

Investment Performance Review  
Period Ending March 31, 2019

## **Palm Beach Gardens Police Pension Plan**

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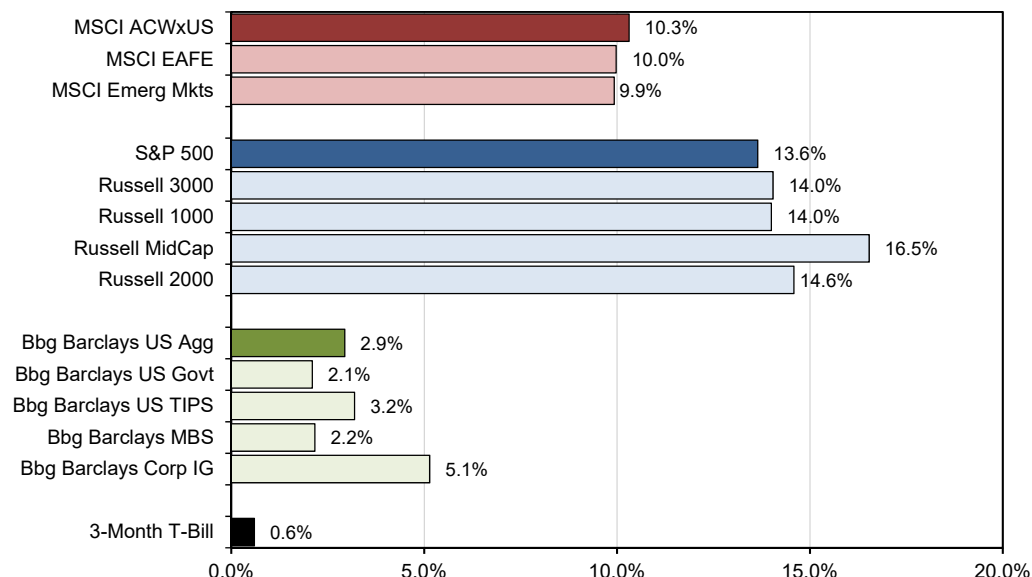


## **1st Quarter 2019 Market Environment**

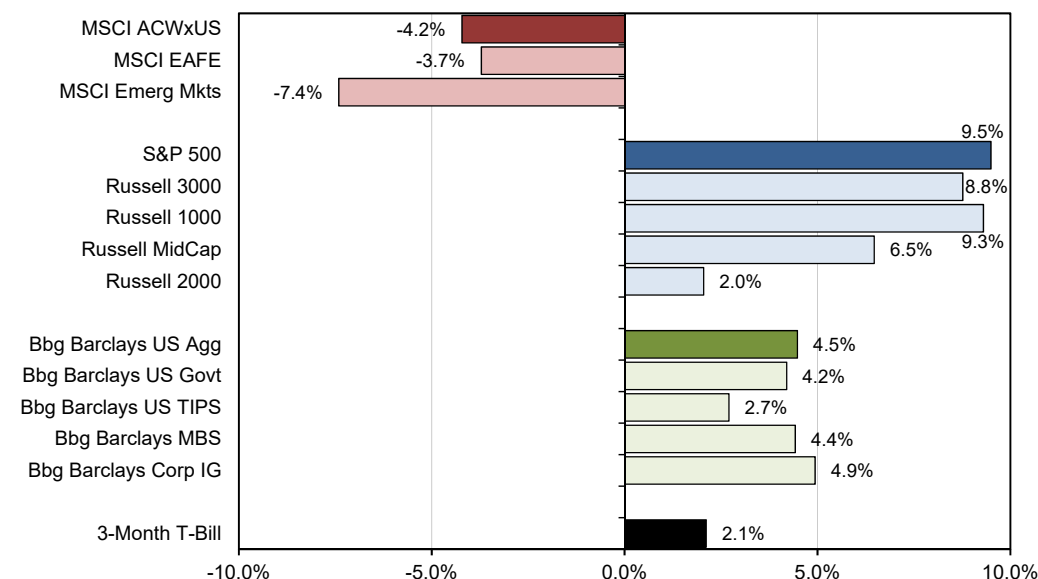


- After a difficult end to 2018, markets rebounded strongly during the 1<sup>st</sup> quarter of 2019 with higher risk assets posting the greatest returns. Broad international and domestic equity markets had double-digit gains during the period as investors overlooked signs of weakening global growth in favor of increased accommodation in global monetary policy and progress in global trade negotiations. While muted relative to equities, fixed income returns were also positive during the quarter. Within equities, domestic stocks outperformed international markets. US markets pushed higher as the US Federal Reserve (Fed) shifted their stance on monetary policy toward a more accommodative posture, the US and China moved closer to a resolution of their ongoing trade dispute and the partial government shutdown that began in December came to an end. The large cap S&P 500 Index returned 13.6% during the quarter while the small cap Russell 2000 Index gained 14.6% for the period. US equity returns over the 1-year period are positive with the S&P 500 appreciating 9.5% while the Russell 2000 posted a more modest gain of 2.0%.
- Similar to US markets, international equity investors were encouraged by a general easing in central bank monetary policy, including new stimulus measures in Europe and China, as well as the de-escalation of trade tensions with the US. Despite the continued softening in global macroeconomic data and the lack of certainty around Brexit, international equity index returns finished the quarter in positive territory with the MSCI ACWI ex US Index returning 10.3%. The developed market MSCI EAFE Index and the MSCI Emerging Markets Index had similar performance during the 1<sup>st</sup> quarter returning 10.0% and 9.9% respectively. Despite the strong quarter, returns over the 1-year period remain negative with developed markets falling -3.7%, outperforming emerging markets which fell -7.4%.
- Fixed income securities underperformed equities to start 2019 with the broad market Bloomberg Barclays Aggregate Index returning 2.9%. Interest rates fell for all maturities across the US Treasury Yield Curve as Fed guidance signaled a pause in monetary policy tightening through 2019. Interest rates in the middle of the curve saw the greatest declines causing the curve to invert with shorter-term maturities paying higher interest rates than those in the middle of the curve. This has historically preceded a recession by 6-24 months. Investment grade corporate issues were the best performing securities this quarter, outperforming Treasury and securitized issues. The Bloomberg Barclays Corporate IG Index returned 5.1% for the period, as corporate credit had tailwinds due to its 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 4.9% versus a 4.5% return for the Bloomberg Barclays Aggregate Index.

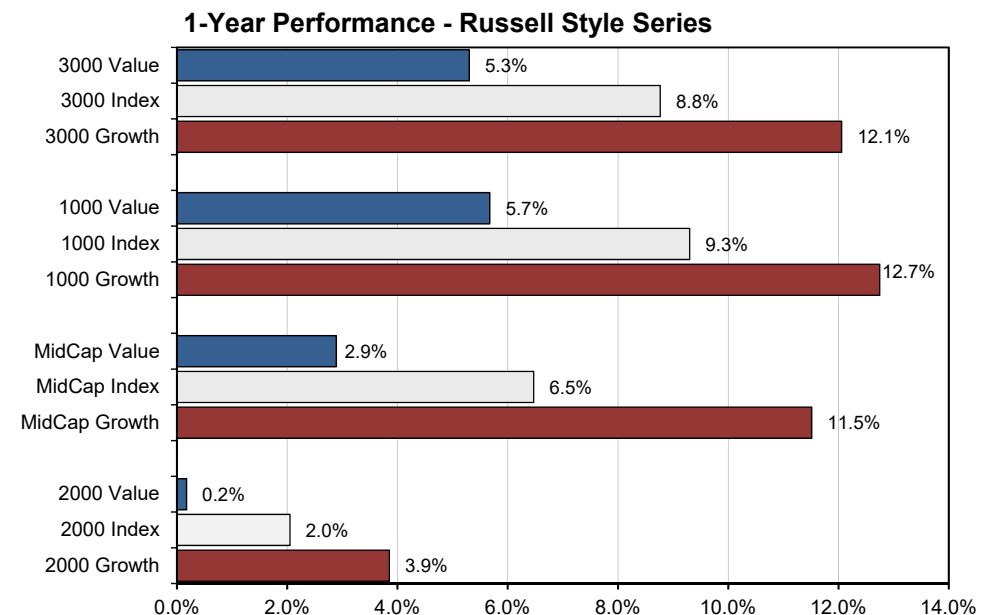
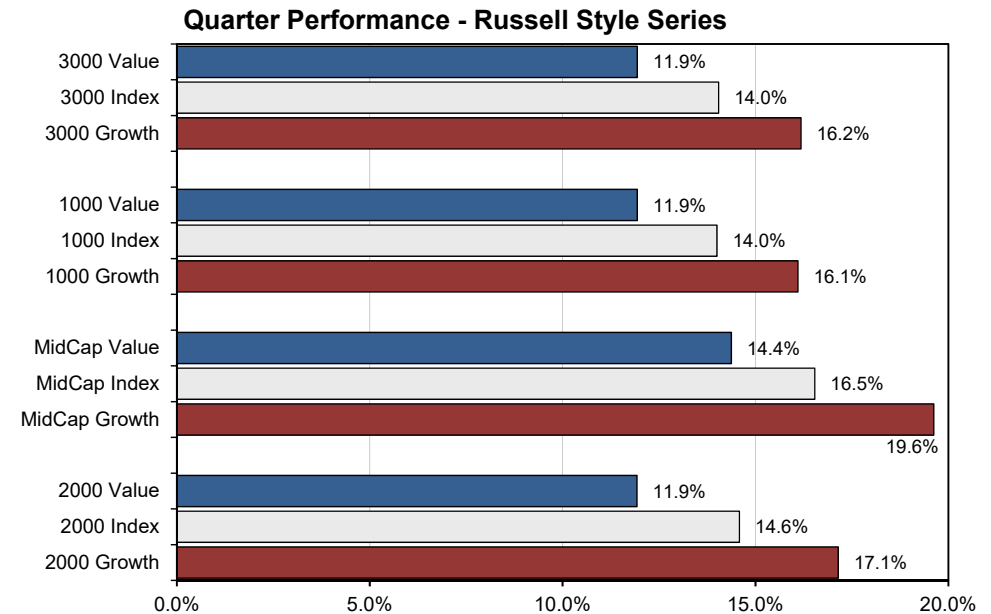
### Quarter Performance



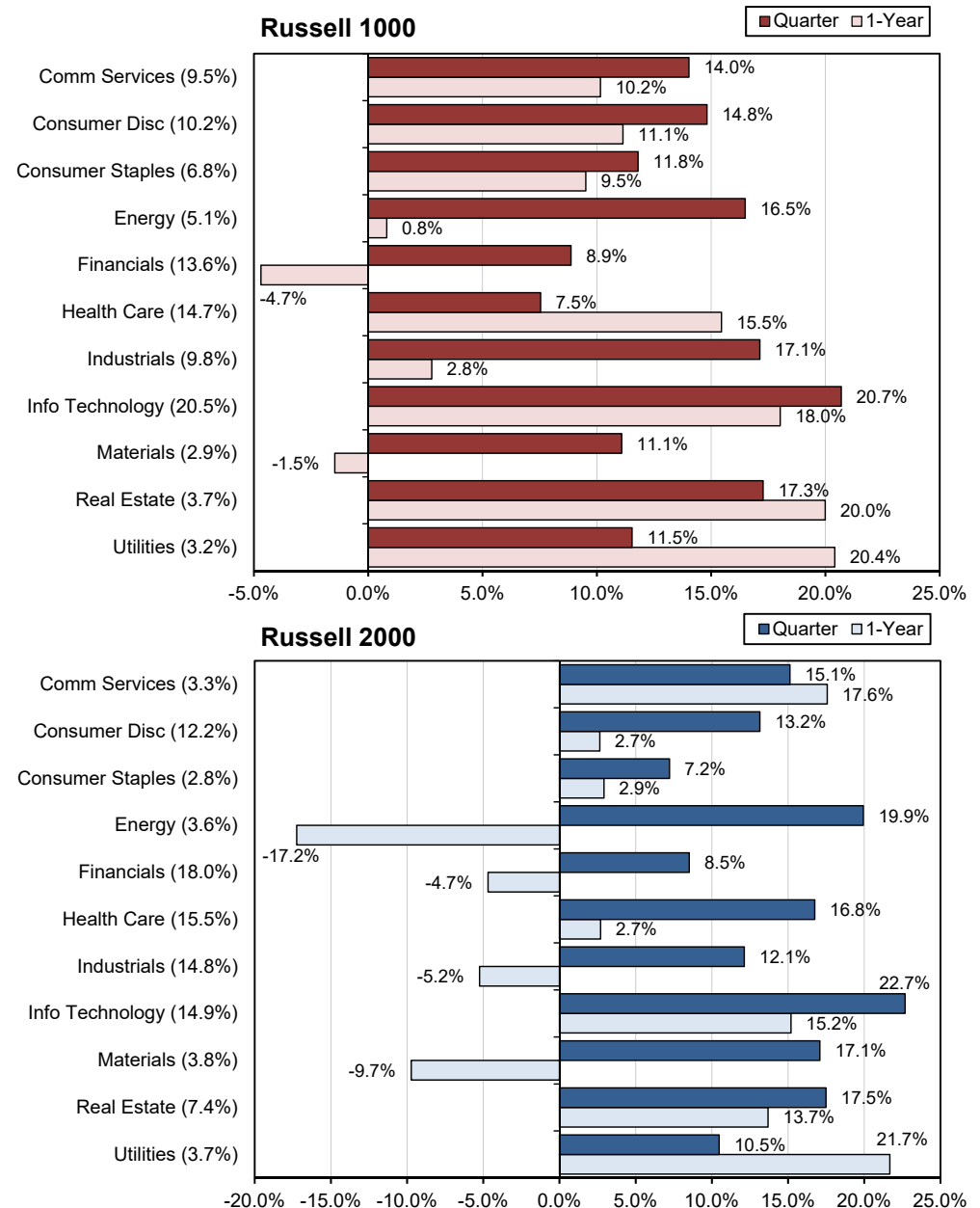
### 1-Year Performance



- US equity index returns were strongly positive across the style and capitalization spectrum to start the year with all indices posting double digit returns. Macroeconomic data released during the quarter was mixed with disappointing data released late in the quarter for GDP and employment being particularly notable. Even though earnings reported during the period were viewed favorably, many companies provided negative forward earnings guidance due to slowing global growth, trade concerns and the fading effects of US tax reform. However, investor concerns over the economy were overshadowed by positive developments in trade negotiations with China and an accommodative shift in Fed monetary policy. With regards to trade, President Trump delayed the implementation of new Chinese tariffs scheduled for March 1<sup>st</sup> citing substantial progress in ongoing discussions. Stocks also rallied on Fed guidance to put further monetary policy tightening on hold as they lowered projections for growth and inflation. Lastly, we saw the end of the partial government shutdown that began in December due to a partisan disagreement over funds for the construction of a border wall with Mexico. While the spending bill that passed did not budget for the wall, President Trump declared a national state of emergency later in the quarter in order to secure the needed funding.
- During the quarter, mid cap stocks were the best performers while small cap stocks outperformed large cap equities across growth, value and core indices. The Russell MidCap Index gained 16.5% during the period versus a 14.6% return for the small cap Russell 2000 Index and a 14.0% gain on the large cap Russell 1000 Index. Part of the reason for strength in small cap names is the projected hold on interest rate increases that occurred over 2018 as small and mid-cap companies typically maintain higher percentages of debt than their large cap peers. Small and mid-cap companies are usually more domestically focused which will serve as a tailwind in periods where the US economy is on stronger footing than international markets. It is also not unusual for smaller market cap stocks to outperform in risk-on market environments. When viewed over the most recent 1-year period, large cap stocks outperformed relative to small cap stocks. The Russell 1000 returned 9.3% for the year while the Russell 2000 gained only 2.0%.
- Growth indices outperformed value indices across the market cap spectrum during the 1<sup>st</sup> quarter. Growth stocks have outperformed value in all but one quarter over the last two years. The Russell MidCap Growth Index was the best performing style index for the period, returning 19.6% for the quarter. The large cap and small cap value indices had the lowest relative returns, both gaining 11.9%. 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 financials which has been a relative detractor.



- Sector performance was broadly positive across large cap sectors for the 1<sup>st</sup> quarter. There were strong gains for all sectors within the Russell 1000 Index during for the period with five sectors outpacing the return of the index. While the rally was broad with nine of eleven sectors posting double digit returns, cyclical sectors such as technology, industrials and energy were some of the best performers through the quarter returning 20.7%, 17.1% and 16.5% respectively. Technology stocks rose on strong earnings and attractive valuations following their 4<sup>th</sup> quarter 2018 sell off. Energy companies benefitted from a large rebound in oil prices which increased by over 30% during the quarter following an OPEC led supply cut and US sanctions against Iran and Venezuela. Industrial stocks, among others, gained on hopes that trade tensions between the US and China would continue to abate. REITs also had a particularly strong quarter, returning 17.3% as the prospect of lower interest rates acted as a tailwind. Financials and health care stocks were the worst performers during the period returning 8.9% and 7.5% respectively. Health care stocks faced uncertainty around the potential for future regulation following congressional hearings on drug pricing while the prospect of lower earnings due to a muted interest rate environment weighed on financial stocks. Returns over the 1-year period were positive with nine out of eleven sectors posting gains, six of which were over 10%. Utilities, REITs and information technology were the best performers returning 20.4%, 20.0% and 18.0% respectively. Financials and materials posted negative results at -4.7% and -1.5% while energy was only slightly positive at 0.8%.
- Quarterly results for small cap sectors were mixed relative to their large capitalization counterparts with six of eleven sectors outperforming their corresponding large cap equivalents. Like large caps, all eleven sectors produced gains during the period with six of eleven economic sectors outpacing the Russell 2000 Index return for the quarter and nine returning over 10.0%. Similar to large caps, cyclical sectors performed well with technology, energy and materials returning 22.7%, 19.9% and 17.1% respectively. Real estate also did well returning 17.5%. The largest detractors over the period were consumer staples, financials and utilities which still produced gains of 7.2%, 8.5% and 10.5%. Over the trailing 1-year period, returns varied significantly with four sectors posting double digit gains and four losing value. Despite a very strong quarter, energy stocks were the worst performers over the 1-year period, falling a considerable -17.2%, while the defensive utilities sector produced the greatest gains, appreciating 21.7%.



**The Market Environment**  
**Top 10 Index Weights & Quarterly Performance for the Russell 1000 & 2000**  
As of March 31, 2019

Top 10 Weighted Stocks				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Apple Inc	3.42%	20.9%	14.9%	Information Technology
Microsoft Corp	3.39%	16.6%	30.8%	Information Technology
Amazon.com Inc	2.78%	18.6%	23.0%	Consumer Discretionary
Facebook Inc A	1.50%	27.2%	4.3%	Communication Services
Berkshire Hathaway Inc B	1.48%	-1.6%	0.7%	Financials
Johnson & Johnson	1.42%	9.0%	12.1%	Health Care
Alphabet Inc C	1.36%	13.3%	13.7%	Communication Services
Alphabet Inc A	1.33%	12.6%	13.5%	Communication Services
Exxon Mobil Corp	1.30%	19.8%	12.9%	Energy
JPMorgan Chase & Co	1.27%	4.6%	-5.6%	Financials

Top 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Versum Materials Inc	0.02%	81.9%	34.7%	Information Technology
Coty Inc Class A	0.02%	77.3%	-34.3%	Consumer Staples
Nabors Industries Ltd	0.00%	72.5%	-48.7%	Energy
Sage Therapeutics Inc	0.03%	66.0%	-1.3%	Health Care
Wayfair Inc Class A	0.03%	64.8%	119.8%	Consumer Discretionary
Chipotle Mexican Grill Inc Class A	0.07%	64.5%	119.8%	Consumer Discretionary
Universal Display Corp	0.02%	63.5%	51.7%	Information Technology
Xerox Corp	0.02%	63.1%	15.7%	Information Technology
Floor & Decor Holdings Inc	0.01%	59.2%	-20.9%	Consumer Discretionary
bluebird bio Inc	0.03%	58.6%	-7.9%	Health Care

Bottom 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Uniti Group Inc	0.01%	-27.8%	-23.8%	Real Estate
PG&E Corp	0.03%	-25.1%	-59.5%	Utilities
The Kraft Heinz Co	0.07%	-23.2%	-45.1%	Consumer Staples
Realogy Holdings Corp	0.01%	-21.8%	-57.3%	Real Estate
Nu Skin Enterprises Inc Class A	0.01%	-21.5%	-33.7%	Consumer Staples
Biogen Inc	0.18%	-21.4%	-13.7%	Health Care
Centennial Resource Development A	0.01%	-20.2%	-52.1%	Energy
CenturyLink Inc	0.04%	-19.3%	-19.0%	Communication Services
Qurate Retail Inc Class A	0.03%	-18.1%	-36.5%	Consumer Discretionary
Macy's Inc	0.03%	-18.0%	-15.2%	Consumer Discretionary

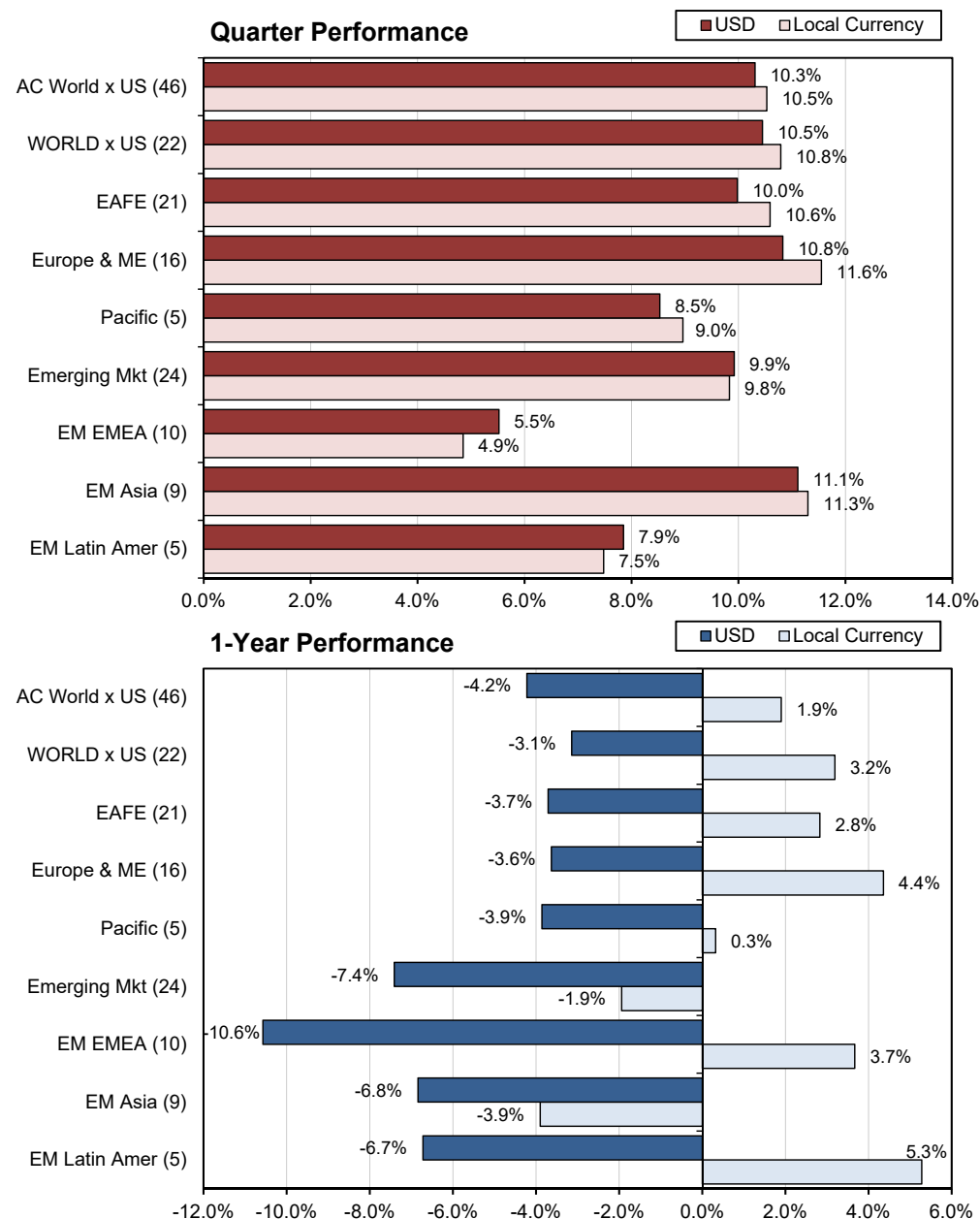
Top 10 Weighted Stocks				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Etsy Inc	0.40%	41.3%	139.6%	Consumer Discretionary
Five Below Inc	0.33%	21.4%	69.4%	Consumer Discretionary
The Trade Desk Inc A	0.32%	70.6%	298.9%	Information Technology
Integrated Device Technology Inc	0.31%	1.2%	60.3%	Information Technology
HubSpot Inc	0.30%	32.2%	53.5%	Information Technology
Planet Fitness Inc A	0.30%	28.2%	81.9%	Consumer Discretionary
Cree Inc	0.29%	33.8%	41.9%	Information Technology
Ciena Corp	0.26%	10.1%	44.2%	Information Technology
Primerica Inc	0.26%	25.4%	27.7%	Financials
Array BioPharma Inc	0.25%	71.1%	49.4%	Health Care

Top 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Immune Design Corp	0.01%	350.0%	77.3%	Health Care
Diebold Nixdorf Inc	0.04%	344.6%	-28.1%	Information Technology
Constellation Pharmaceuticals Inc	0.01%	237.9%	N/A	Health Care
Flotek Industries Inc	0.01%	197.2%	-46.9%	Materials
Spark Therapeutics Inc	0.18%	191.0%	71.0%	Health Care
Magenta Therapeutics Inc	0.01%	188.9%	N/A	Health Care
ION Geophysical Corp	0.01%	178.8%	-46.7%	Energy
Catalyst Pharmaceuticals Inc	0.02%	165.6%	113.4%	Health Care
VirnetX Holding Corp	0.02%	163.8%	60.3%	Information Technology
Rockwell Medical Inc	0.01%	151.8%	9.2%	Health Care

Bottom 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Zomedica Pharmaceuticals Corp	0.00%	-77.0%	-84.2%	Health Care
Aptinyx Inc	0.00%	-75.5%	N/A	Health Care
Alta Mesa Resources Inc Class A	0.00%	-73.5%	-96.7%	Energy
Novavax Inc	0.01%	-70.1%	-73.8%	Health Care
Maxar Technologies Inc	0.01%	-66.3%	-91.0%	Industrials
Solid Biosciences Inc	0.01%	-65.7%	22.7%	Health Care
Achaogen Inc	0.00%	-62.9%	-96.5%	Health Care
EP Energy Corp A	0.00%	-62.9%	-80.6%	Energy
Proteostasis Therapeutics Inc	0.00%	-61.1%	-73.5%	Health Care
Approach Resources Inc	0.00%	-59.4%	-86.4%	Energy



- Broad international equity returns were positive for the quarter in both local currency and USD terms. The MSCI ACWI ex US Index gained 10.5% in local currency terms and 10.3% in USD terms during the 1<sup>st</sup> quarter. Similar to US markets, international equity investors were encouraged by central bank responses to slowing global growth as they shifted towards more accommodative policies and the improvement in dialogue around global trade. Returns in local currency typically outperformed USD returns in the developed markets, as the USD continued to strengthen against most major developed currencies. While the currency effect was detrimental in developed markets, it acted as a slight tailwind in emerging markets. The USD strength is particularly noticeable over the 1-year period where local currency returns on the MSCI ACWI ex US Index were 1.9%, but after accounting for foreign exchange, translated to a loss of -4.2% for a USD investor.
- Fourth quarter results for developed market international indices were positive in both local currency and USD terms with the MSCI EAFE Index returning 10.6% and 10.0% respectively. Ongoing weakness in global economic reporting pushed major central banks to move toward less restrictive postures around monetary policy. In Europe, the European Central Bank (ECB) announced plans for additional stimulus while putting any future interest rate increases on hold until 2020. The Bank of England (BoE) left policy unchanged as uncertainties around Brexit coincided with a slowing economy. Prime Minister Theresa May held two votes on her withdrawal plan, both of which failed, forcing her to request an extension to the March 29<sup>th</sup> withdrawal deadline. Data from Japan drew concerns that the country's economy is contracting as corporate earnings, exports, manufacturing, retail sales and inflation all hinted at an economic slowdown. The MSCI EAFE Index returned 2.8% and -3.7% for the last twelve months in local currency and USD terms respectively.
- Emerging markets slightly underperformed relative to developed markets for the 1<sup>st</sup> quarter, but still appreciated in both local currency and USD terms with the MSCI Emerging Markets Index returning 9.8% and 9.9% respectively. A major tailwind for equity markets was the improvement in trade relations between the US and China. As Chinese economic data appeared to be slowing, the Chinese government also announced continued stimulus in the form of tax cuts, infrastructure investment and lowered the reserve requirement for banks in order to encourage lending. We also saw commodity prices rise over the quarter which is generally beneficial to emerging market countries with rising oil prices helping Russian and Colombian equity returns. In Brazil, President Jair Bolsonaro officially took office. Bolsonaro announced his plan to reform the country's debt laden pension system and promised market friendly economic reforms. One year returns for the MSCI Emerging Market Index were -1.9% in local currency terms and -7.4% in USD terms.





**The Market Environment**  
**US Dollar International Index Attribution & Country Detail**  
As of March 31, 2019

MSCI - EAFE	Sector Weight	Quarter Return	1-Year Return
Communication Services	5.4%	4.3%	-4.5%
Consumer Discretionary	11.0%	7.5%	-10.4%
Consumer Staples	11.8%	12.4%	3.3%
Energy	5.9%	10.4%	4.6%
Financials	18.9%	6.9%	-12.7%
Health Care	11.3%	11.2%	7.4%
Industrials	14.4%	10.6%	-5.4%
Information Technology	6.3%	15.3%	-3.8%
Materials	7.5%	13.2%	-3.0%
Real Estate	3.9%	14.0%	4.2%
Utilities	3.7%	9.0%	8.7%
<b>Total</b>	<b>100.0%</b>	<b>10.0%</b>	<b>-3.7%</b>

MSCI - ACWIXUS	Sector Weight	Quarter Return	1-Year Return
Communication Services	7.1%	6.9%	-1.8%
Consumer Discretionary	11.1%	11.2%	-10.3%
Consumer Staples	9.9%	11.2%	1.6%
Energy	7.4%	12.4%	5.2%
Financials	21.6%	7.7%	-9.4%
Health Care	8.4%	11.0%	4.4%
Industrials	11.7%	10.2%	-4.9%
Information Technology	8.4%	14.7%	-7.3%
Materials	7.6%	11.3%	-3.6%
Real Estate	3.5%	14.4%	2.8%
Utilities	3.3%	8.2%	6.1%
<b>Total</b>	<b>100.0%</b>	<b>10.3%</b>	<b>-4.2%</b>

MSCI - Emerging Mkt	Sector Weight	Quarter Return	1-Year Return
Communication Services	12.3%	9.5%	-3.3%
Consumer Discretionary	13.4%	20.8%	-13.2%
Consumer Staples	6.4%	5.3%	-8.4%
Energy	8.1%	12.2%	9.4%
Financials	24.2%	7.2%	-6.0%
Health Care	2.6%	3.6%	-23.4%
Industrials	5.4%	4.8%	-7.6%
Information Technology	14.6%	12.8%	-10.8%
Materials	7.4%	6.9%	-6.2%
Real Estate	3.2%	15.6%	-2.1%
Utilities	2.5%	4.2%	-2.7%
<b>Total</b>	<b>100.0%</b>	<b>9.9%</b>	<b>-7.4%</b>

Country	MSCI-EAFE Weight	MSCI-ACWIXUS Weight	Quarter Return	1- Year Return
Japan	24.0%	16.1%	6.7%	-7.8%
United Kingdom	17.1%	11.5%	11.9%	-0.1%
France	11.3%	7.6%	10.7%	-3.7%
Switzerland	8.9%	6.0%	13.1%	7.5%
Germany	8.6%	5.8%	6.9%	-13.7%
Australia	6.9%	4.7%	11.4%	4.5%
Hong Kong	4.1%	2.8%	15.6%	8.0%
Netherlands	3.6%	2.4%	13.6%	-2.3%
Spain	3.0%	2.0%	7.0%	-8.8%
Sweden	2.6%	1.8%	7.4%	-5.1%
Italy	2.4%	1.6%	14.6%	-10.6%
Denmark	1.8%	1.2%	12.8%	-3.2%
Singapore	1.3%	0.9%	6.2%	-6.4%
Finland	1.0%	0.7%	8.0%	-3.6%
Belgium	1.0%	0.7%	16.2%	-15.5%
Norway	0.7%	0.5%	7.0%	-4.4%
Ireland	0.5%	0.4%	11.4%	-11.6%
Israel	0.5%	0.4%	10.1%	9.9%
Austria	0.2%	0.2%	8.4%	-23.0%
New Zealand	0.2%	0.2%	16.7%	18.1%
Portugal	0.2%	0.1%	10.2%	-4.9%
<b>Total EAFE Countries</b>	<b>100.0%</b>	<b>67.1%</b>	<b>10.0%</b>	<b>-3.7%</b>
Canada		6.8%	15.4%	3.1%
<b>Total Developed Countries</b>		<b>73.9%</b>	<b>10.5%</b>	<b>-3.1%</b>
China		8.6%	17.7%	-6.2%
Korea		3.4%	4.9%	-16.7%
Taiwan		3.0%	9.0%	-6.1%
India		2.4%	7.2%	6.8%
Brazil		1.9%	8.1%	-4.2%
South Africa		1.5%	4.4%	-18.0%
Russia		1.0%	12.2%	2.2%
Mexico		0.7%	5.5%	-11.7%
Thailand		0.6%	7.4%	-6.9%
Indonesia		0.6%	4.3%	2.0%
Malaysia		0.6%	0.3%	-13.1%
Poland		0.3%	-0.6%	-5.7%
Philippines		0.3%	7.9%	1.8%
Chile		0.3%	4.1%	-17.5%
Qatar		0.2%	-3.5%	22.2%
United Arab Emirates		0.2%	8.7%	1.3%
Turkey		0.1%	-3.2%	-40.3%
Colombia		0.1%	24.8%	5.3%
Peru		0.1%	11.0%	2.2%
Hungary		0.1%	6.0%	0.5%
Greece		0.1%	12.8%	-23.6%
Czech Republic		0.0%	3.8%	-6.8%
Egypt		0.0%	15.8%	-10.2%
Pakistan		0.0%	8.3%	-36.6%
<b>Total Emerging Countries</b>		<b>26.1%</b>	<b>9.9%</b>	<b>-7.4%</b>
<b>Total ACWIXUS Countries</b>		<b>100.0%</b>	<b>10.3%</b>	<b>-4.2%</b>

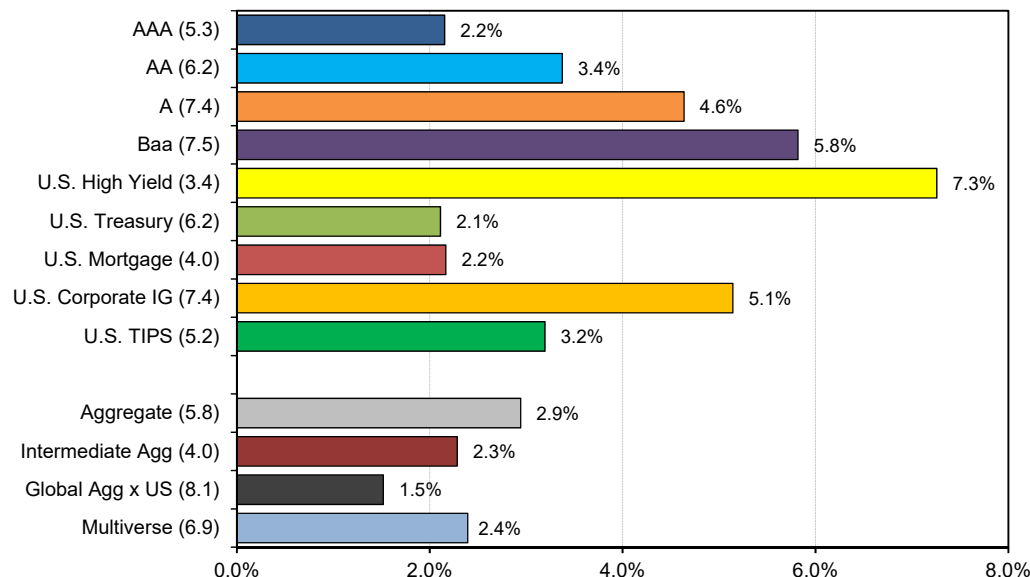
Source: Morningstar Direct, MSCI Global Index Monitor (Returns are Net in USD)

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.

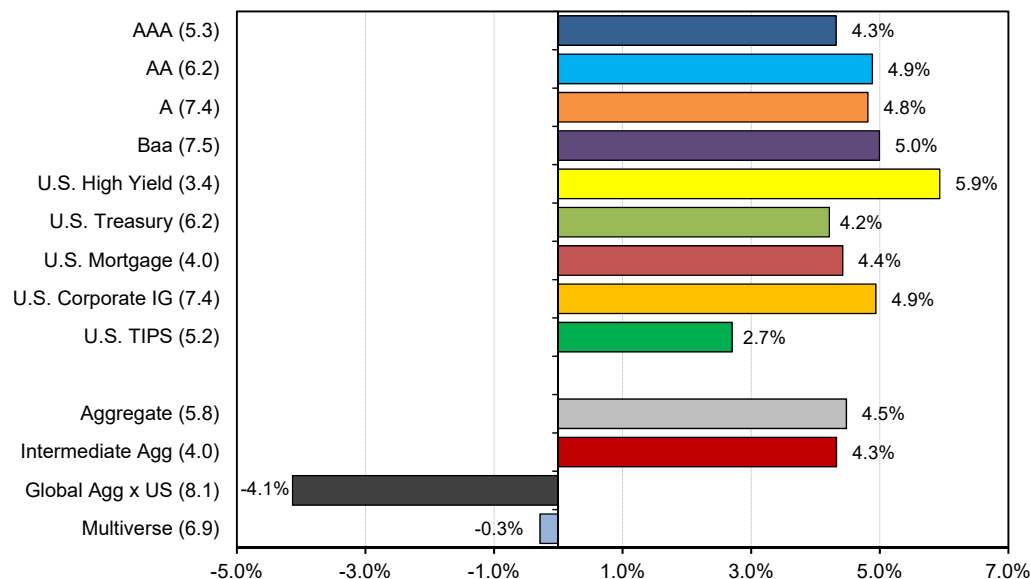


- Broad fixed income benchmarks were positive to start 2019. Following the late 2018 market volatility, the Federal Open Market Committee (FOMC) issued dovish guidance after their January meeting stating that they would be patient in determining future interest rate adjustments. The FOMC also commented on the ongoing balance sheet reduction program, stating that they would be open to changes to the program if market conditions warranted them. Later in March, Fed Chair Jerome Powell communicated that the FOMC is no longer projecting any further interest rate increases through 2019. He also stated that they would begin tapering the roll off from the 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. Interest rates fell across all maturities on the US Treasury Yield Curve with the greatest declines occurring in the mid- and long-term issues. This caused continued inversion in the yield curve with short-term maturities paying higher interest rates than issues in the mid- to long-end of the curve. The difference in yields between the 2-year and 10-year Treasury now sits at just 0.14% with the 30-day T-Bill yielding more than the 10-year bond by 0.02%. Historically, an inverted yield curve has been a leading indicator of a recession in the next 6-24 months. The bellwether Bloomberg Barclays US Aggregate Index posted positive returns for both the 1<sup>st</sup> quarter and the 1-year period, returning 2.9% and 4.5% 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 5.8% for the quarter, while AAA was the worst performing, returning 2.2%. Despite their relatively low durations, high yield securities posted very strong returns for the quarter, gaining 7.3%, as spreads tightened by 135 basis points on these issues. When viewed over the 1-year period, returns for the various quality segments generally show lower quality securities outperforming higher quality issues by a small margin.
- During the 1<sup>st</sup> quarter, investment grade corporates outperformed the more defensive Treasury and mortgage backed sectors of the Bloomberg Barclays US Aggregate Index's three broad sectors. Investment grade corporate credit returned 5.1%, as the drop in interest rates benefitted these securities to a greater degree and credit spreads tightened considerably since the end of 2018. This quarter's performance carried through to the 1-year period as corporate credit outperformed both Treasuries and mortgage backed securities. Corporate issues returned 4.9% versus a 4.4% return for mortgages and 4.2% gain on Treasury securities.

### Quarter Performance

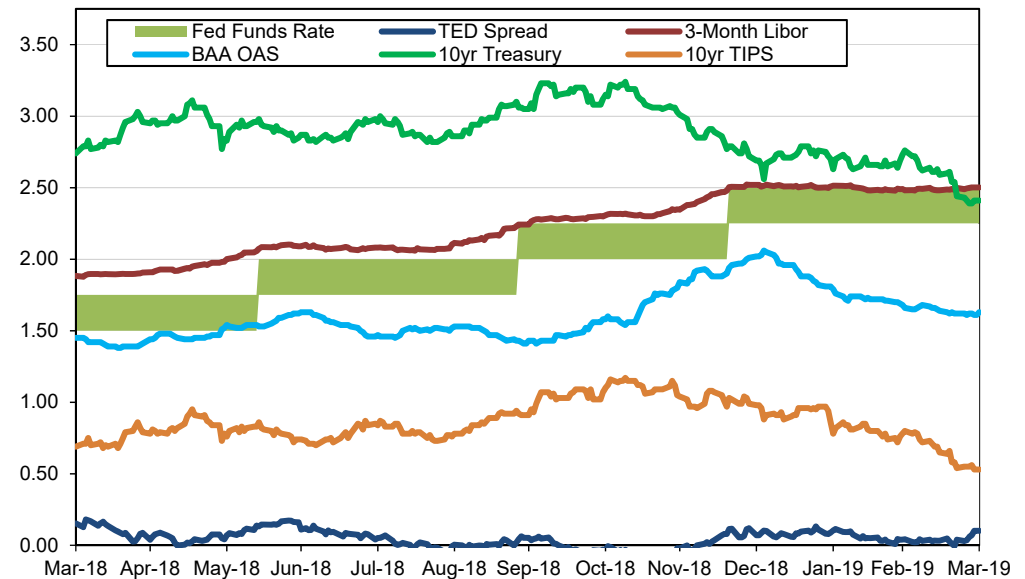


### 1-Year Performance

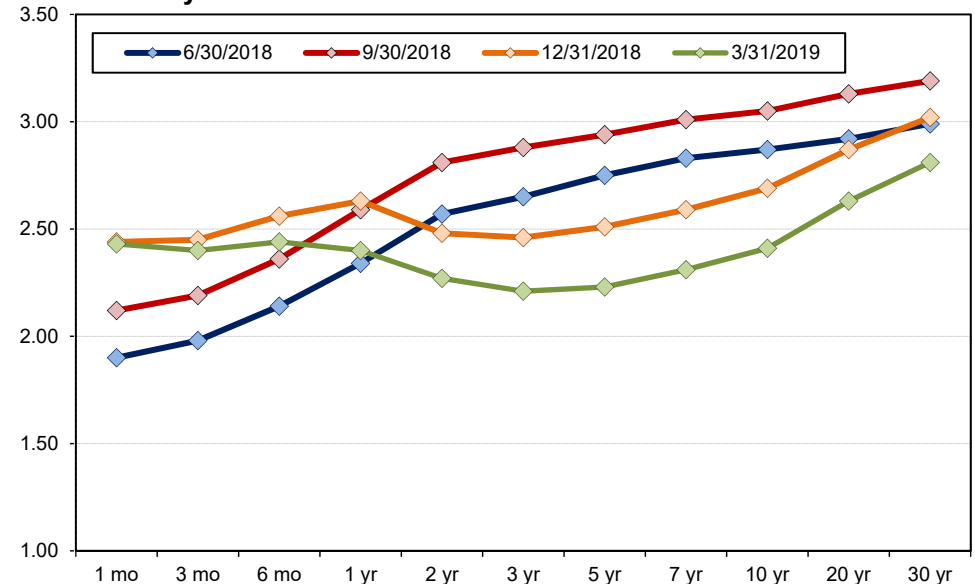


- Global fixed income indices continue to struggle relative to their domestic counterparts, underperforming during the 1<sup>st</sup> quarter. These indices have lower, or in some cases (Germany, Japan), negative yields and the returns of these indices are also significantly influenced by fluctuations in their currency denomination relative to the USD. The USD has appreciated against most other developed currencies, negatively impacting the returns on global bond indices. The return on global bonds, as represented by the Bloomberg Barclays Global Aggregate ex US Index, was 1.5% and -4.1% for the quarter and 1-year period respectively. As global growth has shown signs of stalling, several international central banks have started to step back from more restrictive postures. Notably, the ECB announced a program to extend loans to European banks in an effort to increase lending and pledged to keep interest rates steady through the end of 2019. China also announced new stimulus to help spur its economy. 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 yields below 2.5% to end the first 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 a relatively tight range in credit spreads throughout most of 2018, but highlights an abrupt increase during the 4<sup>th</sup> quarter of 2018 as investors moved to higher quality assets during the quarter's risk-off environment. Subsequently, spreads dropped steadily over the 1<sup>st</sup> quarter of 2019. 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 34 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. As mentioned, the Fed's current guidance is for zero rate increases 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 of interest rates as well as a general flattening 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**



<b>Total Fund Compliance:</b>	<b>Yes</b>	<b>No</b>
The total plan return equaled or exceeded the total plan benchmark over the trailing three year period.		•
The total plan return equaled or exceeded the total plan benchmark over the trailing five year period.		•
The total plan return of the fund over the trailing three year period equaled or exceeded 6.6% (actuarial assumption rate of return).	•	
The three year total plan return ranks in the top 40% of its peer group.	•	
The five year total plan return ranks in the top 40% of its peer group.	•	

<b>Total Equity Compliance:</b>	<b>Yes</b>	<b>No</b>
The equity return equaled or exceeded the benchmark over the trailing three year period.		•
The equity return equaled or exceeded the benchmark over the trailing five year period.		•

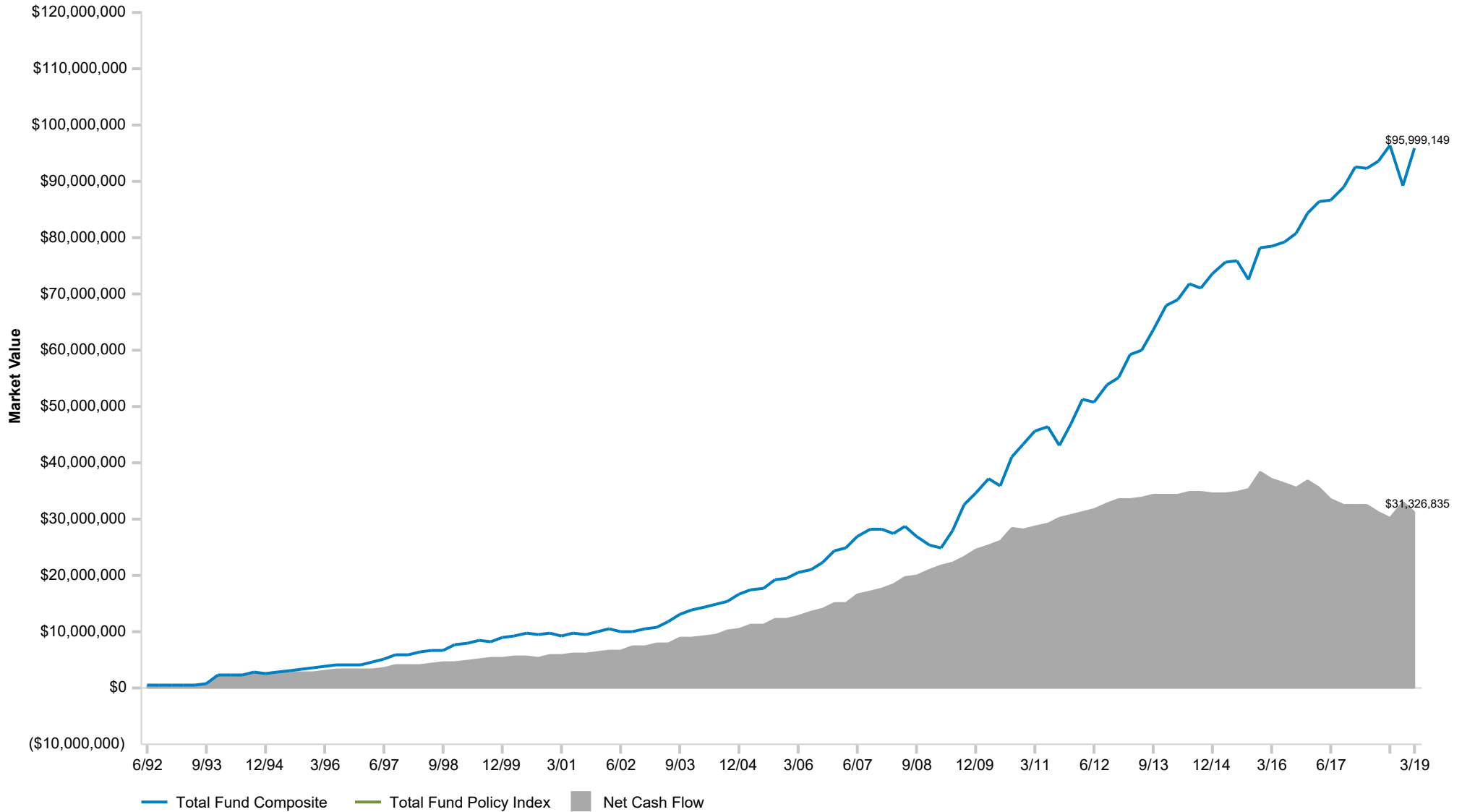
<b>Rhumblin S&amp;P 500</b>	<b>Yes</b>	<b>No</b>
The return equaled or exceeded the benchmark over the trailing three year period.		•
The return equaled or exceeded the benchmark over the trailing five year period.		•
The three year return ranks in the top 40% of its peer group.		•
The five year return ranks in the top 40% of its peer group.	•	

<b>Rhumblin S&amp;P 400</b>	<b>Yes</b>	<b>No</b>
The return equaled or exceeded the benchmark over the trailing three year period.		•
The return equaled or exceeded the benchmark over the trailing five year period.		•
The three year return ranks in the top 40% of its peer group.		•
The five year return ranks in the top 40% of its peer group.		•

Rhumbline S&P 600		Yes	No
The return equaled or exceeded the benchmark over the trailing three year period.			•
The return equaled or exceeded the benchmark over the trailing five year period.		•	
The three year return ranks in the top 40% of its peer group.			•
The five year return ranks in the top 40% of its peer group.			•
Highland LCG		Yes	No
The return equaled or exceeded the benchmark over the trailing three year period.			•
The return equaled or exceeded the benchmark over the trailing five year period.			•
The three year return ranks in the top 40% of its peer group.			•
The five year return ranks in the top 40% of its peer group.			•
Rhumbline International Equity		Yes	No
The return equaled or exceeded the benchmark over the trailing three year period. (one year)			•
The return equaled or exceeded the benchmark over the trailing five year period. (Inception)		•	
The three year return ranks in the top 40% of its peer group. (one year)		•	
The five year return ranks in the top 40% of its peer group. (Inception)			•
Fixed Income Compliance:		Yes	No
The fixed income return equaled or exceeded the benchmark over the trailing three year period.		•	
The fixed income return equaled or exceeded the benchmark over the trailing five year period.		•	
Highland Fixed Income		Yes	No
The return equaled or exceeded the benchmark over the trailing three year period.		•	
The return equaled or exceeded the benchmark over the trailing five year period.		•	
The three year return ranks in the top 40% of its peer group.			•
The five year return ranks in the top 40% of its peer group.			•

**Schedule of Investable Assets**  
**Total Fund Composite**  
 July 1, 1992 To March 31, 2019

**Schedule of Investable Assets**



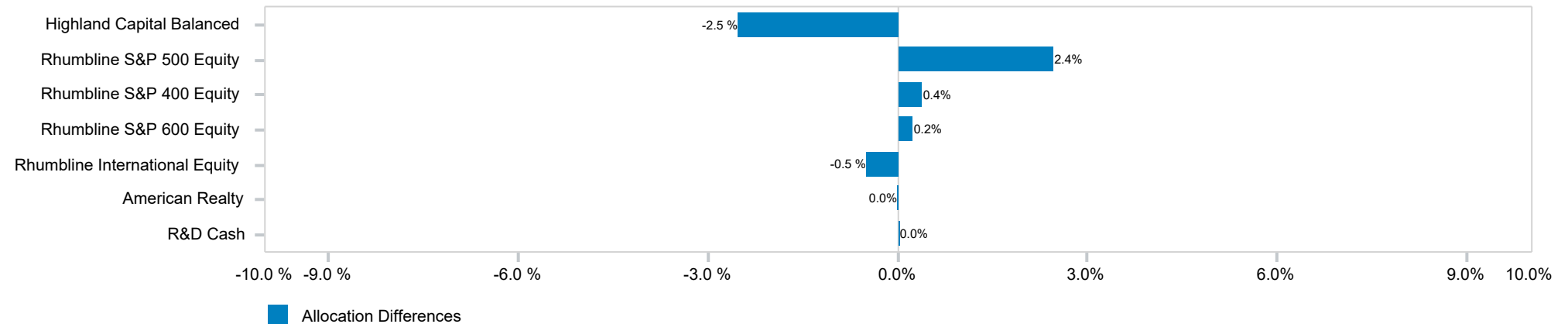
**Schedule of Investable Assets**

Periods Ending	Beginning Market Value \$	Contributions \$	Withdrawals \$	Gain/Loss \$	Ending Market Value \$	%Return
Jul-1992 To Mar-2019	484,222	70,026,589	39,183,976	64,672,314	95,999,149	7.84

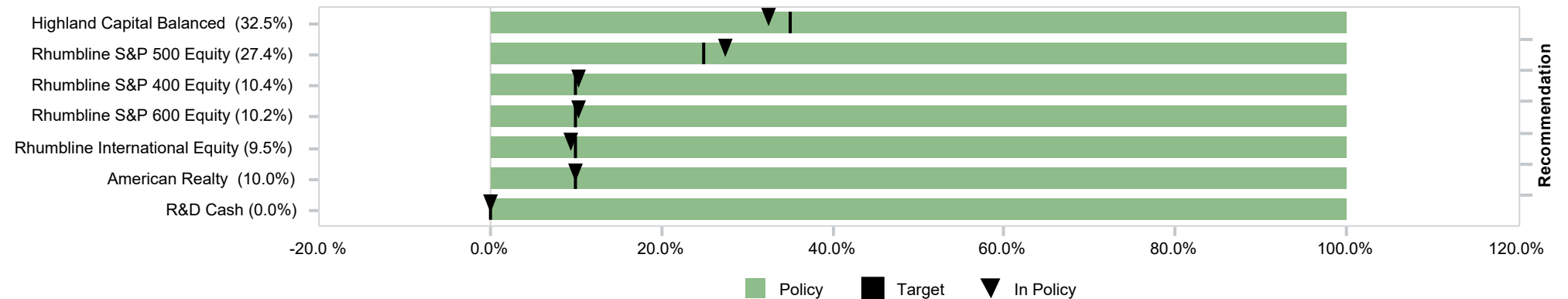


**Asset Allocation Compliance**

	Asset Allocation \$	Current Allocation (%)	Target Allocation (%)	Differences (%)	Target Rebal. (\$000)
Total Fund Composite	95,999,149	100.0	100.0	0.0	-
Highland Capital Balanced	31,164,998	32.5	35.0	-2.5	2,434,704
Rhumblin S&P 500 Equity	26,345,628	27.4	25.0	2.4	-2,345,841
Rhumblin S&P 400 Equity	9,972,734	10.4	10.0	0.4	-372,819
Rhumblin S&P 600 Equity	9,819,551	10.2	10.0	0.2	-219,636
Rhumblin International Equity	9,112,941	9.5	10.0	-0.5	486,974
American Realty	9,581,105	10.0	10.0	0.0	18,810
R&D Cash	2,193	0.0	0.0	0.0	-2,193

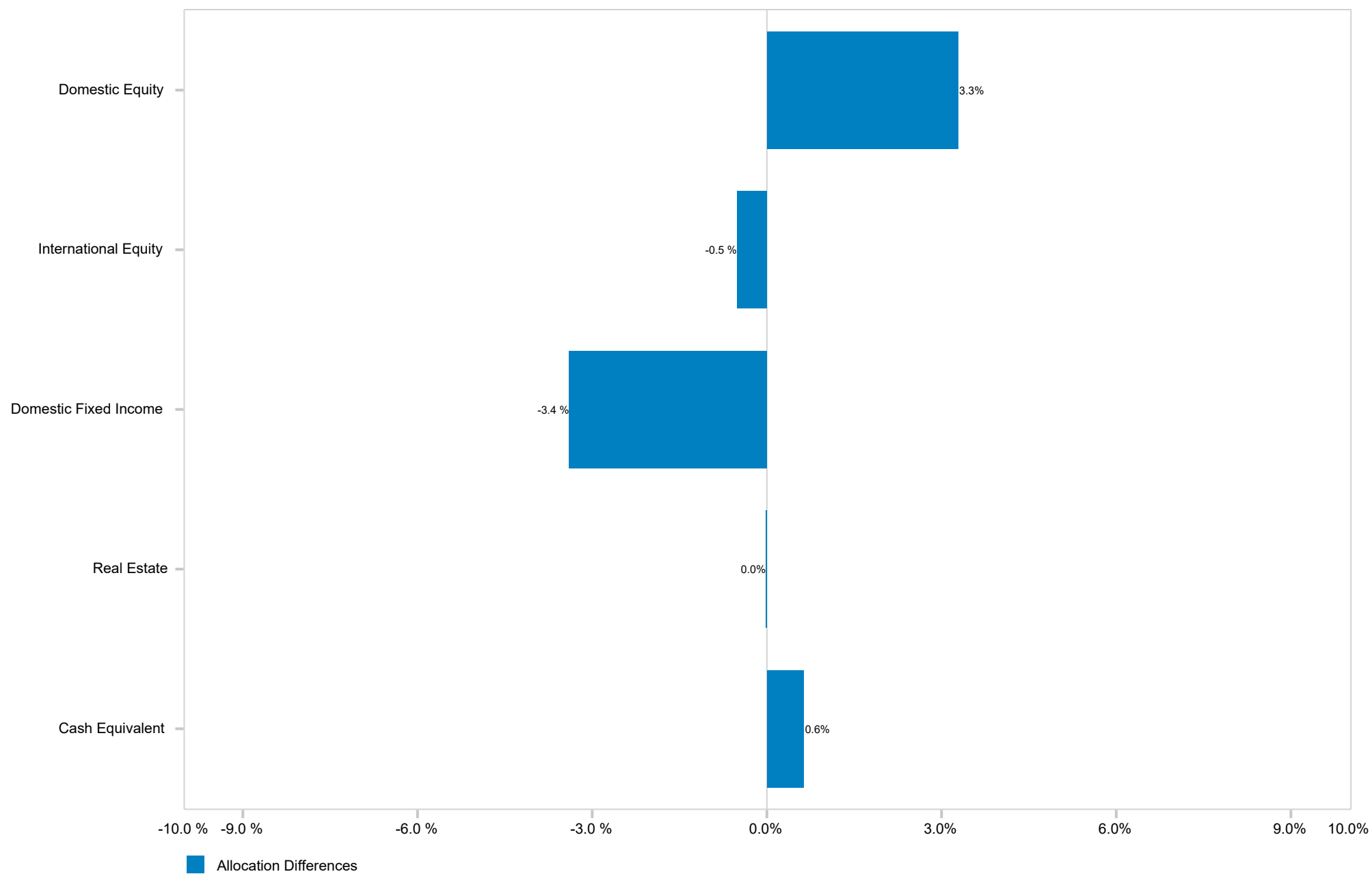


**Executive Summary**

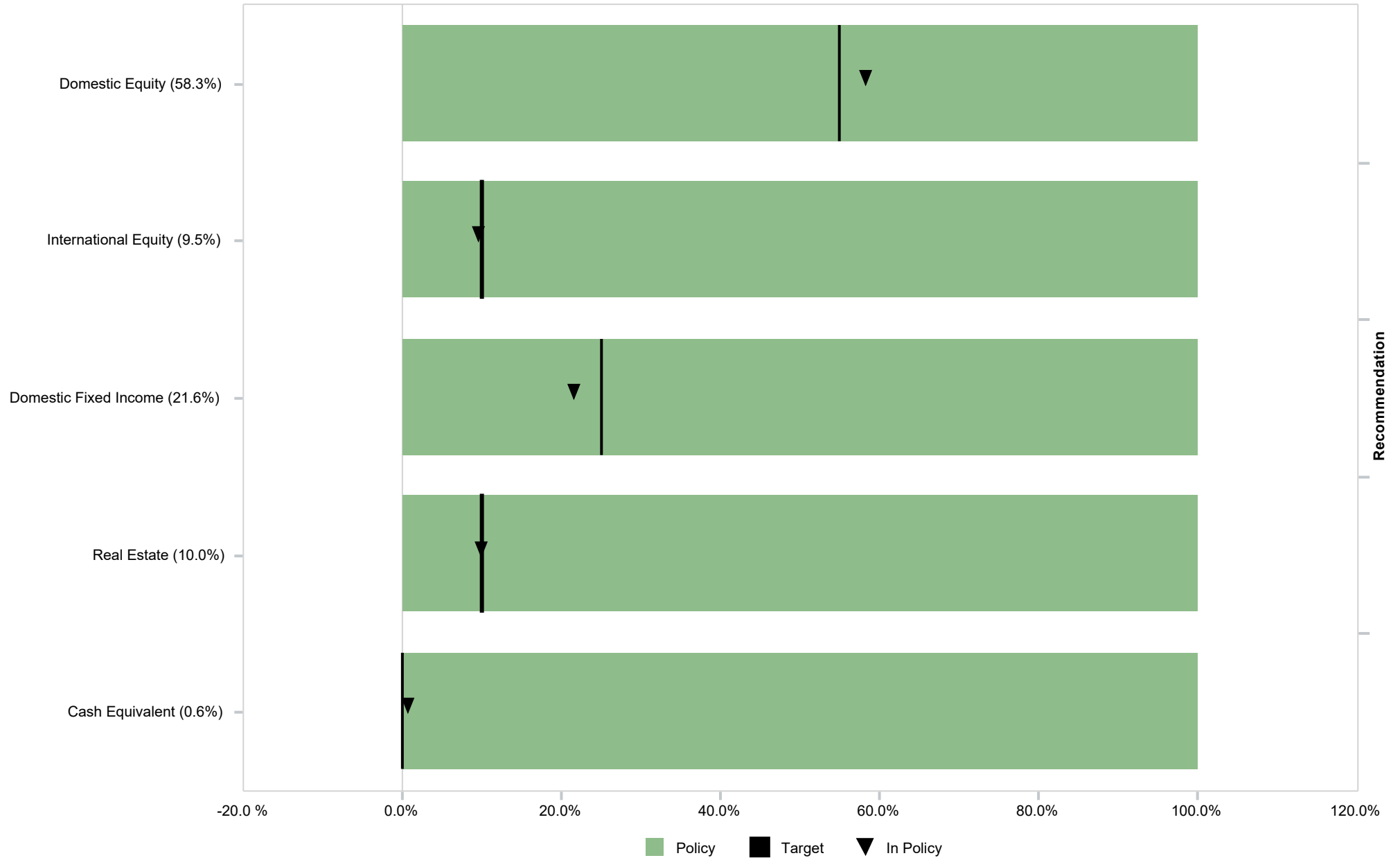


<b>Asset Allocation Compliance</b>						
	<b>Asset Allocation \$</b>	<b>Current Allocation (%)</b>	<b>Target Allocation (%)</b>	<b>Differences (%)</b>	<b>Target Rebal. (\$000)</b>	
Domestic Equity	55,949,604	58.3	55.0	3.3	-3,150,072	
International Equity	9,112,941	9.5	10.0	-0.5	486,974	
Domestic Fixed Income	20,742,808	21.6	25.0	-3.4	3,256,979	
Real Estate	9,581,105	10.0	10.0	0.0	18,810	
Cash Equivalent	612,691	0.6	0.0	0.6	-612,691	
Total Fund	95,999,149	100.0	100.0	0.0	-	

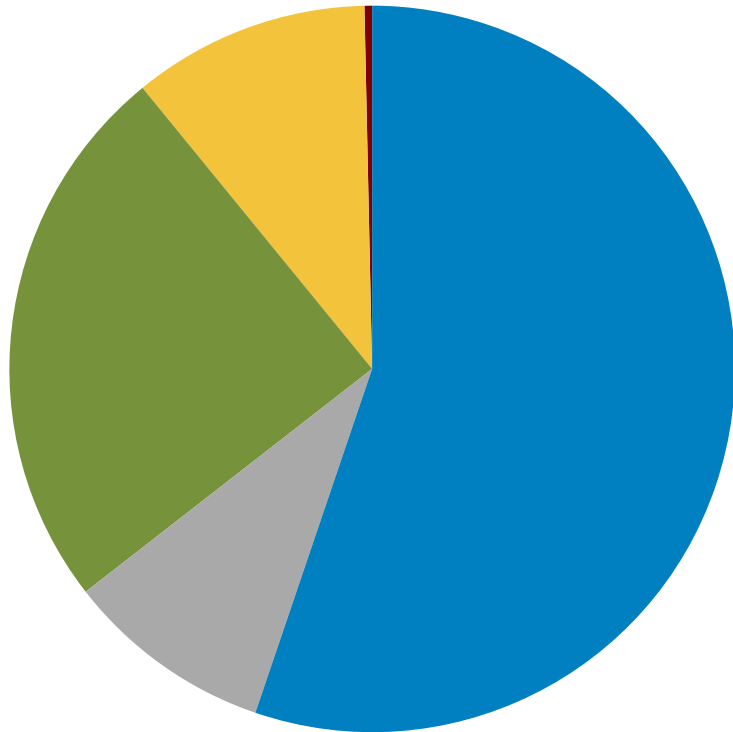




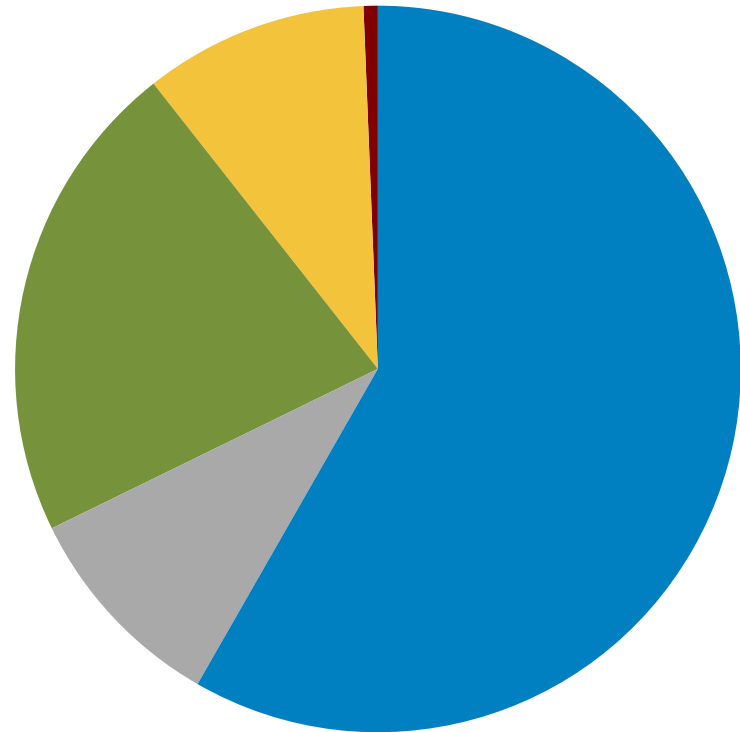
Executive Summary



**Asset Allocation By Segment as of  
December 31, 2018 : \$89,320,659**

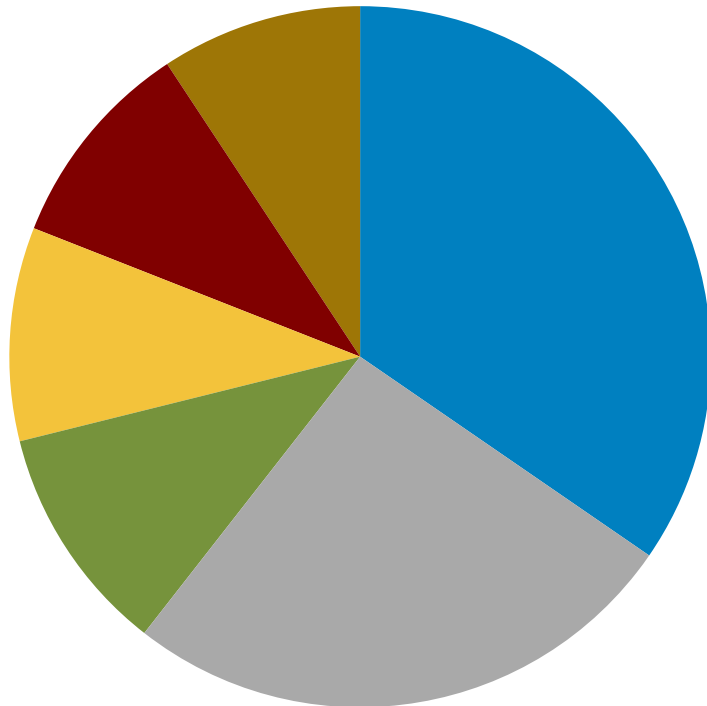


**Asset Allocation By Segment as of  
March 31, 2019 : \$95,999,149**

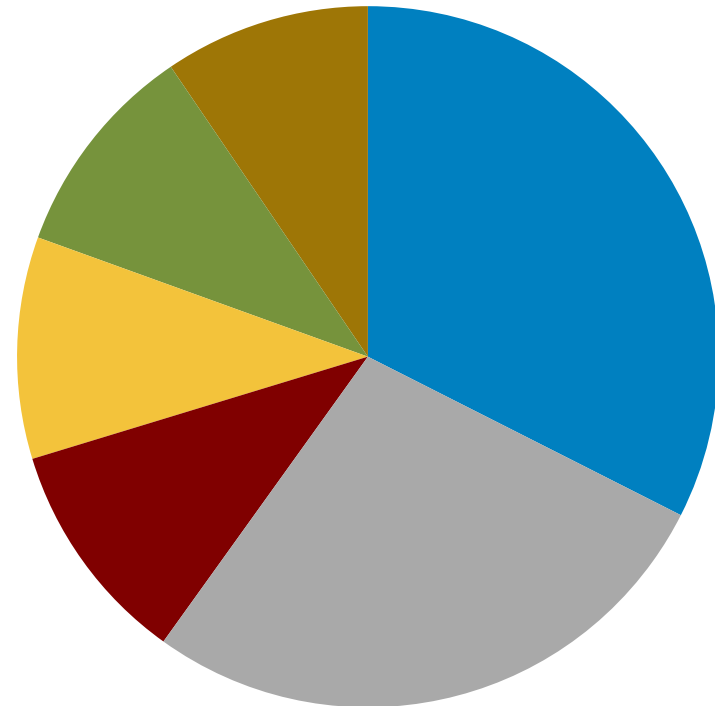


Allocation			Allocation		
Segments	Market Value	Allocation	Segments	Market Value	Allocation
Domestic Equity	49,320,318	55.2	Domestic Equity	55,949,604	58.3
International Equity	8,277,743	9.3	International Equity	9,112,941	9.5
Domestic Fixed Income	21,975,549	24.6	Domestic Fixed Income	20,742,808	21.6
Real Estate	9,443,455	10.6	Real Estate	9,581,105	10.0
Cash Equivalent	303,595	0.3	Cash Equivalent	612,691	0.6

Asset Allocation By Manager as of  
December 31, 2018 : \$89,320,659



Asset Allocation By Manager as of  
March 31, 2019 : \$95,999,149



Allocation			Allocation		
	Market Value	Allocation		Market Value	Allocation
Highland Capital Balanced	30,899,533	34.6	Highland Capital Balanced	31,164,998	32.5
Rhumblin S&P 500 Equity	23,184,252	26.0	Rhumblin S&P 500 Equity	26,345,628	27.4
American Realty	9,443,455	10.6	Rhumblin S&P 400 Equity	9,972,734	10.4
Rhumblin S&P 600 Equity	8,799,832	9.9	Rhumblin S&P 600 Equity	9,819,551	10.2
Rhumblin S&P 400 Equity	8,713,662	9.8	American Realty	9,581,105	10.0
Rhumblin International Equity	8,277,743	9.3	Rhumblin International Equity	9,112,941	9.5
R&D Cash	2,182	0.0	R&D Cash	2,193	0.0

## Asset Allocation &amp; Performance

	Allocation		Performance(%)														
	Market Value \$	%	QTR		FYTD		1 YR		3 YR		5 YR		Inception		MTH		Inception Date
Total Fund Composite	95,999,149	100.0	9.21	(29)	-1.78	(97)	5.12	(23)	9.34	(14)	7.38	(4)	7.84	(48)	0.94	(78)	04/01/1992
Total Fund Policy Index			9.53	(19)	-0.92	(89)	5.46	(14)	9.32	(14)	7.34	(4)	N/A		1.07	(59)	
Difference			-0.32		-0.86		-0.34		0.02		0.04		N/A		-0.13		
All Public Plans-Total Fund Median			8.50		0.21		4.13		8.39		6.02		7.80		1.14		
Total Equity Composite	65,062,545	67.8	12.91		-4.56		5.01		12.21		9.06		5.88		0.56		07/01/2000
Total Equity Policy Index			13.32		-4.04		5.77		12.72		9.36		5.78		0.70		
Difference			-0.41		-0.52		-0.76		-0.51		-0.30		0.10		-0.14		
Total Domestic Equity																	
Rhumbline S&P 500 Equity	26,345,628	27.4	13.64	(45)	-1.72	(40)	9.47	(36)	13.47	(42)	10.87	(39)	5.78	(81)	1.94	(32)	07/01/2000
S&P 500 Index			13.65	(44)	-1.72	(39)	9.50	(35)	13.51	(39)	10.91	(38)	5.67	(87)	1.94	(31)	
Difference			-0.01		0.00		-0.03		-0.04		-0.04		0.11		0.00		
IM U.S. Large Cap Equity (SA+CF) Median			13.29		-2.25		7.99		12.91		10.32		6.82		1.39		
Rhumbline S&P 400 Equity	9,972,734	10.4	14.45	(71)	-5.28	(76)	2.56	(70)	11.21	(61)	8.27	(62)	9.78	(69)	-0.57	(73)	01/01/2004
S&P MidCap 400 Index			14.49	(68)	-5.29	(78)	2.59	(69)	11.24	(59)	8.29	(61)	9.71	(74)	-0.57	(70)	
Difference			-0.04		0.01		-0.03		-0.03		-0.02		0.07		0.00		
IM U.S. Mid Cap Equity (SA+CF) Median			15.72		-2.64		5.47		12.14		8.99		10.33		0.36		
Rhumbline S&P 600 Equity	9,819,551	10.2	11.59	(85)	-10.84	(85)	1.54	(53)	12.53	(52)	8.45	(40)	9.88	(47)	-3.33	(82)	01/01/2004
S&P SmallCap 600 Index			11.61	(85)	-10.83	(85)	1.57	(53)	12.55	(52)	8.45	(40)	9.83	(48)	-3.33	(83)	
Difference			-0.02		-0.01		-0.03		-0.02		0.00		0.05		0.00		
IM U.S. Small Cap Equity (SA+CF) Median			14.20		-8.31		2.06		12.62		7.76		9.77		-2.01		
Highland Capital LCG	9,811,691	10.2	15.19	(61)	-3.78	(79)	9.61	(71)	14.99	(65)	11.15	(76)	8.92	(69)	1.94	(67)	10/01/2007
Russell 1000 Growth Index			16.10	(46)	-2.34	(61)	12.75	(48)	16.53	(46)	13.50	(38)	9.84	(44)	2.85	(31)	
Difference			-0.91		-1.44		-3.14		-1.54		-2.35		-0.92		-0.91		
IM U.S. Large Cap Growth Equity (SA+CF) Median			15.92		-1.57		12.46		16.34		12.80		9.57		2.31		
International Equity																	
Rhumbline International Equity	9,112,941	9.5	10.09	(58)	-3.69	(62)	-3.27	(29)	N/A		N/A		6.40	(74)	0.75	(55)	08/01/2016
MSCI EAFE Index			10.13	(57)	-3.64	(62)	-3.22	(29)	7.80	(62)	2.81	(72)	7.30	(58)	0.74	(55)	
Difference			-0.04		-0.05		-0.05		N/A		N/A		-0.90		0.01		
IM International Equity (SA+CF) Median			10.49		-2.33		-5.69		8.48		3.94		7.74		0.89		

Asset Allocation & Performance

Total Fund Composite (Gross)

As of March 31, 2019

	Allocation		Performance(%)											
	Market Value \$	%	QTR	FYTD	1 YR	3 YR	5 YR	Inception	MTH	Inception Date				
Total Fixed Income Composite	20,742,808	21.6	2.74	4.62	3.37	2.41	2.80	5.22	1.77	04/01/1994				
Total Fixed Inc Policy Index			2.79	4.43	3.46	1.91	2.45	5.25	1.81					
Difference			-0.05	0.19	-0.09	0.50	0.35	-0.03	-0.04					
Domestic Fixed Income														
Highland Capital Fixed Income	20,742,808	21.6	2.74 (91)	4.62 (57)	4.71 (49)	2.44 (58)	2.95 (66)	5.25 (96)	1.77 (92)	04/01/1994				
Blmbg. Barc. U.S. Aggregate Index			2.94 (83)	4.63 (55)	4.48 (80)	2.03 (89)	2.74 (90)	5.33 (93)	1.92 (58)					
Difference			-0.20	-0.01	0.23	0.41	0.21	-0.08	-0.15					
IM U.S. Broad Market Core Fixed Income (SA+CF) Median			3.23	4.65	4.70	2.54	3.10	5.67	1.94					
Real Estate														
American Realty	9,581,105	10.0	1.74 (65)	3.71 (48)	8.20 (53)	7.65 (82)	9.55 (88)	10.39 (81)	1.74 (N/A)	07/01/2012				
NCREIF Fund Index-Open End Diversified Core (EW)			1.68 (66)	3.32 (75)	7.73 (69)	8.17 (63)	10.34 (62)	10.80 (69)	1.68 (N/A)					
Difference			0.06	0.39	0.47	-0.52	-0.79	-0.41	0.06					
IM U.S. Private Real Estate (SA+CF) Median			1.93	3.68	8.23	8.56	10.54	11.36	N/A					
R&D Cash	2,193	0.0												



## Asset Allocation &amp; Performance

	Allocation		Performance(%)						
	Market Value \$	%	QTR	FYTD	1 YR	3 YR	5 YR	Inception	Inception Date
<b>Total Fund Composite</b>	<b>95,999,149</b>	<b>100.0</b>	<b>9.17</b>	<b>-1.85</b>	<b>4.98</b>	<b>9.14</b>	<b>7.19</b>	<b>7.60</b>	<b>04/01/1992</b>
Total Fund Policy Index			9.53	-0.92	5.46	9.32	7.34	N/A	
Difference			-0.36	-0.93	-0.48	-0.18	-0.15	N/A	
<b>Total Equity Composite</b>	<b>65,062,545</b>	<b>67.8</b>	<b>12.91</b>	<b>-4.56</b>	<b>5.01</b>	<b>12.21</b>	<b>9.06</b>	<b>5.88</b>	<b>07/01/2000</b>
Total Equity Policy Index			13.32	-4.04	5.77	12.72	9.36	5.78	
Difference			-0.41	-0.52	-0.76	-0.51	-0.30	0.10	
<b>Total Domestic Equity</b>									
Rhumblin S&P 500 Equity	26,345,628	27.4	13.62	-1.74	9.42	13.40	10.81	5.66	07/01/2000
S&P 500 Index			13.65	-1.72	9.50	13.51	10.91	5.67	
Difference			-0.03	-0.02	-0.08	-0.11	-0.10	-0.01	
Rhumblin S&P 400 Equity	9,972,734	10.4	14.44	-5.30	2.51	11.15	8.21	9.76	01/01/2004
S&P MidCap 400 Index			14.49	-5.29	2.59	11.24	8.29	9.71	
Difference			-0.05	-0.01	-0.08	-0.09	-0.08	0.05	
Rhumblin S&P 600 Equity	9,819,551	10.2	11.57	-10.87	1.48	12.47	8.39	9.86	01/01/2004
S&P SmallCap 600 Index			11.61	-10.83	1.57	12.55	8.45	9.83	
Difference			-0.04	-0.04	-0.09	-0.08	-0.06	0.03	
Highland Capital LCG Equity	9,811,691	10.2	15.19	-3.78	9.61	14.99	11.15	8.92	10/01/2007
Russell 1000 Growth Index			16.10	-2.34	12.75	16.53	13.50	9.84	
Difference			-0.91	-1.44	-3.14	-1.54	-2.35	-0.92	
<b>International Equity</b>									
Rhumblin International Equity	9,112,941	9.5	10.08	-3.71	-3.32	N/A	N/A	6.35	08/01/2016
MSCI EAFE Index			10.13	-3.64	-3.22	7.80	2.81	7.30	
Difference			-0.05	-0.07	-0.10	N/A	N/A	-0.95	

	Allocation		Performance(%)						
	Market Value \$	%	QTR	FYTD	1 YR	3 YR	5 YR	Inception	Inception Date
<b>Total Fixed Income Composite</b>	<b>20,742,808</b>	<b>21.6</b>	<b>2.74</b>	<b>4.62</b>	<b>3.37</b>	<b>2.41</b>	<b>2.80</b>	<b>5.22</b>	<b>04/01/1994</b>
Total Fixed Inc Policy Index			2.79	4.43	3.46	1.91	2.45	5.25	
Difference			-0.05	0.19	-0.09	0.50	0.35	-0.03	
<b>Domestic Fixed Income</b>									
Highland Capital Fixed Income	20,742,808	21.6	2.74	4.62	4.71	2.44	2.95	5.25	04/01/1994
Blmbg. Barc. U.S. Aggregate Index			2.94	4.63	4.48	2.03	2.74	5.33	
Difference			-0.20	-0.01	0.23	0.41	0.21	-0.08	
<b>Real Estate</b>									
American Realty	9,581,105	10.0	1.46	3.14	7.01	6.47	8.37	9.21	07/01/2012
NCREIF Fund Index-ODCE (EW) (Net)			1.47	2.88	6.79	7.26	9.42	9.87	
Difference			-0.01	0.26	0.22	-0.79	-1.05	-0.66	



## Asset Allocation &amp; Performance

	Allocation		Performance(%)										
	Market Value \$	%	Oct-2017 To Sep-2018	Oct-2016 To Sep-2017	Oct-2015 To Sep-2016	Oct-2014 To Sep-2015	Oct-2013 To Sep-2014	Oct-2012 To Sep-2013	Oct-2011 To Sep-2012	Oct-2010 To Sep-2011	Oct-2009 To Sep-2010	Oct-2008 To Sep-2009	Oct-2007 To Sep-2008
<b>Total Fund Composite</b>	<b>95,999,149</b>	<b>100.0</b>	<b>11.27 (3)</b>	<b>13.60(19)</b>	<b>10.94 (14)</b>	<b>1.46 (9)</b>	<b>10.95 (29)</b>	<b>14.75 (13)</b>	<b>18.89 (24)</b>	<b>0.46(51)</b>	<b>10.42 (42)</b>	<b>5.99(8)</b>	<b>-13.46(48)</b>
Total Fund Policy Index			10.59 (6)	12.80(35)	11.83 (4)	0.81 (17)	10.35 (42)	14.21 (19)	19.60 (15)	1.75(26)	10.81 (35)	1.64(47)	-12.83(39)
Difference			0.68	0.80	-0.89	0.65	0.60	0.54	-0.71	-1.29	-0.39	4.35	-0.63
All Public Plans-Total Fund Median			7.59	12.01	9.72	-0.78	9.83	12.45	17.45	0.50	10.23	1.33	-13.61
<b>Total Equity Composite</b>	<b>65,062,545</b>	<b>67.8</b>	<b>16.01</b>	<b>19.67</b>	<b>13.36</b>	<b>0.44</b>	<b>14.07</b>	<b>24.58</b>	<b>28.78</b>	<b>-2.47</b>	<b>12.49</b>	<b>-0.91</b>	<b>-23.22</b>
Total Equity Policy Index			16.49	19.69	14.30	-0.18	13.86	23.27	27.80	-0.50	11.44	-4.36	-21.04
Difference			-0.48	-0.02	-0.94	0.62	0.21	1.31	0.98	-1.97	1.05	3.45	-2.18
<b>Total Domestic Equity</b>													
Rhumblin S&P 500 Equity	26,345,628	27.4	17.87 (42)	18.56(57)	15.38 (26)	-0.63 (57)	19.64 (39)	19.30 (71)	30.16 (39)	1.18(44)	10.20 (49)	-6.49(60)	-21.73(59)
S&P 500 Index			17.91 (40)	18.61(55)	15.43 (24)	-0.61 (57)	19.73 (37)	19.34 (70)	30.20 (38)	1.14(46)	10.16 (50)	-6.91(65)	-21.98(64)
Difference			-0.04	-0.05	-0.05	-0.02	-0.09	-0.04	-0.04	0.04	0.04	0.42	0.25
IM U.S. Large Cap Equity (SA+CF) Median			17.02	18.83	13.22	-0.32	18.79	21.12	29.11	0.78	10.13	-5.49	-20.77
Rhumblin S&P 400 Equity	9,972,734	10.4	14.16 (58)	17.49(54)	15.21 (31)	1.45 (52)	11.81 (67)	27.55 (58)	28.90 (36)	-1.16(56)	17.78 (41)	-2.78(52)	-16.54(19)
S&P MidCap 400 Index			14.21 (55)	17.52(53)	15.33 (30)	1.40 (54)	11.82 (67)	27.68 (56)	28.54 (40)	-1.28(58)	17.78 (41)	-3.11(55)	-16.68(22)
Difference			-0.05	-0.03	-0.12	0.05	-0.01	-0.13	0.36	0.12	0.00	0.33	0.14
IM U.S. Mid Cap Equity (SA+CF) Median			14.98	17.57	11.99	1.52	13.58	28.22	27.26	-0.65	16.78	-2.72	-20.48
Rhumblin S&P 600 Equity	9,819,551	10.2	19.04 (34)	21.08(49)	18.00 (25)	3.90 (37)	5.79 (55)	31.40 (57)	33.27 (36)	0.21(38)	14.14 (58)	-10.54(77)	-13.64(22)
S&P SmallCap 600 Index			19.08 (34)	21.05(49)	18.12 (24)	3.81 (37)	5.74 (56)	31.51 (55)	33.35 (36)	0.21(38)	14.22 (57)	-10.61(77)	-13.83(23)
Difference			-0.04	0.03	-0.12	0.09	0.05	-0.11	-0.08	0.00	-0.08	0.07	0.19
IM U.S. Small Cap Equity (SA+CF) Median			14.73	20.96	14.59	2.41	6.23	32.18	31.62	-1.20	14.99	-5.24	-18.20
Highland Capital LCG	9,811,691	10.2	23.71 (56)	23.11(22)	6.68 (93)	4.64 (34)	16.29 (70)	28.73 (8)	27.51 (52)	-6.48(97)	14.63 (22)	15.31(2)	-30.80(98)
Russell 1000 Growth Index			26.30 (36)	21.94(37)	13.76 (23)	3.17 (55)	19.15 (40)	19.27 (63)	29.19 (39)	3.78(30)	12.65 (35)	-1.85(37)	-20.88(55)
Difference			-2.59	1.17	-7.08	1.47	-2.86	9.46	-1.68	-10.26	1.98	17.16	-9.92
IM U.S. Large Cap Growth Equity (SA+CF) Median			24.38	20.82	11.64	3.61	18.18	20.25	27.65	1.38	11.27	-3.00	-20.13
<b>International Equity</b>													
Rhumblin International Equity	9,112,941	9.5	2.74 (38)	19.24(64)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MSCI EAFE Index			3.25 (34)	19.65(61)	7.06 (76)	-8.27 (50)	4.70 (63)	24.29 (33)	14.33 (72)	-8.94(45)	3.71 (80)	3.80(65)	-30.13(49)
Difference			-0.51	-0.41	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
IM International Equity (SA+CF) Median			1.43	21.01	11.49	-8.35	5.82	20.28	17.27	-9.59	9.60	7.09	-30.29

# Asset Allocation & Performance

## Total Fund Composite (Gross)

As of March 31, 2019

	Allocation		Performance(%)										
	Market Value \$	%	Oct-2017 To Sep-2018	Oct-2016 To Sep-2017	Oct-2015 To Sep-2016	Oct-2014 To Sep-2015	Oct-2013 To Sep-2014	Oct-2012 To Sep-2013	Oct-2011 To Sep-2012	Oct-2010 To Sep-2011	Oct-2009 To Sep-2010	Oct-2008 To Sep-2009	Oct-2007 To Sep-2008
<b>Total Fixed Income Composite</b>	<b>20,742,808</b>	<b>21.6</b>	<b>-1.34</b>	<b>1.26</b>	<b>6.60</b>	<b>1.40</b>	<b>3.45</b>	<b>-2.57</b>	<b>6.28</b>	<b>5.20</b>	<b>8.28</b>	<b>11.96</b>	<b>1.23</b>
Total Fixed Inc Policy Index			-1.24	-0.27	6.01	1.82	3.41	-2.11	4.98	5.18	7.78	11.18	3.84
Difference			-0.10	1.53	0.59	-0.42	0.04	-0.46	1.30	0.02	0.50	0.78	-2.61
<b>Domestic Fixed Income</b>													
Highland Capital Fixed Income	20,742,808	21.6	-1.08 (75)	0.85(39)	6.51 (19)	2.22 (88)	3.51 (95)	-2.54 (98)	6.07 (72)	5.66(28)	8.09 (89)	11.96(58)	1.23(63)
Blmbg. Barc. U.S. Aggregate Index			-1.22 (89)	0.07(87)	5.19 (81)	2.94 (60)	3.96 (81)	-1.68 (80)	5.16 (91)	5.26(49)	8.16 (86)	10.56(82)	3.65(32)
Difference			0.14	0.78	1.32	-0.72	-0.45	-0.86	0.91	0.40	-0.07	1.40	-2.42
IM U.S. Broad Market Core Fixed Income (SA+CF) Median			-0.74	0.62	5.67	3.02	4.51	-1.22	6.62	5.26	9.26	12.30	2.56
<b>International Fixed Income</b>													
Oppenheimer Dreyfus (OIBAX) (DIBAX)	-	0.0	N/A	3.10(83)	9.59 (82)	-4.81 (28)	2.98 (56)	-2.82 (36)	7.90 (77)	0.32(38)	N/A	N/A	N/A
FTSE Non-U.S. World Government Bond			-1.57 (14)	-3.14(100)	12.61 (59)	-7.01 (41)	-0.99 (78)	-5.63 (77)	3.45 (95)	4.13(4)	4.46 (90)	16.04(57)	5.16(2)
Difference			N/A	6.24	-3.02	2.20	3.97	2.81	4.45	-3.81	N/A	N/A	N/A
IM International Fixed Income All (MF) Median			-3.90	6.27	13.82	-8.41	4.03	-4.01	13.45	-0.39	13.85	16.85	-3.02
<b>Real Estate</b>													
American Realty	9,581,105	10.0	8.50 (66)	7.53(66)	9.03 (95)	14.05 (72)	12.45 (71)	12.30 (71)	N/A	N/A	N/A	N/A	N/A
NCREIF Fund Index-Open End Diversified Core (EW)			8.82 (59)	7.81(60)	10.62 (69)	14.71 (66)	12.39 (72)	12.47 (69)	11.77 (64)	18.03(46)	6.14 (51)	-36.09(54)	3.73(57)
Difference			-0.32	-0.28	-1.59	-0.66	0.06	-0.17	N/A	N/A	N/A	N/A	N/A
IM U.S. Private Real Estate (SA+CF) Median			9.04	8.30	11.57	15.79	13.12	13.35	12.98	17.30	6.39	-35.27	4.80
R&D Cash	2,193	0.0											



## Asset Allocation &amp; Performance

	Allocation		Performance(%)										
	Market Value \$	%	Oct-2017 To Sep-2018	Oct-2016 To Sep-2017	Oct-2015 To Sep-2016	Oct-2014 To Sep-2015	Oct-2013 To Sep-2014	Oct-2012 To Sep-2013	Oct-2011 To Sep-2012	Oct-2010 To Sep-2011	Oct-2009 To Sep-2010	Oct-2008 To Sep-2009	Oct-2007 To Sep-2008
<b>Total Fund Composite</b>	<b>95,999,149</b>	<b>100.0</b>	<b>11.12</b>	<b>13.36</b>	<b>10.72</b>	<b>1.29</b>	<b>10.73</b>	<b>14.53</b>	<b>18.64</b>	<b>0.22</b>	<b>10.08</b>	<b>5.61</b>	<b>-13.73</b>
Total Fund Policy Index			10.59	12.80	11.83	0.81	10.35	14.21	19.60	1.75	10.81	1.64	-12.83
Difference			0.53	0.56	-1.11	0.48	0.38	0.32	-0.96	-1.53	-0.73	3.97	-0.90
<b>Total Equity Composite</b>	<b>65,062,545</b>	<b>67.8</b>	<b>16.01</b>	<b>19.67</b>	<b>13.36</b>	<b>0.44</b>	<b>14.07</b>	<b>24.58</b>	<b>28.78</b>	<b>-2.47</b>	<b>12.49</b>	<b>-0.91</b>	<b>-23.22</b>
Total Equity Policy Index			16.49	19.69	14.30	-0.18	13.86	23.27	27.80	-0.50	11.44	-4.36	-21.04
Difference			-0.48	-0.02	-0.94	0.62	0.21	1.31	0.98	-1.97	1.05	3.45	-2.18
<b>Total Domestic Equity</b>													
Rhumblin S&P 500 Equity	26,345,628	27.4	17.81	18.50	15.31	-0.66	19.55	19.18	29.99	1.04	10.02	-6.71	-21.87
S&P 500 Index			17.91	18.61	15.43	-0.61	19.73	19.34	30.20	1.14	10.16	-6.91	-21.98
Difference			-0.10	-0.11	-0.12	-0.05	-0.18	-0.16	-0.21	-0.10	-0.14	0.20	0.11
Rhumblin S&P 400 Equity	9,972,734	10.4	14.10	17.43	15.13	1.40	11.78	27.55	28.90	-1.16	17.78	-2.78	-16.54
S&P MidCap 400 Index			14.21	17.52	15.33	1.40	11.82	27.68	28.54	-1.28	17.78	-3.11	-16.68
Difference			-0.11	-0.09	-0.20	0.00	-0.04	-0.13	0.36	0.12	0.00	0.33	0.14
Rhumblin S&P 600 Equity	9,819,551	10.2	18.98	21.01	17.92	3.85	5.76	31.40	33.27	0.21	14.14	-10.54	-13.64
S&P SmallCap 600 Index			19.08	21.05	18.12	3.81	5.74	31.51	33.35	0.21	14.22	-10.61	-13.83
Difference			-0.10	-0.04	-0.20	0.04	0.02	-0.11	-0.08	0.00	-0.08	0.07	0.19
Highland Capital LCG	9,811,691	10.2	23.71	23.11	6.68	4.64	16.29	28.73	27.51	-6.48	14.63	15.31	-30.80
Russell 1000 Growth Index			26.30	21.94	13.76	3.17	19.15	19.27	29.19	3.78	12.65	-1.85	-20.88
Difference			-2.59	1.17	-7.08	1.47	-2.86	9.46	-1.68	-10.26	1.98	17.16	-9.92
<b>International Equity</b>													
Rhumblin International Equity	9,112,941	9.5	2.68	19.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MSCI EAFE Index			3.25	19.65	7.06	-8.27	4.70	24.29	14.33	-8.94	3.71	3.80	-30.13
Difference			-0.57	-0.48	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**Asset Allocation & Performance**
**Total Fund Composite (Net)**

As of March 31, 2019

	Allocation		Performance(%)										
	Market Value \$	%	Oct-2017 To Sep-2018	Oct-2016 To Sep-2017	Oct-2015 To Sep-2016	Oct-2014 To Sep-2015	Oct-2013 To Sep-2014	Oct-2012 To Sep-2013	Oct-2011 To Sep-2012	Oct-2010 To Sep-2011	Oct-2009 To Sep-2010	Oct-2008 To Sep-2009	Oct-2007 To Sep-2008
<b>Total Fixed Income Composite</b>	<b>20,742,808</b>	<b>21.6</b>	<b>-1.34</b>	<b>1.26</b>	<b>6.60</b>	<b>1.40</b>	<b>3.45</b>	<b>-2.57</b>	<b>6.28</b>	<b>5.20</b>	<b>8.28</b>	<b>11.96</b>	<b>1.23</b>
Total Fixed Inc Policy Index			-1.24	-0.27	6.01	1.82	3.41	-2.11	4.98	5.18	7.78	11.18	3.84
Difference			-0.10	1.53	0.59	-0.42	0.04	-0.46	1.30	0.02	0.50	0.78	-2.61
<b>Domestic Fixed Income</b>													
Highland Capital Fixed Income	20,742,808	21.6	-1.08	0.85	6.51	2.22	3.51	-2.54	6.07	5.66	8.09	11.96	1.23
Blmbg. Barc. U.S. Aggregate Index			-1.22	0.07	5.19	2.94	3.96	-1.68	5.16	5.26	8.16	10.56	3.65
Difference			0.14	0.78	1.32	-0.72	-0.45	-0.86	0.91	0.40	-0.07	1.40	-2.42
<b>International Fixed Income</b>													
Oppenheimer Dreyfus (OIBAX) (DIBAX)	-	0.0	N/A	3.10	9.59	-4.81	2.98	-2.82	7.90	0.32	N/A	N/A	N/A
FTSE Non-U.S. World Government Bond			-1.57	-3.14	12.61	-7.01	-0.99	-5.63	3.45	4.13	4.46	16.04	5.16
Difference			N/A	6.24	-3.02	2.20	3.97	2.81	4.45	-3.81	N/A	N/A	N/A
<b>Real Estate</b>													
American Realty	9,581,105	10.0	7.31	6.34	7.85	12.82	11.34	11.10	N/A	N/A	N/A	N/A	N/A
NCREIF Fund Index-ODCE (EW) (Net)			7.89	6.93	9.69	13.82	11.44	11.46	10.69	17.02	5.24	-36.63	2.82
Difference			-0.58	-0.59	-1.84	-1.00	-0.10	-0.36	N/A	N/A	N/A	N/A	N/A



**Historical Rolling Performance**  
**Total Fund Composite**  
As of March 31, 2019

Historical Rolling Performance					
	QTR	1 YR	3 YR	5 YR	Inception
03/31/2019	9.21	5.12	9.34	7.38	7.84
12/31/2018	-10.06	-4.00	6.84	5.84	7.56
09/30/2018	4.22	11.27	11.93	9.56	8.07
06/30/2018	2.69	10.73	8.48	9.79	7.98
03/31/2018	-0.27	10.86	7.54	9.32	7.95
12/31/2017	4.25	15.62	8.66	10.87	8.04
09/30/2017	3.71	13.60	8.54	10.24	7.94
06/30/2017	2.81	12.92	6.76	10.41	7.87
03/31/2017	4.02	12.16	7.00	9.31	7.83
12/31/2016	2.43	9.87	6.16	10.19	7.74
09/30/2016	3.09	10.94	7.69	11.24	7.72
06/30/2016	2.12	2.09	8.45	8.36	7.67
03/31/2016	1.89	0.03	7.88	8.03	7.65
12/31/2015	3.42	1.00	9.66	8.53	7.65
09/30/2015	-5.13	1.46	8.91	9.06	7.58
06/30/2015	0.06	5.55	12.48	11.97	7.91
03/31/2015	2.88	9.19	11.63	10.75	8.00
12/31/2014	3.89	7.80	13.55	11.04	7.96
09/30/2014	-1.31	10.95	14.82	10.92	7.86
06/30/2014	3.52	18.38	11.51	13.73	8.02
03/31/2014	1.57	14.94	10.45	15.10	7.94
12/31/2013	6.92	21.12	11.41	13.81	7.96
09/30/2013	5.30	14.75	11.08	9.91	7.72
06/30/2013	0.51	13.90	12.11	7.06	7.56
03/31/2013	7.03	10.83	9.90	6.97	7.62
12/31/2012	1.30	12.13	8.93	4.48	7.37
09/30/2012	4.52	18.89	9.66	3.88	7.39
06/30/2012	-2.20	2.85	12.16	3.42	7.25
03/31/2012	8.29	5.76	16.62	4.58	7.46
12/31/2011	7.40	1.83	12.03	3.29	7.13
09/30/2011	-9.58	0.46	5.54	2.69	6.83
06/30/2011	0.57	20.27	6.29	5.50	7.48
03/31/2011	4.26	13.24	6.11	5.13	7.55
12/31/2010	5.96	13.22	2.92	4.93	7.42
09/30/2010	8.25	10.42	0.43	4.00	7.19
06/30/2010	-5.31	14.08	-1.48	2.78	6.83
03/31/2010	4.24	32.44	1.46	4.45	7.25
12/31/2009	3.34	21.96	0.66	3.43	7.10
09/30/2009	11.84	5.99	0.97	3.94	7.01
06/30/2009	9.93	-12.48	-1.61	1.52	6.42

Returns for periods greater than one year are annualized.  
Returns are expressed as percentages.



**Historical Rolling Performance**  
**Total Fund Policy Index**  
As of March 31, 2019

Historical Rolling Performance					
	QTR	1 YR	3 YR	5 YR	Inception
03/31/2019	9.53	5.46	9.32	7.34	N/A
12/31/2018	-9.54	-3.95	6.79	5.78	N/A
09/30/2018	3.85	10.59	11.74	9.19	N/A
06/30/2018	2.49	10.34	8.68	9.53	N/A
03/31/2018	-0.24	10.74	7.65	9.12	N/A
12/31/2017	4.15	15.47	8.59	10.57	N/A
09/30/2017	3.62	12.80	8.34	9.90	N/A
06/30/2017	2.87	12.63	6.59	10.11	N/A
03/31/2017	4.01	11.86	6.86	9.06	N/A
12/31/2016	1.75	9.83	6.09	9.93	N/A
09/30/2016	3.45	11.83	7.55	11.19	N/A
06/30/2016	2.17	3.29	8.25	8.19	N/A
03/31/2016	2.12	0.69	7.70	7.96	N/A
12/31/2015	3.61	0.98	9.22	8.41	N/A
09/30/2015	-4.45	0.81	8.31	9.11	N/A
06/30/2015	-0.41	4.09	11.64	12.02	N/A
03/31/2015	2.41	8.34	11.06	10.71	N/A
12/31/2014	3.44	7.66	13.13	11.13	N/A
09/30/2014	-1.34	10.35	14.66	11.19	N/A
06/30/2014	3.65	17.99	11.30	14.11	N/A
03/31/2014	1.78	14.51	10.37	16.04	N/A
12/31/2013	6.02	19.85	11.27	13.96	N/A
09/30/2013	5.49	14.21	11.60	9.38	N/A
06/30/2013	0.60	13.30	12.83	6.70	N/A
03/31/2013	6.52	10.41	10.27	6.48	N/A
12/31/2012	1.03	12.20	9.52	4.03	N/A
09/30/2012	4.65	19.60	10.48	3.62	N/A
06/30/2012	-1.97	3.15	13.12	3.07	N/A
03/31/2012	8.25	6.34	18.50	4.27	N/A
12/31/2011	7.70	2.45	12.65	3.06	N/A
09/30/2011	-9.75	1.75	4.65	2.58	N/A
06/30/2011	1.06	22.90	5.77	5.39	N/A
03/31/2011	4.29	14.20	5.25	4.87	N/A
12/31/2010	6.97	14.28	1.96	4.83	N/A
09/30/2010	9.02	10.81	-0.61	3.80	N/A
06/30/2010	-6.10	14.16	-2.82	2.66	N/A
03/31/2010	4.36	37.03	0.49	4.46	N/A
12/31/2009	3.72	22.10	-0.23	3.29	N/A
09/30/2009	12.31	1.64	0.24	4.04	N/A
06/30/2009	12.71	-15.67	-2.50	1.60	N/A

Returns for periods greater than one year are annualized.  
Returns are expressed as percentages.



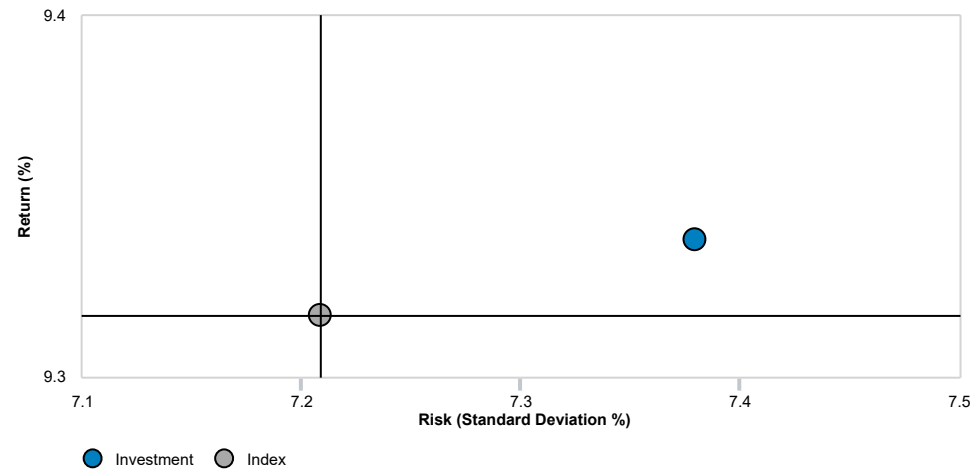
### Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	9.34	7.38	1.09	101.16	10	102.53	2
Index	9.32	7.21	1.11	100.00	10	100.00	2

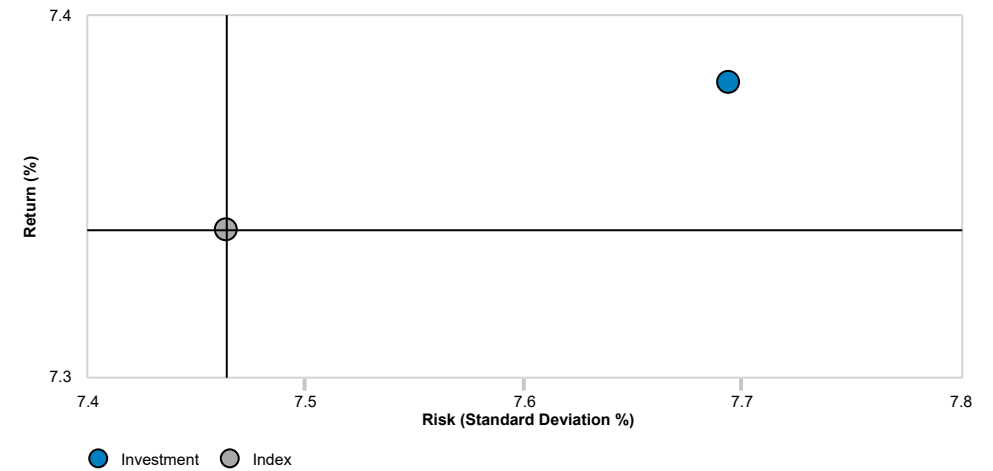
### Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	7.38	7.69	0.88	101.92	16	104.58	4
Index	7.34	7.46	0.90	100.00	15	100.00	5

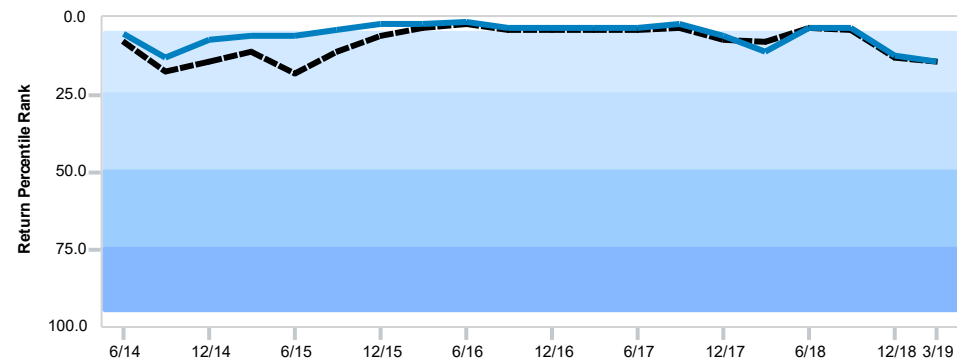
### Risk and Return 3 Years



### Risk and Return 5 Years

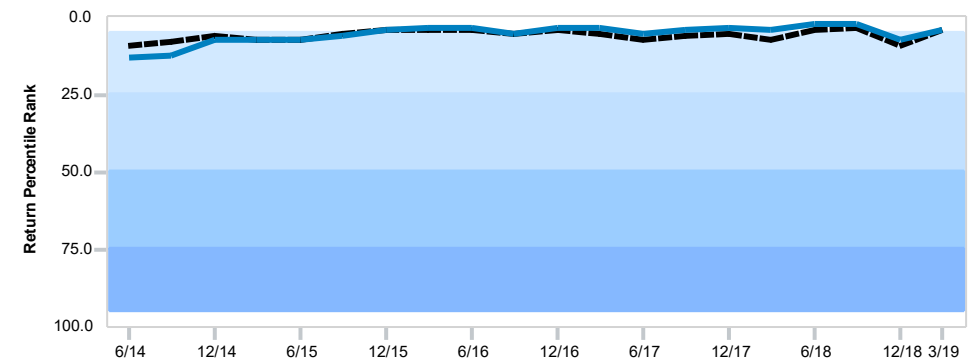


### 3 Year Rolling Percentile Rank All Public Plans-Total Fund



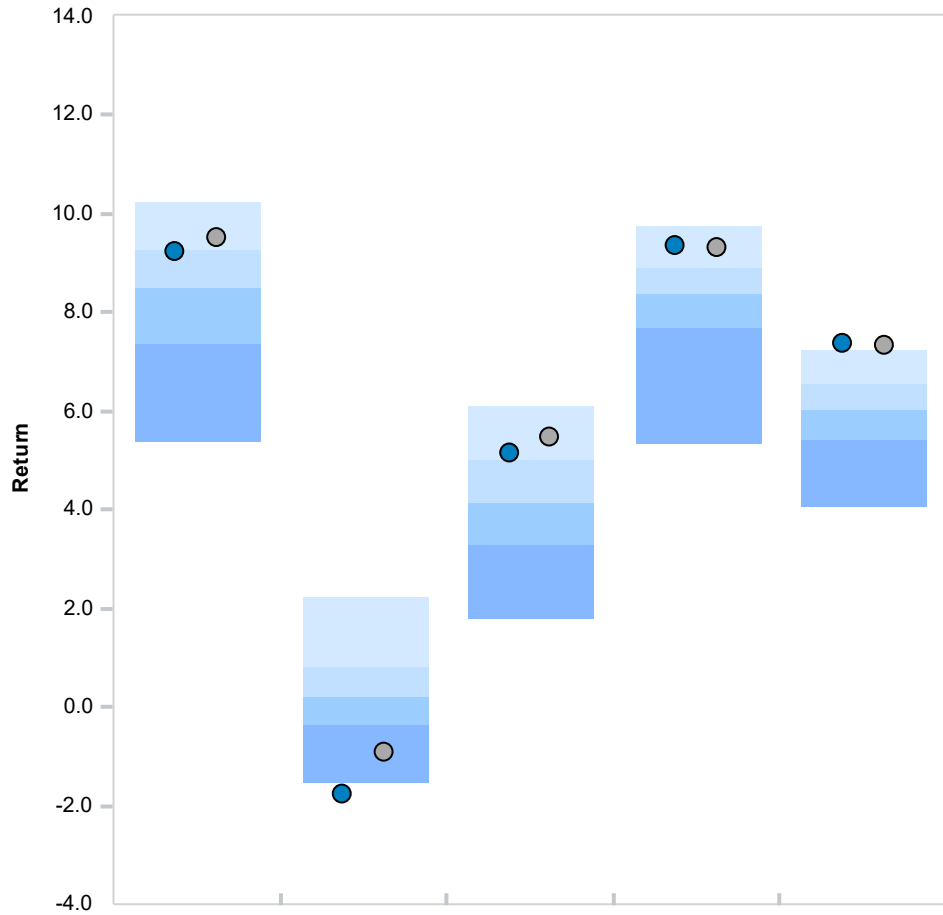
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	20 (100%)	0 (0%)	0 (0%)	0 (0%)
Index	20	20 (100%)	0 (0%)	0 (0%)	0 (0%)

### 5 Year Rolling Percentile Rank All Public Plans-Total Fund



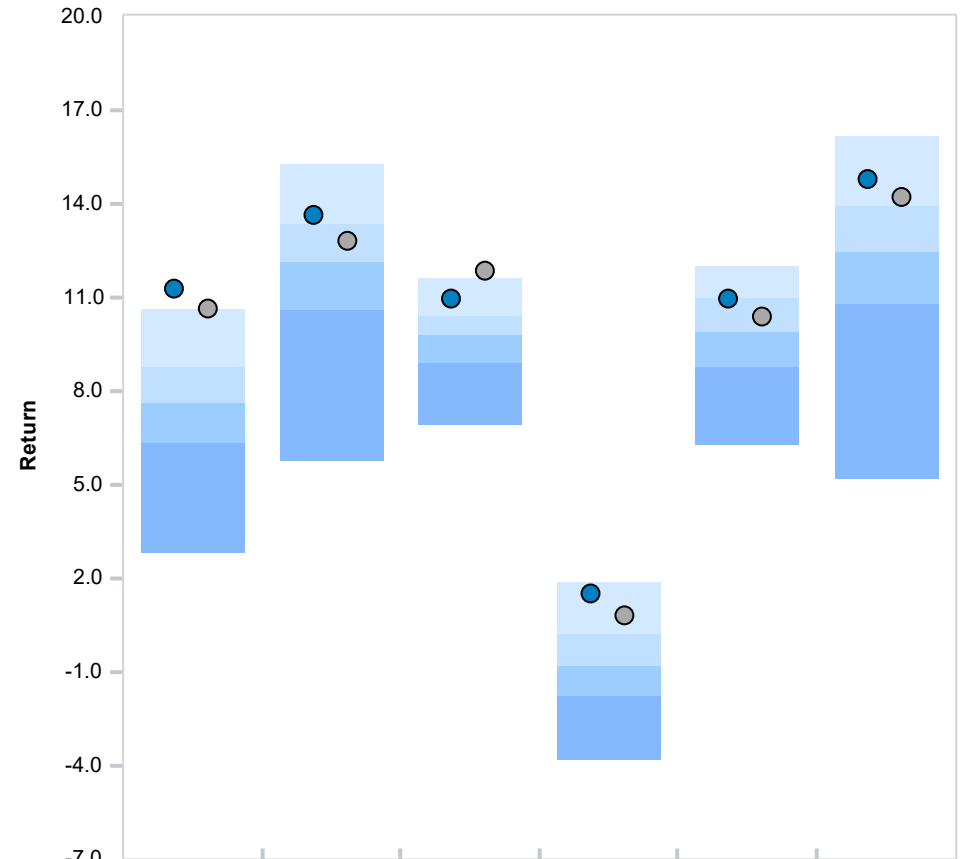
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	20 (100%)	0 (0%)	0 (0%)	0 (0%)
Index	20	20 (100%)	0 (0%)	0 (0%)	0 (0%)

**Peer Group Analysis - All Public Plans-Total Fund**



	QTR	FYTD	1 YR	3 YR	5 YR
Investment	9.21 (29)	-1.78 (97)	5.12 (23)	9.34 (14)	7.38 (4)
Index	9.53 (19)	-0.92 (89)	5.46 (14)	9.32 (14)	7.34 (4)
Median	8.50	0.21	4.13	8.39	6.02

**Peer Group Analysis - All Public Plans-Total Fund**



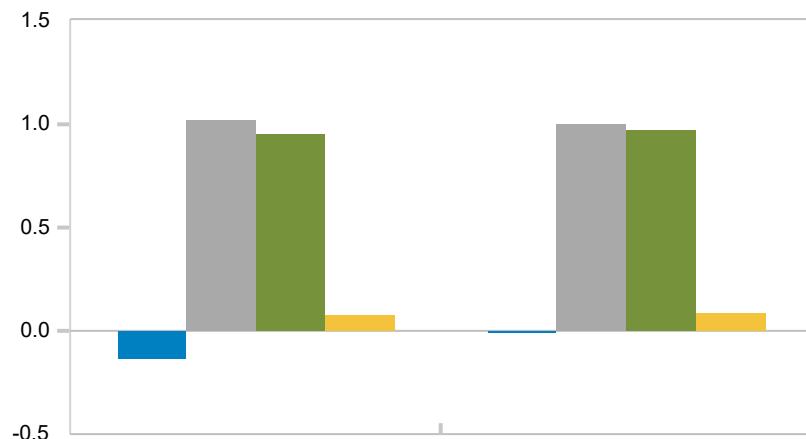
	4 Quarters Ending Sep-2018	4 Quarters Ending Sep-2017	4 Quarters Ending Sep-2016	4 Quarters Ending Sep-2015	4 Quarters Ending Sep-2014	4 Quarters Ending Sep-2013
Investment	11.27 (3)	13.60 (19)	10.94 (14)	1.46 (10)	10.95 (30)	14.75 (14)
Index	10.59 (6)	12.80 (37)	11.83 (4)	0.81 (16)	10.35 (42)	14.21 (21)
Median	7.59	12.15	9.77	-0.79	9.92	12.46

**Comparative Performance**

	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	1 Qtr Ending Sep-2017
Investment	-10.06 (95)	4.22 (4)	2.69 (4)	-0.27 (50)	4.25 (11)	3.71 (32)
Index	-9.54 (88)	3.85 (8)	2.49 (6)	-0.24 (49)	4.15 (15)	3.62 (39)
Median	-7.75	2.70	1.19	-0.27	3.64	3.46



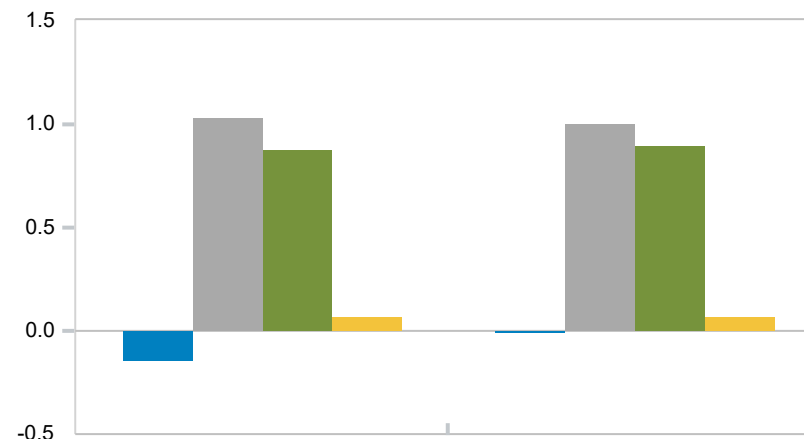
## Risk / Reward Historical Statistics 3 Years Ending March 31, 2019



	Total Fund Composite	Total Fund Policy Index
Alpha	-0.14	0.00
Beta	1.02	1.00
Sharpe Ratio	0.95	0.97
Treynor Ratio	0.08	0.08

■ Alpha  
■ Beta  
■ Sharpe Ratio  
■ Treynor Ratio

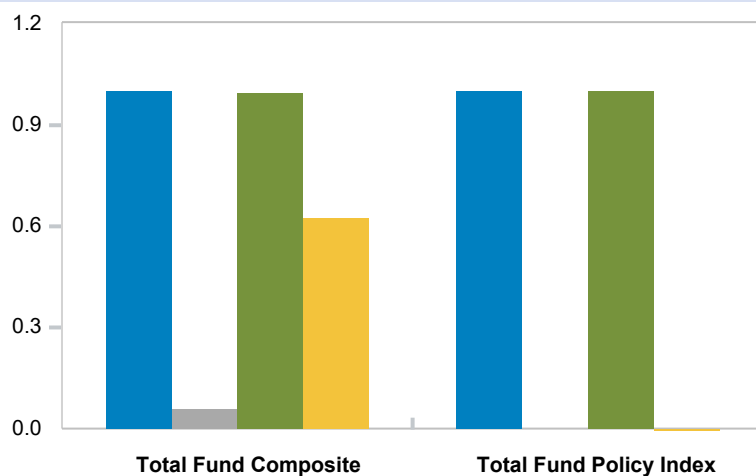
## Risk / Reward Historical Statistics 5 Years Ending March 31, 2019



	Total Fund Composite	Total Fund Policy Index
Alpha	-0.14	0.00
Beta	1.03	1.00
Sharpe Ratio	0.88	0.90
Treynor Ratio	0.07	0.07

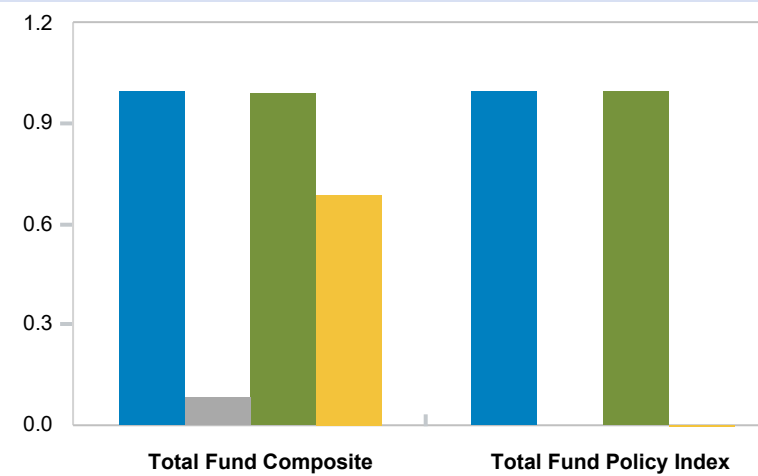
■ Alpha  
■ Beta  
■ Sharpe Ratio  
■ Treynor Ratio

## Benchmark Relative Historical Statistics 3 Years Ending March 31, 2019



■ Actual Correlation  
■ Information Ratio  
■ R-Squared  
■ Tracking Error

## Benchmark Relative Historical Statistics 5 Years Ending March 31, 2019



■ Actual Correlation  
■ Information Ratio  
■ R-Squared  
■ Tracking Error

Benchmark: Total Fund Policy Index

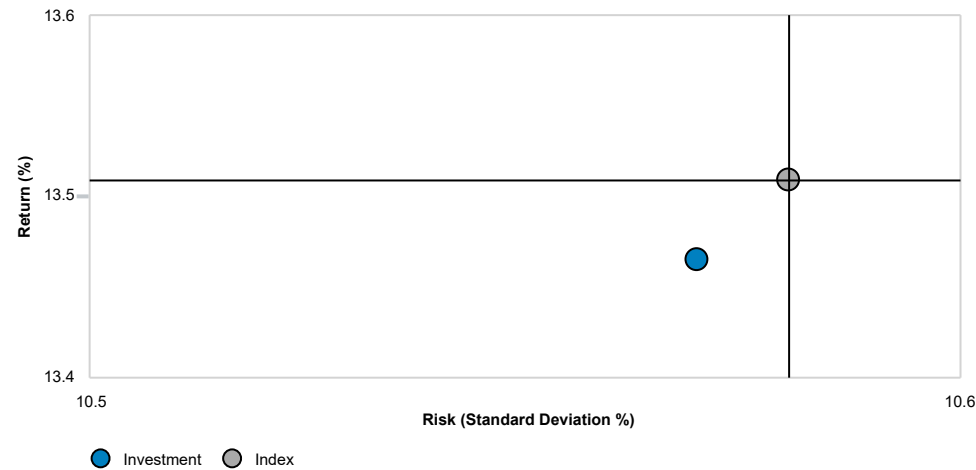
### Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	13.47	10.57	1.14	99.79	10	99.94	2
Index	13.51	10.58	1.15	100.00	10	100.00	2

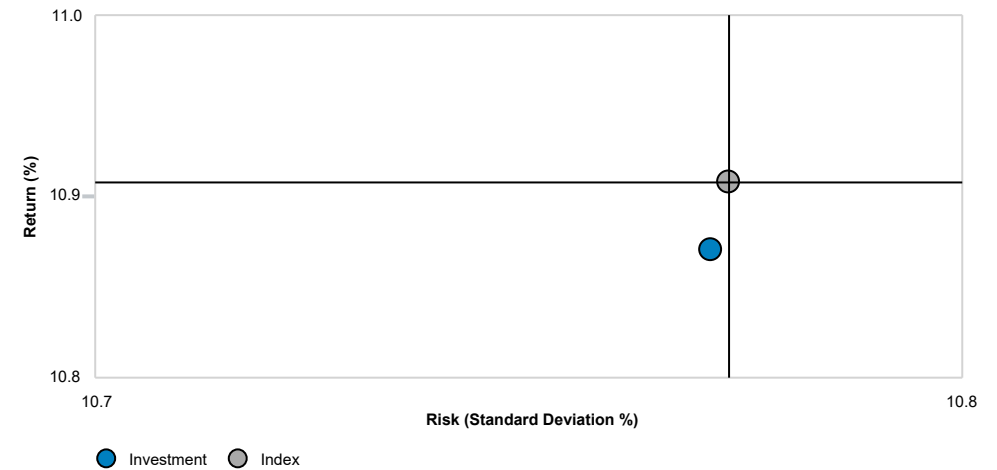
### Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	10.87	10.77	0.96	99.81	17	100.15	3
Index	10.91	10.77	0.96	100.00	17	100.00	3

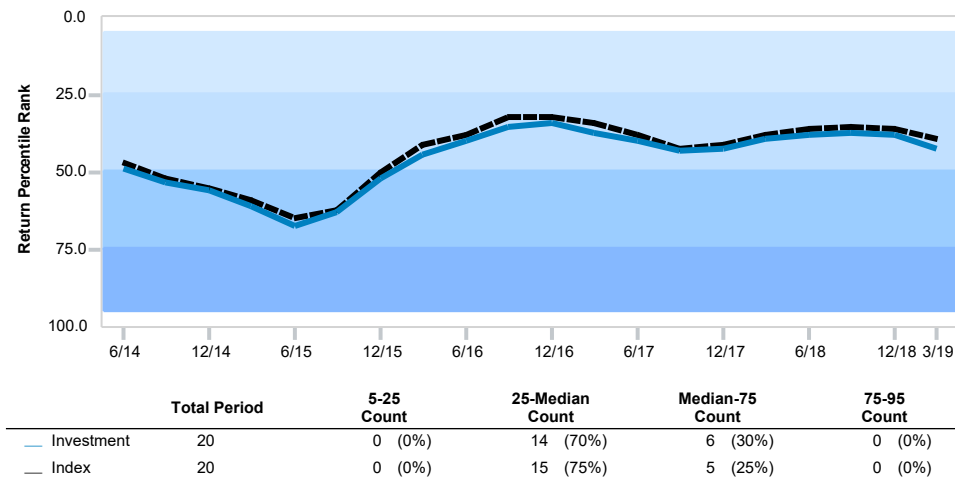
### Risk and Return 3 Years



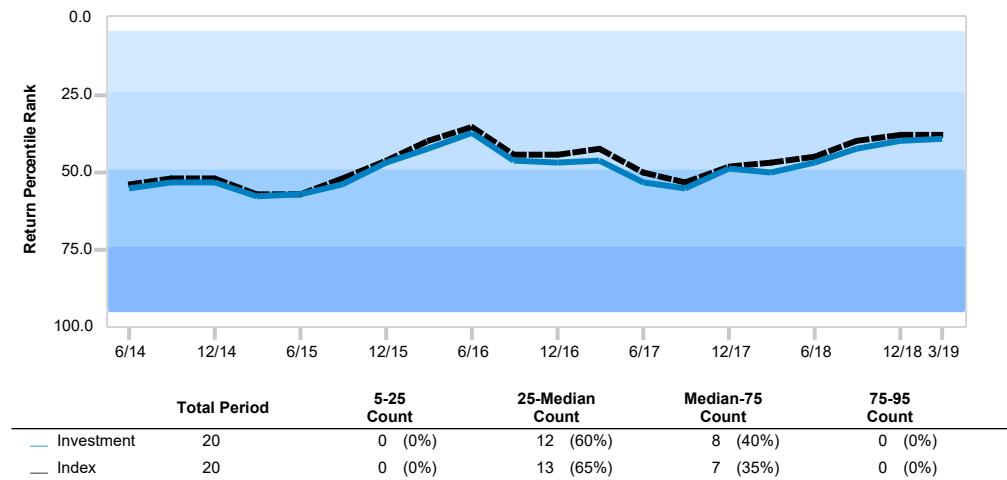
### Risk and Return 5 Years



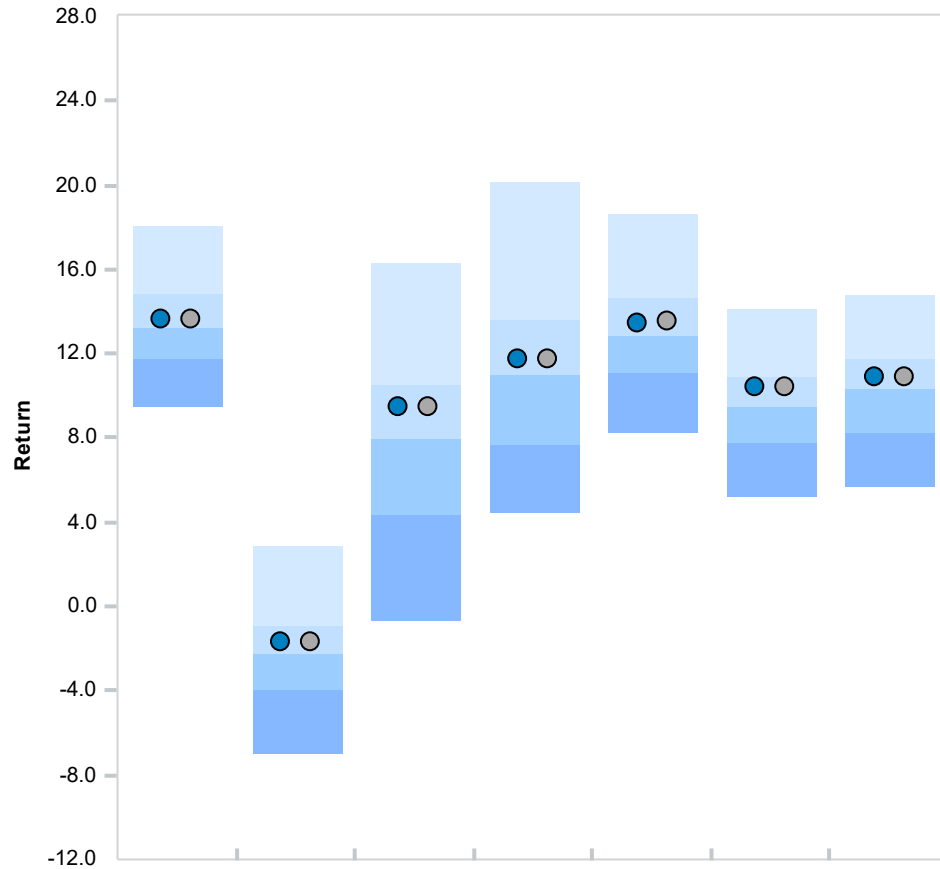
### 3 Year Rolling Percentile Rank IM U.S. Large Cap Equity (SA+CF)



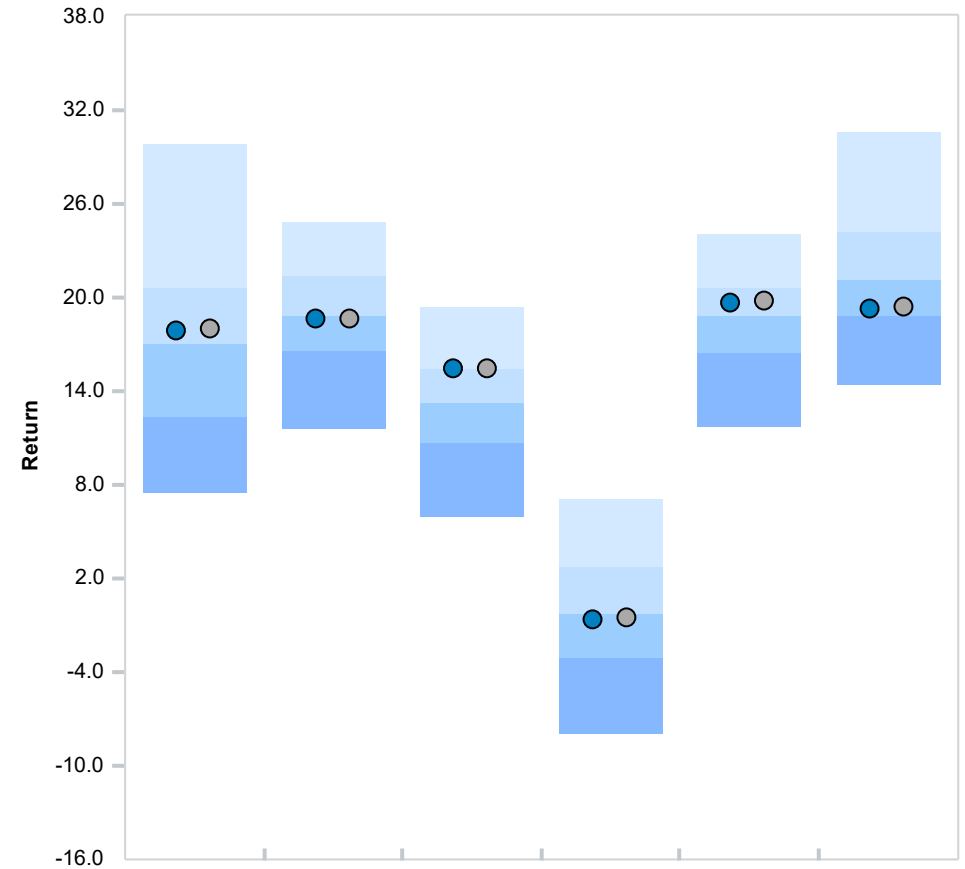
### 5 Year Rolling Percentile Rank IM U.S. Large Cap Equity (SA+CF)



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



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

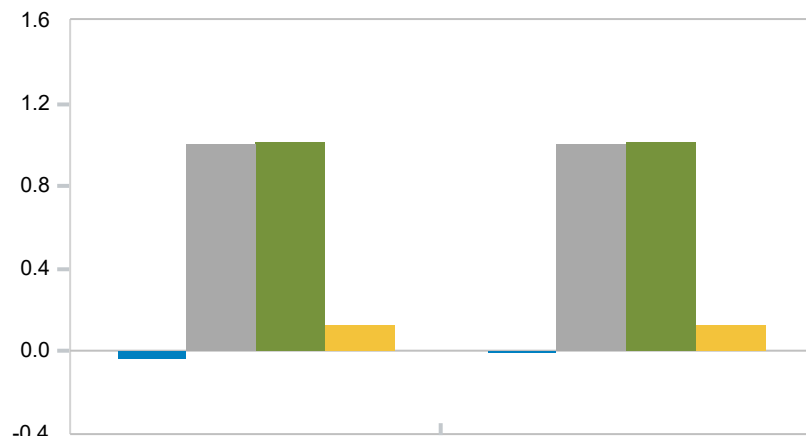


**Comparative Performance**

	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	1 Qtr Ending Sep-2017
Investment	-13.51 (41)	7.70 (35)	3.42 (42)	-0.77 (55)	6.63 (52)	4.49 (56)
Index	-13.52 (41)	7.71 (34)	3.43 (41)	-0.76 (55)	6.64 (50)	4.48 (57)
Median	-13.94	7.11	2.99	-0.69	6.64	4.58

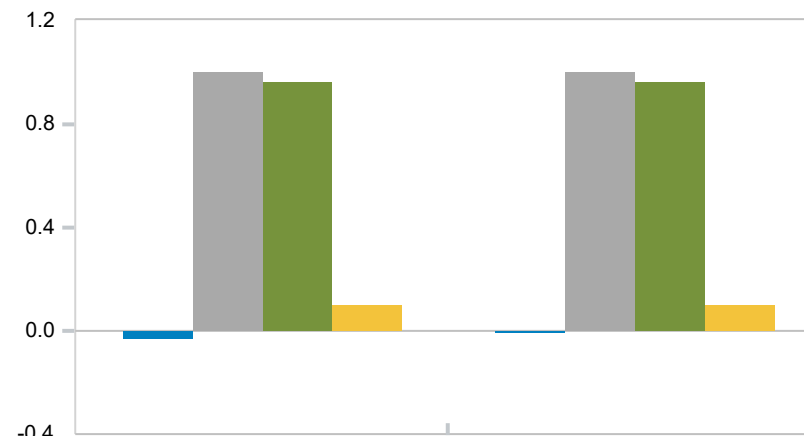


## Risk / Reward Historical Statistics 3 Years Ending March 31, 2019



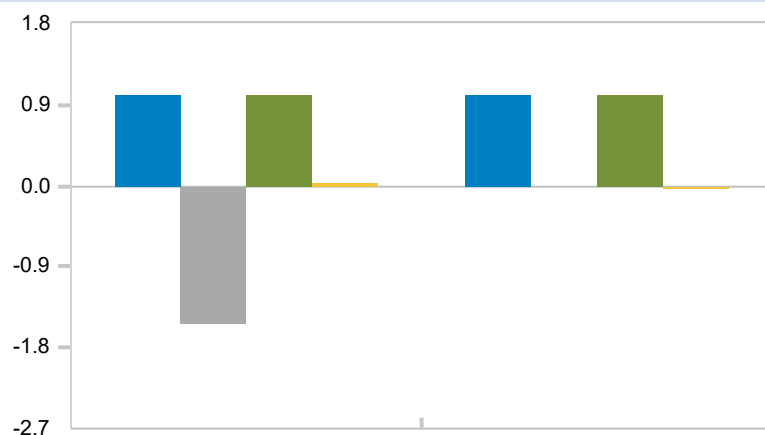
	Rhumblin S&P 500 Equity	S&P 500 Index
Alpha	-0.03	0.00
Beta	1.00	1.00
Sharpe Ratio	1.02	1.02
Treynor Ratio	0.12	0.12

## Risk / Reward Historical Statistics 5 Years Ending March 31, 2019



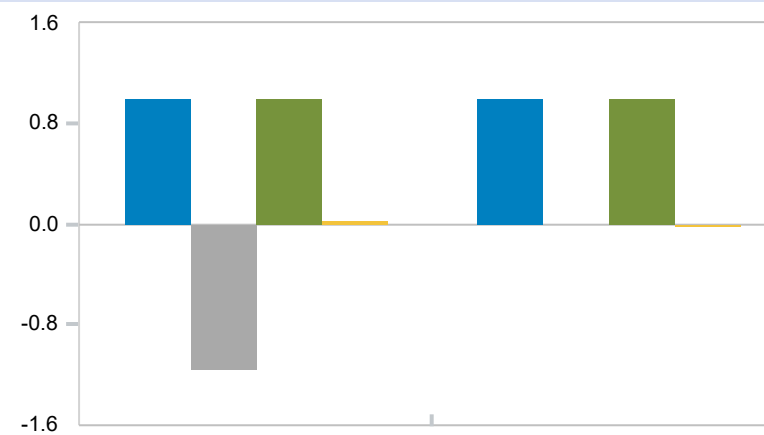
	Rhumblin S&P 500 Equity	S&P 500 Index
Alpha	-0.03	0.00
Beta	1.00	1.00
Sharpe Ratio	0.96	0.96
Treynor Ratio	0.10	0.10

## Benchmark Relative Historical Statistics 3 Years Ending March 31, 2019



	Rhumblin S&P 500 Equity	S&P 500 Index
Actual Correlation	1.00	1.00
Information Ratio	-1.53	N/A
R-Squared	1.00	1.00
Tracking Error	0.03	0.00

## Benchmark Relative Historical Statistics 5 Years Ending March 31, 2019



	Rhumblin S&P 500 Equity	S&P 500 Index
Actual Correlation	1.00	1.00
Information Ratio	-1.15	N/A
R-Squared	1.00	1.00
Tracking Error	0.03	0.00

Benchmark: S&amp;P 500 Index



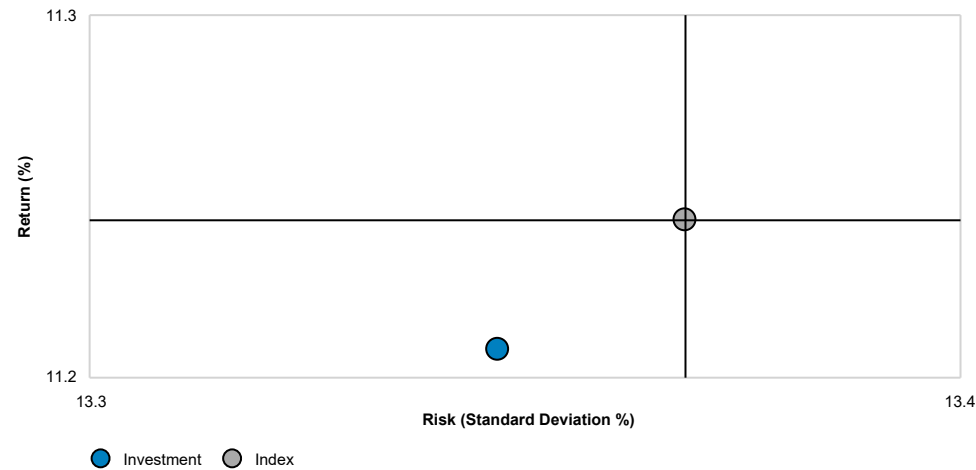
### Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	11.21	13.35	0.78	99.78	10	99.87	2
Index	11.24	13.37	0.78	100.00	10	100.00	2

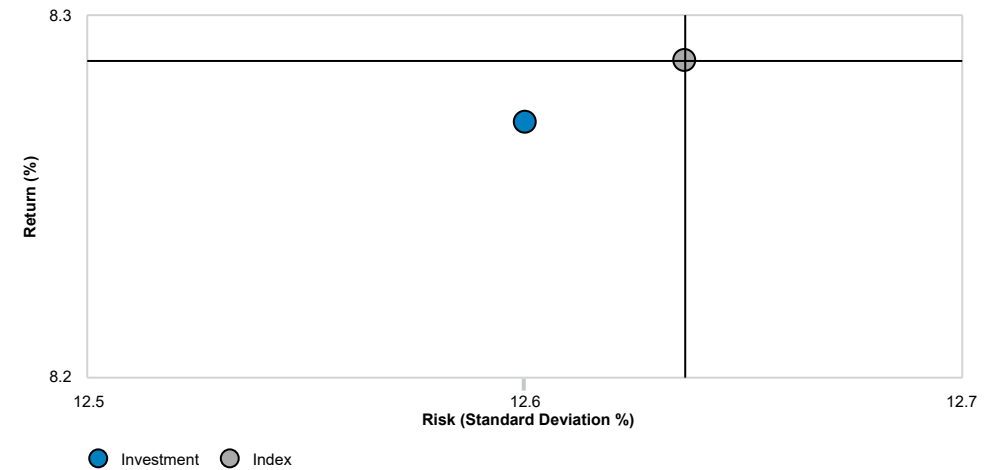
### Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	8.27	12.60	0.64	99.71	15	99.64	5
Index	8.29	12.64	0.64	100.00	15	100.00	5

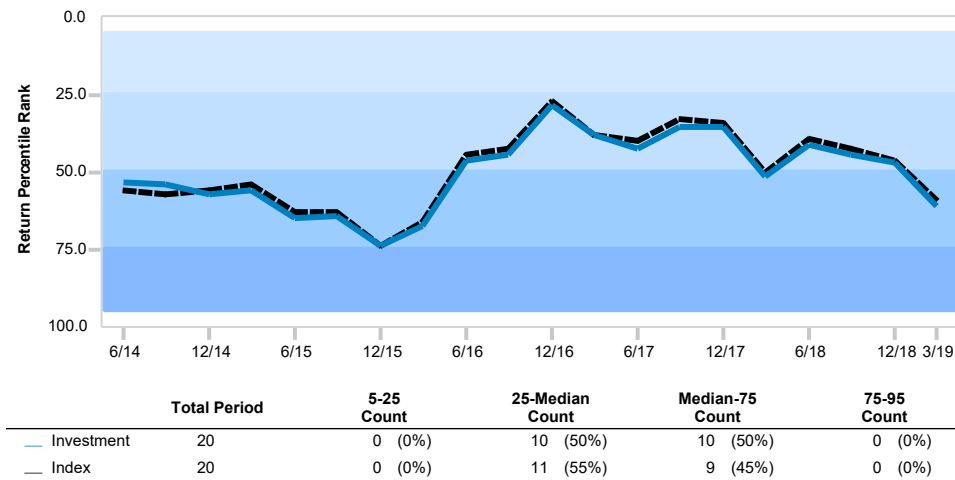
### Risk and Return 3 Years



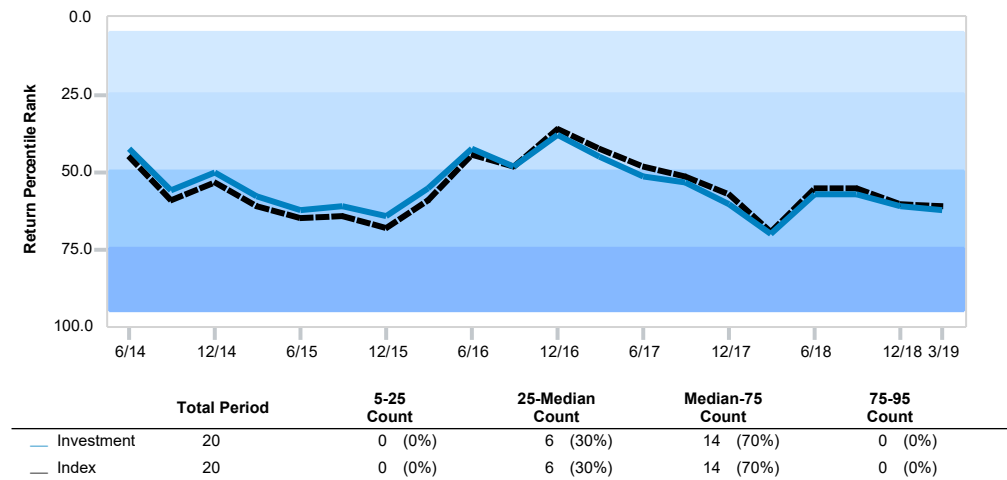
### Risk and Return 5 Years



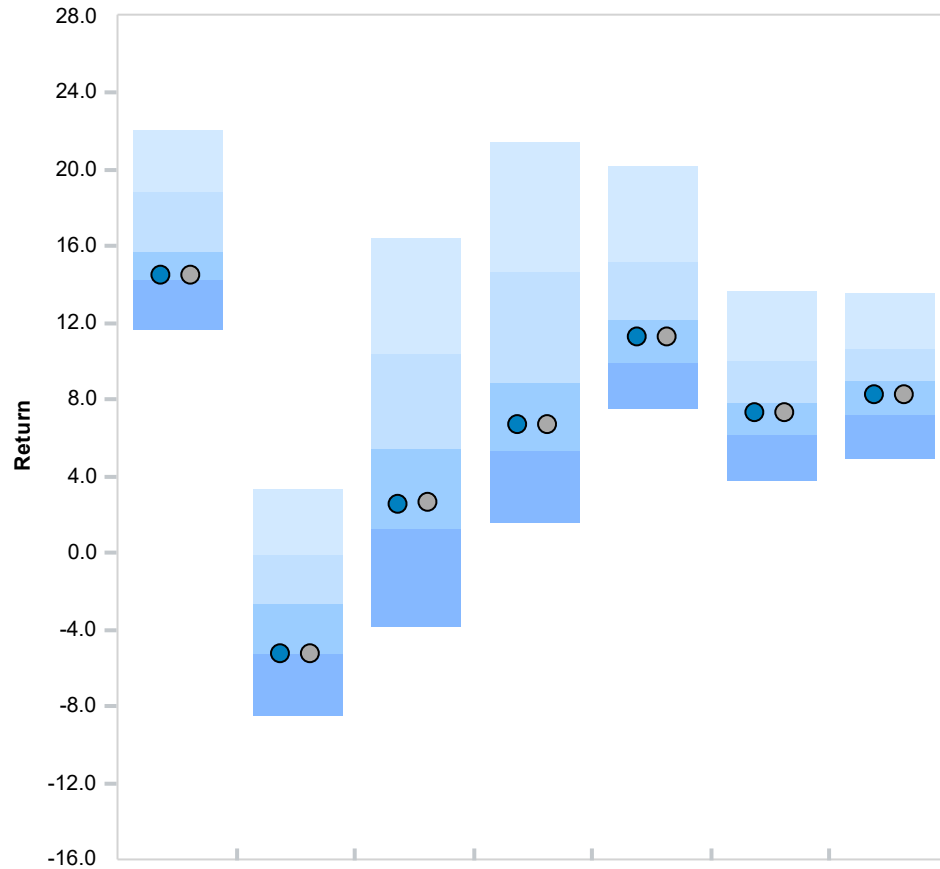
### 3 Year Rolling Percentile Rank IM U.S. Mid Cap Equity (SA+CF)



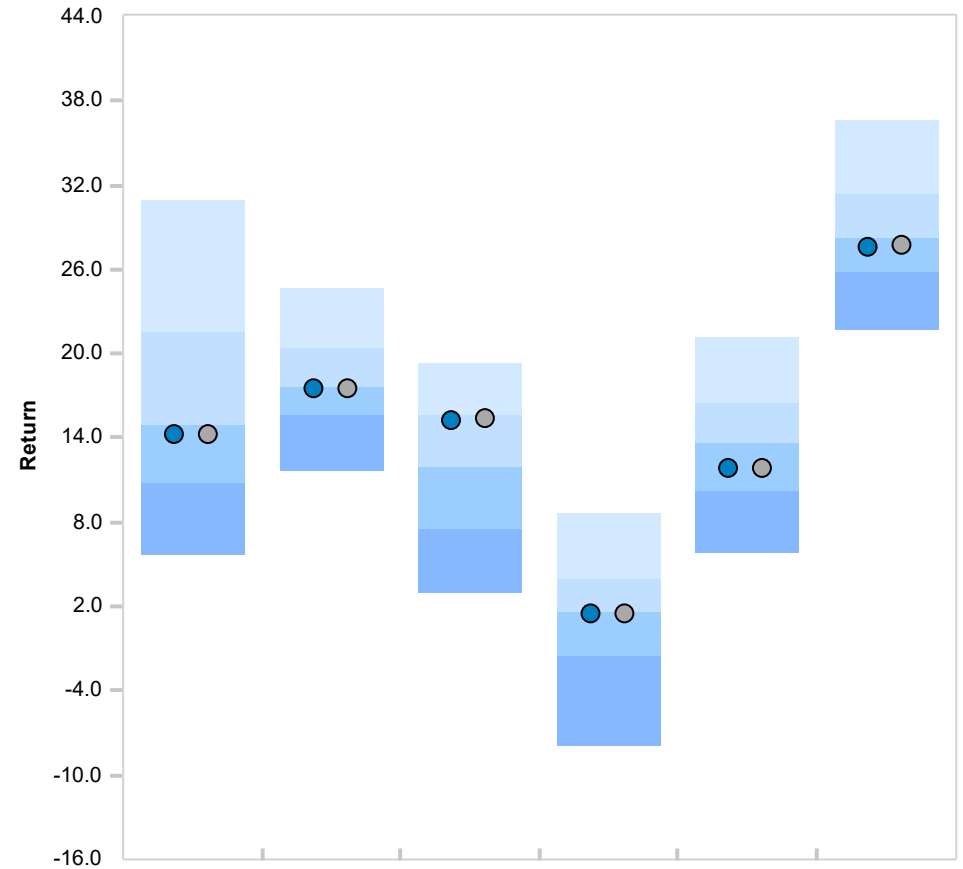
### 5 Year Rolling Percentile Rank IM U.S. Mid Cap Equity (SA+CF)



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



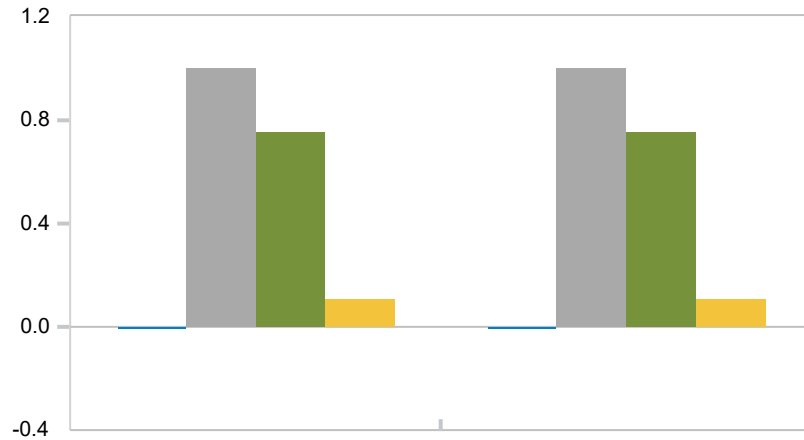
**Peer Group Analysis - IM U.S. Mid Cap Equity (SA+CF)**



**Comparative Performance**

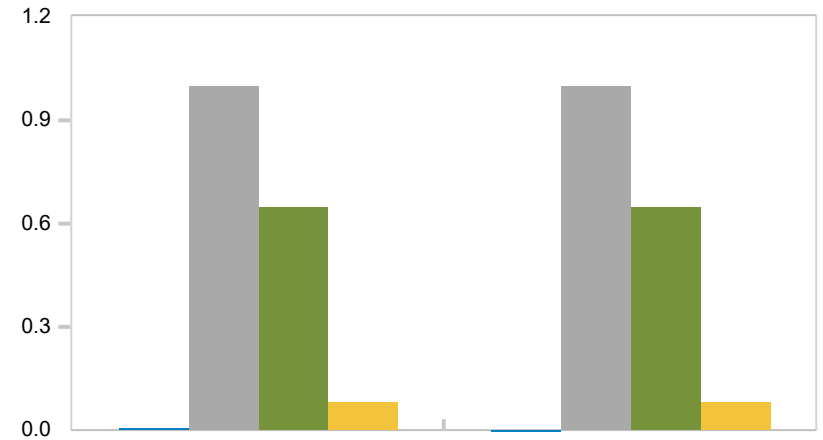
	1 Qtr Ending Dec-2018	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018	1 Qtr Ending Dec-2017	1 Qtr Ending Sep-2017
Investment	-17.24 (61)	3.85 (70)	4.27 (30)	-0.77 (62)	6.25 (44)	3.23 (66)
Index	-17.28 (65)	3.86 (67)	4.29 (28)	-0.77 (62)	6.25 (44)	3.22 (67)
Median	-16.65	4.97	3.13	-0.13	5.97	3.74

**Risk / Reward Historical Statistics 3 Years Ending March 31, 2019**



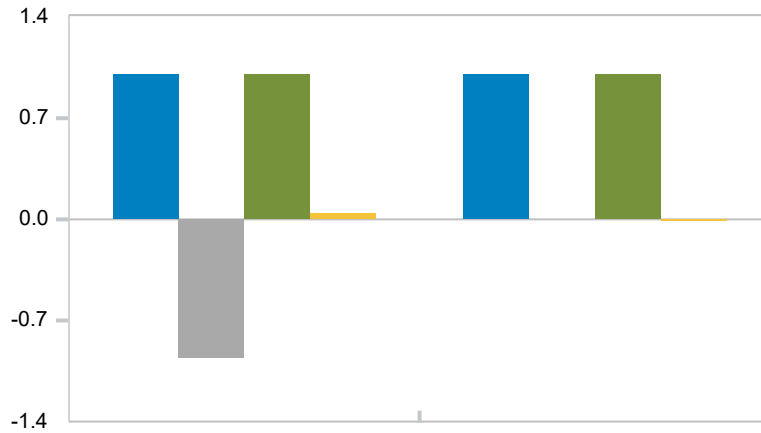
	Rhumblin S&P 400 Equity	S&P MidCap 400 Index
Alpha	-0.01	0.00
Beta	1.00	1.00
Sharpe Ratio	0.75	0.75
Treynor Ratio	0.11	0.11

**Risk / Reward Historical Statistics 5 Years Ending March 31, 2019**



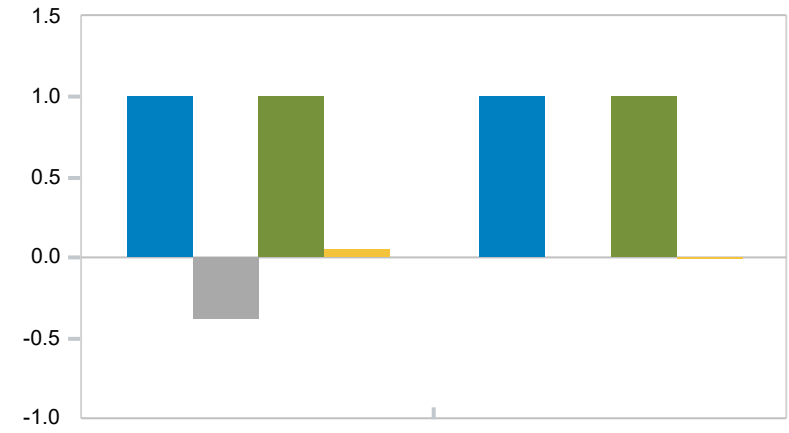
	Rhumblin S&P 400 Equity	S&P MidCap 400 Index
Alpha	0.00	0.00
Beta	1.00	1.00
Sharpe Ratio	0.64	0.64
Treynor Ratio	0.08	0.08

**Benchmark Relative Historical Statistics 3 Years Ending March 31, 2019**



	Rhumblin S&P 400 Equity	S&P MidCap 400 Index
Actual Correlation	1.00	1.00
Information Ratio	-0.96	N/A
R-Squared	1.00	1.00
Tracking Error	0.04	0.00

**Benchmark Relative Historical Statistics 5 Years Ending March 31, 2019**



	Rhumblin S&P 400 Equity	S&P MidCap 400 Index
Actual Correlation	1.00	1.00
Information Ratio	-0.38	N/A
R-Squared	1.00	1.00
Tracking Error	0.06	0.00

Benchmark: S&P MidCap 400 Index



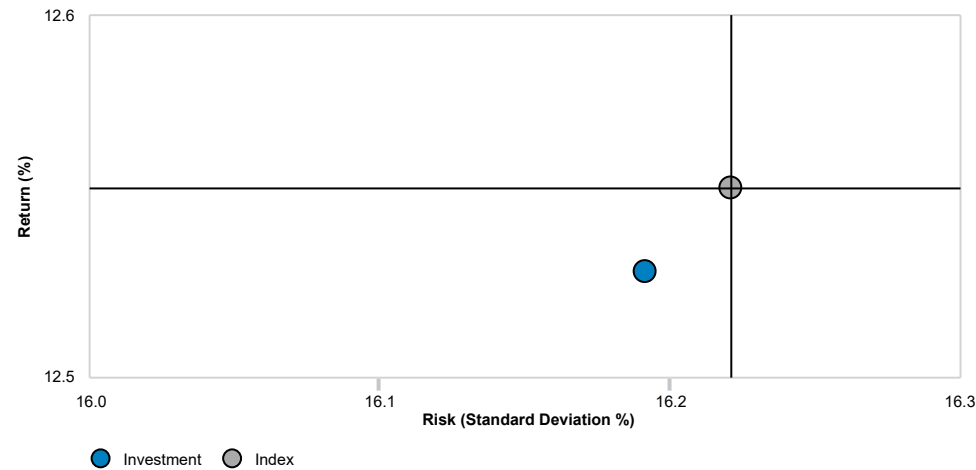
### Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	12.53	16.19	0.74	99.79	11	99.77	1
Index	12.55	16.22	0.74	100.00	11	100.00	1

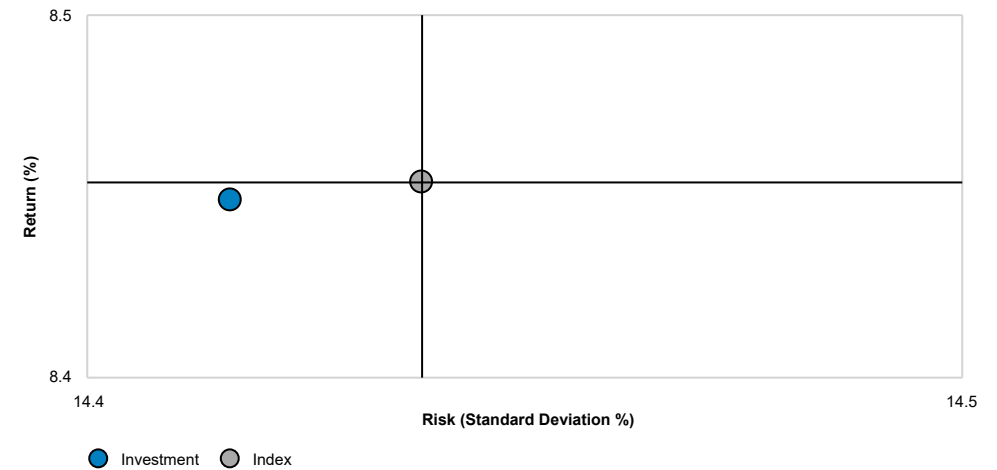
### Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	8.45	14.42	0.59	99.86	17	99.79	3
Index	8.45	14.44	0.59	100.00	17	100.00	3

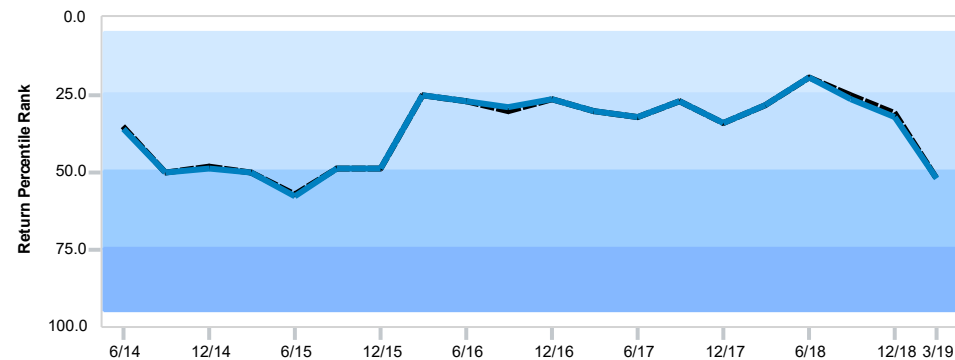
### Risk and Return 3 Years



### Risk and Return 5 Years

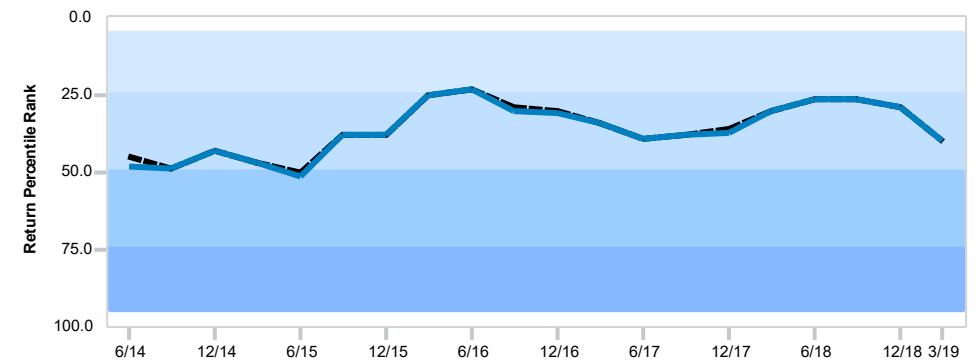


### 3 Year Rolling Percentile Rank IM U.S. Small Cap Equity (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	2 (10%)	16 (80%)	2 (10%)	0 (0%)
Index	20	3 (15%)	15 (75%)	2 (10%)	0 (0%)

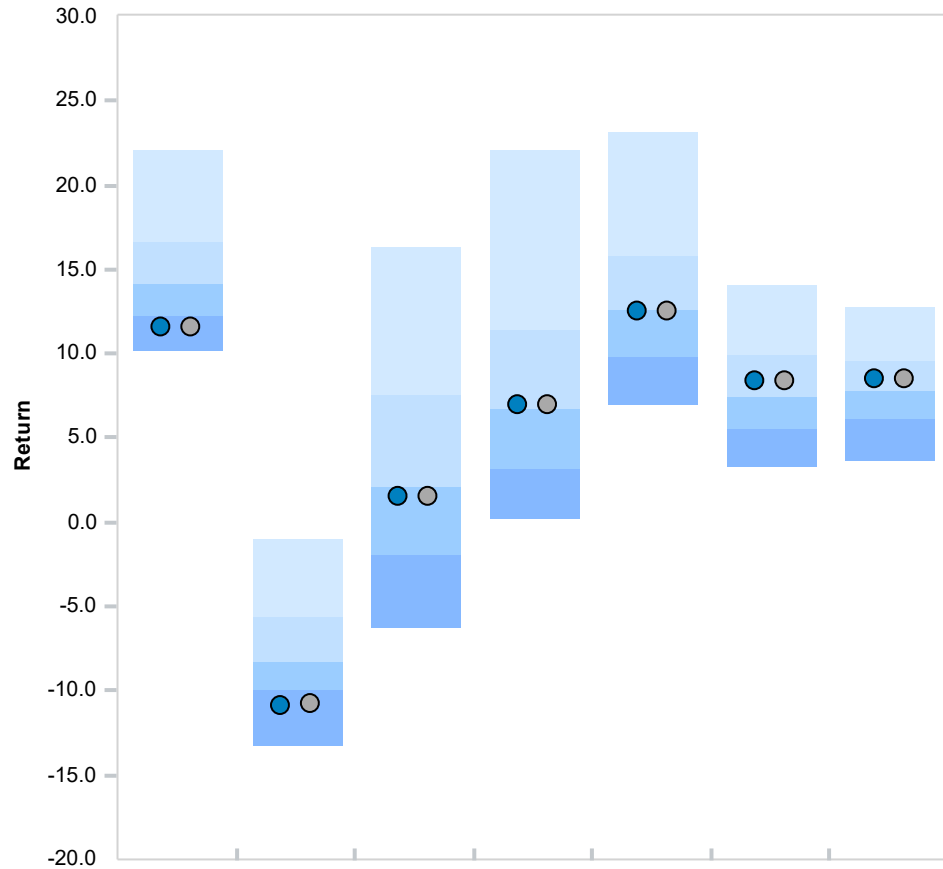
### 5 Year Rolling Percentile Rank IM U.S. Small Cap Equity (SA+CF)



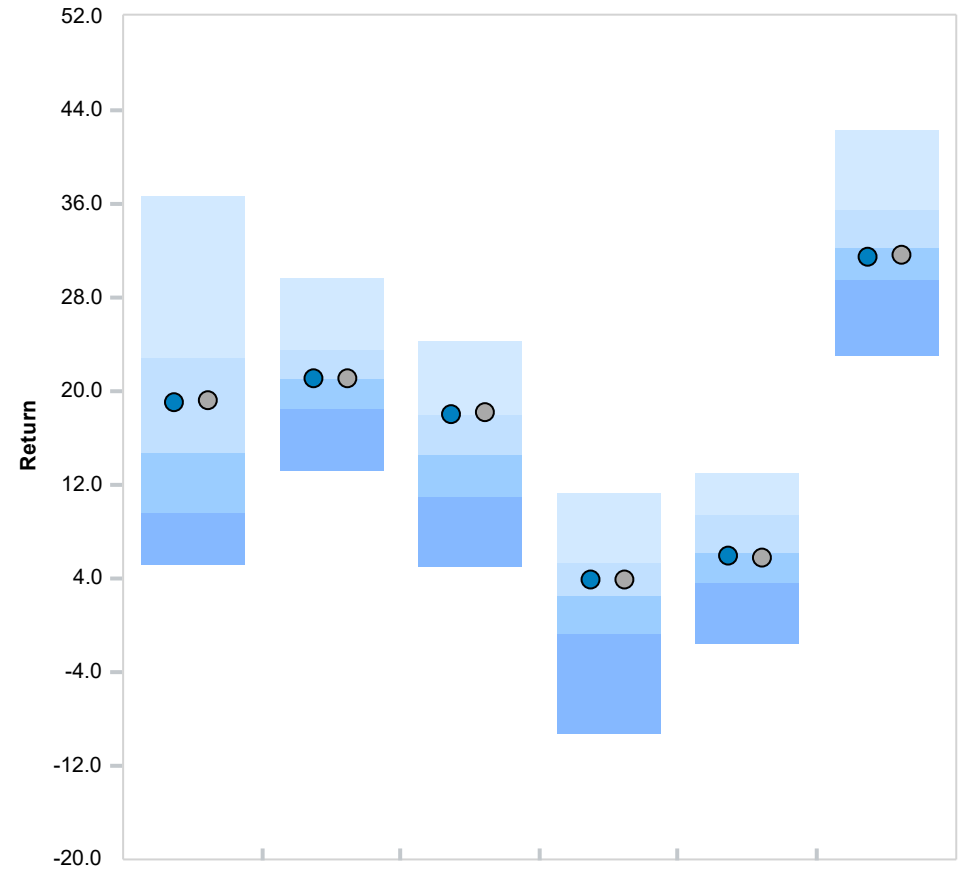
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	2 (10%)	17 (85%)	1 (5%)	0 (0%)
Index	20	2 (10%)	18 (90%)	0 (0%)	0 (0%)



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



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

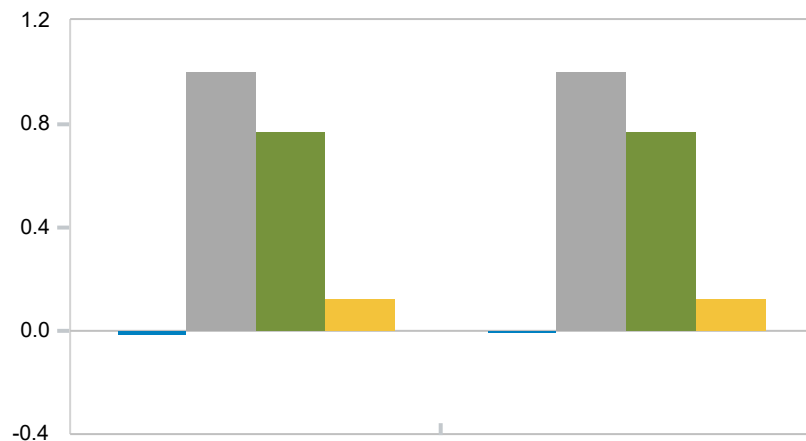


**Comparative Performance**

	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	1 Qtr Ending Sep-2017
Investment	-20.10 (57)	4.71 (41)	8.76 (26)	0.56 (40)	3.94 (52)	5.96 (41)
Index	-20.10 (57)	4.71 (41)	8.77 (25)	0.57 (39)	3.96 (52)	5.96 (41)
Median	-19.89	3.90	7.03	-0.21	4.00	5.61



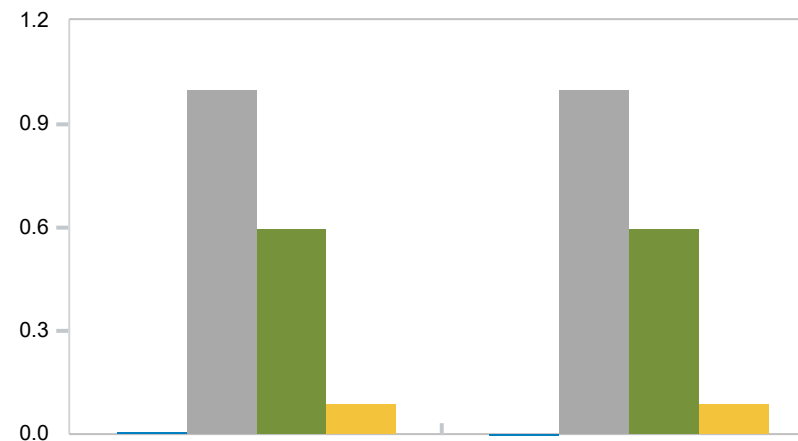
## Risk / Reward Historical Statistics 3 Years Ending March 31, 2019



	Rhumblin S&P 600 Equity	S&P SmallCap 600 Index
Alpha	-0.01	0.00
Beta	1.00	1.00
Sharpe Ratio	0.77	0.77
Treynor Ratio	0.12	0.12

■ Alpha  
■ Beta  
■ Sharpe Ratio  
■ Treynor Ratio

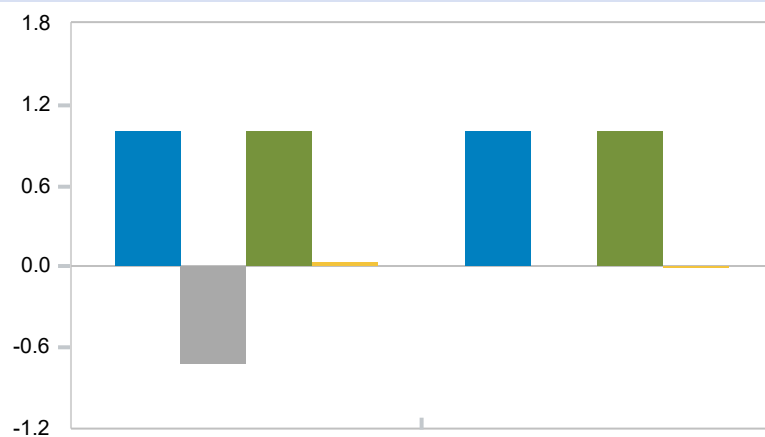
## Risk / Reward Historical Statistics 5 Years Ending March 31, 2019



	Rhumblin S&P 600 Equity	S&P SmallCap 600 Index
Alpha	0.01	0.00
Beta	1.00	1.00
Sharpe Ratio	0.59	0.59
Treynor Ratio	0.09	0.09

■ Alpha  
■ Beta  
■ Sharpe Ratio  
■ Treynor Ratio

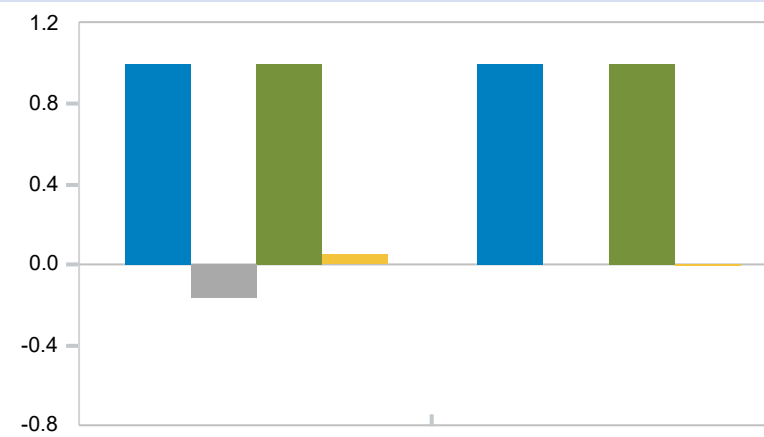
## Benchmark Relative Historical Statistics 3 Years Ending March 31, 2019



	Rhumblin S&P 600 Equity	S&P SmallCap 600 Index
Actual Correlation	1.00	1.00
Information Ratio	-0.72	N/A
R-Squared	1.00	1.00
Tracking Error	0.03	0.00

■ Actual Correlation  
■ Information Ratio  
■ R-Squared  
■ Tracking Error

## Benchmark Relative Historical Statistics 5 Years Ending March 31, 2019



	Rhumblin S&P 600 Equity	S&P SmallCap 600 Index
Actual Correlation	1.00	1.00
Information Ratio	-0.16	N/A
R-Squared	1.00	1.00
Tracking Error	0.05	0.00

■ Actual Correlation  
■ Information Ratio  
■ R-Squared  
■ Tracking Error

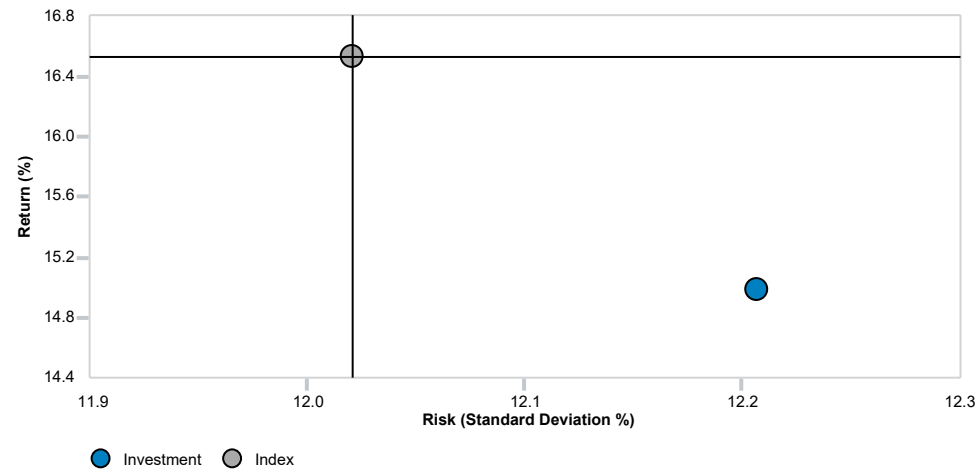
### Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	14.99	12.21	1.12	97.24	10	106.95	2
Index	16.53	12.02	1.24	100.00	11	100.00	1

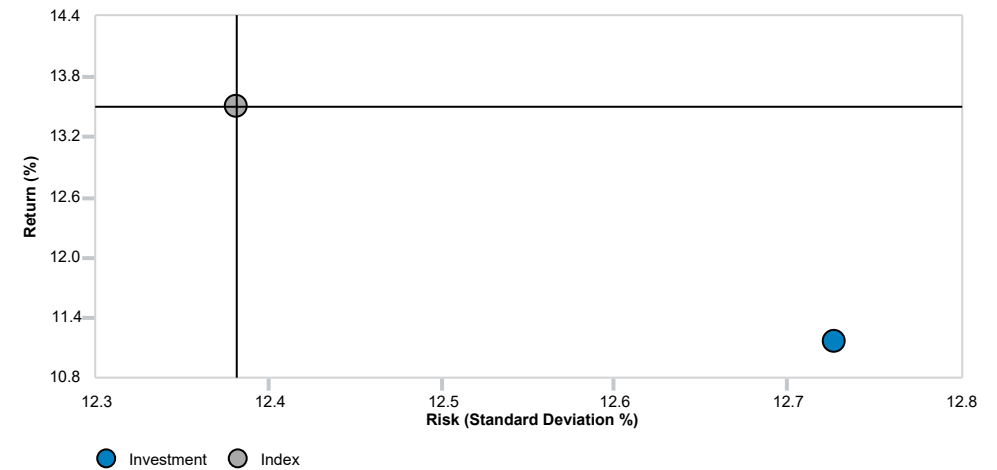
### Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	11.15	12.73	0.85	91.53	15	113.69	5
Index	13.50	12.38	1.05	100.00	18	100.00	2

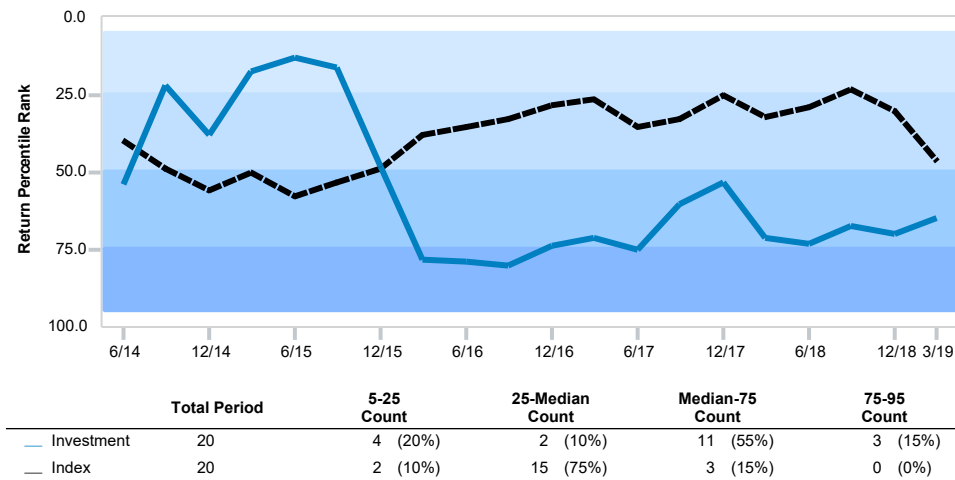
### Risk and Return 3 Years



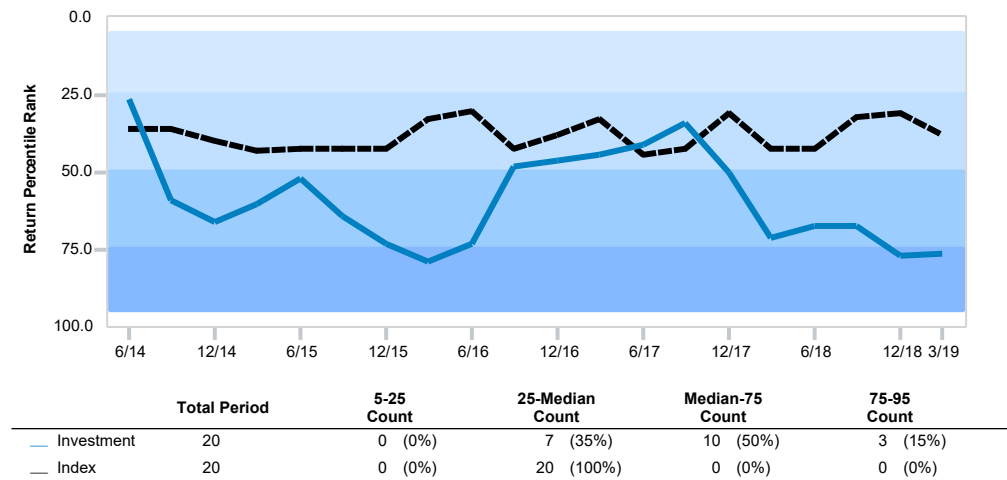
### Risk and Return 5 Years



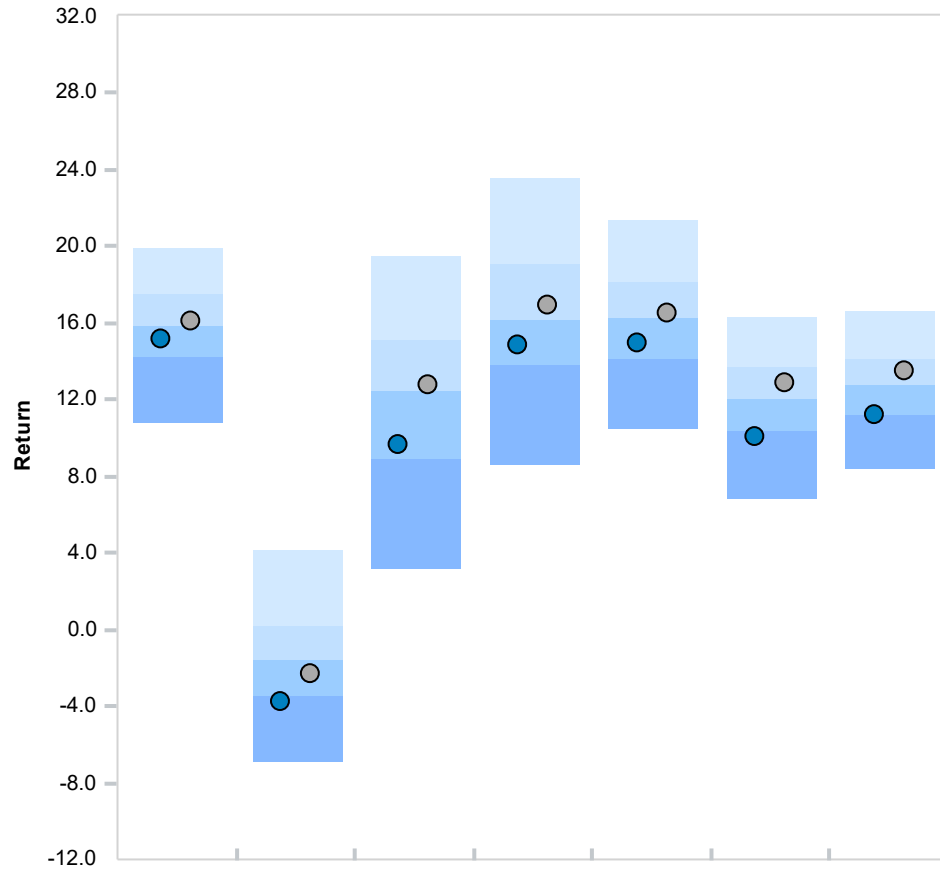
### 3 Year Rolling Percentile Rank IM U.S. Large Cap Growth Equity (SA+CF)



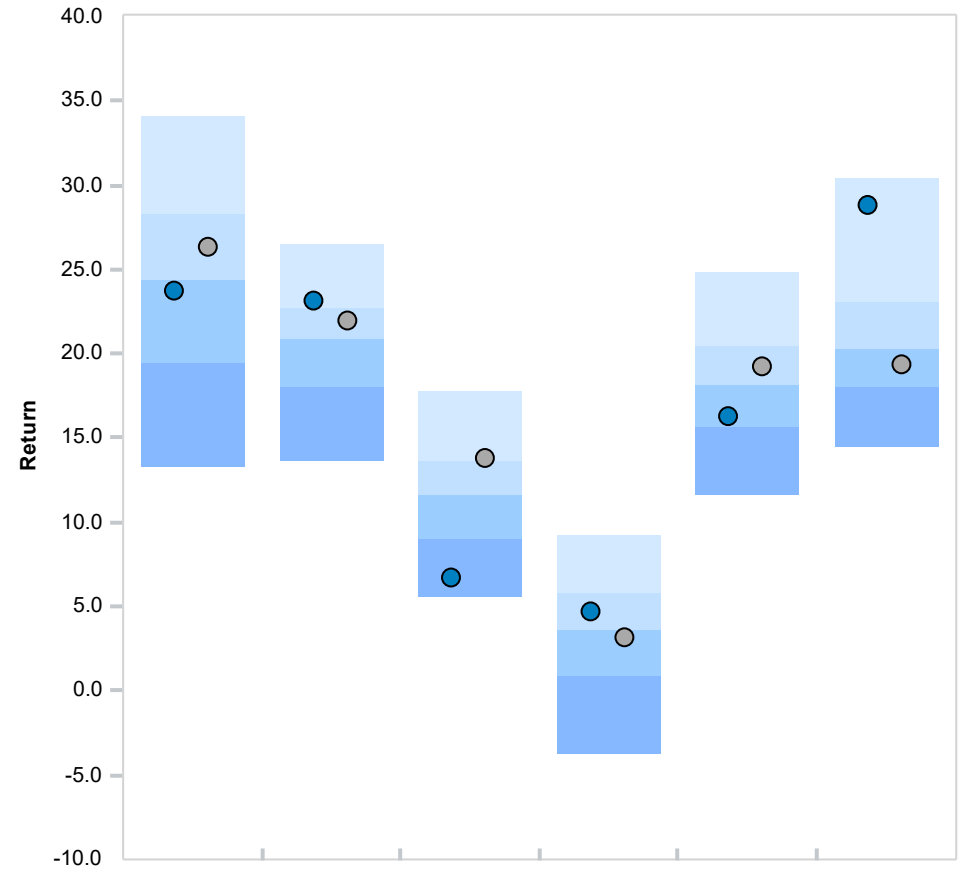
### 5 Year Rolling Percentile Rank IM U.S. Large Cap Growth Equity (SA+CF)



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



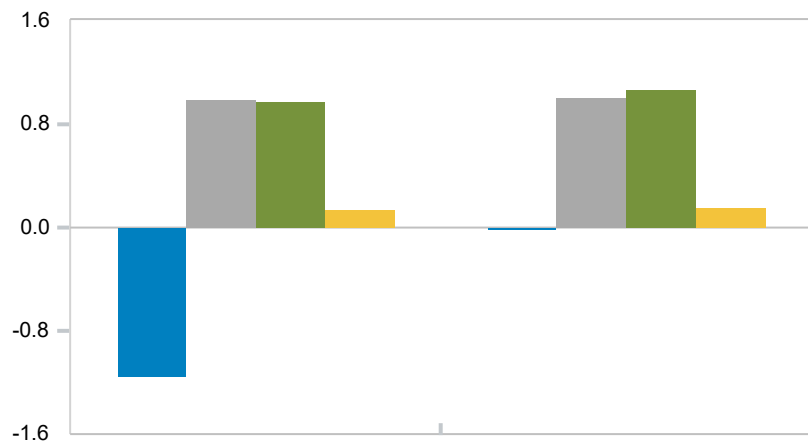
**Peer Group Analysis - IM U.S. Large Cap Growth Equity (SA+CF)**



**Comparative Performance**

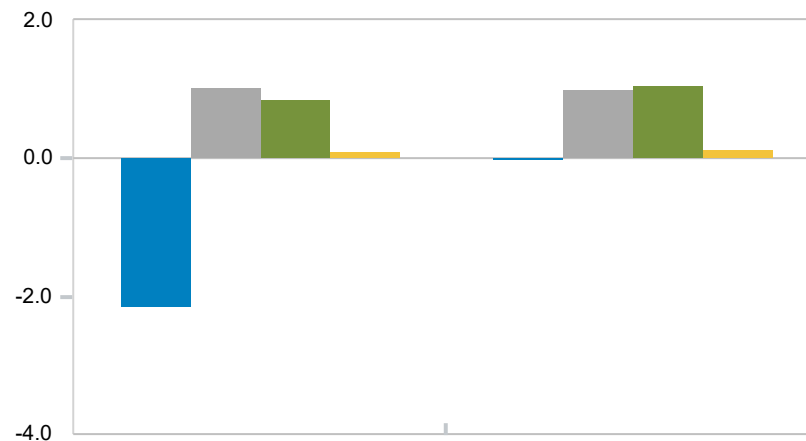
	1 Qtr Ending Dec-2018	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018	1 Qtr Ending Dec-2017	1 Qtr Ending Sep-2017
Investment	-16.47 (72)	7.85 (56)	5.62 (47)	0.74 (71)	7.80 (23)	5.98 (33)
Index	-15.89 (62)	9.17 (23)	5.76 (42)	1.42 (61)	7.86 (21)	5.90 (35)
Median	-14.99	8.13	5.31	2.07	6.90	5.41

Risk / Reward Historical Statistics 3 Years Ending March 31, 2019



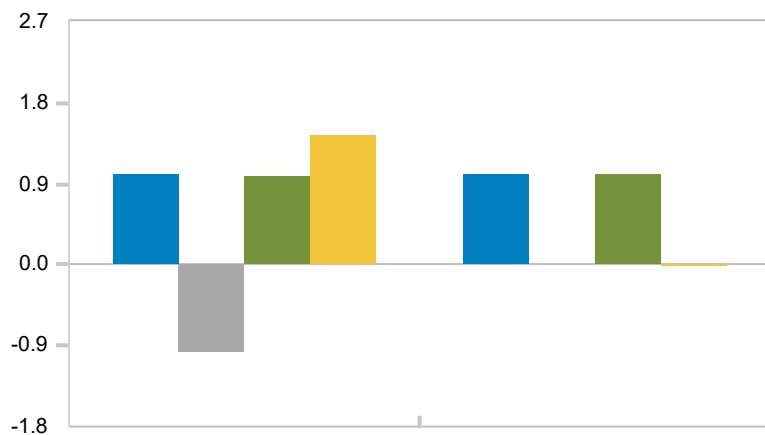
	Highland Capital Equity	Russell 1000 Growth Index
Alpha	-1.16	0.00
Beta	0.99	1.00
Sharpe Ratio	0.97	1.06
Treynor Ratio	0.14	0.16

Risk / Reward Historical Statistics 5 Years Ending March 31, 2019



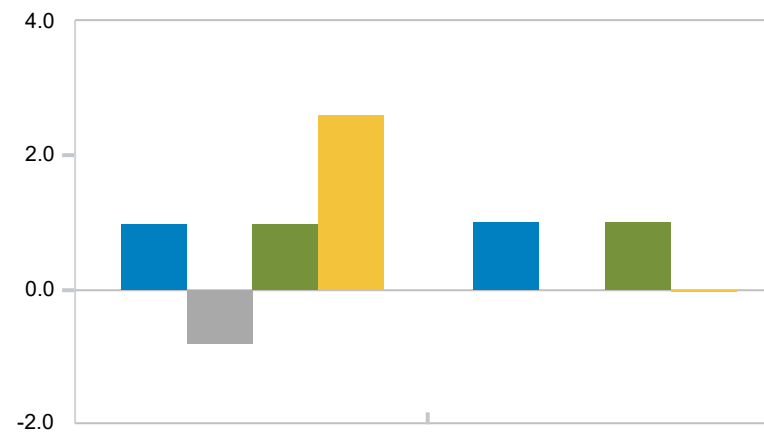
	Highland Capital Equity	Russell 1000 Growth Index
Alpha	-2.16	0.00
Beta	1.01	1.00
Sharpe Ratio	0.85	1.05
Treynor Ratio	0.11	0.13

Benchmark Relative Historical Statistics 3 Years Ending March 31, 2019



	Highland Capital Equity	Russell 1000 Growth Index
Actual Correlation	1.00	1.00
Information Ratio	-0.96	N/A
R-Squared	0.99	1.00
Tracking Error	1.45	0.00

Benchmark Relative Historical Statistics 5 Years Ending March 31, 2019



	Highland Capital Equity	Russell 1000 Growth Index
Actual Correlation	0.98	1.00
Information Ratio	-0.81	N/A
R-Squared	0.96	1.00
Tracking Error	2.60	0.00

Benchmark: Russell 1000 Growth Index



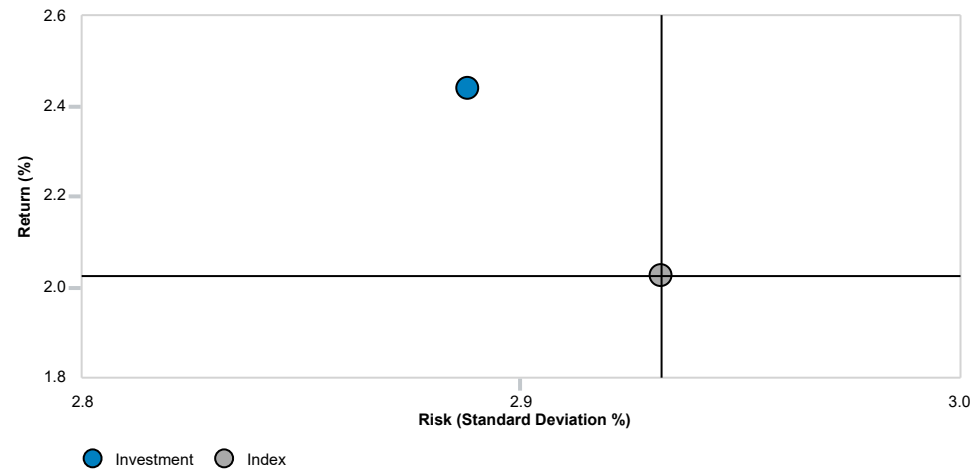
### Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	2.44	2.89	0.45	104.32	9	93.16	3
Index	2.03	2.93	0.31	100.00	9	100.00	3

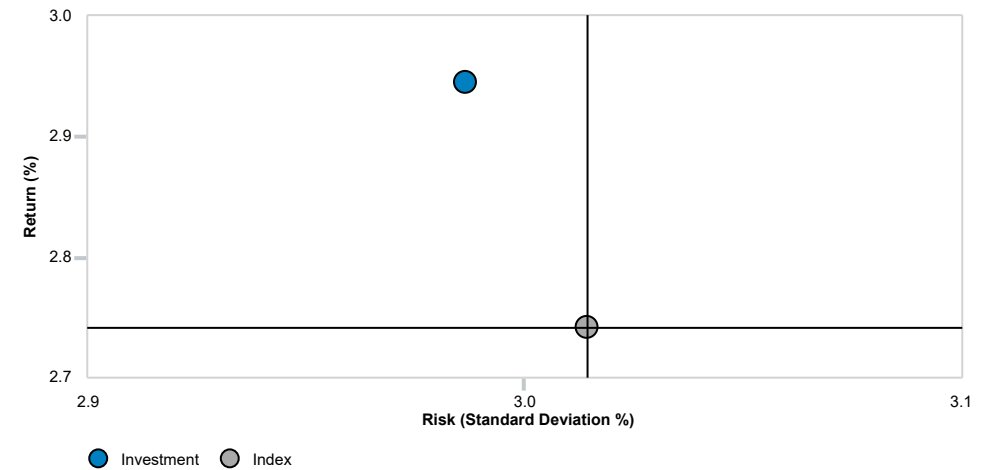
### Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	2.95	2.99	0.75	101.88	15	91.10	5
Index	2.74	3.01	0.68	100.00	15	100.00	5

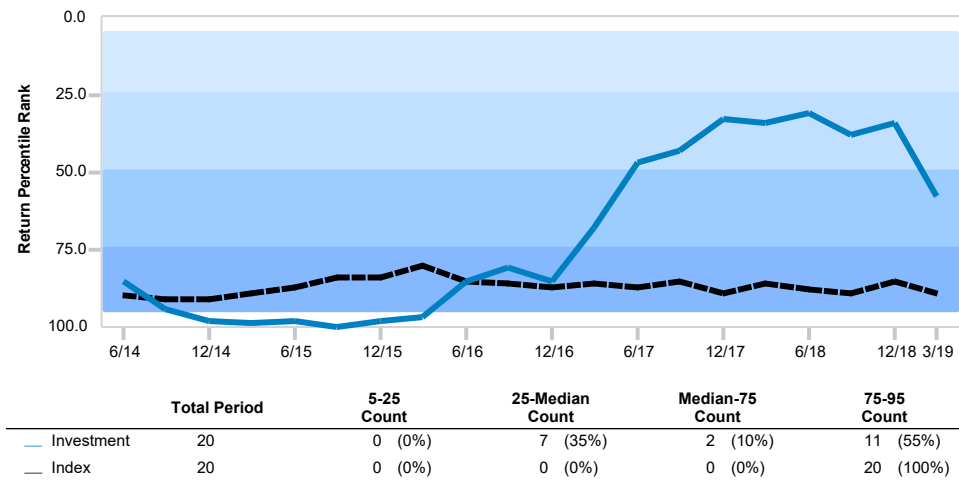
### Risk and Return 3 Years



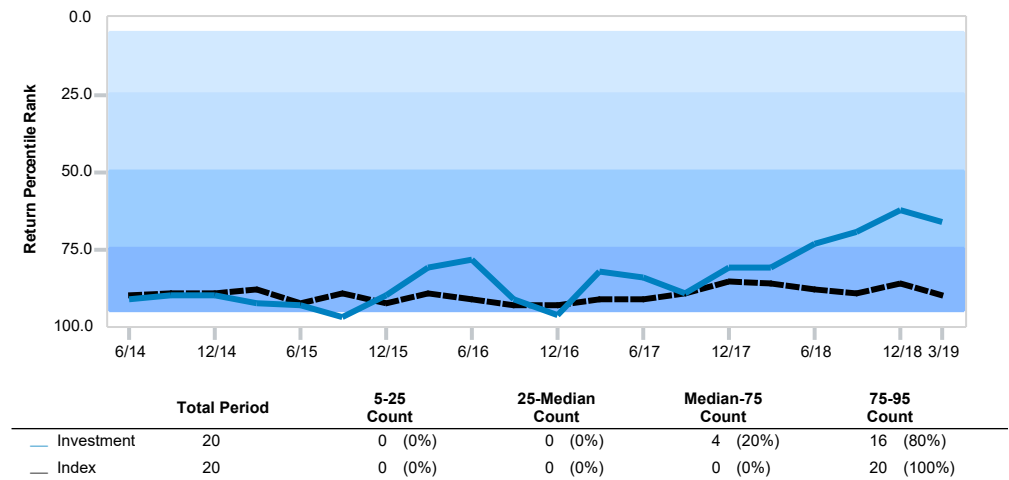
### Risk and Return 5 Years



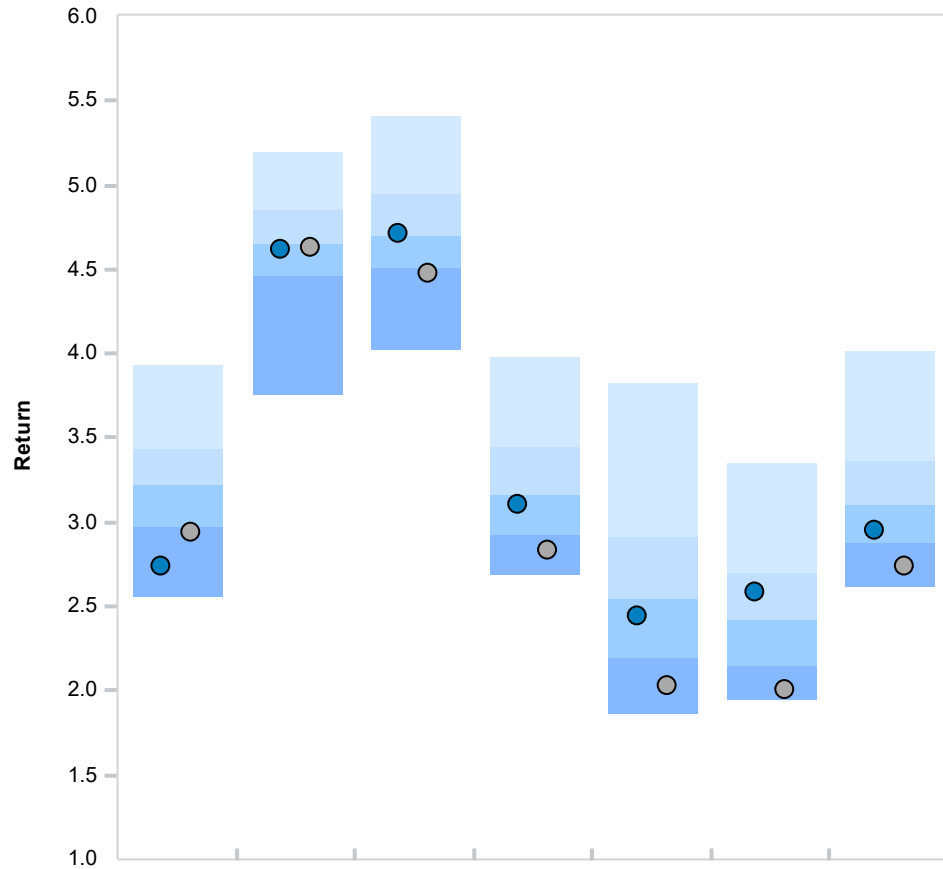
### 3 Year Rolling Percentile Rank IM U.S. Broad Market Core Fixed Income (SA+CF)



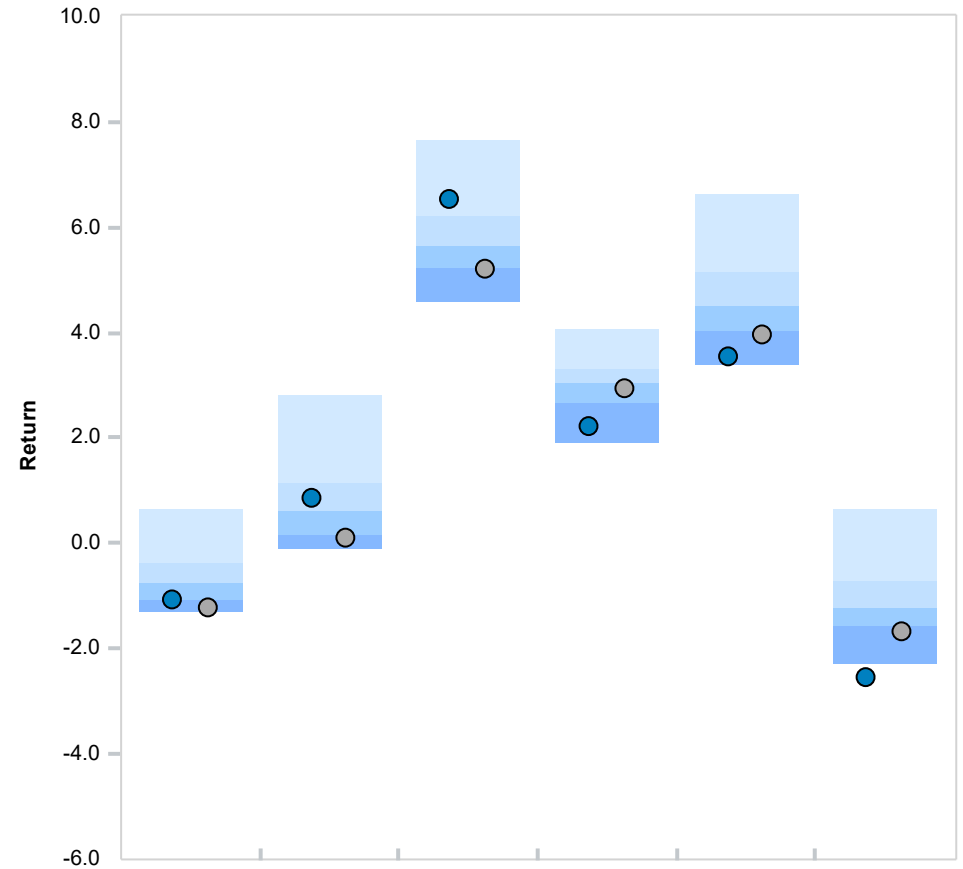
### 5 Year Rolling Percentile Rank IM U.S. Broad Market Core Fixed Income (SA+CF)



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



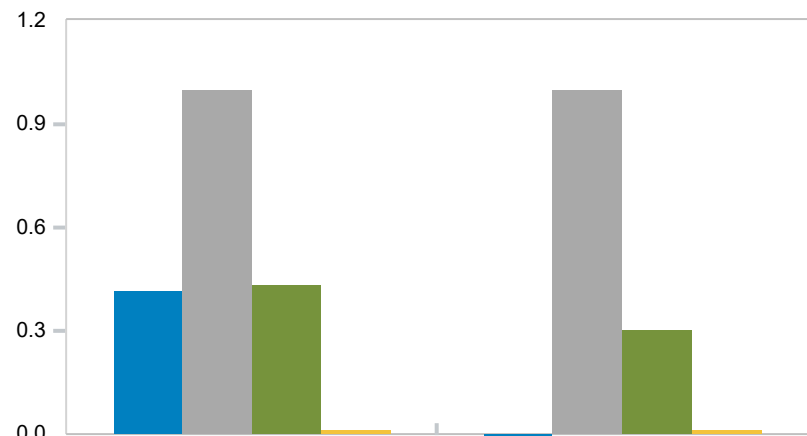
**Peer Group Analysis - IM U.S. Broad Market Core Fixed Income (SA+CF)**



**Comparative Performance**

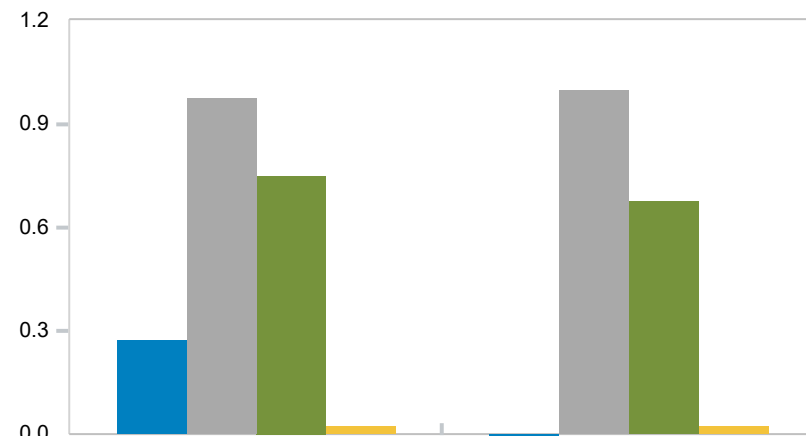
	1 Qtr Ending Dec-2018	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018	1 Qtr Ending Dec-2017	1 Qtr Ending Sep-2017
Investment	1.83 (13)	0.14 (59)	-0.05 (38)	-1.56 (90)	0.40 (77)	1.11 (15)
Index	1.64 (23)	0.02 (83)	-0.16 (73)	-1.46 (68)	0.39 (80)	0.85 (77)
Median	1.40	0.18	-0.09	-1.37	0.51	0.93

**Risk / Reward Historical Statistics 3 Years Ending March 31, 2019**



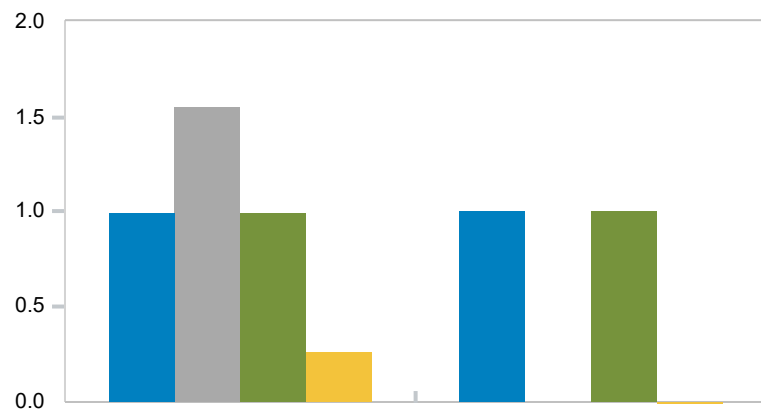
	Highland Capital Fixed Income	Blmbg. Barc. U.S. Aggregate Index
Alpha	0.42	0.00
Beta	1.00	1.00
Sharpe Ratio	0.43	0.30
Treynor Ratio	0.01	0.01

**Risk / Reward Historical Statistics 5 Years Ending March 31, 2019**



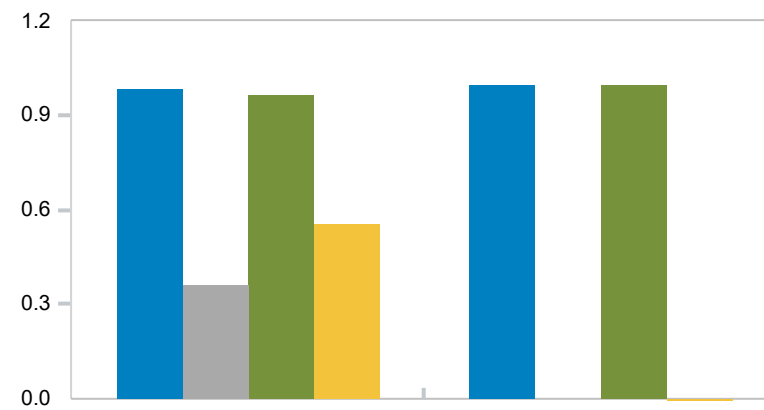
	Highland Capital Fixed Income	Blmbg. Barc. U.S. Aggregate Index
Alpha	0.27	0.00
Beta	0.97	1.00
Sharpe Ratio	0.75	0.68
Treynor Ratio	0.02	0.02

**Benchmark Relative Historical Statistics 3 Years Ending March 31, 2019**



	Highland Capital Fixed Income	Blmbg. Barc. U.S. Aggregate Index
Actual Correlation	1.00	1.00
Information Ratio	1.55	N/A
R-Squared	0.99	1.00
Tracking Error	0.26	0.00

**Benchmark Relative Historical Statistics 5 Years Ending March 31, 2019**



	Highland Capital Fixed Income	Blmbg. Barc. U.S. Aggregate Index
Actual Correlation	0.98	1.00
Information Ratio	0.36	N/A
R-Squared	0.97	1.00
Tracking Error	0.55	0.00

Benchmark: Blmbg. Barc. U.S. Aggregate Index





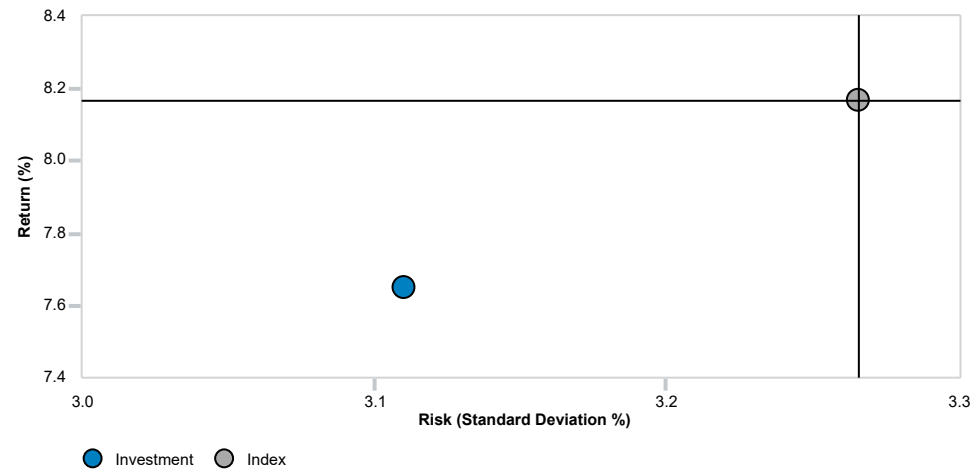
### Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	7.65	3.11	2.03	93.83	12	N/A	N/A
Index	8.17	3.27	2.08	100.00	12	N/A	N/A

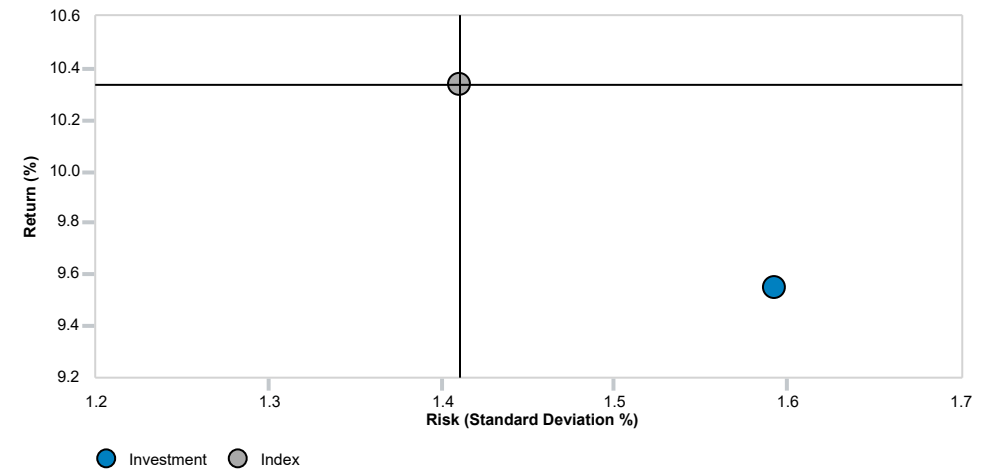
### Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	9.55	1.59	4.78	92.70	20	N/A	N/A
Index	10.34	1.41	5.40	100.00	20	N/A	N/A

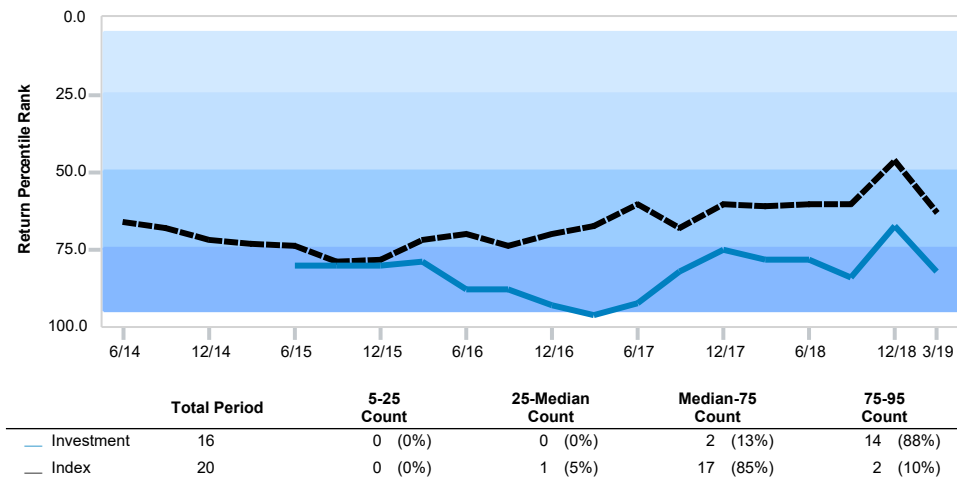
### Risk and Return 3 Years



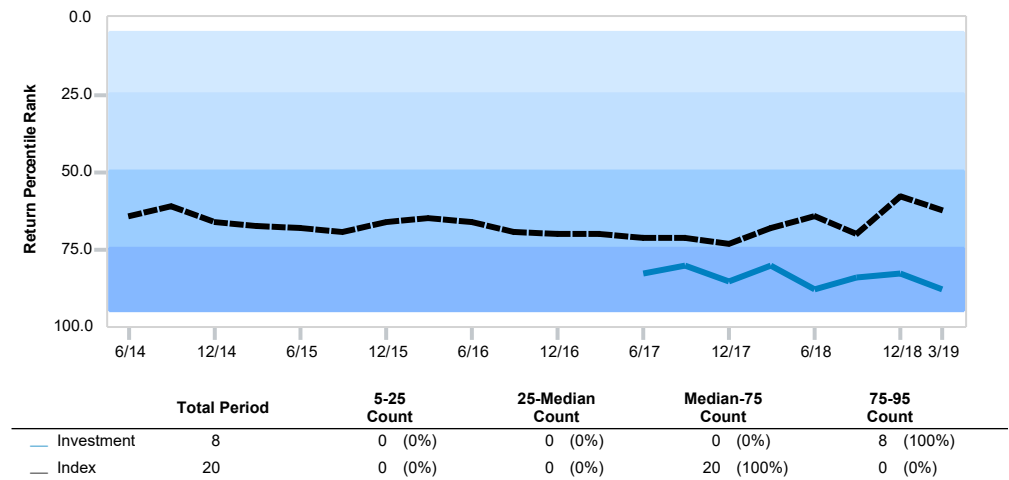
### Risk and Return 5 Years



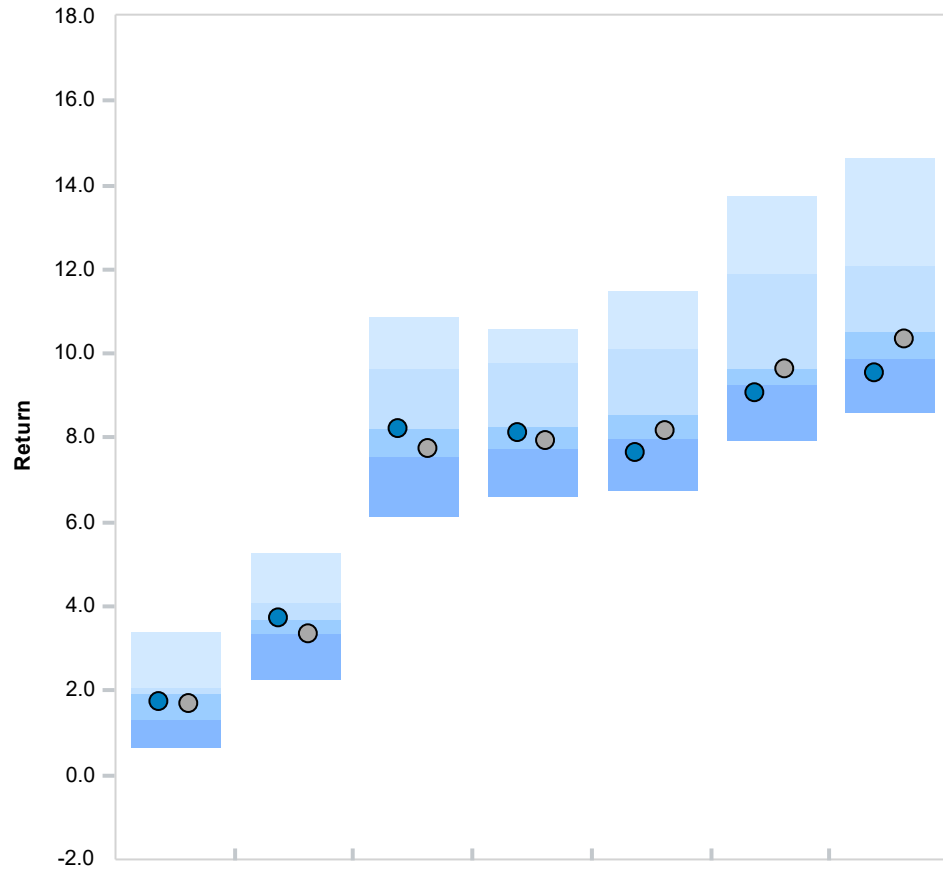
### 3 Year Rolling Percentile Rank IM U.S. Private Real Estate (SA+CF)



### 5 Year Rolling Percentile Rank IM U.S. Private Real Estate (SA+CF)

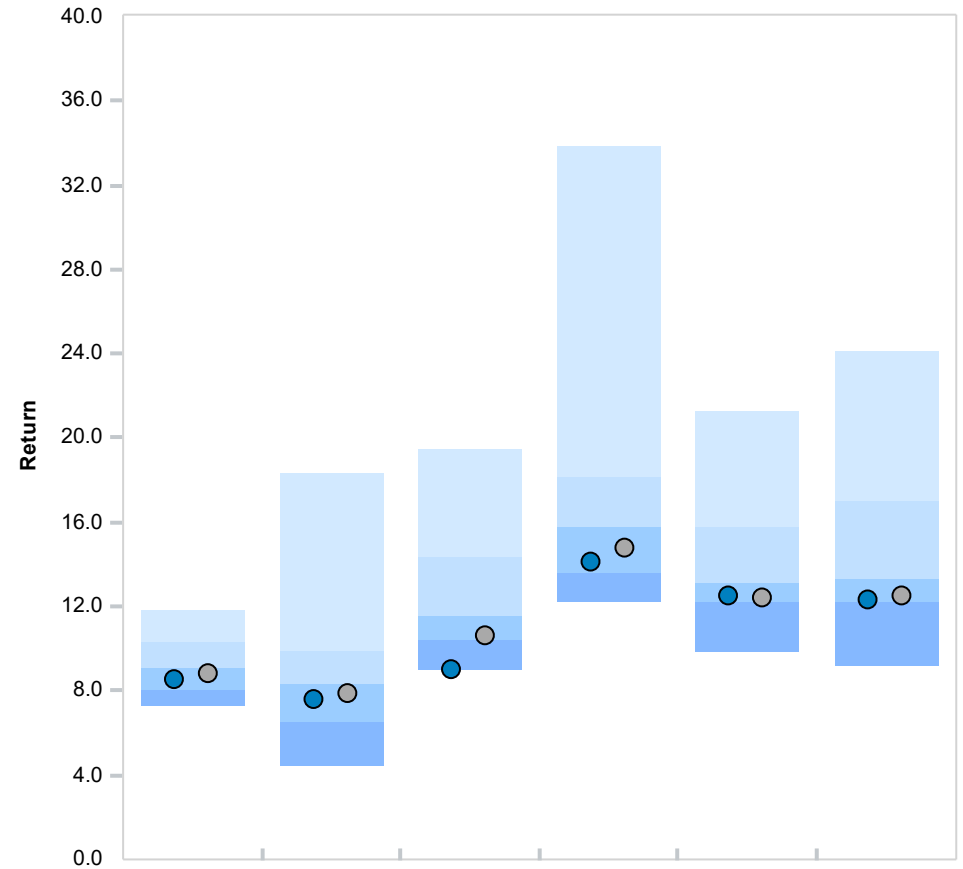


**Peer Group Analysis - IM U.S. Private Real Estate (SA+CF)**



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
Investment	1.74 (65)	3.71 (48)	8.20 (53)	8.12 (59)	7.65 (82)	9.06 (81)	9.55 (88)
Index	1.68 (66)	3.32 (75)	7.73 (69)	7.95 (69)	8.17 (63)	9.62 (58)	10.34 (62)
Median	1.93	3.68	8.23	8.25	8.56	9.65	10.54

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



	Oct-2017 To Sep-2018	Oct-2016 To Sep-2017	Oct-2015 To Sep-2016	Oct-2014 To Sep-2015	Oct-2013 To Sep-2014	Oct-2012 To Sep-2013
Investment	8.50 (66)	7.53 (66)	9.03 (95)	14.05 (72)	12.45 (71)	12.30 (71)
Index	8.82 (59)	7.81 (60)	10.62 (69)	14.71 (66)	12.39 (72)	12.47 (69)
Median	9.04	8.30	11.57	15.79	13.12	13.35

**Comparative Performance**

	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	1 Qtr Ending Sep-2017
Investment	1.94 (28)	2.19 (47)	2.09 (66)	2.23 (47)	1.73 (82)	1.89 (45)
Index	1.62 (65)	2.09 (54)	2.13 (61)	2.17 (57)	2.15 (55)	1.89 (45)
Median	1.76	2.10	2.22	2.22	2.23	1.75



**Palm Beach Gardens Police  
Fee Analysis  
As of March 31, 2019**

	<b>Estimated Annual Fee (%)</b>	<b>Market Value (\$)</b>	<b>Estimated Annual Fee (\$)</b>	<b>Fee Schedule</b>
Rhumblin S&P 500 Equity	0.05	26,345,628	13,173	0.05 % of Assets
Rhumblin S&P 400 Equity	0.05	9,972,734	4,986	0.05 % of Assets
Rhumblin S&P 600 Equity	0.05	9,819,551	4,910	0.05 % of Assets
Rhumblin International Equity	0.05	9,112,941	4,556	0.05 % of Assets
Highland Capital Balanced	0.42	31,164,998	129,369	0.50 % of First \$10 M 0.38 % Thereafter
American Realty	1.10	9,581,105	105,392	1.10 % of Assets
R&D Cash		2,193	-	
Total Fund Composite	0.27	95,999,149	262,386	

**Benchmark History**  
**Investment Policy Benchmarks**  
As of March 31, 2019

Total Policy Historical Hybrid Composition		Total Equity Historical Hybrid Composition	
Allocation Mandate	Weight (%)	Allocation Mandate	Weight (%)
<b>Mar-1992</b>		<b>Jun-2000</b>	
Blmbg. Barc. U.S. Aggregate Index	35.00	S&P 500 Index	100.00
S&P 500 Index	25.00		
S&P MidCap 400 Index	10.00	<b>Jan-2003</b>	
Russell 1000 Growth Index	10.00	S&P 500 Index	80.00
S&P SmallCap 600 Index	10.00	S&P MidCap 400 Index	20.00
MSCI EAFE Index	10.00		
<b>Oct-2010</b>		<b>Jan-2004</b>	
Blmbg. Barc. U.S. Aggregate Index	31.00	S&P 500 Index	60.00
S&P 500 Index	25.00	S&P MidCap 400 Index	20.00
S&P MidCap 400 Index	10.00	S&P SmallCap 600 Index	20.00
Russell 1000 Growth Index	10.00		
MSCI EAFE Index	10.00	<b>Jan-2007</b>	
S&P SmallCap 600 Index	10.00	S&P 500 Index	62.00
FTSE Non-U.S. World Government Bond	4.00	S&P MidCap 400 Index	15.00
		S&P SmallCap 600 Index	15.00
		MSCI EAFE Index	8.00
<b>Apr-2012</b>		<b>Oct-2007</b>	
Blmbg. Barc. U.S. Aggregate Index	29.00	S&P 500 Index	38.40
S&P 500 Index	25.00	S&P MidCap 400 Index	15.40
S&P MidCap 400 Index	10.00	S&P SmallCap 600 Index	15.40
Russell 1000 Growth Index	10.00	MSCI EAFE Index	15.40
MSCI EAFE Index	10.00	Russell 1000 Growth Index	15.40
S&P SmallCap 600 Index	10.00		
FTSE Non-U.S. World Government Bond	4.00		
NCREIF Property Index	2.00		
<b>Oct-2015</b>		<b>Total Fixed Income Historical Hybrid Composition</b>	
Blmbg. Barc. U.S. Aggregate Index	26.00	<b>Allocation Mandate</b>	<b>Weight (%)</b>
S&P 500 Index	25.00		
S&P MidCap 400 Index	10.00	<b>Apr-1994</b>	
Russell 1000 Growth Index	10.00	Blmbg. Barc. U.S. Aggregate Index	89.00
MSCI EAFE Index	10.00	FTSE Non-U.S. World Government Bond	11.00
S&P SmallCap 600 Index	10.00		
FTSE Non-U.S. World Government Bond	4.00		
NCREIF Fund Index-Open End Diversified Core (EW)	5.00		



## Annual Asset Class Performance

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	YTD
Best	MSCI Emerging Markets (Net) Index 34.0 %	MSCI Emerging Markets (Net) Index 32.2 %	MSCI Emerging Markets (Net) Index 39.4 %	Bloomberg Barclays U.S. Aggregate Index 5.2 %	MSCI Emerging Markets (Net) Index 78.5 %	Russell 2000 Growth Index 29.1 %	NCREIF Fund Index-ODCE (EW) (Net) 15.0 %	MSCI Emerging Markets (Net) Index 18.2 %	Russell 2000 Growth Index 43.3 %	S&P 500 Index 13.7 %	NCREIF Fund Index-ODCE (EW) (Net) 14.2 %	Russell 2000 Value Index 31.7 %	MSCI Emerging Markets (Net) Index 37.3 %	NCREIF Fund Index-ODCE (EW) (Net) 7.3 %	Russell 2000 Growth Index 17.1 %
	NCREIF Fund Index-ODCE (EW) (Net) 19.0 %	MSCI EAFE (Net) Index 26.3 %	NCREIF Fund Index-ODCE (EW) (Net) 15.0 %	Bloomberg Barclays Global Aggregate Ex USD 4.4 %	Bloomberg Barclays U.S. Corp High Yield 58.2 %	Russell 2000 Index 26.9 %	Bloomberg Barclays U.S. Aggregate Index 7.8 %	Russell 2000 Value Index 18.1 %	Russell 2000 Value Index 38.8 %	Russell 1000 Value Index 13.5 %	Russell 1000 Growth Index 5.7 %	Russell 2000 Value Index 21.3 %	Russell 1000 Growth Index 30.2 %	Bloomberg Barclays U.S. Aggregate Index 0.0 %	Russell 1000 Growth Index 16.1 %
	MSCI EAFE (Net) Index 13.5 %	Russell 2000 Value Index 23.5 %	Russell 1000 Growth Index 11.8 %	NCREIF Fund Index-ODCE (EW) (Net) -11.1 %	Russell 1000 Growth Index 37.2 %	Russell 2000 Value Index 24.5 %	Bloomberg Barclays U.S. Corp High Yield 5.0 %	Russell 1000 Value Index 17.5 %	Russell 2000 Value Index 34.5 %	Russell 1000 Growth Index 13.1 %	S&P 500 Index 1.4 %	Russell 1000 Value Index 17.3 %	MSCI EAFE (Net) Index 25.0 %	Russell 1000 Growth Index -1.5 %	Russell 2000 Index 14.6 %
	Russell 1000 Value Index 7.1 %	Russell 1000 Value Index 22.2 %	MSCI EAFE (Net) Index 11.2 %	Bloomberg Barclays U.S. Corp High Yield -26.2 %	Russell 2000 Growth Index 34.5 %	MSCI Emerging Markets (Net) Index 18.9 %	Bloomberg Barclays Global Aggregate Ex USD 4.4 %	MSCI EAFE (Net) Index 17.3 %	Russell 1000 Growth Index 33.5 %	NCREIF Fund Index-ODCE (EW) (Net) 11.4 %	Bloomberg Barclays U.S. Aggregate Index 0.5 %	Bloomberg Barclays U.S. Corp High Yield 17.1 %	Russell 2000 Growth Index 22.2 %	Bloomberg Barclays U.S. Corp High Yield -2.1 %	S&P 500 Index 13.6 %
	Russell 1000 Growth Index 5.3 %	Russell 2000 Index 18.4 %	Bloomberg Barclays Global Aggregate Ex USD 11.0 %	Russell 2000 Value Index -28.9 %	MSCI EAFE (Net) Index 31.8 %	Russell 1000 Growth Index 16.7 %	Russell 1000 Growth Index 2.6 %	Russell 2000 Index 16.3 %	Russell 1000 Value Index 32.5 %	Bloomberg Barclays U.S. Aggregate Index 6.0 %	MSCI EAFE (Net) Index -0.8 %	S&P 500 Index 12.0 %	S&P 500 Index 21.8 %	Bloomberg Barclays Global Aggregate Ex USD -2.1 %	Russell 1000 Value Index 11.9 %
	S&P 500 Index 4.9 %	S&P 500 Index 15.8 %	Russell 2000 Growth Index 7.0 %	Russell 2000 Index -33.8 %	Russell 2000 Index 27.2 %	Russell 1000 Value Index 15.5 %	S&P 500 Index 2.1 %	S&P 500 Index 16.0 %	S&P 500 Index 32.4 %	Russell 2000 Growth Index 5.6 %	Russell 2000 Growth Index -1.4 %	Russell 2000 Growth Index 11.3 %	Russell 2000 Index 14.6 %	S&P 500 Index -4.4 %	Russell 2000 Value Index 11.9 %
	Russell 2000 Value Index 4.7 %	NCREIF Fund Index-ODCE (EW) (Net) 15.1 %	Bloomberg Barclays U.S. Aggregate Index 7.0 %	Russell 1000 Value Index -36.8 %	S&P 500 Index 26.5 %	Bloomberg Barclays U.S. Corp High Yield 15.1 %	Russell 1000 Value Index 0.4 %	Bloomberg Barclays U.S. Corp High Yield 15.8 %	MSCI EAFE (Net) Index 22.8 %	Russell 2000 Index 4.9 %	Russell 1000 Value Index -3.8 %	MSCI Emerging Markets (Net) Index 11.2 %	Russell 1000 Value Index 13.7 %	Russell 1000 Value Index -8.3 %	MSCI EAFE (Net) Index 10.0 %
	Russell 2000 Index 4.6 %	Russell 2000 Growth Index 13.3 %	S&P 500 Index 5.5 %	S&P 500 Index -37.0 %	Russell 2000 Value Index 20.6 %	NCREIF Fund Index-ODCE (EW) (Net) 15.1 %	Russell 2000 Growth Index -2.9 %	Russell 1000 Growth Index 15.3 %	NCREIF Fund Index-ODCE (EW) (Net) 12.4 %	Russell 2000 Value Index 4.2 %	Russell 2000 Index -4.4 %	NCREIF Fund Index-ODCE (EW) (Net) 8.4 %	Bloomberg Barclays Global Aggregate Ex USD 10.5 %	Russell 2000 Growth Index -9.3 %	MSCI Emerging Markets (Net) Index 9.9 %
	Russell 2000 Growth Index 4.2 %	Bloomberg Barclays U.S. Corp High Yield 11.9 %	Bloomberg Barclays U.S. Corp High Yield 1.9 %	Russell 1000 Growth Index -38.4 %	Russell 1000 Value Index 19.7 %	S&P 500 Index 15.1 %	Russell 2000 Index -4.2 %	Russell 2000 Growth Index 14.6 %	Bloomberg Barclays U.S. Corp High Yield 7.4 %	Bloomberg Barclays U.S. Corp High Yield 2.5 %	Bloomberg Barclays U.S. Corp High Yield -4.5 %	Russell 1000 Growth Index 7.1 %	Russell 2000 Value Index 7.8 %	Russell 2000 Index -11.0 %	Bloomberg Barclays U.S. Corp High Yield 7.3 %
	Bloomberg Barclays U.S. Corp High Yield 2.7 %	Russell 1000 Growth Index 9.1 %	Russell 1000 Value Index -0.2 %	Russell 2000 Growth Index -38.5 %	Bloomberg Barclays Global Aggregate Ex USD 7.5 %	MSCI EAFE (Net) Index 7.8 %	Russell 2000 Value Index -5.5 %	NCREIF Fund Index-ODCE (EW) (Net) 9.9 %	Bloomberg Barclays U.S. Aggregate Index -2.0 %	MSCI Emerging Markets (Net) Index -2.2 %	Bloomberg Barclays Global Aggregate Ex USD -6.0 %	Bloomberg Barclays U.S. Aggregate Index 2.6 %	Bloomberg Barclays U.S. Corp High Yield 7.5 %	Russell 2000 Value Index -12.9 %	Bloomberg Barclays U.S. Aggregate Index 2.9 %
	Bloomberg Barclays U.S. Aggregate Index 2.4 %	Bloomberg Barclays Global Aggregate Ex USD 8.2 %	Russell 2000 Index -1.6 %	MSCI EAFE (Net) Index -43.4 %	Bloomberg Barclays U.S. Aggregate Index 5.9 %	Bloomberg Barclays U.S. Aggregate Index 6.5 %	MSCI EAFE (Net) Index -12.1 %	Bloomberg Barclays U.S. Aggregate Index 4.2 %	MSCI Emerging Markets (Net) Index -2.6 %	Bloomberg Barclays Global Aggregate Ex USD -3.1 %	Russell 2000 Value Index -7.5 %	Bloomberg Barclays Global Aggregate Ex USD 1.5 %	NCREIF Fund Index-ODCE (EW) (Net) 6.9 %	MSCI EAFE (Net) Index -13.8 %	Bloomberg Barclays Global Aggregate Ex USD 1.5 %
Worst	Bloomberg Barclays Global Aggregate Ex USD -8.7 %	Bloomberg Barclays U.S. Aggregate Index 4.3 %	Russell 2000 Value Index -9.8 %	MSCI Emerging Markets (Net) Index -53.3 %	NCREIF Fund Index-ODCE (EW) (Net) -31.3 %	Bloomberg Barclays Global Aggregate Ex USD 4.9 %	MSCI Emerging Markets (Net) Index -18.4 %	Bloomberg Barclays Global Aggregate Ex USD 4.1 %	Bloomberg Barclays Global Aggregate Ex USD -3.1 %	MSCI EAFE (Net) Index -4.9 %	MSCI Emerging Markets (Net) Index -14.9 %	MSCI EAFE (Net) Index 1.0 %	Bloomberg Barclays U.S. Aggregate Index 3.5 %	MSCI Emerging Markets (Net) Index -14.6 %	NCREIF Fund Index-ODCE (EW) (Net) 1.5 %

Source: Investment Metrics

Past performance is no guarantee of future results. This document is provided for informational purposes only and should not be regarded as investment advice or as a recommendation regarding any particular course of action. The material provided herein is valid as of the date of distribution and not as of any future date, and will not be updated or otherwise revised to reflect information that subsequently becomes available, or circumstances existing or changes occurring after such date. Certain information is based on sources and data believed to be reliable, but AndCo cannot guarantee the accuracy, adequacy or completeness of the information. AndCo Consulting is an investment adviser registered with the U.S. Securities and Exchange Commission ("SEC"). Registration as an investment adviser does not constitute an endorsement of the firm by securities regulators nor does it indicate that the adviser has attained a particular level of skill or ability.



<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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