eq Net Rank  Boston Partners Russell 1000 Value eV US Large Cap Value Equity Net Rank  NTGI S&P 500 (Index) S&P 500 eV US Large Cap Core Equity Net Rank  NTGI S&P 400 Mid-Cap (Index) S&P 400 MidCap eV US Mid Cap Core Equity Net Rank	-8.8% -8.3% -48	85 19.7% 13.7% 25 21.8% 16.2%	45 14.5% 17.3% 43 12.0% 20.7%	64 -4.1% -3.8% 61 1.4%2.2%	73 11.6% 13.5% 48 13.7% 9.8%	44 36.8% 32.5% 27 32.4% 33.5%	40 21.0% 17.5% 7 16.0% 17.9%	82 1.1% 0.4% 40  2.1%  -1.7%	31 13.4% 15.5% 52 15.1% 26.6%	22 26.7% 19.7% 39  26.5%  37.4%

# Annualized Performance (Net of Fees)

Market Value: \$1,689.5 Million and 100.0% of Fund

	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%
InvMetrics 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								
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%
InvMetrics 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%
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%
InvMetrics 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%



# Annualized Performance (Net of Fees)

Market Value: \$1,689.5 Million and 100.0% of Fund

					9 •	010001 0	., _0.0			
	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
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	16.7%	16.0%	10.8%	6.7%	11.2%	9.8%	11.6%	8.6%	18.0%	12.1%
Cambridge Associates All PE	10.3%	19.4%	9.9%	7.3%	11.3%	20.8%	12.7%	8.2%	19.7%	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	10.3%	19.4%	9.9%	7.3%	11.3%	20.8%	12.7%	8.2%	19.7%	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	10.3%	19.4%	9.9%	7.3%	11.3%	20.8%	12.7%	8.2%	19.7%	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	10.3%	19.4%	9.9%	7.3%	11.3%	20.8%	12.7%	8.2%	19.7%	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	10.3%	19.4%	9.9%	7.3%	11.3%	20.8%	12.7%	8.2%	19.7%	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	10.3%	19.4%	9.9%	7.3%	11.3%	20.8%	12.7%	8.2%	19.7%	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	10.3%	19.4%	9.9%	7.3%	11.3%	20.8%	12.7%	8.2%	19.7%	14.0%
Brinson 2004	15.4%	11.4%	4.4%	-0.8%	4.3%	18.5%	7.2%	13.8%	24.9%	11.4%
Cambridge Associates All PE	10.3%	19.4%	9.9%	7.3%	11.3%	20.8%	12.7%	8.2%	19.7%	14.0%
Adams Street 2005	0.5%	13.2%	4.9%	5.2%	7.9%	15.8%	10.2%	8.3%	17.8%	11.5%
Cambridge Associates All PE	10.3%	19.4%	9.9%	7.3%	11.3%	20.8%	12.7%	8.2%	19.7%	14.0%
Adams Street 2009	12.4%	18.6%	8.2%	9.9%	16.3%	16.1%	7.0%	11.0%	16.5%	
Cambridge Associates All PE	10.3%	19.4%	9.9%	7.3%	11.3%	20.8%	12.7%	8.2%	19.7%	14.0%
Adams Street 2012	16.1%	16.8%	5.9%	6.3%	11.0%	0.9%				
Cambridge Associates All PE	10.3%	19.4%	9.9%	7.3%	11.3%	20.8%	12.7%	8.2%	19.7%	14.0%
Adams Street Co-Investment III	22.5%	15.5%	28.9%	-2.8%						
Cambridge Associates All PE	10.3%	19.4%	9.9%	7.3%	11.3%	20.8%	12.7%	8.2%	19.7%	14.0%
Siguler Guff II	14.2%	15.5%	13.9%	6.9%	13.1%	-0.2%				
Cambridge Associates All PE	10.3%	19.4%	9.9%	7.3%	11.3%	20.8%	12.7%	8.2%	19.7%	14.0%
Siguler Guff III	23.5%	10.9%								
Cambridge Associates All PE	10.3%	19.4%	9.9%	7.3%	11.3%	20.8%	12.7%	8.2%	19.7%	14.0%

# Annualized Performance (Net of Fees)

Market Value: \$1,689.5 Million and 100.0% of Fund

	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
Mesirow VI	19.3%	19.9%	7.4%	-2.6%						
Cambridge Associates All PE	10.3%	19.4%	9.9%	7.3%	11.3%	20.8%	12.7%	8.2%	19.7%	14.0%
Mesirow Private Equity Fund VII-A										
Cambridge Associates All PE	10.3%	19.4%	9.9%	7.3%	11.3%	20.8%	12.7%	8.2%	19.7%	14.0%

# Fee Schedule

Market Value: \$1,689.5 Million and 100.0% of Fund

Asset Class	Investment Manager	Fee Schedule	Expense Ratio & Estimated Annual Fee <sup>1</sup>	Industry Average <sup>2</sup>
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% \$283,382	0.22%
Core Fixed Income	NTGI Agg Bond Index	0.0175% on the Balance	0.0175% \$18,093	0.25%
EM Fixed Income	TCW Emerging Markets Debt	0.50% on the Balance	0.50% \$250,735	0.56%
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% \$234,106	0.50%
Large-Cap Core	NTGI S&P 500 (Index)	0.005% on the Balance	0.005% \$6,720	0.03%
Mid-Cap Core	NTGI S&P 400 Mid-Cap (Index)	0.01% on the Balance	0.01% \$11,144	0.07%
Small-Cap Value	Silvercrest Asset Management	0.65% on the first \$50 million 0.55% on the Balance	0.65% \$244,754	0.90%
Non-U.S. All-Cap Core	NTGI ACWI Ex-US IMI (Index)	0.04% on the Balance	0.04% \$70,022	0.08%
Non-U.S. Small-Cap Value	Segall Bryant & Hamill Intl Sm Cap	0.85% on the Balance	0.85% \$367,706	1.15%
Emerging Markets	QMA Emerging Markets Small Cap	0.80% on the Balance	0.80% \$111,908	0.90%
Hedged Equity Hedge FoF	ABS	0.85% on the Balance *redemptions quarterly with 45 days notice	0.85% \$631,737	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	0.32% \$210,360	1.50%
Core Real Estate	American Realty Advisors	0.95% on the Balance	0.95% \$400,964	1.00%
Core Real Estate	Morgan Stanley	0.90% on the Balance	0.90% \$896,943	1.00%

# Fee Schedule

Market Value: \$1,689.5 Million and 100.0% of Fund

Asset Class	Investment Manager	Fee Schedule	Expense Ratio & Estimated Annual Fee <sup>1</sup>	Industry Average <sup>2</sup>
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	0.85% \$318,817	1.00%
Core Infrastructure	IFM	0.97% on the Balance Performance Fee: 20% of return above 8% on a rolling three year basis	0.97% \$812,518	1.50%
Core Infrastructure	J.P. Morgan Infrastructure	1.00% on the Balance Performance Fee: 15% with 7% Hurdle	1.00% \$763,865	1.50%
Private Equity	Adams Street - Private Equity	0.67% on the first \$50 million 0.60% on the Balance	0.64% \$615,469	1.00%
U.S. Private Equity FoF	Siguler Guff II	0.69% on commitment	0.96% \$276,000	1.38%
U.S. Private Equity FoF	Siguler Guff III	0.89% on commitment	1.23% \$355,200	1.38%
U.S. Private Equity FoF	Mesirow VI	0.70% on commitment	0.72% \$210,000	1.03%
U.S. Private Equity FoF	Mesirow Private Equity Fund VII-A - U.S	S. Privat 0.70% on commitment	2.14% \$280,000	3.06%
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% \$15,438	0.14%
Total Investment Managemen	nt Fees		0.44% \$7,385,880	0.66%
Custodian	Northern Trust	\$150,000 Annual Fee (approximate)	\$150,000	N/A
Total Fund			0.45% \$7,535,880	

<sup>&</sup>lt;sup>1</sup> Expense Ratio & Estimated Annual Fee are Based on Market Value at Month End.



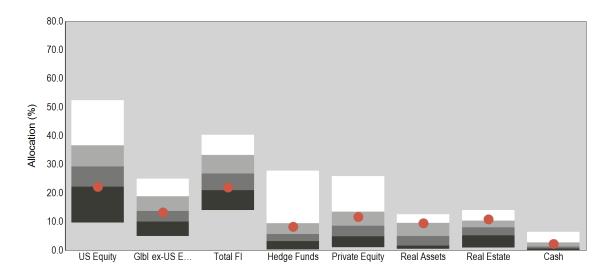
<sup>&</sup>lt;sup>2</sup> Source: 2019 Marquette Associates Investment Management Fee Study.

 $<sup>^{\</sup>rm 3}\,\mathrm{Quoted}$  Custodial Fee does not include Securities Lending Income

# **Total Fund Allocation**

Market Value: \$1,689.5 Million and 100.0% of Fund

#### Total Plan Allocation vs. InvMetrics Public DB Net As of September 30, 2019



5th Percentile
25th Percentile
Median 75th Percentile
95th Percentile
# of Portfolios

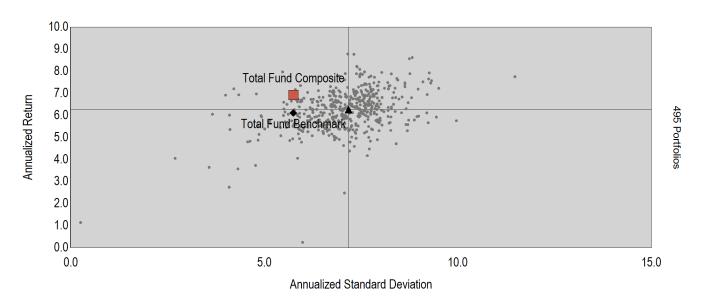
Total Fund Composite

Allocation	n (Rank)															
52.5	,	25.0		40.3		27.8		26.0		12.6		14.1		6.5		
36.7		18.9		33.3		9.5		13.6		9.6		10.4		2.8		
29.3		13.7		26.8		5.7		8.6		5.0		8.1		1.3		
22.2		10.0		21.0		3.2		4.9		1.6		5.2		0.7		
9.7		5.0		14.0		0.4		1.1		0.5		0.9		0.0		
160		206		237		81		111		62		171		228		
22.2	(76)	12.2	(54)	22.0	(73)	Q 3	(20)	117	(31)	0.5	(27)	10.0	(21)	2.3	(32)	

# Annualized Performance (Net of Fees)

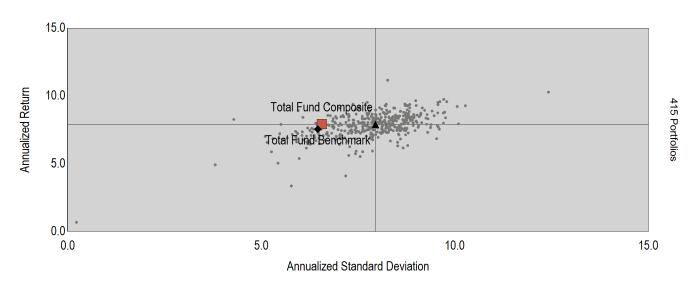
Market Value: \$1,689.5 Million and 100.0% of Fund

# Annualized Return vs. Annualized Standard Deviation 5 Years Ending September 30, 2019



	Anlzd Return	AnIzd Standard Deviation
Total Fund Composite	6.9%	5.8%
Total Fund Benchmark	6.1%	5.7%

#### Annualized Return vs. Annualized Standard Deviation 10 Years Ending September 30, 2019



	Anlzd Return	Anlzd Standard Deviation
Total Fund Composite	7.9%	6.6%
Total Fund Benchmark	7.6%	6.5%

# Performance Summary as of 09/30/2019

## **Private Market Investments Overview**

Investments		Commit	Commitments		utions & utions	Valua	Performance			е	
Investment Name	Vintag e Yr	Commit (\$)	Unfunded Commit (\$)	Contribution (\$)	Distribution (\$)	Valuation (\$)	Total Value (\$)	DPI <sup>T</sup>	VP I	RV PI	IRR (%)
Brinson Partnership Fund-1998 Primary Fund, L.P.	1998	3,000,000	-122,063	3,122,063	4,684,131	8,059	4,692,190	1.50 1	.50	0.00	7.24
Brinson Partnership Fund-1999 Primary Fund, L.P.	1999	2,000,000	-599,812	2,599,812	3,343,506	35,648	3,379,154	1.29 1	.30	0.01	4.26
Brinson Partnership Fund-2000 Primary Fund, L.P.	1999	5,000,000	180,740	4,819,260	7,377,045	98,225	7,475,270	1.53 1	.55	0.02	7.17
Brinson Partnership Fund-2001 Primary Fund, L.P.	2000	5,000,000	506,359	4,493,641	6,947,357	272,495	7,219,852	1.55 1	.61	0.06	7.17
Brinson Partnership Fund-2002 Primary Fund, L.P.	2002	4,000,000	890,417	3,109,583	5,665,447	119,708	5,785,155	1.82 1	.86	0.04	13.15
Brinson Partnership Fund-2003 Primary Fund, L.P.	2003	3,000,000	369,127	2,630,873	4,629,748	218,155	4,847,903	1.76 1	.84	80.0	13.08
Brinson Partnership Fund-2004 Primary Fund, L.P.	2004	3,000,000	617,386	2,382,614	4,092,592	244,598	4,337,190	1.72 1	.82	0.10	9.93
Adams Street Partnership Fund 2005 US Fund, L.P.	2005	10,000,000	502,000	9,498,000	12,254,129	1,978,696	14,232,825	1.29 1	.50	0.21	6.32
Adams Street 2009 Direct Fund, L.P.	2009	30,000,000	2,562,900	27,437,100	24,343,502	23,513,049	47,856,551	0.89 1	.74	0.86	12.68
Adams Street 2012 Global Fund, L.P.	2012	40,000,000	6,524,000	33,476,000	12,044,447	37,786,596	49,831,043	0.36 1	.49	1.13	11.10
Adams Street Co-Investment Fund III , L.P.	2014	30,000,000	3,474,000	26,526,000	4,341,845	34,248,709	38,590,554	0.16 1	.45	1.29	16.44
Siguler Guff Small Buyout Opportunities Fund II, L.P.	2012	40,000,000	2,886,624	37,113,376	28,714,909	29,604,531	58,319,439	0.77 1	.57	0.80	11.70
Siguler Guff Small Buyout Opportunities Fund III, L.P.	2016	40,000,000	14,740,840	26,215,797	5,926,720	28,561,637	34,488,357	0.23 1	.32	1.09	14.74
Mesirow Financial Private Equity Partnership Fund VI, L.P.	2014	30,000,000	7,350,995	22,649,005	3,831,733	29,682,879	33,514,612	0.17 1	.48	1.31	15.46
Mesirow Financial Private Equity Fund VII-A, L.P.	2018	40,000,000	28,572,647	11,427,353	0	11,285,084	11,285,084	0.00 0	.99	0.99	
Total		285,000,000	68,456,160	217,500,477	128,197,110	197,658,069	325,855,179	0.59 1	.50	0.91	10.42

# Performance Summary as of 09/30/2019

## **Private Market Investments Overview**

Investments	(	Commitments	Contributions & Distributions					
Investment Name	Vintag e Year	IRR (1 Yr) (%)	IRR (3 Yrs) (%)	IRR (5 Yrs) (%)	IRR (%)	Prim PME (Long Nickels PME) (%)	Prim PME Primary (Kaplan PME Schoar) Benchmark	
Brinson Partnership Fund-1998 Primary Fund, L.P.	1998	0.93	0.79	1.46	7.24		1.25 MSCI ACWI IMI Net USD	
Brinson Partnership Fund-1999 Primary Fund, L.P.	1999	-9.82	-1.32	-1.65	4.26	3.73	1.02 MSCI ACWI IMI Net USD	
Brinson Partnership Fund-2000 Primary Fund, L.P.	1999	-3.60	5.61	0.31	7.17	3.97	1.13 MSCI ACWI IMI Net USD	
Brinson Partnership Fund-2001 Primary Fund, L.P.	2000	-7.28	1.89	-0.30	7.17	7.00	1.01 MSCI ACWI IMI Net USD	
Brinson Partnership Fund-2002 Primary Fund, L.P.	2002	-12.86	-1.78	1.44	13.15	12.24	1.09 MSCI ACWI ex USA IMI	
Brinson Partnership Fund-2003 Primary Fund, L.P.	2003	-6.09	5.63	7.21	13.08	8.41	1.26 MSCI ACWI IMI Net USD	
Brinson Partnership Fund-2004 Primary Fund, L.P.	2004	0.43	9.89	4.69	9.93	4.70	1.28 MSCI ACWI IMI Net USD	
Adams Street Partnership Fund 2005 US Fund, L.P.	2005	4.01	7.91	6.75	6.32	5.61	1.04 MSCI ACWI IMI Net USD	
Adams Street 2009 Direct Fund, L.P.	2009	10.25	14.09	12.81	12.68	8.77	1.18 MSCI ACWI IMI Net USD	
Adams Street 2012 Global Fund, L.P.	2012	9.53	14.36	11.51	11.10	7.65	1.13 MSCI ACWI IMI Net USD	
Adams Street Co-Investment Fund III , L.P.	2014	11.75	17.40		16.44	8.39	1.19 MSCI ACWI IMI Net USD	
Siguler Guff Small Buyout Opportunities Fund II, L.P.	2012	7.74	13.48	11.27	11.70	13.24	0.96 S&P 500	
Siguler Guff Small Buyout Opportunities Fund III, L.P.	2016	12.42	13.47		14.74	13.26	1.02 S&P 500	
Mesirow Financial Private Equity Partnership Fund VI, L.P.	2014	16.78	19.52		15.46	8.36	1.19 MSCI World	
Mesirow Financial Private Equity Fund VII-A, L.P.	2018						MSCI World	
Total		10.66	14.54	8.20	10.42	8.42	1.08	

#### **DISCLOSURE**

Marquette Associates, Inc. ("Marquette") has prepared this report for the exclusive use by the client for which it was prepared. The information herein was obtained from various sources, such as the client's custodian(s) accounting statements, commercially available databases, and other economic and financial market data sources.

The sources of information used in this report are believed to be reliable. Marquette has not independently verified all of the information in this report and its accuracy cannot be guaranteed. The market commentary, portfolio holdings, and characteristics are as of the date appearing in this material only and are subject to change without prior notice. Past performance does not guarantee future results. No graph, chart, or formula can, in and of itself, be used to determine which securities or investments to buy or sell.

Your custodian does not review whether the management fee is properly calculated. This report may contain data and content provided by third parties. The information contained in this material has been compiled or arrived at from sources believed to be reliable. We urge clients to compare the information set forth in this statement with the statements you receive directly from the custodian in order to ensure accuracy of all account information.

Forward-looking statements, including without limitation any statement or prediction about a future event contained in this presentation, are based on a variety of estimates and assumptions by Marquette, including, but not limited to, estimates of future operating results, the value of assets and market conditions. These estimates and assumptions, including the risk assessments and projections referenced, are inherently uncertain and are subject to numerous business, industry, market, regulatory, geo-political, competitive and financial risks that are outside of Marquette's control. There can be no assurance that the assumptions made in connection with any forward-looking statement will prove accurate, and actual results may differ materially. The inclusion of any forward-looking statement herein should not be regarded as an indication that Marquette considers forward-looking statements to be a reliable prediction of future events.

The views contained herein are those of Marquette and should not be taken as financial advice or a recommendation to buy or sell any security. Any forecasts, figures, opinions or investment techniques and strategies described are intended for informational purposes only. They are based on certain assumptions and current market conditions, and although accurate at the time of writing, are subject to change without prior notice. Opinions, estimates, projections and comments on financial market trends constitute our judgment and are subject to change without notice.