

Investment Performance Review  
Period Ending June 30, 2019

## **Southfield Employees' Retirement System**

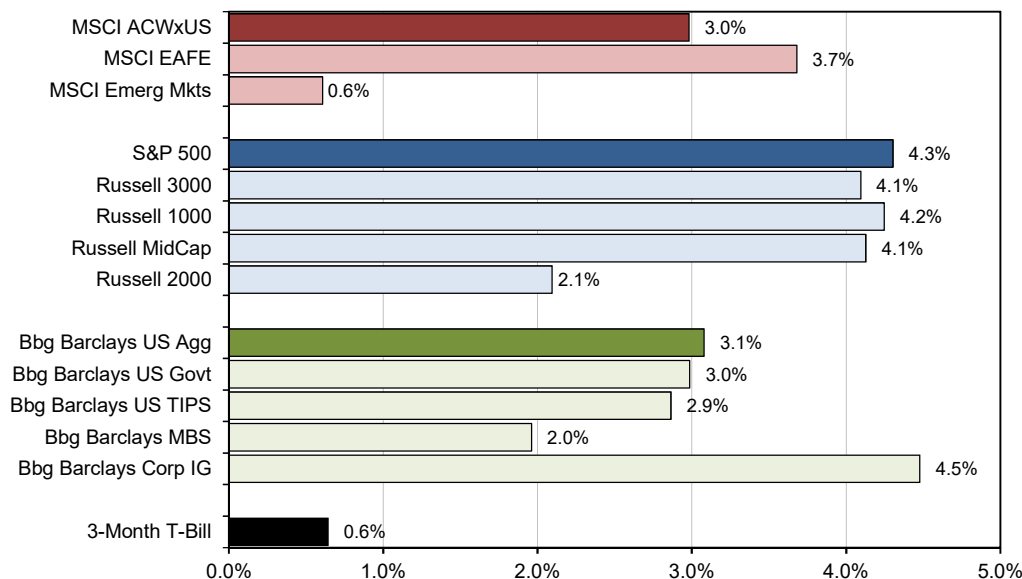
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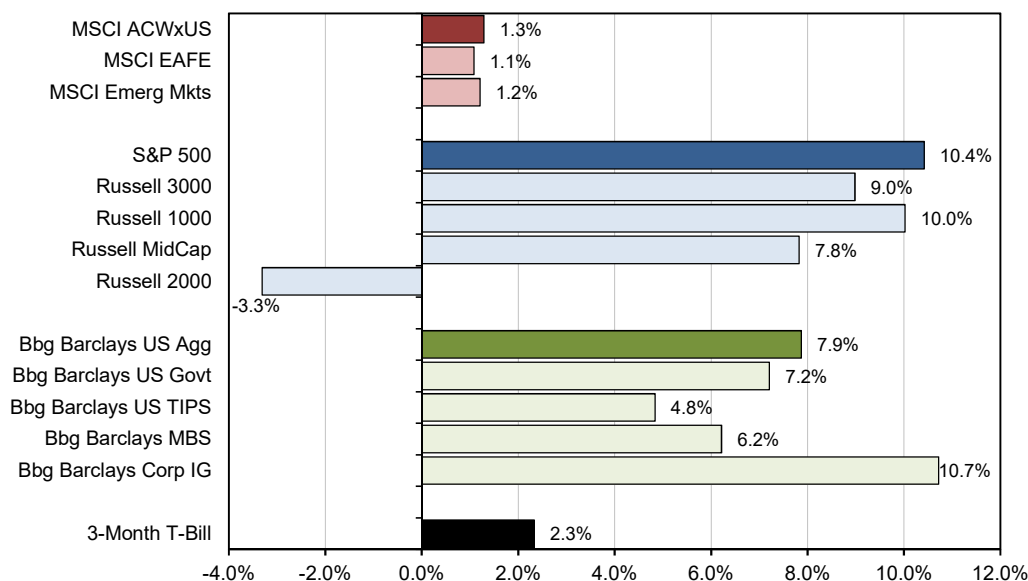
## **2nd Quarter 2019 Market Environment**

- Broad asset class returns were positive during the 2nd quarter of 2019 with both equity and fixed income indices extending their year-to-date gains. US stocks outperformed international stocks during a very volatile quarter. Equity indices rose to start the period as progress in global trade negotiations outweighed signs of weakness in macroeconomic data. However, trade discussions between the US and China fell apart in May prompting increased tariffs and sharp declines in equity markets. The softening in economic data, stubbornly low inflation and the threat of slower future growth caused by ongoing disruption in trade led the Federal Reserve (Fed) to communicate a shift toward a more accommodative policy stance. This change in central bank posture caused markets to rebound strongly, ending the quarter higher for the period. Fixed income returns were also positive during the quarter as the prospect of more accommodative monetary policy pushed interest rates lower, increasing bond prices. Within domestic equity markets, large cap stocks outperformed small cap equities during the quarter with the S&P 500 Index returning 4.3% versus a 2.1% return on the small cap Russell 2000 Index. US equity returns over the 1-year period were positive within large and mid cap stocks, returning 10.4% and 7.8% respectively, but small cap stocks posted a loss, falling -3.3%.
- Similar to US markets, international markets were volatile during the 2nd quarter as investors reacted to mixed economic data, heightened geopolitical uncertainty, particularly around the outlook for global trade and Brexit, and increased accommodation in central bank policy with the European Central Bank (ECB) and People's Bank of China (PBoC) pledging additional stimulus if needed. Developed markets outperformed emerging markets during the period with the MSCI EAFE Index returning 3.7% versus a 0.6% return on the MSCI Emerging Markets Index. Both developing and emerging markets posted modest gains over the 1-year period, returning 1.1% and 1.2% respectively.
- Fixed income returns were in line with equities during the 2nd quarter. The broad market Bloomberg Barclays Aggregate Index returned 3.1% as a more dovish stance from the Fed and other global central banks pushed interest rates lower across the US Treasury Yield Curve. The curve steepened but remained inverted with shorter-term maturities paying higher interest rates than those in the middle of the curve. Investment grade corporate issues were the best performing securities for the second quarter in a row, outperforming Treasury and securitized issues. The Bloomberg Barclays Corporate IG Index returned 4.5% for the period, as corporate credit had tailwinds due to greater interest rate sensitivity, higher yields and tightening credit spreads. Corporate issues also outperformed the other major fixed income sectors over the 1-year period, returning 10.7% versus a 7.9% return for the Bloomberg Barclays Aggregate Index.

### Quarter Performance

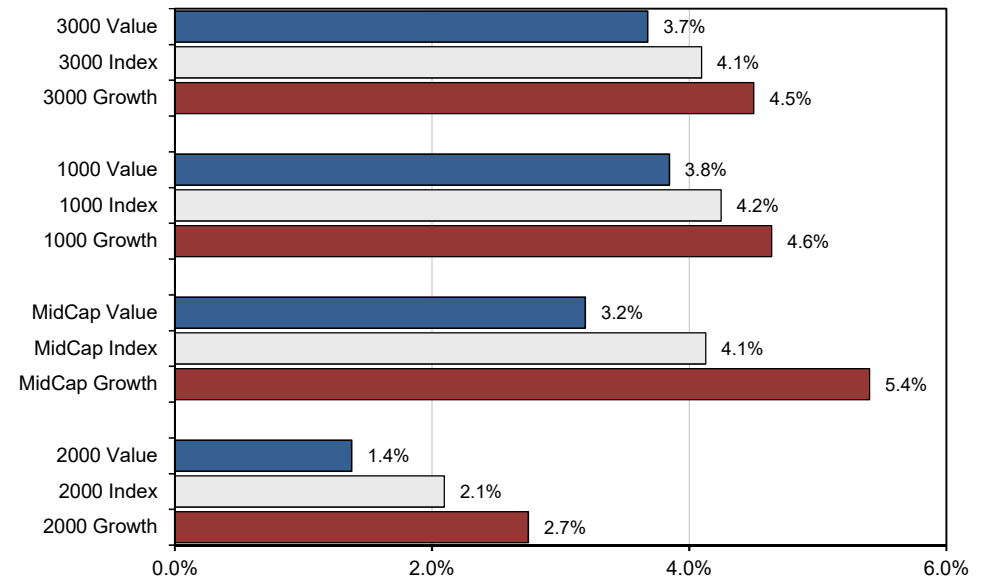


### 1-Year Performance

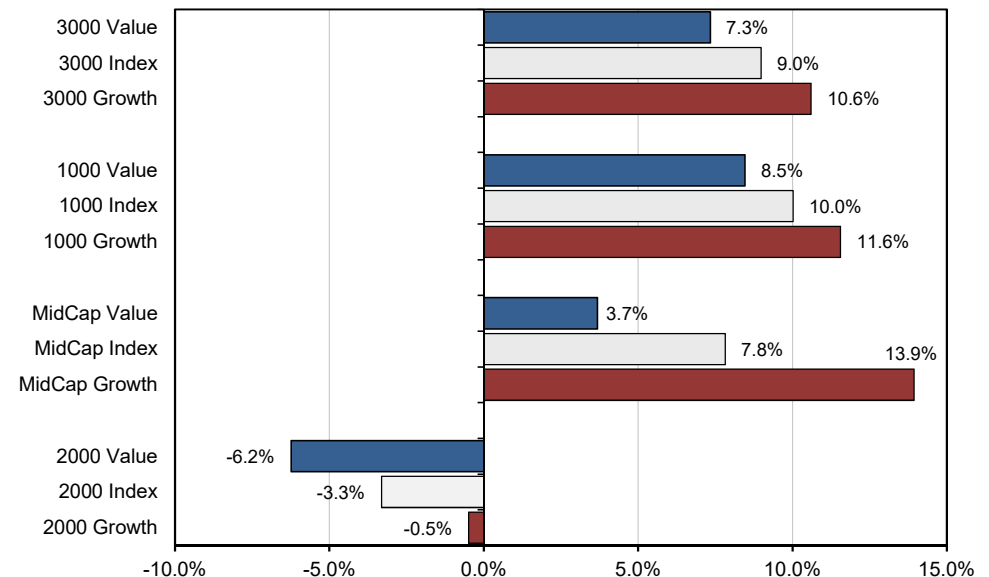


- US equity index returns were modestly positive across the style and capitalization spectrum for the 2nd quarter. Corporate earnings reported during the quarter surprised to the upside, but economic data released during the period showed signs of slowing growth. Developments around global trade were particularly prominent during the period, heavily influencing market sentiment. Positive developments in trade negotiations with China came to an abrupt halt in May leading the US to increase tariffs on \$200 billion of Chinese imports from 10% to 25% and announce that the US would consider tariffs on the remaining \$300 billion in goods imported from China. China retaliated by increasing the tariff range on \$60 billion of US goods from 5-10% to 5-25%. Additionally, the US instituted a ban on sales of technology equipment to Chinese telecommunications firm Huawei citing national security risks. China is expected to take similar action in retaliation although nothing has been announced. Trade talks are ready to resume and both sides have agreed to cease escalations following a meeting between President Trump and President Jinping at the G20 summit held at the end of the quarter. In addition, President Trump threatened a 5% tariff on all Mexican imports as a tact to reduce the level of illegal immigration at the US border with Mexico, and US waivers on sanctions for Iranian oil ended leading to increased tensions in the region that were further escalated after Iran downed a US drone. Despite these headwinds, markets rose following comments from an increasingly accommodative Fed as investors priced in greater odds of easy monetary policy going forward.
- During the quarter, higher market cap stocks outperformed lower market cap stocks across the style spectrum with the only exception being the outperformance of mid cap growth stocks relative to large cap growth stocks. The large cap Russell 1000 Index gained 4.2% during the period versus a 4.1% return for the Russell MidCap Index and a 2.1% gain on the small cap Russell 2000 Index as market participants may be moving toward the relative safety of large cap names as the economy continues to show growing signs of weakness. When viewed over the most recent 1-year period, large cap stocks outperformed relative to small cap stocks. The Russell 1000 returned 10.0% for the year while the Russell 2000 fell -3.3%.
- Growth indices outperformed value indices across the market cap spectrum during the 2nd quarter. Growth stocks have outperformed value in nine of the last ten quarters. The Russell MidCap Growth Index was the best performing style index for the period, returning 5.4% for the quarter with the small cap value index posting the lowest relative return, a gain of 1.4%. The trend of growth outperformance is also visible over the 1-year period as growth indices have benefitted from larger exposures to technology which has been a large driver of index performance over the last year, as well as a meaningful underweight to energy which has been a relative detractor.

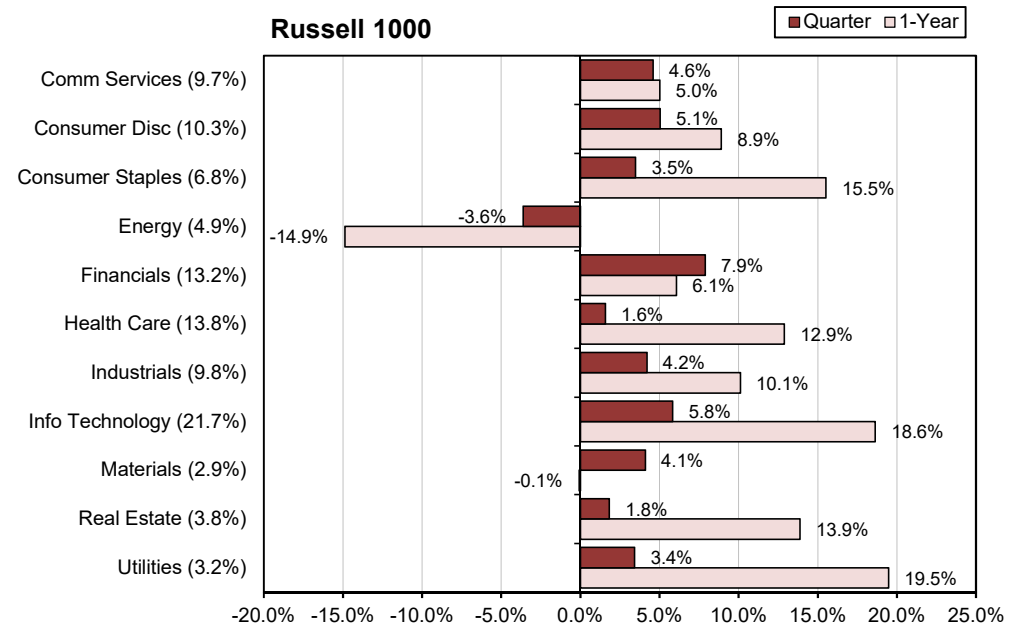
#### Quarter Performance - Russell Style Series



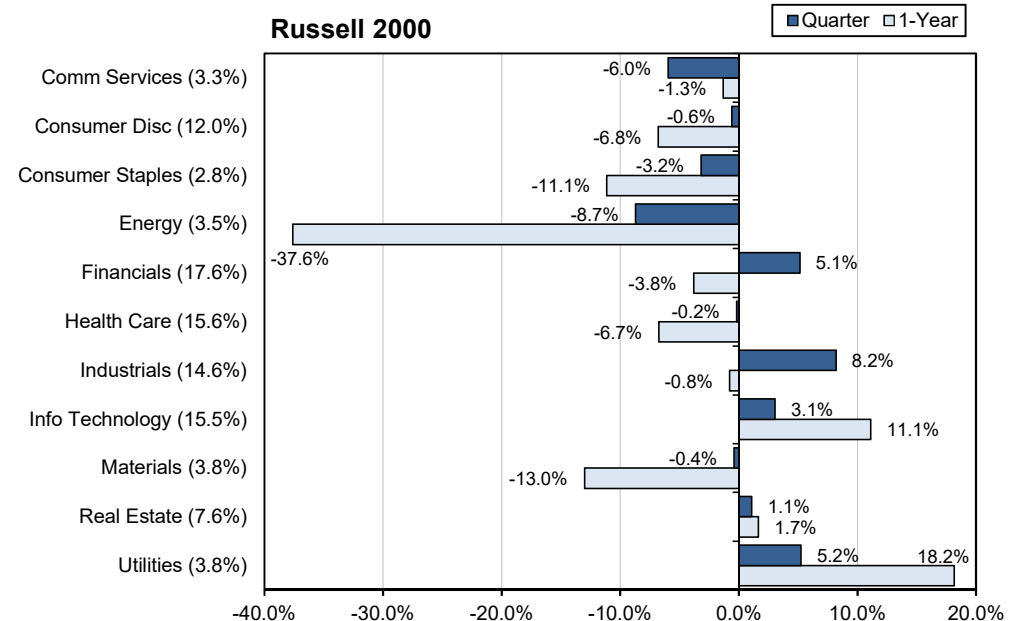
#### 1-Year Performance - Russell Style Series



- Sector performance was broadly positive across large cap sectors for the 2nd quarter. There were gains for ten out of eleven sectors within the Russell 1000 Index during the period with four sectors outpacing the return of the index. Cyclical sectors such as technology, industrials and consumer discretionary were some of the best performers through the quarter returning 5.8%, 4.2% and 5.1% respectively. Financials also outperformed, returning 7.9%, as investors weighed the benefits of continued economic expansion due to easing monetary policy against the effects of lower interest rates on bank earnings. More defensive higher yielding sectors such as consumer staples, real estate and utilities underperformed for the quarter returning 3.5%, 1.8% and 3.4% respectively. The energy sector was the only large cap sector to post a negative return during the quarter, falling -3.6%, as headwinds from weakening economic data and low oil and natural gas prices weighed on 1st quarter earnings. Health care stocks also lagged as continued discussions in Washington around the potential for increased regulation on drug pricing acted as a headwind. Returns over the 1-year period were positive with nine out of eleven sectors posting gains, six of which were over 10%. Defensive sectors such as utilities, REITs and consumer staples performed well returning 19.5%, 13.9% and 15.5% respectively. Technology returns were also strong gaining 18.6%. Energy and materials were the only sectors to post negative results over the 1-year period with energy falling -14.9% and materials returning -0.1%.



- Quarterly results for small cap sectors were generally worse than their large capitalization counterparts with only two of eleven sectors (industrials and utilities) outperforming their corresponding large cap equivalents. Five of eleven sectors produced gains during the period with four of eleven economic sectors outpacing the Russell 2000 Index return for the quarter. Similar to large caps, cyclical sectors performed well on hopes that any Fed policy easing would counteract the recent weakness in economic growth. The industrials sector performed particularly well returning 8.2%, financials posted a 5.1% gain and technology returned 3.1%. Utilities also outperformed returning 5.2%. The largest detractors over the period were energy and communication services which returned -8.7% and -6.0% respectively. Over the trailing 1-year period, returns were broadly negative. Utilities and technology were relative bright spots returning 18.2% and 11.1%. The energy sector was an outlier in terms of negative returns losing -37.6% during the period. There were also notable losses in materials and consumer staples with materials losing -13.0% and consumer staples falling -11.1%.



**The Market Environment**  
**Top 10 Index Weights & Quarterly Performance for the Russell 1000 & 2000**  
As of June 30, 2019

Top 10 Weighted Stocks				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Microsoft Corp	3.71%	14.0%	37.5%	Information Technology
Apple Inc	3.44%	4.6%	8.6%	Information Technology
Amazon.com Inc	2.85%	6.3%	11.4%	Consumer Discretionary
Facebook Inc A	1.68%	15.8%	-0.7%	Communication Services
Berkshire Hathaway Inc B	1.51%	6.1%	14.2%	Financials
Johnson & Johnson	1.37%	0.3%	17.9%	Health Care
JPMorgan Chase & Co	1.35%	11.3%	10.3%	Financials
Alphabet Inc Class C	1.20%	-7.9%	-3.1%	Communication Services
Exxon Mobil Corp	1.19%	-4.1%	-3.3%	Energy
Alphabet Inc A	1.18%	-8.0%	-4.1%	Communication Services

Top 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Adient PLC	0.01%	87.3%	-50.0%	Consumer Discretionary
Anadarko Petroleum Corp	0.13%	55.8%	-1.6%	Energy
Cypress Semiconductor Corp	0.03%	49.8%	46.9%	Information Technology
Okta Inc A	0.04%	49.3%	145.2%	Information Technology
Erie Indemnity Co Class A	0.02%	43.2%	122.5%	Financials
Heico Corp	0.02%	41.1%	83.9%	Industrials
Legg Mason Inc-LeggMason RETAIL	0.01%	39.9%	14.4%	Financials
Exact Sciences Corp	0.05%	36.3%	97.4%	Health Care
Caesars Entertainment Corp	0.02%	36.0%	10.5%	Consumer Discretionary
Ardagh Group SA	0.00%	35.9%	9.6%	Materials

Bottom 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
2U Inc	0.01%	-46.9%	-55.0%	Information Technology
Alkermes PLC	0.01%	-38.2%	-45.2%	Health Care
Range Resources Corp	0.01%	-37.7%	-58.0%	Energy
Antero Resources Corp	0.00%	-37.4%	-74.1%	Energy
Chesapeake Energy Corp	0.01%	-37.1%	-62.8%	Energy
RPC Inc	0.00%	-36.5%	-48.8%	Energy
Realogy Holdings Corp	0.00%	-35.8%	-67.4%	Real Estate
The Chemours Co	0.02%	-34.7%	-44.2%	Materials
United Therapeutics Corp	0.01%	-33.5%	-31.0%	Health Care
Mylan NV	0.04%	-32.8%	-47.3%	Health Care

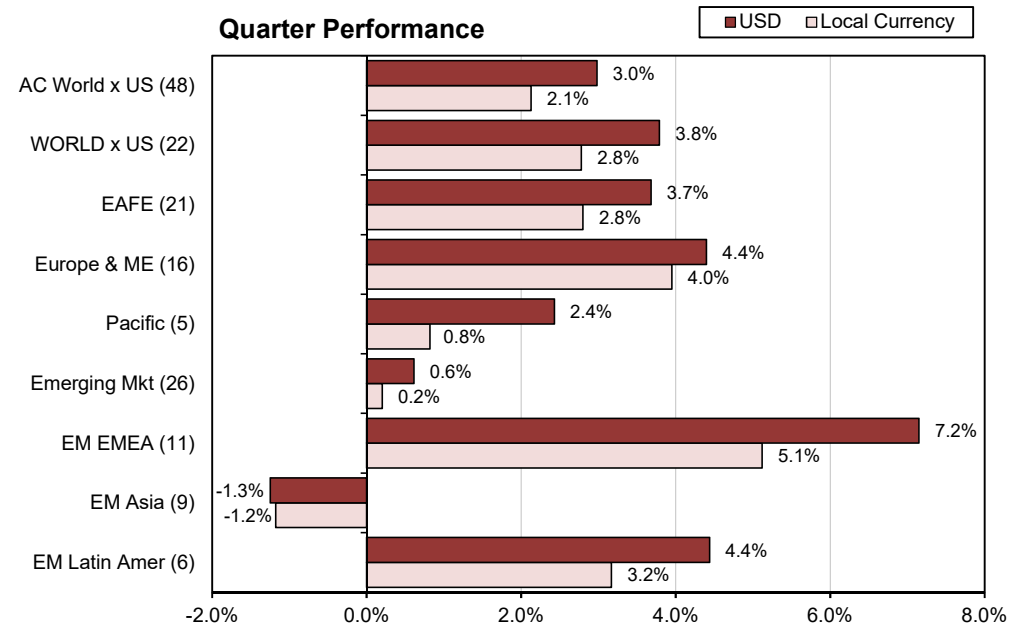
Top 10 Weighted Stocks				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Array BioPharma Inc	0.48%	90.0%	176.1%	Health Care
The Trade Desk Inc A	0.37%	15.1%	142.8%	Information Technology
Etsy Inc	0.36%	-8.7%	45.5%	Consumer Discretionary
Coupa Software Inc	0.35%	39.2%	103.4%	Information Technology
Five Below Inc	0.32%	-3.4%	22.8%	Consumer Discretionary
Planet Fitness Inc A	0.31%	5.4%	64.9%	Consumer Discretionary
HubSpot Inc	0.31%	2.6%	36.0%	Information Technology
Haemonetics Corp	0.30%	37.6%	34.2%	Health Care
Woodward Inc	0.30%	19.4%	48.0%	Industrials
Ciena Corp	0.29%	10.1%	55.1%	Information Technology

Top 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Iovance Biotherapeutics Inc	0.13%	157.8%	91.6%	Health Care
Arqule Inc	0.06%	129.9%	99.1%	Health Care
Adverum Biotechnologies Inc	0.03%	126.9%	124.3%	Health Care
Chimerix Inc	0.01%	105.7%	-9.2%	Health Care
Enphase Energy Inc	0.08%	97.5%	170.9%	Information Technology
Maxar Technologies Inc	0.02%	94.8%	-84.0%	Industrials
Array BioPharma Inc	0.48%	90.0%	176.1%	Health Care
Melinta Therapeutics Inc	0.00%	87.3%	-79.1%	Health Care
G1 Therapeutics Inc	0.03%	84.7%	-29.5%	Health Care
Foundation Building Materials Inc	0.01%	80.7%	15.6%	Industrials

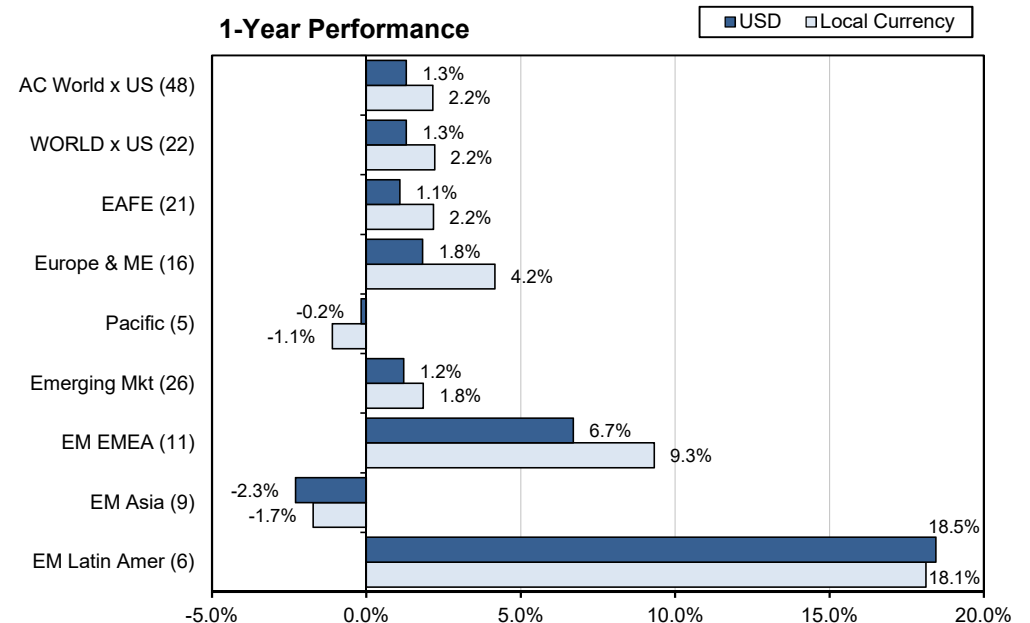
Bottom 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
FuelCell Energy Inc	0.00%	-94.0%	-98.9%	Industrials
Halcon Resources Corp	0.00%	-86.9%	-96.0%	Energy
Pioneer Energy Services Corp	0.00%	-85.7%	-95.7%	Energy
Eros International PLC	0.00%	-85.2%	-89.6%	Communication Services
Superior Energy Services Inc	0.01%	-72.2%	-86.7%	Energy
electroCore Inc	0.00%	-71.4%	-87.9%	Health Care
Ultra Petroleum Corp	0.00%	-70.5%	-92.2%	Energy
Nuvectra Corp	0.00%	-69.6%	-83.7%	Health Care
Dean Foods Co	0.00%	-69.5%	-91.1%	Consumer Staples
Kirkland's Inc	0.00%	-67.9%	-80.6%	Consumer Discretionary

- Broad international equity returns were positive for the quarter in both local currency and USD terms. The MSCI ACWI ex US Index gained 2.1% in local currency terms and 3.0% in US dollar (USD) terms during the 2nd quarter. Similar to US markets, international equity investors balanced difficulties around global trade with central bank shifts toward more accommodative policies as a response to slowing global growth. Notably the ECB President Mario Draghi stated that further monetary policy action may need to be taken if inflation remains below target and the PBoC launched stimulus measures designed to encourage growth following the deterioration of trade negotiations with the US. Returns in USD largely outperformed those in local currency during the quarter as the USD depreciated against most major developed currencies following dovish Fed comments in June. However, the recent USD strength can still be seen over the 1-year period with USD returns trailing most local currency returns. Returns for the MSCI ACWI ex US Index were 2.2% in local currency terms and 1.3% in USD terms for the trailing year.
- Results for developed market international indices were positive in both local currency and USD terms during the 2nd quarter, with the MSCI EAFE Index returning 2.8% and 3.7% respectively. Outside of central bank policy and trade, there was notable news out of the UK with Prime Minister Theresa May resigning from her post after her Brexit withdrawal plan failed to gain parliamentary approval and a new vote for the office is currently underway. UK markets were pressured by continued uncertainty around Brexit with the UK having until October to strike an agreement with the European Union (EU) or withdraw with no agreement in place. Despite the growing uncertainty, the Bank of England (BoE) left monetary policy unchanged. Japan also underperformed as the yen appreciated due to its perceived safe haven status and trade headwinds were expected to affect its export driven economy. The MSCI EAFE Index returned 2.2% and 1.1% for the last twelve months in local currency and USD terms respectively.
- Emerging markets underperformed relative to developed markets for the 2nd quarter, slightly appreciating in both local currency and USD terms. The MSCI Emerging Markets Index gained 0.2% and 0.6% respectively. As expected, geopolitical tensions around trade put pressure on emerging market stocks, with Chinese equities underperforming relative to most countries. Latin American stocks performed well with Brazil and Argentina posting strong returns as commodity prices appreciated from recent lows at the end of 2018 and interest rates fell. Russian equities also performed well, benefiting from increasing commodity prices, but also had a tailwind from a decrease in the likelihood of future US sanctions. One year returns for the MSCI Emerging Market Index were 1.8% in local currency terms and 1.2% in USD terms.

### Quarter Performance



### 1-Year Performance





**The Market Environment**  
**US Dollar International Index Attribution & Country Detail**  
As of June 30, 2019

MSCI - EAFE	Sector Weight	Quarter Return	1-Year Return
Communication Services	5.4%	4.0%	4.3%
Consumer Discretionary	11.1%	5.9%	-2.6%
Consumer Staples	11.7%	1.9%	4.8%
Energy	5.6%	0.4%	-5.5%
Financials	18.9%	4.3%	-2.9%
Health Care	11.2%	2.0%	7.5%
Industrials	14.8%	5.9%	2.4%
Information Technology	6.7%	6.6%	2.7%
Materials	7.4%	3.9%	0.2%
Real Estate	3.6%	-2.2%	2.3%
Utilities	3.6%	1.5%	9.8%
<b>Total</b>	<b>100.0%</b>	<b>3.7%</b>	<b>1.1%</b>

MSCI - ACWIxUS	Sector Weight	Quarter Return	1-Year Return
Communication Services	6.9%	1.0%	5.6%
Consumer Discretionary	11.3%	3.8%	-3.6%
Consumer Staples	9.8%	2.2%	4.6%
Energy	7.2%	0.5%	-1.4%
Financials	21.9%	4.4%	2.0%
Health Care	8.3%	1.2%	4.2%
Industrials	11.9%	5.2%	2.9%
Information Technology	8.5%	4.0%	-0.7%
Materials	7.6%	2.9%	-0.5%
Real Estate	3.3%	-1.6%	4.3%
Utilities	3.3%	2.2%	10.1%
<b>Total</b>	<b>100.0%</b>	<b>3.0%</b>	<b>1.3%</b>

MSCI - Emerging Mkt	Sector Weight	Quarter Return	1-Year Return
Communication Services	11.7%	-2.4%	4.5%
Consumer Discretionary	13.5%	-1.2%	-7.6%
Consumer Staples	6.6%	3.3%	0.9%
Energy	7.9%	1.2%	16.3%
Financials	25.2%	4.0%	11.9%
Health Care	2.6%	-6.6%	-24.7%
Industrials	5.3%	0.0%	4.1%
Information Technology	13.9%	-0.1%	-6.1%
Materials	7.6%	-1.2%	-1.9%
Real Estate	3.0%	-0.2%	10.1%
Utilities	2.7%	2.9%	9.0%
<b>Total</b>	<b>100.0%</b>	<b>0.6%</b>	<b>1.2%</b>

Country	MSCI-EAFE Weight	MSCI-ACWIxUS Weight	Quarter Return	1- Year Return
Japan	23.7%	15.8%	1.0%	-4.2%
United Kingdom	16.8%	11.2%	0.9%	-2.1%
France	11.4%	7.6%	6.5%	3.0%
Switzerland	9.3%	6.2%	8.4%	19.8%
Germany	8.8%	5.9%	7.1%	-3.8%
Australia	7.1%	4.8%	7.3%	6.6%
Hong Kong	4.0%	2.7%	1.0%	10.4%
Netherlands	3.6%	2.4%	5.8%	5.3%
Spain	3.0%	2.0%	2.6%	-2.1%
Sweden	2.7%	1.8%	4.9%	3.4%
Italy	2.3%	1.6%	2.9%	-0.7%
Denmark	1.7%	1.1%	1.6%	5.8%
Singapore	1.4%	0.9%	7.0%	8.3%
Finland	1.0%	0.7%	0.2%	-4.7%
Belgium	1.0%	0.7%	1.2%	-9.1%
Norway	0.7%	0.5%	2.4%	-4.3%
Israel	0.6%	0.4%	-3.6%	-4.5%
Ireland	0.5%	0.4%	4.7%	-9.2%
New Zealand	0.3%	0.2%	3.9%	16.0%
Austria	0.2%	0.2%	0.8%	-13.1%
Portugal	0.2%	0.1%	1.6%	-4.6%
<b>Total EAFE Countries</b>	<b>100.0%</b>	<b>66.8%</b>	<b>3.7%</b>	<b>1.1%</b>
Canada		6.8%	4.9%	3.3%
<b>Total Developed Countries</b>		<b>73.6%</b>	<b>3.8%</b>	<b>1.3%</b>
China		8.3%	-4.0%	-6.7%
Korea		3.3%	-1.0%	-9.1%
Taiwan		2.9%	0.9%	1.1%
India		2.4%	0.5%	7.9%
Brazil		2.0%	7.2%	39.4%
South Africa		1.6%	6.6%	-0.8%
Russia		1.1%	16.9%	27.1%
Thailand		0.8%	9.3%	19.8%
Saudi Arabia		0.8%	0.6%	11.0%
Mexico		0.7%	1.1%	-7.4%
Indonesia		0.6%	3.2%	20.3%
Malaysia		0.6%	1.2%	-0.8%
Philippines		0.3%	4.4%	19.7%
Poland		0.3%	3.5%	10.5%
Qatar		0.3%	0.6%	18.8%
Chile		0.2%	-5.6%	-12.1%
United Arab Emirates		0.2%	-2.7%	3.0%
Turkey		0.1%	2.8%	-17.1%
Colombia		0.1%	-2.4%	-3.7%
Peru		0.1%	-1.9%	3.5%
Argentina		0.1%	31.7%	15.8%
Greece		0.1%	16.2%	-9.2%
Hungary		0.1%	-4.1%	12.7%
Czech Republic		0.0%	2.6%	1.1%
Egypt		0.0%	7.8%	5.4%
Pakistan		0.0%	-20.8%	-36.7%
<b>Total Emerging Countries</b>		<b>26.4%</b>	<b>0.6%</b>	<b>1.2%</b>
<b>Total ACWIxUS Countries</b>		<b>100.0%</b>	<b>3.0%</b>	<b>1.3%</b>

Source: Morningstar Direct, MSCI Global Index Monitor (Returns are Net in USD)

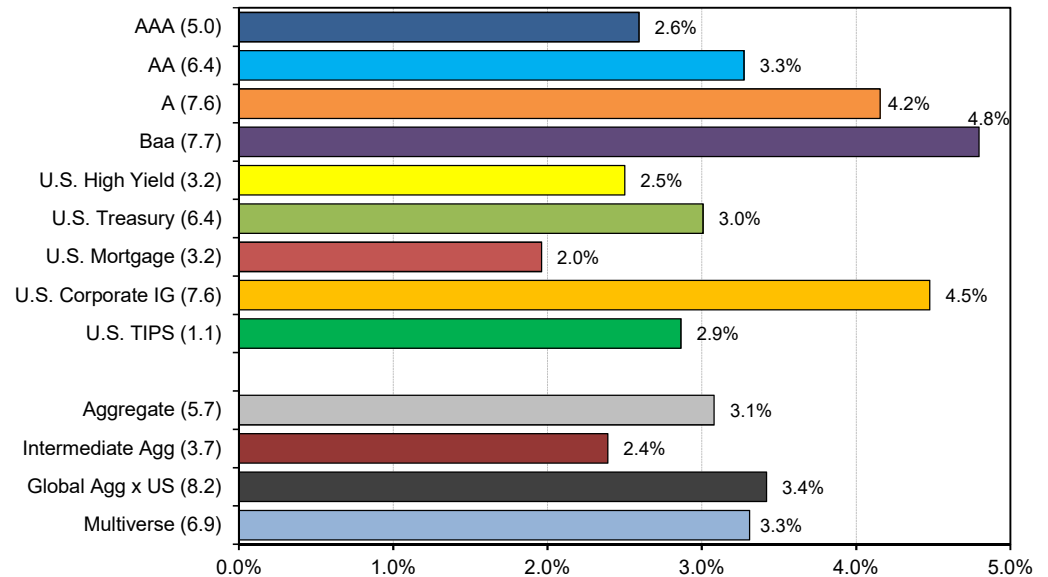
As a result of the GICS classification changes on 9/28/2018 and certain associated reporting limitations, sector performance represents backward looking performance for the prior year of each sector's current constituency, post creation of the Communication Services sector.



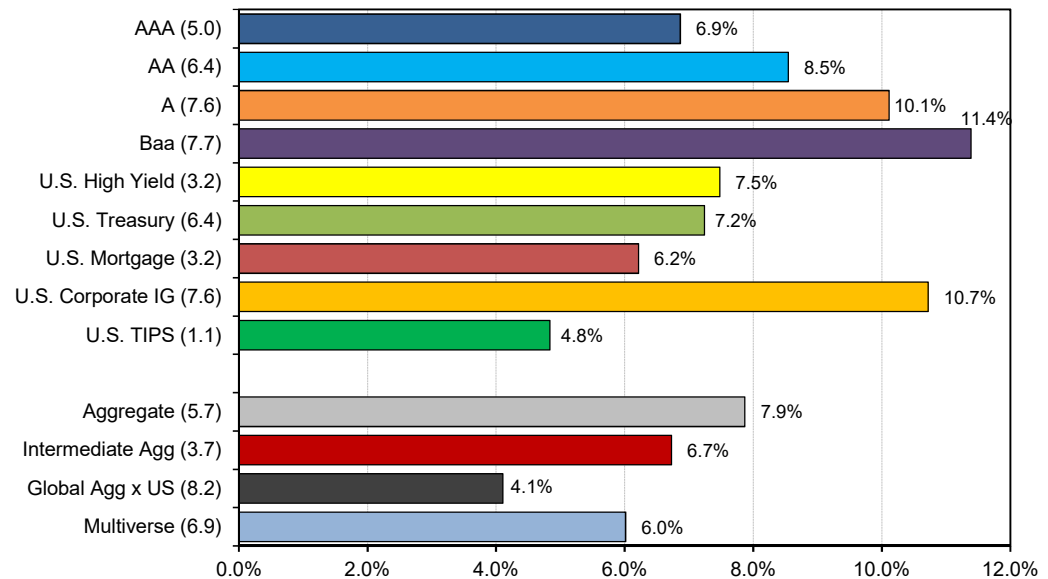


- Broad fixed income benchmarks built on their early 2019 gains during the 2nd quarter. During the 1st quarter, the Federal Open Market Committee (FOMC) reacted to a difficult end to 2018 by issuing guidance that the FOMC is no longer projecting any further interest rate increases through 2019. Federal Reserve Chair Jerome Powell also stated that the Fed would begin tapering the roll off from the planned balance sheet reduction program in May with a plan to halt the program entirely in September. The stoppage of the balance sheet reduction program represents an easing of monetary policy. The Fed took an increasingly dovish stance during the 2nd quarter reacting to softening economic data, tepid inflation and increased risks around global trade. While the committee left interest rates unchanged, the minutes from the June FOMC meeting indicate that the committee felt “downside risks to the outlook for economic activity had risen materially” during the quarter with several participants noting that a “near-term cut in the target range for the Federal Funds Rate could help cushion the effects of possible future adverse shocks to the economy”. These comments led market participants to forecast greater odds of an interest rate cut this year, pushing markets higher. Interest rates fell across all maturities on the US Treasury Yield Curve with the greatest declines occurring in the mid- and long-term issues. The curve remains inverted with short-term maturities paying higher interest rates than issues in the mid- to long-end of the curve. The bellwether Bloomberg Barclays US Aggregate Index posted positive returns for both the 1st quarter and the 1-year period, returning 3.1% and 7.9% respectively.
- Within investment grade credit, lower quality issues outperformed higher quality issues as investors gravitated toward higher risk securities during the quarter. Lower quality issues also benefitted from their higher durations. On an absolute basis, without negating the duration differences in the sub-indices, Baa rated credit was the best performing investment grade credit quality segment returning 4.8% for the quarter, while AAA was the worst performing, returning 2.6%. High yield issues returned 2.5% for the quarter as these issues did not commensurately benefit from the drop in interest rates due to their lower durations. Returns over the 1-year period generally show lower quality securities outperforming higher quality issues.
- Investment grade corporates outperformed the more defensive Treasury and mortgage backed sectors of the Bloomberg Barclays US Aggregate Index’s three broad sectors during the 2nd quarter. Investment grade corporate credit returned 4.5%, as falling interest rates benefitted these securities to a greater degree and credit spreads have continued to tighten since the end of 2018. When viewed over the 1-year period, corporate credit outperformed both Treasuries and mortgage backed securities. Corporate issues returned 10.7% versus a 6.2% return for mortgages and 7.2% gain on Treasury securities.

#### Quarter Performance

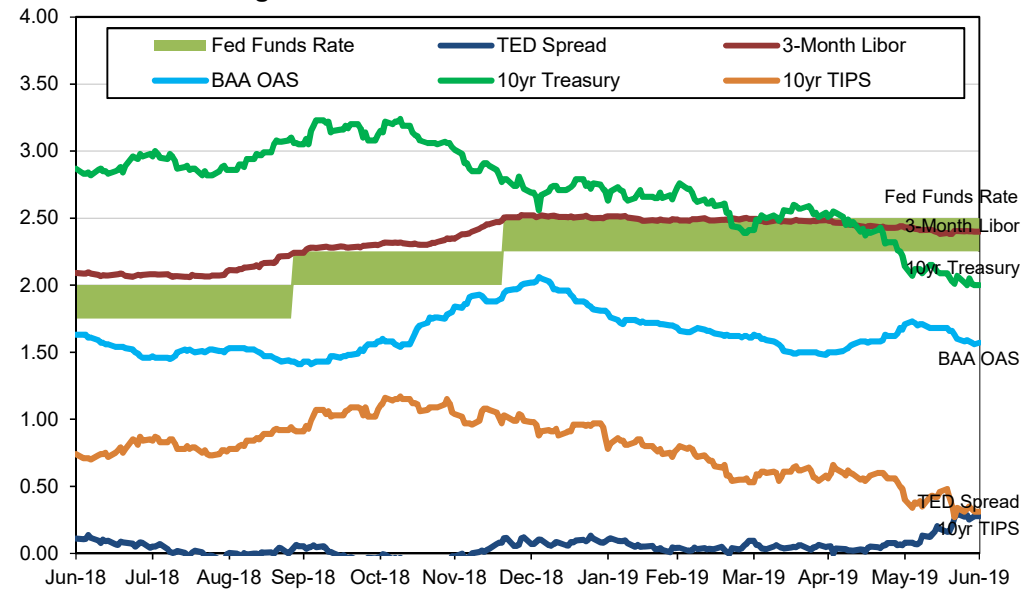


#### 1-Year Performance

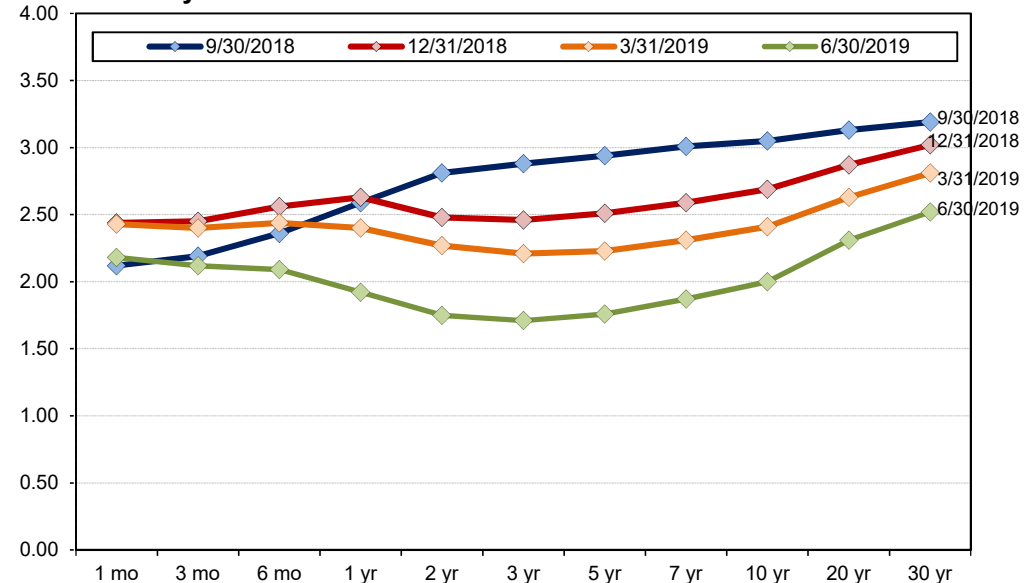


- Global fixed income returns were in line with their domestic counterparts, slightly outperforming during the 2nd quarter. These indices have lower, or in some cases (Germany, Japan), negative yields, but have higher durations. The returns of these indices are also significantly influenced by fluctuations in their currency denomination relative to the USD. The USD depreciated against most other developed currencies, acting as a tailwind to global bond indices. The return on global bonds, as represented by the Bloomberg Barclays Global Aggregate ex US Index, was 3.4%. Global bonds still trail over the 1-year period with the Global Aggregate ex US Index returning 4.1% versus a 7.9% return on the domestically focused Barclays Aggregate Index. As global growth has shown signs of stalling, several international central banks have started to step back from more restrictive postures. The ECB and the PBoC have moved toward an easing of monetary policy and implemented various stimulus programs designed to support their respective economies. The Bank of England and the Bank of Japan made no major policy changes during the quarter as they continue to review macroeconomic data within their respective countries.
- Much of the index performance detailed in the bar graphs on the previous page is visible on a time series basis by reviewing the line graphs to the right. The '1-Year Trailing Market Rates' chart illustrates that the 10-year Treasury yield (green line) fell from recent high's greater than 3.0%, to 2.0% to end the quarter. The blue line illustrates changes in the BAA OAS (Option Adjusted Spread). This measure quantifies the additional yield premium that investors require to purchase and hold non-Treasury issues. This line illustrates an abrupt increase in credit spreads during the 4th quarter of 2018 as investors moved to higher quality assets during the quarter's risk-off environment. Subsequently, spreads dropped steadily until they rose again in May and then later declined in June. This spread tightening is equivalent to an interest rate decrease on corporate bonds, which produces an additional tailwind for corporate bond index returns. These credit spreads have tightened by about 6 basis points over the last three months. The green band across the graph illustrates the gradual increase in the Federal Funds Rate due to the tightening of US monetary policy during 2018. There have been no changes to the Federal Funds Rate in 2019.
- The lower graph provides a snapshot of the US Treasury yield curve at the end of each of the last four calendar quarters. The downward shift in interest rates as well as a general steepening of the yield curve are clearly visible over the last quarter. As mentioned, the yield curve continues to invert as yields on shorter-term maturities fell less than interest rates in the middle- to long-end of the curve.

**1-Year Trailing Market Rates**



**Treasury Yield Curve**



**Southfield Employees Retirement System**  
**Total Fund Asset Allocation Compliance Summary**  
June 30, 2019

Total Portfolio Compliance Summary							
	June 30, 2019 Market Value \$	Current Allocation %	Target Allocation %	Range Allocation %	Act 314 Limit %	Compliance within Ranges	Compliance w/314 Limits
Total Portfolio (excluding Unfunded Commitments)	111,883,836.32	100.0%	100.0%				
Total Equity (14)	75,683,250.56	67.6%	63.5%	53.0% - 70.0%	70.0%	YES	YES
Domestic Equity (14)	56,848,126.07	50.8%	48.0%	43.0% - 53.0%	70.0%	YES	YES
International Equity (14)	18,835,124.49	16.8%	15.5%	10.0% - 20.0%	70.0%	YES	YES
Total US Fixed Income (17 & 17.1.a.iii)	15,757,973.65	14.1%	22.0%	15.0% - 30.0%	100.0%	NO	YES
US Investment Grade Fixed Income (17)	10,781,235.22	9.6%	15.0%	10.0% - 25.0%	100.0%	NO	YES
US Non-Investment Grade Fixed Income (17.1.a.iii)	4,976,738.43	4.4%	5.0%	0.0% - 10.0%	100.0%	YES	YES
Total Non US Fixed Income (20k)	3,366,421.76	3.0%	2.0%	0.0% - 10.0%	20.0%	YES	YES
Total Real Estate (18 & 19)	7,804,086.43	7.0%	6.0%	0.0% - 10.0%	20.0%	YES	YES
Alternative Investments (20d)	8,520,257.92	7.6%	8.5%	0.0% - 10.0%	20.0%	YES	YES
Short Term/Cash Reserves	751,846.00	0.7%	0.0%	0.0% - 5.0%	N/A	YES	YES



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## EXECUTIVE SUMMARY: 4Q 2018

### Market Summary:

The US equity market plummeted during the 4<sup>th</sup> quarter and volatility returned. The sell off may be attributed to several factors, including the Federal Reserve's forecasts for several rate increases in 2019, the slowing global economy, persistent trade tensions with China, politics (midterm elections and federal debt ceiling standoff), and other concerns. The decline was broad based with most sectors falling by double digits during the quarter; larger companies survived the best (S&P 500 down 13.5%), followed by mid-caps and small-caps. The international equity markets fared slightly better (MSCI EAFE -12.5% and MSCI Emerging Markets -7.5%); however, these markets did not keep pace with the US markets over the summer and significantly lagged over the full year. The fixed income market managed a modest gain during the quarter (BB US Aggregate 1.6%). Treasuries and mortgages led as investors focused on safety; corporate bonds struggled, as they were influenced by the equity markets. The Federal Reserve hiked interest rates for a fourth time this year in December and the yield curve continued to flatten (short term rates rising faster than longer term rates); at quarter end the Fed Funds Rate was 2.25% - 2.50%. In late December the Fed softened their language on future rate increases and the equity market rallied.

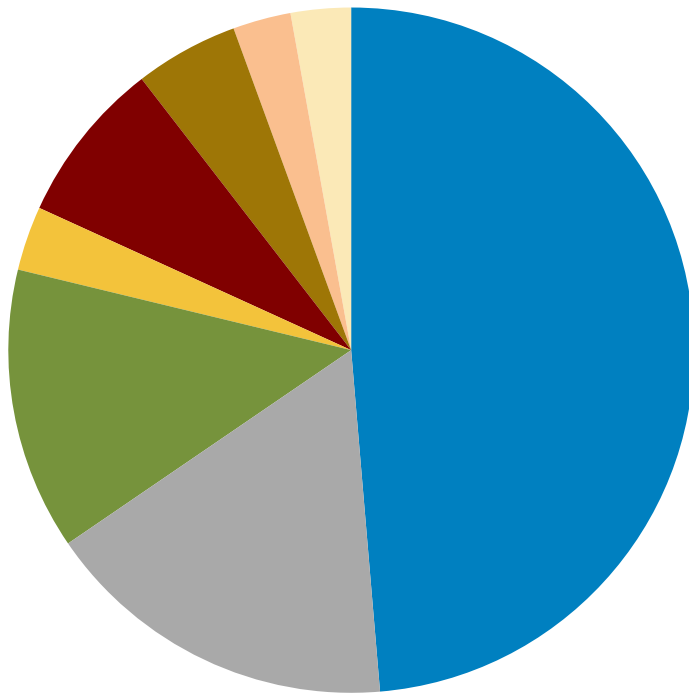
### Conclusions/Recommendations:

1. The Total Fund returned -10.37% during the quarter, trailing the Policy Index by 1.00% and ranking in the bottom half of the Public Fund universe. The Fund was hindered by the significant allocation to small and mid cap stocks and weak performance from several of the active managers, particularly QMA (mid cap), LSV (intl equity), and Bloomfield II (direct lending).
2. The Total Fund posted a return of -6.01% over the past year, under performing the Policy Index and ranking in the bottom half of the peer group. Longer-term, the Fund has performed very well, generally exceeding the Policy Index and ranking in the top third of the peer group.
3. Champlain out performed the Russell Mid Cap Index and ranked near the top of their peer group. The manager benefited from strong stock selection within the Information Technology and Consumer Discretionary sectors. Over the past year the manager has exceeded their benchmark by 13.6%.
4. Bloomfield Capital II struggled this quarter. The manager has returned over 60% of the capital during the last 12 months; the remaining portfolio contains some challenging loans and due to the smaller capital base, these loans have a larger impact on performance.
5. Metropolitan and BTG/RMK have not yet reported their fourth quarter 2018 results (about 3% of the portfolio); these strategies will have minimal impact on the Total Fund. As of 12/31/18, the Plan has outstanding investment commitments with Bloomfield Capital V.

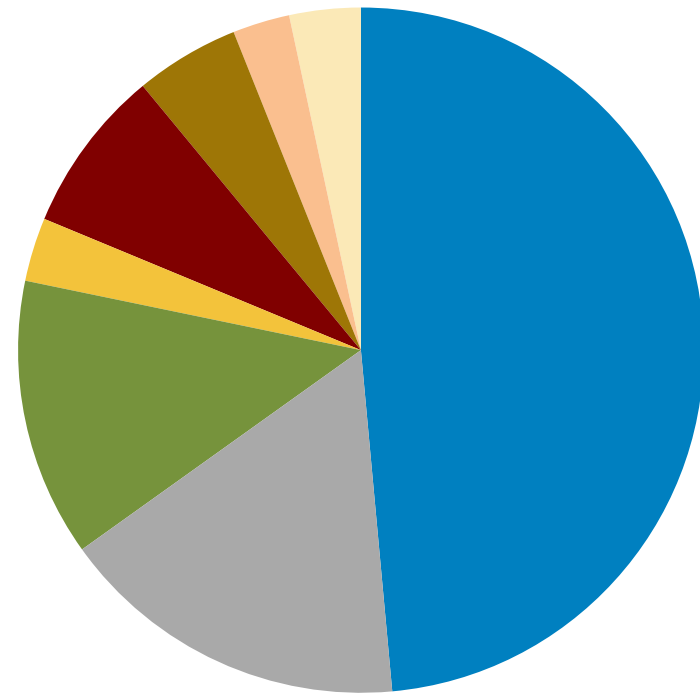
The Fund was slightly below the minimum allocation to domestic fixed income (9.1% vs. 10.0%); see AndCo's rebalancing recommendation on the Asset/Manager Summary handout. We did not detect any other violations of investment policies



Asset Allocation By Segment as of  
March 31, 2019 : \$110,221,006



Asset Allocation By Segment as of  
June 30, 2019 : \$111,883,836



Allocation			Allocation		
Segments	Market Value	Allocation	Segments	Market Value	Allocation
Domestic Equity	53,635,713	48.7	Domestic Equity	54,309,779	48.5
International Equity	18,515,854	16.8	International Equity	18,546,926	16.6
Domestic Fixed Income	14,681,366	13.3	Domestic Fixed Income	14,692,470	13.1
Global Fixed Income	3,339,772	3.0	Global Fixed Income	3,366,422	3.0
Real Estate	8,518,907	7.7	Real Estate	8,685,731	7.8
Hedge Fund	5,383,239	4.9	Hedge Fund	5,505,779	4.9
Other Illiquid Asset	3,014,479	2.7	Other Illiquid Asset	3,014,479	2.7
Cash Equivalent	3,131,677	2.8	Cash Equivalent	3,762,250	3.4

**Financial Reconciliation**  
**Total Fund**  
**1 Quarter Ending June 30, 2019**

<b>Financial Reconciliation</b>								
	<b>Market Value 04/01/2019</b>	<b>Net Transfers</b>	<b>Contributions</b>	<b>Distributions</b>	<b>Management Fees</b>	<b>Other Expenses</b>	<b>Return On Investment</b>	<b>Market Value 06/30/2019</b>
<b>Total Domestic Equity</b>	<b>55,009,462</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-64,384</b>	<b>-3,362</b>	<b>1,906,411</b>	<b>56,848,126</b>
Comerica S&P 500 Index Fund	22,135,838	-	-	-	-3,261	-	953,315	23,085,893
Champlain MC Equity	8,873,771	-	-	-	-18,856	-1,148	277,782	9,131,550
QMA US MC Equity	7,219,696	-	-	-	-7,841	-	168,154	7,380,008
SouthernSun SC	11,078,374	-5,500,000	-	-	-21,061	-1,433	244,797	5,800,676
Walhausen & Co. SMID Value	5,701,783	-	-	-	-13,365	-781	334,129	6,021,765
Great Lakes Equity	-	5,500,000	-	-	-	-	-71,766	5,428,234
<b>Total International Equity</b>	<b>18,953,373</b>	<b>-1,182,971</b>	<b>-</b>	<b>-</b>	<b>-51,297</b>	<b>-1,246</b>	<b>1,117,265</b>	<b>18,835,124</b>
LSV International LCV	9,181,039	17,029	-	-	-17,029	-	158,754	9,339,793
WCM Focused Growth International	9,772,334	-1,200,000	-	-	-34,268	-1,246	958,511	9,495,331
<b>Total Fixed Income</b>	<b>19,654,213</b>	<b>-922,436</b>	<b>-</b>	<b>-</b>	<b>-6,841</b>	<b>-1,391</b>	<b>400,851</b>	<b>19,124,395</b>
Pacific Fixed Income	10,546,228	-75,000	-	-	-6,841	-1,391	318,239	10,781,235
Bloomfield Capital Income Fund II	730,961	-220,000	-	-	-	-	65,634	576,594
Bloomfield Capital Income Fund III	4,173,041	-698,904	-	-	-	-	-28,648	3,445,489
Bloomfield Capital Income Fund V	864,211	71,468	-	-	-	-	18,976	954,655
Templeton Global Bond R6 (FBNRX)	3,339,772	-	-	-	-	-	26,650	3,366,422
<b>Total Real Estate</b>	<b>7,719,757</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-19,410</b>	<b>-</b>	<b>103,739</b>	<b>7,804,086</b>
AEW Core Property Trust	6,954,410	-	-	-	-19,410	-	103,739	7,038,739
Metropolitan Real Estate V	765,347	-	-	-	-	-	-	765,347
<b>Total Timber Funds</b>	<b>3,014,479</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3,014,479</b>
RMK Timberland US Fund	2,112,710	-	-	-	-	-	-	2,112,710
RMK Timberland Intl Fund	901,769	-	-	-	-	-	-	901,769
<b>Total Hedge Fund of Funds</b>	<b>5,383,239</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>122,540</b>	<b>5,505,779</b>
Magnitude Institutional	2,788,023	-	-	-	-	-	66,191	2,854,215
Titan Masters Int'l Fund	2,595,215	-	-	-	-	-	56,349	2,651,564
Cash Account	486,483	2,105,407	1,195,639	-2,991,054	-	-52,566	7,936	751,846
<b>Total Fund</b>	<b>110,221,006</b>	<b>-</b>	<b>1,195,639</b>	<b>-2,991,054</b>	<b>-141,932</b>	<b>-58,565</b>	<b>3,658,742</b>	<b>111,883,836</b>

\*Other expenses represent any professional fees outside of the management fee (custody, consultant, attorney, and admin).



**Comparative Performance**  
**Trailing Returns**  
**As of June 30, 2019**

Comparative Performance																	
	QTR		FYTD		1 YR		3 YR		5 YR		7 YR		10 YR		Inception		Inception Date
Total Fund	3.24	(50)	4.83	(88)	4.83	(88)	9.92	(11)	5.88	(54)	9.52	(9)	11.32	(1)	7.70	(5)	06/01/1997
Total Fund Policy	3.16	(58)	5.65	(72)	5.65	(72)	9.28	(32)	6.51	(25)	9.16	(17)	10.28	(9)	7.95	(1)	
Difference	0.08		-0.82		-0.82		0.64		-0.63		0.36		1.04		-0.25		
All Public Plans-Total Fund Median	3.24		6.36		6.36		8.92		5.99		8.23		9.14		6.91		
Total Domestic Equity	3.47	(53)	4.48	(57)	4.48	(57)	12.13	(48)	7.03	(61)	12.10	(53)	14.46	(36)	8.84	(77)	02/01/1992
Total Domestic Equity Policy	3.28	(56)	3.59	(61)	3.59	(61)	12.68	(44)	8.90	(40)	12.98	(41)	14.41	(37)	10.23	(39)	
Difference	0.19		0.89		0.89		-0.55		-1.87		-0.88		0.05		-1.39		
IM U.S. Equity (SA+CF+MF) Median	3.61		5.81		5.81		11.87		7.94		12.28		13.69		9.80		
Total International Equity	6.27	(7)	5.00	(14)	5.00	(14)	12.35	(12)	5.76	(12)	10.16	(10)	8.87	(23)	2.96	(31)	12/01/2007
Total International Equity Policy	3.68	(30)	1.08	(39)	1.08	(39)	9.11	(44)	2.25	(57)	7.31	(40)	6.90	(58)	1.32	(63)	
Difference	2.59		3.92		3.92		3.24		3.51		2.85		1.97		1.64		
IM International Equity (SA+CF+MF) Median	2.58		-0.10		-0.10		8.76		2.53		6.74		7.22		1.87		
Total Fixed Income	2.09	(98)	5.75	(99)	5.75	(99)	4.60	(3)	4.74	(2)	4.25	(4)	5.23	(20)	5.47	(28)	03/01/2009
Total Fixed Income Policy	3.08	(69)	7.87	(79)	7.87	(79)	2.31	(88)	2.95	(89)	2.62	(92)	3.90	(93)	4.09	(93)	
Difference	-0.99		-2.12		-2.12		2.29		1.79		1.63		1.33		1.38		
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	3.14		8.11		8.11		2.80		3.29		3.10		4.61		5.02		
Total Real Estate	1.34	(67)	6.17	(92)	6.17	(92)	7.24	(81)	9.42	(79)	9.23	(93)	N/A		5.49	(100)	01/01/2012
Total Real Estate Policy	1.51	(38)	6.51	(90)	6.51	(90)	6.89	(84)	8.83	(91)	9.43	(91)	9.25	(84)	9.54	(92)	
Difference	-0.17		-0.34		-0.34		0.35		0.59		-0.20		N/A		-4.05		
IM U.S. Open End Private Real Estate (SA+CF) Median	1.47		7.59		7.59		8.43		10.69		11.23		10.60		11.28		
Total Hedge Fund of Funds	2.28		2.89		2.89		5.24		N/A		N/A		N/A		2.61		08/01/2015
HFRI FOF: Diversified Index	1.68		1.80		1.80		4.11		2.20		3.65		3.28		1.70		
Difference	0.60		1.09		1.09		1.13		N/A		N/A		N/A		0.91		
Total Timber Funds	0.00		6.31		6.31		0.77		-1.72		N/A		N/A		-0.11		08/01/2012
Total Timber Policy	1.04		2.95		2.95		3.29		4.62		6.03		3.98		6.03		
Difference	-1.04		3.36		3.36		-2.52		-6.34		N/A		N/A		-6.14		

\*\* All History prior to 3/31/2015, obtained from prior consultant.\*\*

# LP Real Estate and Timber Funds separate accounts are presented on the IRR page.





**Comparative Performance**  
**Trailing Returns**  
**As of June 30, 2019**

	QTR	FYTD	1 YR	3 YR	5 YR	7 YR	10 YR	Inception	Inception Date
<b>Total Domestic Equity</b>	<b>3.47 (53)</b>	<b>4.48 (57)</b>	<b>4.48 (57)</b>	<b>12.13 (48)</b>	<b>7.03 (61)</b>	<b>12.10 (53)</b>	<b>14.46 (36)</b>	<b>8.84 (77)</b>	<b>02/01/1992</b>
Total Domestic Equity Policy	3.28 (56)	3.59 (61)	3.59 (61)	12.68 (44)	8.90 (40)	12.98 (41)	14.41 (37)	10.23 (39)	
Difference	0.19	0.89	0.89	-0.55	-1.87	-0.88	0.05	-1.39	
IM U.S. Equity (SA+CF+MF) Median	3.61	5.81	5.81	11.87	7.94	12.28	13.69	9.80	
 Comerica S&P 500 Index Fund	 4.31 (48)	 10.44 (33)	 10.44 (33)	 14.17 (42)	 10.71 (40)	 13.98 (49)	 14.72 (44)	 8.69 (56)	 04/01/2006
S&P 500 Index	4.30 (49)	10.42 (34)	10.42 (34)	14.19 (41)	10.71 (40)	13.98 (49)	14.70 (45)	8.65 (59)	
Difference	0.01	0.02	0.02	-0.02	0.00	0.00	0.02	0.04	
IM U.S. Large Cap Core Equity (SA+CF) Median	4.23	8.85	8.85	13.70	10.31	13.97	14.55	8.75	
 Champlain MC Equity	 3.34 (43)	 15.96 (4)	 15.96 (4)	 N/A	 N/A	 N/A	 N/A	 17.78 (5)	 08/01/2017
Russell Midcap Index	4.13 (35)	7.83 (35)	7.83 (35)	12.16 (36)	8.63 (42)	13.37 (50)	15.16 (46)	9.67 (32)	
Difference	-0.79	8.13	8.13	N/A	N/A	N/A	N/A	8.11	
IM U.S. Mid Cap Core Equity (SA+CF) Median	3.10	2.67	2.67	11.58	8.24	13.20	14.82	7.69	
 QMA US MC Equity	 2.33 (76)	 -1.83 (92)	 -1.83 (92)	 N/A	 N/A	 N/A	 N/A	 4.26 (91)	 08/01/2017
S&P MidCap 400 Index	3.05 (64)	1.36 (72)	1.36 (72)	10.90 (69)	8.02 (71)	12.68 (71)	14.64 (77)	7.10 (71)	
Difference	-0.72	-3.19	-3.19	N/A	N/A	N/A	N/A	-2.84	
IM U.S. Mid Cap Core Equity (SA+CF) Median	3.10	2.67	2.67	11.58	8.24	13.20	14.82	7.69	
 SouthernSun SC	 2.62 (51)	 -6.95 (85)	 -6.95 (85)	 6.76 (99)	 -1.65 (100)	 7.21 (100)	 13.17 (93)	 8.42 (92)	 04/01/2008
Russell 2000 Index	2.10 (61)	-3.31 (57)	-3.31 (57)	12.30 (55)	7.06 (73)	11.63 (78)	13.45 (87)	9.10 (82)	
Difference	0.52	-3.64	-3.64	-5.54	-8.71	-4.42	-0.28	-0.68	
IM U.S. Small Cap Core Equity (SA+CF) Median	2.63	-2.54	-2.54	12.56	8.22	13.16	14.61	10.38	
 Walhausen & Co. SMID Value	 5.87 (6)	 0.28 (46)	 0.28 (46)	 11.33 (35)	 N/A	 N/A	 N/A	 10.53 (46)	 10/01/2015
Russell 2500 Value Index	1.89 (79)	-1.92 (62)	-1.92 (62)	8.98 (66)	5.55 (73)	11.00 (79)	13.28 (73)	10.10 (52)	
Difference	3.98	2.20	2.20	2.35	N/A	N/A	N/A	0.43	
IM U.S. SMID Cap Value Equity (SA+CF) Median	3.53	0.10	0.10	10.32	6.62	12.15	14.12	10.12	
 Great Lakes Equity	 N/A	 N/A	 N/A	 N/A	 N/A	 N/A	 N/A	 -2.38 (89)	 05/01/2019
Russell 2500 Index	2.96 (76)	1.77 (65)	1.77 (65)	12.34 (69)	7.66 (90)	12.51 (92)	14.44 (74)	-0.52 (61)	
Difference	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-1.86	
IM U.S. SMID Cap Core Equity (SA+CF) Median	4.37	2.80	2.80	12.60	8.96	13.54	15.44	0.42	

\*\* All History prior to 3/31/2015, obtained from prior consultant.\*\*

# LP Real Estate and Timber Funds separate accounts are presented on the IRR page.



**Comparative Performance**  
**Trailing Returns**  
**As of June 30, 2019**

	QTR	FYTD	1 YR	3 YR	5 YR	7 YR	10 YR	Inception	Inception Date
<b>Total International Equity</b>	<b>6.27 (7)</b>	<b>5.00 (14)</b>	<b>5.00 (14)</b>	<b>12.35 (12)</b>	<b>5.76 (12)</b>	<b>10.16 (10)</b>	<b>8.87 (23)</b>	<b>2.96 (31)</b>	<b>12/01/2007</b>
Total International Equity Policy	3.68 (30)	1.08 (39)	1.08 (39)	9.11 (44)	2.25 (57)	7.31 (40)	6.90 (58)	1.32 (63)	
Difference	2.59	3.92	3.92	3.24	3.51	2.85	1.97	1.64	
IM International Equity (SA+CF+MF) Median	2.58	-0.10	-0.10	8.76	2.53	6.74	7.22	1.87	
 LSV International LCV	 1.73 (60)	 -3.78 (76)	 -3.78 (76)	 8.91 (40)	 1.91 (60)	 8.10 (40)	 7.39 (63)	 4.27 (74)	 01/01/2006
MSCI EAFE Index	3.97 (14)	1.60 (34)	1.60 (34)	9.65 (33)	2.74 (42)	7.81 (43)	7.40 (63)	4.38 (73)	
Difference	-2.24	-5.38	-5.38	-0.74	-0.83	0.29	-0.01	-0.11	
IM International Large Cap Value Equity (SA+CF) Median	2.33	-1.33	-1.33	8.33	2.17	7.40	7.96	5.00	
 WCM Focused Growth International	 10.56 (1)	 14.02 (1)	 14.02 (1)	 15.96 (8)	 10.21 (5)	 12.50 (9)	 N/A	 11.61 (8)	 11/01/2011
MSCI EAFE (Net) Index	3.68 (69)	1.08 (46)	1.08 (46)	9.11 (74)	2.25 (96)	7.31 (90)	6.90 (100)	6.23 (95)	
Difference	6.88	12.94	12.94	6.85	7.96	5.19	N/A	5.38	
IM International Growth Equity (SA+CF) Median	4.63	0.60	0.60	10.48	4.67	8.94	9.55	8.31	

\*\* All History prior to 3/31/2015, obtained from prior consultant.\*\*

# LP Real Estate and Timber Funds separate accounts are presented on the IRR page.



**Comparative Performance**  
**Trailing Returns**  
**As of June 30, 2019**

	QTR	FYTD	1 YR	3 YR	5 YR	7 YR	10 YR	Inception	Inception Date
<b>Total Fixed Income</b>	<b>2.09 (98)</b>	<b>5.75 (99)</b>	<b>5.75 (99)</b>	<b>4.60 (3)</b>	<b>4.74 (2)</b>	<b>4.25 (4)</b>	<b>5.23 (20)</b>	<b>5.47 (28)</b>	<b>03/01/2009</b>
Total Fixed Income Policy	3.08 (69)	7.87 (79)	7.87 (79)	2.31 (88)	2.95 (89)	2.62 (92)	3.90 (93)	4.09 (93)	
Difference	-0.99	-2.12	-2.12	2.29	1.79	1.63	1.33	1.38	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	3.14	8.11	8.11	2.80	3.29	3.10	4.61	5.02	
Pacific Fixed Income	3.11 (56)	7.85 (80)	7.85 (80)	2.77 (52)	3.16 (64)	3.00 (60)	4.14 (79)	5.40 (65)	06/01/1997
Blmbg. Barc. U.S. Aggregate Index	3.08 (69)	7.87 (79)	7.87 (79)	2.31 (88)	2.95 (89)	2.62 (92)	3.90 (93)	5.14 (92)	
Difference	0.03	-0.02	-0.02	0.46	0.21	0.38	0.24	0.26	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	3.14	8.11	8.11	2.80	3.29	3.10	4.61	5.55	
Templeton Global Bond R6 (FBNRX)	0.80 (100)	5.69 (69)	5.69 (69)	N/A	N/A	N/A	N/A	1.00 (100)	04/01/2017
Blmbg. Barc. Global Multiverse	3.31 (55)	6.01 (60)	6.01 (60)	1.95 (74)	1.35 (57)	1.79 (67)	3.13 (70)	4.44 (25)	
Difference	-2.51	-0.32	-0.32	N/A	N/A	N/A	N/A	-3.44	
IM Global Fixed Income (MF) Median	3.37	6.42	6.42	2.56	1.51	2.09	3.66	3.94	
<b>Total Real Estate</b>	<b>1.34 (67)</b>	<b>6.17 (92)</b>	<b>6.17 (92)</b>	<b>7.24 (81)</b>	<b>9.42 (79)</b>	<b>9.23 (93)</b>	<b>N/A</b>	<b>5.49 (100)</b>	<b>01/01/2012</b>
Total Real Estate Policy	1.51 (38)	6.51 (90)	6.51 (90)	6.89 (84)	8.83 (91)	9.43 (91)	9.25 (84)	9.54 (92)	
Difference	-0.17	-0.34	-0.34	0.35	0.59	-0.20	N/A	-4.05	
IM U.S. Open End Private Real Estate (SA+CF) Median	1.47	7.59	7.59	8.43	10.69	11.23	10.60	11.28	
AEW Core Property Trust	1.49 (42)	6.91 (84)	6.91 (84)	7.61 (78)	9.50 (78)	N/A	N/A	9.95 (86)	10/01/2012
NCREIF Fund Index-ODCE (VW)	1.00 (90)	6.41 (91)	6.41 (91)	7.57 (78)	9.76 (64)	10.52 (71)	9.88 (73)	10.49 (69)	
Difference	0.49	0.50	0.50	0.04	-0.26	N/A	N/A	-0.54	
IM U.S. Open End Private Real Estate (SA+CF) Median	1.47	7.59	7.59	8.43	10.69	11.23	10.60	11.28	
<b>Total Hedge Fund of Funds</b>	<b>2.28</b>	<b>2.89</b>	<b>2.89</b>	<b>5.24</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>2.61</b>	<b>08/01/2015</b>
HFRI FOF: Diversified Index	1.68	1.80	1.80	4.11	2.20	3.65	3.28	1.70	
Difference	0.60	1.09	1.09	1.13	N/A	N/A	N/A	0.91	
Magnitude Institutional	2.37	3.88	3.88	4.82	N/A	N/A	N/A	3.44	08/01/2015
HFRI FOF: Diversified Index	1.68	1.80	1.80	4.11	2.20	3.65	3.28	1.70	
Difference	0.69	2.08	2.08	0.71	N/A	N/A	N/A	1.74	
Titan Masters Int'l Fund	2.17	1.84	1.84	5.70	N/A	N/A	N/A	1.51	08/01/2015
HFRI FOF: Diversified Index	1.68	1.80	1.80	4.11	2.20	3.65	3.28	1.70	
Difference	0.49	0.04	0.04	1.59	N/A	N/A	N/A	-0.19	

\*\* All History prior to 3/31/2015, obtained from prior consultant.\*\*

# LP Real Estate and Timber Funds separate accounts are presented on the IRR page.



# Comparative Performance - IRR

As of June 30, 2019

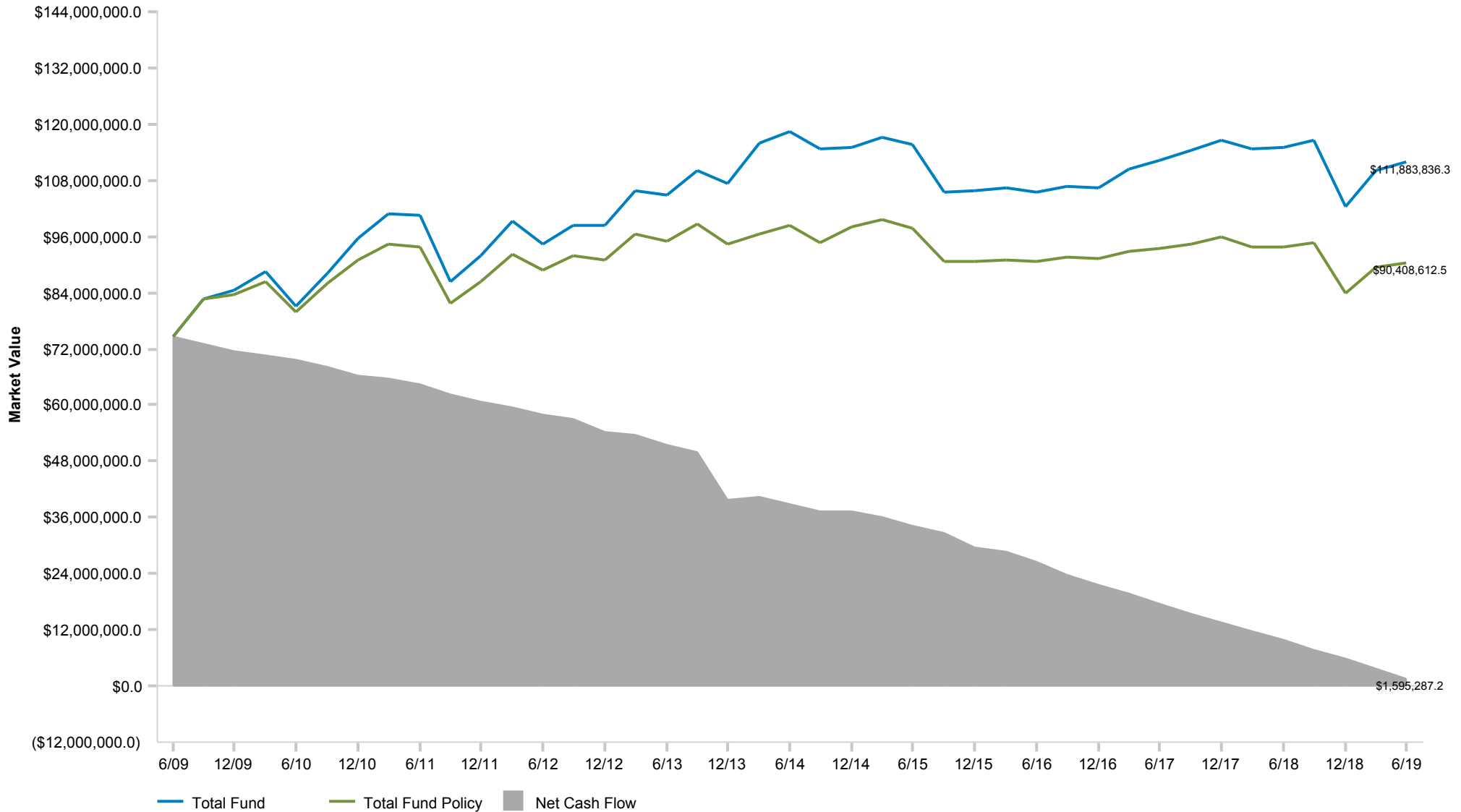
## Comparative Performance - IRR

	QTR	FYTD	1 YR	3 YR	5 YR	7 YR	Since Inception Ending Jun-2019	Inception Date
Bloomfield Capital Income Fund II	9.90	-6.51	-6.51	5.52	N/A	N/A	7.51	12/22/2014
Bloomfield Capital Income Fund III	-0.72	4.08	4.08	N/A	N/A	N/A	8.19	12/31/2016
Bloomfield Capital Income Fund V	2.08	N/A	N/A	N/A	N/A	N/A	2.60	02/14/2019
Metropolitan Real Estate V	0.00	0.17	0.17	5.01	9.60	9.72	8.61	11/30/2011
RMK Timberland US Fund	0.00	9.05	9.05	6.06	2.72	N/A	4.09	10/31/2012
RMK Timberland Intl Fund	0.00	0.54	0.54	-8.08	-8.32	N/A	-7.19	11/21/2012



**Schedule of Investable Assets**  
**Total Fund**  
**10 Years Ending June 30, 2019**

**Schedule of Investable Assets**

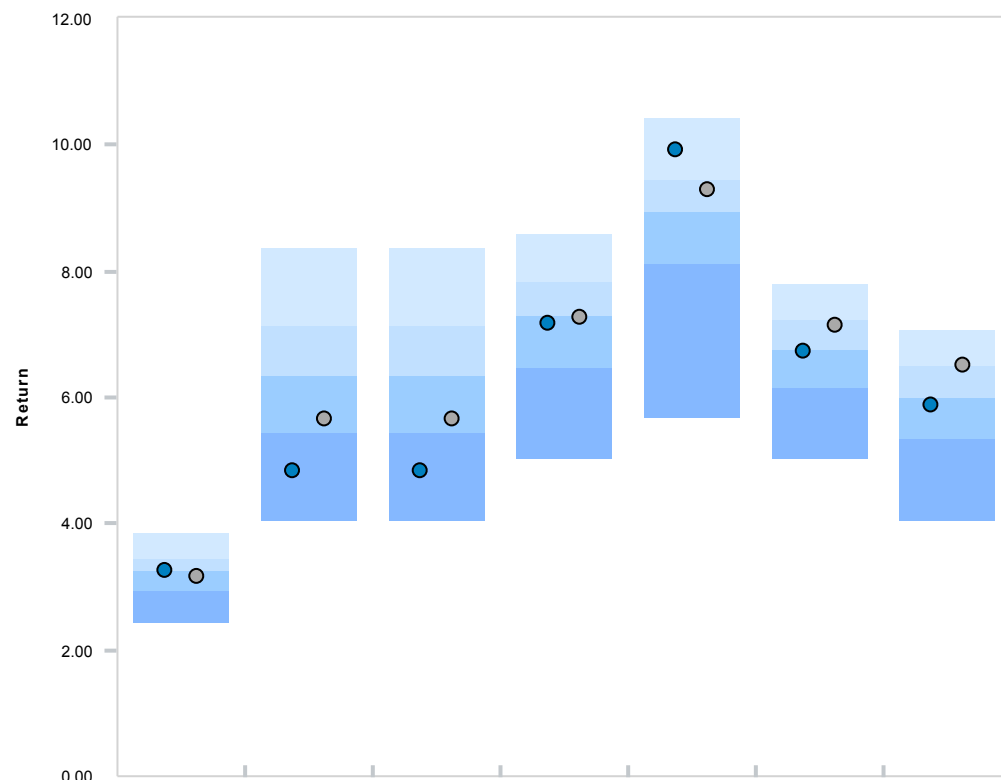


**Schedule of Investable Assets**

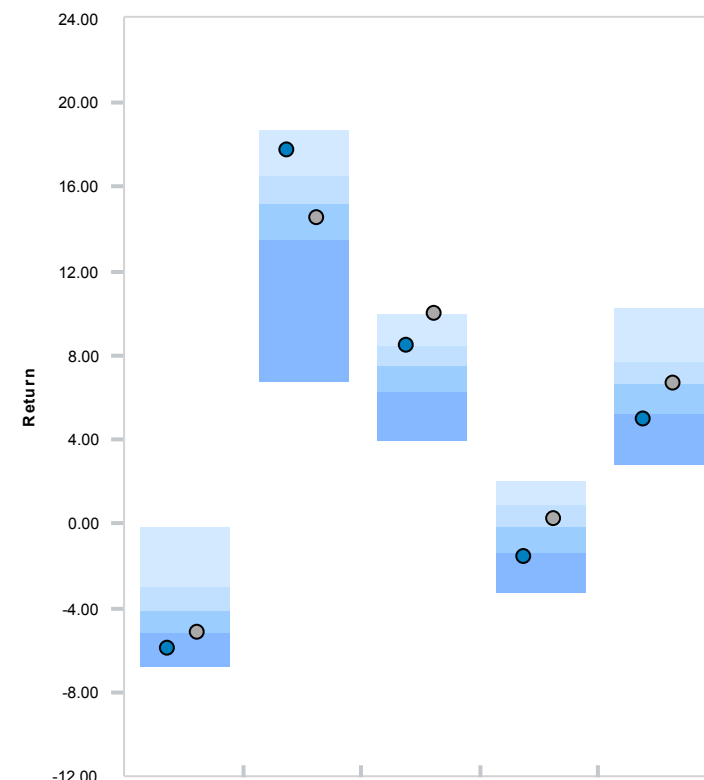
Periods Ending	Beginning Market Value \$	Contributions \$	Withdrawals \$	Gain/Loss \$	Net Cash Flow \$	Ending Market Value \$
10 YR	74,517,593	122,525,499	195,447,805	110,288,549	-72,922,306	111,883,836



## Plan Sponsor Peer Group Analysis - All Public Plans-Total Fund



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Total Fund	3.24 (50)	4.83 (88)	4.83 (88)	7.17 (56)	9.92 (11)	6.73 (53)	5.88 (54)
● Total Fund Policy	3.16 (58)	5.65 (72)	5.65 (72)	7.25 (52)	9.28 (32)	7.12 (29)	6.51 (26)
Median	3.24	6.35	6.35	7.29	8.93	6.77	5.99

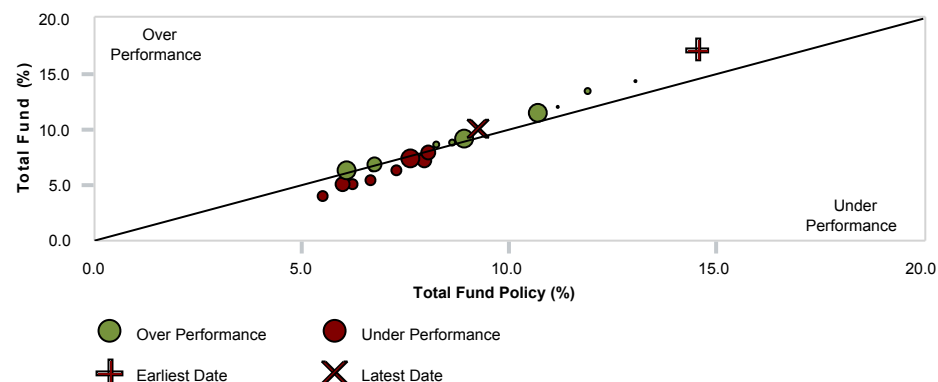


	2018	2017	2016	2015	2014
● Total Fund	-5.93 (87)	17.76 (10)	8.43 (26)	-1.58 (79)	4.92 (82)
● Total Fund Policy	-5.15 (75)	14.48 (63)	9.99 (5)	0.18 (42)	6.66 (50)
Median	-4.15	15.22	7.47	-0.16	6.62

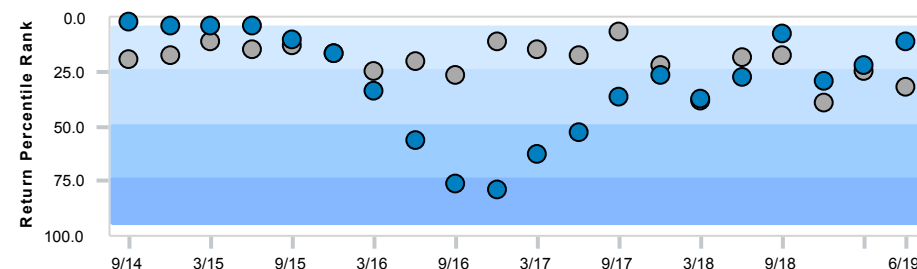
## Comparative Performance

	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018	1 Qtr Ending Dec-2017
Total Fund	9.67 (14)	-10.30 (96)	3.22 (21)	1.79 (17)	-0.19 (41)	3.68 (46)
Total Fund Policy	9.57 (16)	-9.38 (90)	3.13 (27)	2.06 (11)	-0.56 (65)	3.68 (47)
All Public Plans-Total Fund Median	8.42	-7.55	2.58	1.03	-0.32	3.61

## 3 Yr Rolling Under/Over Performance - 5 Years

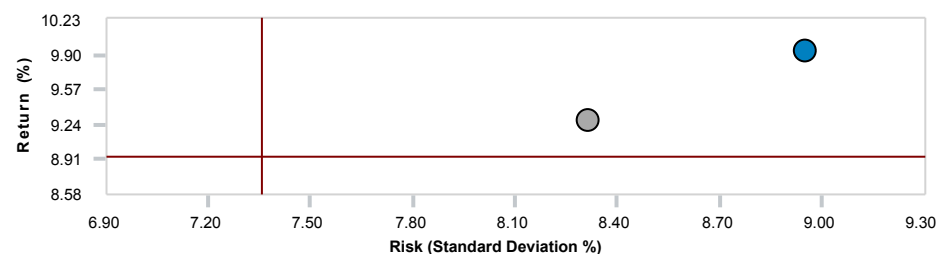


## 3 Yr Rolling Percentile Ranking - 5 Years



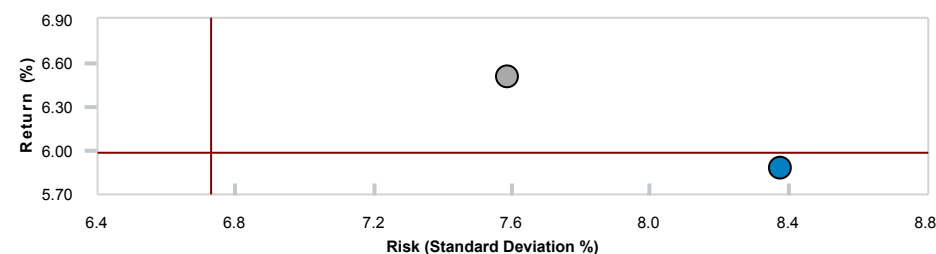
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Total Fund	20	9 (45%)	6 (30%)	3 (15%)	2 (10%)
Total Fund Policy	20	16 (80%)	4 (20%)	0 (0%)	0 (0%)

## Peer Group Scattergram - 3 Years



	Return	Standard Deviation
Total Fund	9.92	8.96
Total Fund Policy	9.28	8.32
Median	8.93	7.36

## Peer Group Scattergram - 5 Years



	Return	Standard Deviation
Total Fund	5.88	8.38
Total Fund Policy	6.51	7.59
Median	5.99	6.73

## Historical Statistics - 3 Years

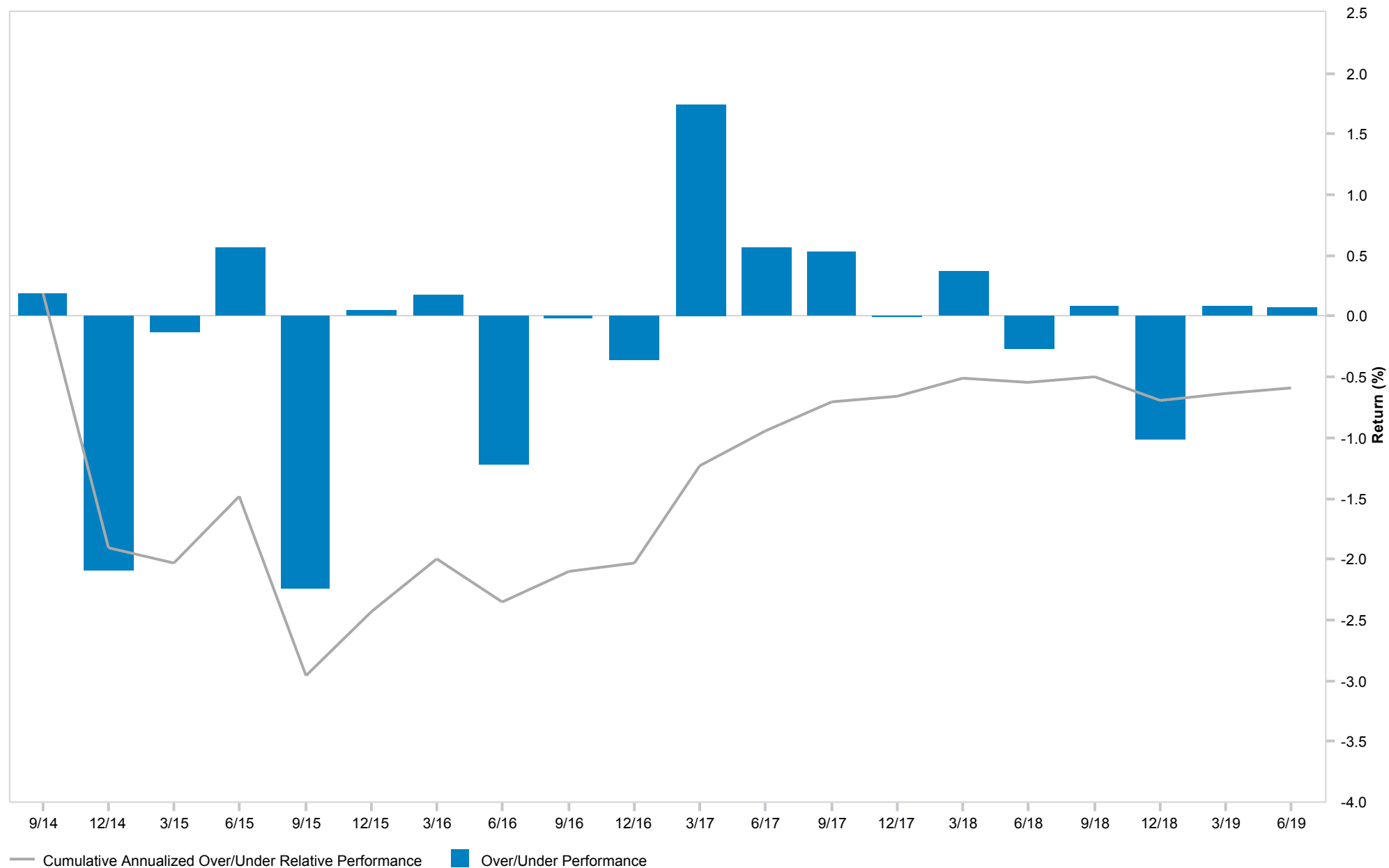
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Fund	1.27	106.69	105.52	0.03	0.52	0.95	1.07	5.95
Total Fund Policy	0.00	100.00	100.00	0.00	N/A	0.95	1.00	5.42

## Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Fund	1.78	98.49	110.85	-1.08	-0.30	0.63	1.08	5.75
Total Fund Policy	0.00	100.00	100.00	0.00	N/A	0.77	1.00	4.93



**Relative Performance**



Calculation based on quarterly periodicity.  
 Benchmark: 65% MSCI ACWi / 35% Barclays Global Agg



#### Comerica S&P 500 - Portfolio Description

- Strategy: S&P 500 Index Fund
- Vehicle: Commingled Fund
- Objective: To replicate the S&P 500
- Annual fees: .10% on first \$5M  
.08% on next \$20M  
.06% on next \$25M
- Benchmark: S&P 500 Index

#### Comerica S&P 500 - Strategy Details

The 500 Index Strategy seeks to provide investment results generally corresponding to the aggregate price and dividend performance of the publicly traded common stocks in the large- capitalization sector of the U.S. equity market. The fund pursues this objective by investing primarily in the 500 common stocks that compose the S&P 500 Index.

#### Champlain MidCap Equity - Portfolio Description

- Strategy: Mid Cap Equity
- Vehicle: Separately Managed Account
- Objective: To outperform the Russell Midcap Index
- Annual fees: .85% on first \$50MM  
.75% on next \$50MM  
.65% over \$100M
- Benchmark: Russell Midcap Index

#### Champlain MidCap Equity - Strategy Details

Champlain's mid cap strategy invests in a broadly diversified portfolio of approximately 50 to 75 common stocks of medium sized companies, and to a lesser extent small and large sized companies, which have attractive long-term fundamentals, appreciation potential, and valuations. They believe that investing in companies with sustainable competitive advantages, durable business models, sound balance sheets, credible and sincere management, and that are trading at valuations deemed reasonable by the team, can, over time, provide attractive returns with less risk than the overall market. Their investment processes are focused on absolute returns and avoiding large losses, which they believe is critical to wealth creation.

#### QMA Midcap Equity - Portfolio Description

- Strategy: US Mid Cap Fore Equity
- Vehicle: Commingled Account
- Objective: To outperform the Russell Midcap Index
- Annual fees: .45% on first \$50MM  
.40% over \$50M
- Benchmark: Russell Midcap Index

#### QMA Midcap Equity - Strategy Details

At QMA, they believe that an adaptive, bottom-up, systematic investment process based on fundamental insights is the most efficient way to exploit market inefficiencies and add value. On a daily basis they assess the relative attractiveness of their universe, scoring stocks according to fundamentals most relevant to their growth characteristics-more emphasis on valuation for slowly growing companies and indicators of future growth prospects for faster growing companies. These scores form the basis of the construction process whereby they focus risk on a breadth of exposures most likely to produce alpha and limit exposures to uncompensated off-benchmark risk. Rebalancing is done with experienced judgment to maintain desired portfolio alpha exposures and risk limits and with careful attention to trading costs.



#### SouthernSun Smallcap Equity - Portfolio Description

- Strategy: Small Cap
- Vehicle: Separately Managed Account
- Objective: To outperform the Russell 2000 Index
- Annual fees: 1.00% on first \$15M
- 0.85% over \$15M
- Benchmark: Russell 2000 Index

#### SouthernSun Smallcap Equity - Strategy Details

The Small Cap strategy targets companies with market caps of \$500 million to \$3.5 billion at time of initial purchase. While idea generation may come from traditional screening, new names are often sourced through research on existing portfolio holdings, industry trade publications, and industry conferences. The Investment Team relies almost solely on internally conducted research for idea generation. This strategy is generally closed to new investors.

#### Walhausen SMID Value Equity - Portfolio Description

- Strategy: Select Value (SMID)
- Vehicle: Separately Managed Account
- Objective: To outperform the Russell 2500 Index
- Annual fees: 1.00% of Assets
- Benchmark: Russell 2500 Index

#### Walhausen SMID Value Equity - Strategy Details

This portfolio is constructed to provide strong returns with moderate volatility. It incorporates 40-50 equally weighted holdings, broadly diversified across industry sectors. Positions are reduced when they begin to exceed 3.0% of the portfolio. Companies included in the portfolio have a market capitalization between \$700 million and \$7.0 billion. The majority (about 80%) of the portfolio is with companies which have consistently high returns on capital, ample free cash flow, well proven management and sell at moderate valuations. Many of these stocks are frequently too dull to attract much "Wall Street" attention and thus have carried low valuations and lower volatility. The remaining 20% of the fund is invested in "Special Situations." For these stocks a focused approach is utilized to find 8-10 names with unusual potential returns. The goal is for both parts of the strategy to outperform over the market cycle, and to deliver annualized returns 200 basis points above the Russell 2500 Value index.

#### Great Lakes SMID Equity - Portfolio Description

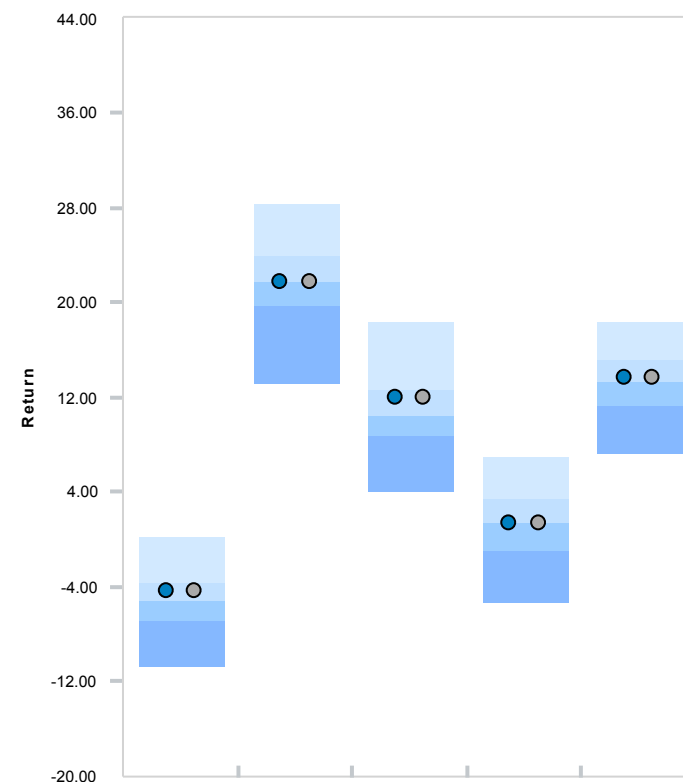
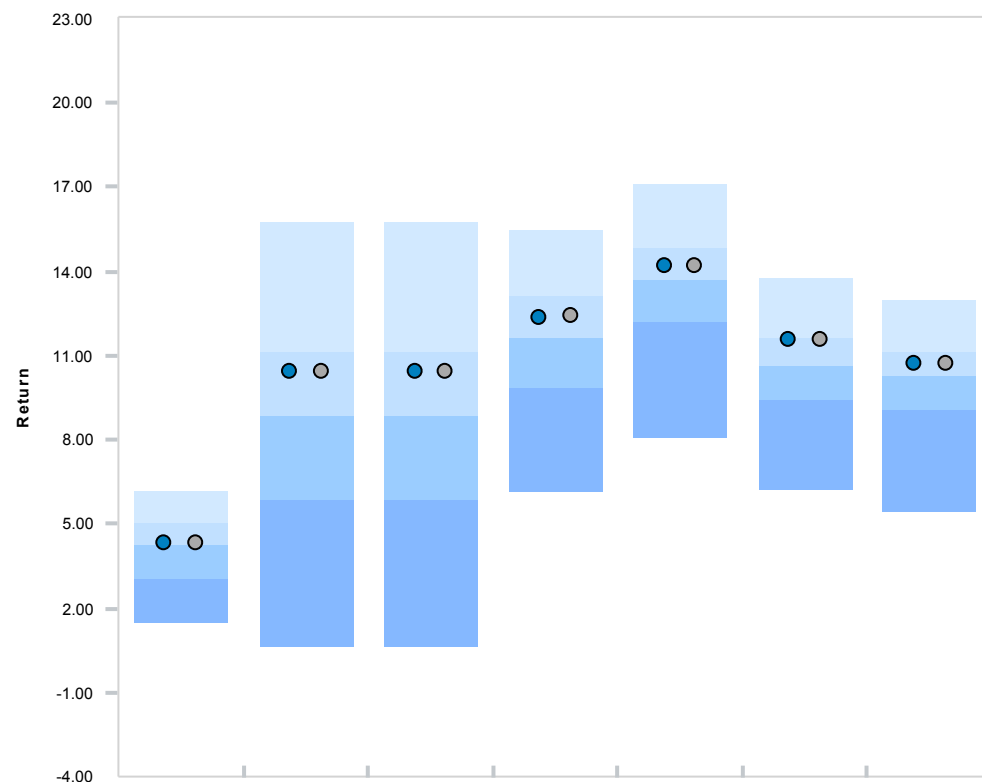
- Strategy: Smid Cap
- Vehicle: Separately Managed Account
- Objective: To outperform the Russell 2500 Index
- Annual fees: 55 bps
- Benchmark: Russell 2500 Index

#### Great Lakes SMID Equity - Strategy Details

The Disciplined Equity SMidCap strategy seeks to outperform the benchmark over time through superior stock selection while maintaining similar risk characteristics. Use a "bottom up" systematic process to evaluate the universe of stocks using three independent analyses, each of which is designed to provide a unique valuation perspective: Broad Universe Analysis (Evaluates each stock relative to all other stocks in the investment universe), Style-Specific Analysis (Evaluates each stock relative to its peers with the same combined market capitalization and style profile), Sector-Specific Analysis (Evaluates each stock relative to all other stocks in the same economic sector).



Peer Group Analysis - IM U.S. Large Cap Core Equity (SA+CF)



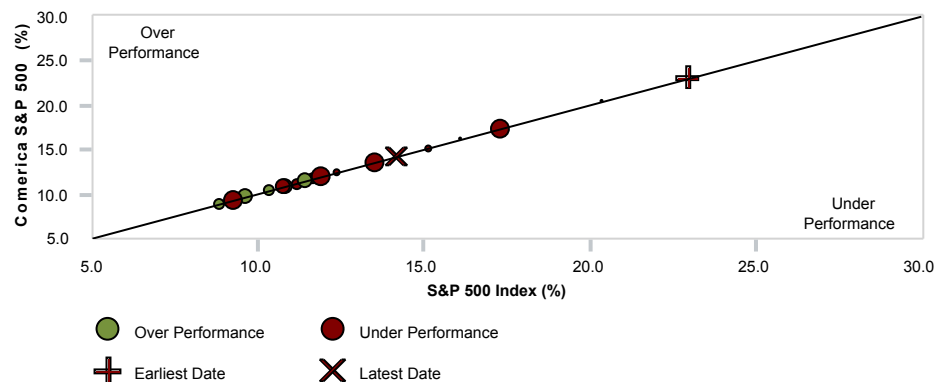
	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
Comerica S&P 500	4.31 (48)	10.44 (33)	10.44 (33)	12.37 (40)	14.17 (42)	11.55 (28)	10.71 (40)
S&P 500 Index	4.30 (49)	10.42 (34)	10.42 (34)	12.38 (40)	14.19 (41)	11.55 (27)	10.71 (40)
Median	4.23	8.85	8.85	11.64	13.70	10.62	10.31

	2018	2017	2016	2015	2014
Comerica S&P 500	-4.35 (36)	21.80 (51)	11.94 (34)	1.44 (50)	13.66 (45)
S&P 500 Index	-4.38 (37)	21.83 (50)	11.96 (34)	1.38 (52)	13.69 (44)
Median	-5.20	21.83	10.52	1.43	13.42

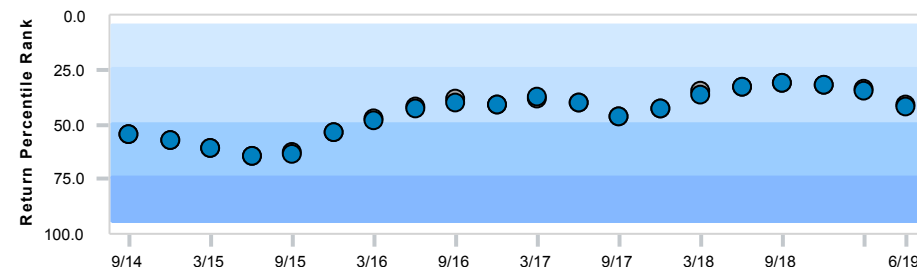
Comparative Performance

	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018	1 Qtr Ending Dec-2017
Comerica S&P 500	13.60 (42)	-13.47 (41)	7.70 (35)	3.43 (35)	-0.77 (66)	6.63 (53)
S&P 500 Index	13.65 (39)	-13.52 (44)	7.71 (34)	3.43 (33)	-0.76 (64)	6.64 (51)
IM U.S. Large Cap Core Equity (SA+CF) Median	13.25	-13.83	7.15	2.90	-0.44	6.66

### 3 Yr Rolling Under/Over Performance - 5 Years

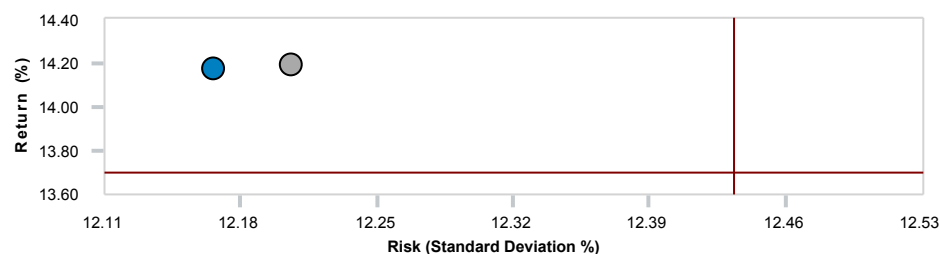


### 3 Yr Rolling Percentile Ranking - 5 Years



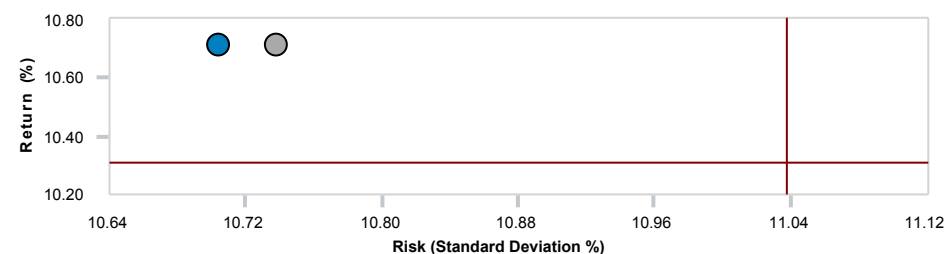
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Comerica S&P 500	20	0 (0%)	14 (70%)	6 (30%)	0 (0%)
S&P 500 Index	20	0 (0%)	14 (70%)	6 (30%)	0 (0%)

### Peer Group Scattergram - 3 Years



	Return	Standard Deviation
Comerica S&P 500	14.17	12.17
S&P 500 Index	14.19	12.21
Median	13.70	12.43

### Peer Group Scattergram - 5 Years



	Return	Standard Deviation
Comerica S&P 500	10.71	10.70
S&P 500 Index	10.71	10.74
Median	10.31	11.04

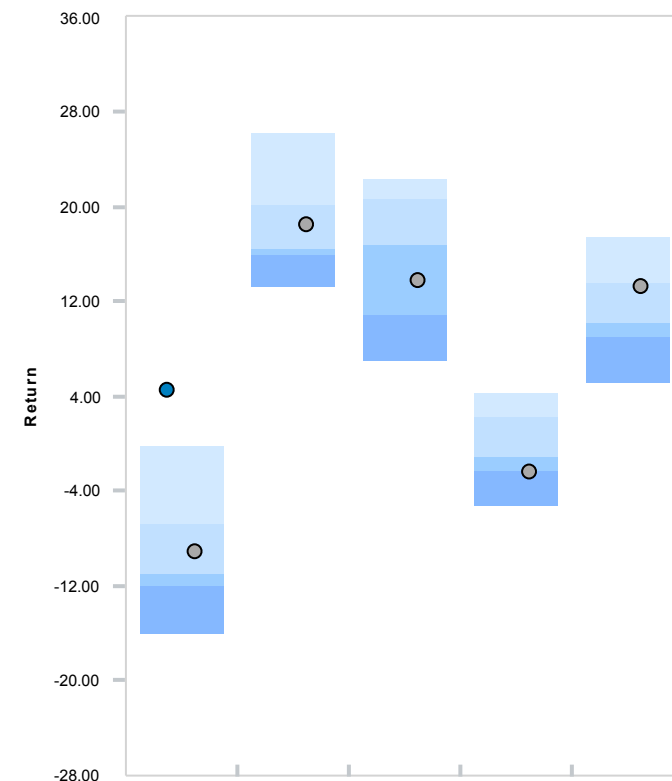
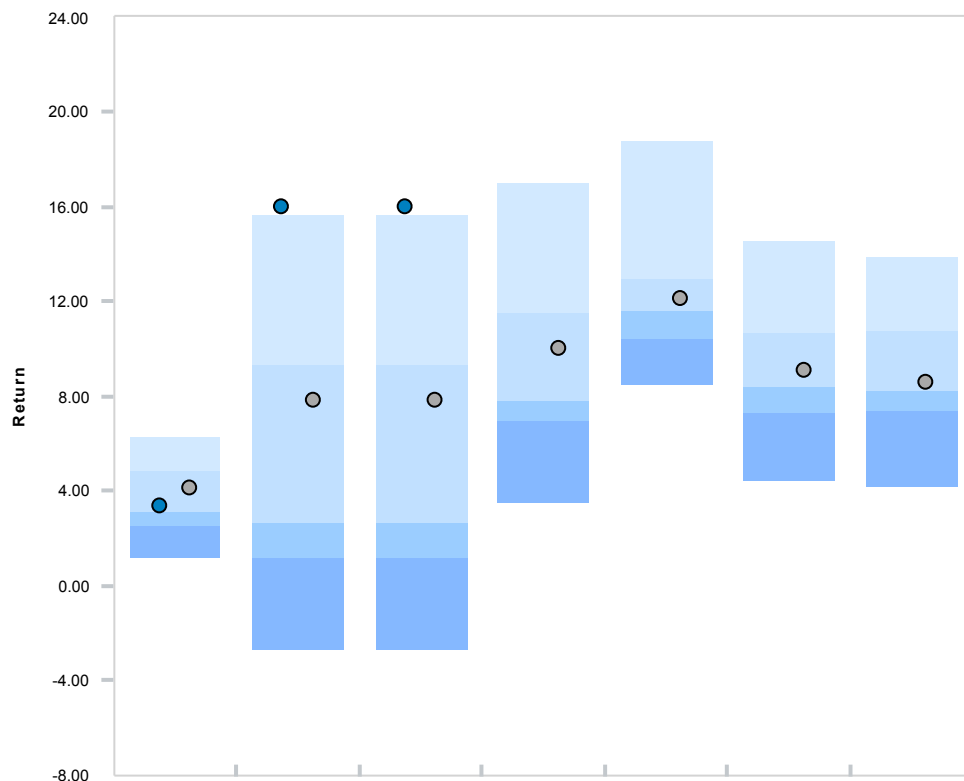
### Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Comerica S&P 500	0.05	99.82	99.79	0.02	-0.47	1.06	1.00	7.97
S&P 500 Index	0.00	100.00	100.00	0.00	N/A	1.06	1.00	8.00

### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Comerica S&P 500	0.04	99.90	99.84	0.02	-0.11	0.85	1.00	7.48
S&P 500 Index	0.00	100.00	100.00	0.00	N/A	0.85	1.00	7.49

Peer Group Analysis - IM U.S. Mid Cap Core Equity (SA+CF)



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Champlain MC Equity	3.34 (43)	15.96 (4)	15.96 (4)	N/A	N/A	N/A	N/A
● Russell Midcap Index	4.13 (35)	7.83 (35)	7.83 (35)	10.05 (34)	12.16 (36)	9.14 (41)	8.63 (42)
Median	3.10	2.67	2.67	7.82	11.58	8.46	8.24

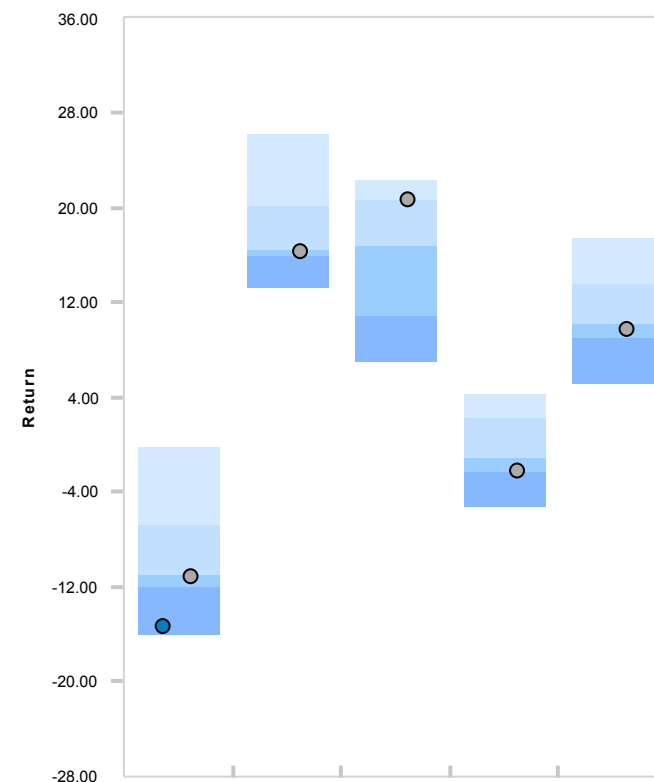
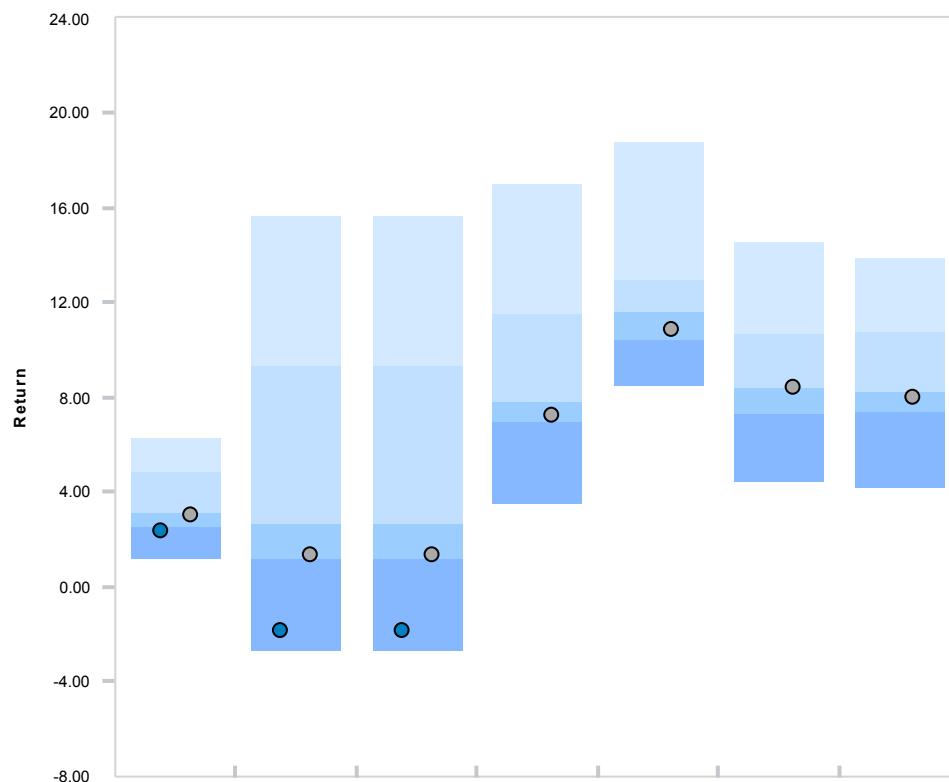
	2018	2017	2016	2015	2014
● Champlain MC Equity	4.54 (2)	N/A	N/A	N/A	N/A
● Russell Midcap Index	-9.06 (35)	18.52 (34)	13.80 (61)	-2.44 (82)	13.22 (28)
Median	-10.99	16.49	16.80	-0.98	10.25

Comparative Performance

	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018	1 Qtr Ending Dec-2017
Champlain MC Equity	16.90 (20)	-11.50 (4)	8.46 (2)	3.95 (43)	4.77 (6)	6.35 (45)
Russell Midcap Index	16.54 (30)	-15.37 (28)	5.00 (37)	2.82 (58)	-0.46 (41)	6.07 (68)
IM U.S. Mid Cap Core Equity (SA+CF) Median	14.65	-17.09	4.50	3.58	-0.76	6.27



Peer Group Analysis - IM U.S. Mid Cap Core Equity (SA+CF)



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● QMA US MC Equity	2.33 (76)	-1.83 (92)	-1.83 (92)	N/A	N/A	N/A	N/A
● S&P MidCap 400 Index	3.05 (64)	1.36 (72)	1.36 (72)	7.26 (73)	10.90 (69)	8.43 (60)	8.02 (71)
Median	3.10	2.67	2.67	7.82	11.58	8.46	8.24

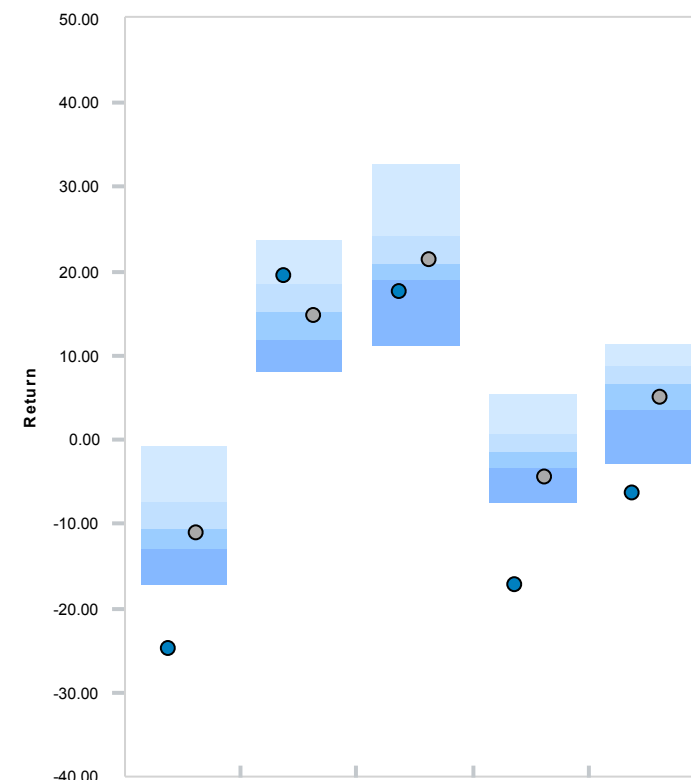
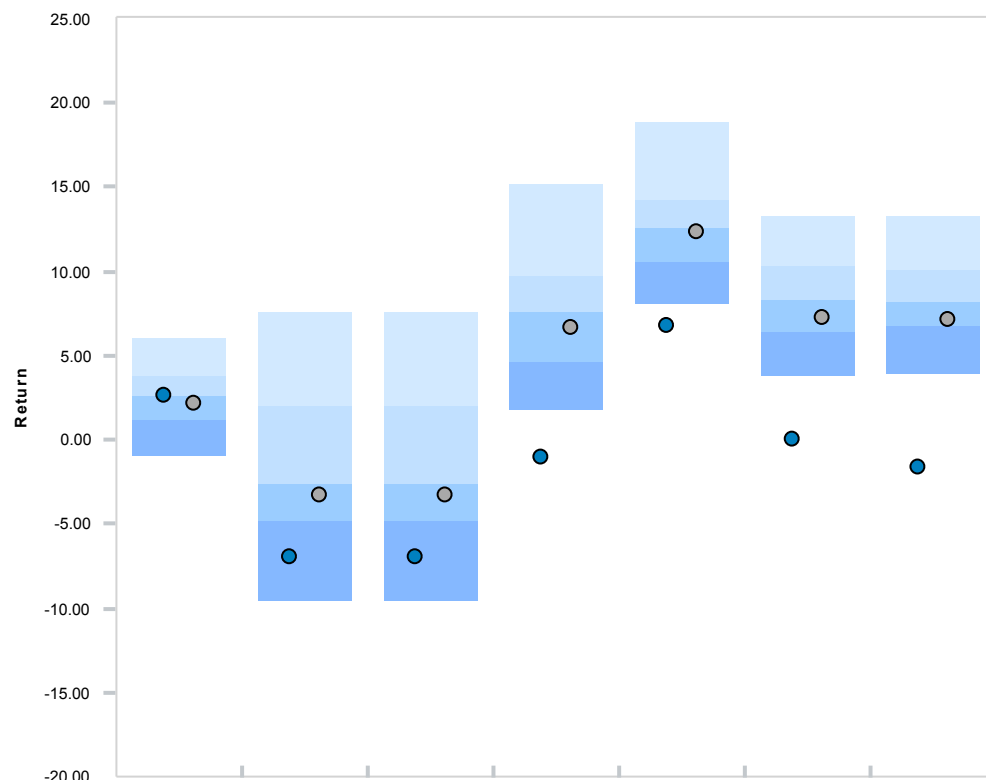
	2018	2017	2016	2015	2014
● QMA US MC Equity	-15.29 (92)	N/A	N/A	N/A	N/A
● S&P MidCap 400 Index	-11.08 (62)	16.24 (67)	20.74 (25)	-2.18 (74)	9.77 (66)
Median	-10.99	16.49	16.80	-0.98	10.25

Comparative Performance

	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018	1 Qtr Ending Dec-2017
QMA US MC Equity	14.44 (68)	-18.37 (85)	2.69 (95)	2.16 (78)	-1.08 (68)	6.18 (66)
S&P MidCap 400 Index	14.49 (58)	-17.28 (67)	3.86 (69)	4.29 (24)	-0.77 (56)	6.25 (60)
IM U.S. Mid Cap Core Equity (SA+CF) Median	14.65	-17.09	4.50	3.58	-0.76	6.27



### Peer Group Analysis - IM U.S. Small Cap Core Equity (SA+CF)



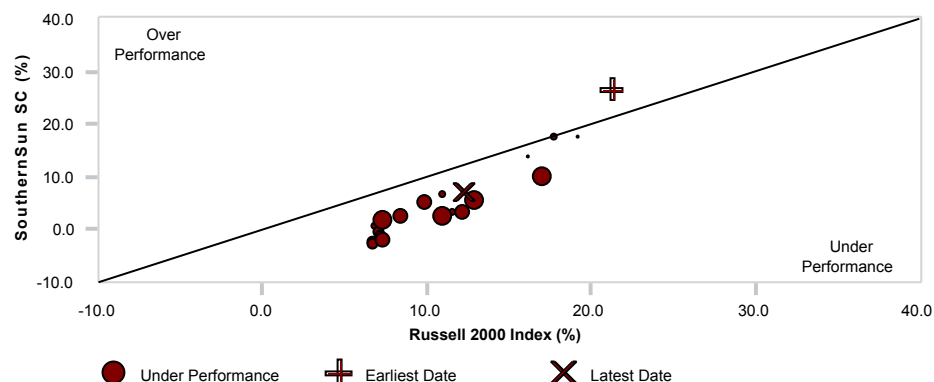
	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● SouthernSun SC	2.62 (51)	-6.95 (85)	-6.95 (85)	-1.10 (100)	6.76 (99)	0.04 (100)	-1.65 (100)
● Russell 2000 Index	2.10 (61)	-3.31 (57)	-3.31 (57)	6.62 (62)	12.30 (55)	7.21 (67)	7.06 (73)
Median	2.63	-2.54	-2.54	7.54	12.56	8.33	8.22

	2018	2017	2016	2015	2014
● SouthernSun SC	-24.95 (100)	19.53 (21)	17.63 (83)	-17.16 (100)	-6.30 (99)
● Russell 2000 Index	-11.01 (55)	14.65 (56)	21.31 (47)	-4.41 (82)	4.89 (66)
Median	-10.69	15.13	20.77	-1.35	6.72

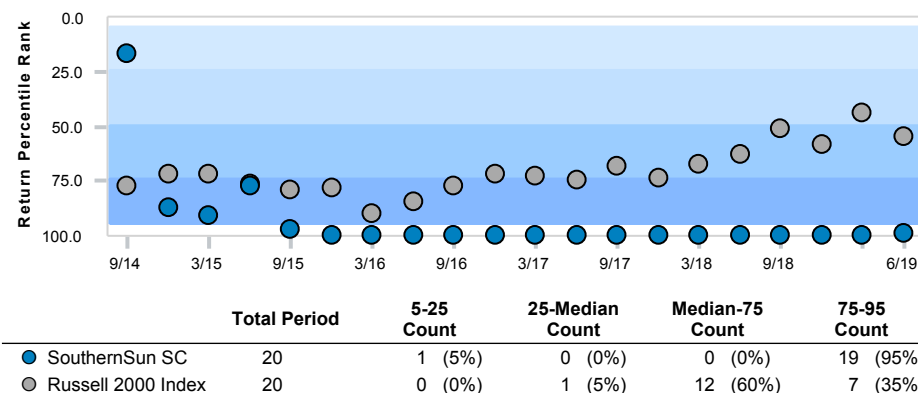
### Comparative Performance

	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018	1 Qtr Ending Dec-2017
SouthernSun SC	17.27 (15)	-21.91 (90)	-0.99 (99)	3.41 (97)	-6.14 (100)	1.52 (94)
Russell 2000 Index	14.58 (43)	-20.20 (62)	3.58 (62)	7.75 (30)	-0.08 (51)	3.34 (58)
IM U.S. Small Cap Core Equity (SA+CF) Median	14.15	-19.75	3.97	6.83	-0.07	3.49

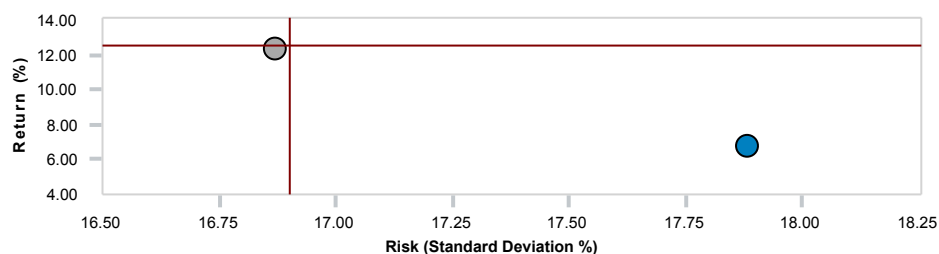
### 3 Yr Rolling Under/Over Performance - 5 Years



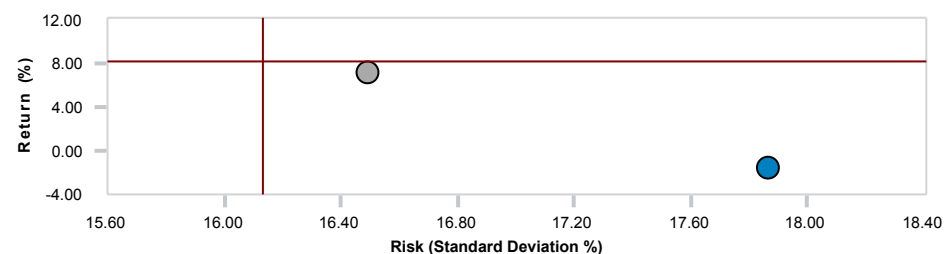
### 3 Yr Rolling Percentile Ranking - 5 Years



### Peer Group Scattergram - 3 Years



### Peer Group Scattergram - 5 Years



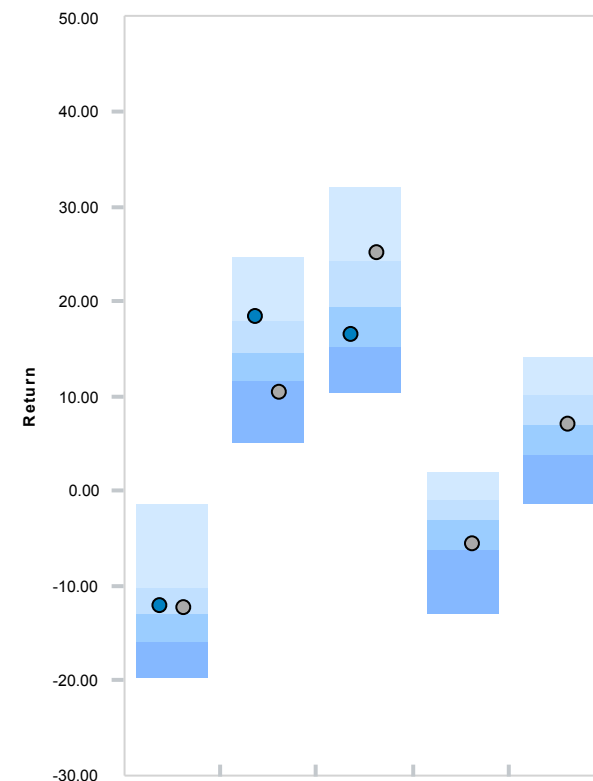
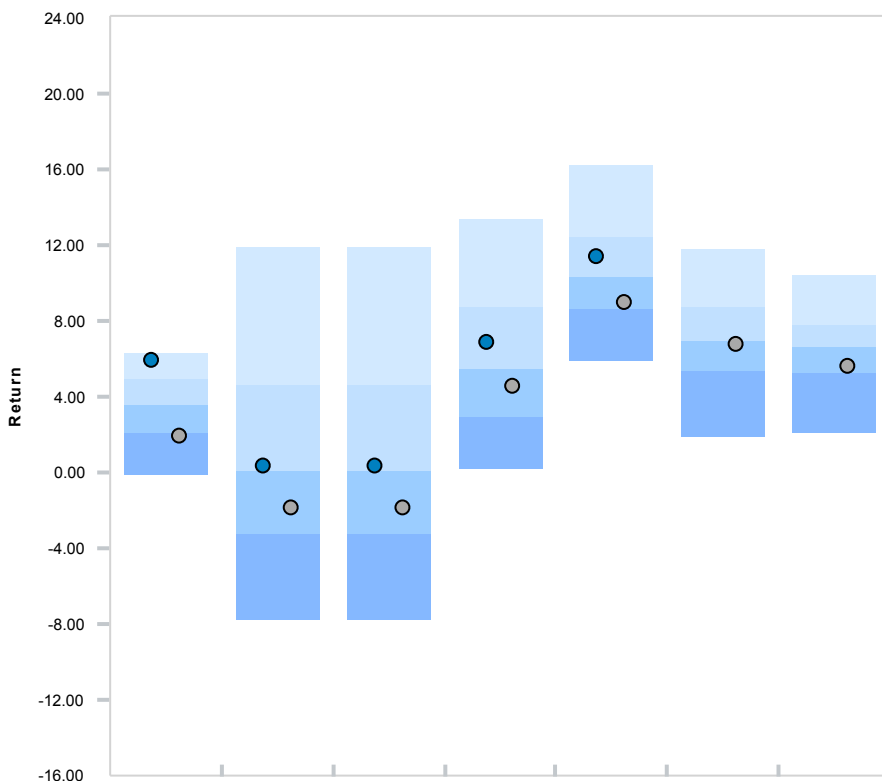
### Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
SouthernSun SC	6.57	85.87	105.34	-4.64	-0.75	0.38	0.99	12.31
Russell 2000 Index	0.00	100.00	100.00	0.00	N/A	0.69	1.00	11.15

### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
SouthernSun SC	8.10	76.90	111.76	-7.71	-1.02	-0.05	0.97	12.72
Russell 2000 Index	0.00	100.00	100.00	0.00	N/A	0.45	1.00	11.23

Peer Group Analysis - IM U.S. SMID Cap Value Equity (SA+CF)



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Walthausen & Co. SMID Value	5.87 (6)	0.28 (46)	0.28 (46)	6.86 (34)	11.33 (35)	N/A	N/A
● Russell 2500 Value Index	1.89 (79)	-1.92 (62)	-1.92 (62)	4.57 (60)	8.98 (66)	6.72 (51)	5.55 (73)
Median	3.53	0.10	0.10	5.47	10.32	6.90	6.62

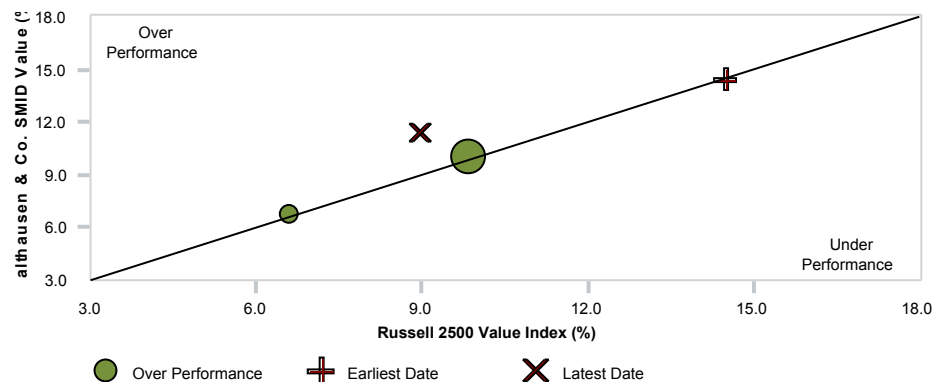
	2018	2017	2016	2015	2014
● Walthausen & Co. SMID Value	12.04 (39)	18.43 (20)	16.63 (68)	N/A	N/A
● Russell 2500 Value Index	12.36 (42)	10.36 (84)	25.20 (24)	-5.49 (67)	7.11 (50)
Median	12.97	14.60	19.46	-3.14	7.06

Comparative Performance

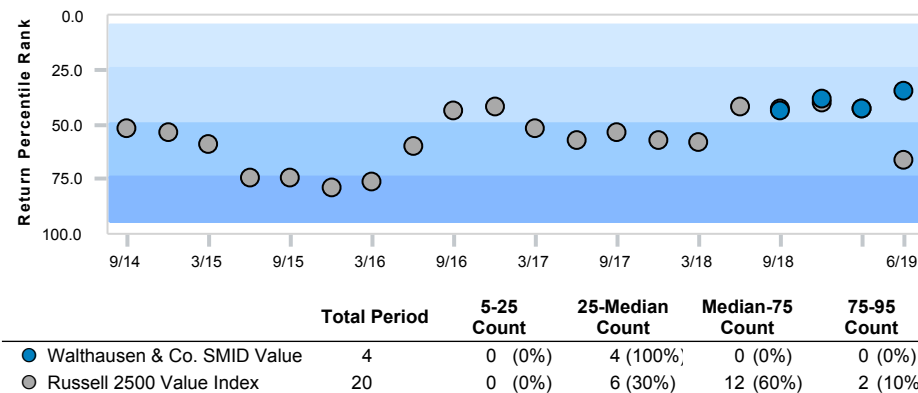
	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018	1 Qtr Ending Dec-2017
Walthausen & Co. SMID Value	11.83 (87)	-17.80 (61)	3.05 (47)	4.62 (25)	-0.75 (35)	5.08 (49)
Russell 2500 Value Index	13.12 (66)	-17.12 (41)	2.67 (53)	5.80 (15)	-2.65 (81)	4.25 (65)
IM U.S. SMID Cap Value Equity (SA+CF) Median	13.87	-17.49	2.87	3.14	-1.36	4.96



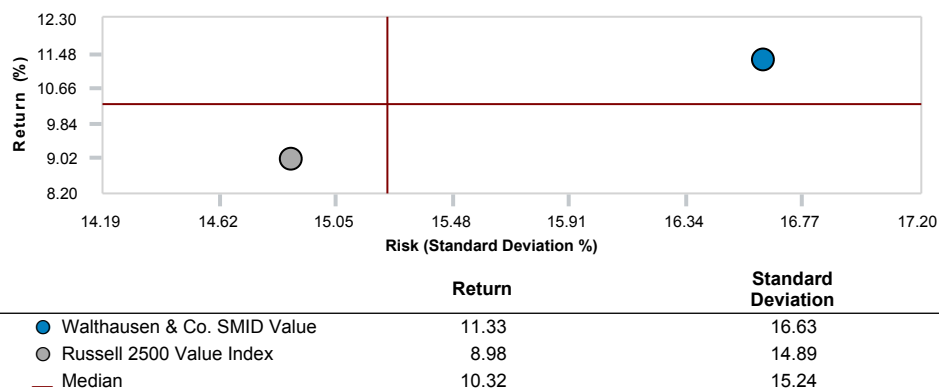
### 3 Yr Rolling Under/Over Performance - 5 Years



### 3 Yr Rolling Percentile Ranking - 5 Years



### Peer Group Scattergram - 3 Years



### Peer Group Scattergram - 5 Years



### Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Walthausen & Co. SMID Value	4.14	111.26	101.93	1.61	0.59	0.65	1.08	10.74
Russell 2500 Value Index	0.00	100.00	100.00	0.00	N/A	0.56	1.00	9.96

### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Walthausen & Co. SMID Value	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Russell 2500 Value Index	0.00	100.00	100.00	0.00	N/A	0.39	1.00	9.61

#### LSV International - Portfolio Description

- Strategy: International Large Cap Value Equity
- Vehicle: Commingled Fund
- Objective: To outperform the MSCI EAFE Index
- Annual fees: .75% on first \$25M  
• .65% on next \$25M
- Benchmark: MSCI EAFE Index

#### LSV International - Strategy Details

The International Large Cap Value Equity strategy's primary emphasis is the use of quantitative techniques to select individual securities in what would be considered a bottom-up approach. A risk control discipline limits the over- or under-exposure of the portfolio to industry concentrations. Value factors and security selection dominate sector/industry factors as explanators of performance. The portfolio decision making process is strictly quantitative and driven by (1) a proprietary model which ranks securities based on fundamental measures of value and indicators of near-term appreciation potential and, (2) a risk control process that controls for residual benchmark risk while maximizing the expected return of the portfolio. There is no subjective modification applied to the results of the process. This leads to a high degree of consistency in the practical application of our investment philosophy.

#### WCM Intl Growth - Portfolio Description

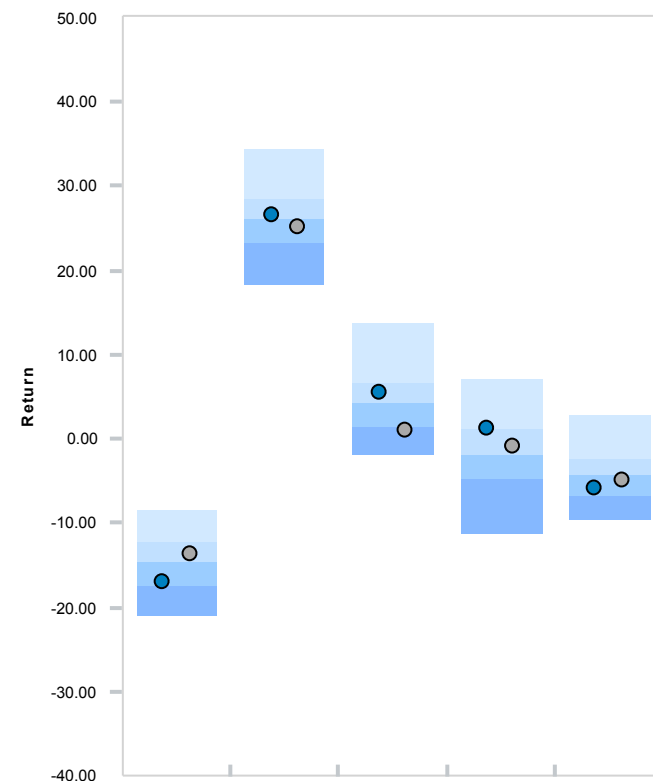
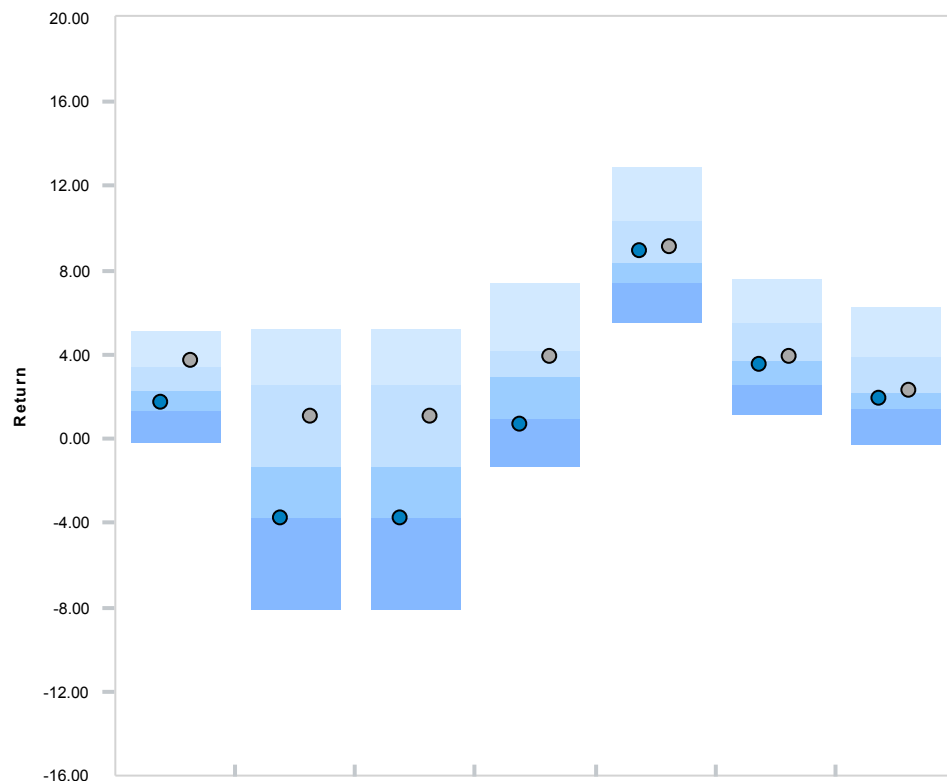
- Strategy: Focused Growth International
- Vehicle: Separately Managed Account
- Objective: To outperform the MSCI EAFE Index
- Annual fees: 1.00% on all assets
- Benchmark: MSCI EAFE Index

#### WCM Intl Growth - Strategy Details

This is a concentrated, large cap, quality, international growth product. They are distinct from the broad international indices with a traditional growth bias, seeking select quality growth businesses from conventional growth sectors. That combined with a concentrated focus (between 25-40) means the product will have investment characteristics distinct from any broad international benchmark. The product includes mega-, large- and mid-cap international shares from developed and emerging markets. The investment process includes top-down thematic analysis and bottom-up fundamental stock selection. They focus on each company's business model (economic moat), corporate culture, management, and valuation (using conservative DCF models). Currency hedging is not utilized in this strategy but careful attention is paid to region, country, and currency exposures. The projected annual turnover is 15-35%, suggesting tax efficiency for tax-sensitive clients.



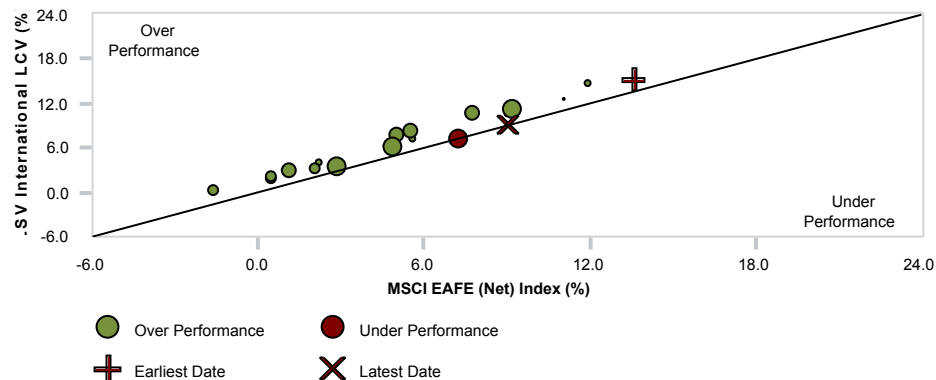
Peer Group Analysis - IM International Large Cap Value Equity (SA+CF)



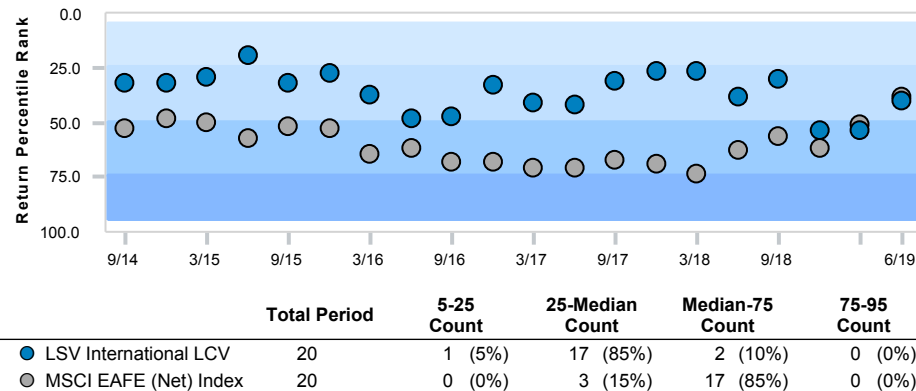
Comparative Performance

	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018	1 Qtr Ending Dec-2017
LSV International LCV	8.28 (83)	-14.19 (76)	1.80 (22)	-3.84 (85)	-1.16 (48)	3.38 (74)
MSCI EAFE (Net) Index	9.98 (39)	-12.54 (47)	1.35 (34)	-1.24 (21)	-1.53 (62)	4.23 (51)
IM International Large Cap Value Equity (SA+CF) Median	9.44	-12.88	0.88	-2.19	-1.26	4.27

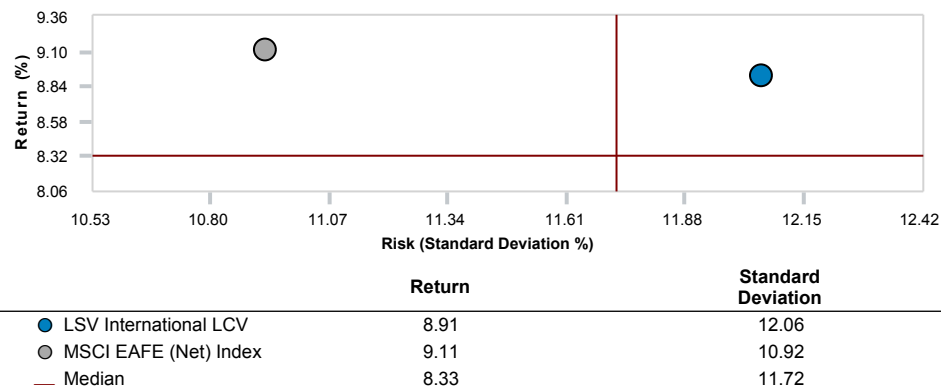
### 3 Yr Rolling Under/Over Performance - 5 Years



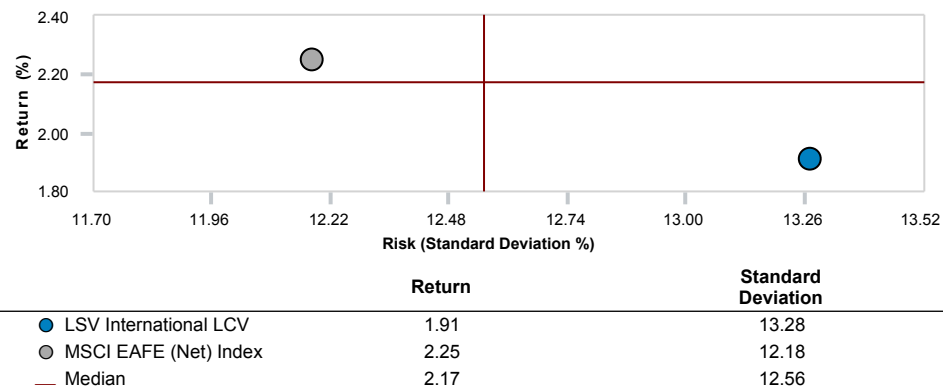
### 3 Yr Rolling Percentile Ranking - 5 Years



### Peer Group Scattergram - 3 Years



### Peer Group Scattergram - 5 Years



### Historical Statistics - 3 Years

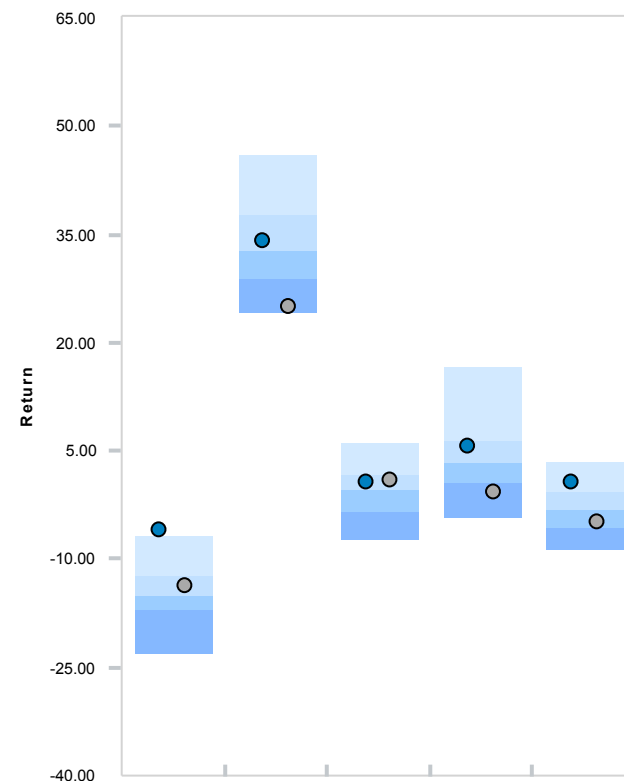
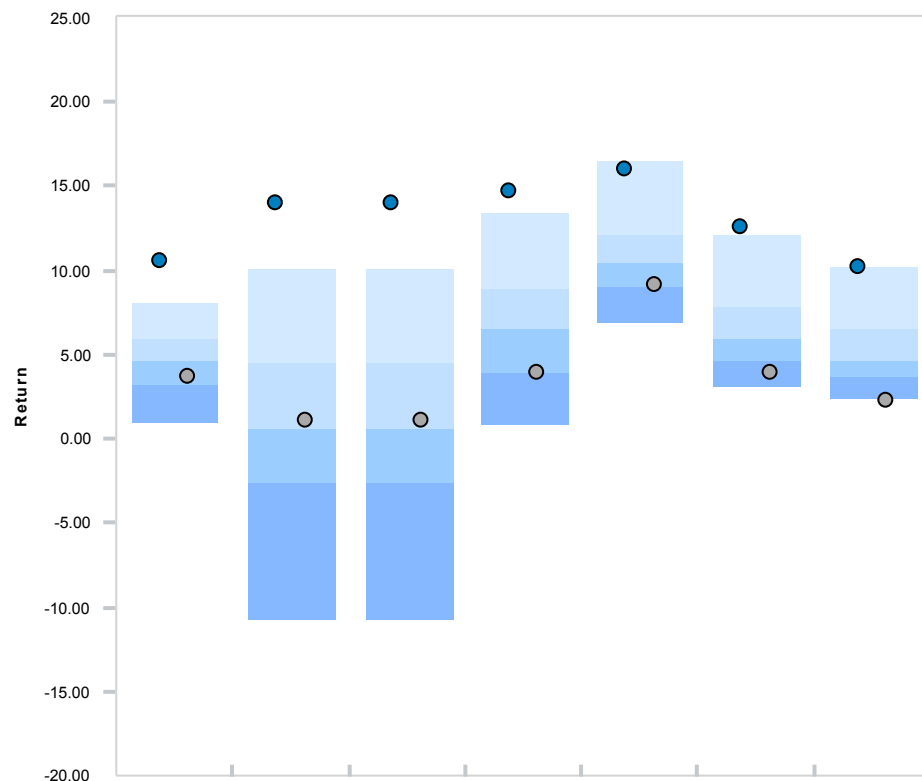
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
LSV International LCV	2.98	104.00	107.76	-0.72	-0.02	0.65	1.07	8.06
MSCI EAFE (Net) Index	0.00	100.00	100.00	0.00	N/A	0.73	1.00	7.12

### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
LSV International LCV	2.81	103.22	105.07	-0.39	-0.07	0.14	1.07	9.11
MSCI EAFE (Net) Index	0.00	100.00	100.00	0.00	N/A	0.17	1.00	8.33



Peer Group Analysis - IM International Growth Equity (SA+CF)



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● WCM Focused Growth Int'l	10.56 (1)	14.02 (1)	14.02 (1)	14.64 (3)	15.96 (8)	12.54 (4)	10.21 (5)
● MSCI EAFE (Net) Index	3.68 (69)	1.08 (46)	1.08 (46)	3.92 (76)	9.11 (74)	3.93 (87)	2.25 (96)
Median	4.63	0.60	0.60	6.49	10.48	5.91	4.67

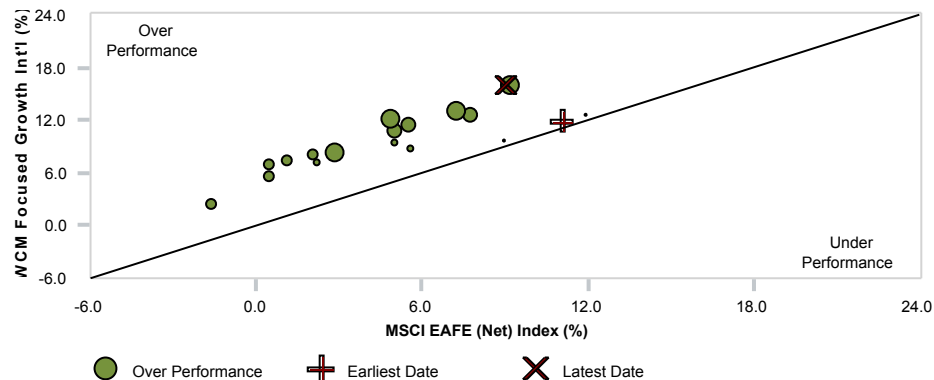
	2018	2017	2016	2015	2014
● WCM Focused Growth Int'l	-5.96 (4)	33.97 (43)	0.70 (39)	5.67 (31)	0.67 (17)
● MSCI EAFE (Net) Index	13.79 (40)	25.03 (93)	1.00 (33)	-0.81 (86)	-4.90 (66)
Median	15.06	32.62	-0.45	3.28	-3.31

Comparative Performance

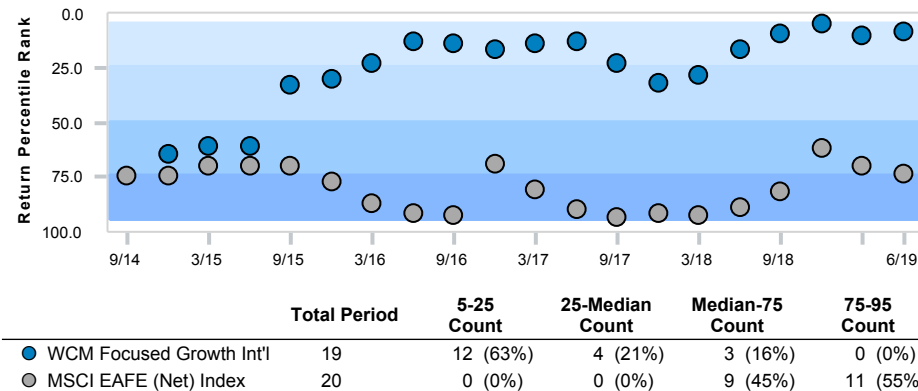
	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018	1 Qtr Ending Dec-2017
WCM Focused Growth Int'l	14.15 (24)	-12.86 (30)	3.68 (3)	2.70 (9)	1.35 (28)	5.20 (54)
MSCI EAFE (Net) Index	9.98 (92)	-12.54 (28)	1.35 (35)	-1.24 (58)	-1.53 (85)	4.23 (73)
IM International Growth Equity (SA+CF) Median	12.26	-14.82	0.45	-1.00	0.18	5.27



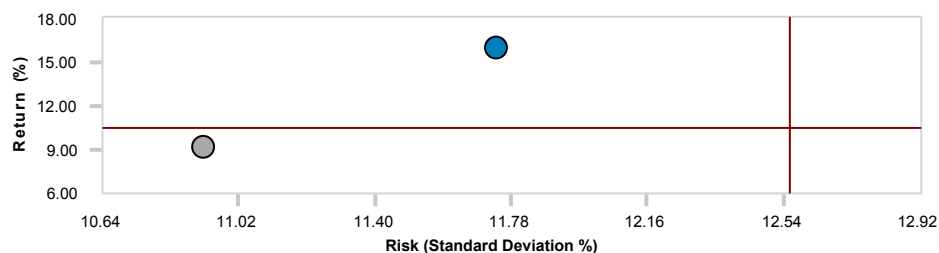
### 3 Yr Rolling Under/Over Performance - 5 Years



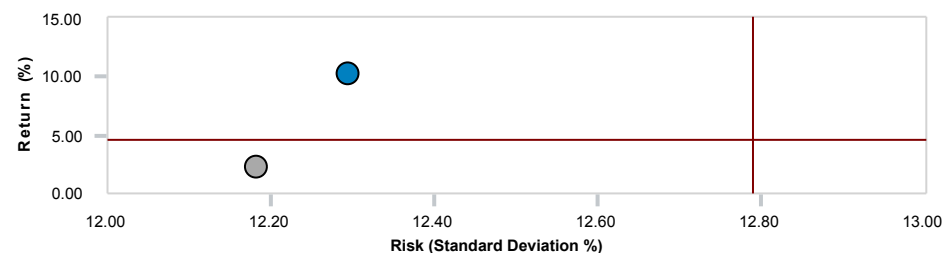
### 3 Yr Rolling Percentile Ranking - 5 Years



### Peer Group Scattergram - 3 Years



### Peer Group Scattergram - 5 Years



### Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
WCM Focused Growth Int'l	5.72	107.94	58.96	7.02	1.09	1.21	0.94	7.49
MSCI EAFE (Net) Index	0.00	100.00	100.00	0.00	N/A	0.73	1.00	7.12

### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
WCM Focused Growth Int'l	5.78	101.71	53.69	8.15	1.31	0.79	0.90	7.80
MSCI EAFE (Net) Index	0.00	100.00	100.00	0.00	N/A	0.17	1.00	8.33

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**Pacific Moderate Duration - Portfolio Description**

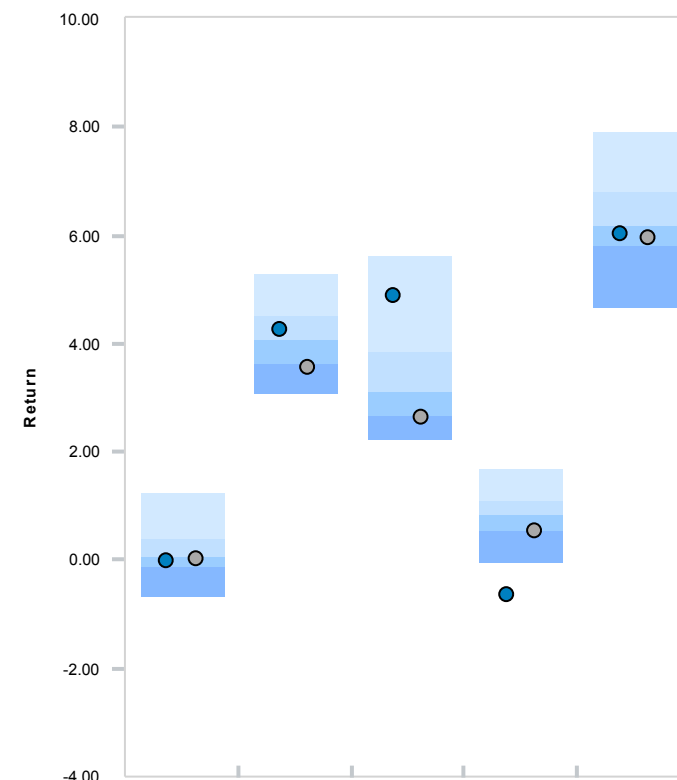
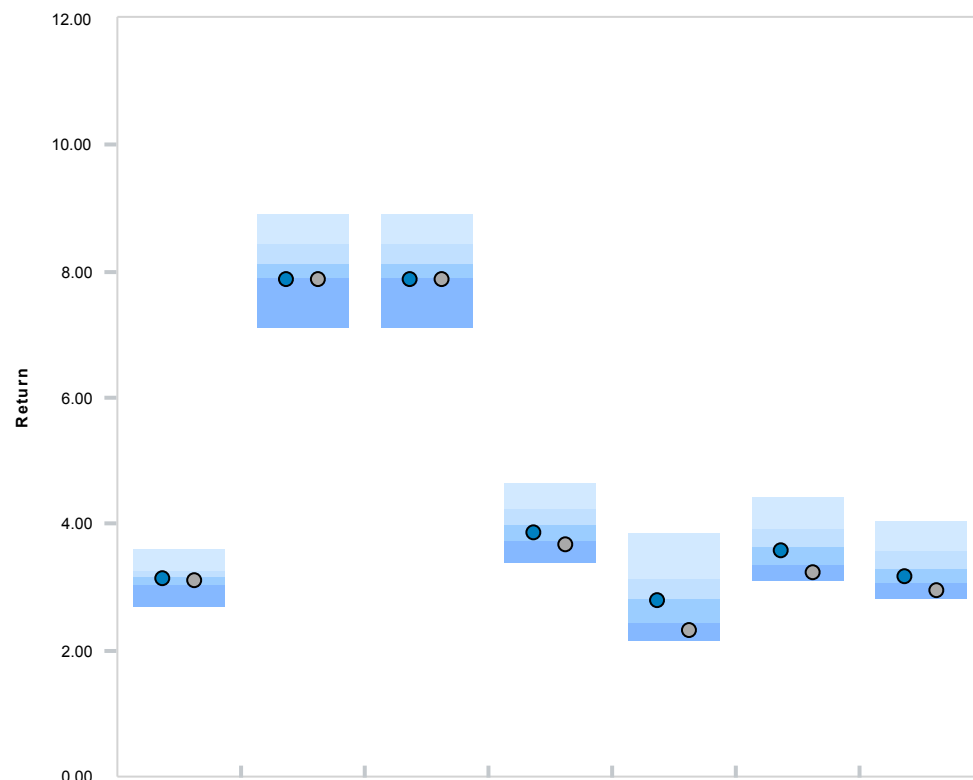
- Strategy: Moderate Duration
- Vehicle: Separately Managed Account
- Objective: To outperform the Bloomberg Barclays US Aggregate Index
- Annual fees: .30% on all assets
- Benchmark: Bloomberg Barclays US Aggregate Index

**Pacific Moderate Duration - Strategy Details**

The Moderate Duration product is a core bond strategy that seeks to outperform the Barclays Capital Aggregate Index on both an absolute and risk-adjusted basis over a full market cycle. The Moderate Duration product invests in U.S. Government securities, mortgage-backed securities, corporate debt securities and asset-backed securities. The product maintains duration of between 3.0 to 7.0 years and is generally within one year of the index.



Peer Group Analysis - IM U.S. Broad Market Core Fixed Income (SA+CF)

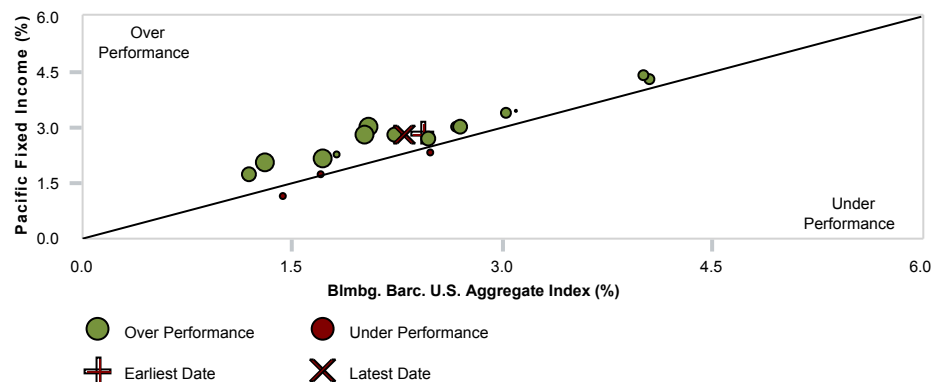


	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR		2018	2017	2016	2015	2014
● Pacific Fixed Income	3.11 (56)	7.85 (80)	7.85 (80)	3.85 (62)	2.77 (52)	3.56 (55)	3.16 (64)	● Pacific Fixed Income	-0.01 (66)	4.24 (35)	4.86 (9)	-0.65 (98)	6.02 (63)
● Blmbg Barc US Agg	3.08 (69)	7.87 (79)	7.87 (79)	3.65 (85)	2.31 (88)	3.22 (89)	2.95 (89)	● Blmbg Barc US Agg	0.01 (61)	3.54 (85)	2.65 (77)	0.55 (74)	5.97 (67)
Median	3.14	8.11	8.11	3.97	2.80	3.63	3.29	Median	0.07	4.06	3.11	0.82	6.16

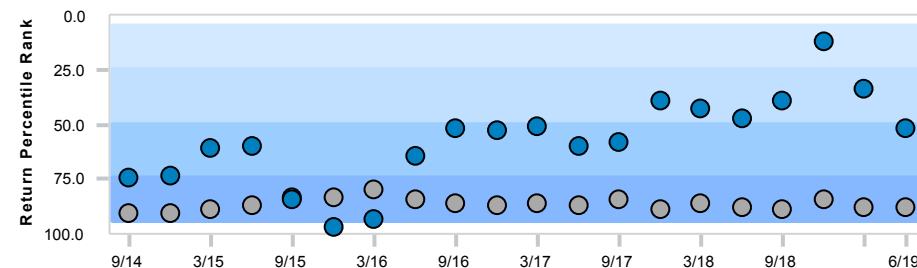
Comparative Performance

	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018	1 Qtr Ending Dec-2017
Pacific Fixed Income	2.90 (85)	1.59 (32)	0.06 (74)	-0.22 (88)	-1.42 (60)	0.64 (20)
Blmbg. Barc. U.S. Aggregate Index	2.94 (83)	1.64 (23)	0.02 (83)	-0.16 (73)	-1.46 (68)	0.39 (80)
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	3.22	1.40	0.18	-0.09	-1.37	0.51

### 3 Yr Rolling Under/Over Performance - 5 Years

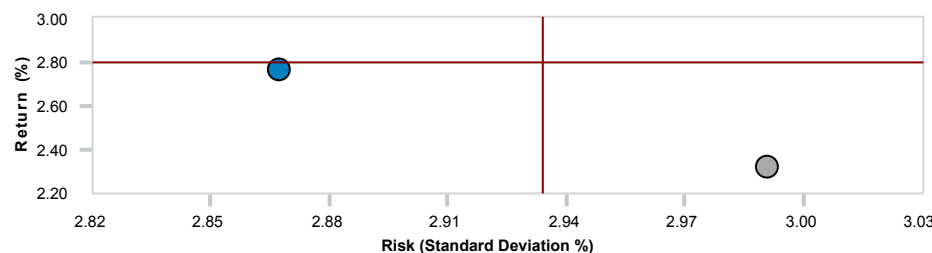


### 3 Yr Rolling Percentile Ranking - 5 Years



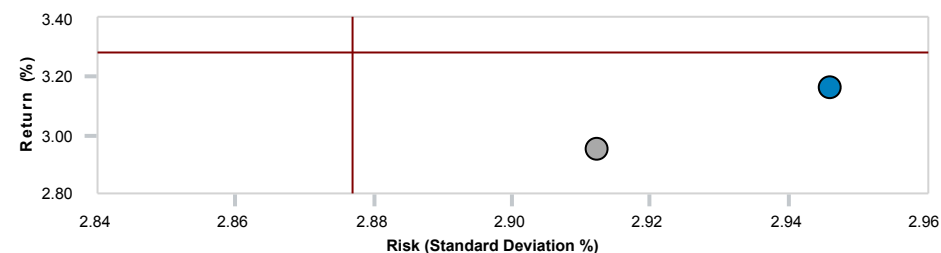
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Pacific Fixed Income	20	1 (5%)	5 (25%)	11 (55%)	3 (15%)
Blmbg Barc US Agg	20	0 (0%)	0 (0%)	0 (0%)	20 (100%)

### Peer Group Scattergram - 3 Years



	Return	Standard Deviation
Pacific Fixed Income	2.77	2.87
Blmbg Barc US Agg	2.31	2.99
Median	2.80	2.93

### Peer Group Scattergram - 5 Years



	Return	Standard Deviation
Pacific Fixed Income	3.16	2.95
Blmbg Barc US Agg	2.95	2.91
Median	3.29	2.88

### Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Pacific Fixed Income	0.30	101.31	86.97	0.54	1.48	0.51	0.95	1.72
Blmbg. Barc. U.S. Aggregate Index	0.00	100.00	100.00	0.00	N/A	0.34	1.00	1.85

### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Pacific Fixed Income	0.95	102.55	97.45	0.33	0.22	0.80	0.96	1.60
Blmbg. Barc. U.S. Aggregate Index	0.00	100.00	100.00	0.00	N/A	0.73	1.00	1.63

#### AEW Core Property - Portfolio Description

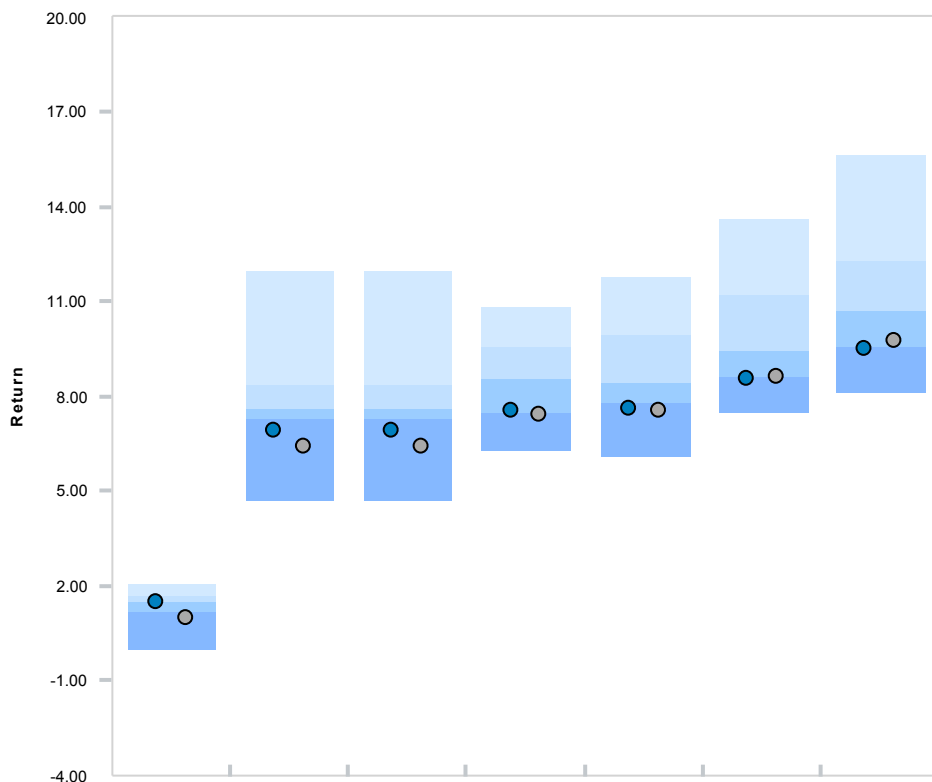
- Strategy: Core Property Trust
- Vehicle: Open Ended Commingled Real Estate Fund
- Objective: To outperform the NCREIF ODCE Index
- Annual fees: 1.10% on all assets
- Benchmark: NCREIF ODCE Index

#### AEW Core Property - Strategy Details

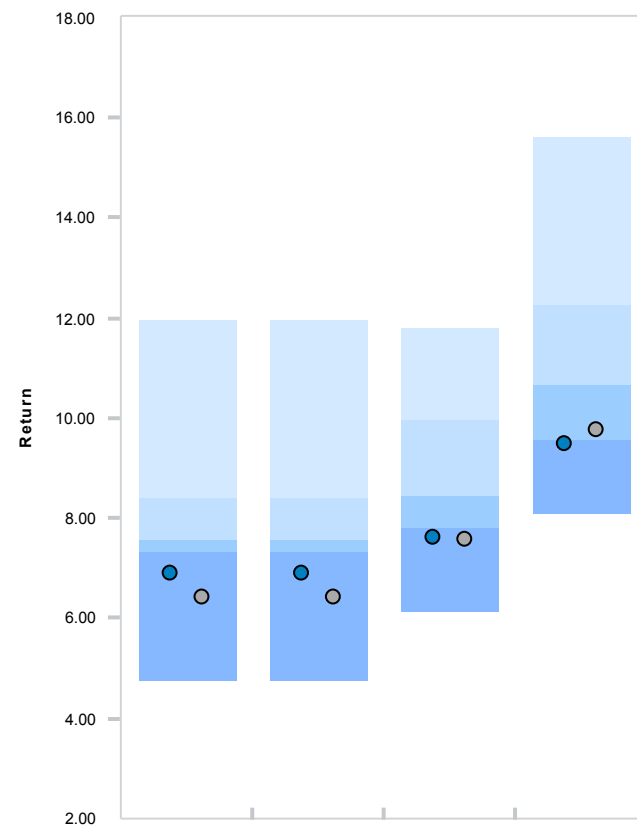
The AEW Core Property Trust combines research-driven strategies with on-the-ground market knowledge and experience to construct a diversified portfolio of multifamily, retail, office, industrial and, to a lesser extent, hotel properties. The Fund seeks to acquire primarily well-located, institutional-quality assets in markets throughout the U.S. - investments that are designed to provide durable income streams and appreciation over the mid- to long-term. AEW expects to invest primarily in major metropolitan markets that feature barriers to new supply - whether physical, governmental or economic - as well as solid population and job growth. With limited supply and increasing demand, these markets should provide an opportunity for peak-to-peak rent growth and thus, long-term value creation. The Fund also seeks to exploit America's changing demographics, and the impact they will have on economic growth and demand for real estate. The Fund also focuses on markets and properties that are positively influenced by globalization as it continues to change the nature of U.S. jobs and affect the movement of goods and services and consumer spending. Finally, the Fund's target markets also exhibit economic diversity in terms of the underlying industries that are driving the demand in the marketplace; providing both growth and diversification to the Fund.



**Peer Group Analysis - IM U.S. Open End Private Real Estate (SA+CF)**



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● AEW Core Property Trust	1.49 (42)	6.91 (84)	6.91 (84)	7.53 (75)	7.61 (78)	8.59 (76)	9.50 (78)
● NCREIF-ODCE (VW)	1.00 (90)	6.41 (91)	6.41 (91)	7.42 (76)	7.57 (78)	8.62 (76)	9.76 (64)
Median	1.47	7.59	7.59	8.60	8.43	9.45	10.69



	FYTD	1 YR	3 YR	5 YR
● AEW Core Property Trust	6.91 (84)	6.91 (84)	7.61 (78)	9.50 (78)
● NCREIF-ODCE (VW)	6.41 (91)	6.41 (91)	7.57 (78)	9.76 (64)
Median	7.59	7.59	8.43	10.69

**Comparative Performance**

	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018	1 Qtr Ending Dec-2017
AEW Core Property Trust	1.71 (81)	1.89 (30)	1.65 (81)	2.31 (44)	1.66 (87)	2.16 (56)
NCREIF Fund Index-ODCE (VW)	1.42 (84)	1.76 (51)	2.09 (54)	2.05 (67)	2.20 (52)	2.07 (68)
IM U.S. Open End Private Real Estate (SA+CF) Median	1.99	1.76	2.10	2.22	2.21	2.25



#### Bloomfield Income Fund - Portfolio Description

- Strategy: Bloomfield Capital Income Fund II
- Objective: To provide an absolute return in excess of 9%
- Annual fees: 2.00% on Committed Capital

#### Bloomfield Income Fund - Strategy Details

The Bloomfield Capital Income Fund II is a real estate opportunity fund focused on two primary strategies. 1. Originating senior secured, high yield, interim and bridge loans on income producing real estate in the U.S. and 2. Acquiring a diverse portfolio of commercial mortgage loans, deeds of trust, and other real estate related opportunistic investments. The Fund's objective is to build a diverse portfolio of senior, secured mortgages providing investors with consistent income and superior risk adjusted returns. Bloomfield Capital targets a double-digit yield on secure, risk-mitigated investments. The portfolio management team implements conservative underwriting techniques to provide a margin of safety.

#### Metropolitan MREP VI - Portfolio Description

- Strategy: Metropolitan Real Estate MREP VI Fund
- Vehicle: Real Estate Fund of Funds
- Objective: To outperform the NCREIF Property Index
- Annual fees: 1.35% on first \$5M
- 1.00% on the next \$20M
- Benchmark: NCREIF Property Index

#### Metropolitan MREP VI - Strategy Details

Invest in a diversified portfolio of private real estate funds or other investment vehicles with direct or indirect exposure to real estate. The manager invests in funds with exposure to office, retail, industrials, multi-family, and other types of properties located primarily in the United States. The manager selects value added and opportunistic funds with superior performance track records. The manager diversifies the strategy across property types, geographic markets, managers, and strategies.

#### RMK Timber - Portfolio Description

- Strategy: RMK Global Timberland Resources US Fund  
RMK Global Timberland Resources Intl Alternative Investment
- Objective: To outperform the NCREIF Timberland Index
- Management fees: US Fund: 1.00%  
Intl Fund: 1.25%
- Performance Fee: US Fund: 20% (6% Hurdle)  
Intl Fund: 20% (10% Hurdle)

#### RMK Timber - Strategy Details

The portfolio team develops an investment strategy for the Fund based on the current environment and market forecasts for timberlands, and related end products. RMK utilizes industry contacts to identify attractive acquisition targets that achieve the Fund's investment strategy. Prior to purchasing a tract of land, the team performs rigorous due diligence and develops an asset management plan. The portfolio is actively managed, evaluating the benefits of harvesting the forests, letting the trees further mature, or selling the timberland. The manager will diversify the portfolio by growth stage/maturity of the forests, geographic locations (50% US exposure / 50% International exposure), and species.



## Fund Information

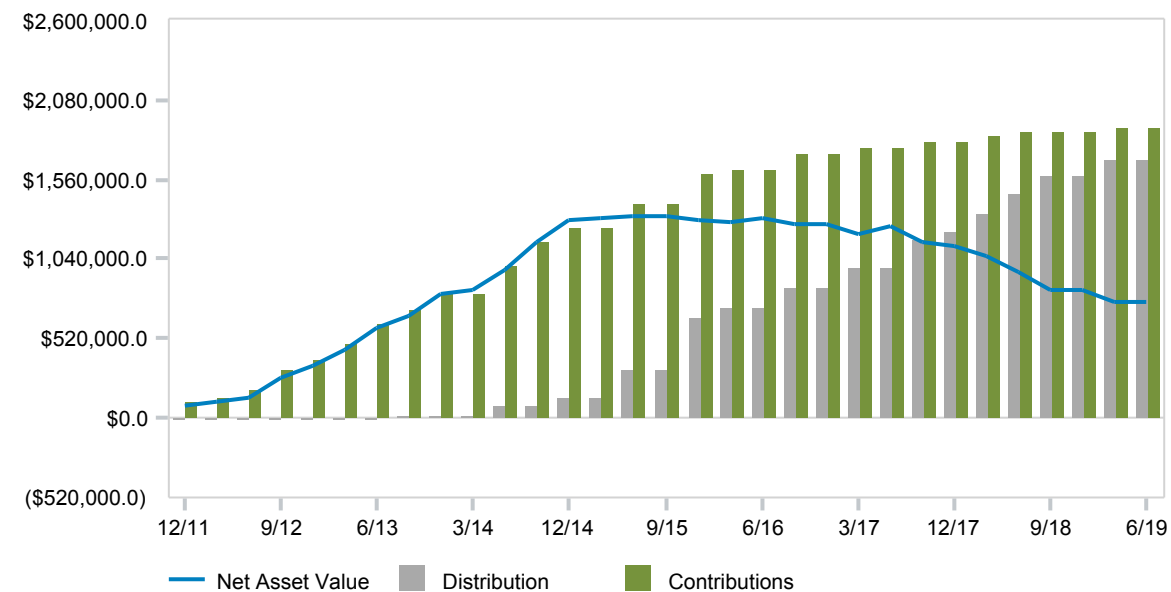
Type of Fund:	Fund Of Funds	Vintage Year:	2008
Strategy Type:	Real Estate	Management Fee:	1%
Target IRR:	9%	Inception:	03/19/2008
General Partner:	MREP6, LLC		
Investment Strategy:	Private Equity Real Estate value add/opportunistic multi-manager		

## Cash Flow Summary

Capital Committed:	\$2,000,000
Capital Invested:	\$1,887,530
Management Fees:	-
Expenses:	-
Interest:	\$1,188
Total Contributions:	\$1,888,718
Remaining Capital Commitment:	\$112,470

Total Distributions:	\$1,679,798
Market Value:	\$765,347
Inception Date:	11/30/2011
Inception IRR:	8.6
TVPI:	1.3

## Cash Flow Analysis



## Fund Information

<b>Type of Fund:</b>	Partnership	<b>Vintage Year:</b>	2016
<b>Strategy Type:</b>	Timber	<b>Management Fee:</b>	1% of NAV
<b>Target IRR:</b>		<b>Inception:</b>	12/01/2016
<b>General Partner:</b>			
<b>Investment Strategy:</b>	South: Focus on pine plantations in the emerging growth stage to maximize biological growth and allow for market recovery from the sawtimber overhang currently impacting the region.		

Pacific Northwest: Acquire high-quality timberland assets with a strong component of mature timber and overall diverse age class structure to take advantage of fiber-short domestic markets and export opportunities to the Pacific Rim.

Mixed Quality Hardwood Regions: Focus on timberland assets that offer exposure to export markets, multiple income streams, low management costs, and low correlation with softwood markets in the South and Pacific Northwest.

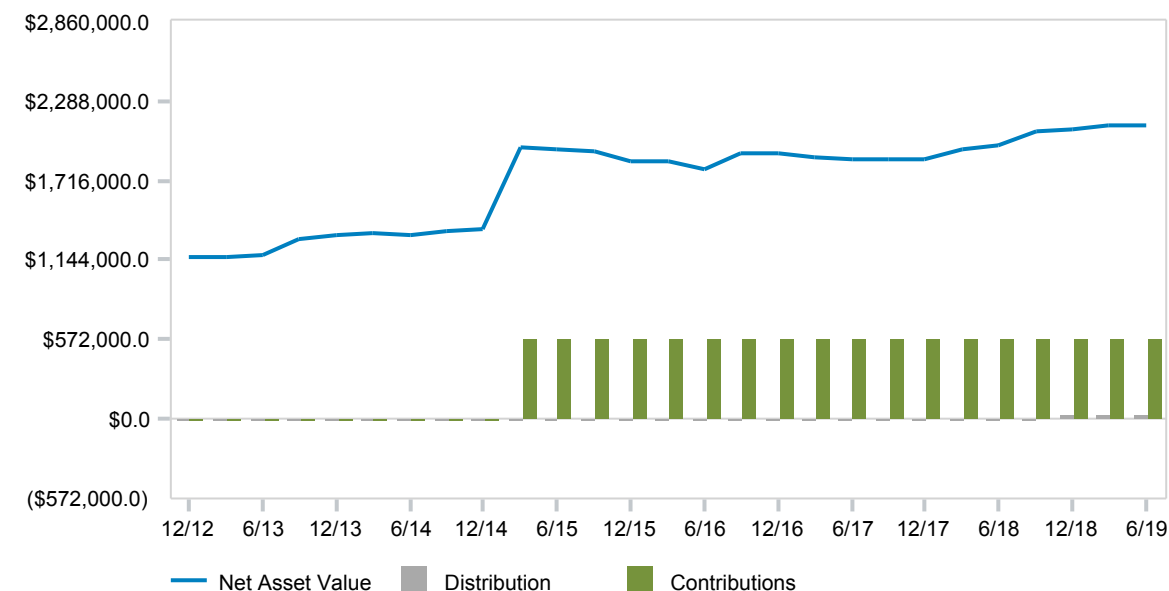
## Cash Flow Summary

<b>Capital Committed:</b>	\$1,700,000
<b>Capital Invested:</b>	\$1,700,000
<b>Management Fees:</b>	-
<b>Expenses:</b>	-
<b>Interest:</b>	-
<b>Total Contributions:</b>	\$1,700,000
<b>Remaining Capital Commitment:</b>	-

<b>Total Distributions:</b>	\$38,224
<b>Market Value:</b>	\$2,112,710

<b>Inception Date:</b>	11/01/2012
<b>Inception IRR:</b>	4.1
<b>TVPI:</b>	1.3

## Cash Flow Analysis



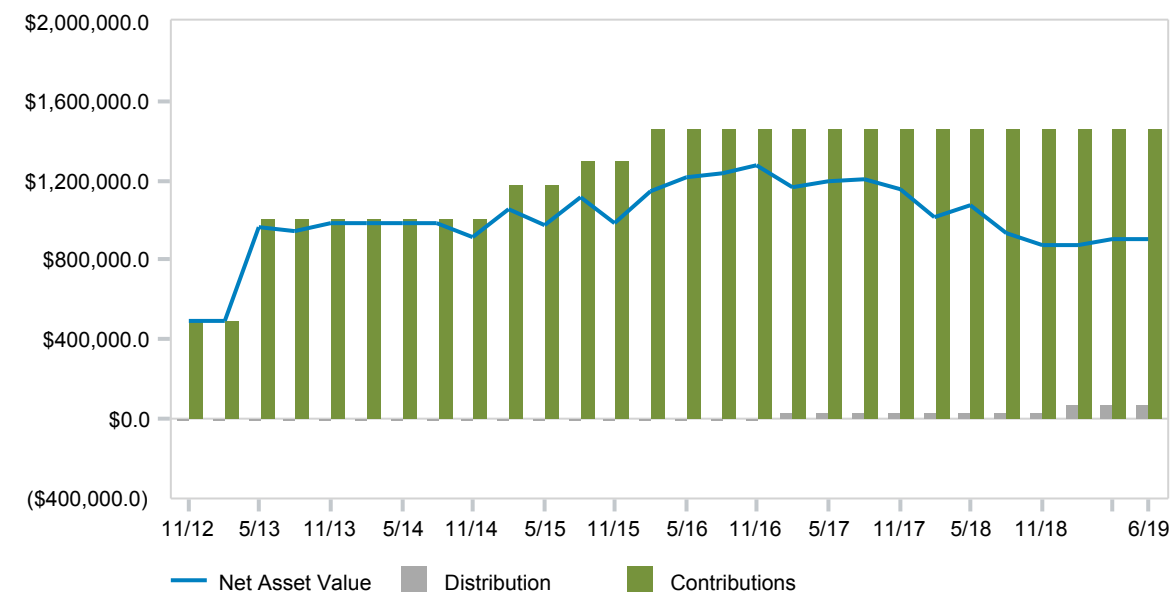
## Fund Information

<b>Type of Fund:</b>	Partnership	<b>Vintage Year:</b>	2011
<b>Strategy Type:</b>	Timber	<b>Management Fee:</b>	1.25% of NAV
<b>Target IRR:</b>		<b>Inception:</b>	09/07/2011
<b>General Partner:</b>			
<b>Investment Strategy:</b>	A portfolio of timberland investments in South America, Eastern/Central Europe, and South Africa through tax efficient investment vehicles and to maximize returns through a portfolio diversified by geography, end-products and end-markets		

## Cash Flow Summary

<b>Capital Committed:</b>	\$1,275,000
<b>Capital Invested:</b>	\$1,461,858
<b>Management Fees:</b>	-
<b>Expenses:</b>	-
<b>Interest:</b>	-
<b>Total Contributions:</b>	\$1,461,858
<b>Remaining Capital Commitment:</b>	-\$186,858
<b>Total Distributions:</b>	\$67,042
<b>Market Value:</b>	\$901,769
<b>Inception Date:</b>	11/21/2012
<b>Inception IRR:</b>	-7.2
<b>TVPI:</b>	0.7

## Cash Flow Analysis



#### Fund Information

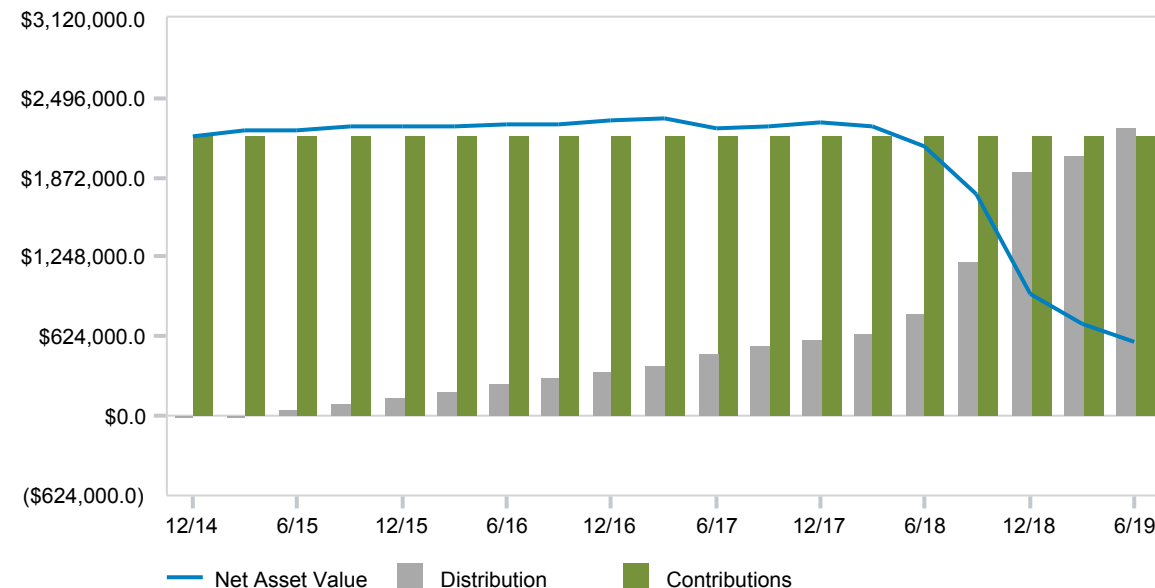
<b>Type of Fund:</b>	Direct	<b>Vintage Year:</b>	2011
<b>Strategy Type:</b>	Other	<b>Management Fee:</b>	2.00%
<b>Target IRR:</b>	9.00%	<b>Inception:</b>	11/13/2011
<b>General Partner:</b>	Bloomfield Capital Partners, LLC		
<b>Investment Strategy:</b>	Bloomfield Capital Income Fund II invests primarily in debt obligations consisting of commercial mortgage loans, deeds of trust and other real estate and/or debt-related investments, with the objective of creating a diversified portfolio producing strong and consistent returns while providing considerable downside protection.		

The Fund's investment strategy has a primary focus on commercial real estate loans and investments collateralized by significant margins of protective collateral such as real estate and other assets including but not limited to cash, marketable securities, equity interests, corporate interests and personal/corporate guarantees.

#### Cash Flow Summary

<b>Capital Committed:</b>	\$2,200,000
<b>Capital Invested:</b>	\$2,200,000
<b>Management Fees:</b>	\$317,000
<b>Expenses:</b>	\$135,239
<b>Interest:</b>	-
<b>Total Contributions:</b>	\$2,200,000
<b>Remaining Capital Commitment:</b>	-
<b>Total Distributions:</b>	\$2,265,864
<b>Market Value:</b>	\$576,594
<b>Inception Date:</b>	12/22/2014
<b>Inception IRR:</b>	7.5
<b>TVPI:</b>	1.3

#### Cash Flow Analysis



#### Fund Information

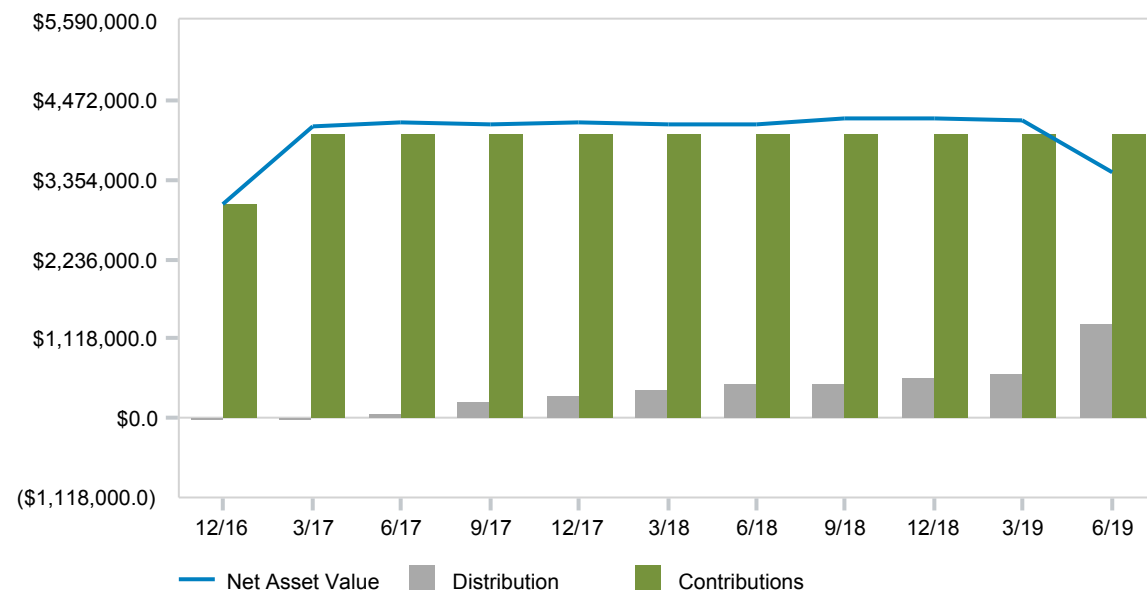
<b>Type of Fund:</b>	Direct	<b>Vintage Year:</b>	2015
<b>Strategy Type:</b>	Other	<b>Management Fee:</b>	2.00%
<b>Target IRR:</b>	8.00%	<b>Inception:</b>	11/01/2015
<b>General Partner:</b>	Bloomfield Capital Partners, LLC		
<b>Investment Strategy:</b>	Bloomfield Capital Income Fund III invests primarily in debt obligations consisting of commercial mortgage loans, deeds of trust and other real estate and/or debt-related investments, with the objective of creating a diversified portfolio producing strong and consistent returns while providing considerable downside protection.		

The Fund's investment strategy has a primary focus on commercial real estate loans and investments collateralized by significant margins of protective collateral such as real estate and other assets including but not limited to cash, marketable securities, equity interests, corporate interests and personal/corporate guarantees.

#### Cash Flow Summary

<b>Capital Committed:</b>	\$4,000,000
<b>Capital Invested:</b>	\$4,000,000
<b>Management Fees:</b>	\$248,970
<b>Expenses:</b>	\$85,895
<b>Interest:</b>	-
<b>Total Contributions:</b>	\$4,000,000
<b>Remaining Capital Commitment:</b>	\$620,000
<b>Total Distributions:</b>	\$1,332,329
<b>Market Value:</b>	\$3,445,489
<b>Inception Date:</b>	12/31/2016
<b>Inception IRR:</b>	8.2
<b>TVPI:</b>	1.2

#### Cash Flow Analysis



#### Fund Information

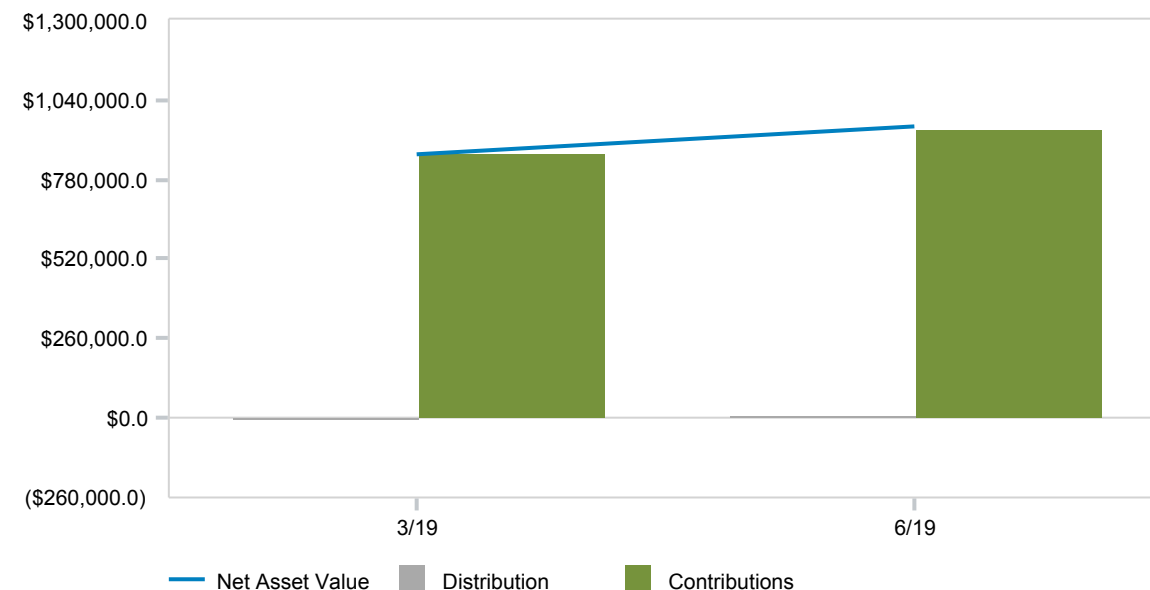
<b>Type of Fund:</b>	Direct	<b>Vintage Year:</b>	2018
<b>Strategy Type:</b>	Other	<b>Management Fee:</b>	1.5%
<b>Target IRR:</b>	8.5% (Series A only)	<b>Inception:</b>	11/16/2018
<b>General Partner:</b>	Bloomfield Capital Partners V, LLC		

**Investment Strategy:** The investment strategy of each Series of the Fund will have a primary focus on private credit and specialty finance assets (which is expected to include real estate debt and other general debt and debt-related investments) with short to intermediate-term durations and often contractual cash flows. The Managing Member's goal is to preserve invested capital, and generate returns that have a low correlation to traditional public markets (although there can be no assurances that this goal will be realized). The Fund will target middle market opportunities in real estate debt and other general debt and debt-related transactions (including REO properties, and preferred equity, that would include debt-like characteristics). The Fund generally will not invest in traditional leveraged common equity positions in real estate; however, the Fund may acquire REO and similar non-traditional properties and may also take incidental or pledged equity positions in connection with certain loans in order to obtain supplemental collateral to enhance the strength of the primary credit investment, and/or to expedite any requisite foreclosure process with such loan for the benefit of the Fund. The primary focus of private credit and specialty finance assets (including real estate debt and other general debt and debt-related investments) will be to capitalize on gap, transitional, bridge, special situation and opportunistic financings that are time sensitive, complex, and that the Managing Member believes offer attractive risk-adjusted returns. Each Series of the Fund may also variously co-invest in opportunities originated by other investors where the overall investment opportunity is of the same or similar nature as the Series typically invests.

#### Cash Flow Summary

<b>Capital Committed:</b>	\$2,000,000
<b>Capital Invested:</b>	\$940,094
<b>Management Fees:</b>	-
<b>Expenses:</b>	-
<b>Interest:</b>	-
<b>Total Contributions:</b>	\$940,094
<b>Remaining Capital Commitment:</b>	\$1,059,906
<b>Total Distributions:</b>	\$6,013
<b>Market Value:</b>	\$954,655
<b>Inception Date:</b>	02/14/2019
<b>Inception IRR:</b>	2.6
<b>TVPI:</b>	1.0

#### Cash Flow Analysis



**Benchmark History**  
**Investment Policy Benchmarks**  
As of June 30, 2019

Total Fund Policy	
Allocation Mandate	Weight (%)
<b>Jan-1985</b>	
S&P 500 Index	20.50
S&P MidCap 400 Index	16.00
Russell 2000 Index	14.00
MSCI EAFE (Net) Index	15.00
Blmbg. Barc. U.S. Aggregate Index	30.00
NCREIF Fund Index-ODCE (VW)	4.50

<b>Jan-2017</b>	
S&P 500 Index	20.00
Russell Midcap Index	14.00
Russell 2000 Index	14.00
MSCI EAFE (Net) Index	15.50
Blmbg. Barc. U.S. Aggregate Index	20.00
Blmbg. Barc. Global Multiverse	2.00
NCREIF Fund Index-ODCE (VW)	6.00
HFRI FOF: Diversified Index	5.00
NCREIF Timberland Index	3.50

Total Fixed Income Policy	
Allocation Mandate	Weight (%)
<b>Jan-1976</b>	
Blmbg. Barc. U.S. Aggregate Index	100.00

Total Real Estate Policy	
Allocation Mandate	Weight (%)
<b>Jan-1978</b>	
NCREIF Property Index	100.00

Total Domestic Equity Policy	
Allocation Mandate	Weight (%)
<b>Jan-1985</b>	
S&P 500 Index	40.00
S&P MidCap 400 Index	32.00
Russell 2000 Index	28.00

Total International Equity Policy	
Allocation Mandate	Weight (%)
<b>Jan-1970</b>	
MSCI EAFE (Net) Index	100.00

Total Timber Policy	
Allocation Mandate	Weight (%)
<b>Apr-1987</b>	
NCREIF Timberland Index	100.00





Plan Disclosures:

- All composite returns (except Timber and Real Estate) prior to March 31, 2015 was obtained from prior consultant.
- Though there was no changes made to any of the composites (except Timber and Real Estate) from 3/31/2015 and back to inception, and are shown as reported by prior consultant, there are changes made to individual portfolios.
- AEW Core Property- obtained all historical statements and built history.
- Bloomfield Capital Income Fund- obtained all historical statements and built history.
- Metropolitan Real Estate VI- obtained all historical statements and built history.
- RMK Timberland Intl Fund- obtained all historical statements and built history.
- RMK Timberland US Fund- obtained all historical statements and built history.
- After rebuilding history for all Real Estate Funds and all Timber funds, recalculated composite returns for each composite.

# Southfield Employees Retirement System

## Fee Analysis

As of June 30, 2019

	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
Comerica S&P 500 Index Fund	0.09	23,085,893	19,869	0.12 % of First \$2 M 0.10 % of Next \$3 M 0.08 % of Next \$20 M 0.06 % of Next \$25 M 0.04 % of Next \$50 M 0.02 % Thereafter
Champlain MC Equity	0.85	9,131,550	77,618	0.85 % of Assets
QMA US MC Equity	0.00	7,380,008	332	0.00 % of Assets
SouthernSun SC	1.00	5,800,676	58,007	1.00 % of First \$15 M 0.85 % Thereafter
Walhausen & Co. SMID Value	0.93	6,021,765	56,185	0.95 % of First \$5 M 0.85 % of Next \$20 M 0.75 % of Next \$25 M 0.65 % Thereafter
Great Lakes Equity	0.55	5,428,234	29,855	0.55 % of Assets
<b>Total Domestic Equity</b>	<b>0.43</b>	<b>56,848,126</b>	<b>241,866</b>	
WCM Focused Growth International	0.75	9,495,331	71,215	0.75 % of Assets
LSV International LCV	0.75	9,339,793	70,048	0.75 % of First \$25 M 0.65 % of Next \$25 M 0.55 % of Next \$50 M 0.45 % Thereafter
<b>Total International Equity</b>	<b>0.75</b>	<b>18,835,124</b>	<b>141,263</b>	
Pacific Fixed Income	0.30	10,781,235	32,344	0.30 % of Assets
Templeton Global Bond R6 (FBNRX)	0.51	3,366,422	17,169	0.51 % of Assets
Bloomfield Capital Income Fund II	2.00	576,594	11,532	2.00 % of Assets
Bloomfield Capital Income Fund III	2.00	3,445,489	68,910	2.00 % of Assets
Bloomfield Capital Income Fund V	1.50	954,655	14,320	1.50 % of Assets
<b>Total Fixed Income</b>	<b>0.75</b>	<b>19,124,395</b>	<b>144,274</b>	
AEW Core Property Trust	1.25	7,038,739	87,984	1.25 % of Assets
Metropolitan Real Estate V	1.00	765,347	7,653	1.00 % of Assets
<b>Total Real Estate</b>	<b>1.23</b>	<b>7,804,086</b>	<b>95,638</b>	
Magnitude Institutional	1.00	2,854,215	28,542	1.00 % of Assets
Titan Masters Int'l Fund	0.70	2,651,564	18,561	0.70 % of Assets
<b>Total Hedge Fund of Funds</b>	<b>0.86</b>	<b>5,505,779</b>	<b>47,103</b>	
RMK Timberland US Fund	1.00	2,112,710	21,127	1.00 % of Assets
RMK Timberland Intl Fund	1.25	901,769	11,272	1.25 % of Assets
<b>Total Timber Funds</b>	<b>1.07</b>	<b>3,014,479</b>	<b>32,399</b>	



# Southfield Employees Retirement System

## Fee Analysis

As of June 30, 2019

	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
Cash		751,846	-	
Total Fund	0.63	111,883,836	702,543	



<b>Active Return</b>	- Arithmetic difference between the manager's performance and the designated benchmark return over a specified time period.
<b>Alpha</b>	- A measure of the difference between a portfolio's actual performance and its expected return based on its level of risk as determined by beta. It determines the portfolio's non-systemic return, or its historical performance not explained by movements of the market.
<b>Beta</b>	- A measure of the sensitivity of a portfolio to the movements in the market. It is a measure of the portfolio's systematic risk.
<b>Consistency</b>	- The percentage of quarters that a product achieved a rate of return higher than that of its benchmark. Higher consistency indicates the manager has contributed more to the product's performance.
<b>Distributed to Paid In (DPI)</b>	- The ratio of money distributed to Limited Partners by the fund, relative to contributions. It is calculated by dividing cumulative distributions by paid in capital. This multiple shows the investor how much money they got back. It is a good measure for evaluating a fund later in its life because there are more distributions to measure against.
<b>Down Market Capture</b>	- The ratio of average portfolio performance over the designated benchmark during periods of negative returns. A lower value indicates better product performance
<b>Downside Risk</b>	- A measure similar to standard deviation that utilizes only the negative movements of the return series. It is calculated by taking the standard deviation of the negative quarterly set of returns. A higher factor is indicative of a riskier product.
<b>Excess Return</b>	- Arithmetic difference between the manager's performance and the risk-free return over a specified time period.
<b>Excess Risk</b>	- A measure of the standard deviation of a portfolio's performance relative to the risk free return.
<b>Information Ratio</b>	- This calculates the value-added contribution of the manager and is derived by dividing the active rate of return of the portfolio by the tracking error. The higher the Information Ratio, the more the manager has added value to the portfolio.
<b>Public Market Equivalent (PME)</b>	- Designs a set of analyses used in the Private Equity Industry to evaluate the performance of a Private Equity Fund against a public benchmark or index.
<b>R-Squared</b>	- The percentage of a portfolio's performance that can be explained by the behavior of the appropriate benchmark. A high R-Squared means the portfolio's performance has historically moved in the same direction as the appropriate benchmark.
<b>Return</b>	- Compounded rate of return for the period.
<b>Sharpe Ratio</b>	- Represents the excess rate of return over the risk free return divided by the standard deviation of the excess return. The result is an absolute rate of return per unit of risk. A higher value demonstrates better historical risk-adjusted performance.
<b>Standard Deviation</b>	- A statistical measure of the range of a portfolio's performance. It represents the variability of returns around the average return over a specified time period.
<b>Total Value to Paid In (TVPI)</b>	- The ratio of the current value of remaining investments within a fund, plus the total value of all distributions to date, relative to the total amount of capital paid into the fund to date. It is a good measure of performance before the end of a fund's life
<b>Tracking Error</b>	- This is a measure of the standard deviation of a portfolio's returns in relation to the performance of its designated market benchmark.
<b>Treynor Ratio</b>	- Similar to Sharpe ratio but utilizes beta rather than excess risk as determined by standard deviation. It is calculated by taking the excess rate of return above the risk free rate divided by beta to derive the absolute rate of return per unit of risk. A higher value indicates a product has achieved better historical risk-adjusted performance.
<b>Up Market Capture</b>	- The ratio of average portfolio performance over the designated benchmark during periods of positive returns. A higher value indicates better product performance.

AndCo compiled this report for the sole use of the client for which it was prepared. AndCo is responsible for evaluating the performance results of the Total Fund along with the investment advisors by comparing their performance with indices and other related peer universe data that is deemed appropriate. AndCo uses the results from this evaluation to make observations and recommendations to the client.

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