ILLINOIS MUNICIPAL RETIREMENT FUND
MINUTES OF
SPECIAL MEETING NO. 17-05
MAY 19, 2017

ILLINOIS MUNICIPAL RETIREMENT FUND

MEETING NO. 17-05

REGULAR MEETING

OF THE

BOARD OF TRUSTEES

The Regular Meeting of the Board of Trustees was held at 9:10 a.m. on May 19, 2017, in the Fund Office at 2211 York Road, Suite 400, Oak Brook, Illinois.

Ms. Stanish presided as Chair and called the meeting to order.

Ms. Enright called the roll:

Present: Thompson, Williams, Copper, Henry, Kuehne, Miller, Stanish

Absent: Wallace

Ms. Becker-Wold and Messrs. Ball and Robinson from Callan Associates, Messrs. Murphy, Buis and Pieterse from Gabriel Roeder Smith & Company, and representatives from Loop Capital and Pensions and Investments were also present.

(17-05-01) (Gabriel, Roeder Smith & Company 2016 Actuarial Valuation and Gain (Loss) Analysis) Messrs. Murphy and Pieterse from Gabriel Roeder Smith & company presented IMRF's Annual Actuarial Valuation as of December 31, 2016, and IMRF's Gain/Loss Analysis as presented below.



IMRF

Annual Actuarial Valuation and Gain (Loss) Analysis December 31, 2016

May 19, 2017

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Purpose

- Calculate employer rates for 3,315 rate groups for the 2018 calendar year
- Measure financial position and funding progress
- Explain changes in financial position that occurred during the year



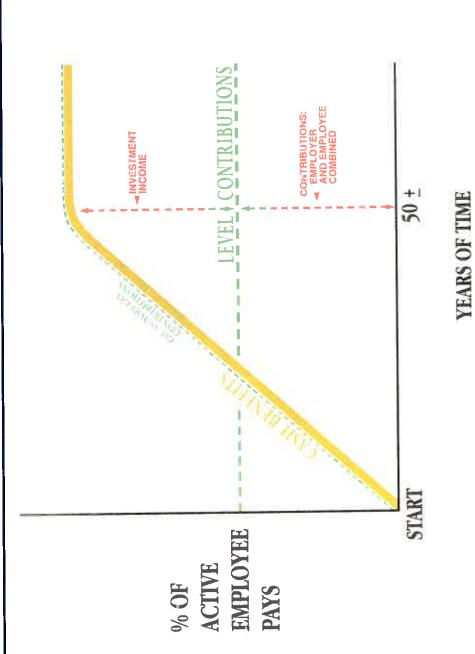
Basic Funding Objective

Establish and receive contributions which:

- Remain approximately level (as a % of payroll) from generation to generation
- investment return, are sufficient to pay benefits to When combined with present assets and future current and future retirees



Financing Diagram





Valuation Uses Data On

- 1) People
- 2) Plan Benefits
- 3) Employers
- 4) Assets



IMRF Population

2015		125,563	48,269	173,832	117,028	141,236	432,096
2016		117,962	56,873	174,835	122,086	132,213	429,134
	Active Members	• Tier 1	• Tier 2	• Total	Retirees	Inactive Members	Total



IMRF Population

2015		7 169,431	4,167	5 234	173,832		140,401	725
2016	S	170,527	4,143	165	174,835	ers	131,385	669
	Active Members	 Regular 	• SLEP	• ECO	Total	Inactive Members	• Regular	• SLEP



110

132,213

• ECO

Total

MRF Employers 12/31/2016

851	496	489	475	307	269	226	202	3,315	380	3,695
School Districts	Townships	Other	Villages	Cities	Counties (Regular, SLEP & ECO)	Library Districts	Park Districts	Total	Employers with no Active Members	Total



Value of Assets (\$ Millions)

	2016	2015
Funding Value (FV)	\$36,773	\$34,913
Market Value (MV)	\$36,447	\$34,461
Ratio	100.9%	101.3%
Difference between FV and MV	\$ (326)	\$ (452)
Market Value Rate of Return	%9.7	0.5%
Funding Value Rate of Return	7.2%	8.5%



Development of Average Contribution Rates Applicable to Calendar Year 2018

(Results as of December 31, 2016)

	Jo %	% of Active Member Pays	Pays
	Regular	SLEP	ECO
Tier I Normal Cost	7.29 %	12.47 %	16.85 %
Tier 2 Normal Cost	4.41 %	8.30 %	16.85 %
Average Employer Contributions for			
Normal Cost*			
Retirement	6.54 %	11.47 %	16.51 %
\$3,000 Lump Sum Death Benefit	0.03 %	0.02 %	0.04 %
Total & Permanent Disability Benefit	0.04 %	0.14 %	0.30 %
Total Normal Cost	6.61 %	11.63 %	16.85 %
Lump Sum Death-in-Service Benefits	0.12 %	0.12 %	0.15 %
Temporary Disability	0.07 %	% 20.0	0.07 %
13th Payments	0.62 %	0.62 %	0.62 %
Unfunded (Overfunded) Liabilities (25 years)^	3.63 %	7.03 %	65.03 %
Early Retirement Incentive Liabilities	0.19 %	0.10 %	% 00.0
SLEP Supplemental Liabilities	0.00 %	1.92 %	0.00 %
Total Average Employer Rate	11.24 %	21.49 %	82.72 %
Prior Year Averages	11.34 %	22.39 %	73.50 %

^{*} Average of Tier 1 and Tier 2 cost weighted on expected payroll.

Dupage County, Peoria County and Union School District 46 subject to individual rating.



^{^ 10} years for instrumentalities.

History of Total Average Employer Contribution Rates

			图	mployer Co	Employer Contribution Rate	ate	
			Expr	essed as %	Expressed as % of Active Payroll	ayroll	
		Regular	Regular Members	SLEP M	SLEP Members	ECO M	ECO Members
Rate Applies	Rate Computed		Average		Average		Average
to Calendar	as of	Normal	Total	Normal	Total	Normal	Total
Year	December 31	Cost	Rate	Cost	Rate	Cost	Rate
1999	1997 ³	7.23%	9.03%	10.62%	14.65%	21.48%	36.14%
2000	1998	7.17%	8.16%	10.42%	14.28%	23.39%	41.38%
2001	16661	7.41%	6.64%	12.02%	14.86%	23.85%	42.58%
2002	2000	7.62%	2.87%	11.94%	14.13%	18.05%	38.46%
2003	2001	7.66%	6.22%	11.96%	14.04%	17.95%	40.37%
2004	2002	7.60%	7.82%	12.47%	16.29%	18.18%	44.90%
2005	2003	7.61%	9.25%	12.48%	17.15%	18.07%	42.66%
2006	2004	7.64%	10.04%	12.56%	18.25%	18.01%	44.90%
2007	2005 1.2	7.43%	9.72%	11.66%	18.42%	17.52%	41.30%
2008	2006	7.42%	9.47%	11.63%	19.33%	16.96%	41.80%
2009	2007	7.42%	9.27%	11.63%	18.65%	17.08%	42.77%
2010	2008 1.4	7.58%	11.89%	11.97%	21.63%	17.24%	43.57%
2011	2009	7.58%	12.14%	11.97%	21.76%	17.20%	42.72%
2012	2010 4	7.58%	12.42%	12.01%	22.48%	17.22%	47.15%
2013	2011 ^{1, 2, 4}	7.77%	12.85%	12.74%	23.40%	17.63%	46.85%
2014	2012 4	7.64%	12.58%	12.61%	23.20%	17.59%	74.52%
2015	2013 4	7.51%	11.69%	12.42%	22.33%	17.73%	70.37%
2016	20141.4	6.84%	11.73%	11.95%	22.71%	16.49%	%20.9%
2017	2015 4	6.71%	11.34%	11.77%	22.39%	16.83%	73.50%
2018	2016	6.61%	11.24%	11.63%	21.49%	16.85%	82.72%

1 Assumption change.

2 Benefit change.

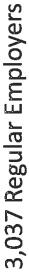
3 Changed to payroll weighted average method.

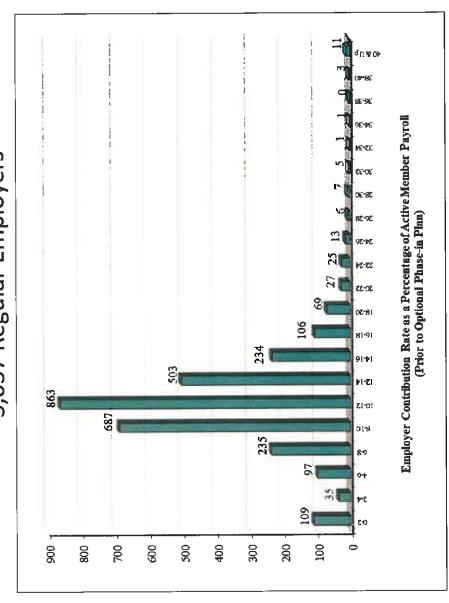
4 Before optional phase-in plan.



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Contribution Rates for Employer Groups 2016 Actuarial Valuation

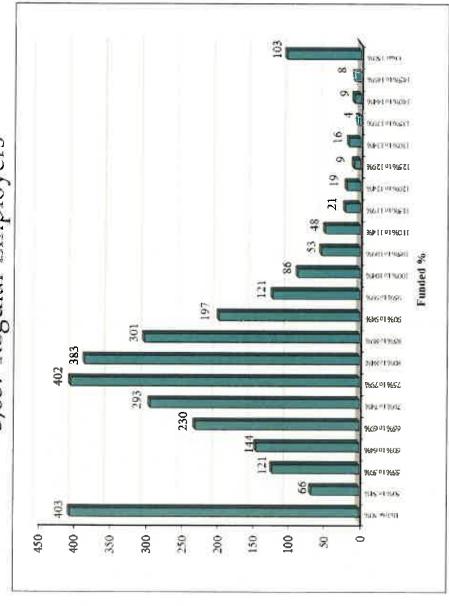






Funded Ratios for Employer Groups 2016 Actuarial Valuation



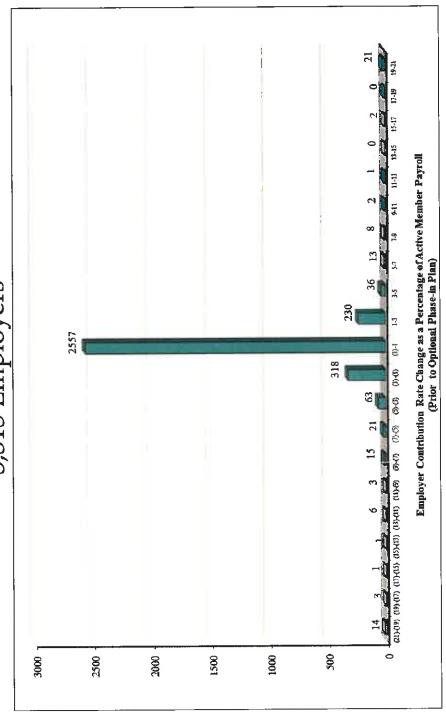




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Contribution Rate Changes for Employer Groups - 2016 Actuarial Valuation







Average Funding Ratios Comparative Statement

											1	A-11
Accrued Liability Payroll	275.8%	408.4%	409.2%	423.2%	455.8%	481.4%	501.9%	520.4%	556.5%	570.7%	590.3%	
Basis AVA Basis Payroll	35.6%	16.0%	64.1%	71.0%	76.3%	81.7%	78.7%	64.7%	70.8%	66.1%	65.4%	
Funded Ratio MV Basis	87.7%	100.0%	70.3%	81.5%	86.3%	80.2%	85.9%	%9.96	93.0%	87.3%	88.1%	
Funded Ratio AVA Basis	87.1%	96.1%	84.3%	83.2%	83.3%	83.0%	84.3%	82.6%	87.3%	88.4%	88.9%	000000
Valuation Date	1994	2007	*8002	2009	2010	2011*#	2012	2013	2014*	2015	2016	* Accompation of the same





Outlook for 2017 Valuation

- 2017 Valuation affects 2019 contribution rates
- Unrecognized asset losses from smoothing method will drive rates up by about 10 basis points
- Increased number of people subject to post-2011 provisions (Tier 2) will drive rates down by about 10 basis points
- But, Experience Study (Fall, 2017) could increase or decrease rates
- Conclusion: If IMRF earns about 7.5% in 2017 and other assumptions are in line with expectations, average 2019 contribution rates may be similar to average 2018 rates



GAIN (LOSS) ANALYSIS

Gain (Loss) Analysis

between Actual and Assumed Experience in A Gain (Loss) Analysis measures differences each Risk Area



13

IMRF Risk Areas

Demographic

Normal retirement

Early retirement

Death-in-service

Disability

Other separations

Economic

Salary increases

Investment return



Change in Unfunded Accrued Liabilities During the Calendar Year 2016

	Unfunded Liability D	Unfunded Liability Development During
	2016	2015
		3CO OCO NOC NO
Untunded Liability January 1	\$4,573,446,42I	54,764,939,075
(Assumed Payments)	(295,381,436)	(306,609,121)
Assumed Interest	332,065,180	346,011,165
Expected Unfunded Liability December 31	4,610,130,165	4,804,341,119
Change Due to Experience Study	0	0
Change Due to Benefit Changes	0	0
Change Due to Data Changes	0	0
Change Due to Investment Experience	109,908,168	(313,208,972)
Change Due to Other Sources	(134,725,458)	82,314,274
Actual Unfunded Liability December 31	\$4,585,312,875	\$4,573,446,421
Gain (Loss) for the Year	\$ 24,817,290	\$ 230,894,698



Investment Gain (Loss) - \$ Millions

Beginning Funding Value

Net Cash Flow

3. Assumed Return

4. Expected Funding Value: 1+2+3

5. Actual Funding Value

. Gain (Loss): 5-4

\$34,913

(625)

2,595

36,883

36,773

(110)



How Does Asset Smoothing Impact Future Valuations

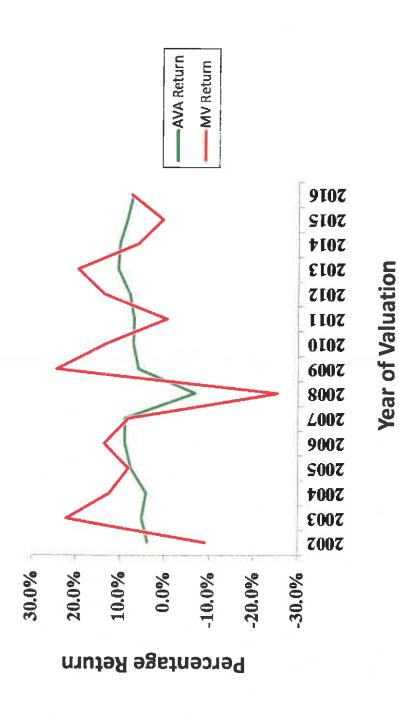
Difference between Market Value and Funding Value (\$327) million) phased-in over next four years

Potential Contribution Increase	0.1%	0.1%	0.1%	0.0%
Scheduled Asset Gain	\$(109,908,168)	\$(109,908,168)	\$(109,908,169)	\$3,107,243
Valuation Date	12/31/2017	12/31/2018	12/31/2019	12/31/2020

- Assumes Market Value earns 7.5% in the next four years
- Actual results will likely be different



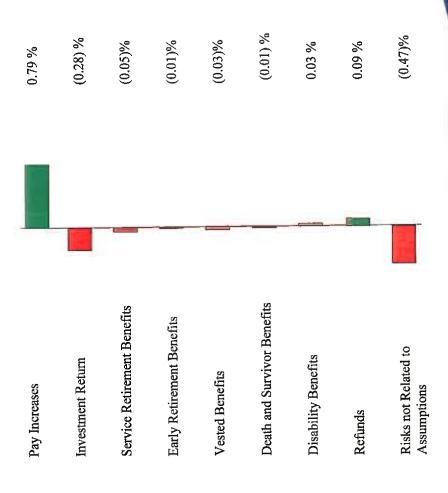
Market Value Return vs. Actuarial Value Return





Gain (Loss) Experience

Gain/Loss Experience expressed as a % of beginning of year liabilities





Experience Gains & Losses by Risk Area -Comparative Statement

	ı				Vested	Death and		Terminated		Total G	Total Gain (Loss)
Experience	Pay	Investment	Service	Early	Deferred	Survivor	Disability	with			Percent of
rerioa	Increases	Keturn	Ketirement	Ketirement	Retirement	Benefits	Benefits	Refund	Other	5∕ 3	Liabilities
1998	(6.69) \$	\$ 515.7	\$ 37.8	\$(8.7)	\$ 37.8	2.7.3	\$ 5.7	\$(10.5)	\$ (197.0)	\$ 318.6	2.9 %
1 6661	5.5	962.1	(8.9)	(5.1)	(14.6)	9.0	6.4	(21.1)	(168.1)	758.9	6.4 %
2000	12.2	642.5	8.0	(2.8)	(8.7)	1.8	8.6	(22.4)	(89.2)	544.0	4.2 %
2001	(29.5)	69.4	(4.9)	(1.0)	(20.3)	2.9	10,0	11.4	4.1	39.4	0.3 %
2002	19.5	(611.8)	(6'6)	(2.0)	(31.0)	4.3	6.9	2.3	(66.7)	(688.4)	(4.5)%
2003	36.8	(404.6)	(18.4)	(5.4)	(28.0)	2.3	5.9	10.0	(250.0)	(651.4)	(3.9)%
2004	(0.3)	(478.5)	(14.7)	(5.3)	(27.5)	3.4	7.3	15.8	(183.0)	(682.6)	(3.8)%
2005	130.0	23.8	(10.4)	(5.0)	(28.3)	1.9	12.0	19.3	(111.2)	32.1	0.2 %
2006	23.5	262.2	(8.6)	(3.4)	(32.7)	2.1	9.4	11.1	(211.7)	51.9	0.3 %
2007	(15.4)	305.8	(8.4)	(2.6)	(35.3)	4.1	10.2	23.2	(170.5)	111.1	0.6 %
2008	8.2	(3,331.5)	2.4	(2.1)	(40.8)	1.8	11.4	9.1	(40.5)	(3,382.0)	(12.6)%
2009	70.2	(343.2)	11.6	(0.5)	(38.3)	3.5	12.9	(11.8)	(53.5)	(349.1)	(1.4)%
2010	359.6	(90.5)	(0.2)	0.0	(32.3)	33	7.3	(0.3)	(442.1) 2	(195.2)	(0.7)%
2011	238,9	(164.3)	(22.9)	(5.7)	(25.9)	7.3	8.2	19.9	(344.4) 3	(288.9)	(1.0)%
2012	230.2	71.0	2.0	(3.0)	(24.7)	6,5	20.8	23.8	(89.0)	237.6	%8.0
2013	141.5	811.5	(11.6)	(2.8)	(22.7)	3.2	15.7	45.1	(74.0)	905.9	2.8 %
2014	64.2	9''29'	(19.3)	(4.9)	(19.7)	(2.2)	17.2	37.9	(1,274.8) 3	(434.0)	(1.3)%
2015	22.9	313.2	(28.5)	(4.7)	(16.8)	(3.4)	15.8	33.0	(100.6)	230.9	0.6 %
2016	312.7	(109.9)	(20.2)	(2.6)	(14.1)	(3.3)	12.0	35.7	(185.5)	24.8	0.1 %

Includes changes in assumptions due to the Experience Study.

Includes one-time data changes of approximately \$250 million.

Includes Experience Study changes.



Reconciliation of Employer Contribution

	Regular	SLEP	ECO	Total
Prior Year	11.34 %	22.39 %	73.50 %	11.94 %
Tier 2 Structure	(0.12)%	(0.16)%	% 00.0	(0.12)%
Investment Return	0.12 %	0.20 %	% 19.0	% 60.0
Pay Increases	(0.16)%	(1.38)%	(0.37)%	(0.16)%
Demographic (Retirement, Turnover, etc.)	(0.02)%	0.19 %	2.20 %	0.00 %
Payroll Growth	%60.0	0.49 %	5.13 %	0.08 %
Death and Disability Rate Change	(0.08)%	%(80.0)	(0.02)%	(0.08)%
Other	0.07 %	(0.16)%	1.64 %	0.03 %
Current Year	11.24 %	21.49 %	82.72 %	11.79 %



Conclusion

- Investment markets continue to be volatile
- IMRF is still well-funded, (89% funding value basis, 88% market value basis) considering recent historic market volatility; national average is around 75%



Disclaimers

- the actuarial valuation report issued on March 22, 2017. This This presentation is intended to be used in conjunction with presentation should not be relied on for any purpose other than the purpose described in the valuation report.
- This presentation shall not be construed to provide tax advice, legal advice or investment advice.
- If you need additional information in order to make an informed decision, please contact the authors.



Next, Mr. Buis from Gabriel Roeder Smith & Company gave a presentation on Contribution Rate Volatility.

He noted that Contribution Rate Volatility is influenced by investment market volatility; funding policy (asset smoothing and amortization policy); and, employer demographics.

Mr. Buis also reviewed the key features of IMRF's current funding policy with the Board.

Discussion followed.

(17-05-02) (1st Quarter Investment Performance Report) Ms. Becker-Wold from Callan Associates presented an evaluation of IMRF's investment performance for the period ending March 31, 2017.

Questions and discussion followed.

(17-05-03) (Investment Manager Activities - Callan Associates) Mr. Ball of Callan Associates presented the following report to the Board on the activities of IMRF's investment managers for the month of April 2017:

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Callan

April 30, 2017

Illinois Municipal

Retirement Fund

Monthly Performance Report

Investment Measurement Service

Monthly Review

The following report was prepared by Callan Associates Inc. ("CAI") using information from sources that include the following: fund trustee(s); fund custodian(s); investment manager(s); CAI computer software; CAI investment manager and fund sponsor database; third party data vendors; and other outside sources as directed by the client. CAI assumes no responsibility for the accuracy or completeness of the information provided, or methodologies employed, by any information providers external to CAI. Reasonable care has been taken to assure the accuracy of the CAI database and computer software. Callan does not provide advice regarding, nor shall Callan be responsible for, the purchase, sale, hedge or holding of individual securities including, without limitation securities of the client (i.e., company stock) or derivatives in the client's accounts. In preparing the following report, CAI has not reviewed the risks of individual security holdings or the conformity of individual security holdings with the client's investment policies and guidelines, nor has it assumed any responsibility to do so. Advice pertaining to the merits of individual securities and derivatives should be discussed with a third party securities expert. Copyright 2017 by Callan Associates Inc.

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Market Environment As of April 30, 2017

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		Year to		Last 3	Last 5	Last 10
Index	Last Month	Date	Last Year	Years	Years	Years
Russell:3000 Index	1.06	6.86	18.58	10.10	13.57	7.23
S&P:500	1.03	7.16	17.92	10.47	13.68	7.15
Russell:2000 Index	1.10	3.59	25.63	9.03	12.95	7.05
MSCI:ACWI ex US	2.14	10.17	12.59	0.83	5.13	1.12
MSCI:EM	2.19	13.88	19.13	1.79	1.49	2.48
Blmbg:Aggregate	0.77	1.59	0.83	2.66	2.27	4.30
NCREIF:Total Index			æ	55	0.55	25
Blmbg:Commodity Price Idx	(1.57)	(4.00)	(1.76)	(15.21)	(9.87)	(6.98)

The market malaise encountered at the end of March continued through much of April. In the U.S., the withdrawal of the health care reform bill continued to cast doubt around the likelihood of other pro-growth policies. Abroad, concerns over the potential election of French populist candidate Le Pen and associated implications regarding the stability of the European Union produced caution. However, investor sentiment improved on April 24 when results of the first round election increased the probability that moderate candidate Macron would become France's next President. In the wake of this news, global equity markets posted positive returns with non-U.S. indices leading their U.S. counterparts. The Russell 3000 Index rose 1.1% during the period. The MSCI ACWI ex U.S. Index advanced 2.1%, propelled by performance in both developed and emerging Europe. The MSCI Emerging Markets Index was up 2.2%. The U.S. Aggregate gained 0.8% over the period as investors had flocked to the relative safety of bonds leading up to the French election.

After slowing last month, nonfarm payroll growth rebounded, adding 211,000 jobs. Excluding March, over 200,000 jobs have now been added each month this year. On the heels of this strength the unemployment rate continued to drop, falling to 4.4%. This is the lowest reading since May 2001. The labor force participation rate held relatively steady, falling only one tenth to 62.9%. Average hourly earnings registered 0.3% month-over-month and 2.5% year-over-year increases. While these figures came in near consensus, wage pressure remains stubbornly absent given the tight labor market conditions.

Headline CPI fell 0.3% month-over-month in March, coming in below consensus expectations. Year-over-year, the index is up 2.4%. Core CPI fell a disappointing 0.1% for the month due to lower energy prices but rose 2.0% year-over-year. The communications component saw a steep drop of 3.5%, reflecting a decline in wireless phone services. Apparel and transportation each contracted as well. Overall, the results pointed to weak consumer demand for goods and services. The initial estimate for first quarter GDP was a paltry 0.7%, driven by the same lack of consumer demand that hampered CPI. The reading also saw a divergence between private investment, which was relatively strong, and consumer spending. Although GDP tends to be weakest in the first quarter due to seasonality, the result was still below expectations.

Page 269021 Illinois Municipal Retirement Fund

^{*}Due to a lag in the reporting of NCREIF Property Index returns, the monthly return shown is deduced from the most recent quarterly return. This monthly return, when compounded over three months, equates to the quarterly return.

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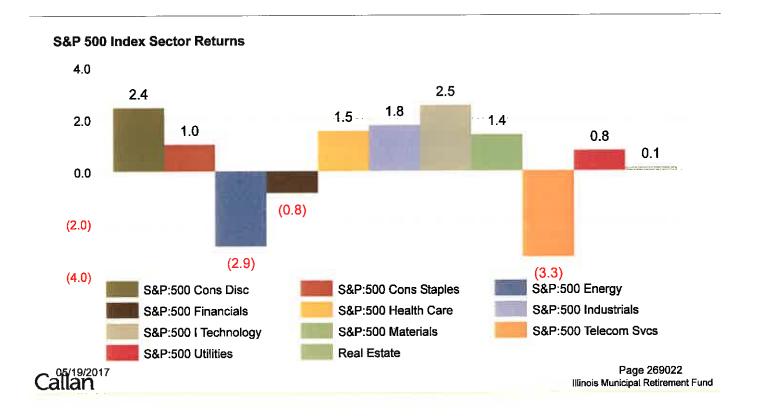
U.S. Equity Overview As of April 30, 2017

7.0 0.7.10 00, =0						Last 10
Index	Last Month	Year to Date	Last Year	Last 3 Years	Last 5 Years	Years
Russell:3000 Index	1.06	6.86	18.58	10.10	13.57	7.23
Russell:1000 Index	1.06	7.15	18.03	10.20	13.63	7.25
Russell:1000 Growth	2.29	11.40	19.50	12.11	13.87	8.88
Russell:1000 Value	(0.19)	3.07	16.55	8.26	13.32	5.53
Russell:Midcap Index	0.77	5.96	16.70	8.97	13.34	7.62
Russell:2000 Index	1.10	3.59	25.63	9.03	12.95	7.05
Russell:2000 Growth	1.84	7.29	24.06	9.27	12.89	7.97
Russell:2000 Value	0.39	0.26	27.18	8.71	12.96	6.02

After trading flat to negative for most of April, U.S. equities generated strong results in the final week of the month, lifting broad benchmarks into positive territory. This lift came as the markets cheered French election results, which went in favor of the moderate candidate over the populist candidate, stemming fears of further challenges for the European Union.

Returns among large and small caps were generally uniform (Russell 1000 Index: +1.1%; Russell 2000 Index: +1.1%). Growth continued to outperform value as it has each month this year (Russell 1000 Growth: +2.3%; Russell 1000 Value: -0.2%). The Russell Midcap Index lagged the broader equity market but still produced a healthy 0.8% return.

Among S&P sectors, cyclicals such as Consumer Discretionary (+2.4%) and Industrials (+1.8%) fared better than defensive sectors including Consumer Staples (+1.0%) and Utilities (+0.8%). Technology (+2.5%) was also an area of strength as larger names such as Alphabet, Microsoft, and Facebook drove the sector upward. Conversely, Energy (-2.9%), Financials (-0.8%), and Telecom (-3.3%) struggled.

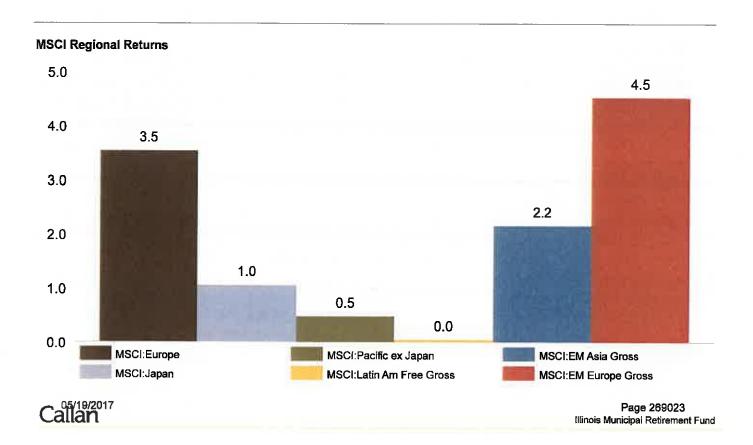


Non-U.S.	Equity	Overview
As of Apa	ii 30, 2	017

	Year to			Last 3	Last 5	Last 10
Index	Last Month	Date	Last Year	Years	Years	Years
MSCI:ACWI ex US	2.14	10.17	12.59	0.83	5.13	1.12
MSCI:EAFE	2.54	9.97	11.29	0.86	6.78	0.87
MSCI:EAFE Hedged Net	1.52	6.62	19.20	7.70	11.80	2.57
MSCI:EM	2.19	13.88	19.13	1.79	1.49	2.48
MSCI:ACWI ex US Small Cap	3.00	12.04	12.48	3.53	7.49	2.89

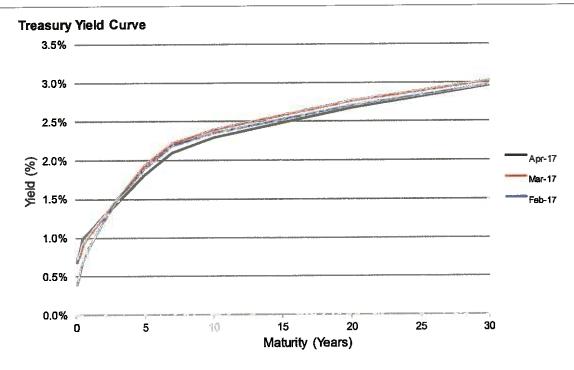
The French presidential election headlined international news as the country advanced through the first round with a run off between candidate Le Pen and Macron scheduled for early May. International stocks continued to outperform their U.S. counterparts in April (MSCI ACWI ex U.S.: 2.1% vs Russell 3000 Index: +1.1%). The European Central Bank made no policy changes in April, inflation rose to a 1.9% annualized rate, and speculation of further reduction in quantitative easing increased. Japan produced positive returns, but had no major economic developments during the month. Emerging markets (+2.2%) outperformed developed markets, bolstered by the U.S. dollar weakness (MSCI EAFE Index: +2.5% vs MSCI EAFE Hedged Index: +1.5%).

All MSCI regional returns were in the black for the month. Emerging Europe (MSCI Emerging Europe) lead the way returning 4.5%, followed by developed Europe (MSCI Europe) with a return of 3.5%. Europe as a whole was followed by Asian emerging markets (MSCI EM Asia), Japan (MSCI Japan), Pacific ex Japan (MSCI Pacific ex Japan), and Latin America (MSCI Latin America), returning 2.2%, 1.0%, 0.5% and 0.0%, respectively.



Fixed Income Overview As of April 30, 2017

		Year to		Last 3	Last 5	Last 10
Index	Last Month	Date	Last Year	Years	Years	Years
Blmbg:Aggregate	0.77	1.59	0.83	2.66	2.27	4.30
Blmbg:US Government	0.68	1.37	(0.57)	2.09	1.45	3.80
Blmbg:Credit	1.00	2.31	2.74	3.45	3.63	5.32
Blmbg:Mortgage Backed Sec	0.65	1.13	0.66	2.60	2.04	4.18
Blmbg:US TIPS	0.59	1.86	1.73	1.77	0.69	4.22
ML:US High Yield Cash Pay	1.14	3.87	13.56	4.76	6.84	7.26
3 Month T-Bill	0.07	0.17	0.40	0.19	0.15	0.65
CS:Lev Loan	0.44	1.64	8.16	3.80	4.80	4.16



Fixed income returns were relatively muted in April following the much anticipated rate increase on March 15. The Fed continues to reiterate their intent for two more rate hikes in 2017, but the market implied probabilities of those hikes are not convincing. The Treasury curve flattened during the month as the long end of the curve dropped, rates falling as investors searched for safety in the face of political uncertainty. The short end rose in anticipation of future rate hikes. The 6-month Treasury showed the greatest increase, finishing the month up eight basis points at 0.99%. The 10-year fell 11 basis points to 2.29%. Despite a slowdown during April, new issuance remains ahead of last year.

Fixed income sectors produced positive returns across the board in April. The Bloomberg Aggregate Index peaked on April 18, and then slowly faded into the end of the month. The Index still managed to return 0.8% for the period. High Yield (ML High Yield CP Index: +1.1%) bounced back from a disappointing March, providing the strongest return of all fixed income sectors in April. Credit (Bloomberg Credit Index), the second best performer year to date (+2.3%), closely followed high yield returning 1.0% during the month. High yield and credit were followed by governments (Bloomberg Government Index: +0.7%), mortgages (Bloomberg Mortgage Backed Securities Index: +0.7%), TIPS (Bloomberg U.S. TIPS Index: +0.6%) and leveraged loans (Credit Suisse Leverage Loans Index: +0.4%).

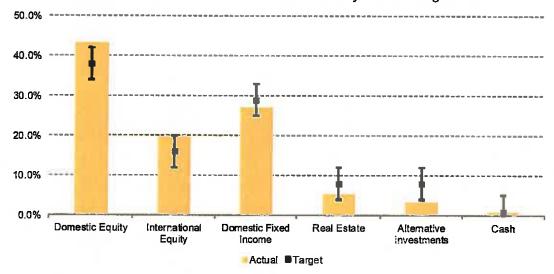


Executive Summary

Total Fund

Total Fund assets grew to \$38.10 billion at the end of April, up approximately \$517.8 million from the end of March. The Fund outperformed its benchmark during April, gaining 1.17%. The U.S. Equity composite fell 11 basis points short of its benchmark, while the International Equity composite outpaced its benchmark by 33 basis points. Real Estate ended April up 0.84%, ahead of the 0.51% return of its benchmark. Alternatives added 0.19% but missed the 0.72% return of its benchmark. Fixed Income gained 0.80% during the month, outperforming the 0.77% return of the Bloomberg Aggregate Index. For the trailing year, the Fund is up 12.20% and ahead of its benchmark by 1.61%.

Current policy states that when actual allocations of the asset classes differ by more than four percentage points from their policy targets, a recommendation for rebalancing will be made to the Board of Trustees. As of April, Alternatives was below target allocation by 4.6% and Domestic Equity was above the target allocation by 5.4%. All other asset classes were within the allowable range. The Chief Investment Officer and Consultant do not recommend any rebalancing at this time.



U.S. Equity

The U.S. Equity composite added 0.95% during April but missed the 1.06% return of the Russell 3000 Index. Large cap had the advantage over small cap, while style returns were mixed across the capitalizations.

Large Cap: IMRF's Large Cap managers were in line with the Russell 1000 Index during April, returning 1.06%. In aggregate, growth managers advanced 2.69% compared to the 2.29% return of the Russell 1000 Growth Index. Continuing the trend from last month, Sands was the best performing Large Cap Growth manager, gaining 3.56% in April. Despite falling 5 basis points, the value managers still outperformed the Russell 1000 Value Index by 14 basis points. Dodge & Cox was the only value manager that posted a positive absolute return for the quarter, gaining 0.43% relative to the -0.19% return of the Russell 1000 Value Index.

Small Cap: The Small Cap composite added 0.56% in April but missed the 1.10% return of the Russell 2000 Index. In a reversal of recent trends, the Small Cap Value managers (+0.72%) had the edge over the Small Cap Growth managers (+0.11%) in April. Similar to March, Frontier (+1.75%) was the best performing Small Cap Growth manager, while Inv. Counselors of Maryland (+1.00%) was the best performing Small Cap Value manager. The Micro-Cap composite advanced 1.23% in April, led by the 2.65% return of Ativo. The liquidation of Ariel began in April.

IMRF Commentary Executive Summary

International Equity

The International Equity composite outpaced the 2.14% return of the MSCI ACWI ex-U.S. (Net) Index in April, returning 2.47%.

<u>Large Cap:</u> International Large Cap managers had a positive absolute return of 2.36% compared to the 2.14% return of the MSCI ACWI ex-U.S. (Net) Index. International Large Cap Growth managers collectively grew 3.04%, led by the 3.22% return of William Blair. In aggregate, the International Large Cap Value managers gained 1.37%. Lazard led the way for the International Large Cap Value managers, returning 3.35%.

International Small Cap and Emerging Markets: The International Small Cap managers returned 4.63%, and beat the 3.00% return of the ACWI Small Cap ex US Index. Both Franklin Templeton (+4.80%) and William Blair (+4.49%) posted strong absolute returns in April. The Emerging Markets portfolio, managed by Genesis, advanced 2.10% during the month but missed the 2.21% return of the MSCI Emerging Markets Index.

Fixed Income

The Fixed Income composite added 80 basis points in April, finishing 3 basis points ahead of the Bloomberg Aggregate Index. Continuing its streak, the Emerging Markets Debt manager, Standish, was the best performing Fixed Income manager, returning 1.54%.

Active Core: In aggregate, the Active Core Fixed Income managers slightly underperformed the 0.77% return of the Bloomberg Aggregate Index, gaining 0.74% during April. Both EARNEST Partners and Piedmont outperformed the Bloomberg Aggregate Index, while Garcia Hamilton fell slightly behind the benchmark.

Core Plus: The Core Plus managers collectively advanced 0.74%. Taplin, Canida, Habacht was the best performing manager, adding 1.02%, followed closely by Brandes (+0.90%), Western (+0.89%), and LM Capital (+0.88%). Performance data for Progress is not yet available.

Bank Loans: The Bank Loans composite, managed by Barings, gained 1.04% during April, outperforming the 0.43% return of its custom benchmark.

Emerging Markets: The Emerging Market Debt component, managed by Standish, was again the best performer in the Fund's Fixed Income composite, returning 1.54%, and surpassing its custom benchmark return of 1.24%.

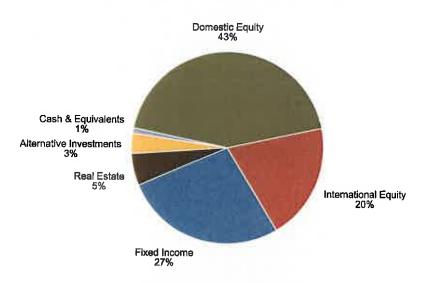
Opportunistic: The Opportunistic fixed income allocation, managed by Crescent, grew 0.91% in April, and outpaced the 0.78% return of its custom benchmark.

High Yield: The high yield manager, MacKay Shields, outperformed its benchmark by 8 basis points, growing 1.22% during April.

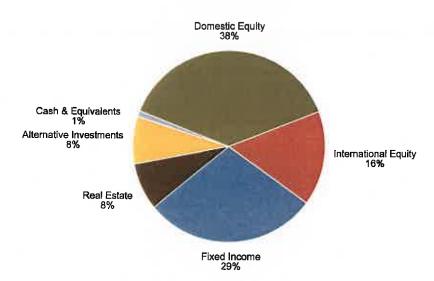
Actual vs Target Asset Allocation

The first chart below shows the Fund's asset allocation as of April 30, 2017. The second chart shows the Fund's target asset allocation as outlined in the investment policy statement.

Actual Asset Allocation



Target Asset Allocation



Asset Class	\$Millions Actual	Percent Actual	Percent Target	Percent Difference	\$Millions Difference
Domestic Equity	16.533	43.4%	38.0%	5.4%	2,056
International Equity	7.509	19.7%	16.0%	3.7%	1.414
Fixed Income ' '	10,370	27.2%	29.0%	(1.8%)	(678)
Real Estate	2,048	5.4%	8.0%	(2.6%)	(1,000)
Alternative Investments	1,280	3.4%	8.0%	(4.6%)	
Cash & Equivalents	1,280 358	0.9%	1.0%	(0.1%)	(1,768) (23)
Total	38.097	100.0%	100.0%		\/_

^{*} Current Month Target = 38.0% Russell 3000 Index, 29.0% Blmbg Aggregate, 16.0% MSCI ACWI ex US, 8.0% NCREIF NFI-ODCE Val Wt Nt, 8.0% 9% Annually and 1.0% 3-month Treasury Bill.



Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of April 30, 2017, with the distribution as of March 31, 2017.

Asset Distribution Across Investment Managers

	April 30, 20	17	March 31, 2017		
	Market Value	Percent	Market Value	Percent	
Domestic Equity*	\$16,532,629,988	43.40%	\$16,440,844,737	43.75%	
Large Cap Growth					
Holland	965,234,012	2.53%	938,702,327	2.50%	
NTGI S&P 500 Growth Idx	1,684,993,329	4.42%	1,653,028,686	4.40%	
Sands	1,336,342,617	3.51%	1,290,403,469	3.43%	
arge Cap Value					
Dodge & Cox	1,351,770,359	3.55%	1,349,317,547	3.59%	
ВМО	1,353,987,959	3.55%	1,363,493,687	3.63%	
LSV	1,382,407,076	3.63%	1,385,126,820	3.69%	
NTGi S&P 500 Value Idx	1,582,013,967	4.15%	1,582,751,181	4.21%	
arge Cap Core					
NTGI MarketCap Index	3,148,379,291	8.26%	3,115,555,096	8.29%	
Small Cap Growth					
Frontier	393,601,598	1.03%	386,831,552	1.03%	
FIAM	1,030,553,497	2.71%	1,035,787,334	2.76%	
Small Cap Value					
Channing	213,659,747	0.56%	214,449,546	0.57%	
Dimensional Small Cap Value	849,178,977	2.23%	842,764,551	2.24%	
Inv. Counselors of Maryland	718,771,095	1.89%	711,631,886	1.89%	
Лісго Сар					
Ariel	15,013,901	0.04%	73,882,461	0.20%	
Ativo	125,022,095	0.33%	121,790,571	0.32% 1.00%	
Dimensional Micro Cap	381,700,469	1.00%	375,328,023	1.00%	
nternational Equity nternational Large Cap Growth	\$7,509,160,896	19.71%	\$7,327,276,592	19.50%	
EARNEST Partners	574,925,987	1.51%	558,786,462	1.49%	
William Blair	646,474,356	1.70%	626,295,151	1.67%	
nternational Large Cap Value					
Brandes	557,545,069	1.46%	552,518,517	1.47%	
Lombardia	5,219	0.00%	5,186	0.009	
Mondrian	533,484,100	1.40%	525,352,585	1.409	
Lazard	101,322,098	0.27%	98,039,864	0.26%	
nternational Large Cap Core					
Arrowstreet	606,877,894	1.59%	591,598,653	1.579	
Brown	305,807,169	0.80%	296,096,032	0.799	
GlobeFlex	588,286,605	1.54%	574,933,500	1.539	
NTGI MSCI EAFE Index Progress Intl Equity	2,185,162,888 257,544,151	5.74% 0.68%	2,129,21 4, 814 257,5 4 4,151	5.679 0.699	
nternational Small Cap					
·	045 000 000	0.57%	205,929,571	0.55%	
Franklin Templeton William Blair	215,808,690 254,281,047	0.67%	243,357,537	0.65%	
Ernerging Markets Genesis	681,640,842	1.79%	667,609,755	1.789	
		27.22%	\$10,305,955,574	27.429	
Total Fixed Income Domestic Fixed Core	\$10,369,746,657	·	. , , ,		
EARNEST Partners	551,904,581	1.45%	548,818,595	1.469	
Piedmont Investment	552,742,186	1.45%	549,880,773 531,060,137	1.469	
Garcia Hamilton	523,434,722	1.37%	521,059,137	1.39%	

^{*} includes asset in equity transition account.



Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of April 30, 2017, with the distribution as of March 31, 2017.

Asset Distribution Across Investment Managers

	April 30, 2017		March 31, 2017		
	Market Value	Percent	Market Value	Percent	
mestic Fixed Passive Core					
NTGI Blmbg Agg. Index	1,533,172,227	4.02%	1,521,620,770	4.05%	
BlackRock US Debt	1 , 416,524,647	3.72%	1,405,411,216	3.74%	
mestic Fixed Core Plus					
BlackRock Core Plus	749,656,857	1.97%	744,774,345	1.98%	
Brandes Core Plus	247,183,202	0.65%	245,172,466	0.65%	
LM Capital	864,733,726	2.27%	859,209,254	2.29%	
Progress Fixed Income	862,411,700	2.26%	862,411,700	2.29%	
Taplin, Canida, & Habacht	878,528,750	2.31%	871,976,328	2.32%	
Western	935,525,836	2.46%	928,814,873	2.47%	
nk Loans					
Barings Global Loan Fund	308,303,700	0.81%	308,305,862	0.82%	
			, ,		
nerging Markets Debt Standish	197,831,362	0.52%	194,830,239	0.52%	
	101,001,002	0.0270	154,030,200	0.5279	
portunistic Fixed Income Crescent	117 760 700	0.31%	440 400 260	0.0402	
	117,768,792	U.31%	118,192,368	0.31%	
h Yield Mackay Shiolda	000 054 700	4.0504	001-1-0:-		
MacKay Shields FIAM High Yield	628,954,738	1.65%	624,617,347	1.66%	
FIMINI FIGU	1,069,630	0.00%	860,300	0.00%	
al Estate al Estate Core	\$2,047,526,100	5.37%	\$2 ,055,545,012	5.47%	
TA Buckhead Ind. Prop.	270 252 240	4.000/	070 050 040	4 0404	
Barings Core Property Fund	379,353,340	1.00%	379,353,340	1.01%	
	142,996,842	0.38%	142,996,842	0.38%	
Barings European Core Property	21,513,578	0.06%	21,130,308	0.06%	
INVESCO Core RE	190,928,291	0.50%	187,728,02 0	0.50%	
AEW Core Property Trust	224,180,987	0.59%	222,513,392	0.59%	
CBRE US Core Property Trust	162,791,481	0.43%	158,669,597	0.42%	
al Estate Non-Core					
Artemis MWBE Spruce	50,976,625	0.13%	50,976,625	0.14%	
Franklin Templeton EMREFF	38,025,722	0.10%	38,025,722	0.10%	
Security Capital	53,590,036	0.14%	53,590,036	0.14%	
Dune II	34,307,190	0.09%		0.09%	
Non-Core Real Estate Funds*			34,307,190		
	650,493,122	1.71%	643,020,004	1.71%	
Non-Core Intl Real Estate Funds**	79,855,068	0.21%	75,780,685	0.20%	
Rockwood Fund VIII	2,654,798	0.01%	5,020,557	0.01%	
Almanac ARS V	6,824,931	0.02%	9,559,662	0.03%	
TA Fund IX	9,034,089	0.02%	32,873,033	0.09%	
ernative Investments	\$1,279,907,285	3.36%	\$1,287,489,186	3.43%	
solute Return Aurora	30,901,940	0.08%	22.624.406	0.000	
	30,301,340	U.UO 76	33,634,196	0.09%	
vate Equity	٠				
Abbott	311,773,410	0.82%	312,068,783	0.83%	
Muller & Monroe ILPEFF	2,913,771	0.01%	2,913,771	0.01%	
Muller & Monroe MPEFF	9,436,695	0.02%	9,436,695	0.03%	
Pantheon	210,948,663	0.55%	211,303,239	0.56%	
Private Equity Fund - Domestic	425,014,923	1.12%	430,191,782	1.14%	
Private Equity Fund - International	33,011,779	0.09%	29,880,376	0.08%	
riculture					
Premiere Partners IV	181,970,435	0.48%	183,163,900	0.49%	
berland					
Forest Investment Assoc.	73,935,669	0.19%	74,896,443	0.20%	
oh 9 Equivalente					
sh & Equivalents	\$357,996,627	0.94%	\$162,022,522	0.43%	
THE ENGINEERING					

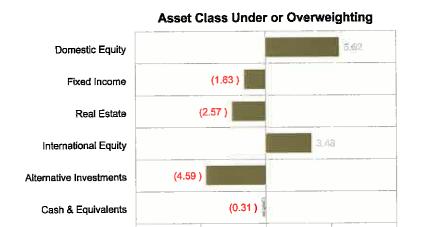
Non-Core Real Estate Funds funded since September 2011.

^{**} Non-Core International Real Estate Funds funded since August 2014.



Monthly Total Fund Relative Attribution - April 30, 2017

The following analysis approaches Total Fund Attribution from the perspective of relative return. Relative return attribution separates and quantifies the sources of total fund excess return relative to its target. This excess return is separated into two relative attribution effects: Asset Allocation Effect and Manager Selection Effect. The Asset Allocation Effect represents the excess return due to the actual total fund asset allocation differing from the target asset allocation. Manager Selection Effect represents the total fund impact of the individual managers excess returns relative to their benchmarks.



(5%)

(10%)

Relative Attribution by Asset Class **Actual vs Target Returns** 0.95 1.06 Domestic Equity 0.01 0.01 Fixed Income 0.84 0.03 0.51 Real Estate 0.07 0.10 International Equity (0.02) 0.19 0.72 (0.00)Alternative Investments (0.00)0.03 0.07 Cash & Equivalents 0.02 0.10 Total (0.10%)(0.05%)0.00% 0.15% 0.0% 0.5% 1.0% 1.5% 2.0% 2.5% 3.0% 🗾 Manager Effect 🏢 Asset Allocation 🌉 Total Actual Target

0%

5%

10%

Relative Attribution Effects for Month ended April 30, 2017

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	44%	38%	0.95%	1.06%	(0.05%)	(<mark>0.00%)</mark> 0.00%	(<mark>0.05%)</mark> 0.01%
Fixed Income Real Estate	27% 5%	29% 8%	0.80% 0.84%	0.77% 0.51%	`0.01%´ 0.02%	0.00%	0.01%
International Equity	19%	16%	2.47%	2.14%	0.07%	0.04%	0.10%
Alternative Investments	3%	8%	0.19%	0.72%	(0.02%) (0.00%)	0.02% 0.00%	(<mark>0.00%)</mark> 0.00%
Cash & Equivalents	1%	1%	0.03%	0.07%	(0.00/0)	0.0076	0.0070
Total			1.17% =	1.07%	+ 0.02% +	0.07%	0.10%

^{*} Current Month Target = 38.0% Russell 3000 Index, 29.0% Blmbg Aggregate, 16.0% MSCI ACWI ex US, 8.0% NCREIF NFI-ODCE Val Wt Nt, 8.0% 9% Annually and 1.0% 3-month Treasury Bill.



Asset Class Returns

The table below details the rates of return for the fund's asset class composites over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

Returns for Periods Ended April 30, 2017

	Last	Last 3	Year to	Last 12	
Domestic Equity	Month 0.95%	Months 4.11%	Date 6.09%	Months	
Blended Benchmark**	1.06%	4.11%	6.86%	19.77%	
Domestic Equity - Net	0.93%	4.06%	6.02 %	18.58% 19.51%	
International Equity	2.47%	6.99%	10.66%	12.69%	
MSCI ACWI x US (Net)	2.14%	6.40%	10.17%	12.59%	
International Equity - Net	2.46%	6.95%	10.59%	12.35%	
Fixed Income	0.80%	1.67%	2.09%	3.01%	
Blmbg Aggregate Index	0.77%	1.40%	1.59%	0.83%	
Fixed Income - Net	0.79%	1.64%	2.04%	2.88%	
Real Estate	0.84%	1.59%	1.82%	8.43%	
Blended Benchmark***	0.51%	1.54%	2.07%	7.23%	
Real Estate - Net	0.84%	1.59%	1.82%	8.43%	
Alternative Investments	0.19%	3.65%	2.35%	7.91%	
Alternatives Custom Benchmark****	0.72%	2.18%	2.91%	9.00%	
Alternative Investments - Net	0.18%	3.61%	2.29%	7.64%	
Absolute Return	16.24%	43.38%	17.89%	25.44%	
HFR Fund-of-Funds Index	0.56%	1.94%	2.97%	6.27%	
Private Equity	(0.00%)	3.85%	3.32%	10.54%	
Alternatives Custom Benchmark****	0.72%	2.18%	2.91%	9.00%	
Agriculture	(0.65%)	(1.14%)	(1.15%)	(1.71%)	
Blended Benchmark***	0.51%	1.54%	2.07%	7.23%	
Timberland	(1.53%)	(1.53%)	(1.53%)	(1.03%)	
Blended Benchmark***	0.51%	1.54%	2.07%	7.23%	
Total Fund	1.17%	3.80%	5.41%	12.20%	
Total Fund - Net	1.15%	3.76%	5.35%	11.98%	
Total Fund Benchmark	1.07%	3.58%	5.07%	10.59%	

allan

^{*} Current Month Target = 38.0% Russell 3000 Index, 29.0% Blmbg Aggregate, 16.0% MSCI ACWI ex US, 8.0% NCREIF NFI-ODCE Val Wt Nt, 8.0% 9% Annually and 1.0% 3-month Treasury Bill.

** The Blended Benchmark is currently Russell 3000 Index. Returns prior to January 1, 2015, reflect those of the Dow Jones U.S. Total Stock Market Index.

*** The Blended Benchmark is currently ODCE Value Weighted Index. Returns between January 1, 2007 and December 31, 2012 reflect NPI+1%. Returns prior to January 1, 2007, reflect those of the Consumer Price Index +5%.

Given that ODCE returns are updated quarterly, an approximation of the Index is used in the monthly reports.

**** The Alternatives Custom Benchmark is based on an annualized rate of return of 9.0%. Prior to July 1, 2010 the Benchmark was based on an annual return of 12.0%. Prior to 2003, it was based on an annual return of 15.0%.

Asset Class Returns

The table below details the rates of return for the fund's asset class composites over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

	Last 36 Months	Last 60 Months	Last 120 Months	Since Inception
Domestic Equity	9.44%	13.38%	7.44%	11.60% (1/82)
Blended Benchmark**	10.07%	13.52%	7.34%	11.36% (1/82)
Domestic Equity - Net	9.19%	13.10%	7.17%	8.07% (1/05)
International Equity	2.22%	7.22%	2.02%	7.85% (9/86)
MSCI ACWI x UŚ (Net)	0.83%	5.13%	1.12%	4
International Equity - Net	1.91%	6.88%	1.71%	5.48% (1/05)
Fixed Income	3.26%	3.41%	5.20%	8.49% (1/82)
Blmbg Aggregate Index	2.66%	2.27%	4.30%	7.96% (1/82)
Fixed Income - Net	3.13%	3.27%	5.06%	4.93% (1/05)
Real Estate - Net	10.67%	10.89%	4.53%	7.03% (1/05)
Blended Benchmark***	10.63%	11.13%	7.39%	7.74% (1/05)
Alternative Investments	7.48%	8.10%	5.96%	10.62% (2/86)
Alternatives Custom Benchmark****	9.00%	9.00%	9.94%	12.97% (2/86)
Alternative Investments - Net	7.13%	7.77%	5.67%	7.74% (1/05)
Absolute Return	9.03%	7.57%	4.08%	5.61% (1/02)
HFR Fund-of-Funds Index	2.21%	3.39%	1.12%	3.43% (1/02)
Private Equity	9.92%	10.03%	8.19%	12.75% (2/86)
Alternatives Custom Benchmark****	9.00%	9.00%	9.94%	12.97% (2/86)
Agriculture	11.64%	15.58%	9.44%	8.46% (10/97)
Blended Benchmark***	10.63%	11.13%	7.39%	7.56% (10/97)
Timberland	0.08%	2.32%	4.67%	7.86% (10/92)
Blended Benchmark***	10.63%	11.13%	7.39%	7.57% (10/92)
Total Fund	6.11%	8.88%	6.18%	9.95% (1/82)
Total Fund - Net	5.88%	8.64%	5.95%	7.01% (1/05)
Total Fund Benchmark	6.43%	8.37%	6.04%	6.84% (1/05)

^{*} Current Month Target = 38.0% Russell 3000 Index, 29.0% Blmbg Aggregate, 16.0% MSCI ACWI ex US, 8.0% NCREIF NFI-ODCE Val Wt Nt, 8.0% 9% Annually and 1.0% 3-month Treasury Bill.

** The Blended Benchmark is currently Russell 3000 Index. Returns prior to January 1, 2015, reflect those of the Dow Jones U.S. Total Stock Market Index.

*** The Blended Benchmark is currently ODCE Value Weighted Index. Returns between January 1, 2007 and December 31, 2012 reflect NPI+1%. Returns prior to January 1, 2007, reflect those of the Consumer Price Index +5%. Given that ODCE returns are updated quarterly, an approximation of the Index is used in the monthly reports.

**** The Alternatives Custom Benchmark is based on an annualized rate of return of 9.0%. Prior to July 1, 2010 the Benchmark was based on an annual return of 12.0%. Prior to 2004, the Benchmark was based on an annual return of 13.0%. Prior to 2003 it was based on an annual return of 15.0%. 13.0%. Prior to 2003, it was based on an annual return of 15.0%.



Large Cap Equity Returns

The table below details the rates of return for the fund's large cap growth and large cap value managers over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

		Last	Year	Last
	Last	3	to	12
	Month	Months	Date	Months
Large Cap Equity	1.06%	4.89%	7.44%	19.02%
Russell 1000 Index	1.06%	5.04%	7.15%	18.03%
Large Cap Growth	2.69%	8.08%	13.31%	18.82%
Holland	2.83%	8.37%	11.89%	16.47%
LCG Blended Benchmark*	2.29%	7.77%	11.40%	19.50%
Russell 1000 Growth Index	2.29%	7.77%	11,40%	19.50%
Holland - Net	2.78%	8.26%	11.78%	16.18%
NTGI S&P 500 Growth Idx	1.93%	7.39%	10.59%	19.13%
S&P/Citl 500 Growth Index	1.95%	7.43%	10.65%	19.15%
NTGI S&P 500 Growth Idx - Net	1.93%	7.39%	10.59%	19.13%
Sands	3.56%	8.74%	18.05%	20.55%
LCG Blended Benchmark*	2.29%	7.77%	11.40%	19.50%
Russell 1000 Growth Index	2.29%	7.77%	11.40%	19.50%
Sands - Net	3.56%	8.69%	17.99%	20.28%
Large Cap Value	(0.05%)	2.76%	3.94%	19.24%
Dodge & Cox	0.43%	3.09%	5.54%	25.90%
LCV Blended Benchmark**	(0.19%)	2.35%	3.07%	16.55%
Russell 1000 Value Index	(0.19%)	2.35%	3.07%	16.55%
Dodge & Cox - Net	0.43%	3.04%	5.49%	25.71%
ВМО	(0.53%)	2.66%	3.89%	15.69%
LCV Blended Benchmark**	(0.19%)	2.35%	3.07%	16.55%
Russell 1000 Value Index	(0.19%)	2.35%	3.07%	16.55%
BMO - Net	(0.53%)	2.61%	3.83%	15.44%
LSV	(0.03%)	2.68%	3.16%	19.92%
LCV Blended Benchmark**	(0.19%)	2.35%	3.07%	16.55%
Russell 1000 Value Index	(0.19%)	2.35%	3.07%	16.55%
LSV - Net	(0.09%)	2.62%	3.04%	19.64%
NTGI S&P 500 Value ldx	(0.05%)	2.61%	3,31%	16.35%
S&P/Citi 500 Value Index	(0.07%)	2.54%	3.22%	16.13%
NTGI S&P 500 Value ldx - Net	(0.05%)	2.61%	3.31%	16.34%
Large Cap Passive Core	1.05%	4.88%	6.92%	18.69%
NTGI MarketCap ldx	1.05%	4.88%	6.92%	18.69%
DJ U.S. Total Stock Market Index	1.04%	4.85%	6.89%	18.56%
NTGI MarketCap ldx - Net	1.05%	4.88%	6.91%	18.68%



^{*} The LCG Blended Benchmark is currently the Russell 1000 Growth Index. Returns prior to January 1, 2006, reflect those the S&P 500/Citigroup Growth Index.

** The LCV Blended Benchmark is currently the Russell 1000 Value Index. Returns prior to January 1, 2006, reflect those of the S&P 500/Citigroup Value Index.

Large Cap Equity Returns

The table below details the rates of return for the fund's large cap growth and large cap value managers over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

	Last	Last	Last		
	36	60	120	Since	
	Months	Months	<u>Months</u>	Inceptior	1
arge Cap Equity	10.05%	13.60%	7.41%	11.18%	(1/82)
Russell 1000 Index	10.20%	13.63%	7.25%	11.55%	(1/82)
arge Cap Growth	10.76%	12.56%	8.76%	11.5 9 %	(1/82)
Holland	10.49%	11.94%	9.10%	10.25%	(11/94)
LCG Blended Benchmark*	12.11%	13.87%	8.88%	9.79%	(11/94)
Russell 1000 Growth Index	12.11%	13.87%	8.88%	9.04%	(11/94)
Holland - Net	10.26%	11.69%	8.82%	8.07%	(1/05)
NTGI S&P 500 Growth ldx	12.16%	14.24%	8.92%	6.89%	(8/01)
S&P/Citi 500 Growth Index	12.13%	14.22%	8.91%	6.85%	(8/01)
NTGI S&P 500 Growth Idx - Net	12.15%	14.23%	8.91%	8.83%	(1/05)
Sands	9,55%	12.24%	11.35%	10.94%	(11/03)
LCG Blended Benchmark*	12,11%	13.87%	8.88%	8.85%	(11/03)
Russell 1000 Growth Index	12.11%	13.87%	8.88%	8.91%	(11/03)
Sands - Net	9.31%	11.99%	11.09%	9.67%	(1/05)
arge Cap Value	9.06%	14.57%	6.21%	10.43%	(10/82)
Dodge & Cox	10.10%	15.87%	6.51%	9.65%	(9/03)
LCV Blended Benchmark**	8.26%	13.32%	5.53%	8.44%	(9/03)
Russell 1000 Value Index	8.26%	13.32%	5.53%	8.63%	(9/03)
Dodge & Cox - Net	9.89%	15.63%	6.28%	7.77%	(1/05)
ВМО	8.53%	13.88%	6.53%	8.01%	(2/01)
LCV Blended Benchmark**	8.26%	13.32%	5.53%	5.48%	(2/01)
Russell 1000 Value Index	8.26%	13.32%	5.53%	6.62%	(2/01)
BMO - Net	8.29%	13.63%	6.29%	8.13%	(1/05)
LSV	9.15%	15.41%	6.81%	11.36%	(2/03)
LCV Blended Benchmark**	8.26%	13.32%	5.53%	9.50%	(2/03)
Russell 1000 Value Index	8.26%	13.32%	5.53%	9.52%	(2/03)
LSV - Net	8.89%	15.13%	6.52%	8.37%	(1/05)
NTGI S&P 500 Value ldx	8.51%	13.04%	5.33%	5.56%	(8/99)
S&P/Citi 500 Value Index	8.42%	12.94%	5.26%	5.53%	(8/99)
NTGI S&P 500 Value ldx - Net	8.51%	13.04%	5.32%	6.87%	(1/05)
arge Cap Passive Core	10.14%	13.59%	7.26%	11.10%	(1/85)
NTGI MarketCap ldx	10.14%	13.59%	7.27%	10.85%	(2/85)
DJ U.S. Total Stock Market Index	10.03%	13.49%	7.32%	10.80%	(2/85)
NTGI MarketCap Idx - Net	10.14%	13.58%	7.26%	8.11%	(1/05)



^{*} The LCG Blended Benchmark is currently the Russell 1000 Growth Index. Returns prior to January 1, 2006, reflect those the S&P 500/Citigroup Growth Index.

** The LCV Blended Benchmark is currently the Russell 1000 Value Index. Returns prior to January 1, 2006, reflect those of the S&P 500/Citigroup Value Index.

Small Cap Equity Returns

The table below details the rates of return for the fund's small cap growth, small cap value, and micro cap managers over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

	Last	Last	Year to	Last 12
	Month	Months	Date	Months
Small Cap Equity	0.56%	1.58%	1.81%	21.89%
Russell 2000 Index	1.10%	3.18%	3.59%	25.63%
Small Cap Growth	0.11%	2.28%	3.86%	18.28%
Frontier	1.75%	4.87%	6.98%	23.12%
Russell 2000 Growth Index	1.84%	5.57%	7.29%	24.06%
Frontier - Net	1.63%	4.74%	6.72%	22.44%
FIAM	(0.51%)	1.32%	2.71%	15.53%
Russell 2000 Growth Index	1.84%	5.57%	7.29%	24.06%
FIAM - Net	(0.62%)	1.21%	2.60%	14.87%
Small Cap Value	0.72%	0.67%	0.33%	24.62%
Channing	(0.37%)	(0.14%)	(0.10%)	25.24%
Russell 2000 Value Index	0.39%	0.98%	0.26%	27.18%
Channing - Net	(0.49%)	(0.26%)	(0.34%)	24.48%
DFA Small Cap Value	0.76%	0.11%	(0.75%)	23.49%
Russell 2000 Value Index	0.39%	0.98%	0.26%	27.18%
DFA Small Cap Value - Net	0.76%	(0.01%)	(0.87%)	22.89%
Inv. Counselors of Maryland	1.00%	1.58%	1.77%	26.95%
Russell 2000 Value Index	0.39%	0.98%	0.26%	27.18%
Inv. Couns. of Maryland - Net	1.00%	1.49%	1.68%	26.22%
Micro Cap	1.23%	2.74%	1.58%	22.80%
Ativo	2.65%	5.68%	3.79%	23.53%
Russell Microcap Index	1.03%	2.97%	1.41%	25.03%
Russell 2000 Growth Index	1.84%	5.57%	7.29%	24.06%
Russell 2000 Index	1.10%	3.18%	3.59%	25.63%
Ativo - Net	2.50%	5.51%	3.48%	22.83%
DFA Micro Cap	1.70%	2.76%	1.24%	25.92%
Russell 2000 Value Index	0.39%	0.98%	0.26%	27.18%
Russell 2000 index	1.10%	3.18%	3,59%	25.63%
DFA Micro Cap - Net	1.70%	2.63%	1.11%	25.30%



Small Cap Equity Returns

The table below details the rates of return for the fund's small cap growth, small cap value, and micro cap managers over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

	Last	Last	Last	
	36	60	120	Since
	Months	Months	Months	Inception
Small Cap Equity	7.87%	12.91%	8.26%	12.45% (7/88)
Russell 2000 Index	9.03%	12.95%	7.05%	9.60% (7/88)
Small Cap Growth	8.19%	12.57%	8.47%	13.03% (7/88)
Frontier	5.53%	11.01%	8.32%	12.89% (8/88)
Russell 2000 Growth Index	9.27%	12.89%	7.97%	8.08% (B/BB)
Frontier - Net	4.92%	10.38%	5.82%	6.92% (1/05)
FIAM	10.77%	14.26%	9.66%	13.78% (8/88)
Russell 2000 Growth Index	9.27%	12.89%	7.97%	8.08% (8/88)
FIAM - Net	10.15%	13.67%	9.04%	10.99% (1/05)
Small Cap Value	9.16%	14.02%	7.85%	12.31% (9/89)
Channing	9.32%	15.69%	_	12.96% (7/11)
Russell 2000 Value Index	8.71%	12.96%	6.02%	11.04% (7/1)
Channing - Net	8.82%	15.03%	-	12.32% (7/11)
Charming - 146t	0.0270	10.0075		
DFA Small Cap Value	8.54%	14.60%	7.44%	12.87% (2/96)
Russell 2000 Value Index	8.71%	12.96%	6.02%	10.09% (2/96)
DFA Small Cap Value - Net	8.04%	14.06%	6.92%	8.54% (1/05)
Diff official dup value 1101				
Inv. Counselors of Maryland	11.01%	14.23%	8.40%	12.05% (5/99)
Russell 2000 Value Index	8.71%	12.96%	6.02%	9.67% (5/99)
Inv. Couns. of Maryland - Net	10.49%	13.74%	7.88%	9.02% (1/05)
·				
Micro Cap	4.57%	11.23%	6.05%	11.91% (7/84)
Ativo	10.80%	16.88%	変	14.95% (10/10)
Russell Microcap Index	7.36%	12.99%	5.37%	13.24% (10/10)
Russell 2000 Growth Index	9.27%	12.89%	7.97%	13.65% (10/10)
Russell 2000 Index	9.03%	12.95%	7.05%	13.24% (10/10)
Ativo - Net	10.03%	16.04%	25	14.12% (10/10)
DFA Micro Cap	9.99%	14.99%	8.12%	11.49% (8/87)
Russeli 2000 Value Index	8.71%	12.96%	6.02%	10.26% (8/87)
Russell 2000 Index	9.03%	12.95%	7.05%	8.95% (8/87)
DFA Micro Cap - Net	9.44%	14.42%	7.60%	8.30% (1/05)



The table below details the rates of return for the fund's international large cap growth and international large cap value managers over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

		Last	Year	Last
	Last	3	to	12
	Month	Months	Date	Months
Intl Large Cap Equity	2.36%	6.65%	10.28%	12.52%
MSCI ACWI ex-US Index	2.14%	6.40%	10.17%	12.59%
Inti Large Cap Growth	3.04%	6.69%	10.96%	14.57%
EARNEST Partners	2.84%	6.94%	11.35%	18.75%
MSCI ACWI ex-US Index	2.14%	6.40%	10.17%	12.59%
MSCI ACWI ex-US Growth	2.97%	8.11%	12.47%	11.53%
EARNEST Partners - Net	2.84%	6.94%	11.35%	18.64%
William Blair	3.22%	6.48%	10.61%	11.10%
MSCI ACWI ex-US Index	2.14%	6.40%	10.17%	12.59%
MSCI ACWI ex-US Growth	2.97%	8.11%	12.47%	11.53%
William Blair - Net	3.13%	6.39%	10.42%	10.60%
Intl Large Cap Value	1.37%	5.34%	7.72%	10.04%
Brandes	0.86%	3.50%	5.91%	10.17%
MSCI ACWI ex-US Index	2.14%	6.40%	10.17%	12.59%
MSCI ACWI ex-US Value	1.47%	5.12%	8.39%	14.67%
Brandes - Net	0.86%	3.50%	5.91%	10.05%
Mondrian	1.55%	6.86%	9.23%	10.75%
MSCI ACWI ex-US Index	2.14%	6.40%	10.17%	12.59%
MSCI ACWI ex-US Value	1.47%	5.12%	8.39%	14.67%
Mondrian - Net	1.55%	6.86%	9.23%	10.34%
Lazard	3.35%	7.82%	10.04%	7.45%
MSCI ACWI ex-US Index	2.14%	6.40%	10.17%	12.59%
MSCI ACWI ex-US Value	1.47%	5.12%	8.39%	14.67%
Lazard - Net	3.35%	7.76%	9.97%	6.73%



The table below details the rates of return for the fund's international large cap growth and international large cap value managers over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

	Last	Last	Last	
	36	60	120	Since
	Months	Months	Months	Inception
Intl Large Cap Equity	2.20%	7.54%	1.77%	7.87% (9/86)
MSCI ACWI ex-US Index	0.83%	5.13%	1.12%	=
Intl Large Cap Growth	2.26%	6.46%	1.90%	8.60% (9/02)
EARNEST Partners	1.42%	5.65%	4.14%	9.64% (10/04)
MSCI ACWI ex-US Index	0.83%	5.13%	1.12%	5.94% (10/04)
MSCI ACWI ex-US Growth	2.65%	5.94%	2.16%	6.69% (10/04)
EARNEST Partners - Net	1.24%	5.38%	3.76%	8.18% (1/05)
William Blair	3.03%	7.21%	2.66%	9.87% (10/02)
MSCI ACWI ex-US Index	0.83%	5.13%	1.12%	8.43% (10/02)
MSCI ACWI ex-US Growth	2.65%	5.94%	2.16%	8.56% (10/02)
William Blair - Net	2.62%	6.78%	2.27%	6.10% (1/05)
Intl Large Cap Value	1.26%	7.13%	0.72%	9.07% (10/95)
Brandes	1.10%	7.96%	1.03%	9.30% (1/96)
MSCI ACWI ex-US Index	0.83%	5.13%	1.12%	5.09% (1/96)
MSCI ACWI ex-US Value	(0.13%)	5.22%	0.94%	360
Brandes - Net	0.90%	7.72%	0.80%	4.31% (1/05)
Mondrian	1.57%	6.39%	-	5.71% (4/12)
MSCI ACWI ex-US Index	0.83%	5.13%	1.12%	4.72% (4/12)
MSCI ACWI ex-US Value	(0.13%)	5.22%	0.94%	4.62% (4/12)
Mondrian - Net	1.14%	5.90%	-	5.23% (4/12)
Lazard	1.54%	6.60%	5	6.41% (4/12)
MSCI ACWI ex-US Index	0.83%	5.13%	1.12%	4.72% (4/12)
MSCI ACWI ex-US Value	(0.13%)	5.22%	0.94%	4.62% (4/12)
Lazard - Net	0.93%	5.93%	다	5.75% (4/12)



The table below details the rates of return for the fund's international large cap core, international small cap, and emerging markets managers over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

Returns for Periods Ended April 30, 2017

		Last	Year	Last	
	Last	3	to	12	
	Month	Months	Date	Months	
Intl Large Cap Active Core	2.23%	6.96%	11.71%	13.85%	
Arrowstreet	2.58%	5.78%	11.68%	16.63%	
MSCI ACWI ex-US Index	2.14%	6.40%	10.17%	12.59%	
Arrowstreet - Net	2.58%	5.66%	11.56%	16.10%	
Brown	3.28%	8.57%	11.11%	6.99%	
MSCI ACWI ex-US Index	2.14%	6.40%	10.17%	12.59%	
Brown - Net	3.22%	8.51%	10.91%	5.53%	
GlobeFlex	2.32%	8.15%	13.10%	16.02%	
MSCI ACWI ex-US Index	2.14%	6.40%	10.17%	12.59%	
GlobeFlex - Net	2.32%	8.05%	12.99%	15.57%	
Progress Intl Equity	0.00%	5.22%	9.41%	11.34%	
Custom Benchmark	2.32%	7 .17%	11.34%	13.92%	
MSCI ACWI ex-US Index	2.14%	6.40%	10.17%	12.59%	
Progress Intl Equity - Net	0.00%	5.22%	9.28%	10.93%	
Intl Large Cap Pass. Core	2.63%	7.10%	10.21%	11.79%	
NTGI MSCI EAFE Idx	2.63%	7.10%	10.21%	11.79%	
MSCI EAFE Index	2.54%	6.87%	9.97%	11.29%	
NTGI EAFE ldx - Net	2.63%	7.10%	10.20%	11 .78%	
International Small Cap	4.63%	10.20%	13.90%	12.55%	
Franklin Templeton	4.80%	11.06%	15.15%	14.96%	
ACWI Small Cap ex US	3.00%	7.90%	12.04%	12.48%	
Franklin Templeton - Net	4.80%	11.06%	15.15%	14.33%	
William Blair	4.49%	9.48%	12.86%	10.59%	
ACWI Small Cap ex US	3.00%	7.90%	12.04%	12.48%	
intl SC Blended Benchmark	3.00%	7.90%	12.04%	12.48%	
William Blair - Net	4.30%	9.28%	12.44%	9.54%	
Emerging Markets	2.10%	8.06%	12.04%	14.53%	
Genesis	2.10%	8.11%	12.15%	14.82%	
MSCI Emerging Markets Index	2.21%	8.03%	13.95%	19.58%	
Genesis - Net	2.10%	8.01%	11.99%	14.18%	

Brown and GlobeFlex moved to International Large Cap Active Core April 1, 2011.
Progress Custom Benchmark is a comprised of each manager's weighted benchmark.
Intl SC Blended Benchmark consists of the S&P Developed Ex-U.S. Small Cap Index through May 31, 2011 and the MSCI ACWI Ex-U.S. Small Cap Index thereafter.



The table below details the rates of return for the fund's international large cap core, international small cap, and emerging markets managers over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

Returns for Periods Ended April 30, 2017

	Last	Last	Last	
	36	60	120	Since
	Months	Months	Months	Inception
Intl Large Cap Active Core	4.29%	9.16%	12	4.40% (2/08)
Arrowstreet	5.23%	10.01%	-0	4.62% (3/08)
MSCI ACWI ex-US Index	0.83%	5.13%	1.12%	1.23% (3/08)
Arrowstreet - Net	4.78%	9.49%	•0	4.14% (3/08)
Brown	3.83%	10.22%	3.66%	8.08% (10/04)
MSCI ACWI ex-US Index	0.83%	5.13%	1.12%	5.94% (10/04)
Brown - Net	2.62%	9.14%	2.97%	6.39% (1/05)
GlobeFlex	4.59%	8.43%	2.68%	4.87% (3/06)
MSCI ACWI ex-US Index	0.83%	5.13%	1.12%	3.32% (3/06)
GlobeFlex - Net	4.20%	7.98%	2.23%	4.42% (3/06)
Progress Intl Equity	-	=	2:	0.86% (7/14)
Custom Benchmark	3.50	_	-	0.87% (7/14)
MSCI ACWI ex-US Index	0.83%	5.13%	1.12%	(0.39%) _(7/14)
Progress Intl Equity - Net	-	-	5	0.45% (7/14)
Intl Large Cap Pass. Core	1.26%	7.21%	1.29%	3.16% (1/00)
NTGI MSCI EAFE Idx	1.26%	7.21%	1.28%	3.56% (2/00)
MSCI EAFE Index	0.86%	6.78%	0.87%	3.17% (2/00)
NTGI EAFE ldx - Net	1.25%	7.20%	1.28%	4.78% (1/05)
International Small Cap	4.51%	9.12%	0.97%	4.68% (12/05)
Franklin Templeton	4.18%	8.99%		6.59% (8/11)
ACWI Small Cap ex US	3.53%	7.49%	2.89%	4.75% (8/11)
Franklin Templeton - Net	3.54%	8.27%	-	5.88% (8/11)
William Blair	4.79%	9.23%	¥:	10.47% (9/10)
ACWI Small Cap ex US	3.53%	7.49%	2.89%	7.81% (9/10)
Intl SC Blended Benchmark	3.53%	7.49%	2.01%	8.31% (9/10)
William Blair - Net	3.91%	8.34%	8	9.61% (9/10)
Emerging Markets	1.20%	2.83%	5.37%	9.04% (2/92)
Genesis	1.28%	2.88%	5.39%	11.54% (5/04)
MSCI Emerging Markets Index	2.16%	1.85%	2.81%	9.23% (5/04)
Genesis - Net	0.69%	2.30%	4.77%	9.33% (1/05)

Brown and GlobeFlex moved to International Large Cap Active Core April 1, 2011.

Progress Custom Benchmark is a comprised of each manager's weighted benchmark.

Intl SC Blended Benchmark consists of the S&P Developed Ex-U.S. Small Cap Index through May 31, 2011 and the MSCI ACWI Ex-U.S. Small Cap Index thereafter.



The table below details the rates of return for the fund's domestic fixed core managers over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

		Last	Year	Last	
	Last	3	to	12	
	<u>Month</u>	Months	Date	Months	
Dom. Fixed Active Core	0.74%	1.45%	1.73%	1.53%	
EARNEST Partners	0.81%	1.41%	1.65%	0.94%	
Bimbg Aggregate Index	0.77%	1.40%	1.59%	0.83%	
EARNEST Partners - Net	0.77%	1.37%	1.57%	0.77%	
Piedmont	0.79%	1.57%	1.98%	2.26%	
Blmbg Aggregate Index	0.77%	1.40%	1.59%	0.83%	
Piedmont - Net	0.75%	1.53%	1.90%	2.09%	
Garcia Hamilton	0.61%	1.37%	1.56%	1.43%	
Bimbg Aggregate Index	0.77%	1.40%	1.59%	0.83%	
Garcia Hamilton	0.58%	1.34%	1.50%	1.29%	
Dom. Fixed Passive Core	0.77%	1.41%	1.63%	0.85%	
BlackRock US Debt	0.79%	1.44%	1.64%	0.92%	
Blmbg Aggregate Index	0.77%	1.40%	1.59%	0.83%	
BlackRock US Debt - Net	0.79%	1.44%	1.64%	0.92%	
NTGI Blmbg Agg. Index	0.76%	1.38%	1.61%	0.78%	
Blmbg Aggregate Index	0.77%	1.40%	1.59%	0.83%	
NTGI Blmbg Agg. Index - Net	0.76%	1.38%	1.61%	0.77%	



The table below details the rates of return for the fund's domestic fixed core managers over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

	Last	Last	Last	
	36	60	120	Since
	Months	Months	Months	Inception
Dom. Fixed Active Core	3.14%	2.91%	4.69%	4.68% (4/01)
EARNEST Partners	3.18%	2.89%	4.78%	4.69% (5/05)
Blmbg Aggregate Index	2.66%	2.27%	4.30%	4.25% (5/05)
EARNEST Partners - Net	2.98%	2.67%	4.56%	4.48% (5/05)
Piedmont	3.13%	2.94%	4.62%	4.51% (6/05)
Blmbg Aggregate Index	2.66%	2.27%	4.30%	4.18% (6/05)
Piedmont - Net	2.97%	2.78%	4.44%	4.31% (6/05)
Garcia Hamilton	_	8	21	2.57% (6/15)
Blmbg Aggregate Index	2.66%	2.27%	4.30%	1.98% (6/15)
Garcia Hamilton	-	96	+9	2.47% (6/15)
Dom. Fixed Passive Core	2.74%	2.31%	4.25%	6.12% (1/90)
BlackRock US Debt	2.80%	22	24	3.09% (10/13)
Bimbg Aggregate Index	2.66%	2.27%	4.30%	2.95% (10/13)
BlackRock US Debt - Net	2.79%	æ	85	3.09% (10/13)
NTGI Blmbg Agg. Index	2.70%	2.29%	4.25%	6.18% (2/90)
Blmbg Aggregate Index	2.66%	2.27%	4.30%	6.17% (2/90)
NTGI Blmbg Agg. Index - Net	2.69%	2.28%	4.24%	4.16% (1/05)



The table below details the rates of return for the fund's domestic fixed core plus and high yield managers over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

Returns for Periods Ended April 30, 2017

		Last	Year	Last
	Last	3	to	12
	Month	Months	Date	Months
Domestic Fixed Core Plus	0.74%	1.70%	2.08%	2.81%
BlackRock Core Plus	0.84%	1.67%	1.84%	1.62%
Blmbg Aggregate Index	0.77%	1.40%	1.59%	0.83%
BlackRock Core Plus - Net	0.84%	1.66%	1.83%	1.51%
Brandes Core Plus	0.90%	1.69%	2.05%	1.28%
Blmbg Aggregate Index	0.77%	1.40%	1.59%	0.83%
Brandes Core Plus - Net	0.90%	1.69%	2.05%	1.28%
LM Capital	0.88%	1.85%	2.11%	2.05%
Blmbg Aggregate Index	0.77%	1.40%	1.59%	0.83%
LM Capital - Net	0.84%	1.81%	2.03%	1.88%
Progress Fixed Income	0.00%	0.81%	1.19%	1.74%
Blmbg Aggregate Index	0.77%	1.40%	1.59%	0.83%
Progress Fixed Inc Net	0.00%	0.81%	1.10%	1.49%
Taplin, Canida, Habacht	1.02%	1.93%	2.44%	4.95%
Bimbg Aggregate Index	0.77%	1.40%	1.59%	0.83%
Taplin, Canida, Hab Net	0.99%	1.90%	2.38%	4.78%
Western	0.89%	2.17%	2.74%	3.96%
Bimbg Aggregate Index	0.77%	1.40%	1.59%	0.83%
Western - Net	0.86%	2.14%	2.70%	3.81%
Bank Loans	1.04%	1.51%	2.23%	9.05%
Barings Global Loan Fund	1.04%	1.51%	2.23%	9.30%
Custom Benchmark	0.43%	1.06%	1.69%	8.05%
Barings Global Loan Fund - Net	1.04%	1.51%	2.25%	9.33%
Emerging Markets	1.54%	5.32%	7.36%	9.73%
Standish	1.54%	5.32%	7.36%	9.73%
Custom Benchmark	1.24%	4.42%	6.32%	6.33%
Standish - Net	1.54%	5.23%	7.26%	9.35%
Opportunistic Fixed Income	0.91%	1.89%	2.76%	10.57%
Crescent	0.91%	1.89%	2.76%	10.57%
Custom Benchmark	0.78%	1.76%	2.73%	10.84%
Crescent - Net	0.91%	1.83%	2.70%	10.00%
High Yield	1.25%	2.13%	3.43%	13.20%
MacKay Shields	1.22%	2.12%	3.43%	13,79%
ML High Yield Cash Pay Index	1.14%	2.50%	3.87%	13.56%
MacKay Shields - Net	1.22%	2.03%	3.34%	13.40%

Taplin, Canida, & Habacht moved to Core Plus October 1, 2010.
Barings Custom Benchmark is comprised of the Credit Suisse US Leveraged Loan Index and the Credit Suisse Western European Leveraged Loan Index, weighted by the portfolio's market value to each sector.
Standish Custom Benchmark is 50% JPM GBI-EM Index, 25% JPM EMBI Global Index and 25% JPM Corporate EMBI Diversified Index.
Crescent Custom Benchmark is 50% ML U.S. High Yield Master II Index and 50% S&P/LSTA Leveraged Loan Index.



The table below details the rates of return for the fund's domestic fixed core plus and high yield managers over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

Returns for Periods Ended April 30, 2017

	Last	Last	Last	
	36	60	120	Since
	Months	Months	Months	Inception
Domestic Fixed Core Plus	3.46%	3.48%	4.98%	8.33% (1/82)
BlackRock Core Plus	3.17%	2.96%	4.82%	4.84% (4/07)
Blmbg Aggregate Index	2.66%	2.27%	4.30%	4.32% (4/07)
BlackRock Core Plus - Net	3.02%	2.79%	4.69%	4.71% (4/07)
Brandes Core Plus	_	14	86	1.65% (3/18)
	2.66%	2.27%	4.30%	1.84% (3/16)
Bimbg Aggregate Index Brandes Core Plus - Net	89	7	•	1.65% (3/16)
LM Capital	3,41%	3.26%	5.14%	5.12% (5/05)
Blmbg Aggregate Index	2.66%	2.27%	4.30%	4.25% (5/05)
LM Capital - Net	3.25%	3.09%	4.97%	4.95% (5/05)
Progress Fixed Income	2.84%	3.06%	4.92%	5.02% (1/06)
Blmbg Aggregate Index	2.66%	2.27%	4.30%	4.36% (1/06)
Progress Fixed Inc Net	2.53%	2.71%	4.56%	4.68% (1/06)
Frogress Fixed life Net				• •
Taplin, Canida, Habacht	3.85%	4.03%	5.34%	5.19% (5/05)
Bimbg Aggregate Index	2.66%	2.27%	4.30%	4.25% (5/05)
Taplin, Canida, Hab Net	3.71%	3.88%	5.21%	5.06% (5/05)
Western	4.07%	4.00%	5.10%	5.61% (11/01)
Blmbg Aggregate Index	2.66%	2.27%	4.30%	4.40% (11/01)
Western - Net	3.92%	3.86%	4.95%	5.03% (1/05)
Bank Loans	20	:=	<u>*</u> :	4.09% (8/14)
Barings Global Loan Fund	20	_	£	4.18% (8/14)
Custom Benchmark	Ş)		8	3.90% (8/14)
Barings Global Loan Fund - Net	<u> 1</u>	_		4.19% (8/14)
Barings Global Loan Fund - Net	53			4.1070 (art4)
Emerging Markets	5)	•	-	2.07% (8/14)
Standish	20		92	2.07% (8/14)
Custom Benchmark	1.53%	1.85%	5.34%	0.69% (8/14)
Standish - Net	*	2		1.75% (8/14)
Statistics 1461				, ,
Opportunistic Fixed Income	*	-	8	3.53% (8/14)
Crescent	-	-	_	3.32% (9/14)
Custom Benchmark	4,24%	5.70%	5.94%	4.12% (9/14)
Crescent - Net	70	-	8	2.99% (9/14)
High Yield	5.61%	7.07%	7.60%	9.82% (4/86)
MacKay Shields	5.80%	7.29%	7.35%	9.25% (11/00)
MacKay Shields ML High Yield Cash Pay Index	4.76%	6.84%	7.26%	7.93% (11/00)
	4.70% 5.44%	6.90%	6.97%	7.18% (1/05)
MacKay Shields - Net	J.77 /A	0.30 /0	0.37 70	7.1070 (100)

Taplin, Canida, & Habacht moved to Core Plus October 1, 2010.

Barings Custom Benchmark is comprised of the Credit Suisse US Leveraged Loan Index and the Credit Suisse Western European Leveraged Loan Index, weighted by the portfolio's market value to each sector.

Standish Custom Benchmark is 50% JPM GBI-EM Index, 25% JPM EMBI Global Index and 25% JPM Corporate EMBI

Crescent Custom Benchmark is 50% ML U.S. High Yield Master II Index and 50% S&P/LSTA Leveraged Loan Index.



Five Best Performing Portfolio's vs. Benchmarks

Manager	Year-to-Date Outperformance	Since Inception Outperformance		
	(in % points)	(in % points)		
Sands	6.66	2.09	10/31/2003	
Franklin	3.11	1.84	07/31/2011	
Dodge & Cox	2.46	1.21 08/31/20		
Arrowstreet	1.51	3.05	02/29/2008	
Inv Couselors of MD	1.51	2.39	04/30/1999	

Five Worst Performing Portfolio's vs. Benchmarks

Manager	Year-to-Date Underperformance	Since Inception Underperformance		
	(in % points)	(in % points)		
Pyramis SCG	-4.58	5.69	07/31/1988	
Brandes	-4.26	4.21	12/31/1995	
Ativo	-3.50	1.30	09/30/2010	
Progress Int'l Equity	-1.93	-0.01	05/31/2014	
Genesis	-1.80	2.31	04/30/2004	

Five Highest Returning Portfolios

Manager	Year-to-Date Return	Since Inception Return		
	(in % points)	(in % points)		
Sands	18.05	10.94	10/31/2003	
Franklin	15.15	6.60	07/31/2011	
GlobeFlex	13.10	4.83	02/28/2006	
William Blair Int'l SC	12.86	10.47	08/31/2010	
Genesis	12.15	11.54	04/30/2004	

Five Lowest Returning Portfolios

Manager	Year-to-Date Return	Since Inception Return	
	(in % points)	(in %	points)
DFA SCV	-0.75	12.87	01/31/1996
Channing	-0.10	12.96	06/30/2011
Progress	1.19	5.02	12/31/2005
DFA Micro Cap	1.24	11.49	07/31/1987
NTGI BC Agg	1.61	6.18	01/31/1990

Returns are shown gross of investment management fees.

Excludes Real Estate and Alternative Investments portfolios.

(17-05-04) $(4^{\rm th}$ Quarter 2016 Real Estate Performance Report) Mr. Robinson from Callan Associates presented an evaluation of IMRF's real estate performance for the period ending December 31, 2016.

Discussion followed.

(17-05-05) (Consent Agenda) The Chair presented an agenda consisting of a Consent Agenda. The following items remained on the Consent Agenda since no Board member asked for their removal.

Approval of Minutes

Regular Meeting 17-04-27

Schedules - Dated April 30, 2017

Schedule A =	Benefit	award	listing	of	ret	irement	,	temporary
	disability	, death	n benef	its,	and	refund	of	employee
	contribut	ions pro	cessed	during	, the	preced	ling	calendar
	month unde	er Articl	e 7 of t	he Ill	inois	Pension	1 Coo	de.

Schedule B =	Adjustment	of Be	nefit	Awards	showing	adjustments	required
	in benefit	awards	and	the rea	sons the	erefore.	

Schedule D =	Expira	tion	of	Tempora	ary	Disabili	ty Ber	nefit	ts t	erminated
	under	the	provisions		of	Section	7-147	of	the	Illinois
	Pension Code.									

Schedule E -	Total and Permanent Disability Benefit Awards recommended
	by the Fund's medical consultants as provided by Section
	7-150 of the Illinois Pension Code.

Schedule F = Benefits Terminated.

Schedule G - Administrative Benefit Denials.

Schedule P - Administrative Denial of Application for Past Service Credit.

Schedule R Prior Service - New Governmental Units

Schedule S - Prior Service Adjustments

Bids

Office Furniture

Approved Bidder: Forward Space

Approved Bid: \$56,054.67

Mainframe Data Base Extraction Software

Sole Source: Treehouse Software

Approved Bid: \$86,400.

Support for VMWare vSphere and vCenter Software

Approved Bidder: Software House, Inc.

Approved Bid: \$129,420.00

Participation of New Unit of Government

Municipal Consolidated Dispatch

County: Cook 2017 Rate: 9.66%

Effective Participation Date: August 1, 2017

Number of Participating Employees: 16

Review of May Financial Reporting Packages

Statement of Fiduciary Net Position (March 31, 2017)

Impact of 2017 Year-To-Date Investment Income on Employer Reserves,
Funding Status and Average Employer Contribution Rates

<u>Schedule T - Report of Expenditures (April 30, 2017)</u>

It was moved by Ms. Henry, seconded by Mr. Kuehne, to approve the Consent Agenda as presented.

Vote: Unanimous Voice Vote

Absent: Wallace

(17-05-06) (Audit Committee Meeting) The Chair of the Audit Committee reported on the meeting held on May 19, 2017.

She stated the Chief Financial Officer presented the RSM SOC-1 Type 2 Report for the period April 1, 2016 to March 31, 2017, (unmodified opinion). He reported that IMRF's external auditors, RSM, proposed a scope period of January 1, 2017 through December 31, 2017 for the next SOC-1 Type 2 Report period.

It was the consensus of the Audit Committee to approve the proposed change in the SOC-1 Type 2 Report period.

IMRF's external auditors, RSM, presented information on their work on the 2016 Financial Statement Audit, noting there were no proposed audit adjustments or internal control findings brought to the Audit Committees' attention. RSM will continue with their fieldwork on the Financial Statements, the Schedule of Changes in Fiduciary Net Position by Employer and the Census Attestation. RSM will issue their final opinion by May 31, 2017, and barring any last minute changes, the CAFR and Schedule of Changes in Fiduciary Net Position by Employer and the Census Attestation will be accepted by the Audit Committee by teleconference.

Next, IMRF's Chief Audit Officer reported on the completion of the 2016 internal audit plan including 174 employer audits during 2016. She noted IMRF system controls are operating effectively and the 2016 audit on IMRF had no exceptions.

Lastly, the Committee held private sessions with the IMRF's external and internal auditors.

Discussion followed.

(17-05-07) (Benefit Review Committee Meeting) The Vice Chair of the Benefit Review Committee reported on the Benefit Review Committee Meeting held on May 18, 2017.

It was moved by Ms. Copper, seconded by Mr. Kuehne, to accept the following recommendations of the Benefit Review Committee:

- To adopt the written findings and conclusions of the IMRF Hearing Officer in the case of Daniela Tainer Partipilo which upheld staff's determination.
- To adopt the written findings and conclusions of the IMRF Hearing Officer in the case of Becky Fedrigon which upheld staff's determination.
- To overturn staff's decision regarding the return to work of George Compton.
- To uphold staff's decision denying total and permanent disability benefits to Hilaria G. Garcia.
- To defer the Temporary Disability Denial case of John M. Zarr, III to the August 17, 2017 Benefit Review Committee Meeting.
- To refer the temporary disability denial case of Daphne Flowers to staff for further consideration.

Vote: Unanimous Voice Vote

Absent: Wallace

(17-05-08) (Report of the Investment Committee Meeting) The Chair of the Investment Committee reported on the meeting held May 18, 2017.

The Investment Committee heard presentations from two Listed Infrastructure managers, Cohen & Steers Listed Infrastructure Strategy and Brookfield Global Infrastructure Securities Strategy, and two Unlisted Infrastructure managers, Oaktree Infrastructure Fund(Parallel), L.P.; and, Partners Group Direct Infrastructure 2016 Transportation and Energy (USD) A, L.P. followed by recommendations from staff.

It was the consensus of the Investment Committee to recommend the Board approve the following recommendations:

For Listed Infrastructure

- Allocate up to \$300 million to Cohen & Steers Listed Infrastructure Strategy, subject to satisfactory legal due diligence;
- Allocate up to \$150 million to Brookfield Global Infrastructure Securities strategy, subject to satisfactory legal due diligence;

- Allocations to these managers will be funded from a source deemed appropriate by the IMRF CIO (e.g. domestic equity large cap value) and,
- Authorize staff to complete all documentation necessary to execute these recommendations.

For Unlisted Infrastructure

- Allocate up to \$100 million to Oaktree Transportation and Energy Infrastructure Fund (Parallel), L.P., subject to satisfactory legal due diligence;
- Allocate up to \$100 million to Partners Group Direct Infrastructure 2016 (USD) A, L.P., subject to satisfactory legal due diligence; and,
- Authorize staff to complete all documentation necessary to execute these recommendations.

Next, staff presented Fixed Income recommendations to the Investment Committee for approval.

It was the consensus of the Investment Committee to recommend the Board approve the following recommendations:

For Fixed Income

- Termination and full withdrawal of BlackRock Core Plus mandate (approximately \$750 million);
- Additional allocation of \$200 million to Earnest Partners Core Fixed Income mandate;
- Additional allocation of \$200 million to Garcia Hamilton Core Fixed Income mandate;
- Additional allocation of \$200 million to Piedmont Core Fixed Income mandate;
- Allocation of residual assets of approximately \$150 million to BlackRock U.S. Debt Index/NTI Bloomberg Barclays US Aggregate Bond Index; and,
- Authorize staff to complete all documentation necessary to execute these recommendations.

It was moved by Ms. Henry seconded by Mr. Miller to approve the Infrastructure and Fixed Income recommendations of the Investment Committee.

Vote: Unanimous Voice Vote

Absent: Wallace

(17-05-09) (Approval Trustee Election Procedures) General Counsel presented the following materials concerning the 2017 Executive Trustee Election. They include a proposed 2017 Executive Trustee Election Schedule; General Memorandum - IMRF Trustee Election Fact Sheet; Nominating Petition Forms; Biographical Information Form and, a memorandum regarding judges and clerks for the 2017 Employee Trustee Election. IMRF employers will elect one Executive Trustee for a five-year term beginning January 1, 2018.

2017 EXECUTIVE TRUSTEE ELECTION SCHEDULE

MAY 19, 2017

The Board of Trustees will approve the 2017 Executive Trustee Election Schedule, nominating petition forms, biographical information form, and election rules at the May Board Meeting. The Board will also appoint election judges and clerks. This election is for one Executive Trustee for a five-year term.

MAY 19, 2017 - DECEMBER 15, 2017

All election information requests will be directed to the Executive Director, Communications Manager, or Legislative Liaison and will be documented in a Candidate Contact log. Staff will not disclose any specific information regarding candidates before candidates have been certified in September. No election information, other than what is available on the IMRF website, will be provided to third parties, except as required by the Freedom of Information Act (FOIA). No quantities of IMRF materials (e.g. benefit booklets and forms) will be provided to candidates, including incumbent candidates. No candidates may campaign during IMRF training sessions for employers, members, and annuitants.

JUNE 2, 2017

IMRF staff will solicit bids for the printing of the Executive Trustee ballots.

JUNE 30, 2017

The IMRF *Employer Digest* will announce the Executive Trustee Election. IMRF staff will mail paper copies of the announcement to employers without internet access. The IMRF website will be updated with all election information, including nominating petitions, election rules, and candidate biography forms.

JUNE 29, 2017

IMRF staff will open and review the bids for the printing of the Executive Trustee ballots.

JULY 20, 2017

IMRF staff will make a recommendation regarding the vendor to print the ballots by this date.

AUGUST 1, 2017 - SEPTEMBER 15, 2017

Nominating petitions and biography forms for Executive Trustee will be accepted in the Fund offices. Petition forms must be <u>received</u> by IMRF no later than 4:30 PM on September 15, 2017. Candidates are encouraged to submit their biography forms as soon as three petition forms are received, and no later than September 15, 2017.

SEPTEMBER 18, 2017

IMRF staff will verify the Executive Trustee nominating petitions by this date.

SEPTEMBER 19, 2017

The envelope order (artwork, specifications, etc.) will go to the printer. We will also send the vendor the ballot mailing date.

SEPTEMBER 19, 2017

The Executive Director will confirm nominees for one Executive Trustee position at the September Board Meeting. If only one candidate is certified as a nominee, then that candidate will be submitted to be confirmed as Executive Trustee for the new term.

SEPTEMBER 19, 2017

IMRF staff will send letters to all candidates who submitted nominating petitions informing them whether or not they will be on the ballot. The Executive Trustee candidates will be provided the names of the other candidates. The nominees will also receive a proof of their biography for correction and comment. Final changes or corrections to the proofs are due back by **September 29, 2017.**

SEPTEMBER 29, 2017*

If an election will be held for the Executive Trustee, the IMRF *Employer Digest* will include an overview of the procedures for the Executive Trustee election. Otherwise, the *Digest* will include information on the new Executive Trustee.

OCTOBER 2, 2017*

IMRF staff will send the ballot to the printer. Also, the two Authorized Agent address electronic files will go to the mailing vendor (Governing Body employers and Authorized Agent employers) after staff reviews the quality of the address format. Candidate information will be posted on the IMRF web site.

OCTOBER 11, 2017*

The IMRF *Employer Digest* will again explain the eligibility requirements for voting in the Executive Trustee Election.

OCTOBER 11, 2017*

The Executive Trustee ballots will be mailed after staff reviews samples to verify print quality and addressing accuracy. Mailings will be directed to the Authorized Agent or Governing Body as appropriate. IMRF staff will verify each employer's certification on the ballot envelope as completed ballots are received at the IMRF office.

DECEMBER 12, 2017*

Voted Executive Trustee ballots must be received at the Oak Brook office by 4:30 PM. Staff will pick up any final ballots from the post office at 4:30 PM.

DECEMBER 13, 2017*

IMRF staff will tabulate the Executive Trustee ballots and a final vote tally will be prepared. All candidates will be notified by telephone of the final vote tally. Written notice of the final vote tally will also be mailed by certified mail, return receipt requested, to all candidates. Each candidate will also receive notice of IMRF's Recount Procedures.

DECEMBER 15, 2017*

The IMRF Board of Trustees will certify the results of the 2017 Executive Trustee Election at the December Board Meeting. IMRF staff will mail a written notice of the certification to all candidates. Staff will post the election results on the IMRF web site. Staff will send a General Memo with election results to employers in January.

DECEMBER 29, 2017

IMRF staff will ensure that email addresses on the IMRF Public Email Inbox are updated, including the addition of the email address for any new Trustee.

*These items will not be required if there is only one eligible candidate as of the petition due date

GENERAL MEMORANDUM #XXX

To: All Authorized Agents

Subject: 2017 Executive Trustee Election

Date: June 30, 2017

In November, IMRF employers will elect one Executive Trustee for a five-year term. The five-year term will run from January 1, 2018, through December 31, 2022.

You can obtain information on nominating procedures, qualifications, sample petitions, and a biographical questionnaire by visiting the Board of Trustees area of the IMRF website, by sending us a secure message, or by calling an IMRF Member Services Representative at 1-800-ASK-IMRF (275-4673) Monday through Friday, 7:30 AM to 5:30 PM.

The State Officials and Employees Ethics Act includes prohibitions against political activity during work hours. It is our opinion that these prohibitions do not apply to elections for the IMRF Board of Trustees. Gathering signatures and other activities of running for the IMRF Board are not included in prohibited political activity regulated by the Act.

Sincerely,

Louis W. Kosiba Executive Director

PanoWKunda



IMRF Executive Trustee Election

Board meetings are held at least quarterly. Some Board committees meet every month in which there is a Board meeting; others meet less frequently or as needed. Trustees serve without compensation but are reimbursed for expenses incurred while attending meetings.

Terms and conditions of office

In November, IMRF employers will elect one Executive Trustee for a five-year term. The five-year term of office will run from January 1, 2018, through December 31, 2022.

Nominating procedures—petitions

The petitions explain the nominating procedures for Executive Trustee. Nominating petitions for Executive Trustee candidates can be submitted either by Authorized Agents or by governing bodies of IMRF employers. Regardless of who submits the nominating petitions, at least three petitions must be submitted.

If an Authorized Agent submits a nominating petition, his or her notice of appointment must be on file with IMRF, and the notice of appointment must indicate that the governing body has delegated the power to make such nomination to the Authorized Agent.

If a governing body files a petition, the petition must be adopted by the governing body and certified by the clerk or other proper official.

Petitions for Executive Trustee candidates will be accepted in the IMRF Oak Brook and Springfield offices between August 1, 2017, and the close of business at 4:30 PM, September 15, 2017. Mail, hand deliver, scan and email (IMRFTrusteeElection@imrf.org), or fax (630-706-4656) the completed petitions to IMRF, ATTN: IMRF Trustee Petitions.

If you scan the petitions and email them to IMRF or if you fax the petitions to IMRF, please call IMRF at 1-800-ASK-IMRF (275-4673) to confirm that they were sent.

Petitions postmarked on or before September 15, 2017, but received after that date will not be accepted.

The State Officials and Employees Ethics Act includes prohibitions against political activity during work hours. It is our opinion these prohibitions do not apply to elections for the IMRF Board of Trustees. Gathering IMRF member signatures and other activities of running for the IMRF Board are not included in prohibited political activity regulated by the Act.

On September 19, 2017, letters will be sent to all candidates who submitted nominating petitions informing them whether they will be on the ballot. Executive Trustee candidates will also be provided the names of the other candidates at that time.

Qualifications

A nominee for Executive Trustee must be employed by an IMRF employer as a chief executive officer, chief finance officer, or other officer, executive, or department head. The nominee must also participate in IMRF and have at least eight years of IMRF service credit as of December 31, 2017.

Executive Trustee ballots

Ballots, along with candidates' biographies, will be mailed to Authorized Agents or governing bodies as appropriate on October 11, 2017, and must be returned by the close of business at 4:30 PM, December 12, 2017.

Not all Authorized Agents can vote in the Executive Trustee election. The only Authorized Agents who can vote are those whose Notice of Appointment filed with IMRF indicates they have been given such power. Otherwise, the governing body would cast the ballot, and the clerk or other proper official would certify the ballot.

New Trustee orientation

It is critical for the sound governance of IMRF that Trustees be fully informed with regard to IMRF's nature, purposes, structure, operational systems, and processes. To that end, the newly elected Trustee will participate in an in-depth New Trustee Orientation Program designed to fully inform them of IMRF's key functions and their responsibilities as Trustee. The Program is more fully described in the IMRF Board Candidate Packet, available in the Board of Trustees area of the IMRF website.

The Candidate Packet also includes information about the Illinois Governmental Ethics Act, which requires individuals serving as IMRF Trustees to file a written statement of economic interest.

05/19/2017 Re**Pissed** 998548, 2017





NOTICE TO AUTHORIZED AGENTS

June 30, 2017

NOMINATION OF EXECUTIVE TRUSTEE

Petitions for Executive Trustee candidates will be accepted in the IMRF Oak Brook and Springfield offices between August 1, 2017, and the close of business at 4:30 PM, September 15, 2017. Mail, hand deliver, scan and email (IMRFTrusteeElection@imrf.org), or fax (630-368-5397) the completed petitions to IMRF, ATTN: IMRF Trustee Petitions. Petitions postmarked on or before September 15, 2017, but received after that date will not be accepted.

One Executive Trustee will be elected for a five-year term, commencing January 1, 2018. Currently Trustees meet one day each month and frequently more often. Trustees serve without compensation but are reimbursed for their expenses, including lost wages if they are not paid by their employer during absences while performing IMRF Board duties.

A nominee for Executive Trustee must be employed by a participating governmental unit in the capacity of chief executive officer, chief finance officer, or other officer, executive, or department head. The nominee must also be a participating member and have at least eight years of service credit with IMRF as of December 31, 2017. Service forfeited by acceptance of a refund of member contributions and not reinstated is not considered for the eight-year requirement.

Nominations must be by petition: (1) adopted by the governing body and certified by the clerk or other proper official of the participating municipality or participating instrumentality, or (2) submitted by an Authorized Agent whose Notice of Appointment, on file with IMRF, indicates that the Authorized Agent has been delegated the power to make such nomination. Petitions by at least three participating municipalities or participating instrumentalities are necessary to nominate a candidate.

The State Officials and Employees Ethics Act includes prohibitions against political activity during work hours. It is our opinion that these prohibitions do not apply to elections for the IMRF Board of Trustees. Gathering signatures and other activities of running for the IMRF Board are not included in prohibited political activity regulated by the Act.

FORM OF PETITION I hereby certify that the

1 1101009			
		Governing Body	Municipality or Participating Instrumentalit
1. 🗆 Byare	solution duly passed by the	ne governing body	
2. 🗆 By virt	ue of the power delegated	to its Authorized Age	nt in a notice on file with the Fund, hereby petitions
that		re:	siding at
	Name of Employe	e	Street
		occupying the pos	sition of
	City		Title
with			be a candidate for the office of Executive Trustee of
	Name of Emplo	yer	
Illinois Municij	pal Retirement Fund for a	five-year term of office	be beginning January 1, 2017.
	Date		Signature
			Title



Illinois Municipal Retirement Fund 2017 Executive Trustee Election—Biographical Information

page 1 of 3

- Return this completed form with your signed petitions to IMRF, ATTN IMRF Trustee
 Petitions, 2211 York Road, Suite 500, Oak Brook IL 60523-2337 or fax to 630-368-5397.
- You must submit your petitions and biography form no later than 4:30 PM, Friday, September 15, 2017.
- If you prefer, you can email your biography and scans of your signed petitions to IMRFTrusteeElection@imrf.org.

- We suggest you submit your biography form as soon as you obtain the required signatures on your petitions.
- After IMRF receives your completed biography form, you will receive a proof of your biography as it will appear in the newsletter. Changes to your biography can be made at that time.
- Sample biographies can be found on page 3.

The information you provide will be used to create your biography which will appear on the ballot.

Current job duties — Generally, the description of your current job duties should not exceed 50 words. *You can use a separate sheet if preferred.*

Please include total number of persons supervised and the name and title of your supervisor.

IMRF participating positions, contd.

page 2 of 3

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1 CAIONS	TI-IIZI	Positions

Job Title					
Length of service in this position _	FROM	ТО	with this employer	FROM	то
Job Title			Employer		
Length of service in this position _	FROM	то	with this employer	FROM	то
Job Title			Employer		
Length of service in this position _	FROM	TO	with this employer	FROM	TO

Other pertinent information

Not more than 80 words.

You can use a separate sheet if preferred.

Other experience, training, or qualifications supporting your candidacy; and/or any goals, objectives, or views you would endorse or pursue as a Trustee. You may consider answering some of the following questions. *Providing responses to these questions is optional*; they are provided only as a guide.

- 1. Why are you running for Executive Trustee?
- 2. What do you hope to accomplish as an Executive Trustee?
- 3. How will your experience as an IMRF member help you in your role as an Executive Trustee?
- 4. How will your prior work experience help you in your role as an Executive Trustee?
- 5. What are the key issues surrounding public pensions? How should they be addressed?
- 6. What key issues surrounding public pensions should an IMRF employer be concerned with?

(Maximum available space shown below)

Executive Trustee Sample Bio

Executive Trustee Candidate Name 500 N. Anywhere Ave. Anywhere, Illinois 60004

Current Position — Director of Administrative Services, Village of Anywhere.

Length of Service — With the Village of Anywhere since May 1977, in this position since September 1991; Secretary/ Administrative Intern with the Village of Anywhere Park from November 1973 to May 1977.

Duties — As Director of Administrative Services, I am a Department Head reporting directly to the Village Administrator. In this position, I am responsible for organizationwide (125 full-time employees, including Public Works, Parks and Recreation, Library, Clerical, Police and Fire) personnel administration including recruitment, hiring, employee records, collective bargaining, employee benefit plan and health insurance administration, risk management, general liability and workers' compensation insurance, cable television franchise administration, special management studies, and research and program development initiated by the department or Board of Trustees.

Other Pertinent Information — As the IMRF Authorized Agent for the Village of Anywhere for 11 years, I have assisted members with problems on disability and retirement claims on numerous occasions. I am seeking this position to work to improve the quality of service provided to IMRF participants.

MEMORANDUM

TO:

BOARD OF TRUSTEES

FROM:

BONNIE SHADID

DATE:

5/11/2017

RE:

APPROVAL OF TRUSTEE ELECTION JUDGES AND CLERKS

Executive Summary

The Board appoints staff to serve as judges and clerks to administer the 2017 Executive Trustee Election.

Background

IMRF staff administers the process for electing IMRF Trustees. Election judges coordinate various activities and make administrative decisions allowing for a smooth election process. The clerks are responsible for completing specific activities during the election process. The Board appoints staff to these positions for purposes for administering the Trustee election.

Recommendation

Staff recommends that the Board approve the appointment of the following IMRF staff members to serve as judges and clerks for the 2017 Trustee election.

Judges:

Bonnie Shadid

Brandi Smith

Clerks:

Tamika Harrington – Chief Clerk

Rick Baier
Erin Cochran
Larice Davis
Jennifer Ellison
Helen Huang
John Krupa
Victoria Lane
Anne-marie Lilly
Michael Nesson
Denise Streit
Keyla Vivas

It was moved by Mr. Miller, seconded by Ms. Thompson, to approve the 2017 Executive Trustee Election Schedule and Procedures.

Vote: Unanimous Voice Vote

Absent: Wallace

(17-05-10) (IMRF Eligibility Certification for Appointed Governing Body Members) General Counsel recommended the Board adopt a resolution requiring biennial re-certification of eligibility for IMRF participation for the members of appointed governing bodies.

After questions and discussion, it was moved by Mr. Miller, seconded by Ms. Copper, to adopt the following proposed resolution:

WHEREAS, section 7-198 of the Illinois Pension Code authorizes the Board of Trustees of the Illinois Municipal Retirement Fund to establish rules necessary or desirable for the efficient administration of the Fund; and

WHEREAS, section 7-200 of the Pension Code authorizes the Board of Trustees to make administrative decisions on participation and coverage which are necessary for carrying out the intent of the fund in accordance with the provisions of Article 7 of the Pension Code; and

WHEREAS, Section 7-137 of the Pension Code establishes an IMRF participation standard for employees and elected officials of IMRF participating units of government. This standard limits IMRF participation to persons who hold positions or occupy elected offices "normally requiring performance of duty" for at least 600 or 1,000 hours per year; and

WHEREAS, IMRF Board Resolution 1968-7273 requires the governing body of an IMRF participating unit of government to adopt a resolution in a form satisfactory to IMRF finding that certain elected positions normally require performance of duty during 600 hours (or 1,000 hours, as applicable) or more in a year, if the incumbent in that position is to be eligible for IMRF participation; and

WHEREAS, the IMRF Board finds it is appropriate that the governing body of an IMRF participating unit of government whose members are appointed also adopt a resolution finding that its members are normally required to work during 600 hours (or 1,000 hours, as applicable) or more in a year, if the members of that governing body are to be enrolled in IMRF; and

WHEREAS, the IMRF Board finds it is appropriate that the appointed governing body of an IMRF participating unit of government re-certify at least biennially that its members are normally required to work during 600 hours (or 1,000 hours, as applicable) or more in a year, if the members of that governing body are to continue participation in IMRF.

NOW, THEREFORE, BE IT RESOLVED that the IMRF Board of Trustees adds

the following requirement to the rules regarding TMRF participation for elected officials: every two years the governing body of an IMRF participating unit of government whose members are appointed must adopt a resolution finding that the members of that governing body are normally required to work during 600 hours (or 1,000 hours, as applicable) or more in a year, if the members of that governing body are to participate in IMRF.

BE IT FURTHER RESOLVED that an initial resolution regarding the appointed governing body must be adopted no later than September 1, 2017.

Vote: Unanimous Voice Vote

Absent: Wallace

(17-05-11) (Legislative Update) General Counsel updated the Board on current legislative activity.

She reported that both bills on the Board's 2017 Legislative Agenda passed the House and are now in the Senate (HB 2966 - would update qualifications section for IMRF Trustees to ensure the Board candidates are vested; HB 3070 - would codify current IMRF practice to allow members to make one payment for service credit purchases after termination).

General Counsel discussed one newly introduced bill, HB 4045, that is identical to SB 16, as originally introduced and, in the provisions applicable to IMRF, would create a hybrid plan for new employees of each of the pension systems. The proposal introduced in the Senate was amended to remove IMRF.

Discussion followed.

(17-05-12 (Litigation Update)) The following is an update of the currently pending or recently concluded litigation:

IN RE TRIBUNE CO, ET AL., THE OFFICIAL COMMITTEE OF UNSECURED CREDITORS OF TRIBUNE CO, ET AL. VS. FITZSIMONS, ET AL.

Summary: The unsecured creditors in the Tribune bankruptcy sued investors who sold their Tribune stock at the time of the buyout by the Sam Zell group. The plaintiff's theory is that the buyout was fraudulent and therefore a portion of those stockholders' proceeds from the stock sale was due to the fraud and should be returned to the Tribune's bankruptcy estate.

Status: The stockholders' motion to dismiss the intentional fraudulent transfer claim was granted on January 6, 2017 and the claim against them was dismissed. Another portion of this claim against the stockholders was previously dismissed on motions and that decision was upheld on appeal. Therefore, unless there is an appeal of the January 6 decision, the case against the disinterested stockholders (including IMRF) is over.

The Court has granted the creditors motion for an order allowing an appeal

of this decision, notwithstanding that claims against other defendants remain to be litigated.

KATHLEEN KONICKI V. IMRF (14 MR 32) (SANGAMON CO)

Summary: Administrative review challenging the Board's decision that Ms. Konicki was not eligible to convert service into Original ECO.

Status: On July 29, 2016, Judge Belz upheld the IMRF Board's decision finding that the law clearly did not allow Plaintiff to participate in Original ECO and that the law creating Revised ECO did not violate the Pension Protection Clause. Plaintiff had 30 days from July 29, 2016 to file a notice of appeal. She did not do so, however, it was discovered that the court clerk never mailed Plaintiff the judge's order. Konicki filed a motion for relief from Judgment which was granted. The case has been appealed to the Fourth District Appellate Court and a scheduling order has been entered. IMRF's appellate brief was due in May but is now due in June because of several motions filed by Ms. Konicki.

MCLEAN COUNTY V. IMRF (MCLEAN COUNTY 2016 MR 563)

Summary: This is an appeal from the IMRF Board's decision denying an exemption from the AP for a charge to McLean County that resulted from a payment of back wages under a collective bargaining agreement that was entered into after January 1, 2012. The County also charges a violation of the Open Meetings Act by IMRF claiming that its Board Agenda was not sufficiently detailed regarding the decision.

Status: IMRF and McLean County are working on the details based on the Board Resolution allowing certain back wages to be allocated to prior months when AP charges are involved and a new case management date is set for June 2017. This case has been voluntarily dismissed and will be coming off the report.

MOTORS LIQUIDATION COMPANY AVOIDANCE ACTION TRUST VS. JP MORGAN CHASE, ET AL. (US BANKRUPTCY CT., SO. DIST. OF N.Y.)

Summary: This is an adversary action stemming from the General Motors bankruptcy. A loan in which IMRF was an investor was paid off after the bankruptcy filing. It was later discovered that an error, before the bankruptcy, had released part of the security. A group of unsecured creditors sued to force the recipients of the loan pay-off proceeds to return them.

Status: The parties are currently litigating the value of the remaining security, which if it is sufficient would end the case. We are sharing our defense counsel with several other public pension funds:

THERESA MILLER V. IMRF (16 MR 58 MONROE COUNTY)

Summary: This is an administrative review of the Board's decision to deny total and permanent disability benefits to Ms. Miller.

Status: IMRF's answer and appearance were filed on 11/28/2016.

KATHERINE HADLER V. IMRF (16 MR 1375 DUPAGE COUNTY)

Summary: This is an administrative review of the Board's decision to deny total and permanent disability benefits to Ms. Hadler.

Status: Judge Fullerton issued a written decision on April 3,2017 upholding the decision of the IMRF Board. Ms. Hadler has appealed to the Second District Appellate Court.

CARRIE MCHUGH V. IMRF (17 MR 135 KANE COUNTY)

Summary: This is an administrative review of the IMRF Board's decision adopting the recommendation of the IMRF hearing officer which found that Ms. McHugh was ineligible for disability benefits due to a voluntary termination of her employment with the City of Aurora.

Status: IMRF's answer and appearance were filed and an initial court appearance is set for 5/18/17.

JOSHUA PEA V. IMRF (ST. CLAIR COUNTY 17 MR 1380

Summary: This is an appeal challenging the Board's denial of total and permanent disability benefits.

Status: IMRF has filed an appearance and the administrative record.

(17-05-13) (Report of Executive Director

Special Board Meeting

The Executive Director stated that IMRF's Executive Search Firm, EFL Associates, requested a meeting with the Board to discuss the Executive Search.

It was the consensus of the Board to hold a Special Board Meeting on June 15, 2017 at 9:00 a.m.

Quarterly Strategic Objectives Update

The Executive Director updated the Board on the $1^{\rm st}$ Quarter Strategic Objectives.

Ms. Thompson left the meeting at 11:42 a.m.

(17-05-14) (Trustee Forum) The Chair reported the following Trustees requested authorization from the Board for the following conference:

Trudy Williams IPPFA 2017 Regional Seminar

June 20, 2017 Edwardsville, IL

Sharon U. Thompson IPPFA Mid-American Pension Conference

October 3-6, 2017 St. Louis, MO

It was moved by Ms. Copper, seconded by Mr. Kuehne, to approve the above Trustee requests.

Vote: Unanimous Voice Vote

Absent: Wallace

(17-05-15) (Executive Session) The Chair asked for a motion to go into executive session for the purpose of discussing the performance of the Executive Director under Section 2(c)(1) of the Open Meetings Act.

Motioned by: Mr. Miller Seconded by: Ms. Copper

Vote:

Aye: Williams, Copper, Henry, Kuehne, Miller, Stanish

Nay: None

Absent: Thompson, Wallace

It was moved by Mr. Miller, seconded by Ms. Copper, that the Board go back into open session.

Vote:

Aye: Williams, Copper, Henry, Kuehne, Miller, Stanish

Nay: None

Absent: Thompson, Wallace

(17-03-15) (Adjournment) It was the moved by Mr. Miller, seconded by Mr. Kuehne, to adjourn the Board Meeting at 12:10 p.m., to reconvene in the Fund offices, 2211 York Road, Suite 400, Oak Brook, Illinois, at 9:00 a.m. on June 15, 2017.

Vote: Unanimous Voice Vote Absent: Thompson, Wallace

President

Date

Date