ILLINOIS MUNICIPAL RETIREMENT FUND
MINUTES OF
REGULAR MEETING NO. 19-08
AUGUST 23, 2019

ILLINOIS MUNICIPAL RETIREMENT FUND

MEETING NO. 19-08

REGULAR MEETING

OF THE

BOARD OF TRUSTEES

The Regular Meeting of the Board of Trustees was held at 9:00 a.m. August 23, 2019, in the Fund Office at 2211 York Road, Suite 400, Oak Brook, Illinois.

Mr. Wallace presided as Chair and called the meeting to order.

There was a visual roll:

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

Absent: None

Ms. Becker-Wold and Mr. O'Connell from Callan Associates, Ms. Mangat from CEM Pension Administration Benchmarking Services, Mr. Lauzen from Kane County, and a representative from Loop Capital were also present.

(19-08-01) (Public Comments) Mr. Lauzen from Kane County, gave testimony regarding IMRF's assumed rate of return.

Later in the meeting, Mr. Carrabotta from Maine Township arrived and gave testimony regarding recertification of elected officials.

(19-08-02) 2nd Quarter 2019 Investment Manager Report) Mr. O'Connell of Callan Associates presented an evaluation of IMRF's investment performance for the period ending Jun 30, 2019.

Discussion Followed.

(19-08-03) (Investment Manager Activities - Callan Associates) Ms. Becker-Wold of Callan Associates presented the following report to the Board on the activities of IMRF's investment managers for the month of July 2019:

Callan

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July 31, 2019 Illinois Municipal Retirement Fund Monthly Performance Report

Investment Measurement Service Monthly Review

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Market Environment As of July 31, 2019

		Year to		Last 3	Last 5	Last 10
Index	Last Month	Date	Last Year	Years	Years	Years
Russell:3000 Index	1.49	20.48	7.05	13.11	10.96	13.98
S&P:500	1.44	20.24	7.99	13.36	11.34	14.03
Russell:2000 Index	0.58	17.66	(4.42)	10.36	8.53	12.47
MSCI:ACWI ex US	(1.21)	12.23	(2.27)	7.21	2.12	5.42
MSCI:EM	(1.22)	9.24	(2.17)	8.42	1.85	4.56
Blmbg:Aggregate	0.22	6.35	8.08	2.17	3.05	3.75
NCREIF:Total Index*	0.50	3.85	6.45	6.86	8.75	9.43
Blmbg:Commodity Price Idx	(0.87)	2.93	(7.53)	(2.15)	(9.20)	(4.60)

Most asset classes produced subdued results in July, with U.S. equities up modestly and the S&P 500 reaching a record high. The most notable event occurred on the final day of the month as the U.S. Federal Reserve announced a 25 basis point cut to its target interest rate, the first such cut since 2008. Despite the apparent stimulus, U.S. equities traded lower following the announcement given the market's lofty expectations of either a larger cut or an indication of subsequent cuts in the near future. U.S. economic data was generally favorable. June's employment data was a marked improvement from the weaker May data and second quarter GDP exceeded analysts' expectations. Manufacturing remains the primary point of concern, with the PMI index hovering narrowly above the contractionary threshold of 50. In the U.K., Boris Johnson was confirmed as the nation's new Prime Minister, raising the likelihood of a no-deal Brexit. Also in Europe, Christine Lagarde was nominated as the next president of the ECB and is set to take the reins from Mario Draghi in November. Lagarde is expected to maintain the current regime of accommodative monetary policy.

July added 164,000 new nonfarm payrolls, exceeding analysts' expectations. Employment growth was bolstered by significant hiring in the public sector, with the government adding 16,000 new jobs. Unemployment remained unchanged at 3.7% and the participation rate ticked ten basis points higher to 63%. Year-over-year wage growth also climbed 10 basis points from last month to end July at 3.2%.

The Consumer Price Index (CPI) rose 0.3% in July, and 1.8% over the trailing 12 months. Medical and housing costs continue to climb, with year-over-year growth of 3.3% and 3.0%, respectively. Core CPI grew 0.3% during the month and 2.2% over the trailing year. Energy prices were up in July, but still negative over the past year.

Initial estimates of second quarter GDP came in at 2.1%, down from the 3.1% posted in the first quarter. In the second quarter, growth was fueled by strong consumer spending. Business investment contracted for the first time in more than three years, and housing declined for a sixth consecutive quarter, which may be an early indication of future economic slowing.

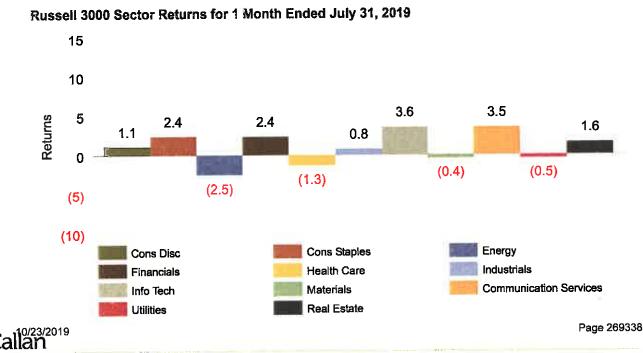
^{*}Due to a lag in the reporting of NCREIF Property Index returns, the monthly return shown is deduced from the most recent quarterly return. This monthly return, when compounded over three months, equates to the quarterly return. 0/23/2019

U.S. Equity Overview As of July 31, 2019

		Year to		Last 3	Last 5	Last 10
Index	Last Month	Date	Last Year	Years	Years	Years
Russell:3000 Index	1.49	20.48	7.05	13.11	10.96	13.98
S&P:500	1.44	20.24	7.99	13.36	11.34	14.03
Russell:1000 Index	1.55	20.69	8.00	13.31	11.15	14.10
Russell:1000 Growth	2.26	24.23	10.82	17.13	14.25	15.74
Russell:1000 Value	0.83	17.20	5.20	9.44	8.01	12.40
Russell:Midcap Index	1.43	23.08	6.71	11.02	9.59	14.35
Russell:2000 Index	0.58	17.66	(4.42)	10.36	8.53	12.47
Russell:2000 Growth	0.98	21.54	(1.22)	12.66	10.21	13.67
Russell:2000 Value	0.16	13.65	(7.71)	7.96	6.74	11.19

U.S. equities trended slowly upward throughout the month as economic data and corporate earnings came in better than expected. While investor enthusiasm seems more muted than in the recent past, the S&P 500 managed to close at a record high on July 26 and ended the month up 1.4%. However, the index lost ground on July 31 after the Fed reduced rates 25 basis points, an apparent sign that investors were hoping for more aggressive stimulus. Small caps trailed large caps (Russell 2000 Index: +0.6% vs. Russell 1000 Index: +1.6%) and value lagged growth (Russell 1000 Value Index: +0.8% vs. Russell 1000 Growth Index: +2.3%), both reversals from the previous month. Mid cap returns were between large and small caps (Russell Midcap Index: +1.4%).

Sector returns were mixed in July, with seven sectors producing gains and four sectors losing ground. Information Technology (+3.6%) was the top performing sector. Communication Services (+3.5%) benefitted from Alphabet's 12.5% monthly return following its strong earnings report. Energy (-2.5%) was the worst performing sector, followed by Health Care (-1.3%).

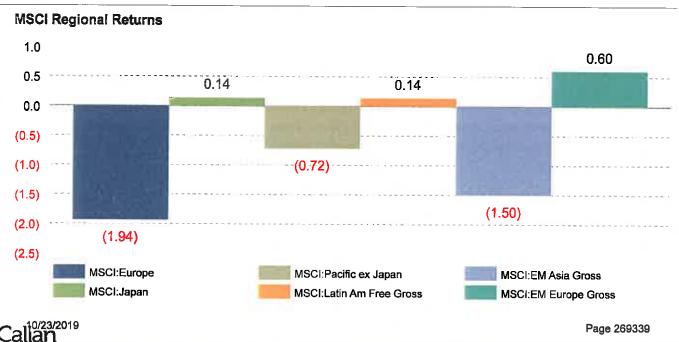


Non-U.S. Equity Overview As of July 31, 2019

Index	Last Month	Year to Date	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
MSCI:ACWI ex US	(1.21)	12.23	(2.27)	7.21	2.12	5.42
MSCI:EAFE MSCI:EAFE Hedged Net	(1. 27) 0.89	12.58 16.19	(<mark>2.60)</mark> 2.84	6.87 10.38	2.39 7.19	5.84 8.25
MSCI:EM	(1.22)	9.24	(2.17)	8.42	1.85	4.56
MSCI:ACWI ex US Small Cap	(0.67)	10.86	(7.22)	5.59	3.03	7.4 7

Non-U.S. equities were marginally positive in local currency terms but a rising U.S. dollar pushed the indexes into negative territory in USD terms (MSCI EAFE Index: -1.3% vs. MSCI EAFE Hedged Net Index: +0.9%). A combination of the Fed's measured tone around future stimulus and geopolitical issues abroad contributed to the dollar's strength. For example, the British pound fell to its lowest point since 2017 when Boris Johnson was appointed as the new prime minister and a no-deal Brexit became a genuine concern. Emerging markets (MSCI Emerging Markets Index: -1.2%) narrowly outperformed developed international equity (MSCI EAFE Index: -1.3%) but trailed U.S. stocks. Non-U.S. small cap held up slightly better than non-U.S. large cap stocks (MSCI ACWI ex-U.S. Small Cap: -0.7% vs. MSCI ACWI ex-U.S.: -1.2%).

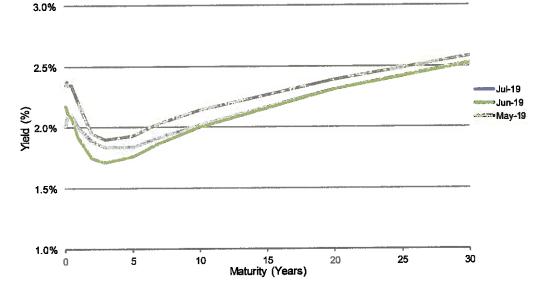
Emerging Europe was the best performing region (MSCI EM Europe Gross Index: +0.6%). Turkey lifted the index higher as the central bank cut interest rates by a whopping 425 basis points. Developed Europe was the worst performing region as Brexit uncertainty impacted the U.K. and broader Eurozone (MSCI Europe Index: -1.9%).



Fixed Income Overview As of July 31, 2019

		Year to		Last 3	Last 5	Last 10
Index	Last Month	Date	Last Year	Years	Years	Years
Blmbg:Aggregate	0.22	6.35	8.08	2.17	3.05	3.75
Blmbg:Long Gov/Credit	0.73	14.29	14.36	3.14	5.76	7.30
Blmbg:US Government	(0.11)	5.03	7.53	1.21	2.49	2.91
Blmbg:Treasury	(0.12)	5.06	7.57	1.16	2.50	2.99
Blmbg:Credit	0.52	9.92	10.12	3.47	4.03	5.43
Blmbg:Mortgage Backed Sec	0.40	4.59	6.76	2.13	2.76	3.19
Blmbg:US TIPS	0.36	6.53	5.72	1.91	1.82	3.67
ML:US High Yield Cash Pay	0.51	10.72	6.95	6.82	5.08	8.58
CS:Leveraged Loan	0.78	6.24	4.10	5.21	4.02	5.88
3 Month T-Bill	0.18	1.43	2.34	1.44	0.91	0.51





The Fed's July 31 meeting was the primary focus for bond investors throughout the month with many observers even expecting a 50 basis point cut. In actuality the Fed cut rates by 25 bps, bringing the target range to 2.00% - 2.25%. The Fed also announced they would end their balance sheet reduction program two months ahead of schedule, meaning when Treasuries and mortgage-backed securities mature they will be reinvested rather than rolled off. Despite these moves the market viewed Fed Chair Jerome Powell's comments as less dovish than desired when he tempered expectations for future cuts. The yield curve flattened slightly in July but didn't reflect the rate cut given its occurrence on the last day of the month (rates have fallen sharply in August). To end the month, the 30-year Treasury rose one bp to 2.53%, the 10-year rose two bps to 2.02%, and the 2-year rose 14 bps to 1.89%. At month end the closely watched spread between the 2- and 10-year Treasuries sat at 13 bps, down from 25 bps at the end of June.

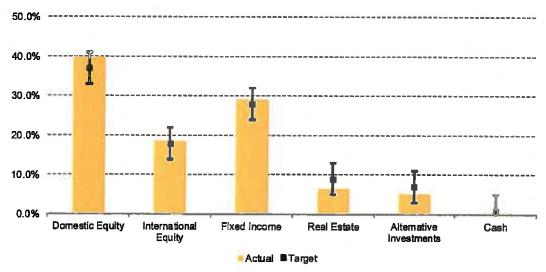
The Bloomberg Aggregate Index increased 0.2% in July, lifted by spread tightening in the corporate and mortgage-backed security sectors. The Bloomberg Credit Index gained 0.5% and the Bloomberg Mortgage Backed Security Index added 0.4%. High yield (ML U.S. High Yield Index: +0.5%) and leveraged loans (CS Leveraged Loan Index: +0.8%) benefitted from spread tightening as well. Longer dated issues performed especially well (Bloomberg Long Gov/Credit Index: +0.7%). The Bloomberg Treasury Index declined 0.1% amid modestly rising rates.

IMRF Commentary Executive Summary

Total Fund

The market value of the Total Fund was \$42.77 billion at the end of July, a modest increase of \$5.8 million from the prior month. The Fund returned 0.38% during the month, trailing the 0.47% return of its benchmark. Domestic Equity (+1.27%) underperformed its benchmark (+1.49%). International Equity (-1.21%) fell in line with its benchmark for the month. The Fixed Income composite returned 0.30%, leading its benchmark return of 0.22%. Real Estate returned 0.28% in July, modestly outperforming its benchmark by two basis points. Over the last three months, Alternatives (+1.45%) trailed the benchmark return of 2.18%.

As of July month end, all asset classes are within their target ranges. Current policy states that when actual allocations of the asset classes differ by more than four percentage points from their policy target, a recommendation for rebalancing will be made to the Board of Trustees.



U.S. Equity

The U.S. Equity composite returned 1.27% during July, trailing the Russell 3000 Index by 22 basis points. For the month, large caps outperformed small caps.

Large Cap: IMRF's Large Cap managers returned 1.33% in July, trailing the 1.55% return of the Russell 1000 Index. In aggregate, growth managers returned 1.30%, while the Russell 1000 Growth Index returned 2.26%. Value managers returned 1.29% collectively, outperforming the 0.83% return of the Russell 1000 Value Index.

Small Cap: The Small Cap composite (+1.14%) led the Russell 2000 Index by 56 basis points in July. The growth managers collectively returned 1.34%, relative to the 0.98% return of the Russell 2000 Growth Index. The value managers returned 1.15% during the month, leading the Russell 2000 Value Index by 99 basis points. The Micro Cap composite returned 0.74% in July.

Public Real Assets: The Public Real Assets portfolio managed by Brookfield and Cohen & Steers returned 0.42% in July, outperforming the custom benchmark by 78 basis points.

July 31, 2019

IMRF Commentary Executive Summary

International Equity

The International Equity composite returned -1.21% in July, falling in line with its MSCI ACWI ex-U.S. benchmark.

International Large Cap: International Large Cap managers collectively returned -1.52% in July, trailing the MSCI ACWI ex-U.S. Index by 31 basis points. International Large Cap Growth managers (-0.81%) trailed the MSCI ACWI ex-U.S. Growth Index by 62 basis points. International Large Cap Value managers returned -1.91% for the month, leading the MSCI ACWI ex-U.S. Value Index (-2.22%).

International Small Cap and Emerging Markets: The International Small Cap managers returned -0.59% in July, eight basis points ahead of the MSCI ACWI Small Cap ex-U.S. Index return of -0.67%. The Emerging Markets portfolio, managed by Genesis, returned 0.47% during the month, leading the MSCI Emerging Markets Index by 161 basis points.

Fixed Income

The Fixed Income composite returned 0.30% in July relative to the 0.22% return of the Bloomberg Aggregate Index.

Active Core: In aggregate, the Domestic Active Core managers returned 0.25% in July, three basis points ahead of the Bloomberg Aggregate Index.

Core Plus: Domestic Fixed Core Plus managers ended the month with a return of 0.35%, leading the Bloomberg Aggregate Index by 13 basis points.

Bank Loans: The Bank Loans portfolio, managed by Barings, returned 0.94% for the month, leading the custom benchmark by 13 basis points.

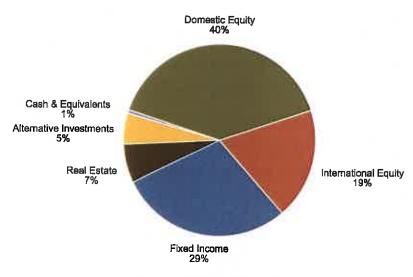
Emerging Markets: The Emerging Markets Debt component, managed by Standish, returned 1.12% in July, 15 basis points ahead of the custom benchmark.

High Yield: The High Yield allocation, managed by MacKay Shields, returned -0.18% in July, trailing the benchmark return of 0.51%.

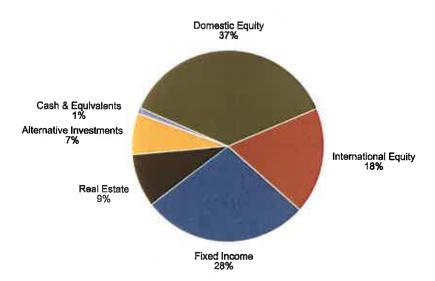
Actual vs Target Asset Allocation

The first chart below shows the Fund's asset allocation as of July 31, 2019. 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	17,058	39.9%	37.0%	2.9%	
International Equity	7,993	18.7%	18.0%	0.7%	1,234 295
Fixed Income	12,479	29.2%	28.0%	1.2%	504
Real Estate	2,784	6.5%	9.0%	(2.5%)	
Alternative Investments	2,215	5.2%	7.0%	(1.8%)	(1,065) (779)
Cash & Equivalents	239	0.6%	1.0%	(0.4%)	(189)
Total	42,768	100.0%	100.0%	1	<u></u>

Current Month Target = 37.0% Russell 3000 Index, 28.0% Blmbg Aggregate, 18.0% MSCI ACWI ex US, 9.0% NCREIF NFI-ODCE Val Wt Nt, 7.0% 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 July 31, 2019, with the distribution as of June 30, 2019.

Asset Distribution Across Investment Managers

	July 31, 20	July 31, 2019		June 30, 2019		
	Market Value	Percent	Market Value	Percent		
omestic Equity*	\$17,058,141,969	39.89%	\$16,976,338,523	39.70%		
arge Cap Growth						
NTGI S&P 500 Growth Idx	2,357,855,481	5.51%	2,330,696,749	5.45%		
Sands	2,025,307,300	4.74%	2,005,800,975	4.69%		
Piedmont Russell 1000 G	1,051,230,548	2.46%	1,028,061,199	2.40%		
arge Cap Value						
Dodge & Cox	1,351,875,565	3.16%	1,327,058,726	3.10%		
BMO	1,219,344,225	2.85%	1,345,037,629	3.15%		
LSV	1,523,068,749	3.56%	1,510,140,451	3.53%		
NTGI S&P 500 Value Idx	1,689,970,835	3.95%	1,660,746,186	3.88%		
arge Cap Core						
NTGI MarketCap Index	2,661,143,062	6.22%	2,622,467,401	6.13%		
mall Cap Growth						
Frontier	563,632,258	1.32%	557,623,630	1.30%		
FIAM	175,171,588	0.41%	171,392,694	0.40%		
mall Cap Value						
Channing	231,058,209	0.54%	228,606,021	0.53%		
Dimensional Small Cap Value	563,689,307	1.32%	558,987,867	1.319		
Inv. Counselors of Maryland	683,950,749	1.60%	674,245,004	1.58%		
icro Cap						
Dimensional Micro Cap	429,340,880	1.00%	426,190,223	1.009		
ublic Real Assets						
Brookfield	168,277,953	0.39%	167,410,283	0.39%		
Cohen & Steers	363,225,261	0.85%	361,873,485	0.85%		
nternational Equity	\$7,993,025,000	18.69%	\$8,090,580,091	18.92%		
nternational Large Cap Growth						
EARNEST Partners	632,273,331	1.48%	640,121,224	1.509		
William Blair	759,489,215	1.78%	762,937,322	1.78%		
nternational Large Cap Value						
Brandes	586,432,784	1.37%	597,378,675	1.409		
Mondrian	530,492,948	1.24%	542,043,903	1.279		
Lazard	116,073,974	0.27%	117,228,083	0.279		
nternational Large Cap Core						
Arrowstreet	694,564,037	1.62%	702,247,819	1.649		
Brown	353,558,865	0.83%	357,105,905	0.849		
GlobeFlex	585,885,885	1.37%	600,104,681	1.409		
NTGI MSCI EAFE Index	1,841,918,172	4.31%	1,878,865,714	4.399 0.749		
Progress Intl Equity	314,203,353	0.73%	315,595,479	0.747		
nternational All Cap Developed						
Ativo International	138,918,632	0.32%	139,522,079	0.339		
nternational Small Cap						
Franklin Templeton	189,925,604	0.44%	191,736,341	0.459		
William Blair	276,392,166	0.65%	277,350,378	0.659		
Emerging Markets		a	000 040 400	0.00		
Genesis	972,896,033	2.27%	968,342,488	2.269		

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 July 31, 2019, with the distribution as of June 30, 2019.

Asset Distribution Across Investment Managers

	July 31, 2019		June 30, 2	June 30, 201 9		
	Market Value	Percent	Market Value	Percent		
Total Fixed Income	\$12,479,425,067	29.18%	\$12,468,064,014	29.16%		
Domestic Fixed Core			,,			
Brandes Core	363,969,483	0.85%	364,541,064	0.85%		
EARNEST Partners	1,070,283,056	2.50%	1,069,753,723	2.50%		
Piedmont Investment	1,057,503,454	2.47%	1,056,369,053	2.47%		
Garcia Hamilton	1,042,206,701	2.44%	1,041,269,155	2.44%		
Domestic Fixed Passive Core	1,012,200,101	2	1,011,200,100	2.1170		
NTGI Bimbg Agg. Index	1,770,616,306	4.14%	1,765,910,760	4.13%		
BlackRock US Debt	1,696,336,457	3.97%	1,692,553,053	3.96%		
			,,,	0.0070		
Domestic Fixed Core Plus						
LM Capital	906,647,642	2.12%	905,916,137	2.12%		
Progress Fixed Income	953,730,993	2.23%	950,720,600	2.22%		
Taplin, Canida, & Habacht	935,038,077	2.19%	934,039,330	2.18%		
Western	1,111,406,037	2.60%	1,110,311,305	2.60%		
Bank Loans						
Barings Global Loan Fund	E70 044 704	4.000/	F70 F47 C00	4.048/		
barings Global Loan Fund	570,841,784	1.33%	573,517,630	1.34%		
Emerging Markets Debt						
Standish	219,300,446	0.51%	216,870,344	0.51%		
ligh Yield						
MacKay Shields	7 81,217,965	1.83%	78 5,958,31 2	1.84%		
FIAM High Yield	326,661	0.00%	333,54 4	0.00%		



Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of July 31, 2019, with the distribution as of June 30, 2019.

Asset Distribution Across Investment Managers

	July 31, 2019		June 30, 2019		
	Market Value	Percent	Market Value	Percent	
Real Estate	\$2,783,794,310	6.51%	\$2,779,894,601	6.50%	
Real Estate Core					
TA Buckhead Ind. Prop.	569,464,015	1.33%	569,464,015	1.33%	
Barings Core Property Fund	1,070	0.00%	1,070	0.00%	
Barings European Core Property	122,690,393	0.29%	122,526,772	0.29%	
Blackstone Property Partners Europe	124,360,523	0.29%	127,197,561	0.30%	
INVESCO Core RE	209,185,978	0.49%	208,860,635	0.49%	
INVESCO Euro real estate	55,380,316	0.13%	57,163,841	0.13%	
AEW Core Property Trust	239,528,000	0.56%	236,476,046	0.55%	
CBRE US Core Property Trust	197,435,087	0.46%	193,547,093	0.45%	
CBNE GO Cole i Topolty Trast	101,100,001	0.1070	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Real Estate Non-Core			555	0.440/	
Artemis MWBE Spruce	177,092,578	0.41%	177,092,578	0.41%	
Franklin Templeton EMREFF	16,006,799	0.04%	17,460,476	0.04%	
Security Capital	56,724,554	0.13%	57,053,998	0.13%	
Dune II	26,059,989	0.06%	26,059,989	0.06%	
Non-Core Real Estate Funds*	852,771,088	1.99%	860,141,009	2.01%	
Non-Core Intl Real Estate Funds**	135,051,526	0.32%	124,807,123	0.29%	
Rockwood Fund VIII	229,684	0.00%	229,684	0.00%	
Almanac ARS V	1,812,710	0.00%	1,812,710	0.00%	
TA Fund IX	1	0.00%	1	0.00%	
Alternative Investments	\$2,215,006,059	5.18%	\$2,178,937,249	5.10%	
Absolute Return				0.000/	
Aurora	615,215	0.00%	629,033	0.00%	
Private Equity					
Abbott	333,207,870	0.78%	332,728,550	0.78%	
Muller & Monroe MPEFF	5,077,803	0.01%	5,068,585	0.01%	
Pantheon	263,822,354	0.62%	254,581,162	0.60%	
Private Equity Fund - Domestic	1,010,401,773	2.36%	981,716,833	2.30%	
Private Equity Fund - International	287,188,845	0.67%	294,961,630	0.69%	
Agriculturo					
Agriculture Premiere Partners IV	202,082,549	0.47%	197,125,377	0.46%	
Forest Investment Assoc.	73,816,408	0.17%	73,616,238	0.17%	
t Otest illyestillerit Assoc.	, 0,0 10, 100	0.17.70	. 5,5 . 5,20	2	
Inlisted Infrastructure		0.0524	60 500 044	0.0004	
Unlisted Infrastructure Funds	38,793,242	0.09%	38,509,841	0.09%	
Carlo S Farricalente	\$238,753,484	0.56%	\$268,496,960	0.63%	
Cash & Equivalents	<u> </u>				

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

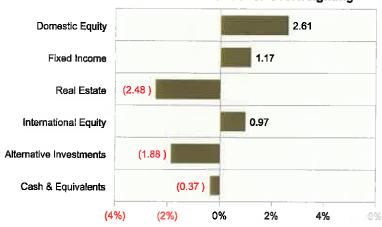


^{*} Non-Core Real Estate Funds funded since September 2011.

Monthly Total Fund Relative Attribution - July 31, 2019

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.





Actual vs Target Returns

0.30

0.72

1%

0.22 0.28

0.18

0.18 0.38

Actual Target

0%

0.47

(0.02)

1.49

2%

3%

Domestic Equity Fixed Income Real Estate International Equity





Relative Attribution by Asset Class

Relative Attribution Effects for Month ended July 31, 2019

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	40%	37%	1.27%	1.49%	(0.09%)	0.03%	
Fixed Income	29%	28%	0.30%	0.22%	0.02%	(0.00%)	(<mark>0.06%)</mark> 0. 02 %
Real Estate	7%	9%	0.28%	0.26%	0.00%	`0.01%′	0.01%
International Equity	19% 5 5%	18%	(1.21%)	(1.21%) 0.72%	0.00%	(0.02%)	(0.02%)
Alternative Investments	5 5%	7%	(0.02%)	`0.72%′	(0.04%)	(0.00%)	(0.04%)
Cash & Equivalents	1%	1%	0.18%	0.18%	0.00%	0.00%	0.00%
Total			0.38% =	0.47% +	(0.10%) +	0.01%	(0.09%)

^{*} Current Month Target = 37.0% Russell 3000 Index, 28.0% Blmbg Aggregate, 18.0% MSCI ACWI ex US, 9.0% NCREIF NFI-ODCE Val Wt Nt. 7.0% 9% Annually and 1.0% 3-month Treasury Bill.



(1.21)

(1.21)

(2%)

(1%)

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 July 31, 2019

	Last	Last 3	Year to	Last 12	
	Month	Months	Date	Months	
Domestic Equity	1.27%	0.68%	19.78%	4.30%	
Blended Benchmark**	1.49%	1.59%	20.48%	7.05%	
Domestic Equity - Net	1.26%	0.63%	19.66%	4.10%	
International Equity	(1.21%)	(0.84%)	13.19%	(2.29%)	
MSCI ACWI x US (Net)	(1.21%)	(0.88%)	12.23%	(2.27%)	
International Equity - Net	(1.21%)	(0.89%)	13.04%	(2.55%)	
Fixed Income	0.30%	3.10%	6.98%	7.90%	
Blmbg Aggregate Index	0.22%	3.28%	6.35%	8.08%	
Fixed Income - Net	0.29%	3.08%	6.90%	7.76%	
Real Estate	0.28%	3.50%	5.32%	10.25%	
Blended Benchmark***	0.26%	0.77%	2.24%	5.08%	
Real Estate - Net	0.27%	3.48%	5.28%	10.22%	
Alternative investments	(0.02%)	1.45%	3.67%	14.75%	
Alternatives Custom Benchmark****	0.72%	2.18%	5.16%	9.00%	
Alternative Investments - Net	(0.02%)	1.44%	3.62%	14.64%	
Private Equity	(0.02%)	1.64%	4.58%	17.77%	
Alternatives Custom Benchmark****	0.72%	2.18%	5.16%	9.00%	
Agriculture	(0.02%)	(0.17%)	(2.38%)	0.85%	
Blended Benchmark***	0.26%	0.77%	2.24%	5.08%	
Timberland	0.27%	0.99%	0.70%	(1.90%)	
Blended Benchmark***	0.26%	0.77%	2.24%	5.08%	
Unlisted Infrastructure	(0.48%)	1.42%	2.70%	9.57%	
Alternatives Custom Benchmark****	0.72%	2.18%	5.16%	9.00%	
Total Fund	0.38%	1.28%	12.83%	4.54%	
Total Fund - Net	0.37%	1.24%	12.72%	4.37%	
Total Fund Benchmark	0.47%	1.68%	12.15%	5.96%	

13.0%. Prior to 2003, it was based on an annual return of 15.0%.



^{*}Current Month Target = 37.0% Russell 3000 Index, 28.0% Blmbg Aggregate, 18.0% MSCI ACWI ex US, 9.0% NCREIF NFI-ODCE Val Wt Nt, 7.0% 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%.

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 84 Months	Last 120 Months	Since Inception
Domestic Equity	13.05%	10.26%	13.70%	13.81%	11.58% (1/82)
Blended Benchmark**	13.11%	10.94%	13.83%	14.01%	11.41% (1/82)
Domestic Equity - Net	12.83%	10.03%	13.45%	13.54%	8.52% (1/05)
International Equity	7.56%	3.27%	7.54%	7.00%	7.68% (9/86)
MSCI ACWI x US (Net)	7.21%	2.12%	5.96%	5.42%	=
International Equity - Net	7.23%	2.93%	7.20%	6.67%	5.40% (1/05)
Fixed Income	3.18%	3.63%	3.38%	5.05%	8.22% (1/82)
Blmbg Aggregate Index	2.17%	3.05%	2.45%	3.75%	7.69% (1/82)
Fixed Income - Net	3.03%	3.48%	3.23%	4.90%	4.78% (1/05)
Real Estate - Net	9.19%	10.15%	10.60%	9.15%	7.44% (1/05)
Blended Benchmark***	6.48%	8.61%	9.53%	9.83%	7.52% (1/05)
Alternative Investments	12.69%	9.98%	10.14%	9.54%	10.82% (2/86)
Alternatives Custom Benchmark****	9.00%	9.00%	9.00%	9.27%	12.70% (2/86)
Alternative Investments - Net	12.50%	9.70%	9.86%	9.25%	8.61% (1/05)
Private Equity	16.06%	12.42%	12.35%	12.57%	13.03% (2/86)
Alternatives Custom Benchmark****	9.00%	9.00%	9.00%	9.27%	12.70% (2/86)
Agriculture	(2.52%)	5.75%	9.98%	8.40%	7.27% (10/97)
Blended Benchmark***	6.48%	8.61%	9.53%	9.83%	7.43% (10/97)
Timberland	1.20%	1.54%	3.06%	2.74%	7.44% (10/92)
Blended Benchmark***	6.48%	8.61%	9.53%	9.83%	7.46% (10/92)
Unlisted Infrastructure	-	-		5/4/1	8.19% (4/18)
Alternatives Custom Benchmark****	9.00%	9.00%	9.00%	9.27%	9.00% (4/18)
Total Fund	8.84%	6.87%	9.14%	9.45%	9.84% (1/82)
Total Fund - Net	8.63%	6.65%	8.91%	9.22%	7.13% (1/05)
Total Fund Benchmark	8.07%	6.89%	8.54%	8.95%	6.98% (1/05)

^{*} Current Month Target = 37.0% Russell 3000 Index, 28.0% Blmbg Aggregate, 18.0% MSCI ACWI ex US, 9.0% NCREIF NFI-ODCE Val Wt Nt, 7.0% 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.

Returns for Periods Ended July 31, 2019

		Last	Year	Last
	Last	3	to	12
	Month	Months	Date	Months
Large Cap Equity	1.33%	0.87%	19.95%	5.93%
Russell 1000 Index	1.55%	1.76%	20.69%	8.00%
Large Cap Growth	1.30%	1.44%	24.71%	10.62%
	4.470/	4.700/	24 500/	9.57%
NTGI S&P 500 Growth Idx	1.17%	1.72% 1.71%	21.59% 21.58%	9.55%
S&P/Citi 500 Growth Index	1.16%			9.57%
NTGI S&P 500 Growth Idx - Net	1.16%	1.72%	21.58%	9.57 76
Piedmont Russell 1000 G	2.25%	2.37%	24.20%	52
Russell 1000 Growth Index	2.26%	2.38%	24.23%	10.82%
Piedmont Russell 1000 G - Net	2.25%	2.37%	24.19%	¥
	0.070/	0.649/	28.84%	12.49%
Sands	0.97%	0.64%		10.82%
LCG Blended Benchmark*	2.26%	2.38%	24.23%	10.82%
Russell 1000 Growth Index	2.26%	2.38%	24.23%	
Sands - Net	0.97%	0.58%	28.71%	12.24%
Large Cap Value	1.29%	0.03%	15.71%	1.86%
D 1 00	0.059/	0.15%	15.06%	1.53%
Dodge & Cox	2.05%	1.12%	17.20%	5.20%
LCV Blended Benchmark**	0.83%		17.20%	5.20%
Russell 1000 Value Index	0.83%	1.12%		1.32%
Dodge & Cox - Net	2.05%	0.10%	14.95%	1.3270
вмо	0.15%	(1.44%)	13.48%	(0.56%)
LCV Blended Benchmark**	0.83%	1.12%	17.20%	5.20%
Russell 1000 Value Index	0.83%	1.12%	17.20%	5.20%
BMO - Net	0.09%	(1.55%)	13.30%	(0.83%)
LSV	1.03%	(0.61%)	14.91%	(0.50%)
LCV Blended Benchmark**	0.83%	1.12%	17.20%	5.20%
	0.83%	1.12%	17.20%	5.20%
Russell 1000 Value Index	0.83%	(0.73%)	14.71%	(0.74%)
LSV - Net	0.97 %	(0.7370)	14.7 170	(0.7470)
NTGI S&P 500 Value ldx	1.76%	1.66%	18.78%	6.29%
S&P/Citi 500 Value Index	1.76%	1.66%	18.76%	6.28%
NTGI S&P 500 Value Idx - Net	1.76%	1.66%	18.77%	6.29%
Large Cap Passive Core	1.47%	1.58%	20.49%	6.97%
Latye Cap rassive Cole	1.77 /0	1.00 /0	20.70	
NTGI MarketCap idx	1.47%	1.58%	20.49%	6.97%
DJ U.S. Total Stock Market Index	1.47%	1.57%	20.45%	6.90%
NTGI MarketCap Idx - Net	1.47%	1.58%	20.49%	6.96%
the management of the trans				

^{*}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	Months	Inception	
arge Cap Equity	13.69%	10.79%	14.08%	11.25% (1/82)	
Russell 1000 Index	13.31%	11.15%	14.10%	11.61% (1/82)	
arge Cap Growth	18.09%	13.62%	15.62%	12.00% (1/82)	
NTGI S&P 500 Growth Idx	15.91%	13.62%	15.48%	8.00% (8/01)	
S&P/Citi 500 Growth Index	15.94%	13.64%	15.47%	7.97% (8/01)	
NTGI S&P 500 Growth Idx - Net	15.91%	13.61%	15.48%	9.92% (1/05)	
Piedmont Russell 1000 G		191	-	4.48% (10/18)	
Russell 1000 Growth Index	17.13%	14.25%	15.74%	4.49% (10/18)	
Piedmont Russell 1000 G - Net	17.1370	14.2J /b =	13.7470	4.47% (10/18) 4.47% (10/18)	
100000000000000000000000000000000000000		_	-	T.T7 70 (10/18)	
Sands	21.64%	13.98%	19.15%	12.54% (11/03)	
LCG Blended Benchmark*	17.13%	14.25%	15.74%	10.01% (11/03)	
Russell 1000 Growth Index	17.13%	14.25%	15.74%	10.06% (11/03)	
Sands - Net	21.37%	13.72%	18.88%	11.53% (1/05)	
arge Cap Value	10.96%	8.51%	12.93%	10.29% (10/82)	
Dodge & Cox	13.17%	9.14%	13.53%	9.52% (9/03)	
LCV Blended Benchmark**	9.44%	8.01%	12.40%	8.35% (9/03)	
Russell 1000 Value Index	9.44%	8.01%	12.40%	8.52% (9/03)	
Dodge & Cox - Net	12.94%	8.93%	13.30%	7.88% (1/05)	
ВМО	10.00%	8.04%	12.47%	7.96% (2/01)	
LCV Blended Benchmark**	9.44%	8.01%	12.40%	5.76% (2/01)	
Russell 1000 Value Index	9.44%	8.01%	12.40%	6.77% (2/01)	
BMO - Net	9.75%	7.80%	12.21%	8.01% (1/05)	
	J J	1.00%	12.2170	G.G 1 70 (1999)	
LSV	10.42%	8.20%	13.24%	10.81% (2/03)	
LCV Blended Benchmark**	9.44%	8.01%	12.40%	9.28% (2/03)	
Russell 1000 Value Index	9.44%	8.01%	12.40%	9.29% (2/03)	
LSV - Net	10.16%	7.93%	12.95%	8.17% (1/05)	
NTGI S&P 500 Value Idx	10.41%	8.71%	12.46%	5.92% (8/99)	
S&P/Citi 500 Value Index	10.30%	8.64%	12.39%	5.89% (8/99)	
NTGI S&P 500 Value Idx - Net	10.40%	8.71%	12.45%	7.17% (1/05)	
arge Cap Passive Core	42 450/	40.000/	44.070/	44.4001	
arge Cap rassive Core	13.15%	10.99%	14.07%	11.16% (1/85)	
NTGI MarketCap Idx	13.15%	10.99%	14.08%	10.94% (2/85)	
DJ U.S. Total Stock Market Index	13.07%	10.90%	13.99%	10.88% (2/85)	
NTGI MarketCap Idx - Net	13.14%	10.98%	14.08%	8.72% (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	Year	Last
	Last	3	to	12
	Month	Months	Date	Months
Small Cap Equity	1.14%	(0.91%)	18.61%	(3.53%)
Russell 2000 Index	0.58%	(0.69%)	17.66%	(4.42%)
Small Cap Growth	1.34%	0.32%	23.68%	3.68%
Frontier	1.08%	(0.22%)	22.45%	5.33%
Russell 2000 Growth Index	0.98%	0.69%	21.54%	(1.22%)
Frontier - Net	0.95%	(0.34%)	21.64%	4.49%
FIAM	2.20%	1.51%	26.40%	4.51%
Russell 2000 Growth Index	0.98%	0.69%	21.54%	(1.22%)
FIAM - Net	2.20%	1.35%	26.20%	4.21%
Small Cap Value	1.15%	(1.52%)	16.48%	(7.60%)
Channing	1.07%	(0.79%)	20.08%	(6.36%)
Russell 2000 Value Index	0.16%	(2.16%)	13.65%	(7.71%)
Channing - Net	1.07%	(0.79%)	19.79%	(6.72%)
DFA Small Cap Value	0.84%	(3.55%)	11.48%	(11.31%)
Russell 2000 Value Index	0.16%	(2.16%)	13.65%	(7.71%)
DFA Small Cap Value - Net	0.84%	(3.67%)	11.22%	(11.75%)
Inv. Counselors of Maryland	1.44%	(0.04%)	19.69%	(4.74%)
Russell 2000 Value Index	0.16%	(2.16%)	13.65%	(7.71%)
Inv. Couns. of Maryland - Net	1.44%	(0.14%)	19.46%	(5.22%)
Micro Cap	0.74%	(1.46%)	13.87%	(8.35%)
DFA Micro Cap	0.74%	(1.46%)	13.88%	(8.10%)
Russell 2000 Value Index	0.16%	(2.16%)	13.65%	(7.71%)
Russell 2000 Index	0.58%	(0.69%)	17.66%	(4.42%)
DFA Micro Cap - Net	0.74%	(1.58%)	13.61%	(8.55%)
			00 000/	40 500/
Public Real Assets	0.42%	4.46%	20.22%	13.58%
Public Real Assets Benchmark (1)	(0.36%)	3.10%	18.09%	11.47%
Brookfield Public Global Inf	0.52%	3.82%	21.52%	10.81%
Dow Jones Global Infra Comp Idx	(0.26%)	2.95%	19.90%	8.38%
Brookfield Public Global Inf - Net	0.52%	3.69%	21.21%	10.23%
Cohen & Steers Public Global Inf	0.37%	4.76%	19.63%	14.91%
FTSE GI Core Infr 50/50 N	(0.40%)	3.15%	17.48%	12.48%
Cohen & St Public Global Inf - Net	0.37%	4.65%	19.37%	14.42%



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 36	Last 60	Last 120	Since	
	Months	Months	Months	Inception	
Small Cap Equity	10.35%	8.26%	13.12%	12.05% (7/88)	
Russell 2000 Index	10.36%	8.53%	12.47%	9.39% (7/88)	
Small Cap Growth	12.81%	10.49%	13.93%	12.94% (7/88)	
Frontier	17.67%	11.59%	14.10%	13.21% (8/88)	
Russell 2000 Growth Index	12.66%	10.21%	13.67%	8.27% (6/88)	
Frontier - Net	16.91%	10.91%	13.37%	9.87% (1/05)	
FIAM	11.37%	11.08%	14.70%	13.52% (8/88)	
Russell 2000 Growth Index	12.66%	10.21%	13.67%	8.27% (8/88)	
FIAM - Net	10.98%	10.54%	14.12%	10.83% (1/05)	
Small Cap Value	8.99%	7.54%	12.70%	11.67% (9/89)	
Channing	7.92%	7.36%	¥	10.26% (7/11)	
Russell 2000 Value Index	7.96%	6.74%	11.19%	8.69% (7/11)	
Channing - Net	7.43%	6.88%	*	9.67% (7/11)	
DFA Small Cap Value	6.76%	5.78%	12.77%	11.71% (2/98)	
Russeli 2000 Value Index	7.96%	6.74%	11.19%	9.38% (2/96)	
DFA Small Cap Value - Net	6.21%	5.26%	12.23%	7.30% (1/05)	
Inv. Counselors of Maryland	11.41%	10.02%	13.37%	11.47% (5/99)	
Russell 2000 Value Index	7.96%	6.74%	11.1 9%	8.89% (5/99)	
Inv. Couns. of Maryland - Net	10.81%	9.48%	12.83%	8.61% (1/05)	
Micro Cap	8.13%	5.34%	12.15%	11.40% (7/84)	
DFA Micro Cap	10.10%	8.76%	13.53%	11.05% (8/87)	
Russell 2000 Value Index	7.96%	6.74%	11.19%	9.72% (8/87)	
Russell 2000 Index	10.36%	8.53%	12.47%	8.79% (8/87)	
DFA Micro Cap - Net	9.56%	8.22%	12.98%	7.76% (1/05)	
Public Real Assets	-	5	4	8.79% (8/17)	
Public Real Assets Benchmark (1)	1345	-	-	6.55% (8/17)	
Brookfield Public Global Inf		=	734	6.08% (8/17)	
Dow Jones Global Infra Comp Idx	5.96%	3.59%	11.21%	4.54% (8/17)	
Brookfield Public Global Inf - Net	0 <u>2</u> 2	-		5.60% (8/17)	
Cohen & Steers Public Global Inf	650		7, 2 3	10.12% (8/17)	
FTSE GI Core Infr 50/50 N	8.36%	6.82%	-	7.19% (B/17)	
Cohen & St Public Global Inf - Net	-	2	(12)	9.72% (8/17)	

^{(1) 1/3} Dow Jones Brookfield Global Infrastructure Composite Index + 2/3 FTSE Global Core Infrastructure 50/50 Net Tax Index



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	(1.52%)	(1.12%)	12.15%	(3.11%)
MSCI ACWI ex-US Index	(1.21%)	(0.88%)	12.23%	(2.27%)
Intl Large Cap Growth	(0.81%)	0.03%	16.29%	(2.43%)
EARNEST Partners	(1.23%)	(2.01%)	12.54%	(4.35%)
MSCI ACWI ex-US Index	(1.21%)	(0.88%)	12.23%	(2.27%)
MSCI ACWI ex-US Growth	(0.19%)	1.08%	17.31%	1.09%
EARNEST Partners - Net	(1.23%)	(2.01%)	12.48%	(4.46%)
William Blair	(0.45%)	1.79%	19.61%	(0.62%)
MSCI ACWI ex-US Index	(1.21%)	(0.88%)	12.23%	(2.27%)
MSCI ACWI ex-US Growth	(0.19%)	1.08%	17.31%	1.09%
William Blair - Net	(0.45%)	1.79%	19.40%	(0.98%)
Intl Large Cap Value	(1.88%)	(3.20%)	7.57%	(4.47%)
Brandes	(1.83%)	(4.24%)	4.76%	(8.30%)
MSCI ACWI ex-US Index	(1.21%)	(0.88%)	12.23%	(2.27%)
MSCI ACWI ex-US Value	(2.22%)	(2.54%)	8.02%	(4.67%)
Brandes - Net	(1.88%)	(4.29%)	4.59%	(8.50%)
Mondrian	(2.13%)	(2.88%)	9.31%	(1.21%)
MSCI ACWI ex-US Index	(1.21%)	(0.88%)	12.23%	(2.27%)
MSCI ACWI ex-US Value	(2.22%)	(2.54%)	8.02%	(4.67%)
Mondrian - Net	(2.13%)	(2.88%)	9.31%	(1.21%)
Lazard	(0.98%)	0.86%	14.83%	1.75%
MSCI ACWI ex-US Index	(1.21%)	(0.88%)	12.23%	(2.27%)
MSCI ACWI ex-US Value	(2.22%)	(2.54%)	8.02%	(4.67%)
Lazard - Net	(0.98%)	0.80%	14.69%	1.50%



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
Inti Large Cap Equity	7.29%	3.15%	6.87%	7.66% (9/86)
MSCI ACWI ex-US Index	7.21%	2.12%	5.42%	V.E.
Intl Large Cap Growth	8.18%	3.38%	7.39%	8.24% (9/02)
EARNEST Partners	7.97%	2.17%	6.94%	8.82% (10/04)
MSCI ACWI ex-US Index	7.21%	2.12%	5.42%	5.77% (10/04)
MSCI ACWI ex-US Growth	8.42%	4.64%	7.03%	6.87% (10/04)
EARNEST Partners - Net	7.79%	1.97%	6.58%	7.55% (1/05)
William Blair	8.42%	4.49%	8.69%	9.54% (10/02)
MSCI ACWI ex-US index	7.21%	2.12%	5.42%	7.94% (10/02)
MSCI ACWI ex-US Growth	8.42%	4.64%	7.03%	8.47% (10/02)
William Blair - Net	8.07%	4.11%	8.29%	6.25% (1/05)
Intl Large Cap Value	5.68%	1.93%	5.17%	8.50% (10/95)
Brandes	5.60%	1.57%	5.30%	8.62% (1/98)
MSCI ACWI ex-US Index	7.21%	2.12%	5.42%	5.06% (1/96)
MSCI ACWI ex-US Value	6.97%	0.52%	4.73%	-
Brandes - Net	5.33%	1.34%	5.05%	3.95% (1/05)
Mondrian	5.61%	2.19%	*	5.07% (4/12)
MSCI ACWI ex-US Index	7.21%	2.12%	5.42%	4.75% (4/12)
MSCI ACWI ex-US Value	6.97%	0.52%	4.73%	4.06% (4/12)
Mondrian - Net	5.26%	1.78%	<u>.</u>	4.64% (4/12)
Lazard	6.81%	3.14%	8	6.35% (4/12)
MSCI ACWI ex-US Index	7.21%	2.12%	5.42%	4.75% (4/12)
MSCI ACWI ex-US Value	6.97%	0.52%	4.73%	4.06% (4/12)
Lazard - Net	6.55%	2.72%	*	5.82% (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 Pariods Ended July 31, 2019

		Last	Year	Last	
	Last	3	to	12	
	Month	Months	Date	Months	
Inti Large Cap Active Core	(1.36%)	(0.44%)	12.68%	(2.78%)	
				(0.440)	
Arrowstreet	(1.09%)	0.24%	12.84%	(0.44%)	
MSCI ACWI ex-US Index	(1.21%)	(0.88%)	12.23%	(2.27%)	
Arrowstreet - Net	(1.09%)	0.12%	12.58%	(0.91%)	
Brown	(0.99%)	0.47%	15.44%	(1.04%)	
MSCI ACWI ex-US Index	(1.21%)	(0.88%)	12.23%	(2.27%)	
Brown - Net	(0.99%)	0.41%	15.30%	(1.29%)	
GlobeFlex	(2.37%)	(1.61%)	9.97%	(7.53%)	
MSCI ACWI ex-US Index	(1.21%)	(0.88%)	12.23%	(2.27%)	
GlobeFlex - Net	(2.37%)	(1.71%)	9.74%	(7.91%)	
Globeriex - Net	(2.51 70)	(1.7 1 74)	0.7 470	(175 (15)	
Progress Intl Equity	(0.44%)	(0.73%)	14.54%	(0.35%)	
Custom Benchmark	(1.21%)	(0.88%)	12.23%	(2.27%)	
MSCI ACWI ex-US Index	(1.21%)	(0.88%)	12.23%	(2.27%)	
Progress Intl Equity - Net	(0.44%)	(0.86%)	14.27%	(0.85%)	
Intl Large Cap Pass. Core	(1.97%)	(1.27%)	11.98%	(3.00%)	
The Europe Cap 1 acc. Colo	(1.01.10)				
NTGI MSCI EAFE Idx	(1.97%)	(1.27%)	11.98%	(3.00%)	
MSCI EAFE Index	(1.27%)	(0.44%)	12.58%	(2.60%)	
NTGI EAFE idx - Net	(1.97%)	(1.27%)	11.97%	(3.01%)	
Inti Ali Cap Developed	(0.43%)	1.92%	7.43%	86	
Ativo International	(0.43%)	1.92%		+	
MSCI FAFE + Canada	(1.21%)	(0.29%)	13,25%	(2.33%)	
Ativo International - Net	(0.43%)	1.92%	10,20,0	(=100.10)	
Auvo international - Net	(0.4570)	1.02.70			
		(0.000()	47.000/	(E 200/)	
International Small Cap	(0.59%)	(0.23%)	17.06%	(5.29%)	
Franklin Templeton	(0.94%)	(1.67%)	14.01%	(4.71%)	
ACWI Small Cap ex US	(0.67%)	(1.64%)	10.86%	(7.22%)	
Franklin Templeton - Net	(0.94%)	(1.86%)	13.60%	(5.46%)	
Fightin Fortploton 1400	•			,	
William Blair	(0.35%)	0.64%	19.47%	(5.61%)	
ACWI Small Cap ex US	(0.67%)	(1.64%)	10.86%	(7.22%)	
Intl SC Blended Benchmark	(0.67%)	(1.64%)	10.86%	(7.22%)	
William Blair - Net	(0.35%)	0.64%	19.03%	(6.35%)	
Emerging Markets	0.47%	0.30%	19.20%	6.27%	
Genesis	0.47%	0.30%	19.20%	6.27%	
MSCI Emerging Markets Index	(1.14%)	(2.48%)	9.51%	(1.79%)	
Genesis - Net	0.47%	0.25%	18.91%	5.74%	
Genega - Ner	QTr /0	0.2070		=	

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 until 201712.

after 201712 the benchmark is MSCI ACWI ex US - Net.

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 July 31, 2019

	Last Last		Last		
	36	60	120	Since	
	Months	Months	Months	Inception	
ntl Large Cap Active Core	8.11%	4.52%	8.40%	4.68% (2/08)	
Arrowstreet	8.99%	5.16%	8.65%	4.93% (3/08)	
MSCI ACWI ex-US Index	7.21%	2.12%	5.42%	1.93% (3/08)	
Arrowstreet - Net	8.49%	4.67%	8.14%	4.44% (3/08)	
Brown	7.54%	4.69%	8.56%	7.86% (10/04)	
MSCI ACWI ex-US Index	7.21%	2.12%	5.42%	5.77% (10/04)	
Brown - Net	6.74%	3.76%	7.80%	6.35% (1/05)	
Oleh-El					
GlobeFlex	6.70%	3.59%	7.89%	4.61% (3/06)	
MSCI ACWI ex-US Index	7.21%	2.12%	5.42%	3.57% (3/06)	
GlobeFlex - Net	6.30%	3.18%	7.46%	4.17% (3/06)	
Progress Intl Equity	9.45%	4.70%		4.49% (7/14)	
Custom Benchmark	8.01%	3.12%	- 2	2.95% (7/14)	
MSCI ACWI ex-US Index	7.21%	2.12%	5.42%		
Progress Intl Equity - Net	8.92%	4.23%			
riogress inti Equity - Net	0.92%	4.23%		4.02% (7/14)	
l Large Cap Pass. Core	7.00%	2.62%	6.16%	3.31% (1/00)	
	-			(1,50)	
NTGI MSCI EAFE Idx	7.00%	2.62%	6.15%	3.67% (2/00)	
MSCI EAFE Index	6.87%	2.39%	5.84%	3.32% (2/00)	
NTGI EAFE Idx - Net	6.99%	2.61%	6.15%	4.74% (1/05)	
ti Ali Cap Developed	*	3	\$	7.57% {2/19}	
Ativo International				= ===	
MSCI EAFE + Canada	0.050	0.4004		7.57% (2/19)	
···	6.85%	2.16%	5.6 6%	5.71% (2/19)	
Ativo International - Net	-	÷	¥3	7.57% (2/19)	
ternational Small Cap	6.54%	4.31%	8.34%	4.58% (12/05)	
Example Templeton	0.440	4.00%		, ,	
Franklin Templeton	8.14%	4.22%	_#i	6.01% (8/11)	
ACWI Small Cap ex US	5.59%	3.03%	7.47%	4.22% (8/11)	
Franklin Templeton - Net	7.35%	3.46%	劃	5.26% (8/11)	
William Blair	5.31%	4.43%	*:	8.74% (9/10)	
ACWI Small Cap ex US	5.59%	3.03%	7.47%	6.54% (9/10)	
Int! SC Blended Benchmark	5.59%	3.03%	7.34%	6.91% (9/10)	
William Blair - Net	4.57%	3.63%	=	7.92% (9/10)	
merging Markets	10.27%	3.36%	7.75%	9.05% (2/92)	
Genesis	10.27%	3.36%	7.75%	11.17% (5/04)	
MSCI Emerging Markets Index	8.83%	2.23%	4.92%	8.72% (5/04)	
Genesis - Net	9.65%	2.76%	7.12%	9.19% (1/05)	
	3.0070	2.7070	1.14/0	9. 137/0 (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 until 201712.

after 201712 the benchmark is MSCI ACWI ex US - Net.

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.

				Year	Last	
	Last	3	to	12		
	Month	Months	Date	Months		
Dom. Fixed Active Core	0.25%	3.18%	6.11%	7.69%		
Brandes Core*	0.00%	2.69%	5.71%	6.99%		
Blmbg Aggregate Index	0.22%	3.28%	6.35%	8.08%		
Brandes Core - Net	0.00%	2.69%	5.71%	6.99%		
EARNEST Partners	0.29%	3.49%	6.37%	8.60%		
Blmbg Aggregate Index	0.22%	3.28%	6.35%	8.08%		
EARNEST Partners - Net	0.29%	3.49%	6.30%	8.50%		
Piedmont	0.25%	3.29%	6.52%	7.56%		
Blmbg Aggregate Index	0.22%	3.28%	6.35%	8.08%		
Piedmont - Net	0.25%	3.29%	6.45%	7.42%		
Garcia Hamilton	0.29%	2.92%	5.56%	7.03%		
Blmbg Aggregate Index	0.22%	3.28%	6.35%	8.08%		
Garcia Hamilton	0.27%	2.90%	5.50%	6.92%		
Dom. Fixed Passive Core	0.25%	3.33%	6.43%	8.19%		
		2 222/	0.440/	0.479/		
BlackRock US Debt	0.22%	3.30%	6.41%	8.17%		
Bimbg Aggregate Index	0.22%	3.28%	6.35%	8.08%		
BlackRock US Debt - Net	0.22%	3.29%	6.41%	8.17%		
NTGI Bimbg Agg. Index	0.27%	3.36%	6.45%	8.20%		
Bimbg Aggregate Index	0.22%	3.28%	6.35%	8.08%		
NTGI Blmbg Agg. Index - Net	0.26%	3.36%	6.45%	8.20%		

^{*} Brandes changed to a Core mandate from Core Plus on 01/01/2018. Performance shown is Brandes full SI history.

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.

Returns for Periods Ended July 31, 2019

	Last	Last	Last			
	36	60	120	Since		
	Months	Months	Months	Inception		
Dom. Fixed Active Core	2.55%	3.41%	4.53%	4.58% (4/01)		
Brandes Core *	1.92%	(€	*	2.62% (3/16)		
Blmbg Aggregate Index	2.17%	3.05%	3.75%	3.03% (3/16)		
Brandes Core - Net	1.92%	950	2	2.62% (3/16)		
EARNEST Partners	2.60%	3.56%	4.54%	4.61% (5/05)		
Blmbg Aggregate Index	2.17%	3.05%	3.75%	4.15% (5/05)		
EARNEST Partners - Net	2.46%	3.39%	4.35%	4.41% (5/05)		
Piedmont	2.60%	3.27%	4.45%	4.36% (8/05)		
Blmbg Aggregate Index	2.17%	3.05%	3.75%	4.10% (6/05)		
Piedmont - Net	2.46%	3.13%	4.28%	4.18% (6/05)		
Garcia Hamilton	2.50%	520	20	3.29% (8/15)		
Bimbg Aggregate Index	2.17%	3.05%	3.75%	2.88% (6/15)		
Garcia Hamilton	2.41%		£1	3.20% (6/15)		
Dom. Fixed Passive Core	2 220/	2 400/	0.050/	F 000/		
Dom. Fixed Passive Core	2.23%	3.12%	3.85%	5.93% (1/90)		
BlackRock US Debt	2.27%	3.15%	Ē	3.35% (10/13)		
Bimbg Aggregate Index	2.17%	3.05%	3.75%	3.22% (10/13)		
BlackRock US Debt - Net	2.27%	3.15%	= 1	3.34% (10/13)		
NTGI Blmbg Agg. Index	2.20%	3.09%	3.84%	5. 99% (2/90)		
Blmbg Aggregate Index	2.17%	3.05%	3.75%	5.98% (2/90)		
NTGI Blmbg Agg. Index - Net	2.19%	3.08%	3.83%	4.09% (1/05)		

^{*} Brandes changed to a Core mandate from Core Plus on 01/01/2018. Performance shown is Brandes full SI history.

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 July 31, 2019

	Last	Last 3	Year to Date	Last 12 Months	
Domestic Fixed Core Plus	Month 0.35%	Months 3.40%	7,47%	8.38%	
Domestic Fixed Core Flus	0.5576	3.4070	1.41 70	0.0070	
LM Capital	0.32%	3.17%	7.40%	7.79%	
Blmbg Aggregate Index	0.22%	3.28%	6.35%	8.08%	
LM Capital - Net	0.28%	3.13%	7.27%	7.62%	
Duaguaga Fixed Income	0.32%	3.32%	7.10%	8.29%	
Progress Fixed Income	0.32%	3.28%	6.35%	8.08%	
Blmbg Aggregate Index		3.24%	6.93%	7.94%	
Progress Fixed Inc Net	0.32%	3.24%	0.9376	7.54 /0	
BMO-TCH	0,35%	3.06%	7.09%	7.78%	
Blmbg Aggregate Index	0.22%	3.28%	6.35%	8.08%	
BMO-TCH Net	0.35%	3.03%	7.02%	7.64%	
				0.450/	
Western	0.41%	3.96%	8.17%	9.45%	
Blmbg Aggregate Index	0.22%	3.28%	6.35%	8.08%	
Western - Net	0.41%	3.92%	8.14%	9.34%	
Bank Loans	0.94%	0.55%	5.97%	3.99%	
Parings Clabal Loop Fund	0.94%	0.55%	5.97%	3.99%	
Barings Global Loan Fund Custom Benchmark	0.81%	0.94%	6.12%	4.51%	
Barings Global Loan Fund - Net	0.91%	0.46%	5.74%	3.60%	
Battings Global Coatt Fulld - Net	0.5176	0.40 %	0.7470	0.007	
Emerging Markets	1.12%	6.26%	11.65%	9.59%	
Standish	1.12%	6.26%	11.65%	9.59%	
Custom Benchmark	0.97%	5.52%	10.30%	9.13%	
Standish - Net	1.12%	6.17%	11.47%	9.21%	
High Yield	(0.18%)	1.39%	10.42%	7.78%	
MacKay Shields	(0.17%)	1.39%	10.42%	7.78%	
ML High Yield Cash Pay Index	0.51%	1.67%	10.72%	6.95%	
MacKay Shields - Net	(0.17%)	1.31%	10.26%	7.43%	
	V				

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.



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 July 31, 2019

	Last 36		Last 120	Since	
	Months	Months	Months	Inception	
Domestic Fixed Core Plus	3.11%	3.69%	5.15%	8.08% (1/82)	
LM Capital	2.58%	3.41%	4.66%	4.87% (5/05)	
Blmbg Aggregate Index	2.17%	3.05%	3.75%	4.15% (5/05)	
LM Capital - Net	2.42%	3.24%	4.49%	4.70% (5/05)	
Progress Fixed Income	3.08%	3.57%	4.63%	4.95% (1/06)	
Blmbg Aggregate Index	2.17%	3.05%	3.75%	4.24% (1/06)	
Progress Fixed Inc Net	2.75%	3.24%	4.28%	4.61% (1/06)	
вмо-тсн	3.69%	3.87%	5.28%	5.03% (5/05)	
Bimbg Aggregate Index	2.17%	3.05%	3.75%	4.15% (5/05)	
BMO-TCH - Net	3.55%	3.74%	5.15%	4.90% (5/05)	
Western	3.68%	4.25%	5.93%	5.50% (11/01)	
Blmbg Aggregate Index	2.17%	3.05%	3.75%	4.31% (11/01)	
Western - Net	3.54%	4.11%	5.78%	4.96% (1/05)	
Bank Loans	5.71%	4.64%		4.64% (8/14)	
Barings Global Loan Fund	5.71%	4.64%	2	4.64% (8/14)	
Custom Benchmark	5.37%	4.23%	- 3	4.23% (8/14)	
Barings Global Loan Fund - Net	5.18%	4.08%	20	4.08% (8/14)	
Tunnamina Madasta	F 040/	0.0497		2.240/	
imerging Markets	5.61%	3.24%	=:	3.24% (8/14)	
Standish	5.61%	3.24%	*:	3.24% (8/14)	
Custom Benchmark	4.77%	2.49%	5.09%	2.49% (8/14)	
Standish - Net	5.24%	2.90%	27	2.90% (8/14)	
ligh Yield	7.22%	5.86%	8.99%	9.55% (4/86)	
MacKay Shields	7.32%	6.04%	8.73%	8.85% (11/00)	
ML High Yield Cash Pay Index	6.82%	5.08%	8.58%	7.60% (11/00)	
MacKay Shields - Net	6.96%	5.67%	8.35%	6.93% (1/05)	

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.



Five Best Performing Portfolio's vs. Benchmarks

Manager	Year-to-Date Outperformance	Since Inception	Since Inception Outperformance		
	(in % points)	(in %	6 points)		
Genesis	9.69	2.46	04/30/2004		
William Blair Int'l SC	8.61	2.20	08/31/2010		
William Blair	7.38	1.59	09/30/2002		
Channing	6.43	1.56	06/30/2011		
Pyramis SCG	4.86	5.26	07/31/1988		

Five Worst Performing Portfolio's vs. Benchmarks

Manager	Year-to-Date Underperformance	Since Inception Underperformance (in % points)	
	(in % points)		
Brandes	-7.53	3.55	12/31/1995
ВМО	-3.72	2.20	01/31/2001
Mondrian	-2.92	0.32	03/31/2012
LSV	-2.29	1.53	01/31/2003
DFA SCV	-2.17	2.33	01/31/1996

Five Highest Returning Portfolios

Manager	Year-to-Date Return	Since Inception Return (in % points)	
	(in % points)		
Sands	28.84	12.54	10/31/2003
Pyramis SCG	26.40	13.52	07/31/1988
Frontier	22.45	13.21	07/31/1988
NTGI S&P500 Gr	21.59	8.00	07/31/2001
NTGI US MarketCap	20.49	10.94	01/31/1985

Five Lowest Returning Portfolios

Мяпадег	Year-to-Date Return	Since Inception Return		
1	(in % points)	(in %	(in % points)	
Brandes	4.70	8.61	12/31/1995	
Earnest FI	6.37	4.61	04/30/2005	
NTGI BC Agg	6.45	5.99	01/31/1990	
Piedmont	6.52	4.34	05/31/2005	
Taplin, Canida, Habacht	7.09	5.01	04/30/2005	

Returns are shown gross of investment management fees.

Excludes Real Estate and Alternative Investments portfolios.

 $\frac{(19-08-04)~(2019~Annual~Economic~Opportunity~Investment~Report)}{\text{Investment Officer presented an overview of the 2019~Annual Illinois~Economic}} \\ \text{Opportunity Investment Report.} \\ \text{He reported under Public Act 96-0753, this report must be submitted to the Governor and General Assembly annually by September 1^{st}.}$

It was moved by Ms. Stanish, seconded by Mr. Kuehne, to approve submission of the 2019 Annual Economic Opportunity Investment Report.

Vote: Unanimous Voice Vote

Absent: None

(19-08-05) (Pension Administration Benchmarking Presentation) Ms. Mangat, Vice President of CEM Benchmarking, Inc. (CEM) along with the Deputy Executive Director, presented highlights of IMRF's benefit administration benchmarking results for the fiscal year 2018.

The Deputy Executive Director stated that in addition to providing important benchmarking metrics, this study allows IMRF to compare their customer service results to those of their peer group. This comparison helps identify customer service improvement opportunities. This is consistent with IMRF's ongoing Journey of Excellence initiatives, and with IMRF's approach to continuous process improvement. As a result of analyzing CEM reports, IMRF has implemented numerous service improvements over the years.

Ms. Mangat presented the following key highlights from the 2018 CEM Report:

- IMRF's total service score increased from 87 to 89 between 2015 and 2019.
- IMRF's total cost was \$95 per active member and annuitant (\$29 below the peer average cost of \$124, and slightly above the peer median), which is excellent cost performance despite a relatively higher number of transactions (43% above the peer medium), higher complexity, and a higher cost environment.
- IMRF ranked 6th in overall service in the North American Peer Group (out of 43 public pension systems)-effective customer service:

The presentation was followed by discussion.

(19-08-06) (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 19-05-17

Schedules - Dated June 2019

Schedule A - Benefit award listing of retirement, temporary disability, death benefits, and refund of employee contributions processed during the preceding calendar month under Article 7 of the Illinois Pension Code.

- Schedule B Adjustment of Benefit Awards showing adjustments required in benefit awards and the reasons therefore.
- Schedule C Benefit Cancellations.
- Schedule D Expiration of Temporary Disability Benefits terminated 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.

Schedules - Dated July 2019

- Schedule A Benefit award listing of retirement, temporary disability, death benefits, and refund of employee contributions processed during the preceding calendar month under Article 7 of the Illinois Pension Code.
- Schedule B Adjustment of Benefit Awards showing adjustments required in benefit awards and the reasons therefore.
- Schedule C Benefit Cancellations.
- Schedule D Expiration of Temporary Disability Benefits terminated 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

Schedules - Dated August 23, 2019

Schedule A - Benefit award listing of retirement, temporary disability, death benefits, and refund of employee contributions processed during the preceding calendar month under Article 7 of the Illinois Pension Code.

Schedule B Adjustment of Benefit Awards showing adjustments required in benefit awards and the reasons therefore.

Schedule C - Benefit Cancellations.

Schedule D - Expiration of Temporary Disability Benefits terminated 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

Participation of New Units of Government

Union/Alexander Joint ETSB

County: Union 2019 Rate: 7.81%

Effective Participation Date: September 1, 2019

Number of Participating Employees: 1

River Valley Mass Transit District

County: Kankakee 2019 Rate: 11.92%

Effective Participation Date: September 1, 2019

Number of Participating Employees: 25

Sheridan Sanitary District

County: LaSalle 2019 Rate: 17.54%

Effective Participation Date: December 1, 2019

Number of Participating Employees: 2

Winnebago County Special Education Coop

County: Winnebago 2018 Rate: 8.42%

Effective Participation Date: September 1, 2019

Number of Participating Employees: 74

Woodford County Special Education Association

County: Woodford 2019 Rate: 7.81%

Effective Participation Date: September 1, 2019

Number of Participating Employees: 43

Participation of New Townships

Leaf River Township

County: Ogle

Estimated 2020 Rate: 7.93%

Effective Participation Date: January 1, 2020

Number of Participating Employees: 1

Helvetia Township County: Madison

Estimated 2020 Rate: 15.77%

Effective Participation Date: January 1, 2020

Number of Participating Employees: 3

The following bids were presented to the Board for approval:

Temporary Staffing Services

Approved Bidders: Banner Personnel & 22nd Century Technology, Inc.

Approved Bids: \$17.82-\$46.20/Hour & \$15.99-\$39.00/Hour

Audio-Visual (AV) Maintenance - 3 Year Contract

Approved Bidder: AVI-SPL, Inc.

Approved Bid: \$34,555.18.

Documentation and Technical Writing Services

Approved Bidder: ProWrite Technical Writing & Editing

Approved Bid: \$\$437,700.

Coterminous Addendum to Existing Sungard Availability Services (AS) Agreement

Approved Vendor: Sungard AS

Approved Coterminous Addendum: \$1,416.30/month.

Disaster Recovery - Dell MX7000 Chassis

Approved Bidder: Meridian IT Inc.

Approved Bid: \$176,054.27

Disaster Recovery - Nimble Storage Array

Approved Bidder: American Digital Corporation

Approved Bid: \$138,304.02

Film Roll Conversion Project Approved Bidder: Datamation Approved Bid: \$84,461.00.

Disaster Recovery - VMWare vSphere and vCenter Licensing

Approved Bidder: Zones, Inc. Approved Bid: \$66,367.48.

Furniture Replacement 2019
Approved Bidder: Forward Space

Approved Bid: \$70,947.18

Contractor Services for Kitchen Upgrades & Flooring

Approved Bidder: West DuPage Construction

Approved Bid: \$62,187.08

Palo Alto Firewall Licenses and Support

Approved Bidder: Konsultek, Inc.

Approved Bid: \$\$80,281.14.

Sitecore Upgrade - Change Order #1 Approved Bidder: Inflection Point Approved Change Order: \$30,800.

Review of June, July and August Financial Reporting Packages

Impact of 2019 Year-To-Date Investment Income of Employer Reserves, Funding Status and Average Employer Contribution Rate (June, July, August)

Statement of Fiduciary Net Position (April, May, June)

Schedule T - Report of Expenditures (May, June, July)

It was moved by Ms. Henry, seconded by Ms. Thompson, to approve the items on the consent agenda.

Vote: Unanimous Voice Vote

Absent: None

(19-08-07) (Investment Committee Meeting) The Chair of the Investment Committee reported on the Investment Committee Meeting held on August 22, 2019.

The Chief Investment Officer gave an Investment Consultant and Performance Measurement Services Search Presentation along with a recommendation to the Investment Committee, followed by presentations from two Investment Consulting Firms (Wilshire Associates, Inc. and Callan Associates).

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

For Investment Consulting and Performance Measurement Services

o Appoint Wilshire Associates, Inc., as IMRF's Investment Consultant and Performance Measurement Services provider for a five-year term, subject to satisfactory legal due diligence, and,

o Authorize staff to complete all documentation necessary to execute this recommendation.

Next, staff and consultant presented the 2018 Annual Private Equity Portfolio Performance.

It was moved by Ms. Stanish seconded by Ms. Henry, to approve the recommendations of the Investment Committee.

Vote: Unanimous Voice Vote

Absent: None

(19-08-08) (Benefit Review Committee Meeting) The Chair of the Benefit Review Committee reported on the Benefit Review Committee Meeting held on August 22, 2019.

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

- To uphold staff's decision to deny total and permanent disability benefits to Kastie Pavlik on two grounds. First, the Committee finds that Kastie Pavlik has refused to undergo a reasonable physical examination by a physician pursuant to the terms of Section 7-150(b)(4) of the Illinois Pension Code where she refused to undergo a Functional Capacity Evaluation. The Committee finds that the reasoning that Kastie Pavlik cannot travel and that the evaluation would aggravate her symptoms was not persuasive where Kastie Pavlik was able to travel for the hearing and regularly attends physical therapy. Additionally, the Committee was not persuaded that the totality of the evidence in the record supported Kastie Pavlik's eligibility for total and permanent disability benefits where Kastie Pavlik stated cognitive impairments are not supported by her activities of daily life. She did not appear to have cognitive deficits when participating in the Moreover, her ability to continue writing books is additional evidence of her cognitive abilities. The Committee found the opinions of the medical consultant to be more persuasive than her treating physicians because the opinion aligned with Kastie Pavlik's physician capabilities and activities of daily living.
- To uphold the staff decision denying total and permanent disability to Kristen Busby. The Committee was not persuaded that the medical evidence in the record rose to the level of total and permanent disability as defined in Section 7-150 of the Illinois Pension Code where Kristen Busby's testimony was inconsistent with the medical evidence in the record. The Committee was not persuaded by Kristen Busby's explanation for the Functional Capacity Evaluation (FCE) finding that Kristen Busby gave suboptimal effort throughout the FCE. Specifically, the Committee found Kristen Busby's testimony regarding her having a good day during the FCE to be inconsistent with the FCE's finding that she offered suboptimal effort throughout the FCE and her subjective complaints of pain did not align with physiological pain indicators. The Committee found the opinions of the medical and vocational rehab consultants to be persuasive and consistent.

- That Tod Van Wolvelaere returned to work in an IMRF qualifying position while receiving retirement benefits; that Tod Van Wolvelaere received a prepayment of retirement benefits that he was not entitled to in an amount not to exceed \$93,141.74 which must be repaid to IMRF; and that Rock Island County shall be held liable for one half of the prepayment owed by Tod Van Wolvelaere.
- To uphold staff's recommendation that the Cahokia School District Retiree Group have received a prepayment of benefits based on an illegal provision in the collective bargaining agreement between the Union and the School District regarding the granting of sick days.
- To adopt the findings and conclusion of the IMRF hearing officer in the Nameoki Township case.
- To adopt the findings and conclusion of the IMRF hearing officer in the Carma Slaymaker case.

Vote: Unanimous Voice Vote

Absent: None

(19-08-09) (Strategic Planning Process: Steps 4 &5) The Deputy Executive Director and the Performance Excellence Officer presented four Strategic Objectives and six supporting Key Strategies that will serve as the basis of IMRF's 2020-2022 IMRF Strategic Plan for discussion and Board approval. The Strategic Objectives and Key Strategies were the result of IMRF's formal strategic planning methodology.

The Deputy Executive Director stated that staff will finalize the 2020-2022 Strategic Plan document, based around the four Strategic Objectives and six Key Strategies, for presentation at the November Board Meeting.

It was moved by Ms. Copper, seconded by Ms. Thompson, to approve the four Strategic Objectives and six supporting Key Strategies as presented.

Vote: Unanimous Voice Vote

Absent: None

(19-08-10) (Legislative Update) The Legislative Liaison gave an update to the Board on current legislative activity.

She reported that the following four bills amending the Pension Code and pertain to IMRF passed out of the General Assembly that adjourned it's spring session on June 2^{nd} and were signed into law by the Governor:

- Public Act 101-0151 (House Bill 3446) allows members to retain disability eligibility if they have up to a 3-month gap in employment prior to disability and return to participation with a different employer.
- Public Act 101-0473 (House Bill 2460) requires all public agencies and units of government in Illinois to specific sustainability goals.

- Public Act 101-0492 (House Bill 2884) extends to members participating with certain educational employers the ability to roll over unused, unpaid sick leave between employers.
- Public Act 101-0504 (House Bill 3263) requires IMRF to post certain employer cost and participation information on its website.

Lastly, the Legislative Liaison reported the following bill passed out of the General Assembly and was signed into law:

 Public Act 101-0546 (Senate Bill 1264) - requires all pension systems to send an annual report to the State Treasurer's Office regarding unclaimed assets.

Questions and discussion followed.

(19-08-11) (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: IMRF was served in January of 2012 and shares defense counsel with a group of public pension funds. 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. No claims are currently pending against the group of shareholders that IMRF is a part of, but there is a chance that some form of a claim could be revived. These chances recently became much slimmer as the Litigation Trustee's motion to amend the complaint to include a federal constructive fraudulent conveyance claim against the shareholders was denied. IMRF continues to monitor this litigation.

THOMAS SHEAHAN v. MEABF AND IMRF (COOK COUNTY 17 CH 14040)

Summary: This is a case in which the Plaintiff is attempting to reinstate creditable service with the MEABF as a result of the prior Village of Oak Brook v. Sheahan and Sheahan v. IMRF litigation. IMRF was added as a codefendant. MEABF also filed a crossclaim against IMRF for payment of interest on the disputed funds.

Status: Plaintiff has filed a Third Amended Complaint. IMRF's motion to dismiss was denied. Staff filed a responsive pleading on July 8. The Judge continued the case until September 10 and encouraged the parties to discuss settlement before undertaking any discovery or further motion practice.

WILLIAMSON COUNTY v. IMRF (WILLIAMSON COUNTY 18 MR 215)

Summary: This is administrative review of IMRF's adoption of hearing officer recommendation to affirm the staff decision to terminate the IMRF participation of the County Commissioners.

Status: After being fully briefed, oral argument was held on July 30. IMRF is awaiting a decision from the court.

JEFF BOYD v. IMRF (ROCK ISLAND COUNTY 18 MR 514)

Summary: This is administrative review of IMRF's adoption of hearing officer recommendation to affirm the staff decision to plaintiff's service credit and salary related to his service as Sheriff.

Status: Plaintiff has filed an amended complaint and IMRF has filed its responsive pleading. Mr. Boyd has filed a motion to supplement the record which is set for hearing on September 25, 2019.

BRENDA HORTON v. IMRF (COOK COUNTY 18 CH 10774)

Summary: This is administrative review of IMRF's closure of Plaintiff's disability claim.

Status: IMRF's motion to dismiss was granted by the court. Horton filed an amended complaint to which IMRF filed another motion to dismiss. The motion has been fully briefed and is set for ruling on August 15, 2019.

RICHARD CHAPPELL v. IMRF, ET AL. (COOK COUNTY 18 CH 12400)

Summary: This is administrative review of IMRF's adoption of hearing officer recommendation to affirm the staff decision to remove omitted service credit from the Plaintiff based on the employer conducting its own audit and determining that he was not entitled to omitted service. Plaintiff has named both IMRF and his former employer, River Forest Township, as defendants in the lawsuit.

Status: IMRF has filed a motion to dismiss this case. IMRF's motion was granted with respect to Count II but denied with respect to Count I. IMRF has filed the administrative record and the case is in the midst of its briefing schedule. Plaintiff has filed his opening brief; the Defendants will file their responses by August 16; and Plaintiff to file his reply no later than August 30. This matter is then up for status on September 3.

GORDON v. IMRF (U.S. EEOC 440-2019-00509)

Summary: This is an EEOC charge of discrimination by a current employee.

Status: IMRF filed its position statement and is awaiting further direction from the EEOC.

IMRF v. BLEVINS (DUPAGE COUNTY 2019 CH 439)

Summary: This is an interpleader action approved by the BRC and Board in March of 2019 that involves a death benefit dispute between the member's wife and his daughter over whether the member was incapacitated at the time his beneficiary was updated in IMRF member access.

Status: At the initial case status held on August 1, 2019, the Judge encouraged the defendants to discuss settlement among themselves. The case was continued to August 28, 2019 for status on settlement.

JOHNSON v. IMRF (SANGAMON COUNTY 2019 MR 487)

Summary: Plaintiff is appealing IMRF's closure of her claim for total and permanent disability. She failed to file a request for hearing within 63 days of being notified of the denial. Pursuant to the IMRF appeal procedures, her claim for disability was closed.

Status: IMRF filed a motion to dismiss on July 24, 2019. At Plaintiff's request, the Court continued the hearing on IMRF's motion to dismiss to September 23, 2019.

MOYLEN-KREY v. IMRF and MAINE TOWNSHIP (DUPAGE COUNTY 2019 CH 439)

Summary: This is administrative review of IMRF's adoption of hearing officer recommendation to affirm the staff decision to remove certain service credit from Plaintiff based on the governing board's failure to recertify the elected assessor position as an IMRF qualifying position. Plaintiff has named both IMRF and Maine Township, as defendants in the lawsuit

Status: IMRF filed the administrative record and the case is set for initial status on October 17, 2019.

(19-08-12) (Board Resolution) General Counsel presented a Resolution to the Board for approval to rescind several Board Resolutions.

General Counsel stated that IMRF legal staff periodically reviews active IMRF Board Resolutions to recommend amendment or rescission of resolution(s) where necessary, noting several resolutions have been obsolete or rescinded.

After questions and discussion, it was moved by Ms. Copper, seconded by Ms. Thompson to adopt the following 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, the Board of Trustees has previously adopted Resolutions 1959-4268, 1961-5056, 1963-5639, 1964-5906, 1965-6236(a), 1968-7033(b), 1968-7033(c), 1968-7033(f), 1971-7985, 1971-8154, 1977-10238, 1983-12740, 1984-

13219, 1992-03-16, 1997-06-23, 1997-08-20, 2002-10-07(b), 2005-08-11, 2005-12-10(b), 2005-12-10(c), and 2015-11-14(a) establishing certain Board policies; and

WHEREAS, these policies are now obsolete because of statutory changes or passage of time; and

WHEREAS, it is appropriate that these resolutions be rescinded.

NOW THEREFORE BE IT RESOLVED that Board Resolutions 1959-4268, 1961-5056, 1963-5639, 1964-5906, 1965-6236(a), 1968-7033(b), 1968-7033(c), 1968-7033(f), 1971-7985, 1971-8154, 1977-10238, 1983-12740, 1984-13219, 1992-03-16, 1997-06-23, 1997-08-20, 2002-10-07(b), 2005-08-11, 2005-12-10(b), 2005-12-10(c), and 2015-11-14(a) be and are hereby rescinded.

Vote: Unanimous Voice Vote

Absent: None

General Counsel presented a Resolution to the Board for approval amending the IMRF Definition of Earning Related to Military Differential Pay.

She noted when employment with an IMRF employer is interrupted due to service in the armed forces, both state and federal law gives protection to these employees. One security is the protection of pension benefits while the employee is on leave.

It was moved by Ms. Henry, seconded by Mr. Kuehne to adopt the following Resolution:

WHEREAS, section 7-114 of the Pension Code provides that earnings as reported to IMRF for use in the calculation of IMRF benefits shall be an amount to be determined by the Board of Trustees equal to the total amount of money paid to any employee for personal services or official duties as an employee including compensation, fees, allowances and other emoluments paid for official duties, and also the money value of any board, lodging and other allowances provided to the employee in lieu of cash; and

WHEREAS, employment with an IMRF employer may be interrupted due to service in the Armed Forces; and

WHEREAS, the Uniformed Services Employment and Reemployment Rights Act ("USERRA"), 38 U.S.C. § 4301, et seq. and the Illinois Service Member Employment and Reemployment Rights Act ("ISERRA"), 330 ILCS 61/1-1, et seq., establish protections for service members who render military service while employed in a civilian position; and

WHEREAS, Section 1-118 of the Pension Code requires IMRF to comply with the requirements of USERRA; and

WHEREAS, 330 ILCS 61/5-10 requires that a service member continue to receive an amount equal to their regular wages while on certain types of military leave; and

WHEREAS, determining whether the differential compensation or re-employment provisions of ISERRA and USERRA are applicable to an employee is the responsibility of each IMRF participating unit of government; and

WHEREAS, the Board of Trustees intends to amend the IMRF definition of earnings in accordance with the pension protection requirements of USERRA and ISERRA.

NOW THEREFORE BE IT RESOLVED by the Board of Trustees of the Illinois Municipal Retirement Fund that the IMRF definition of earnings is amended as follows:

If an IMRF employer has determined that an employee would be entitled to differential compensation under ISERRA, IMRF reportable earnings includes an amount equal to an employee's regular wages regardless of the amount of the differential pay. This definition of earnings also applies to employees who would have been eligible to receive differential pay if their military wages did not exceed their IMRF wages, under ISERRA (330 ILCS 61/1-15). Such wages shall be reported as if the employee were still working in their IMRF position, and service credit shall be granted accordingly.

BE IT FURTHER RESOLVED that this resolution shall be retroactively effective as of January 1, 2019.

Vote: Unanimous Voice Vote

Absent: None

Next, General Counsel presented a Resolution to the Board for approval regarding the payment of death benefits to minors.

She reported that IMRF's current Board Resolution provides the rules for the distribution of death benefits for minors. However, the rules have been burdensome for the natural parent of a child due a benefit.

It was moved by Ms. Henry, seconded by Mr. Kuehne, to adopt the following Resolution:

WHEREAS, death benefits payable by the Fund are often made payable to minors as designated beneficiaries, and

WHEREAS, child annuities payable by the Fund are payable to minors, and

WHEREAS, other benefits such as reversionary and beneficiary annuities may in some instances be payable to minors, and

WHEREAS, it is desirable to establish a policy for the direction of the staff in processing such payments;

RESOLVED, that the following procedures shall be used in regard to benefits and annuities payable to persons under the age of 18:

Death benefits may be paid on behalf of minors without formal guardianship if the representative payee for the minor is the natural or adoptive parent.

- 1. Death benefits may be paid on behalf of minors without formal guardianship if the amount payable is \$25,000 or less and the representative payee for the minor is not the natural or adoptive parent.
- 2. Death benefits may be paid on behalf of minors without formal guardianship if the amount payable is \$25,000 or less and the representative payee for the minor is not the natural adoptive parent.
- 3. Death benefits in excess of \$50,000 payable to minors shall be made only to legal guardians of the estate of the minor. Death benefits payable to minors in excess of \$25,000 but not more than \$50,000 shall be made only to court appointed guardians of the minor unless the representative payee is the natural or adoptive parent.
- 4. Payments of child annuities shall not be made except to guardians of the estate of the orphan appointed by a court, unless the representative payee is the natural or adoptive parent of the minor.
- 5. Payments of any other annuities payable to minors shall be made only to a guardian of the estate of the minor appointed by a court, unless the representative payee is the natural or adoptive parent of the minor.
- 6. Any election by a minor necessary under Article 7 of the Illinois Pension Code, such as the election to receive a beneficiary annuity in lieu of a death benefit or a lump sum survivor's benefit, may be made only by a court appointed guardian of the estate of the minor, unless the representative payee for the minor is the natural or adoptive parent.

Vote: Unanimous Voice Vote

Absent: None

Lastly, General Counsel presented a Resolution to the Board for approval amending the IMRF policy against harassment.

She noted that with new legislation being passed, effective January 1, 2020, which provides additional requirements for handling harassment claims in the workplace, several changes are needed to the current IMRF policy.

It was moved by Ms. Henry, seconded by Mr. Kuehne, to adopt the following 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, recent legislation requires an amendment to the IMRF Policy Against Harassment found in the Board Ethics Policy (2017-12-16); and

WHEREAS, it is appropriate that the Board amend its Policy Against Harassment.

NOW THEREFORE BE IT RESOLVED that the Board of Trustees of the Illinois Municipal Retirement Fund does hereby adopt the following amended Policy Against Harassment:

It is the desire of the Board of Trustees that employees work in an atmosphere free from all forms of harassment. Therefore, this policy prohibits all types of harassment, including, but not limited to, harassment based on: sex, race, color, religion, national origin, age, marital status, disability, handicap, sexual orientation, gender identity, or any other classification protected under applicable law. This policy extends to each and every level of IMRF. Accordingly, harassment, whether by an employee, a Trustee, an IMRF member or annuitant, a customer, a member of management, or a visitor will not be tolerated. Activities of this nature are unlawful and serve no legitimate purpose; they have a disruptive effect on an individual's ability to perform his/her job, and they undermine the integrity of the employment relationship.

Harassment is verbal or physical conduct relating to an individual's sex, race, color, religion, national origin, age, marital status, disability, handicap, sexual orientation, gender identity, or any other classification protected under applicable law when this conduct:

- 1. Has the purpose or effect of creating an intimidating, hostile, or offensive working environment;
- 2. Has the purpose or effect of unreasonably interfering with an individual's work performance; or
- 3. Otherwise adversely affects an individual's employment opportunities

We recognize examples of conduct that may constitute prohibited harassment include: slurs, jokes, cartoons, stereotypes, statements, etc., based upon sex, race, color, religion, national origin, age, marital status, disability, handicap, sexual orientation, gender identity, any other classification protected under applicable law, and unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature when:

- 1. Submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment;
- 2. An individual's submission to or rejection of such conduct is used as a basis for an employment decision affecting that individual; or
- 3. The purpose or the effect of such conduct is to substantially interfere with the affected individual's work performance or to create an intimidating, hostile, or offensive work environment.

Although the above defines "unlawful" harassment, it is also a violation of this policy to commit or engage in any unprofessional or inappropriate conduct based on any protected classification, whether or not such conduct rises to the level of "unlawful" harassment.

Retaliation against any individual who has complained about harassment, filed a charge of harassment, or who otherwise participated in an investigation of harassment will not be tolerated.

Reports of violations of this Policy may be made to Supervisors, Managers, Directors, the Director of Human Resources or the Executive Director.

No Supervisor, Manager or Director has the authority to condition any tangible job benefit on an employee's putting up with or agreeing to any conduct that may violate this policy. If an employee believes that he or she has been deprived of any job benefit or that he or she has been threatened, he or she should immediately report it to one of the individuals listed above. Supervisors, Managers and Directors must report immediately to the Executive Director and/or the Director of Human Resources any incidents that they hear about or observe that may constitute a violation of this policy.

If the allegations involve the Director of Human Resources, then Supervisors, Managers and Directors should report the incident(s) to the Executive Director. If the allegations involve the Executive Director, Supervisors, Managers and Directors should report the incident(s) to the President, Vice President and/or Secretary of the Board of Trustees.

If a Trustee makes allegations involving another Trustee, the Trustee making the allegations should report the incident(s) to the Executive Director or the Director of Human Resources.

The confidentiality of harassment allegations will be protected to the extent possible under the circumstances. IMRF will actively investigate all harassment complaints, and, if it is determined that harassment has occurred, management will take appropriate disciplinary action against the offending party, up to and including immediate termination of employment.

Retaliation against any person who has complained about harassment, filed a charge of harassment, or who otherwise participated in an investigation of harassment will not be tolerated. Furthermore, no Supervisor, Manager, Director, or Trustee has the authority to require anyone to tolerate or agree to any conduct that violates this policy in order to receive any job benefit, including compensation, duties, assignments, promotions, etc. Such activities are unlawful and will result in severe discipline, up to and including immediate termination of employment.

Pursuant to the Whistleblower Act (740 ILCS 174/15(a)), an employer may not retaliate against an employee who discloses information in a court, an administrative hearing, or before a legislative commission or committee, or in any other proceeding, where the employee has reasonable cause to believe that the information discloses a violation of a State or federal law, rule, or regulation. In addition, an employer may not retaliate against an employee for disclosing information to a government or law enforcement agency, where the employee has reasonable cause to believe that the information discloses a violation of a State or federal law, rule, or regulation. (740 ILCS 174/15(b)).

IMRF acknowledges a person's right to contact the Illinois Department of Human Rights (IDHR) at the James R. Thompson Center, 100 Randolph Street,

Suite 10-100, Chicago, Illinois 60601, about filing a formal complaint. The IDHR will investigate a complaint, and, if it determines that there is sufficient evidence of harassment to proceed further, it will file a complaint with the Illinois Human Rights Commission (HRC), located at the same address on the fifth floor. If the IDHR does not complete its investigation within 365 days, a complaint may be filed directly with the HRC between the 365th and the 395th day.

Also a complaint may be filed with the Equal Employment Opportunity Commission (EEOC) at 500 West Madison Street, Suite 2800, Chicago Illinois 60661.

Anyone filing a complaint concerning a violation or suspected violation of this Policy must be acting in good faith and have reasonable grounds for believing the information disclosed indicates a violation of the Policy. Any allegations which prove to have been made maliciously or known to be false will be viewed as a serious disciplinary offense.

Vote: Unanimous Voice Vote

Absent: None

(19-08-13) (Horizon Project Update) The Chief Information Services Officer, along with Mr. Smith our Independent Verification and Validation (IV&V) consultant, Provaliant, and Ms. Pettegrew from our Modernization Project vendor, Morneau Shepell, gave an update to the Board on IMRF's Horizon Modernization Project.

(19-08-14)) (Appreciation of Service - Dan Duquette) Members of the Board of Trustees honored Dan Duquette, Deputy Executive Director, who will be retiring from IMRF on September 30, 2019 with the following Resolution of Appreciation:

Resolution of Appreciation

WHEREAS, Dan Duquette, Deputy Executive Director, has faithfully served IMRF from July 1990 through September 2019, and;

WHEREAS, Dan Duquette held positions as the Human Resources Manager, as Director of Operations and Planning, and since 2010 as Deputy Executive Director, and;

WHEREAS, during his tenure, Dan Duquette served as a trusted advisor to three Executive Directors (Robert L. Cusma, Louis W. Kosiba and Brian F. Collins) and supported more than 35 IMRF Trustees, and held the position of Interim Executive Director, and;

WHEREAS, over the span of Dan Duquette's lengthy IMRF career, he provided leadership to the vast majority of the Fund's departments and

employees, including Human Resources, Benefits, Disability, Member Services, Field Services, Office Services, Information Services, and Performance Excellence, and;

WHEREAS, Dan Duquette led the establishment of IMRF's current offices by efficiently facilitating the relocation of IMRF from Chicago to Oak Brook in 1993 and creating the first regional office in Springfield in 2001, and;

WHEREAS, Dan Duquette led the development of the first (and subsequent) Strategic Plans for IMRF and developed the Triennial Strategic Planning Process, and;

WHEREAS, Dan Duquette advocated for the adoption of the Baldrige Criteria for Performance Excellence and authored the original vision statement and operational roadmap for IMRF's "Journey of Excellence," and encouraged active participation in the Illinois Performance Excellence (ILPEx) recognition program, in which IMRF received a Bronze Award for "Commitment to Excellence" in 2009, two Silver Awards for "Progress towards Excellence" in 2012 and 2014, and a Gold Award for "Achievement of Excellence" in 2017, and;

WHEREAS, Dan Duquette played a foundational role in the establishment of many other core IMRF programs and processes, such as the creation of IMRF's Human Resources and Performance Excellence departments; the launch of the Employee Engagement Program to foster and maintain an engaged workforce; the introduction of operational performance benchmarking, including participation in the CEM and Cobalt national survey programs; the rollout of IMRF's Leadership Scorecard management system; the development of an organization-wide Business Continuity Plan; and the formalization of the Board of Trustees current election process, and;

WHEREAS, over the course of his 29-year career, Dan Duquette became a respected leader within the public pension industry - speaking, facilitating, and representing IMRF at numerous events across the country, including before the Association of Illinois Public Retirement Systems Conference, at the IMRF Employer Rate Meetings, at the CEM Global Pension Administration Conference, and before the National Association of State Retirement Administrators Conference, where he founded and facilitated the popular Senior Staff Workshop, and;

WHEREAS, Dan Duquette provided role model work habits, and made a difference in so many people's lives during his time at IMRF, and his presence will be greatly missed by the members, employers, and staff alike;

THEREFORE, BE IT RESOLVED, that the IMRF Board of Trustees recognizes and honors Dan Duquette for his significant contributions and excellent service to the Illinois Municipal Retirement Fund.

(19-08-15) (Trustee Forum) The Chair reported the following Trustee requested authorization from the Board for the following conferences:

Dave Miller

EDHEC Scientific Beta Days North America

Scientific Beta October 24-25, 2019

Boston, MA

It was moved by Ms. Copper, seconded by Ms. Thompson, to approve the above Trustee request.

Vote: Unanimous Voice Vote Absent: None

(19-08-16) (Adjournment) It was moved by Ms. Copper, seconded by Ms. Thompson, to adjourn the Board Meeting at 11:45 a.m., to reconvene in the Fund offices, 2211 York Road, Suite 400, Oak Brook, Illinois, at 9:00 a.m. on November 22, 2019.

Vote: Unanimous Voice Vote

Absent: None

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President	Date		
Secretary	Date		