



Pension Plan

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

Total Fund Composite

Manager Status

Market Value: \$1,680.4 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 Infrastructure	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: \$1,680.4 Million and 100.0% of Fund

Ending August 31, 2015

	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
Total Fund Composite		1,680,381,640	-50,311,107	100.0	100.0	0
Fixed Income Composite		316,683,854	-17,000,000	18.8	22.0	-53,000,107
J.P. Morgan	Core Fixed Income	264,782,127	0	15.8		
Mellon Capital	Core Fixed Income	51,901,727	-17,000,000	3.1		
U.S. Equity Composite		400,776,025	-38,687,087	23.9	25.0	-19,319,385
Boston Partners	Large-Cap Value	123,297,681	-16,687,087	7.3	8.0	-11,132,851
Mellon Capital	Large-Cap Core	92,654,939	0	5.5	6.0	-8,167,959
Artisan Partners	Mid-Cap Growth	41,608,321	-6,000,000	2.5	2.5	-401,220
Geneva Capital	Mid-Cap Growth	42,500,439	-6,000,000	2.5	2.5	490,898
Fiduciary Management	Small-Cap Value	50,437,750	-6,000,000	3.0	3.0	26,301
Silvercrest Asset Management	Small-Cap Value	50,276,895	-4,000,000	3.0	3.0	-134,554
International Equity Composite		313,513,699	-119,871	18.7	20.0	-22,562,629
NTGI ACWI Ex-US	Non-U.S. All-Cap Core	77,505,414	0	4.6	6.5	-31,719,392
Vontobel Asset Management	Non-U.S. Large-Cap Core	120,892,789	0	7.2	6.5	11,667,983
GMO Small-Cap	Non-U.S. Small-Cap Value	67,373,205	0	4.0	4.0	157,940
OFI Institutional Asset Management	Emerging Markets	47,742,291	-119,871	2.8	3.0	-2,669,159
Hedged Equity Composite		188,870,672	0	11.2	10.0	20,832,508
ABS	Hedged Equity Hedge FoF	92,170,916	0	5.5	5.0	8,151,834
K2	Hedged Equity Hedge FoF	96,699,756	0	5.8	5.0	12,680,674
Real Estate Composite		189,479,964	-2,379,009	11.3	8.5	46,647,524
American Realty Advisors	Core Real Estate	38,676,039	-567,392	2.3		
Morgan Stanley	Core Real Estate	131,987,401	-1,624,673	7.9		
UBS	Core Real Estate	18,816,201	-186,945	1.1		
Infrastructure Composite		151,525,115	-1,233,476	9.0	8.5	8,692,675
IFM	Core Infrastructure	69,872,042	-150,083	4.2		
J.P. Morgan Infrastructure	Core Infrastructure	81,653,072	-1,083,393	4.9		

Total Fund Composite

Market Value: \$1,680.4 Million and 100.0% of Fund

Ending August 31, 2015

	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio	Policy %	Policy Difference (\$)
Private Equity Composite		81,457,299	6,933,165	4.8	6.0	-19,365,600
Progress	U.S. Private Equity FoF	25,924	0	0.0		
Brinson 1998	U.S. Private Equity FoF	71,922	0	0.0		
Brinson 1999	U.S. Private Equity FoF	155,632	0	0.0		
Brinson 2000	U.S. Private Equity FoF	414,621	-166,342	0.0		
Brinson 2001	U.S. Private Equity FoF	997,492	0	0.1		
Brinson 2002	U.S. Private Equity FoF	532,156	0	0.0		
Brinson 2003	U.S. Private Equity FoF	631,567	-82,829	0.0		
Brinson 2004	U.S. Private Equity FoF	97,187	-97,187	0.0		
Adams Street 2005	U.S. Private Equity FoF	5,369,179	-592,599	0.3		
Adams Street 2009	U.S. Private Equity FoF	22,047,468	-360,293	1.3		
Adams Street 2012	Global Divers. Private Equity FoF	20,053,680	3,327,087	1.2		
Adams Street Co-Investment III	Private Equity Co- Investment	3,072,265	2,091,000	0.2		
Siguler Guff	U.S. Private Equity FoF	26,019,677	2,896,061	1.5		
Mesirov VI	U.S. Private Equity FoF	3,655,596	-81,733	0.2		
Total Cash Equivalents		38,075,014	2,175,172	2.3	0.0	38,075,014

Total Fund Composite

Annualized Performance (Net of Fees)

Market Value: \$1,680.4 Million and 100.0% of Fund

Ending August 31, 2015

	1 Mo	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs
Total Fund Composite	-3.2%	-2.7%	0.5%	0.6%	7.4%	8.5%	7.9%	8.6%	6.0%	5.8%
<i>Total Fund Benchmark</i>	-3.1%	-3.8%	-0.1%	-0.3%	6.5%	7.8%	7.5%	8.4%	5.6%	5.5%
Fixed Income Composite	-0.1%	-0.3%	1.1%	2.2%	3.7%	1.9%	2.9%	3.2%	5.2%	4.9%
<i>Barclays Aggregate</i>	-0.1%	-0.5%	0.4%	1.6%	3.6%	1.5%	2.6%	3.0%	4.5%	4.5%
U.S. Equity Composite	-5.7%	-5.1%	-1.6%	1.6%	10.9%	14.4%	14.6%	15.4%	8.9%	7.4%
<i>Wilshire 5000 Total Market</i>	-5.9%	-6.0%	-2.7%	0.3%	11.8%	14.4%	15.0%	15.8%	8.7%	7.4%
International Equity Composite	-7.4%	-9.2%	-3.6%	-11.3%	3.0%	6.5%	3.8%	5.6%	1.5%	1.2%
<i>MSCI ACWI ex USA</i>	-7.6%	-10.5%	-4.2%	-12.4%	1.6%	5.3%	3.4%	4.8%	1.5%	4.0%
Hedged Equity Composite	-2.4%	-1.9%	4.0%	6.2%	9.7%	10.3%	8.1%	7.5%	--	--
<i>HFRX Equity Hedge Index</i>	-3.1%	-4.2%	-1.1%	-1.0%	2.9%	4.4%	2.5%	0.9%	-1.2%	0.1%
<i>Russell 3000</i>	-6.0%	-6.1%	-2.6%	0.4%	11.9%	14.6%	15.2%	16.0%	8.8%	7.3%
<i>MSCI ACWI</i>	-6.9%	-8.3%	-3.5%	-6.3%	6.5%	9.4%	8.6%	9.6%	4.6%	5.3%
Real Estate Composite	0.0%	3.9%	7.2%	14.9%	13.7%	13.4%	13.0%	14.5%	8.4%	6.9%
<i>Custom Real Estate Benchmark</i>	0.0%	1.2%	6.8%	11.2%	11.3%	11.4%	11.3%	12.6%	6.9%	6.1%
<i>NFI</i>	0.0%	1.2%	6.8%	11.2%	11.3%	11.4%	11.3%	12.6%	2.7%	5.5%
Infrastructure Composite	-0.2%	3.2%	2.0%	-1.6%	3.0%	5.1%	4.8%	6.9%	--	--
<i>CPI +4%</i>	0.3%	1.3%	4.3%	4.3%	5.1%	5.2%	5.4%	5.9%	5.3%	6.0%
Private Equity Composite	0.0%	-0.4%	-0.7%	1.6%	10.2%	9.4%	7.7%	11.0%	6.6%	10.5%
<i>Cambridge Associates All PE</i>	0.0%	0.0%	1.7%	4.0%	11.2%	12.5%	11.6%	12.9%	8.8%	11.8%

Investment Manager

Annualized Performance (Net of Fees)

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Ending August 31, 2015

	1 Mo	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs
Total Fund Composite	-3.2%	-2.7%	0.5%	0.6%	7.4%	8.5%	7.9%	8.6%	6.0%	5.8%
<i>Total Fund Benchmark</i>	-3.1%	-3.8%	-0.1%	-0.3%	6.5%	7.8%	7.5%	8.4%	5.6%	5.5%
Fixed Income Composite	-0.1%	-0.3%	1.1%	2.2%	3.7%	1.9%	2.9%	3.2%	5.2%	4.9%
<i>Barclays Aggregate</i>	-0.1%	-0.5%	0.4%	1.6%	3.6%	1.5%	2.6%	3.0%	4.5%	4.5%
J.P. Morgan	0.0%	-0.3%	1.2%	2.4%	3.7%	2.0%	3.0%	3.3%	5.0%	--
<i>Barclays Aggregate</i>	-0.1%	-0.5%	0.4%	1.6%	3.6%	1.5%	2.6%	3.0%	4.5%	4.5%
Mellon Capital	-0.2%	-0.6%	0.4%	1.5%	3.5%	1.4%	2.5%	2.9%	4.5%	4.4%
<i>Barclays Aggregate</i>	-0.1%	-0.5%	0.4%	1.6%	3.6%	1.5%	2.6%	3.0%	4.5%	4.5%
U.S. Equity Composite	-5.7%	-5.1%	-1.6%	1.6%	10.9%	14.4%	14.6%	15.4%	8.9%	7.4%
<i>Wilshire 5000 Total Market</i>	-5.9%	-6.0%	-2.7%	0.3%	11.8%	14.4%	15.0%	15.8%	8.7%	7.4%
Boston Partners	-5.5%	-6.8%	-4.3%	-1.3%	10.1%	15.1%	16.5%	16.4%	9.9%	8.4%
<i>Russell 1000 Value</i>	-6.0%	-7.4%	-6.1%	-3.5%	9.6%	13.9%	14.8%	14.7%	7.5%	6.2%
Mellon Capital	-6.0%	-5.9%	-2.9%	0.4%	12.1%	14.3%	15.2%	15.8%	8.6%	7.1%
<i>S&P 500</i>	-6.0%	-5.9%	-2.9%	0.5%	12.2%	14.3%	15.2%	15.9%	8.7%	7.2%
Artisan Partners	-6.0%	-3.4%	1.4%	3.1%	11.3%	15.3%	14.8%	17.9%	12.0%	10.8%
<i>Russell MidCap Growth</i>	-5.8%	-5.8%	-0.3%	2.5%	12.6%	16.2%	15.1%	17.1%	10.1%	8.7%
Geneva Capital	-5.9%	-2.6%	4.4%	9.3%	11.6%	13.5%	--	--	--	--
<i>Russell MidCap Growth</i>	-5.8%	-5.8%	-0.3%	2.5%	12.6%	16.2%	15.1%	17.1%	10.1%	8.7%
Fiduciary Management	-5.6%	-2.5%	1.5%	4.0%	10.4%	14.5%	13.6%	14.5%	--	--
<i>Russell 2000 Value</i>	-4.9%	-7.4%	-6.8%	-4.9%	6.0%	11.8%	12.3%	13.2%	6.6%	5.7%
Silvercrest Asset Management	-4.5%	-5.3%	-2.0%	1.3%	--	--	--	--	--	--
<i>Russell 2000 Value</i>	-4.9%	-7.4%	-6.8%	-4.9%	6.0%	11.8%	12.3%	13.2%	6.6%	5.7%
International Equity Composite	-7.4%	-9.2%	-3.6%	-11.3%	3.0%	6.5%	3.8%	5.6%	1.5%	1.2%
<i>MSCI ACWI ex USA</i>	-7.6%	-10.5%	-4.2%	-12.4%	1.6%	5.3%	3.4%	4.8%	1.5%	4.0%
NTGI ACWI Ex-US	-7.3%	-10.3%	-3.4%	-11.7%	2.2%	--	--	--	--	--
<i>MSCI ACWI ex USA</i>	-7.6%	-10.5%	-4.2%	-12.4%	1.6%	5.3%	3.4%	4.8%	1.5%	4.0%
Vontobel Asset Management	-7.2%	-5.5%	-1.7%	-6.5%	--	--	--	--	--	--
<i>MSCI EAFE</i>	-7.4%	-8.1%	-0.2%	-7.5%	3.8%	8.5%	6.3%	7.0%	2.2%	4.0%
GMO Small-Cap	-5.4%	-9.2%	2.0%	-6.9%	5.6%	12.9%	8.3%	11.0%	--	--
<i>MSCI EAFE Small Cap</i>	-4.4%	-4.8%	6.2%	-1.8%	7.9%	13.1%	8.7%	10.4%	6.2%	5.4%
OFI Institutional Asset Management	-10.5%	-15.8%	-15.1%	-25.5%	--	--	--	--	--	--
<i>MSCI Emerging Markets</i>	-9.0%	-17.5%	-12.9%	-22.9%	-3.9%	-2.4%	-3.3%	-0.9%	0.2%	5.5%

Investment Manager

Annualized Performance (Net of Fees)

Market Value: \$1,680.4 Million and 100.0% of Fund

Ending August 31, 2015

	1 Mo	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs
Hedged Equity Composite	-2.4%	-1.9%	4.0%	6.2%	9.7%	10.3%	8.1%	7.5%	--	--
<i>HFRX Equity Hedge Index</i>	-3.1%	-4.2%	-1.1%	-1.0%	2.9%	4.4%	2.5%	0.9%	-1.2%	0.1%
<i>Russell 3000</i>	-6.0%	-6.1%	-2.6%	0.4%	11.9%	14.6%	15.2%	16.0%	8.8%	7.3%
<i>MSCI ACWI</i>	-6.9%	-8.3%	-3.5%	-6.3%	6.5%	9.4%	8.6%	9.6%	4.6%	5.3%
ABS	-1.4%	-0.8%	4.2%	6.9%	10.0%	10.8%	7.8%	7.7%	--	--
<i>HFRX Equity Hedge Index</i>	-3.1%	-4.2%	-1.1%	-1.0%	2.9%	4.4%	2.5%	0.9%	-1.2%	0.1%
<i>Russell 3000</i>	-6.0%	-6.1%	-2.6%	0.4%	11.9%	14.6%	15.2%	16.0%	8.8%	7.3%
<i>MSCI ACWI</i>	-6.9%	-8.3%	-3.5%	-6.3%	6.5%	9.4%	8.6%	9.6%	4.6%	5.3%
K2	-3.4%	-2.8%	3.7%	5.4%	9.3%	9.9%	8.4%	7.3%	--	--
<i>HFRX Equity Hedge Index</i>	-3.1%	-4.2%	-1.1%	-1.0%	2.9%	4.4%	2.5%	0.9%	-1.2%	0.1%
<i>Russell 3000</i>	-6.0%	-6.1%	-2.6%	0.4%	11.9%	14.6%	15.2%	16.0%	8.8%	7.3%
<i>MSCI ACWI</i>	-6.9%	-8.3%	-3.5%	-6.3%	6.5%	9.4%	8.6%	9.6%	4.6%	5.3%
Real Estate Composite	0.0%	3.9%	7.2%	14.9%	13.7%	13.4%	13.0%	14.5%	8.4%	6.9%
<i>Custom Real Estate Benchmark</i>	0.0%	1.2%	6.8%	11.2%	11.3%	11.4%	11.3%	12.6%	6.9%	6.1%
<i>NFI</i>	0.0%	1.2%	6.8%	11.2%	11.3%	11.4%	11.3%	12.6%	2.7%	5.5%
<i>American Realty Advisors</i>	0.0%	3.5%	7.9%	12.9%	12.2%	11.6%	11.5%	--	--	--
<i>NFI</i>	0.0%	1.2%	6.8%	11.2%	11.3%	11.4%	11.3%	12.6%	2.7%	5.5%
<i>Morgan Stanley</i>	0.0%	4.2%	7.3%	16.0%	14.7%	14.7%	14.6%	--	--	--
<i>NFI</i>	0.0%	1.2%	6.8%	11.2%	11.3%	11.4%	11.3%	12.6%	2.7%	5.5%
<i>UBS</i>	0.0%	2.6%	5.1%	11.4%	10.3%	9.7%	--	--	--	--
<i>NFI</i>	0.0%	1.2%	6.8%	11.2%	11.3%	11.4%	11.3%	12.6%	2.7%	5.5%
Infrastructure Composite	-0.2%	3.2%	2.0%	-1.6%	3.0%	5.1%	4.8%	6.9%	--	--
<i>CPI +4%</i>	0.3%	1.3%	4.3%	4.3%	5.1%	5.2%	5.4%	5.9%	5.3%	6.0%
IFM	-0.4%	1.2%	1.8%	-0.2%	1.9%	5.2%	4.8%	7.3%	--	--
<i>CPI +4%</i>	0.3%	1.3%	4.3%	4.3%	5.1%	5.2%	5.4%	5.9%	5.3%	6.0%
J.P. Morgan Infrastructure	0.0%	4.9%	2.2%	-2.7%	4.5%	5.1%	4.7%	--	--	--
<i>CPI +4%</i>	0.3%	1.3%	4.3%	4.3%	5.1%	5.2%	5.4%	5.9%	5.3%	6.0%

Total Fund Composite

Fee Schedule

Market Value: \$1,680.4 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% \$447,173	0.24%
Core Fixed Income	Mellon Capital	0.04% on the first \$200 million 0.02% on the Balance	0.04% \$20,761	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	0.21% \$260,798	0.51%
Large-Cap Core	Mellon Capital	0.04% on the first \$200 million 0.02% on the Balance	0.04% \$37,062	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% \$332,867	0.78%
Mid-Cap Growth	Geneva Capital	0.55% on the Balance	0.55% \$233,752	0.78%
Small-Cap Value	Silvercrest Asset Management	0.65% on the first \$50 million 0.55% on the Balance	0.65% \$326,523	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	0.66% \$332,626	0.83%
Non-U.S. All-Cap Core	NTGI ACWI Ex-US	0.08% on the Balance	0.08% \$62,004	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% \$935,803	0.68%
Non-U.S. Small-Cap Value	GMO Small-Cap	0.75% on the Balance	0.75% \$505,299	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	0.85% \$405,809	1.00%
Hedged Equity Hedge FoF	ABS	0.85% on the Balance *redemptions quarterly with 45 days notice	0.85% \$783,453	1.37%
Hedged Equity Hedge FoF	K2	0.90% on the Balance *redemptions quarterly with 91 days notice	0.90% \$870,298	1.37%

Total Fund Composite

Fee Schedule

Market Value: \$1,680.4 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% \$367,422	1.03%
Core Real Estate	Morgan Stanley	0.90% on the Balance	0.90% \$1,187,887	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	0.89% \$168,234	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% \$873,401	1.80%
Core Infrastructure	J.P. Morgan Infrastructure	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% \$1,240,623	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% \$355,659	1.11%
U.S. Private Equity FoF	Siguler Guff	0.69% on commitment	1.06% \$276,000	1.71%
U.S. Private Equity FoF	Mesirow VI	0.70% on commitment	5.74% \$210,000	9.11%
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% \$26,653	0.20%
Total Investment Management Fees			0.61% \$10,260,106	0.81%
Custodian	BNY Mellon	\$100,000 Annual Fee (approximate)	\$100,000	N/A
Total Fund			0.62% \$10,360,106	

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

² Source: 2010 Marquette Associates Investment Management Fee Study.