



Pension Plan

Employees' Retirement System
of Milwaukee County
Monthly Update
May 31, 2015

Total Fund Composite

Manager Status

Market Value: \$1,779.4 Million and 100.0% of Fund

Investment Manager	Asset Class	Status	Reason
J.P. Morgan	Core Fixed Income	In Compliance	---
Mellon Capital	Core Fixed Income	In Compliance	---
Boston Partners	Large-Cap Value	In Compliance	---
Mellon Capital	Large-Cap Core	In Compliance	---
Artisan Partners	Mid-Cap Growth	Alert	Performance
Geneva Capital	Mid-Cap Growth	Alert	Performance
Silvercrest Asset Management	Small-Cap Value	In Compliance	---
Fiduciary Management	Small-Cap Value	In Compliance	---
NTGI ACWI Ex-US	Non-U.S. All-Cap Core	In Compliance	---
Vontobel Asset Management	Non-U.S. Large-Cap Core	In Compliance	---
GMO Small-Cap	Non-U.S. Small-Cap Value	In Compliance	---
OFI Institutional Asset Management	Emerging Markets	In Compliance	---
ABS	Hedged Equity Hedge FoF	Alert	Performance
K2	Hedged Equity Hedge FoF	Termination	Organizational Issues
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	Core Infrastructure	In Compliance	---
Adams Street	Private Equity	In Compliance	---
Siguler Guff	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: \$1,779.4 Million and 100.0% of Fund

Ending May 31, 2015

	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
Total Fund Composite		1,779,389,564	-47,856,448	100.0	100.0	0
Fixed Income Composite		334,640,672	-8,000,000	18.8	22.0	-56,825,032
J.P. Morgan	Core Fixed Income	265,356,124	-8,000,000	14.9		
Mellon Capital	Core Fixed Income	69,284,548	0	3.9		
U.S. Equity Composite		461,233,999	-17,400,000	25.9	25.0	16,386,608
Boston Partners	Large-Cap Value	150,024,463	0	8.4	8.0	7,673,298
Mellon Capital	Large-Cap Core	98,490,844	-17,400,000	5.5	6.0	-8,272,530
Artisan Partners	Mid-Cap Growth	48,800,769	0	2.7	2.5	4,316,030
Geneva Capital	Mid-Cap Growth	49,433,794	0	2.8	2.5	4,949,055
Fiduciary Management	Small-Cap Value	57,406,276	0	3.2	3.0	4,024,589
Silvercrest Asset Management	Small-Cap Value	57,077,853	0	3.2	3.0	3,696,166
International Equity Composite		345,301,253	-15,118,034	19.4	20.0	-10,576,660
NTGI ACWI Ex-US	Non-U.S. All-Cap Core	86,415,709	-15,000,000	4.9	6.5	-29,244,612
Vontobel Asset Management	Non-U.S. Large-Cap Core	127,991,910	0	7.2	6.5	12,331,589
GMO Small-Cap	Non-U.S. Small-Cap Value	74,197,003	0	4.2	4.0	3,021,421
OFI Institutional Asset Management	Emerging Markets	56,696,630	-118,034	3.2	3.0	3,314,943
Hedged Equity Composite		192,449,752	-5,000,000	10.8	10.0	14,510,795
ABS	Hedged Equity Hedge FoF	92,969,957	0	5.2	5.0	4,000,478
K2	Hedged Equity Hedge FoF	99,479,795	-5,000,000	5.6	5.0	10,510,317
Real Estate Composite		184,206,178	-2,272,636	10.4	8.5	32,958,065
American Realty Advisors	Core Real Estate	37,826,111	-551,106	2.1		
Morgan Stanley	Core Real Estate	127,864,558	-1,585,039	7.2		
UBS	Core Real Estate	18,515,161	-136,491	1.0		
Infrastructure Composite		147,656,029	-2,546,318	8.3	8.5	-3,592,084
IFM	Core Infrastructure	69,189,581	-267,281	3.9		
J.P. Morgan	Core Infrastructure	78,466,448	-2,279,037	4.4		

Total Fund Composite

Market Value: \$1,779.4 Million and 100.0% of Fund

Ending May 31, 2015

	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
Private Equity Composite		77,102,046	2,583,290	4.3	6.0	-29,661,328
Progress	U.S. Private Equity FoF	25,924	0	0.0		
Brinson 1998	U.S. Private Equity FoF	72,612	0	0.0		
Brinson 1999	U.S. Private Equity FoF	161,319	0	0.0		
Brinson 2000	U.S. Private Equity FoF	590,932	0	0.0		
Brinson 2001	U.S. Private Equity FoF	1,010,237	-221,024	0.1		
Brinson 2002	U.S. Private Equity FoF	550,755	0	0.0		
Brinson 2003	U.S. Private Equity FoF	688,817	-84,519	0.0		
Brinson 2004	U.S. Private Equity FoF	1,037,632	-107,417	0.1		
Adams Street 2005	U.S. Private Equity FoF	5,840,428	-445,543	0.3		
Adams Street 2009	U.S. Private Equity FoF	22,184,148	471,275	1.2		
Adams Street 2012	Global Divers. Private Equity FoF	16,943,075	1,200,000	1.0		
Adams Street Co-Investment III	Private Equity Co- Investment	963,998	0	0.1		
Siguler Guff	U.S. Private Equity FoF	22,983,164	870,518	1.3		
Mesirov VI	U.S. Private Equity FoF	4,049,005	900,000	0.2		
Total Cash Equivalents		36,799,634	-102,749	2.1	0.0	36,799,634

Total Fund Composite

Annualized Performance (Net of Fees)

Market Value: \$1,779.4 Million and 100.0% of Fund

Ending May 31, 2015

	1 Mo	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs
Total Fund Composite	0.5%	1.3%	3.3%	6.0%	9.2%	11.1%	7.5%	9.5%	5.6%	6.6%
<i>Total Fund Benchmark</i>	0.1%	1.1%	3.5%	5.2%	8.6%	10.7%	7.4%	9.6%	5.3%	6.3%
Fixed Income Composite	-0.1%	0.2%	1.4%	3.5%	3.0%	2.5%	3.6%	4.0%	5.2%	5.1%
<i>Barclays Aggregate</i>	-0.2%	-0.1%	1.0%	3.0%	2.9%	2.2%	3.4%	3.9%	4.7%	4.6%
U.S. Equity Composite	1.7%	1.4%	3.8%	11.8%	15.1%	19.1%	12.8%	15.5%	8.6%	8.5%
<i>Wilshire 5000 Total Market</i>	1.3%	0.7%	3.5%	11.7%	16.0%	19.7%	13.9%	16.4%	8.5%	8.4%
International Equity Composite	-0.7%	1.5%	6.2%	-1.2%	7.2%	13.1%	3.6%	8.8%	0.4%	2.7%
<i>MSCI ACWI ex USA</i>	-1.6%	1.7%	7.0%	-0.9%	6.5%	12.6%	3.2%	8.1%	0.6%	6.0%
Hedged Equity Composite	2.0%	2.5%	5.9%	10.2%	10.7%	11.8%	7.3%	7.8%	--	--
<i>HFRX Equity Hedge Index</i>	-0.2%	1.6%	3.2%	4.9%	4.5%	6.6%	1.2%	1.9%	-1.4%	0.9%
<i>Russell 3000</i>	1.4%	0.8%	3.7%	11.9%	16.1%	19.9%	14.1%	16.5%	8.6%	8.4%
<i>MSCI ACWI</i>	-0.1%	1.2%	5.1%	5.1%	11.0%	15.8%	8.0%	11.8%	3.9%	6.8%
Real Estate Composite	0.0%	3.2%	3.2%	13.7%	14.1%	12.9%	12.4%	14.9%	6.0%	7.4%
<i>Custom Real Estate Benchmark</i>	0.0%	1.0%	3.2%	10.4%	11.3%	11.0%	11.3%	13.2%	4.7%	6.5%
<i>NFI</i>	0.0%	1.0%	3.2%	10.4%	11.3%	11.0%	11.3%	12.8%	2.1%	5.7%
Infrastructure Composite	-0.1%	-0.3%	-1.1%	-2.7%	3.4%	4.7%	4.5%	7.4%	--	--
<i>CPI +4%</i>	0.3%	1.8%	2.4%	3.4%	4.8%	5.0%	5.2%	5.7%	5.3%	6.1%
Private Equity Composite	0.0%	-0.1%	-0.1%	8.6%	11.1%	9.3%	9.2%	11.3%	6.6%	12.2%
<i>Cambridge Associates All PE</i>	0.0%	0.0%	0.0%	4.3%	13.2%	12.9%	10.8%	13.8%	7.6%	12.4%

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$1,779.4 Million and 100.0% of Fund

Ending May 31, 2015

	1 Mo	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs
Total Fund Composite	0.5%	1.3%	3.3%	6.0%	9.2%	11.1%	7.5%	9.5%	5.6%	6.6%
<i>Total Fund Benchmark</i>	0.1%	1.1%	3.5%	5.2%	8.6%	10.7%	7.4%	9.6%	5.3%	6.3%
Fixed Income Composite	-0.1%	0.2%	1.4%	3.5%	3.0%	2.5%	3.6%	4.0%	5.2%	5.1%
<i>Barclays Aggregate</i>	-0.2%	-0.1%	1.0%	3.0%	2.9%	2.2%	3.4%	3.9%	4.7%	4.6%
J.P. Morgan	0.0%	0.2%	1.5%	3.6%	3.0%	2.6%	3.6%	4.1%	5.1%	--
<i>Barclays Aggregate</i>	-0.2%	-0.1%	1.0%	3.0%	2.9%	2.2%	3.4%	3.9%	4.7%	4.6%
Mellon Capital	-0.2%	-0.1%	1.0%	3.0%	2.8%	2.2%	3.4%	3.8%	4.7%	4.6%
<i>Barclays Aggregate</i>	-0.2%	-0.1%	1.0%	3.0%	2.9%	2.2%	3.4%	3.9%	4.7%	4.6%
U.S. Equity Composite	1.7%	1.4%	3.8%	11.8%	15.1%	19.1%	12.8%	15.5%	8.6%	8.5%
<i>Wilshire 5000 Total Market</i>	1.3%	0.7%	3.5%	11.7%	16.0%	19.7%	13.9%	16.4%	8.5%	8.4%
Boston Partners	1.8%	1.1%	2.6%	10.3%	15.2%	21.6%	15.2%	17.0%	9.9%	9.9%
<i>Russell 1000 Value</i>	1.2%	0.8%	1.4%	9.0%	14.2%	20.1%	13.6%	15.6%	7.4%	7.4%
Mellon Capital	1.3%	0.6%	3.2%	11.8%	16.0%	19.6%	14.3%	16.5%	8.3%	8.1%
<i>S&P 500</i>	1.3%	0.6%	3.2%	11.8%	16.0%	19.7%	14.3%	16.5%	8.4%	8.1%
Artisan Partners	1.3%	1.0%	5.0%	13.1%	16.2%	18.7%	13.4%	18.7%	11.5%	11.7%
<i>Russell MidCap Growth</i>	1.2%	0.8%	5.9%	14.7%	17.7%	20.6%	13.2%	17.5%	9.4%	10.1%
Geneva Capital	2.0%	2.8%	7.1%	17.8%	15.4%	--	--	--	--	--
<i>Russell MidCap Growth</i>	1.2%	0.8%	5.9%	14.7%	17.7%	20.6%	13.2%	17.5%	9.4%	10.1%
Fiduciary Management	1.3%	1.6%	4.1%	10.3%	13.2%	17.4%	10.3%	13.2%	--	--
<i>Russell 2000 Value</i>	0.8%	0.3%	0.6%	5.1%	10.8%	17.3%	10.3%	12.7%	7.7%	7.3%
Silvercrest Asset Management	2.2%	2.5%	3.4%	10.2%	--	--	--	--	--	--
<i>Russell 2000 Value</i>	0.8%	0.3%	0.6%	5.1%	10.8%	17.3%	10.3%	12.7%	7.7%	7.3%
International Equity Composite	-0.7%	1.5%	6.2%	-1.2%	7.2%	13.1%	3.6%	8.8%	0.4%	2.7%
<i>MSCI ACWI ex USA</i>	-1.6%	1.7%	7.0%	-0.9%	6.5%	12.6%	3.2%	8.1%	0.6%	6.0%
NTGI ACWI Ex-US	-1.2%	2.4%	7.7%	-0.4%	7.1%	--	--	--	--	--
<i>MSCI ACWI ex USA</i>	-1.6%	1.7%	7.0%	-0.9%	6.5%	12.6%	3.2%	8.1%	0.6%	6.0%
Vontobel Asset Management	-0.6%	-0.3%	4.1%	0.9%	--	--	--	--	--	--
<i>MSCI EAFE</i>	-0.5%	2.0%	8.6%	-0.5%	8.4%	15.6%	5.3%	9.9%	1.2%	5.6%
GMO Small-Cap	0.9%	4.7%	12.3%	-1.6%	11.1%	19.7%	7.6%	14.1%	--	--
<i>MSCI EAFE Small Cap</i>	1.0%	4.6%	11.6%	2.0%	11.8%	17.7%	7.0%	12.6%	4.3%	7.0%
OFI Institutional Asset Management	-1.8%	0.0%	0.8%	-6.1%	--	--	--	--	--	--
<i>MSCI Emerging Markets</i>	-4.0%	1.9%	5.7%	0.0%	2.1%	6.0%	-1.3%	4.1%	-0.3%	8.8%

Investment Manager

Annualized Performance (Net of Fees)

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Ending May 31, 2015

	1 Mo	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs
Hedged Equity Composite	2.0%	2.5%	5.9%	10.2%	10.7%	11.8%	7.3%	7.8%	--	--
<i>HFRX Equity Hedge Index</i>	-0.2%	1.6%	3.2%	4.9%	4.5%	6.6%	1.2%	1.9%	-1.4%	0.9%
<i>Russell 3000</i>	1.4%	0.8%	3.7%	11.9%	16.1%	19.9%	14.1%	16.5%	8.6%	8.4%
<i>MSCI ACWI</i>	-0.1%	1.2%	5.1%	5.1%	11.0%	15.8%	8.0%	11.8%	3.9%	6.8%
ABS	1.6%	2.6%	5.1%	9.4%	10.5%	11.7%	7.2%	7.9%	--	--
<i>HFRX Equity Hedge Index</i>	-0.2%	1.6%	3.2%	4.9%	4.5%	6.6%	1.2%	1.9%	-1.4%	0.9%
<i>Russell 3000</i>	1.4%	0.8%	3.7%	11.9%	16.1%	19.9%	14.1%	16.5%	8.6%	8.4%
<i>MSCI ACWI</i>	-0.1%	1.2%	5.1%	5.1%	11.0%	15.8%	8.0%	11.8%	3.9%	6.8%
K2	2.4%	2.4%	6.7%	11.0%	10.8%	11.8%	7.4%	7.7%	--	--
<i>HFRX Equity Hedge Index</i>	-0.2%	1.6%	3.2%	4.9%	4.5%	6.6%	1.2%	1.9%	-1.4%	0.9%
<i>Russell 3000</i>	1.4%	0.8%	3.7%	11.9%	16.1%	19.9%	14.1%	16.5%	8.6%	8.4%
<i>MSCI ACWI</i>	-0.1%	1.2%	5.1%	5.1%	11.0%	15.8%	8.0%	11.8%	3.9%	6.8%
Real Estate Composite	0.0%	3.2%	3.2%	13.7%	14.1%	12.9%	12.4%	14.9%	6.0%	7.4%
<i>Custom Real Estate Benchmark</i>	0.0%	1.0%	3.2%	10.4%	11.3%	11.0%	11.3%	13.2%	4.7%	6.5%
<i>NFI</i>	0.0%	1.0%	3.2%	10.4%	11.3%	11.0%	11.3%	12.8%	2.1%	5.7%
<i>American Realty Advisors</i>	0.0%	4.2%	4.2%	11.9%	12.0%	11.2%	11.5%	--	--	--
<i>NFI</i>	0.0%	1.0%	3.2%	10.4%	11.3%	11.0%	11.3%	12.8%	2.1%	5.7%
<i>Morgan Stanley</i>	0.0%	3.0%	3.0%	14.6%	15.4%	14.1%	14.4%	--	--	--
<i>NFI</i>	0.0%	1.0%	3.2%	10.4%	11.3%	11.0%	11.3%	12.8%	2.1%	5.7%
<i>UBS</i>	0.0%	3.0%	2.7%	11.2%	10.7%	9.6%	--	--	--	--
<i>NFI</i>	0.0%	1.0%	3.2%	10.4%	11.3%	11.0%	11.3%	12.8%	2.1%	5.7%
Infrastructure Composite	-0.1%	-0.3%	-1.1%	-2.7%	3.4%	4.7%	4.5%	7.4%	--	--
<i>CPI +4%</i>	0.3%	1.8%	2.4%	3.4%	4.8%	5.0%	5.2%	5.7%	5.3%	6.1%
IFM	-0.2%	2.5%	0.6%	-0.7%	4.8%	6.3%	4.9%	8.3%	--	--
<i>CPI +4%</i>	0.3%	1.8%	2.4%	3.4%	4.8%	5.0%	5.2%	5.7%	5.3%	6.1%
J.P. Morgan	0.0%	-2.6%	-2.6%	-4.3%	2.3%	3.2%	4.2%	--	--	--
<i>CPI +4%</i>	0.3%	1.8%	2.4%	3.4%	4.8%	5.0%	5.2%	5.7%	5.3%	6.1%

Total Fund Composite

Fee Schedule

Market Value: \$1,779.4 Million and 100.0% of Fund

Asset Class	Investment Manager	Fee Schedule	Expense Ratio & Estimated Annual Fee ¹	Industry Average ²
Core Fixed Income	J.P. Morgan	0.20% on the first \$100 million 0.15% on the Balance	0.17% \$448,034	0.24%
Core Fixed Income	Mellon Capital	0.04% on the first \$200 million 0.02% on the Balance	0.04% \$27,714	0.08%
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	0.19% \$287,524	0.46%
Large-Cap Core	Mellon Capital	0.04% on the first \$200 million 0.02% on the Balance	0.04% \$39,396	0.09%
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% \$390,406	0.78%
Mid-Cap Growth	Geneva Capital	0.55% on the Balance	0.55% \$271,886	0.78%
Small-Cap Value	Silvercrest Asset Management	0.65% on the first \$50 million 0.55% on the Balance	0.64% \$363,928	0.83%
Small-Cap Value	Fiduciary Management	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% \$374,438	0.83%
Non-U.S. All-Cap Core	NTGI ACWI Ex-US	0.08% on the Balance	0.08% \$69,133	0.12%
Non-U.S. Large-Cap Core	Vontobel Asset Management	0.85% on the first \$50 million 0.75% on the next \$50 million 0.65% on the next \$400 million 0.60% on the Balance	0.77% \$981,947	0.68%
Non-U.S. Small-Cap Value	GMO Small-Cap	0.75% on the Balance	0.75% \$556,478	1.16%
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% \$478,573	0.92%
Hedged Equity Hedge FoF	ABS	0.85% on the Balance *redemptions quarterly with 45 days notice	0.85% \$790,245	1.37%
Hedged Equity Hedge FoF	K2	0.90% on the Balance *redemptions quarterly with 91 days notice	0.90% \$895,318	1.37%

Total Fund Composite

Fee Schedule

Market Value: \$1,779.4 Million and 100.0% of Fund

Asset Class	Investment Manager	Fee Schedule	Expense Ratio & Estimated Annual Fee ¹	Industry Average ²
Core Real Estate	American Realty Advisors	0.95% on the Balance	0.95% \$359,348	1.03%
Core Real Estate	Morgan Stanley	0.90% on the Balance	0.90% \$1,150,781	1.03%
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	0.90% \$165,750	1.03%
Core Infrastructure	IFM	1.25% on the Balance Performance Fee: 20% of return above 8% on a rolling three year basis	1.25% \$864,870	1.80%
Core Infrastructure	J.P. Morgan	1.50% on the first \$50 million 1.55% on the Balance Performance Fee: 15% with 7% Hurdle (six year soft lock, effective lock 4.5 years)	1.52% \$1,191,230	1.80%
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)	0.67% \$335,264	1.11%
U.S. Private Equity FoF	Siguler Guff	0.69% on commitment	1.20% \$276,000	1.93%
U.S. Private Equity FoF	Mesirow VI	0.70% on commitment	5.19% \$210,000	8.22%
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% \$25,760	0.20%
Total Investment Management Fees			0.59% \$10,554,022	0.79%
Custodian	BNY Mellon	\$100,000 Annual Fee (approximate)	\$100,000	N/A
Total Fund			0.60% \$10,654,022	

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

² Source: 2010 Marquette Associates Investment Management Fee Study.