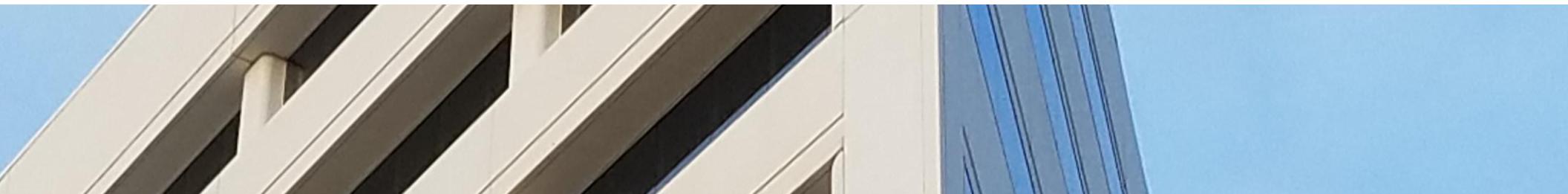




WILSHIRE ASSOCIATES

Wilshire Consulting



Monthly Performance Review

As of May 31, 2020



Capital Market Review

Economic Review

Market Commentary

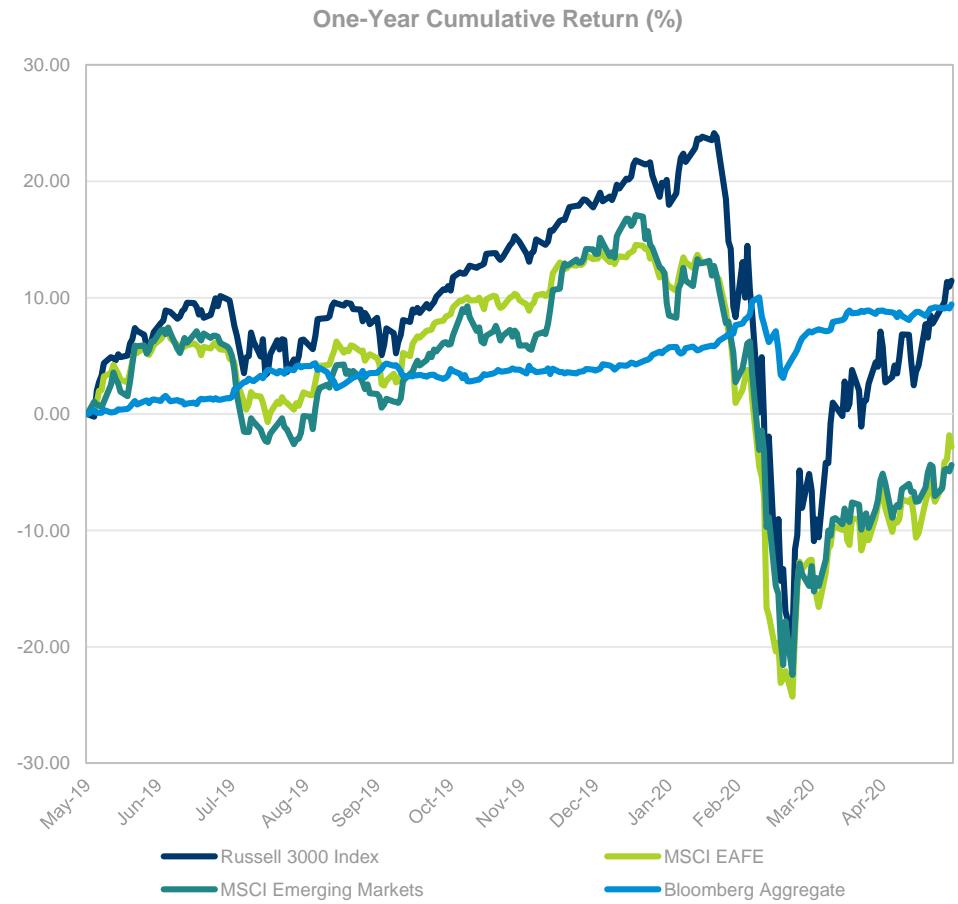
Global markets continued their recovery during May, as COVID-19 restrictions began to ease. Alongside the gradual reopening of world economies during the month, markets continued to rise on record amounts of stimulus being injected into economies within the United States, as well as in Europe and Asia. By the end of the month, data suggested that the economy had hit its bottom during April; however, it would still take some time for the economy to reach pre-COVID-19 levels in the coming months.

Surprisingly, the United States added jobs during the month of May, adding approximately 2.5 million jobs. Prior to the announcement, the consensus in the market was a loss of 7.5 million jobs during the month. The unemployment had grown to 14.7% by the end of April, but dropped to 13.3% during May.

Manufacturing in the United States, marked by the ISM Manufacturing Index, fell to 31.8 during May. Importantly, the index report fell at a lower rate than it did during April, marking an improvement in economic conditions for manufacturing.

Consumer spending rose during May as the economy continued to gradually reopen across the United States. Retail sales, a measure of purchases at stores, at restaurants and online, increased by 17.7% during the month.

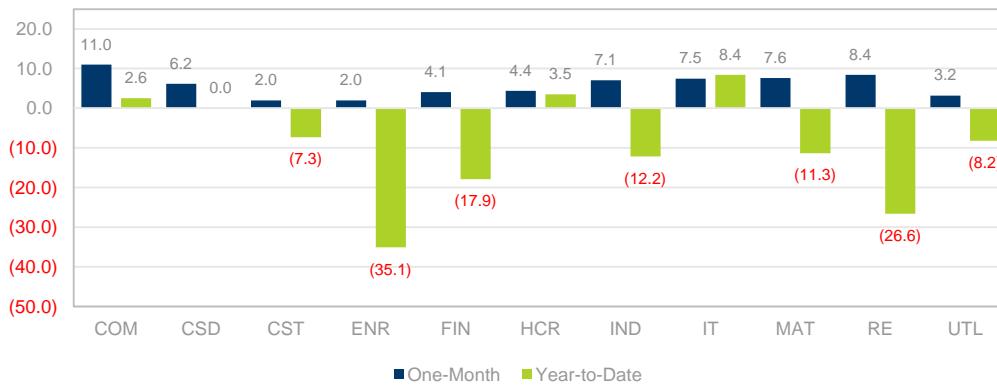
Consumer sentiment modestly increased during May. The University of Michigan Consumer Sentiment Index rose to 72.3, up from 71.8 during April.



U.S. Equity Market

U.S. Equity Indices (%)	MTD	QTD	YTD	1 Year	3 Years	5 Years	10 Years
Russell 3000 Index	5.35	19.30	(5.63)	11.46	9.54	9.16	12.78
Standard & Poor's 500 Index	4.76	18.19	(4.97)	12.84	10.22	9.85	13.14
Russell 1000 Index	5.28	19.19	(4.91)	12.54	10.08	9.56	13.06
Russell 2500 Index	7.39	23.01	(13.55)	(0.80)	3.94	4.66	10.31
Russell 2000 Index	6.51	21.14	(15.95)	(3.44)	1.98	3.72	9.22
Russell Micro Cap Index	6.63	22.87	(16.44)	(4.78)	0.52	2.05	8.31
Russell 1000 Index	5.28	19.19	(4.91)	12.54	10.08	9.56	13.06
Russell 1000 Growth Index	6.71	22.50	5.23	26.25	17.20	14.48	16.06
Russell 1000 Value Index	3.43	15.05	(15.70)	(164)	2.60	4.35	9.84
Russell 2000 Index	6.51	21.14	(15.95)	(3.44)	1.98	3.72	9.22
Russell 2000 Growth Index	9.45	25.75	(6.65)	7.32	7.71	6.33	11.71
Russell 2000 Value Index	2.87	15.56	(25.65)	(14.69)	(4.16)	0.71	6.53
Russell 3000 Index	5.35	19.30	(5.63)	11.46	9.54	9.16	12.78
GICS - Communication Services	10.97	2143	2.55	9.65	17.17	11.34	10.14
GICS - Consumer Discretionary	6.15	25.84	0.01	13.66	12.21	11.04	15.41
GICS - Consumer Staples	1.99	9.14	(7.32)	7.04	1.36	4.85	10.89
GICS - Energy	2.00	34.18	(35.06)	(30.96)	(13.42)	(11.29)	(152)
GICS - Financials	4.10	14.97	(17.90)	(4.30)	5.41	7.04	10.24
GICS - Health Care	4.37	18.76	3.46	22.75	13.89	8.86	16.22
GICS - Industrials	7.06	18.84	(12.18)	6.38	2.86	3.49	12.01
GICS - Information Technology	7.48	23.42	8.44	38.37	21.39	19.49	17.92
GICS - Materials	7.64	23.64	(11.34)	5.55	2.32	4.26	9.02
GICS - Real Estate	8.43	22.87	(26.59)	(7.11)	(3.29)	(3.96)	3.94
GICS - Utilities	3.21	8.05	(8.21)	5.96	5.87	7.92	10.93

Sector Returns (%)



Market Commentary

The U.S. stock market, represented by the Russell 3000 Index, continued to rise during the month, up +5.4% during May, and up +19.3% since March 31, 2020. Over the trailing one-year, the Russell 3000 Index is now positive, up +11.5%.

During May, many states across the United States began to ease social-distancing restrictions on its citizens and allowing some non-essential businesses to reopen with restrictions.

U.S. corporate earnings reports for the first quarter 2020 confirmed that earnings contracted by approximately 14% year-over-year. Non-cyclical sectors like Consumer Staples and Health Care were more defensive and reported positive earnings, while the increased demand for remote-communication drove strong performance out of Information Technology and Communication Services.

Small capitalization stocks outperformed large caps for the second month in a row, as the Russell 2000 Index returned 6.5% versus 5.3% for the Russell 1000 Index. The Russell Micro Cap Index was up 6.6% for the month.

Growth stocks again led value stocks during May largely due to the technology names in the index.

Of the eleven major sectors in the index, all were positive during May. Year-to-date, four sectors (Communication Services, Consumer Discretionary, Health Care, and Information Technology) are positive.

Non-U.S. Equity Market

Market Commentary

Equity markets outside of the U.S. underperformed the U.S. equity market during May, up +3.3% for the month. Over the trailing one-year, Non-U.S. equity markets remain negative, down -3.4%.

The United States was the only economy to report a decline in unemployment during May.

The European Central Bank took further relief action during May, increasing its Pandemic Emergency Purchase Program by €600 billion and extending the timeline for purchases and reinvestments.

Deteriorating relations between the United States and China may be a significant headwind for otherwise favorable economic news for stock recovery.

Developed Markets outpaced Emerging Markets +4.4 versus +0.8%. EM Asia and EM Latin America were mixed with EM Asia down modestly -0.3%, and EM Latin America up +6.5% during the month.

The U.S. Dollar weakened during the month, providing a tailwind for U.S. based investors. Year-to-date; however, the strengthening of the U.S. Dollar prior to April and May has cost U.S. based investors 2.6% of return.

Non-U.S. Equity (USD %)	MTD	QTD	YTD	1 Year	3 Years	5 Years	10 Years
MSCI AC World ex U.S. Index	3.27	11.10	(14.85)	(3.44)	(0.24)	0.79	4.37
MSCI EAFE Index	4.35	11.10	(14.26)	(2.81)	(0.37)	0.79	5.27
MSCI Emerging Markets Index	0.77	10.00	(15.96)	(4.39)	(0.15)	0.88	2.46
MSCI AC World ex U.S. Small Index	6.06	18.95	(15.55)	(3.27)	(1.10)	1.39	5.66
MSCI Europe Index	4.55	10.76	(16.19)	(4.41)	(1.68)	0.03	5.15
MSCI Japan Index	5.92	11.63	(7.11)	6.98	3.33	3.09	5.87
MSCI Pacific ex Japan Index	(0.40)	11.28	(19.43)	(14.10)	(1.07)	0.34	4.79
MSCI EM Latin America Index	6.45	13.15	(38.46)	(31.88)	(8.58)	(4.01)	(4.62)
MSCI EM Asia Index	(0.30)	8.85	(10.84)	3.05	1.98	2.34	5.11
MSCI EM Europe Index	7.98	18.98	(24.42)	(10.47)	0.61	0.84	(104)
Local Currency (%)	MTD	QTD	YTD	1 Year	3 Years	5 Years	10 Years
MSCI AC World ex U.S. Index	3.00	9.82	(12.30)	(2.22)	0.90	1.74	5.93
MSCI EAFE Index	4.06	9.71	(12.83)	(2.72)	0.12	1.17	6.27
MSCI Emerging Markets Index	0.63	9.49	(11.37)	(0.55)	2.82	3.27	5.27

Regional Returns (%)



Currency Effect (%)



Fixed Income Market

Market Commentary

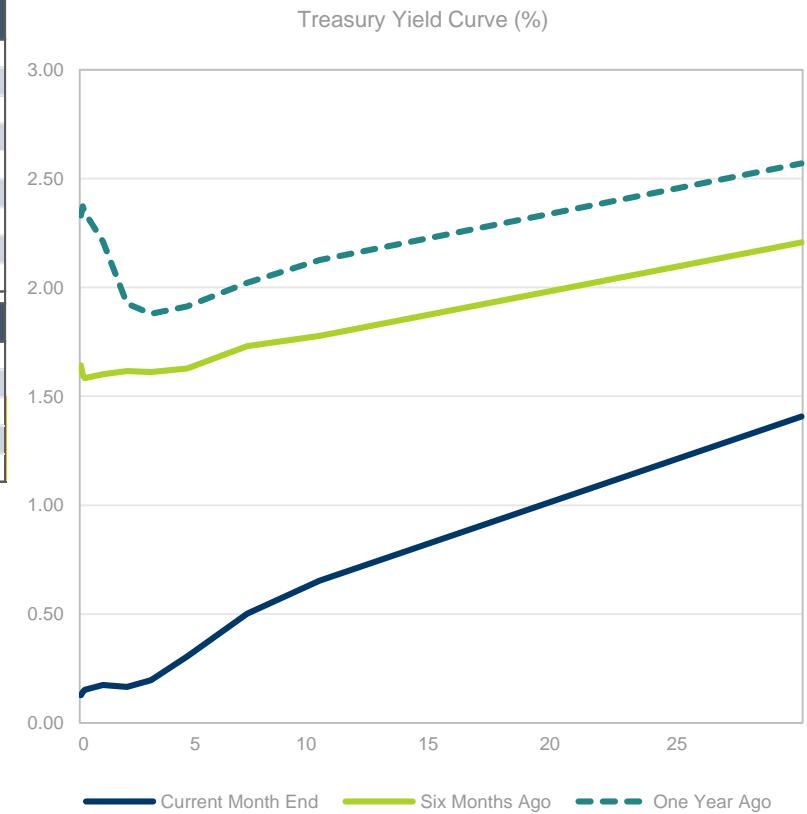
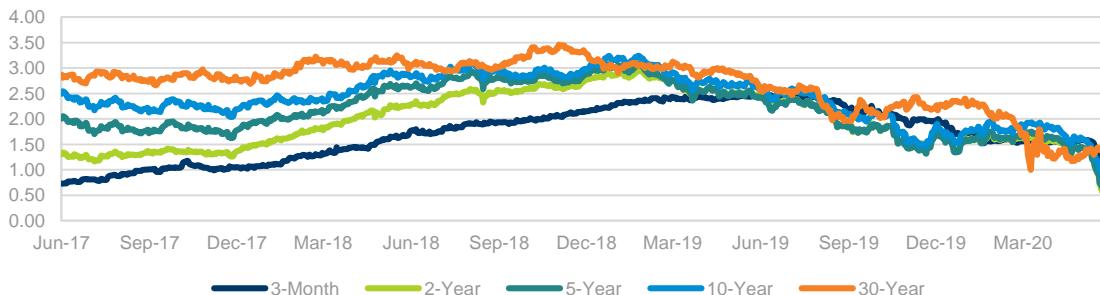
The U.S. Treasury yield curve remained depressed during the month across the maturity spectrum. The 10-year Treasury yield ended the month at 0.65%, up 1 bps from April 30, 2020. Following the massive stimulus packages provided to the U.S. economy during March and April, the yield curve has steepened. Bonds in riskier segments of the market have outperformed Treasuries, typically a signal of an improving economy.

Federal Reserve Chairman, Jerome Powell, reiterated the Fed's commitment to keeping interest rates low until the economy improves.

Credit spreads continued to tighten during the May in both investment grade and non-investment grade fixed income. High yield spreads, which compressed from 1100 bps during March to 744 bps by the end of April, further tightened to 637 bps at May 31, 2020.

U.S. Fixed Income	M TD	QTD	YTD	1 Year	3 Years	5 Years	10 Years
Bloomberg Barclays U.S. Aggregate	0.47	2.25	5.47	9.42	5.06	3.94	3.92
Bloomberg Barclays Long Gov't/Credit	0.09	4.60	11.10	20.34	10.03	7.83	8.09
Bloomberg Barclays LT Treasury	(187)	0.12	2105	26.91	12.13	8.37	8.21
Bloomberg Barclays U.S. TIPS	0.30	3.09	4.84	8.00	4.32	3.31	3.55
Bloomberg Barclays U.S. Credit	163	6.28	2.94	9.54	5.59	4.79	5.25
Bloomberg Barclays U.S. High Yield	4.41	9.11	(4.73)	1.32	3.04	4.27	6.71
ICE BofA U.S. High Yield Cash Pay	4.58	8.59	(2.30)	3.92	3.90	4.59	6.12
S&P LSTA Levered Loan Index	3.80	8.47	(5.68)	(2.86)	167	2.57	4.00
ICE BofA US 3-Month Treasury Bill	0.00	0.01	0.58	1.84	1.79	1.19	0.64
Global Fixed Income	M TD	QTD	YTD	1 Year	3 Years	5 Years	10 Years
Bloomberg Barclays Global Aggregate	0.44	2.41	2.08	5.59	3.45	3.28	2.87
Bloomberg Barclays Global Aggregate (Hdg.)	0.28	1.91	3.38	7.02	4.86	4.08	4.11
JPM GBI-EM Index	4.79	7.56	(7.07)	193	0.16	152	184
JPM EMBI Global Index	5.74	8.07	(4.63)	167	2.25	4.17	5.73
JPM Corporate EMBI Index	3.81	8.59	(2.30)	3.92	3.90	4.59	6.12

Daily Treasury Yield Curve Rates (%)



Real Assets Market

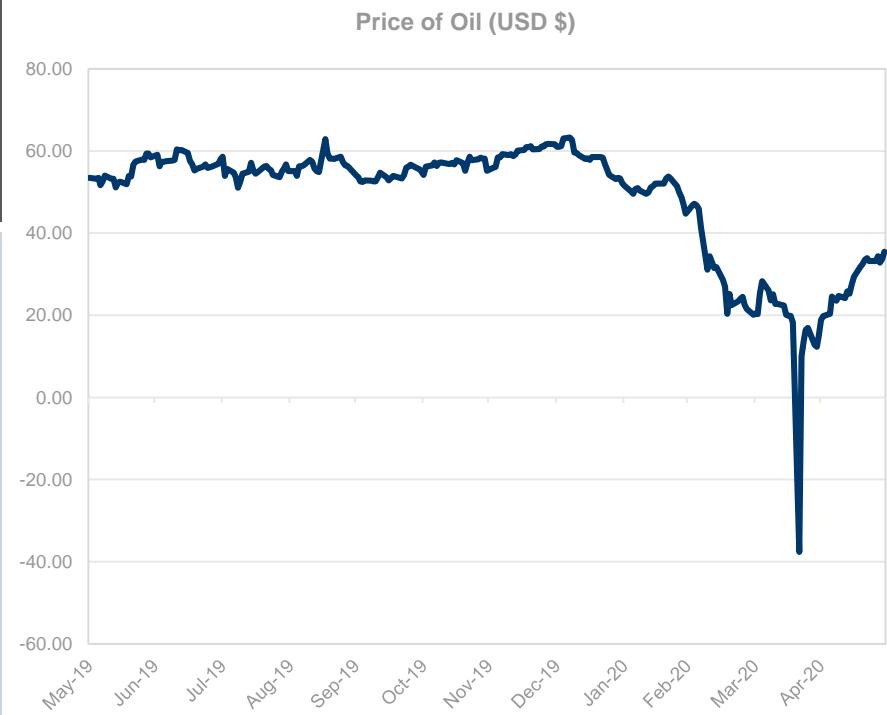
Real Assets	MTD	QTD	YTD	1 Year	3 Years	5 Years	10 Years
Wilshire US RESI	(0.32)	8.10	(19.72)	(13.12)	0.16	2.82	8.48
Wilshire Global RESI	(0.36)	7.10	(22.04)	(15.10)	(106)	138	7.72
Bloomberg Commodity Index	4.34	2.74	(2120)	(17.06)	(6.89)	(7.78)	(6.00)
S&P GSCI Index	16.37	5.12	(39.39)	(34.31)	(10.78)	(13.41)	(8.94)
Alerian MLP Index	8.95	63.01	(30.21)	(34.74)	(14.65)	(12.92)	(0.06)
DJ Brookfield Global Infrastructure	4.47	13.22	(10.34)	(0.29)	3.91	4.18	9.69
FTSE Global 50/50 Infrastructure	4.28	12.72	(11.22)	(143)	4.34	5.88	10.03

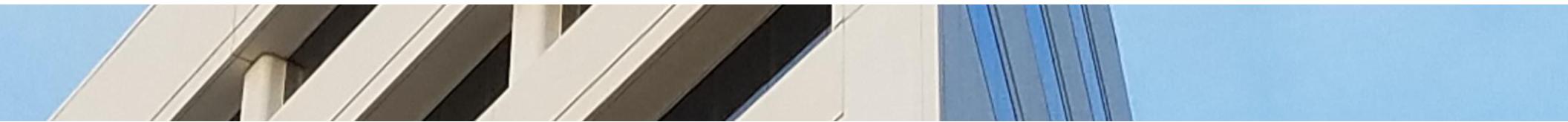
Market Commentary

U.S. real estate securities were down slightly during May, -0.3%. Similarly, global real estate securities were down -0.4%. Over the trailing one year, real estate both in the United States and globally remain negative, -13.1% and -15.1%, respectively.

Commodities came back strong during May, returning +4.3% for the month.

Crude oil was up +88.4% for the month, ending at \$35.49 per barrel. Year-to-date; however, crude oil remains negative, down -41.8%, ending 2019 at \$61.06 per barrel. Midstream Energy (MLPs) continued their recovery alongside oil, up +9.0% during May, but remain negative over the trailing one-year, down -34.7%.





IMRF Performance

IMRF Commentary

IMRF Commentary

The Illinois Municipal Retirement Fund (“IMRF”) ended May 2020 with a market value of \$42.3 billion, up for the month by approximately \$1.2 billion. The Fund returned +3.09% for the month, outperforming the Total Fund Benchmark, which returned +2.75%.

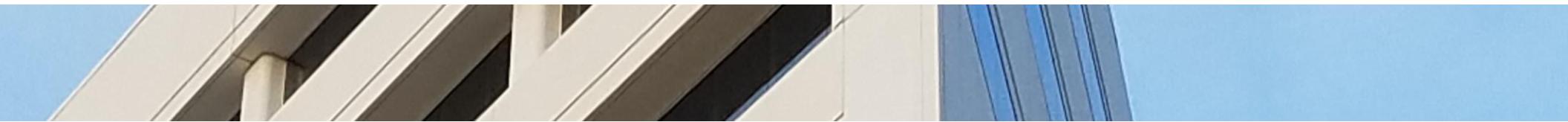
The U.S. Equity Portfolio outperformed the benchmark for the month returning +5.96% versus +5.35%. Investment manager outperformance in Large Cap added relative value versus the benchmark, returning +6.03% during the month. Additionally, the Portfolio’s overweight position to Small Cap contributed to relative performance, returning +5.98%.

The Public Real Assets Portfolio outperformed its benchmark for the month returning +4.59% versus +4.30%.

The International Equity Portfolio outpaced the return of the benchmark during May, +4.26% versus +3.27%. In aggregate, investment managers within Large Cap Growth, Large Cap Core Small Cap and Emerging Markets added value by outperforming their respective benchmarks, while Large Cap Value, in aggregate trailed its benchmark during the month. The Portfolio’s allocation Small Cap contributed to relative outperformance, returning +9.57% during the month.

The Fixed Income Portfolio benefited from credit spread compression during the month in both investment grade and non-investment grade fixed income. The Portfolio outperformed its benchmark during May +1.24% versus +0.47%. Positions in Corporate Credit, High Yield and Emerging Markets added value.

Entering the month, the allocation to U.S. Equity, on average, was overweight by 1.61% versus the Total Fund Benchmark. Given the strong performance within the U.S. Equity market (the U.S. Equity market returned +5.35% during the month), an overweight position added relative value. Conversely, the allocation to Fixed Income, on average, was overweight by 1.43%. Within Fixed Income, returns for the month were modest compared to equities (the Core Fixed Income market returned +0.47%), an overweight position detracted relative value.



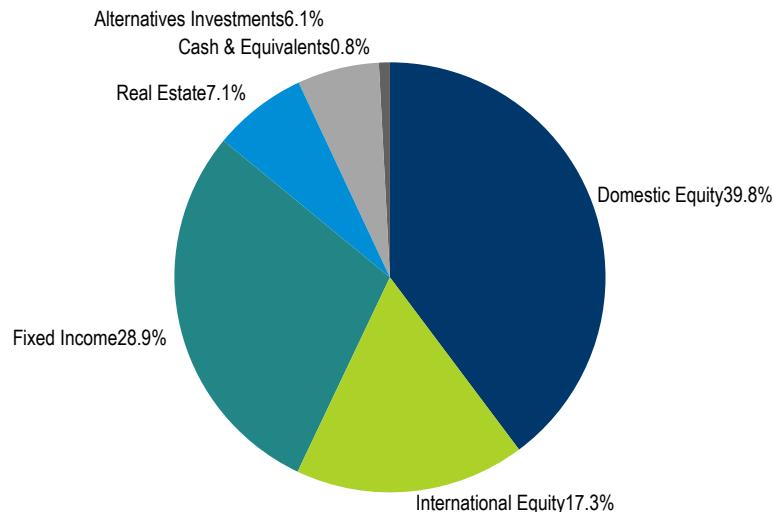
Total Fund

Asset Allocation

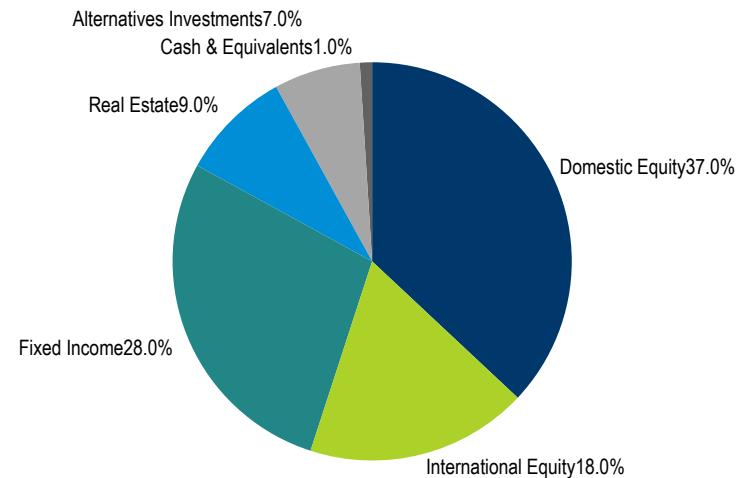
Total Fund

Periods Ended As of May 31, 2020

Actual Allocation



Target Allocation

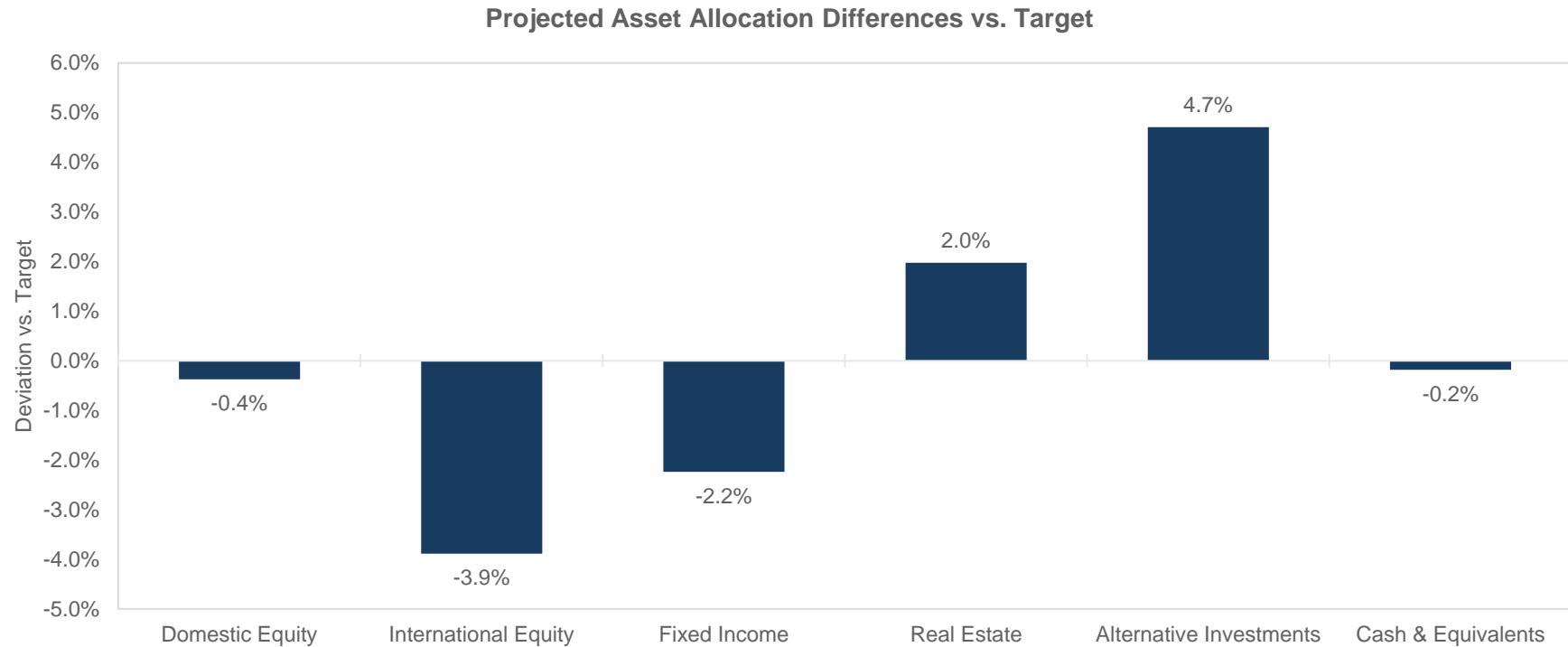


■ Domestic Equity ■ International Equity ■ Fixed Income ■ Real Estate ■ Alternatives Investments ■ Cash & Equivalents

	Actual Allocation \$Millions	Actual Allocation %	Target Allocation %	Differences %	Differences \$Millions
Total Fund	42,253	100.0	100.0	0.0	
■ Domestic Equity	16,809	39.8	37.0	2.8	1,175
■ International Equity	7,296	17.3	18.0	-0.7	-310
■ Fixed Income	12,218	28.9	28.0	0.9	387
■ Real Estate	2,987	7.1	9.0	-1.9	-816
■ Alternatives Investments	2,597	6.1	7.0	-0.9	-360
■ Cash & Equivalents	346	0.8	1.0	-0.2	-76

Projected Deviation From Benchmark

Period Ending May 31, 2020

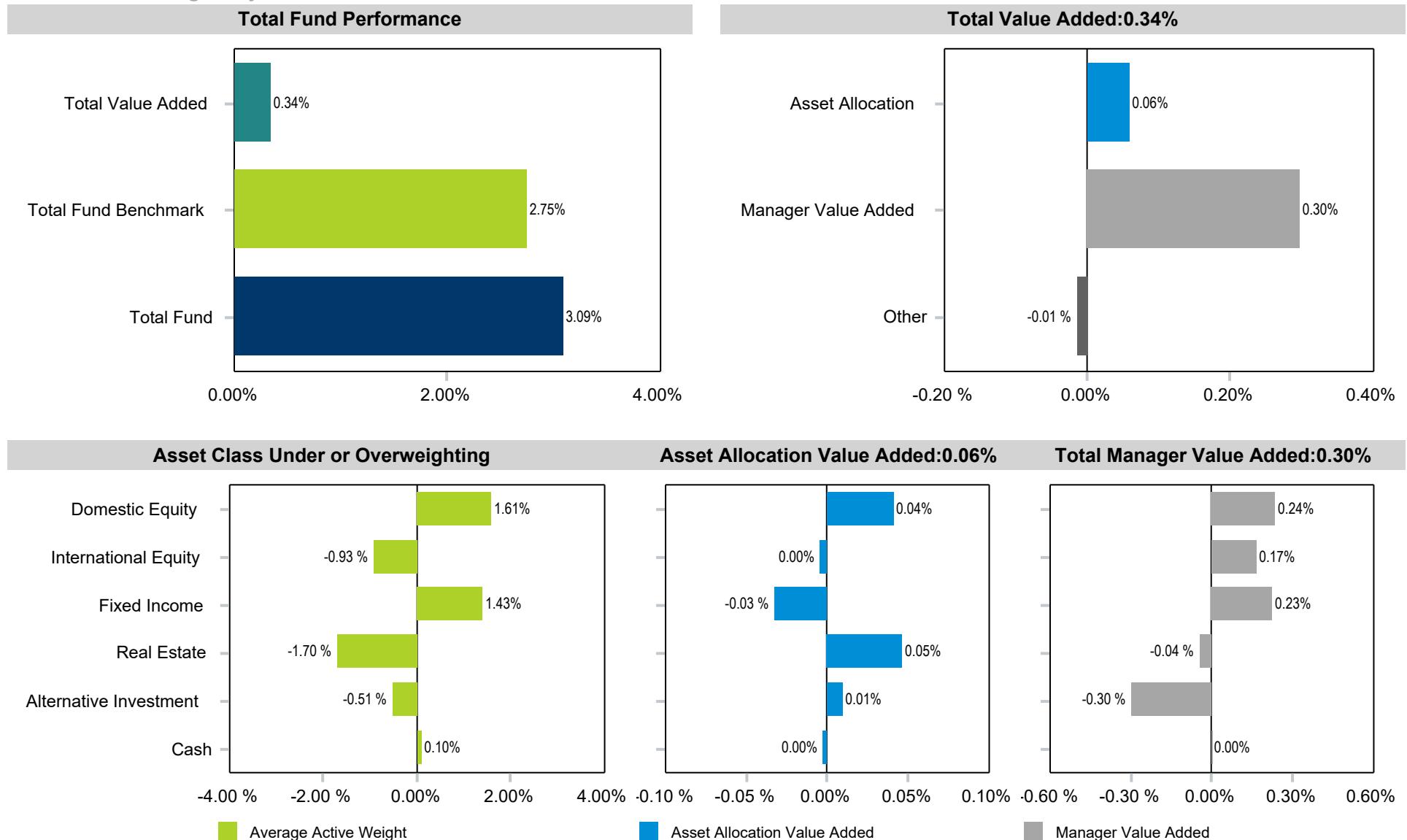


- Includes committed, but unfunded amounts for real estate (\$1,648.8 million) and alternatives (\$2,349.0 million). Assumes real estate and alternatives allocations are fully funded as of quarter end.
- Assumes that outstanding commitments are funded equally from the public markets asset classes (one-third from U.S. Equity, one-third from International Equity, and one-third from Fixed Income).

Total Fund Attribution

Total Fund

1 Month Ending May 31, 2020



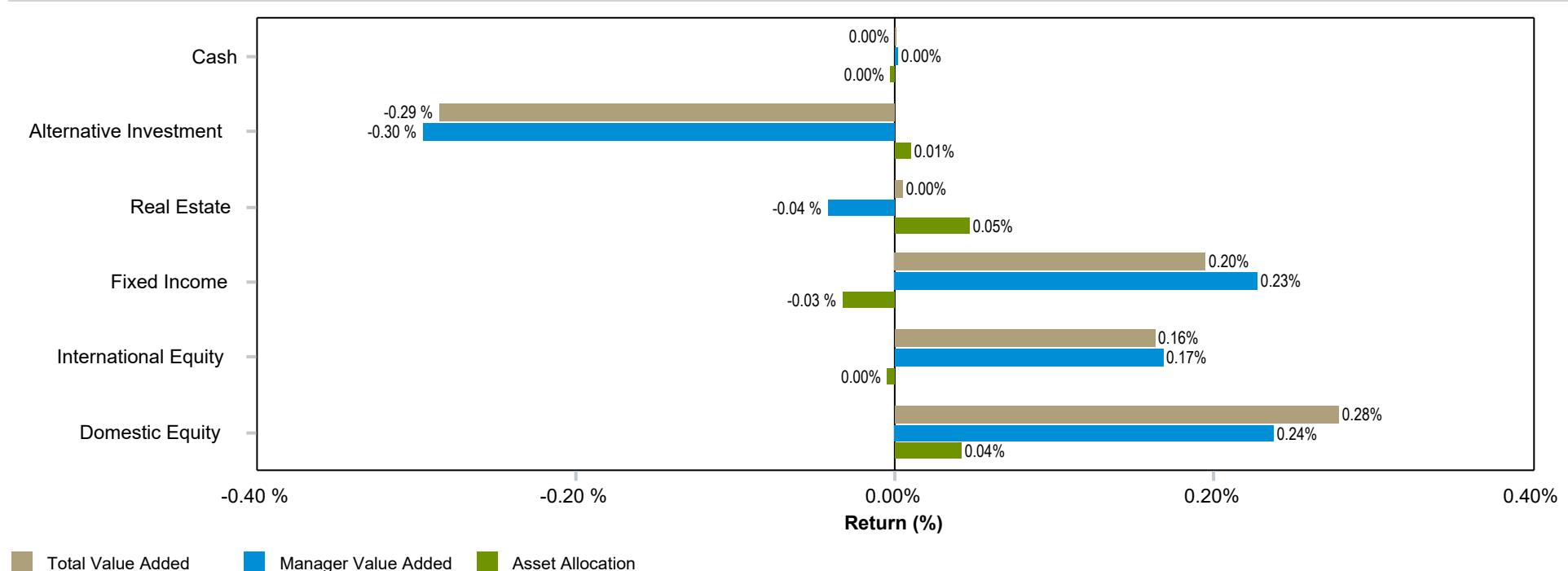
Total Fund Benchmark = 37.0% Russell 3000 Index, 28.0% Blmbg Aggregate, 18.0% MSCI ACWI ex US, 9.0% NCREIF NFI-ODCE Val Wt Nt, 7.0% 9% Annually and 1.0% 3-month Treasury Bill.

Total Fund Attribution

Total Fund

1 Month Ending May 31, 2020

Relative Attribution by Asset Class



	Relative Attribution Effects						
	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return*
Domestic Equity	38.6	37.0	5.96	5.35	0.24	0.04	0.28
International Equity	17.1	18.0	4.26	3.27	0.17	0.00	0.16
Fixed Income	29.4	28.0	1.24	0.47	0.23	-0.03	0.20
Real Estate	7.3	9.0	-0.57	0.00	-0.04	0.05	0.00
Alternative Investment	6.5	7.0	-3.83	0.72	-0.30	0.01	-0.29
Cash	1.1	1.0	0.23	0.00	0.00	0.00	0.00
Total Fund	100.0	100.0	3.09	2.75	0.30	0.06	0.34

Total Fund Benchmark = 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.

*Other contribution to Relative Performance: -0.01%

Asset Class Returns

Periods Ended May 31, 2020

	Performance (%)										
	1 Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	Since Inception	Inception Date
Total Fund	3.11	10.23	-4.53	5.99	5.95	5.77	8.61	6.37	8.24	9.65	1/1/1982
Total Fund - Net	3.09	10.19	-4.61	5.81	5.76	5.56	8.38				
Total Fund Benchmark	2.75	9.75	-2.62	7.79	6.37	6.20	8.41				
Domestic Equity	5.99	20.50	-6.96	8.51	8.35	7.94	12.30	6.58	10.06	11.32	1/1/1982
Domestic Equity - Net	5.96	20.46	-7.05	8.30	8.14	7.72	12.04				
Blended Benchmark (U.S. Equity)	5.35	19.30	-5.63	11.46	9.54	9.17	12.82	6.35	9.70		
U.S. Equity IMRF Custom Benchmark	5.16	18.82	-7.75	8.23	7.61	7.78					
International Equity	4.31	12.34	-14.39	-1.95	0.45	1.79	6.00	4.87	6.32	7.27	9/1/1986
International Equity - Net	4.26	12.25	-14.54	-2.28	0.12	1.45	5.66				
MSCI AC World ex USA (Net)	3.27	11.10	-14.85	-3.43	-0.24	0.79	4.38	3.39			
International Equity IMRF Custom Benchmark	3.38	11.41	-14.88	-3.36	-0.35	0.83					
Fixed Income	1.25	3.66	3.43	7.64	4.77	4.14	4.71	5.70	6.69	8.20	1/1/1982
Fixed Income - Net	1.24	3.64	3.38	7.52	4.63	3.99	4.55				
Bloomberg Barc. U.S. Aggregate	0.47	2.25	5.47	9.42	5.07	3.94	3.92	5.21	6.06	7.73	
Fixed Income IMRF Custom Benchmark	0.92	2.98	4.11	8.23	4.79	3.92					
Real Estate	-0.57	-1.48	0.54	5.44	8.27	9.12	10.87	7.89	4.97	5.51	5/1/1985
Real Estate - Net	-0.57	-1.48	0.54	5.40	8.25	9.10	10.86				
Blended Benchmark (Real Estate)	0.00	0.00	0.75	3.40	5.51	6.97	10.20	7.28	7.45	7.62	
Alternatives Investments	-3.83	-3.24	-1.51	4.02	10.14	9.06	8.95	6.16	11.46	10.67	2/1/1986
Alternatives Investments - Net	-3.83	-3.25	-1.52	4.00	10.04	8.87	8.71				
Alternatives Custom Benchmark	0.72	1.45	3.66	9.00	9.00	9.00	9.02	10.93	12.27	12.61	
Private Equity	-3.07	-2.35	-0.85	5.97	12.97	11.90	11.69	7.55	14.06	12.88	2/1/1986
Alternatives Custom Benchmark	0.72	1.45	3.66	9.00	9.00	9.00	9.02	10.93	12.27	12.61	
Agriculture	-0.04	-0.16	4.54	0.71	-1.61	2.51	9.00	7.33		7.04	10/1/1997
NCREIF Farmland Index	0.00	0.00	-0.10	3.98	5.70	6.56	10.87	12.21		11.58	
Timberland	0.00	0.79	4.36	5.70	2.59	1.04	2.90	3.26		7.39	10/1/1992
NCREIF Timberland Index	0.00	0.00	0.11	1.30	2.48	2.80	4.49	5.79		8.49	

Benchmark definitions on next page.

Asset Class Returns

Periods Ended May 31, 2020

	Performance (%)										
	1 Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	Since Inception	Inception Date
Unlisted Infrastructure Alternatives Custom Benchmark	-0.08 0.72	-1.00 1.45	-1.34 3.66	4.82 9.00						7.51 9.00	4/1/2018
Cash 90 Day US Treasury Bill	0.23 0.00	0.51 0.01	1.30 0.59	3.48 1.84	2.75 1.79	1.96 1.17	1.07 0.62	1.93 1.64	3.28 2.78	3.81 3.27	7/1/1986

Benchmark definitions on next page.

Benchmark Definitions

Account Name	From Date	To Date	Benchmark
Domestic Equity Blended Benchmark	1/1/2015 1/1/1982	Present 12/31/2014	100% Russell 3000 Index 100% Dow Jones US Total Stock Market Index
Real Estate Blended Benchmark	1/1/2013 1/1/2007 1/1/2005	Present 12/31/2012 12/31/2016	100% NCREIF Fund Index-ODCE (VW) (Net)** 100% 100% NPI + 1% 100% Consumer Price Index + 5%
Alternatives Custom Benchmark	7/1/2010 1/1/2004 1/1/2003 2/1/1986	Present 6/30/2010 12/31/2003 12/31/2002	100% Annualized rate of 9.0% 100% Annualized rate of 12.0% 100% Annualized rate of 13.0% 100% Annualized rate of 15.0%
U.S. Equity IMRF Custom Benchmark			Blend of the U.S. Equity Style benchmarks returns, dollar weighted by the actual allocation at previous month end.
International Equity IMRF Custom Benchmark			Blend of the International Equity Style benchmarks returns, dollar weighted by the actual allocation at previous month end.
Fixed Income IMRF Custom Benchmark			Blend of the Fixed Income Style benchmarks returns, dollar weighted by the actual allocation at previous month end.

**ODCE returns are updated quarterly.

Benchmark Definitions

Account Name	From Date	To Date	Benchmark
Total Fund Benchmark			<p>The total fund benchmark is a blend of the asset class benchmark returns weighted by the target allocation for each asset class, currently:</p> <p>37% Russell 3000 Index, 28% Blmbg. Barc. U.S. Aggregate, 18% MSCI AC World ex USA (Net), 9% NCREIF Fund Index-ODCE (VW) (Net), 7% Alternatives Custom Benchmark, 1% 90 Day US Treasury Bill.</p>

Investment Manager Asset Allocation

Periods Ended May 31, 2020

	Apr-2020		May-2020	
	\$	%	\$	%
Domestic Equity	15,858,793,157	38.61	16,808,723,749	39.78
Large Cap Growth	6,078,152,837	14.80	6,575,826,970	15.56
NTGI S&P 500 Growth	2,367,835,598	5.76	2,508,774,830	5.94
Sands Capital	2,337,500,222	5.69	2,602,061,578	6.16
Xponance Russell 1000 G	1,372,817,016	3.34	1,464,990,563	3.47
Large Cap Value	4,394,255,999	10.70	4,546,975,084	10.76
Dodge & Cox	1,170,950,842	2.85	1,209,031,058	2.86
BMO	709,872,543	1.73	739,034,826	1.75
LSV Asset	1,207,211,764	2.94	1,250,602,119	2.96
NTGI S&P 500 Value	1,306,220,849	3.18	1,348,307,081	3.19
Large Cap Pass. Core	2,406,788,752	5.86	2,535,633,146	6.00
NTGI MarketCap Idx.	2,406,788,752	5.86	2,535,633,146	6.00
Quantitative Factor Strategies	227,073,454	0.55	239,285,966	0.57
Quantitative US Equity - SciBeta	227,073,454	0.55	239,285,966	0.57
Small Cap Growth	657,964,741	1.60	728,245,237	1.72
Frontier Capital	510,235,222	1.24	571,533,096	1.35
FIAM Small Cap	147,729,520	0.36	156,712,141	0.37
Small Cap Value	1,147,230,697	2.79	1,191,513,533	2.82
Channing	183,969,196	0.45	197,187,175	0.47
DFA Small Cap Val.	425,233,353	1.04	437,510,266	1.04
Inv. Couns. Maryland	538,028,149	1.31	556,816,092	1.32
Micro Cap	340,767,844	0.83	356,244,219	0.84
DFA Micro Cap (9-10)	340,767,844	0.83	356,244,219	0.84

Investment Manager Asset Allocation

Periods Ended May 31, 2020

	Apr-2020		May-2020	
	\$	%	\$	%
Public Real Assets	606,558,833	1.48	634,999,592	1.50
Brookfield Public Global Infrastru	142,891,234	0.35	150,081,119	0.36
Cohen & St Public Global Infrastru	463,667,599	1.13	484,918,473	1.15
International Equity	7,013,100,746	17.07	7,295,747,849	17.27
Intl Large Cap Growth	1,123,037,909	2.73	1,190,672,238	2.82
EARNEST Part. Intl	385,781,718	0.94	395,932,424	0.94
William Blair	737,256,191	1.79	794,739,813	1.88
Intl Large Cap Value	1,032,007,872	2.51	1,053,225,387	2.49
Brandes Investment	475,128,573	1.16	487,538,557	1.15
Mondrian	457,082,558	1.11	461,853,458	1.09
Lazard	99,796,741	0.24	103,833,372	0.25
Intl Large Cap Core	3,294,211,277	8.02	3,427,858,740	8.11
Arrowstreet Capital	648,038,034	1.58	674,181,007	1.60
Brown Capital	352,328,690	0.86	379,701,913	0.90
GlobeFlex Capital	469,315,024	1.14	479,337,594	1.13
NTGI MSCI EAFE	1,801,438,807	4.39	1,891,918,497	4.48
Progress Intl Equity	3,411,166	0.01	2,146,580	0.01
Transition Account	19,679,556	0.05	573,148	0.00
Intl All Cap Developed	119,686,251	0.29	125,208,258	0.30
Ativo International	119,686,251	0.29	125,208,258	0.30
Internationall Small Cap	428,312,245	1.04	470,223,949	1.11
Franklin Templeton	160,052,654	0.39	171,760,370	0.41

Investment Manager Asset Allocation

Periods Ended May 31, 2020

	Apr-2020		May-2020	
	\$	%	\$	%
William Blair IntSC	268,259,591	0.65	298,463,579	0.71
Emerging Mkt Equity	1,015,845,192	2.47	1,028,559,278	2.43
Genesis Asset Mngrs.	1,015,845,192	2.47	1,028,559,278	2.43

Investment Manager Asset Allocation

Periods Ended May 31, 2020

	Apr-2020		May-2020	
	\$	%	\$	%
Fixed Income	12,089,838,219	29.43	12,217,790,079	28.92
Domestic Fixed Core	3,703,680,671	9.02	3,732,448,024	8.83
Brandes FI Core	382,298,964	0.93	384,214,965	0.91
EARNEST Partners	1,032,008,088	2.51	1,034,996,538	2.45
Xponance Yield Advantage Agg.	1,085,215,747	2.64	1,097,887,975	2.60
Garcia Hamilton	1,094,370,333	2.66	1,104,384,530	2.61
Ramirez Asset Management	109,787,540	0.27	110,964,016	0.26
Domestic Fixed Passive Core	3,722,604,464	9.06	3,740,145,531	8.85
NTGI Blmbg Agg.	1,901,071,365	4.63	1,909,770,433	4.52
BlackRock US Debt I	1,821,533,099	4.43	1,830,375,098	4.33
Domestic Fixed Core Plus	3,238,598,457	7.88	3,260,781,597	7.72
LM Capital Group FI	936,108,504	2.28	948,046,819	2.24
Progress Inv. FI	22,582,674	0.05	27,157	0.00
BMO - TCH	969,322,509	2.36	976,938,486	2.31
Western Asset	1,135,656,220	2.76	1,159,255,641	2.74
Longfellow Core Plus	174,928,550	0.43	176,513,493	0.42
Bank Loans	498,812,873	1.21	515,886,158	1.22
Barings Global Loan Fund	498,812,873	1.21	515,886,158	1.22
Emerging Markets Debt	199,068,601	0.48	210,283,787	0.50
Standish-Mellon EMD	199,068,601	0.48	210,283,787	0.50
High Yield	727,073,152	1.77	758,244,983	1.79
MacKay Shields	726,745,099	1.77	757,925,169	1.79
FIAM High Yield	328,053	0.00	319,814	0.00

Investment Manager Asset Allocation

Periods Ended May 31, 2020

	Apr-2020		May-2020	
	\$	%	\$	%
Real Estate	2,997,589,278	7.30	2,987,124,348	7.07
Real Estate Core Cmp	1,586,540,670	3.86	1,596,982,668	3.78
TA Assoc. Buckhead	617,321,318	1.50	623,041,645	1.47
Barings Core Property		0.00		0.00
Barings Euro Core Property	126,276,077	0.31	129,311,241	0.31
Blackstone Property Euro	131,582,983	0.32	134,591,039	0.32
INVESCO Core Real Estate	214,079,432	0.52	214,079,432	0.51
INVESCO European real estate	55,934,768	0.14	56,798,358	0.13
AEW Core Property Tr	236,721,799	0.58	234,536,661	0.56
CBRE Core Partners	204,624,292	0.50	204,624,292	0.48
RE Non-Core Cmp	1,411,048,608	3.43	1,390,141,681	3.29
Artemis MWBE Spruce	256,193,946	0.62	260,463,718	0.62
Franklin T. EMREFF	7,946,633	0.02	7,946,633	0.02
Security Capital	47,065,421	0.11	49,155,100	0.12
Dune II	22,643,881	0.06	20,456,881	0.05
Non-Core Real Estate Funds	941,391,081	2.29	919,463,355	2.18
Non-Core Intl Real Estate	135,598,836	0.33	132,363,033	0.31
Rockwood Fund VIII	156,152	0.00	149,098	0.00
Almanac ARS V	52,658	0.00	143,862	0.00
TA Assoc. - Fund IX		0.00		0.00
Alternatives Investments	2,668,097,634	6.49	2,597,369,700	6.15
Absolute Return	449,219	0.00	336,524	0.00
Aurora Investment	449,219	0.00	336,524	0.00

Investment Manager Asset Allocation

Periods Ended May 31, 2020

	Apr-2020		May-2020	
	\$	%	\$	%
Private Equity	2,157,952,199	5.25	2,125,878,274	5.03
Abbott S/A Comp.	369,826,409	0.90	353,654,638	0.84
Muller Monroe MPEFF	4,808,888	0.01	4,808,888	0.01
Pantheon S/A Comp.	269,864,975	0.66	269,573,799	0.64
Private Equity Fund - Domestic	1,158,682,161	2.82	1,161,514,489	2.75
Private Equity Fund - International	343,272,124	0.84	322,850,169	0.76
Oakbrook Opportunities Fund	11,497,642	0.03	13,476,291	0.03
Private Credit	168,289,575	0.41	130,898,261	0.31
Private Credit Fund - Domestic	168,289,575	0.41	130,898,261	0.31
Agriculture	217,605,762	0.53	217,525,457	0.51
Premiere Partners IV	217,605,762	0.53	217,525,457	0.51
Timberland	77,119,926	0.19	77,119,926	0.18
Forest Investment	77,119,926	0.19	77,119,926	0.18
Unlisted Infrastructure	46,680,953	0.11	45,611,258	0.11
Unlisted Infrastructure Funds	46,680,953	0.11	45,611,258	0.11
Cash & Equivalents	451,931,288	1.10	346,431,860	0.82
Total Fund	41,079,350,321	100.00	42,253,187,585	100.00

Wilshire Consulting Performance



Periods Ended May 31, 2020

	Market Value \$	Performance (%)									
		1 Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date	
Total Fund	42,253,187,585	3.11	10.23	-4.53	5.99	5.95	5.77	8.61	9.65	1/1/1982	
Total Fund - Net		3.09	10.19	-4.61	5.81	5.76	5.56	8.38			
Total Fund Benchmark		2.75	9.75	-2.62	7.79	6.37	6.20	8.41			
Domestic Equity	16,808,723,749	5.99	20.50	-6.96	8.51	8.35	7.94	12.30	11.32	1/1/1982	
Domestic Equity - Net		5.96	20.46	-7.05	8.30	8.14	7.72	12.04			
Blended Benchmark		5.35	19.30	-5.63	11.46	9.54	9.17	12.82			
Russell 3000 Index		5.35	19.30	-5.63	11.46	9.54	9.17	12.80	11.29		
Large Cap Equity	13,658,435,201	6.05	20.54	-4.17	12.10	10.03	9.30	13.09	11.09	1/1/1982	
Large Cap Equity - Net		6.03	20.51	-4.21	12.02	9.92	9.18	12.94			
Russell 1000 Index		5.28	19.19	-4.91	12.54	10.09	9.58	13.07	11.45		
Large Cap Growth	6,575,826,970	8.19	24.30	8.70	24.94	18.32	14.54	15.97	12.15	1/1/1982	
Large Cap Growth - Net		8.17	24.27	8.66	24.84	18.20	14.41	15.80			
LCG Blended Benchmark		6.71	22.50	5.23	26.25	17.21	14.50	16.07			
Russell 1000 Growth Index		6.71	22.50	5.23	26.25	17.21	14.50	16.07	11.34		
NTGI S&P 500 Growth	2,508,774,830	5.95	21.23	3.60	20.04	15.01	13.24	15.59	8.27	8/1/2001	
NTGI S&P 500 Growth - Net		5.95	21.23	3.60	20.03	15.00	13.24	15.58			
S&P 500 Growth		5.95	21.26	3.67	20.09	15.04	13.27	15.59	8.25		
Xponance Russell 1000 G	1,464,990,563	6.71	22.50	5.23	26.21				11.95	10/1/2018	
Xponance Russell 1000 G - Net		6.71	22.49	5.22	26.19				11.93		
Russell 1000 Growth Index		6.71	22.50	5.23	26.25				11.96		
Sands Capital	2,602,061,578	11.32	28.04	16.16	29.30	22.69	16.47	18.85	13.14	11/1/2003	
Sands Capital - Net		11.27	27.98	16.04	29.03	22.43	16.21	18.58			
LCG Blended Benchmark		6.71	22.50	5.23	26.25	17.21	14.50	16.07	10.44		
Russell 1000 Growth Index		6.71	22.50	5.23	26.25	17.21	14.50	16.07	10.49		
Large Cap Value	4,546,975,084	3.48	16.15	-16.68	-1.34	2.83	4.55	10.56	9.78	10/1/1982	
Large Cap Value - Net		3.46	16.10	-16.74	-1.48	2.67	4.38	10.38			
LCV Blended Benchmark		3.43	15.05	-15.70	-1.64	2.60	4.36	9.85			
Russell 1000 Value Index		3.43	15.05	-15.70	-1.64	2.60	4.36	9.85	11.28		

Benchmark definitions in glossary.

Wilshire Consulting Performance



Periods Ended May 31, 2020

	Market Value \$	Performance (%)									
		1 Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date	
Dodge & Cox	1,209,031,058	3.25	16.89	-16.04	-2.37	3.06	5.49	11.13	8.39	9/1/2003	
Dodge & Cox - Net		3.20	16.82	-16.13	-2.58	2.84	5.27	10.89			
LCV Blended Benchmark		3.43	15.05	-15.70	-1.64	2.60	4.36	9.85	7.32		
Russell 1000 Value Index		3.43	15.05	-15.70	-1.64	2.60	4.36	9.85	7.47		
BMO	739,034,826	4.11	17.40	-15.18	-4.14	1.89	3.44	10.40	7.04	2/1/2001	
BMO - Net		4.10	17.37	-15.19	-4.28	1.69	3.23	10.16			
LCV Blended Benchmark		3.43	15.05	-15.70	-1.64	2.60	4.36	9.85	5.00		
Russell 1000 Value Index		3.43	15.05	-15.70	-1.64	2.60	4.36	9.85	5.95		
LSV Asset	1,250,602,119	3.59	16.72	-20.38	-3.90	1.43	3.53	10.34	9.45	2/1/2003	
LSV Asset - Net		3.59	16.64	-20.49	-4.13	1.20	3.28	10.07			
LCV Blended Benchmark		3.43	15.05	-15.70	-1.64	2.60	4.36	9.85	8.23		
Russell 1000 Value Index		3.43	15.05	-15.70	-1.64	2.60	4.36	9.85	8.24		
NTGI S&P 500 Value	1,348,307,081	3.22	14.32	-14.54	4.38	4.81	5.87	10.43	5.41	8/1/1999	
NTGI S&P 500 Value - Net		3.22	14.31	-14.55	4.37	4.81	5.86	10.42			
S&P 500 Value		3.19	14.24	-14.71	4.21	4.73	5.77	10.34	5.37		
Large Cap Pass. Core	2,535,633,146	5.35	19.31	-5.67	11.34	9.53	9.18	12.84	10.97	1/1/1985	
Large Cap Pass. Core - Net		5.35	19.31	-5.68	11.33	9.52	9.18	12.83			
Dow Jones US Total Stock Market Index		5.37	19.34	-5.68	11.31	9.48	9.10	12.78			
NTGI MarketCap Idx.	2,535,633,146	5.35	19.31	-5.67	11.34	9.53	9.18	12.85	10.74	2/1/1985	
NTGI MarketCap Idx. - Net		5.35	19.31	-5.68	11.33	9.52	9.18	12.84			
Dow Jones US Total Stock Market Index		5.37	19.34	-5.68	11.31	9.48	9.10	12.78			
Quantitative Factor Strategies	239,285,966	5.42	18.73	-9.05					-3.92	9/17/2019	
Quantitative US Equity - SciBeta	239,285,966	5.42	18.73	-9.05					-3.92	9/17/2019	
Quantitative US Equity - SciBeta - Net		5.38	18.63	-9.25					-4.13		
SciBeta US Hi-Fctr-Intst Div Multi-Beta Multi-Strat Index		5.52	18.29	-9.36					-4.58		
Small Cap	2,276,002,990	6.06	22.85	-19.74	-6.71	0.86	2.38	9.20	11.19	7/1/1988	
Small Cap Composite - Net		5.98	22.72	-20.03	-7.30	0.33	1.82	8.61			
Russell 2000 Index		6.51	21.14	-15.95	-3.44	1.98	3.72	9.23	8.76		

Benchmark definitions in glossary.

Wilshire Consulting Performance



Periods Ended May 31, 2020

	Market Value \$	Performance (%)								
		1 Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
Small Cap Growth	728,245,237	10.68	32.10	-9.48	6.82	8.70	6.08	11.78	12.53	7/1/1988
Small Cap Growth - Net		10.68	31.96	-10.06	5.84	8.08	5.45	11.15		
Russell 2000 Growth Index		9.45	25.75	-6.65	7.32	7.72	6.34	11.72	7.91	
Frontier Capital	571,533,096	12.01	35.30	-7.48	9.87	13.37	8.02	12.33	12.89	8/1/1988
Frontier Capital - Net		12.01	35.12	-8.25	8.70	12.49	7.26	11.62		
Russell 2000 Growth Index		9.45	25.75	-6.65	7.32	7.72	6.34	11.72	7.99	
FIAM Small Cap	156,712,141	6.08	21.62	-16.10	-2.77	4.35	4.28	11.26	12.75	8/1/1988
FIAM Small Cap - Net		6.08	21.59	-16.12	-3.17	4.05	3.84	10.73		
Russell 2000 Index		6.51	21.14	-15.95	-3.44	1.98	3.72	9.23	8.82	
Russell 2000 Growth Index		9.45	25.75	-6.65	7.32	7.72	6.34	11.72	7.99	
Small Cap Value	1,191,513,533	3.86	18.91	-24.24	-12.46	-3.14	1.27	7.88	10.56	9/1/1989
Small Cap Value - Net		3.74	18.78	-24.42	-12.91	-3.65	0.75	7.36		
Russell 2000 Value Index		2.87	15.56	-25.65	-14.69	-4.16	0.71	6.54	8.84	
Channing	197,187,175	7.19	22.62	-18.61	-6.83	-2.10	2.00		7.33	7/1/2011
Channing - Net		7.04	22.46	-18.82	-7.31	-2.59	1.48		6.75	
Russell 2000 Value Index		2.87	15.56	-25.65	-14.69	-4.16	0.71		5.20	
DFA Small Cap Val.	437,510,266	2.89	19.74	-27.42	-16.00	-6.05	-1.22	7.13	10.13	2/1/1996
DFA Small Cap Val. - Net		2.78	19.61	-27.61	-16.42	-6.54	-1.73	6.61		
Russell 2000 Value Index		2.87	15.56	-25.65	-14.69	-4.16	0.71	6.54	8.05	
Inv. Couns. Maryland	556,816,092	3.49	17.03	-23.47	-11.42	-1.01	3.85	8.83	9.92	5/1/1999
Inv. Couns. Maryland - Net		3.38	16.90	-23.64	-11.89	-1.53	3.31	8.32		
Russell 2000 Value Index		2.87	15.56	-25.65	-14.69	-4.16	0.71	6.54	7.39	
Micro Cap	356,244,219	4.54	18.99	-22.31	-10.32	-2.25	-0.51	7.64	10.55	7/1/1984
Micro Cap - Net		4.43	18.87	-22.51	-10.77	-2.76	-1.09	6.96		
Russell Microcap Index		6.63	22.87	-16.43	-4.78	0.52	2.06	8.31		
DFA Micro Cap (9-10)	356,244,219	4.54	18.99	-22.31	-10.32	-1.32	2.76	9.32	10.12	8/1/1987
DFA Micro Cap (9-10) - Net		4.43	18.87	-22.51	-10.77	-1.81	2.25	8.78		
Russell 2000 Index		6.51	21.14	-15.95	-3.44	1.98	3.72	9.23	8.20	

Benchmark definitions in glossary.

Wilshire Consulting Performance



Periods Ended May 31, 2020

	Market Value \$	Performance (%)								
		1 Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
Public Real Assets	634,999,592	4.69	12.45	-10.57	-0.68				4.12	8/1/2017
Public Real Assets - Net		4.59	12.34	-10.76	-1.11				3.67	
Public Real Assets Benchmark		4.30	13.50	-11.92	-3.04				1.98	
Brookfield	150,081,119	5.03	14.63	-14.86	-6.06				0.12	8/1/2017
Brookfield - Net		4.88	14.47	-15.10	-6.56				-0.38	
Dow Jones Brookfield Global Infrastructure Composite Index		4.54	15.33	-12.87	-4.83				0.17	
Cohen & Steers	484,918,473	4.58	11.59	-8.58	1.83				6.03	8/1/2017
Cohen & Steers - Net		4.50	11.50	-8.75	1.43				5.61	
FTSE Global Core Infrastructure 50/50 Index (Net)		4.18	12.60	-11.48	-2.17				2.87	

Benchmark definitions in glossary.

Wilshire Consulting Performance



Periods Ended May 31, 2020

	Market Value \$	Performance (%)									
		1 Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date	
International Equity	7,295,747,849	4.31	12.34	-14.39	-1.95	0.45	1.79	6.00	7.27	9/1/1986	
International Equity - Net		4.26	12.25	-14.54	-2.28	0.12	1.45	5.66			
MSCI AC World ex USA (Net)		3.27	11.10	-14.85	-3.43	-0.24	0.79	4.38			
Intl LargeCap Equity	5,671,756,365	4.43	11.74	-14.26	-2.28	0.16	1.57	6.00	7.26	9/1/1986	
Intl LargeCap Equity - Net		4.39	11.67	-14.38	-2.55	-0.10	1.30	5.72			
MSCI AC World ex USA (Net)		3.27	11.10	-14.85	-3.43	-0.24	0.79	4.38			
Intl Large Cap Grwth	1,190,672,238	6.02	15.40	-11.42	2.39	2.10	2.65	6.45	7.65	9/1/2002	
Intl Large Cap Grwth - Net		5.96	15.31	-11.56	2.11	1.84	2.38	6.11			
MSCI AC World ex USA (Net)		3.27	11.10	-14.85	-3.43	-0.24	0.79	4.38	6.35		
MSCI AC World ex USA Growth (Net)		4.35	13.35	-7.33	7.37	4.36	4.02	6.43	7.16		
EARNEST Part. Intl	395,932,424	2.63	11.71	-21.40	-10.87	-3.13	-0.35	4.26	7.23	10/1/2004	
EARNEST Part. Intl - Net		2.63	11.64	-21.49	-11.01	-3.30	-0.54	3.98			
MSCI AC World ex USA (Net)		3.27	11.10	-14.85	-3.43	-0.24	0.79	4.38	4.91		
MSCI AC World ex USA Growth (Net)		4.35	13.35	-7.33	7.37	4.36	4.02	6.43	6.21		
William Blair	794,739,813	7.80	17.34	-5.11	11.38	5.63	4.61	8.37	9.35	10/1/2002	
William Blair - Net		7.70	17.23	-5.28	10.99	5.26	4.24	7.97			
MSCI AC World ex USA (Net)		3.27	11.10	-14.85	-3.43	-0.24	0.79	4.38	7.06		
MSCI AC World ex USA Growth (Net)		4.35	13.35	-7.33	7.37	4.36	4.02	6.43	7.76		
Intl Large Cap Val.	1,053,225,387	2.06	7.50	-22.16	-11.66	-4.07	-1.17	3.75	7.52	10/1/1995	
Intl Large Cap Val. - Net		2.05	7.41	-22.28	-11.93	-4.38	-1.52	3.39			
MSCI AC World ex USA (Net)		3.27	11.10	-14.85	-3.43	-0.24	0.79	4.38			
MSCI AC World ex USA Value		2.06	8.62	-22.29	-13.63	-4.46	-2.03	2.78			
Brandes Investment	487,538,557	2.61	7.87	-24.64	-14.40	-5.50	-2.17	3.57	7.49	1/1/1996	
Brandes Investment - Net		2.61	7.80	-24.73	-14.58	-5.70	-2.38	3.33			
MSCI AC World ex USA (Net)		3.27	11.10	-14.85	-3.43	-0.24	0.79	4.38			
MSCI AC World ex USA Value		2.06	8.62	-22.29	-13.63	-4.46	-2.03	2.78			
Mondrian	461,853,458	1.04	6.39	-20.69	-9.81	-3.20	-0.45		2.85	4/1/2012	
Mondrian - Net		1.04	6.27	-20.87	-10.19	-3.65	-0.93		2.35		
MSCI AC World ex USA (Net)		3.27	11.10	-14.85	-3.43	-0.24	0.79		3.22		
MSCI AC World ex USA Value		2.06	8.62	-22.29	-13.63	-4.46	-2.03		1.41		

Benchmark definitions in glossary.

Wilshire Consulting Performance



Periods Ended May 31, 2020

	Market Value \$	Performance (%)									
		1 Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date	
Lazard	103,833,372	4.05	10.91	-16.06	-6.12	-0.37	0.72		4.26	4/1/2012	
Lazard - Net		3.97	10.83	-16.18	-6.36	-0.62	0.39		3.75		
MSCI AC World ex USA (Net)		3.27	11.10	-14.85	-3.43	-0.24	0.79		3.22		
MSCI AC World ex USA Value		2.06	8.62	-22.29	-13.63	-4.46	-2.03		1.41		
Intl Large Cap Active Core	1,535,940,243	4.16	12.37	-11.62	0.65	1.69	3.09	7.57	4.03	2/1/2008	
Intl Large Cap Active Core - Net		4.07	12.23	-11.85	0.15	1.22	2.56	7.03			
MSCI AC World ex USA (Net)		3.27	11.10	-14.85	-3.43	-0.24	0.79	4.38	1.35		
Arrowstreet Capital	674,181,007	4.03	13.99	-11.13	2.16	2.46	3.39	7.91	4.33	3/1/2008	
Arrowstreet Capital - Net		3.91	13.85	-11.35	1.68	1.99	2.91	7.41	3.84		
MSCI AC World ex USA (Net)		3.27	11.10	-14.85	-3.43	-0.24	0.79	4.38	1.12		
Brown Capital	379,701,913	7.77	16.96	0.45	11.73	5.76	5.30	8.82	7.91	10/1/2004	
Brown Capital - Net		7.77	16.89	0.32	11.42	5.29	4.52	8.04			
MSCI AC World ex USA (Net)		3.27	11.10	-14.85	-3.43	-0.24	0.79	4.38	4.91		
GlobeFlex Capital	479,337,594	2.14	11.79	-17.35	-6.76	-2.17	1.18	6.38	3.53	3/1/2006	
GlobeFlex Capital - Net		2.02	11.65	-17.55	-7.18	-2.56	0.78	5.94	3.09		
MSCI AC World ex USA (Net)		3.27	11.10	-14.85	-3.43	-0.24	0.79	4.38	2.77		
Progress Intl Equity	2,146,580										
Intl Large Cap Passive Core	1,891,918,497	5.02	11.23	-13.77	-2.36	0.05	1.21	5.66	2.87	1/1/2000	
Intl Large Cap Passive Core - Net		5.02	11.23	-13.78	-2.36	0.04	1.20	5.65			
MSCI EAFE Index (Net)		4.35	11.10	-14.26	-2.81	-0.37	0.79	5.27	2.47		
NTGI MSCI EAFE	1,891,918,497	5.02	11.23	-13.77	-2.36	0.05	1.21	5.66	3.21	2/1/2000	
NTGI MSCI EAFE - Net		5.02	11.23	-13.78	-2.36	0.04	1.20	5.65			
MSCI EAFE Index (Net)		4.35	11.10	-14.26	-2.81	-0.37	0.79	5.27	2.81		
Intl All Cap Developed	125,208,258	4.61	12.97	-15.77	-4.88				-2.23	2/1/2019	
Intl All Cap Developed - Net		4.61	12.81	-15.99	-5.36				-2.67		
MSCI EAFE + Canada (Net)		4.25	11.52	-14.42	-3.12				-1.62		

Benchmark definitions in glossary.

Wilshire Consulting Performance



Periods Ended May 31, 2020

	Market Value \$	Performance (%)								
		1 Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
Ativo International	125,208,258	4.61	12.97	-15.77	-4.88				-2.23	2/1/2019
Ativo International - Net		4.61	12.81	-15.99	-5.36				-2.67	
MSCI EAFE + Canada (Net)		4.25	11.52	-14.42	-3.12				-1.62	
Intl Small Cap Eqty	470,223,949	9.79	23.24	-9.76	6.29	2.11	3.76	8.17	4.37	12/1/2005
Intl Small Cap Eqty - Net		9.57	23.00	-10.13	5.47	1.34	2.98	7.37		
MSCI AC World ex USA Small Cap (Net)		6.06	18.95	-15.55	-3.27	-1.10	1.39	5.67	4.91	
Custom Benchmark (Intl Small Cap)		6.06	18.95	-15.55	-3.27	-1.10	1.39	5.86	4.22	
Franklin Templeton	171,760,370	7.32	19.70	-16.96	-4.57	-0.99	1.09		4.23	8/1/2011
Franklin Templeton - Net		7.11	19.47	-17.28	-5.29	-1.72	0.34		3.48	
MSCI AC World ex USA Small Cap (Net)		6.06	18.95	-15.55	-3.27	-1.10	1.39		2.99	
William Blair IntSC	298,463,579	11.26	25.37	-5.02	13.74	4.06	5.63		8.82	9/1/2010
William Blair IntSC - Net		11.04	25.13	-5.41	12.85	3.26	4.82		7.98	
MSCI AC World ex USA Small Cap (Net)		6.06	18.95	-15.55	-3.27	-1.10	1.39		5.21	
Custom Benchmark (Intl Small Cap)		6.06	18.95	-15.55	-3.27	-1.10	1.39		5.51	
Emerging Mkt Equity	1,028,559,278	1.29	11.50	-16.95	-2.82	2.31	2.67	4.81	8.40	2/1/1992
Emerging Mkt Equity - Net		1.25	11.40	-17.16	-3.36	1.73	2.07	4.21		
MSCI Emerging Markets Index		0.79	10.04	-15.90	-4.02	0.22	1.25	2.82	6.43	
Genesis Asset Mngrs.	1,028,559,278	1.29	11.50	-16.95	-2.82	2.31	2.67	4.81	9.89	5/1/2004
Genesis Asset Mngrs. - Net		1.25	11.40	-17.16	-3.36	1.73	2.07	4.21		
MSCI Emerging Markets Index		0.79	10.04	-15.90	-4.02	0.22	1.25	2.82	7.64	

Benchmark definitions in glossary.

Wilshire Consulting Performance



Periods Ended May 31, 2020

	Market Value \$	Performance (%)								
		1 Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
Fixed Income	12,217,790,079	1.25	3.66	3.43	7.64	4.77	4.14	4.71	8.20	1/1/1982
Fixed Income - Net		1.24	3.64	3.38	7.52	4.63	3.99	4.55		
Blmbg. Barc. U.S. Aggregate		0.47	2.25	5.47	9.42	5.07	3.94	3.92	7.73	
Active Fixed Core	3,732,448,024	0.78	2.76	4.97	8.28	4.96	4.03	4.42	4.74	4/1/2001
ActiveCore Fixed Inc - Net		0.78	2.74	4.92	8.17	4.86	3.90	4.27		
Blmbg. Barc. U.S. Aggregate		0.47	2.25	5.47	9.42	5.07	3.94	3.92	4.78	
Brandes FI Core	384,214,965	0.50	1.88	6.30	9.36	4.80			4.01	3/1/2016
Brandes FI Core - Net		0.50	1.88	6.30	9.36	4.80			4.01	
Blmbg. Barc. U.S. Aggregate		0.47	2.25	5.47	9.42	5.07			4.26	
EARNEST Partners	1,034,996,538	0.29	2.29	4.49	7.74	4.96	4.02	4.36	4.78	5/1/2005
EARNEST Partners - Net		0.29	2.25	4.43	7.60	4.82	3.86	4.17	4.58	
Blmbg. Barc. U.S. Aggregate		0.47	2.25	5.47	9.42	5.07	3.94	3.92	4.44	
Xponance Yield Advantage Agg.	1,097,887,975	1.17	3.27	4.31	7.77	4.52	3.82	4.29	4.54	6/1/2005
Xponance - Net		1.17	3.23	4.25	7.63	4.38	3.67	4.13	4.35	
Blmbg. Barc. U.S. Aggregate		0.47	2.25	5.47	9.42	5.07	3.94	3.92	4.39	
Garcia Hamilton	1,104,384,530	0.92	2.90	5.51	8.86	5.28	4.27		4.27	6/1/2015
Garcia Hamilton - Net		0.92	2.88	5.47	8.77	5.19	4.18		4.18	
Blmbg. Barc. U.S. Aggregate		0.47	2.25	5.47	9.42	5.07	3.94		3.94	
Ramirez Asset Management	110,964,016	1.10							1.10	5/1/2020
Ramirez Asset Management - Net		1.10							1.10	
Blmbg. Barc. U.S. Aggregate		0.47							0.47	
Pass. Core Fixed Inc	3,740,145,531	0.47	2.25	5.55	9.52	5.14	4.01	3.97	6.03	1/1/1990
Pass. Core Fixed Inc - Net		0.47	2.25	5.55	9.51	5.13	4.01	3.96		
Blmbg. Barc. U.S. Aggregate		0.47	2.25	5.47	9.42	5.07	3.94	3.92	6.01	
BlackRock US Debt I	1,830,375,098	0.49	2.32	5.54	9.51	5.16	4.05		4.10	10/1/2013
BlackRock US Debt I - Net		0.49	2.31	5.53	9.51	5.16	4.04		4.10	
Blmbg. Barc. U.S. Aggregate		0.47	2.25	5.47	9.42	5.07	3.94		3.98	

Benchmark definitions in glossary.

Wilshire Consulting Performance



Periods Ended May 31, 2020

	Market Value \$	Performance (%)								
		1 Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
NTGI Blmbg Agg.	1,909,770,433	0.46	2.19	5.56	9.52	5.11	3.99	3.95	6.08	2/1/1990
NTGI Blmbg Agg. - Net	0.46	2.19	5.56	9.51	5.11	3.98	3.94			
Blmbg. Barc. U.S. Aggregate	0.47	2.25	5.47	9.42	5.07	3.94	3.92		6.07	
Core Plus Fixed Income	3,260,781,597	1.38	4.03	4.14	8.83	5.05	4.35	4.88	8.08	1/1/1982
Core Plus Fixed Inc. - Net	1.36	3.97	4.04	8.63	4.86	4.16	4.69			
Blmbg. Barc. U.S. Aggregate	0.47	2.25	5.47	9.42	5.07	3.94	3.92		7.73	
LM Capital Group FI	948,046,819	1.28	2.68	4.62	8.82	4.72	4.11	4.61	5.06	5/1/2005
LM Capital Group FI - Net	1.28	2.64	4.53	8.65	4.56	3.95	4.44		4.89	
Blmbg. Barc. U.S. Aggregate	0.47	2.25	5.47	9.42	5.07	3.94	3.92		4.44	
Progress Inv. FI	27,157									
BMO - TCH	976,938,486	0.79	2.99	4.50	8.61	5.11	4.59	5.16	5.20	5/1/2005
BMO - TCH - Net	0.75	2.96	4.43	8.47	4.98	4.46	5.03		5.07	
Blmbg. Barc. U.S. Aggregate	0.47	2.25	5.47	9.42	5.07	3.94	3.92		4.44	
Western Asset	1,159,255,641	2.08	5.97	3.16	9.15	5.34	4.79	5.37	5.61	11/1/2001
Western Asset - Net	2.04	5.94	3.10	9.04	5.22	4.66	5.23			
Blmbg. Barc. U.S. Aggregate	0.47	2.25	5.47	9.42	5.07	3.94	3.92		4.53	
Longfellow Core Plus	176,513,493	0.91							0.91	5/1/2020
Longfellow Core Plus - Net	0.91								0.91	
Blmbg. Barc. U.S. Aggregate	0.47								0.47	
Bank Loans	515,886,158	3.42	7.72	-8.04	-4.94	1.10	2.62		2.87	8/1/2014
Bank Loans - Net	3.42	7.72	-8.04	-5.00	0.75	2.17			2.40	
Custom Benchmark	3.71	8.72	-5.69	-2.79	1.96	2.86			2.92	
Barings Global Loan Fund	515,886,158	3.42	7.72	-8.04	-4.94	1.10	2.62		2.87	8/1/2014
Barings Global Loan Fund - Net	3.42	7.72	-8.04	-5.00	0.75	2.17			2.40	
Custom Benchmark	3.71	8.72	-5.69	-2.79	1.96	2.86			2.92	
Emerging Markets Debt	210,283,787	5.64	10.10	-6.79	1.61	1.59	3.01		2.04	8/1/2014
Emerging Markets Debt - Net	5.64	10.10	-6.88	1.35	1.27	2.67			1.71	
Custom Benchmark	5.07	8.91	-5.33	2.52	2.24	3.30			1.70	

Benchmark definitions in glossary.

Wilshire Consulting Performance



Periods Ended May 31, 2020

	Market Value \$	Performance (%)								
		1 Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
Standish-Mellon EMD Standish EM MRK - Net Custom Benchmark	210,283,787	5.64	10.10	-6.79	1.61	1.59	3.01		2.04	8/1/2014
		5.64	10.10	-6.88	1.35	1.27	2.67		1.71	
		5.07	8.91	-5.33	2.52	2.24	3.30		1.70	
High Yield High Yield - Net ICE BofAML US High Yield, Cash Pay Index	758,244,983	4.29	9.25	-2.97	3.41	4.50	5.32	7.22	9.35	4/1/1986
		4.29	9.25	-3.05	3.07	4.18	4.96	6.85		
		4.58	8.55	-5.63	0.41	2.66	4.06	6.50	8.03	
MacKay Shields MacKay Shields - Net ICE BofAML US High Yield, Cash Pay Index	757,925,169	4.29	9.26	-2.97	3.41	4.47	5.51	7.36	8.52	11/1/2000
		4.29	9.26	-3.05	3.07	4.15	5.15	6.99		
		4.58	8.55	-5.63	0.41	2.66	4.06	6.50	7.12	

Benchmark definitions in glossary.

Benchmark History

Account Name	From Date	To Date	Benchmark
Total Fund			<p>The total fund benchmark is a blend of the asset class benchmark returns weighted by the target allocation for each asset class, currently:</p> <p>37% Russell 3000 Index, 28% Blmbg. Barc. U.S. Aggregate, 18% MSCI AC World ex USA (Net), 9% NCREIF Fund Index-ODCE (VW) (Net), 7% Alternatives Custom Benchmark, 1% 90 Day US Treasury Bill.</p>
Domestic Equity	1/1/2015	Present	100% Russell 3000 Index
	1/1/1982	12/31/2014	100% Dow Jones US Total Stock Market Index
Large Cap Growth	1/1/2006	Present	100% Russell 1000 Growth Index
	11/1/2003	12/31/2005	100% S&P 500 Growth
Large Cap Value	1/1/2006	Present	100% Russell 1000 Value Index
	2/1/2001	12/31/2005	100% S&P 500 Value
Public Real Assets	8/1/2017	Present	33.3% Dow Jones Brookfield Global Infrastructure Composi, 66.7% FTSE GLOBAL CORE INFRASTRUCTURE 50/50 INDEX (Net)
Progress Intl Equity	12/1/2017	Present	100% MSCI AC World ex USA (Net)
	7/1/2014	11/30/2017	Custom blended weighted average of the underlying managers' individual MSCI benchmarks

Benchmark History

Account Name	From Date	To Date	Benchmark
Intl Small Cap Eqty	6/1/2011	Present	100% MSCI AC World ex USA Small Cap (Net)
	12/1/2005	5/31/2011	100% S&P Developed Ex-U.S. SmallCap (Net)
Barings Global Loan Fund	8/1/2014	Present	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 Emerging Markets	4/1/2020	Present	50% JPM GBI-EM Global Diversified ex-CNY, 25% JPM EMBI Global (USD), 25% JPM CEMBI Broad Index
	8/1/2014	3/31/2020	50% JPM GBI-EM Global Diversified, 25% JPM EMBI Global (USD), 25% JPM CEMBI Broad Index