Investment Performance Review Period Ending December 31, 2018

Palm Beach Gardens Police Pension Plan

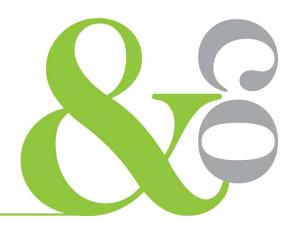


Table Of Contents

1	Market Environment	Page 1
1	Market Environment	Page 1
2	Compliance Report	Page 10
3	Asset Allocation Compliance	Page 12
4	Asset Allocation Compliance Segment Based	Page 13
5	Asset Allocation Pie Chart	Page 16
6	Asset Allocation & Performance Trailing Periods (gross)	Page 18
7	Asset Allocation & Performance Trailing Periods (net)	Page 20
8	Asset Allocation & Performance Fiscal Year Periods (gross)	Page 22
9	Asset Allocation & Performance Fiscal Year Periods (net)	Page 24
10	Historical Rolling Performance Total Fund	Page 26
11	Historical Rolling Performance Total Fund Policy	Page 27
12	Total Fund Composite Returns Based Analysis	Page 28
13	Rhumbline S&P 500 Equity Returns Based Analysis	Page 31
14	Rhumbline S&P 400 Equity Returns Based Analysis	Page 34
15	Rhumbline S&P 600 Equity Returns Based Analysis	Page 37
16	Highland Capital Equity Returns Based Analysis	Page 40
17	Highland Capital Fixed Income Returns Based Analysis	Page 43
18	American Realty Returns Based Analysis	Page 46
19	Fee Schedule	Page 48
20	Benchmark History	Page 49
21	Definitions & Disclosure Pages	Page 50



As we start 2019, we first want to say "Thank you" for giving AndCo the opportunity to serve you. On behalf of our entire organization, we are extremely grateful for our client partnerships and we will continue working hard to maintain your trust and confidence. Our mission statement reads – "To represent the sole interest of our clients by redefining independence". We're happy to report we remain steadfast in this core belief and continue to build an organization and service model that is singularly focused and independent. This helps ensure all recommendations are truly in the best interest of our valued clients. We believe this approach will drive value for our client partnerships long into the future.

AndCo also remains committed to delivering high quality, customized services. As we start 2019, we are 89 employees strong advising approximately \$90 billion in client assets - both record highs for AndCo. In 2018 we hired 7 new team members including one consultant, two research professionals, one additional compliance officer, one technology administrator and two team members within our client solutions group. All hires were made to better service our clients.

2019 will represent another year of reinvestment in the organization to better serve our clients and make AndCo stronger. For example, we have already hired a new Senior Research Analyst bringing our dedicated research team to 15 professionals. As 2019 progresses, we are targeting additional hires in research, software development, content creation and our client solutions group. We will also be partnering with an external firm this year to conduct an in-depth client assessment to help ensure we are meeting the evolving needs of our clients and exceeding their service expectations. There will be more information regarding this survey from the firm and your consultant over the coming months.

Finally, we just completed our annual Firmwide retreat. This retreat was a great opportunity for our firm to spend time together with colleagues and get a clear understanding of where the company is going, and more importantly, why we're headed in that direction. Since the inception of AndCo, the idea has been to make the firm a multigenerational organization owned and managed by its employees. As a result, since 2015, along with the strategic elements of our annual retreat, we also started the process of announcing new partners of the firm to foster this succession plan and today we have 8 partners controlling 100% of the company.

The evolution of our firm would not be possible without great partners like you. Our name reminds us who we work for every day: "Our Client" &Co. You will always be first in our service approach. As we continue to discuss updates with our firm, please know every decision is made by asking "How does this benefit our clients?" If it doesn't benefit you, we don't do it, it's that simple. We know our clients are facing many challenges and we want to be there to help get you through all environments. We are honored and humbled you have chosen AndCo as your partner. We don't take that relationship for granted and will continue to work tirelessly to exceed your expectations.

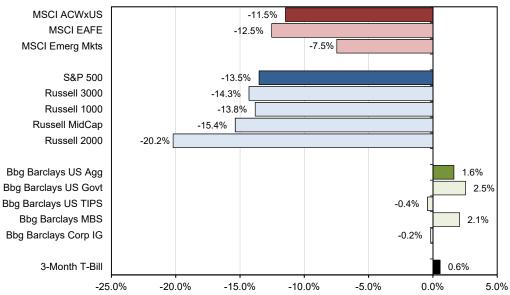
On behalf of AndCo, thank you for your valued partnership and the opportunity to serve you.

Mike Welker, CFA® President/CEO

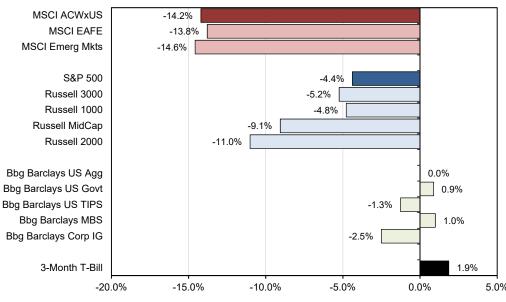


- Markets were volatile to end the 2018 calendar year. Both international and domestic equity markets had considerable losses during the 4th quarter while fixed income returns were muted, but outperformed relative to equities. Within equities, domestic stocks trailed international markets, reversing the 2018 trend of US market strength. Trade tensions between the US and China, midterm elections in US Congress, the effects of ongoing monetary policy tightening by the Federal Reserve (Fed), federal debt ceiling negotiations and the subsequent partial government shutdown outweighed generally positive corporate earnings and macroeconomic data reported during the quarter. The large cap S&P 500 Index returned -13.5% during the quarter while the small cap Russell 2000 Index fell by over 20% for the period. The drop in equity prices over the last three months was enough to take the returns for major US equity indices into negative territory for the 2018 calendar year. Returns over the 1-year period were -4.4% and -11.0% for the S&P 500 and Russell 2000 respectively.
- Similar to US equities, international equity index returns finished the quarter in negative territory with the MSCI ACWI ex US Index returning -11.5%. International markets faced headwinds from softening global macroeconomic data, tightening global monetary policy, uncertainty around Brexit negotiations, turmoil surrounding global trade relations, falling commodity prices and continued US Dollar (USD) strength. The developed market MSCI EAFE Index fell -12.5% during the 4th quarter, ending the year down -13.8%. Emerging markets performed well by comparison, only losing -7.5% during the quarter. Despite the 4th quarter outperformance, returns for emerging market equities trailed developed markets over the 1-year period with the MSCI Emerging Markets Index returning -14.6% versus a -13.8% return for the MSCI EAFE Index.
- Fixed income securities outperformed equities through both the 4th quarter and calendar year 2018 with the broad market Bloomberg Barclays Aggregate Index returning 1.6% and 0.0% respectively. Interest rates on the US Treasury Yield Curve continued their 2018 flattening trend as short-term rates increased to near-term highs while long- term rates fell during the quarter. Some of the increase in short-term rates can be attributed to the late December Fed interest rate hike. This marked the fourth Fed interest rate increase of 2018. This movement in rates did lead to some short-term rates being higher than those of longer dated maturities. More conservative fixed income sectors such as Treasuries and mortgage backed securities outperformed during the quarter and for the year as investors moved toward the relative safety these securities provide while widening credit spreads acted as a headwind to corporate issues.

Quarter Performance



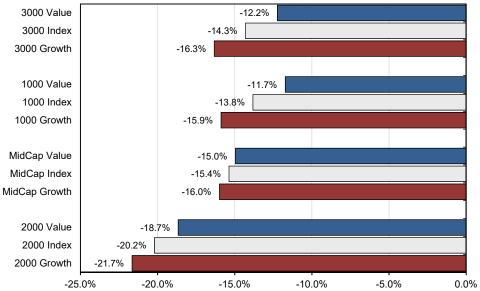
1-Year Performance



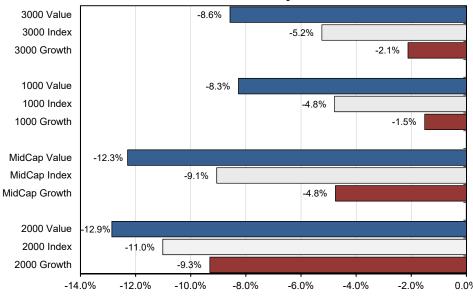


- US equity index returns were strongly negative across the style and capitalization spectrum during the 4th quarter of 2018. Despite these negative results, there was positive data in GDP, unemployment, wage growth, retail sales, and corporate earnings during the period. These positive economic factors were offset by softening data in housing, consumer confidence and manufacturing, tightening monetary policy, negative guidance for future corporate earnings and signs of slowing global growth which all contributed to the heavy selling in equities. Investors also considered the effects of ongoing trade negotiations, especially between the US and China, and the results of the US congressional midterm elections which likely reduced the chances of any major policy changes or new fiscal stimulus measures. The effects of partisan politics was particularly evident at the end of the quarter as budget negotiations between Democrats and Republicans collapsed over disagreement around the inclusion of funds for a border wall with Mexico, leading to a partial government shutdown to end the year.
- During the quarter, large cap stocks outperformed mid and small cap equities across growth, value and core indices. The large cap Russell 1000 Index fell 13.8% during the 4th quarter versus a -20.2% drop for the Russell 2000 Index. Part of the reason for weakness in small cap names is the steady increase in interest rates that occurred over 2018 as small cap companies typically maintain a higher percentage of debt than their large cap peers. Small cap names are also typically more volatile than larger companies and they have historically underperformed during market downturns. Similar to the most recent quarter, large cap stocks outperformed relative to small caps through calendar year 2018. The Russell 1000 returned -4.8% for the 1-year periods compared to a -11.0% return for the Russell 2000.
- Value indices outperformed growth indices across the market cap spectrum during the 4th quarter, reversing a year-to-date trend of growth stock outperformance. The large cap Russell 1000 Value Index was the best performing style index for the period, returning -11.7% for the quarter, while the Russell 2000 Growth Index was the worst performer, returning -21.7%. Value benchmarks tend to outperform in down markets as they benefit from their relative safety and higher dividend yields. Despite the short-term underperformance, growth benchmarks continue to outperform over the 1-year period, however, many of the sector exposures that drove growth stock outperformance during the first three quarters of the year, such as technology and consumer discretionary, were relative detractors during the 4th quarter.

Quarter Performance - Russell Style Series

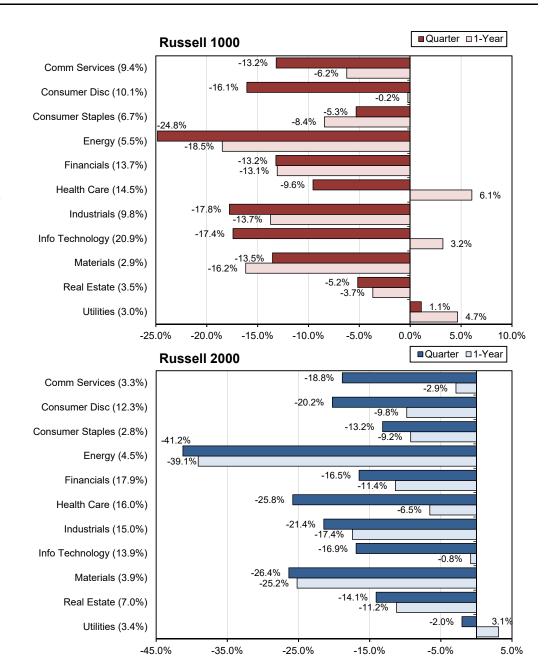


1-Year Performance - Russell Style Series





- Both S&P Dow Jones Indices and MSCI made changes to the Global Industry Classification Standard (GICS) sector configurations of their indices, creating a new GICS sector classification called Communication Services which replaced the Telecommunications sector on September 28, 2018. The Communication Services sector is comprised of companies in the Telecommunications sector, as well as certain companies formerly classified as Consumer Discretionary and Information Technology. As a result, the sector, went from a weighting of about 2% of the Russell 1000 Index to almost 10% post reclassification. Notable names now classified under Communication Services include Netflix, Alphabet, Facebook and Disney. This is just the second change to the GICS classifications since 1999.
- Sector performance was broadly negative across large cap sectors for the 4th quarter. All sectors within the Russell 1000 Index with the exception of the utilities sector posted negative returns for the period with seven sectors outpacing the return on the index. Cyclical sectors such as energy, industrials and technology were the worst performers through the quarter returning -24.8%, -17.8% and -17.4% respectively. Energy companies were hurt by a steep decline in oil prices during the quarter while technology and industrial companies fell on negative guidance for future earnings. More defensive, higher dividend paying sectors such as utilities, REITs and consumer staples were the strongest performing sectors with returns of 1.1%, -5.2% and -5.3% respectively. Only three sectors (health care, utilities, technology) posted positive results over the 1-year period with the remaining sectors losing ground during the calendar year.
- Quarterly results for small cap sectors were generally lower relative to their large capitalization counterparts. All eleven sectors had negative returns during the period with six of eleven economic sectors outpacing the Russell 2000 Index return for the quarter. Energy, materials and healthcare posted the worst returns for the period returning -41.2%, -26.4% and -25.8% respectively. Similar to large caps, defensive sectors performed well with utilities, consumer staples and real estate detracting the least returning -2.0%, -13.2% and -14.1% respectively. Over the trailing 1-year period, only utilities posted a gain returning 3.1%. Energy stocks were the worst performers in 2018, falling a considerable -41.2%.
- Using S&P 500 sector valuations as a proxy for the market, forward P/E ratios for three of the eleven GICS sectors were higher than their long-term averages at quarter-end. Using these historical P/E measures, the utilities, consumer discretionary and real estate sectors appear the most extended. In contrast the financials, technology and energy sectors were trading at a discount to their long-term average P/E ratios.





Top 10 Weighted Stocks					
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector	
Microsoft Corp	3.27%	-11.2%	20.3%	Information Technology	
Apple Inc	3.24%	-29.9%	-5.4%	Information Technology	
Amazon.com Inc	2.59%	-25.0%	28.4%	Consumer Discretionary	
Berkshire Hathaway Inc B	1.68%	-4.6%	3.0%	Financials	
Johnson & Johnson	1.47%	-6.0%	-5.1%	Health Care	
JPMorgan Chase & Co	1.39%	-12.9%	-6.6%	Financials	
Alphabet Inc Class C	1.34%	-13.2%	-1.0%	Communication Services	
Alphabet Inc A	1.32%	-13.4%	-0.8%	Communication Services	
Facebook Inc A	1.32%	-20.3%	-25.7%	Communication Services	
Exxon Mobil Corp	1.23%	-19.0%	-15.1%	Energy	

Top 10 Weighted Stocks					
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector	
Integrated Device Technology Inc	0.35%	3.0%	62.9%	Information Technology	
Etsy Inc	0.32%	-7.4%	132.6%	Consumer Discretionary	
Five Below Inc	0.31%	-21.3%	54.3%	Consumer Discretionary	
Haemonetics Corp	0.29%	-12.7%	72.3%	Health Care	
Ciena Corp	0.27%	8.5%	62.0%	Information Technology	
Planet Fitness Inc A	0.26%	-0.8%	54.8%	Consumer Discretionary	
Idacorp Inc	0.26%	-5.6%	4.6%	Utilities	
HubSpot Inc	0.26%	-16.7%	42.2%	Information Technology	
LivaNova PLC	0.25%	-26.2%	14.5%	Health Care	
Cree Inc	0.24%	13.0%	15.2%	Information Technology	

Top 10 Performing Stocks (by Quarter)					
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector	
Tesaro Inc	0.01%	90.3%	-10.4%	Health Care	
Red Hat Inc	0.13%	28.9%	46.2%	Information Technology	
Virtu Financial Inc A	0.00%	27.1%	45.9%	Financials	
Tesla Inc	0.19%	25.7%	6.9%	Consumer Discretionary	
SCANA Corp	0.03%	23.2%	23.1%	Utilities	
Tribune Media Co A	0.02%	18.9%	9.7%	Communication Services	
MarketAxess Holdings Inc	0.03%	18.6%	5.6%	Financials	
ARRIS International PLC	0.02%	17.6%	19.0%	Information Technology	
United States Cellular Corp	0.00%	16.1%	38.1%	Communication Services	
Newmont Mining Corp	0.08%	15.2%	-6.2%	Materials	

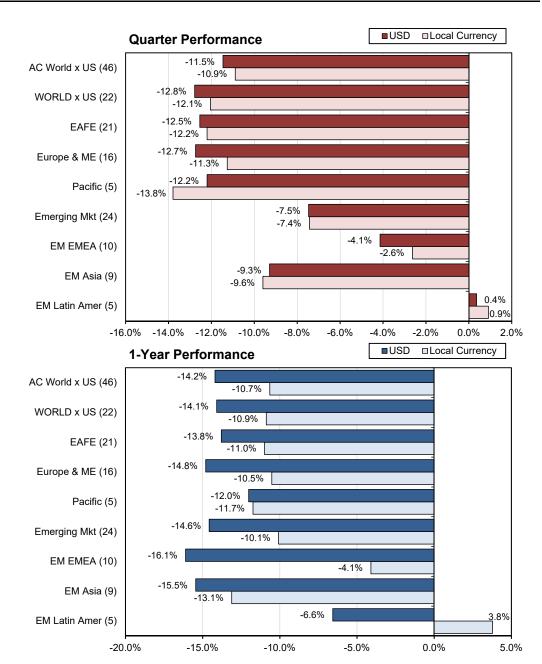
Top 10 Performing Stocks (by Quarter)					
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector	
Electro Scientific Industries Inc	0.05%	71.7%	39.8%	Information Technology	
Fluent Inc	0.01%	67.4%	3.4%	Communication Services	
Mitek Systems Inc	0.02%	53.3%	20.8%	Information Technology	
Arsanis Inc	0.00%	43.2%	-81.8%	Health Care	
Inovalon Holdings Inc	0.05%	41.1%	-5.5%	Health Care	
K12 Inc	0.05%	40.1%	55.9%	Consumer Discretionary	
Investment Technology Group Inc	0.05%	39.9%	59.0%	Financials	
Eidos Therapeutics Inc	0.01%	37.9%	N/A	Health Care	
Belmond Ltd Class A	0.13%	37.2%	104.3%	Consumer Discretionary	
Pacific Biosciences of California Inc	0.06%	36.8%	180.3%	Health Care	

Bottom 10 Performing Stocks (by Quarter)					
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector	
Weatherford International PLC	0.00%	-79.4%	-86.6%	Energy	
Nabors Industries Ltd	0.00%	-66.8%	-69.3%	Energy	
Extraction Oil & Gas Inc	0.00%	-62.0%	-70.0%	Energy	
Adient PLC	0.01%	-61.4%	-80.4%	Consumer Discretionary	
Whiting Petroleum Corp	0.01%	-57.2%	-14.3%	Energy	
Kosmos Energy Ltd	0.00%	-56.5%	-40.6%	Energy	
Chesapeake Energy Corp	0.01%	-53.2%	-47.0%	Energy	
Conduent Inc	0.01%	-52.8%	-34.2%	Information Technology	
NVIDIA Corp	0.33%	-52.4%	-30.8%	Information Technology	
SM Energy Co	0.01%	-50.8%	-29.6%	Energy	

Bottom 10 Performing Stocks (by Quarter)					
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector	
Synergy Pharmaceuticals Inc	0.00%	-93.3%	-94.9%	Health Care	
Sanchez Energy Corp	0.00%	-88.3%	-94.9%	Energy	
Sienna Biopharmaceuticals Inc	0.00%	-84.3%	-87.2%	Health Care	
Cloud Peak Energy Inc	0.00%	-84.1%	-91.8%	Energy	
Selecta Biosciences Inc	0.00%	-82.9%	-72.9%	Health Care	
Clearside Biomedical Inc	0.00%	-82.6%	-84.7%	Health Care	
Key Energy Services Inc	0.00%	-81.9%	-82.4%	Energy	
AAC Holdings Inc	0.00%	-81.7%	-84.4%	Health Care	
PHI Inc Non-Voting Shares	0.00%	-80.2%	-84.0%	Energy	
Bristow Group Inc	0.00%	-80.0%	-82.0%	Energy	



- Broad international equity returns were negative for the quarter in both local currency and USD terms. Geopolitical concerns, weakening economic data and the tightening of global monetary policy drove most of the negative performance. The USD also continued to strengthen against most currencies for the period which provided a headwind for USD based investors. The MSCI ACWI ex US Index fell -10.9% in local currency terms and -11.5% in USD terms during the 4th quarter. Returns for international indices were also broadly negative over the 1-year period in both local currency and USD terms with the MSCI ACWI ex US returning -10.7% and -14.2% respectively.
- Fourth quarter results for developed market international indices were negative in both local currency and USD terms with the MSCI EAFE Index returning -12.2% and -12.5% respectively. Returns were dampened for US investors as the USD continued to appreciate against most currencies, pushing returns lower. Global economic reporting during the guarter fueled concerns that global growth was beginning to slow. Japanese economic data faced headwinds from several natural disasters and data out of Europe was generally disappointing. Investors also weighed the effects of several significant political events in Europe including riots in France, ongoing budget negotiations between Italy and the EU and uncertainty around Brexit. Concerns over a "no deal" Brexit grew during the quarter as the draft withdrawal agreement presented by UK Prime Minister Theresa May was poorly received leading to a wave of cabinet resignations, a delay in the parliamentary vote and a "no confidence" vote which she ultimately won. The MSCI EAFE Index returned -11.0% and -13.8% for the last twelve months in local currency and USD terms respectively.
- Emerging markets outperformed relative to developed markets for the 4th guarter, but still declined in both local currency and USD terms with the MSCI Emerging Markets Index returning -7.4% and -7.5% respectively. Returns in emerging markets were hurt by the continued uncertainty surrounding trade relations between the US and China as both countries agreed to a 90-day hold on any new tariffs to allow for continued negotiations. Chinese economic data also appeared to be slowing during the quarter prompting the announcement of additional monetary and fiscal stimulus. The election of President Andres Manuel Lopez Obrador hurt returns in Mexico as investors feared the potential ramifications of his nationalist campaign promises. In contrast, Brazil was one of the few bright spots during the quarter as market participants looked favorably on the election of President Jair Bolsonaro in anticipation of market friendly economic reforms, including reforms associated with the countries bloated state pension system which has weighed heavily on the country's debt load. One year returns for the MSCI Emerging Market Index were -10.1% in local currency terms and -14.6% in USD terms.



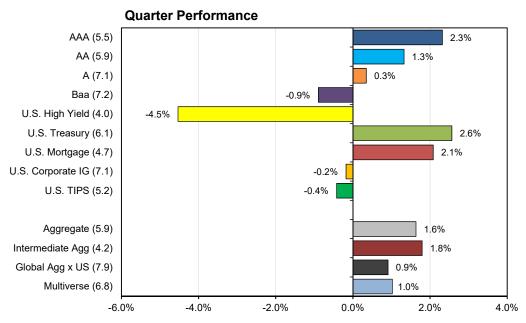


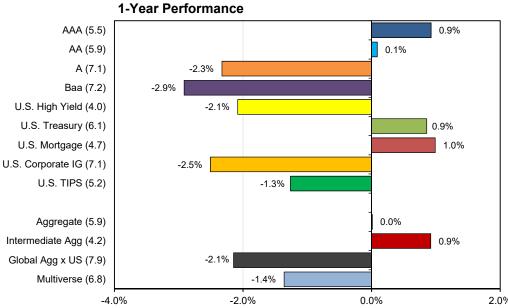
MSCI - EAFE	Sector Weight	Quarter Return	1-Year Return
Communication Services	5.6%	-7.7%	-12.1%
Consumer Discretionary	11.2%	-14.2%	-16.1%
Consumer Staples	11.6%	-8.4%	-10.8%
Energy	5.9%	-17.5%	-7.2%
Financials	19.5%	-13.7%	-20.1%
Health Care	11.2%	-10.3%	-4.3%
Industrials	14.3%	-14.6%	-15.7%
Information Technology	6.0%	-16.7%	-15.6%
Materials	7.4%	-15.2%	-17.5%
Real Estate	3.7%	-5.4%	-9.9%
Utilities	3.8%	-0.1%	1.1%
Total	100.0%	-12.5%	-13.8%
MSCI - ACWIXUS	Sector Weight	Quarter Return	1-Year Return
Communication Services	7.6%	-5.5%	-11.9%
Consumer Discretionary	10.6%	-14.1%	-20.2%
Consumer Staples	9.9%	-7.4%	-11.2%
Energy	7.3%	-16.3%	-8.1%
Financials	22.2%	-10.7%	-16.8%
Health Care	8.4%	-11.2%	-6.2%
Industrials	11.7%	-13.7%	-15.1%
Information Technology	8.0%	-14.6%	-17.6%
Materials	7.7%	-13.4%	-15.9%
Real Estate	3.4%	-3.8%	-11.6%
Utilities	3.4%	0.5%	-0.9%
Total	100.0%	-11.5%	-14.2%
MSCI - Emerging Mkt	Sector Weight	Quarter Return	1-Year Return
Communication Services	14.1%	-3.7%	-14.9%
Consumer Discretionary	10.4%	-13.5%	-32.5%
Consumer Staples	6.7%	-4.6%	-13.7%
Energy	8.0%	-10.6%	4.7%
Financials	24.8%	-0.9%	-8.7%
Health Care	2.8%	-16.2%	-20.9%
Industrials	5.5%	-3.8%	-12.6%
Information Technology	14.2%	-12.7%	-19.3%
Materials	7.7%	-10.8%	-11.6%
Real Estate	3.0%	1.4%	-17.2%
Utilities	2.7%	3.6%	-3.8%
Total	100.0%	-7.5%	-14.6%

	MSCI-EAFE	MSCI-ACWIXUS	Quarter	1- Year
Country	Weight	Weight	Return	Return
Japan	24.6%	16.6%	-14.2%	-12.9%
United Kingdom	16.9%	11.4%	-11.8%	-14.2%
France	11.1%	7.5%	-15.1%	-12.8%
Germany	8.8%	6.0%	-15.5%	-22.2%
Switzerland	8.7%	5.8%	-8.9%	-9.1%
Australia	6.9%	4.7%	-10.0%	-12.0%
Hong Kong	3.9%	2.6%	-4.5%	-7.8%
Netherlands	3.4%	2.3%	-11.0%	-13.1%
Spain	3.1%	2.1%	-8.7%	-16.2%
Sweden	2.7%	1.8%	-14.2%	-13.7%
Italy	2.3%	1.5%	-11.8%	-17.8%
Denmark	1.8%	1.2%	-9.8%	-15.4%
Singapore	1.4%	0.9%	-6.7%	-9.4%
Finland	1.0%	0.7%	-14.7%	-3.4%
Belgium	1.0%	0.6%	-18.5%	-26.9%
Norway	0.7%	0.5%	-18.1%	-8.6%
Ireland	0.5%	0.4%	-17.7%	-25.3%
Israel	0.5%	0.4%	-14.4%	-5.5%
Austria	0.2%	0.2%	-20.7%	-27.4%
New Zealand	0.2%	0.2%	-6.6%	-4.0%
Portugal	0.2%	0.1%	-14.3%	-11.1%
Total EAFE Countries	100.0%	67.5%	-12.5%	-13.8%
Canada		6.5%	-15.3%	-17.2%
Total Developed Countries		74.0%	-12.8%	-14.1%
China		7.9%	-10.7%	-18.9%
Korea		3.6%	-13.1%	-20.9%
Taiwan		3.0%	-13.7%	-8.9%
India		2.4%	2.5%	-7.3%
Brazil		2.0%	13.4%	-0.5%
South Africa		1.6%	-3.8%	-24.8%
Russia		1.0%	-9.0%	-0.7%
Mexico		0.7%	-18.8%	-15.5%
Malaysia		0.6%	-5.8%	-6.0%
Thailand		0.6%	-10.2%	-5.5%
Indonesia		0.6%	9.7%	-9.2%
Poland		0.3%	-3.0%	-12.9%
Philippines		0.3%	5.3%	-16.5%
Qatar		0.3%	8.4%	29.8%
Chile		0.3%	-8.7%	-19.7%
United Arab Emirates		0.2%	-5.5%	-7.7%
Turkey		0.2%	4.8%	-41.4%
Colombia		0.1%	-19.0%	-11.5%
Peru		0.1%	-2.9%	1.6%
Hungary		0.1%	5.9%	-6.1%
Greece		0.1%	-16.0%	-36.8%
Czech Republic		0.0%	-8.7%	-4.5%
Egypt		0.0%	-9.4%	-14.0%
Pakistan		0.0%	-22.4%	-34.8%
Total Emerging Countries		26.0%	-7.5%	-14.6%



- Broad fixed income benchmarks had mixed results during the 4th quarter. Interest rates rose across short-term maturities, but fell on those on the middle and long end of the US Treasury Yield Curve. The Federal Open Market Committee (FOMC), decided to increase short-term interest rates by 25 basis points at their December meeting citing the strength of the US economy which caused an increase in short-term interest rates, but equity market volatility led market participants toward less volatile assets, pushing rates lower on maturities greater than 1-year. This was the fourth rate hike of 2018. The current Fed Funds Rate target range sits at 2.25%-2.50%. This caused continued flattening in the yield curve with some moderate inversion, which happens when short-term maturities have greater yields than long-term securities, in the middle of curve. The difference in yields between the 2-year and 10-year Treasury now sits at just 0.21%. Historically, an inverted yield curve has signaled a greater probability of a recession. The Fed is also continuing the reduction of the size of its balance sheet by slowing its pace of reinvestment as the securities it holds mature. However, the Fed did lower its guidance for future rate increases in 2019 following a reduction in expectations for GDP and inflation. The Fed is now projecting just two additional interest rate increases in 2019. The Bloomberg Barclays US Aggregate Index was positive during the guarter, posting a 1.6% return, but was flat, returning 0.0% over the 1-year period.
- Within investment grade credit, higher quality issues outperformed lower quality issues as investors preferred more conservative securities. On an absolute basis, without negating the duration differences in the sub-indices, AAA rated credit was the best performing investment grade credit quality segment returning 2.3% for the quarter, while Baa was the worst performing, falling -0.9%. High yield debt trailed investment grade credit as spreads widened the most for these issues, returning -4.5%. Returns are mixed for the investment grade quality segments when viewed over the 1-year period with higher quality issues outperforming lower quality securities. High yield performed well relative to lower quality investment grade debt due to the relatively strong returns experienced during the first three quarters of 2018.
- During the 4th quarter, the more defensive Treasury and mortgage backed sectors of the Bloomberg Barclays US Aggregate Index's three broad sectors were the best performers returning 2.6% and 2.1% respectively. Investment grade corporate credit underperformed, returning -0.2%, as credit spreads widened considerably during the period. This trend carried through to the 1-year period as both Treasuries and mortgage backed securities outperformed both investment grade and high yield corporate debt. Calendar year 2018 performance for the Treasury, mortgage backed and investment grade corporate issues was 0.9%, 1.0% and -2.5% respectively. US TIPS returned -0.4% and -1.3% for the 4th quarter and 1-year period.

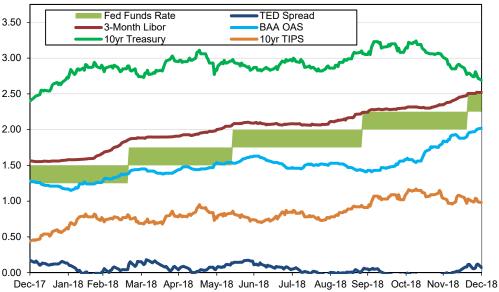


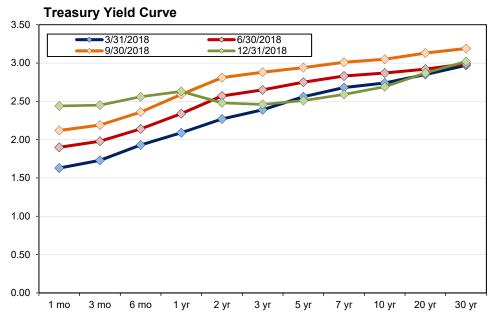




- Global fixed income indices continue to struggle relative to their domestic counterparts, underperforming during the 4th guarter. These indices have lower vields and the returns of these indices are also significantly influenced by fluctuations in their currency denomination relative to the USD. During the 4th quarter the USD strengthened against most other 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 0.9% and -2.1% for the guarter and 1-year period respectively. As the global economy continues to recover, several international central banks have started to move toward less accommodative postures. Notably, the ECB, began to slow its monthly bond purchase program in September, reducing new purchases to 15 billion euro per month from 30 billion euro per month and ended the program entirely at year end. However, they have indicated a continuation of reinvestment in maturing securities and would likely not raise interest rates from current levels until summer 2019. The Bank of England and the Bank of Japan made no major policy changes during the guarter 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 vield (green line) fell during the 4th quarter after rising steadily through most of the year as investors moved to safe haven assets during the period, ending the year at 2.69%. 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 4th quarter as investors moved to higher quality assets. This increase is equivalent to an interest rate increase on corporate bonds, which produces an additional headwind for corporate bond index returns. These credit spreads have widened by about 59 basis points over the last 3-months. The green band across the graph illustrates the gradual increase in the Federal Funds Rate (four increases in the last twelve months) due to the continued tightening of US monetary policy.
- The lower graph provides a snapshot of the US Treasury yield curve at the end of each of the last four calendar quarters. As mentioned, the yield curve continues to flatten as yields on shorter-term maturities have risen more than interest rates on the long end of the curve. The upward momentum of interest rates as well as a general flattening of the yield curve are clearly visible over the last twelve months with some minor inversion visible in the middle of the vield curve.

1-Year Trailing Market Rates







	.,	
Total Fund Compliance:	Yes	No
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 6.7% (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.	•	
Total Equity Compliance:	Yes	No
The equity return equaled or exceeded the benchmark over the trailing three year period.	163	140
The equity return equaled or exceeded the benchmark over the trailing five year period.		•
Rhumbline S&P 500	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 S&P 400	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.		•



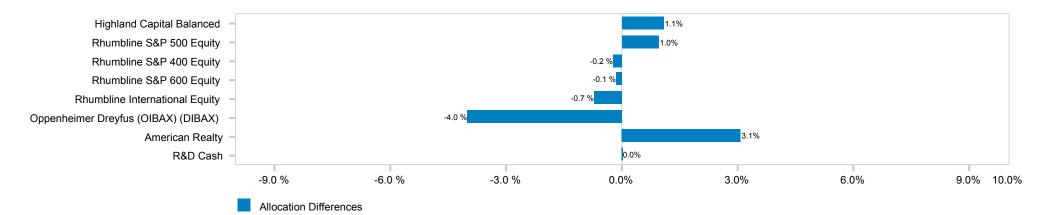
The five year return ranks in the top 40% of its peer group.

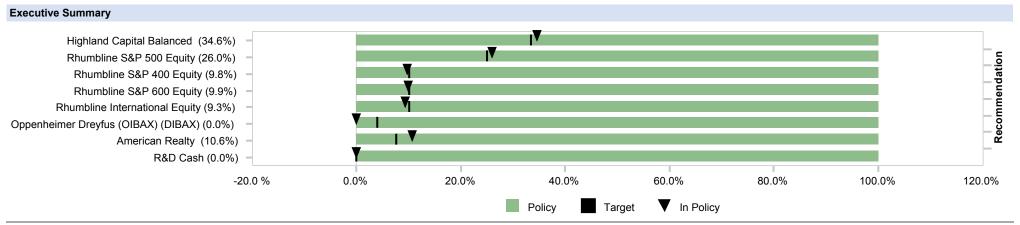
Dhumbling CAD CO	Vaa	Na
Rhumbline S&P 600 The return equaled as exceeded the heapthmark ever the trailing three year period.	Yes	No
The return equaled or exceeded the benchmark over the trailing three year period. The return equaled as exceeded the benchmark over the trailing three year period.		•
The 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.

	Asset Allocation \$	Current Allocation (%)	Target Allocation (%)	Differences (%)	Target Rebal. (\$000)
Total Fund Composite	89,320,659	100.0	100.0	0.0	-
Highland Capital Balanced	30,899,533	34.6	33.5	1.1	-977,113
Rhumbline S&P 500 Equity	23,184,252	26.0	25.0	1.0	-854,087
Rhumbline S&P 400 Equity	8,713,662	9.8	10.0	-0.2	218,404
Rhumbline S&P 600 Equity	8,799,832	9.9	10.0	-0.1	132,234
Rhumbline International Equity	8,277,743	9.3	10.0	-0.7	654,323
Oppenheimer Dreyfus (OIBAX) (DIBAX)	-	0.0	4.0	-4.0	3,572,826
American Realty	9,443,455	10.6	7.5	3.1	-2,744,405
R&D Cash	2,182	0.0	0.0	0.0	-2,182

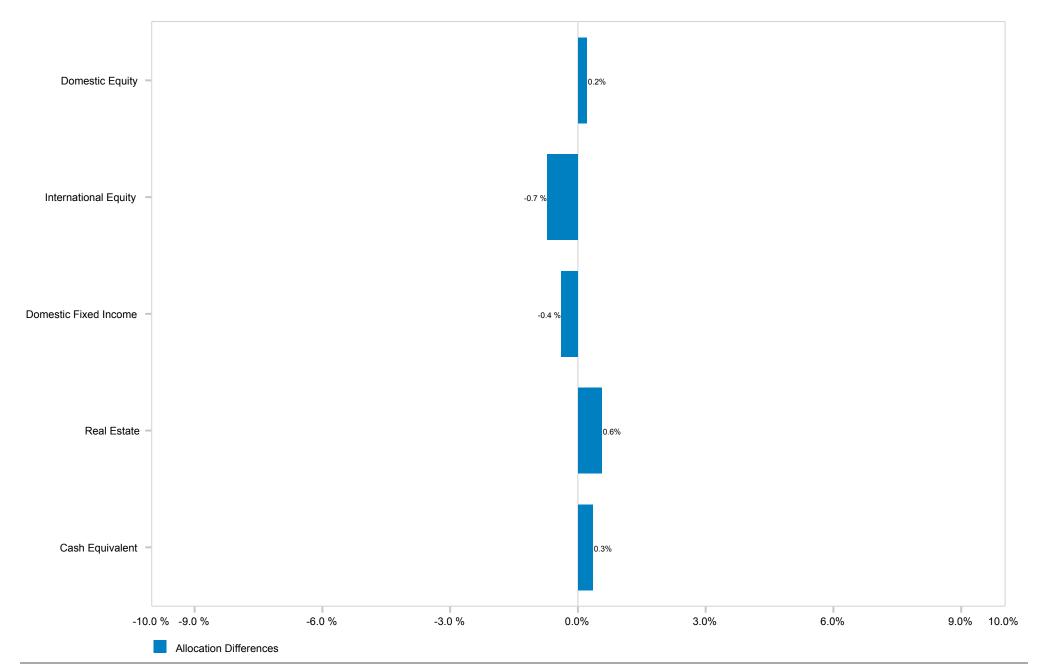




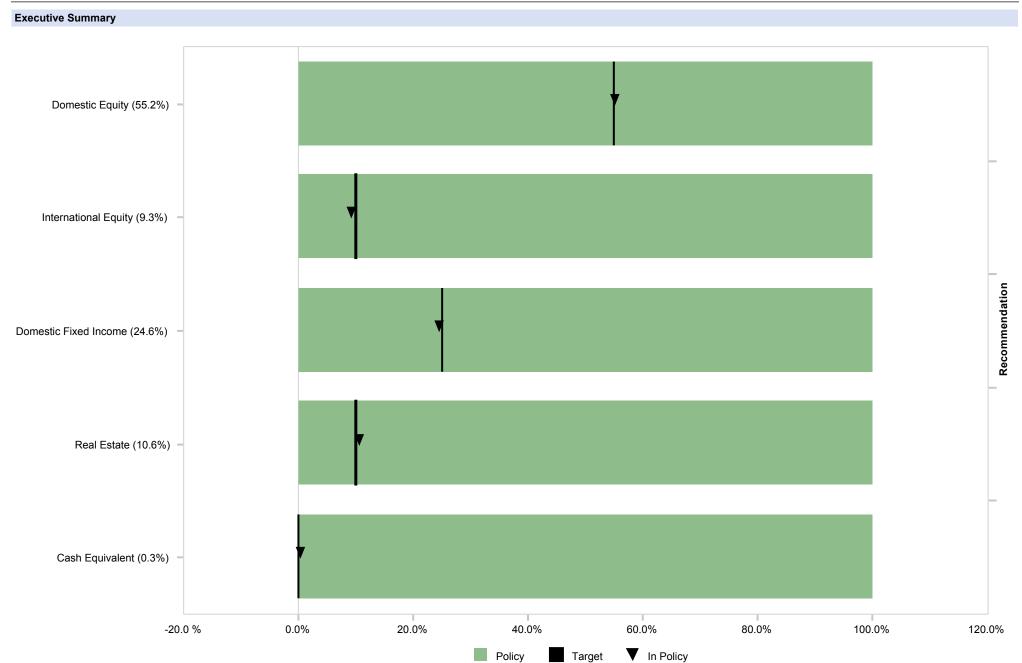


Asset Allocation Compliance					
	Asset Allocation \$	Current Allocation (%)	Target Allocation (%)	Differences (%)	Target Rebal. (\$000)
Domestic Equity	49,320,318	55.2	55.0	0.2	-193,955
International Equity	8,277,743	9.3	10.0	-0.7	654,323
Domestic Fixed Income	21,975,549	24.6	25.0	-0.4	354,616
Real Estate	9,443,455	10.6	10.0	0.6	-511,389
Cash Equivalent	303,595	0.3	0.0	0.3	-303,595
Total Fund	89,320,659	100.0	100.0	0.0	-





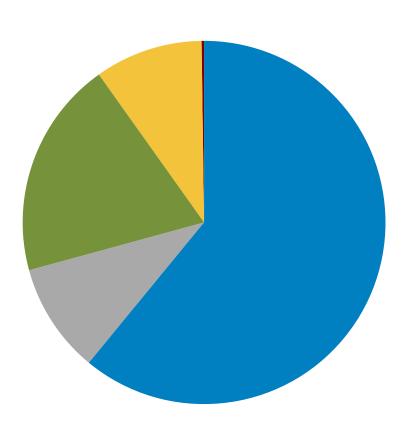


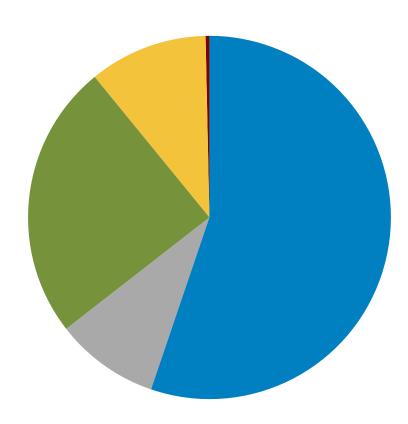




Asset Allocation By Segment as of September 30, 2018 : \$96,451,644

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



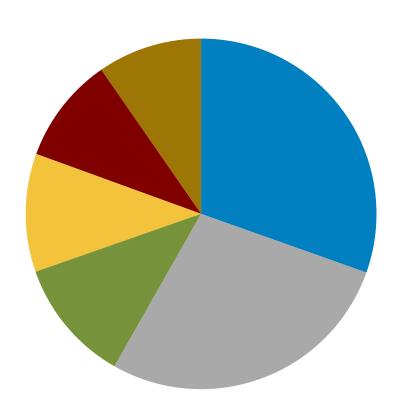


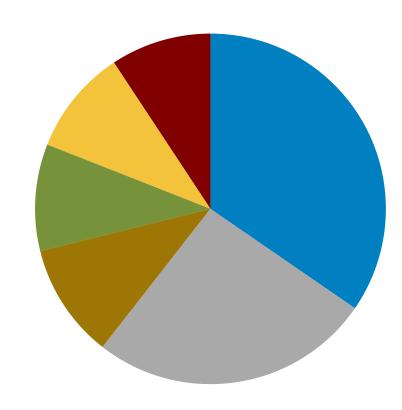
ocation					
Segments	Market Value	Allocation	Segments	Market Value	Allocation
■ Domestic Equity	58,788,280	61.0	Domestic Equity	49,320,318	55.2
International Equity	9,461,632	9.8	International Equity	8,277,743	9.3
■ Domestic Fixed Income	18,700,143	19.4	Domestic Fixed Income	21,975,549	24.6
Real Estate	9,289,566	9.6	Real Estate	9,443,455	10.6
■ Cash Equivalent	212,024	0.2	Cash Equivalent	303,595	0.3



Asset Allocation By Manager as of September 30, 2018 : \$96,451,644

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





ocation	Allocation									
	Market Value	Allocation		Market Value	Allocation					
■ Highland Capital Balanced	29,349,318	30.4	■ Highland Capital Balanced	30,899,533	34.6					
■ Rhumbline S&P 500 Equity	26,806,608	27.8	Rhumbline S&P 500 Equity	23,184,252	26.0					
■ Rhumbline S&P 600 Equity	11,013,783	11.4	American Realty	9,443,455	10.6					
Rhumbline S&P 400 Equity	10,528,566	10.9	Rhumbline S&P 600 Equity	8,799,832	9.9					
■ Rhumbline International Equity	9,461,632	9.8	Rhumbline S&P 400 Equity	8,713,662	9.8					
American Realty	9,289,566	9.6	Rhumbline International Equity	8,277,743	9.3					
R&D Cash	2,172	0.0	R&D Cash	2,182	0.0					



Asset Allocation & Performance										
	Allo	ocation				Perfo	rmance(%)			
	Market Value \$	%	QTR	FYTD	1 YR	3 YR	5 YR	Inception	МТН	Inception Date
Total Fund Composite	89,320,659	100.0	-10.06 (92)	-10.06 (92)	-4.00 (44)	6.84 (16)	5.84 (12)	7.56 (50)	-5.64 (90)	04/01/1992
Total Fund Policy Index			-9.54 (83)	-9.54 (83)	-3.95 (43)	6.79 (16)	5.78 (13)	N/A	-5.28 (80)	
Difference			-0.52	-0.52	-0.05	0.05	0.06	N/A	-0.36	
All Public Plans-Total Fund Median			-8.34	-8.34	-4.33	5.79	4.80	7.55	-4.59	
Total Equity Composite	57,598,060	64.5	-15.47	-15.47	-7.41	8.18	6.76	5.27	-9.31	07/01/2000
Total Equity Policy Index	, ,		-15.32	-15.32	-6.94	8.53	7.01	5.14	-9.14	
Difference			-0.15	-0.15	-0.47	-0.35	-0.25	0.13	-0.17	
Total Domestic Equity										
Rhumbline S&P 500 Equity	23,184,252	26.0	-13.51 (41)	-13.51 (41)	-4.40 (42)	9.22 (37)	8.46 (40)	5.14 (80)	-9.02 (53)	07/01/2000
S&P 500 Index			-13.52 (41)	-13.52 (41)	-4.38 (42)	9.26 (35)	8.49 (38)	5.02 (85)	-9.03 (54)	
Difference			0.01	0.01	-0.02	-0.04	-0.03	0.12	0.01	
IM U.S. Large Cap Equity (SA+CF) Median			-13.94	-13.94	-5.15	8.62	7.99	6.19	-8.99	
Rhumbline S&P 400 Equity	8,713,662	9.8	-17.24 (61)	-17.24 (61)	-11.08 (65)	7.62 (48)	6.02 (61)	8.97 (66)	-11.28 (76)	01/01/2004
S&P MidCap 400 Index			-17.28 (65)	-17.28 (65)	-11.08 (66)	7.66 (46)	6.03 (60)	8.90 (70)	-11.32 (80)	
Difference			0.04	0.04	0.00	-0.04	-0.01	0.07	0.04	
IM U.S. Mid Cap Equity (SA+CF) Median			-16.66	-16.66	-9.26	7.52	6.26	9.38	-10.14	
Rhumbline S&P 600 Equity	8,799,832	9.9	-20.10 (57)	-20.10 (57)	-8.50 (37)	9.42 (32)	6.34 (29)	9.25 (40)	-12.08 (68)	01/01/2004
S&P SmallCap 600 Index			-20.10 (57)	-20.10 (57)	-8.48 (36)	9.46 (32)	6.34 (29)	9.19 (42)	-12.07 (68)	
Difference			0.00	0.00	-0.02	-0.04	0.00	0.06	-0.01	
IM U.S. Small Cap Equity (SA+CF) Median			-19.88	-19.88	-10.65	7.63	5.20	8.92	-11.60	
Highland Capital LCG	8,622,571	9.7	-16.47 (71)	-16.47 (71)	-4.14 (78)	9.04 (70)	8.14 (77)	7.76 (70)	-9.24 (85)	10/01/2007
Russell 1000 Growth Index			-15.89 (62)	-15.89 (62)	-1.51 (54)	11.15 (29)	10.40 (31)	8.62 (45)	-8.60 (59)	
Difference			-0.58	-0.58	-2.63	-2.11	-2.26	-0.86	-0.64	
IM U.S. Large Cap Growth Equity (SA+CF) Median			-15.14	-15.14	-1.17	10.19	9.66	8.43	-8.40	
International Equity										
Rhumbline International Equity	8,277,743	9.3	-12.51 (55)	-12.51 (55)	-13.53 (35)	N/A	N/A	2.91 (72)	-4.81 (54)	08/01/2016
MSCI EAFE Index			-12.50 (55)	-12.50 (55)	-13.36 (33)	3.38 (68)	1.00 (73)	3.85 (57)	-4.83 (55)	
Difference			-0.01	-0.01	-0.17	N/A	N/A	-0.94	0.02	
IM International Equity (SA+CF) Median			-11.87	-11.87	-14.86	4.84	2.07	4.27	-4.63	



	Allo	cation				Perfo	ormance(%)			
	Market Value \$	%	QTR	FYTD	1 YR	3 YR	5 YR	Inception	MTH	Inceptior Date
Total Fixed Income Composite	21,975,549	24.6	1.83	1.83	-0.07	2.86	2.59	5.16	1.70	04/01/1994
Total Fixed Inc Policy Index			1.60	1.60	-0.17	2.21	2.29	5.19	1.91	
Difference			0.23	0.23	0.10	0.65	0.30	-0.03	-0.21	
Domestic Fixed Income										
Highland Capital Fixed Income	21,975,549	24.6	1.83 (14)	1.83 (14)	0.33 (31)	2.73 (34)	2.72 (61)	5.19 (96)	1.70 (42)	04/01/1994
Blmbg. Barc. U.S. Aggregate Index			1.64 (24)	1.64 (24)	0.01 (62)	2.06 (85)	2.52 (84)	5.27 (94)	1.84 (16)	
Difference			0.19	0.19	0.32	0.67	0.20	-0.08	-0.14	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	1		1.40	1.40	0.07	2.48	2.86	5.61	1.68	
Real Estate										
American Realty	9,443,455	10.6	1.94 (35)	1.94 (35)	8.72 (50)	7.97 (74)	9.86 (79)	10.52 (74)	1.94 (N/A)	07/01/2012
NCREIF Fund Index-Open End Diversified Core (EW)			1.62 (76)	1.62 (76)	8.25 (66)	8.44 (52)	10.52 (63)	10.96 (70)	1.62 (N/A)	
Difference			0.32	0.32	0.47	-0.47	-0.66	-0.44	0.32	
IM U.S. Private Real Estate (SA+CF) Median			1.80	1.80	8.71	8.66	10.82	11.55	N/A	
R&D Cash	2,182	0.0								



	Allo	ocation				Performance	(%)		
	Market Value \$	%	QTR	FYTD	1 YR	3 YR	5 YR	Inception	Inception Date
Total Fund Composite	89,320,659	100.0	-10.10	-10.10	-4.13	6.65	5.64	7.32	04/01/1992
Total Fund Policy Index Difference			-9.54 -0.56	-9.54 -0.56	-3.95 -0.18	6.79 -0.14	5.78 -0.14	N/A N/A	
Total Equity Composite	57,598,060	64.5	-15.47	-15.47	-7.41	8.18	6.76	5.27	07/01/2000
Total Equity Policy Index	, ,		-15.32	-15.32	-6.94	8.53	7.01	5.14	
Difference			-0.15	-0.15	-0.47	-0.35	-0.25	0.13	
Total Domestic Equity									
Rhumbline S&P 500 Equity	23,184,252	26.0	-13.52	-13.52	-4.45	9.16	8.40	5.01	07/01/2000
S&P 500 Index			-13.52	-13.52	-4.38	9.26	8.49	5.02	
Difference			0.00	0.00	-0.07	-0.10	-0.09	-0.01	
Rhumbline S&P 400 Equity	8,713,662	9.8	-17.25	-17.25	-11.12	7.56	5.97	8.95	01/01/2004
S&P MidCap 400 Index			-17.28	-17.28	-11.08	7.66	6.03	8.90	
Difference			0.03	0.03	-0.04	-0.10	-0.06	0.05	
Rhumbline S&P 600 Equity	8,799,832	9.9	-20.11	-20.11	-8.54	9.36	6.28	9.23	01/01/2004
S&P SmallCap 600 Index			-20.10	-20.10	-8.48	9.46	6.34	9.19	
Difference			-0.01	-0.01	-0.06	-0.10	-0.06	0.04	
Highland Capital LCG Equity	8,622,571	9.7	-16.47	-16.47	-4.14	9.04	8.14	7.76	10/01/2007
Russell 1000 Growth Index			-15.89	-15.89	-1.51	11.15	10.40	8.62	
Difference			-0.58	-0.58	-2.63	-2.11	-2.26	-0.86	
International Equity									
Rhumbline International Equity	8,277,743	9.3	-12.52	-12.52	-13.58	N/A	N/A	2.86	08/01/2016
MSCI EAFE Index			-12.50	-12.50	-13.36	3.38	1.00	3.85	
Difference			-0.02	-0.02	-0.22	N/A	N/A	-0.99	
Total Fixed Income Composite	21,975,549	24.6	1.83	1.83	-0.07	2.86	2.59	5.16	04/01/1994
Total Fixed Inc Policy Index			1.60	1.60	-0.17	2.21	2.29	5.19	
Difference			0.23	0.23	0.10	0.65	0.30	-0.03	



	Allo	cation		Performance(%)									
	Market Value \$	%	QTR	FYTD	1 YR	3 YR	5 YR	Inception	Inception Date				
Domestic Fixed Income													
Highland Capital Fixed Income	21,975,549	24.6	1.83	1.83	0.33	2.73	2.72	5.19	04/01/1994				
Blmbg. Barc. U.S. Aggregate Index			1.64	1.64	0.01	2.06	2.52	5.27					
Difference			0.19	0.19	0.32	0.67	0.20	-0.08					
Real Estate													
American Realty	9,443,455	10.6	1.66	1.66	7.53	6.78	8.69	9.34	07/01/2012				
NCREIF Fund Index-ODCE (EW) (Ne	et)		1.39	1.39	7.30	7.53	9.60	10.02					
Difference			0.27	0.27	0.23	-0.75	-0.91	-0.68					



Asset Allocation & Performance	4 ···	41					_		(0/)				
		cation						erformance	· ,				
	Market Value	%	Oct-2017 To	То	То	То	То	То	Oct-2011 To	То	То	Oct-2008 To	То
	\$		Sep-2018	Sep-2017	7 Sep-2016	Sep-2015	Sep-2014	Sep-2013	Sep-2012	Sep-2011	Sep-2010	Sep-2009	Sep-2008
Total Fund Composite	89,320,659	100.0	11.27 (9)	13.60(21)	10.94 (14)	1.46 (14)	10.95 (35)	14.75 (15)	18.89 (29)	0.46(46)	10.42 (36)	5.99(9)	-13.46(58)
Total Fund Policy Index			10.59 (13)	12.80(38)	11.83 (5)	0.81 (23)	10.35 (48)	14.21 (21)	19.60 (19)	1.75(19)	10.81 (29)	1.64(50)	-12.83(50)
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			8.14	12.19	9.66	-0.45	10.24	12.51	17.94	0.29	9.90	1.60	-12.88
Total Equity Composite	57.598.060	64.5	16.01	19.67	13.36	0.44	14.07	24.58	28.78	-2.47	12.49	-0.91	-23.22
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
Total Domestic Equity													
Rhumbline S&P 500 Equity	23,184,252	26.0	17.87 (42)	18.56(57)	15.38 (25)	-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	, ,		, ,	18.61(55)	15.43 (24)			, ,	, ,	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			17.08	18.83	13.21	-0.30	18.79	21.13	29.11	0.78	10.13	-5.49	-20.78
Rhumbline S&P 400 Equity	8,713,662	9.8	` ,	17.49(54)	15.21 (31)	` ,	` '	` ,	28.90 (36)	` '	17.78 (41)	` '	-16.54(19)
S&P MidCap 400 Index			. ,	17.52(53)	15.33 (30)				28.54 (40)	, ,	17.78 (41)	` '	-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	27.30	-0.65	16.78	-2.72	-20.48
Rhumbline S&P 600 Equity	8,799,832	9.9	19.04 (34)	21.08(49)	18.00 (26)	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 (35)	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	20.99	14.58	2.39	6.23	32.17	31.61	-1.20	14.98	-5.22	-18.20
Highland Capital LCG	8,622,571	9.7	23.71 (56)	23.11(22)	6.68 (93)	4.64 (33)	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 (37)	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			24.42	20.81	11.64	3.60	18.18	20.25	27.65	1.38	11.27	-2.98	-20.13
International Equity													
Rhumbline International Equity	8,277,743	9.3	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 (71)	-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			1.44	21.00	11.54	-8.30	5.83	20.31	17.27	-9.59	9.60	7.06	-30.28



	Alloc	cation					Pe	rformance	(%)				
	Market Value \$	%	Oct-2017 To Sep-2018	То	То	То	Oct-2013 To Sep-2014	То	Oct-2011 To Sep-2012	Oct-2010 To Sep-2011	То	Oct-2008 To Sep-2009	То
Total Fixed Income Composite	21,975,549	24.6	-1.34	1.26	6.60	1.40	3.45	-2.57	6.28	5.20	8.28	11.96	1.23
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
Domestic Fixed Income													
Highland Capital Fixed Income	21,975,549	24.6	-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 (80)	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) Media	an		-0.73	0.62	5.67	3.02	4.52	-1.22	6.62	5.26	9.26	12.30	2.56
International Fixed Income													
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	6.25	13.84	-8.41	4.03	-4.01	13.45	-0.39	13.85	16.85	-3.02
Real Estate													
American Realty	9,443,455	10.6	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 (66)	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	13.10	17.30	6.39	-35.27	4.80
R&D Cash	2,182	0.0											



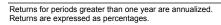
	Allo	cation					P	erformance(%)				
	Market Value \$	%	Oct-2017 To Sep-2018	Oct-2016 To Sep-2017	Oct-2015 To Sep-2016	Oct-2014 To Sep-2015	Oct-2013 To Sep-2014	Oct-2012 To Sep-2013	Oct-2011 To Sep-2012	Oct-2010 To Sep-2011	Oct-2009 To Sep-2010	Oct-2008 To Sep-2009	Oct-200 To Sep-200
Total Fund Composite	89,320,659	100.0	11.12	13.36	10.72	1.29	10.73	14.53	18.64	0.22	10.08	5.61	-13.73
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
Total Equity Composite	57,598,060	64.5	16.01	19.67	13.36	0.44	14.07	24.58	28.78	-2.47	12.49	-0.91	-23.22
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
Total Domestic Equity													
Rhumbline S&P 500 Equity	23,184,252	26.0	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
Rhumbline S&P 400 Equity	8,713,662	9.8	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
Rhumbline S&P 600 Equity	8,799,832	9.9	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		-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	8,622,571	9.7	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
International Equity													
Rhumbline International Equity	8,277,743	9.3	2.68	19.17	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							
Total Fixed Income Composite	21,975,549	24.6	-1.34	1.26	6.60	1.40	3.45	-2.57	6.28	5.20	8.28	11.96	1.23
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



	Alloc	cation		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
Domestic Fixed Income													
Highland Capital Fixed Income Blmbg. Barc. U.S. Aggregate Index Difference	21,975,549	24.6	-1.08 -1.22 0.14	0.85 0.07 0.78	6.51 5.19 1.32	2.22 2.94 -0.72	3.51 3.96 -0.45	-2.54 -1.68 -0.86	6.07 5.16 0.91	5.66 5.26 0.40	8.09 8.16 -0.07	11.96 10.56 1.40	1.23 3.65 -2.42
International Fixed Income													
Oppenheimer Dreyfus (OIBAX) (DIBAX) FTSE Non-U.S. World Government Bo Difference	- ind	0.0	N/A -1.57 N/A	3.10 -3.14 6.24	9.59 12.61 -3.02	-4.81 -7.01 2.20	2.98 -0.99 3.97	-2.82 -5.63 2.81	7.90 3.45 4.45	0.32 4.13 -3.81	N/A 4.46 N/A	N/A 16.04 N/A	N/A 5.16 N/A
Real Estate													
American Realty NCREIF Fund Index-ODCE (EW) (Net	9,443,455)	10.6	7.31 7.89 -0.58	6.34 6.93 -0.59	7.85 9.69 -1.84	12.82 13.82 -1.00	11.34 11.44 -0.10	11.10 11.46 -0.36	N/A 10.69 N/A	N/A 17.02 N/A	N/A 5.24 N/A	N/A -36.63 N/A	N/A 2.82 N/A

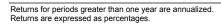


Historical Rolling F	Performance				
	QTR	1 YR	3 YR	5 YR	Inception
12/31/2018	-10.06	-4.00	6.84	5.84	7.56
09/30/2018	4.22	11.27	11.93	9.56	8.07
06/30/2018	2.69	10.73	8.48	9.79	7.98
03/31/2018	-0.27	10.86	7.54	9.32	7.95
12/31/2017	4.25	15.62	8.66	10.87	8.04
09/30/2017	3.71	13.60	8.54	10.24	7.94
06/30/2017	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
03/31/2009	-4.01	-20.33	-5.03	-0.23	5.92





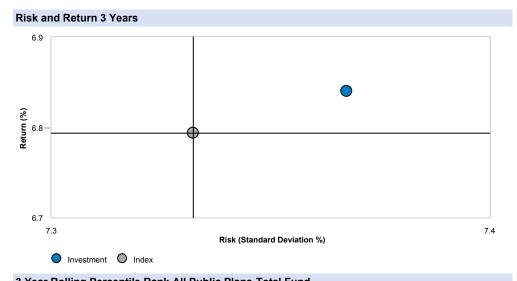
Historical Rolling P	Performance				
	QTR	1 YR	3 YR	5 YR	Inception
12/31/2018	-9.54	-3.95	6.79	5.78	N/A
09/30/2018	3.85	10.59	11.74	9.19	N/A
06/30/2018	2.49	10.34	8.68	9.53	N/A
03/31/2018	-0.24	10.74	7.65	9.12	N/A
12/31/2017	4.15	15.47	8.59	10.57	N/A
09/30/2017	3.62	12.80	8.34	9.90	N/A
06/30/2017	2.87	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
03/31/2009	-7.00	-25.49	-6.77	-0.75	N/A

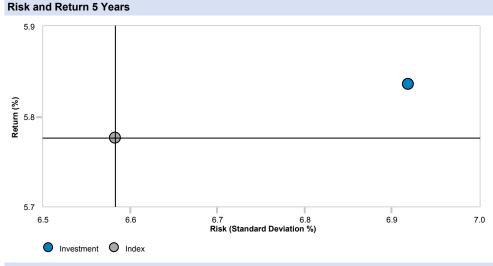


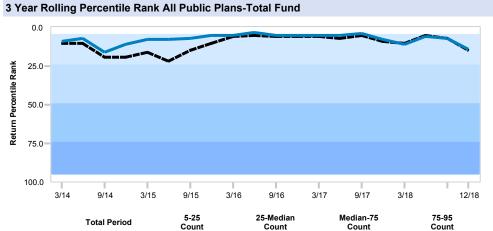


Historical Stati	stics 3 Years						
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	6.84	7.37	0.80	100.45	10	100.21	2
Index	6.79	7.33	0.80	100.00	10	100.00	2

Historical Statis	stics 5 Years						
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	5.84	6.92	0.76	102.51	16	104.58	4
Index	5.78	6.58	0.79	100.00	15	100.00	5







0 (0%)

0 (0%)

0 (0%)

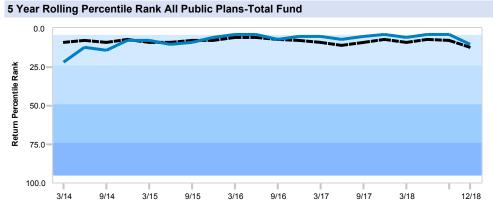
0 (0%)

0 (0%)

0 (0%)

20 (100%)

20 (100%)



	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%)	



Investment

__ Index

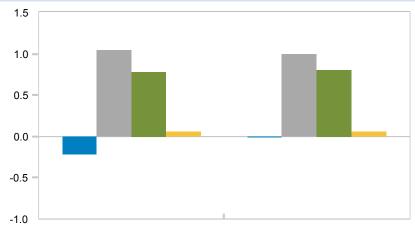
20

20



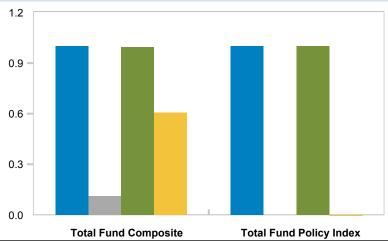


Risk / Reward Historical Statistics 3 Years Ending December 31, 2018



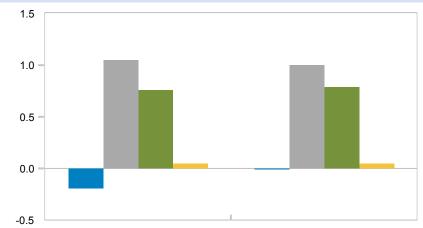
	Total Fund Composite	Total Fund Policy Index
Alpha	-0.22	0.00
■ Beta	1.04	1.00
Sharpe Ratio	0.78	0.80
Treynor Ratio	0.06	0.06

Benchmark Relative Historical Statistics 3 Years Ending December 31, 2018



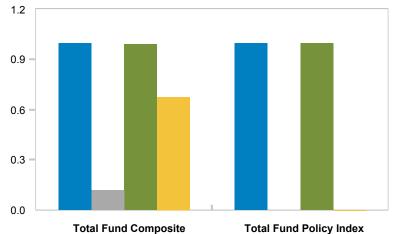
0.0			
	Total Fund Composite	Total Fund Policy Index	
Actual Correlation	1.00	1.00	
Information Ratio	0.11	N/A	
R-Squared	1.00	1.00	
Tracking Error	0.61	0.00	

Risk / Reward Historical Statistics 5 Years Ending December 31, 2018



	Total Fund Composite	Total Fund Policy Index
Alpha	-0.19	0.00
Beta	1.05	1.00
Sharpe Ratio	0.76	0.79
Treynor Ratio	0.05	0.05

Benchmark Relative Historical Statistics 5 Years Ending December 31, 2018



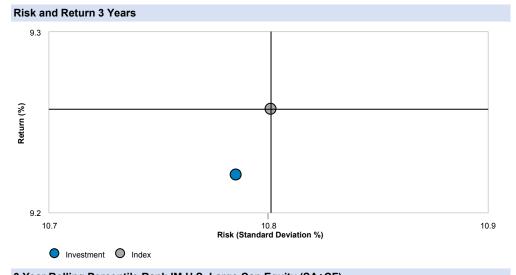
	rotal Fulla Colliposite	Total Fully Folicy
Actual Correlation	1.00	1.00
Information Ratio	0.12	N/A
R-Squared	0.99	1.00
Tracking Error	0.68	0.00

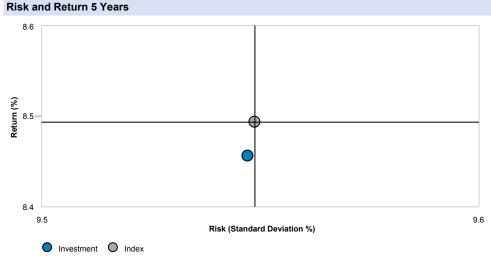
Benchmark: Total Fund Policy Index

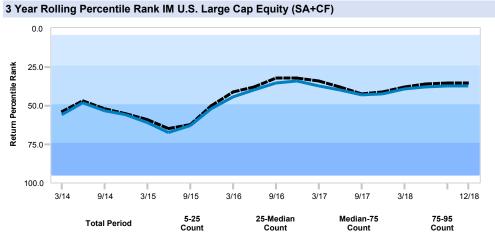


Historical Stati	stics 3 Years						
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	9.22	10.79	0.78	99.76	10	99.88	2
Index	9.26	10.80	0.78	100.00	10	100.00	2

Historical Statis	stics 5 Years						
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	8.46	9.55	0.84	99.77	17	100.15	3
Index	8.49	9.55	0.84	100.00	17	100.00	3







13 (65%)

14 (70%)

7 (35%)

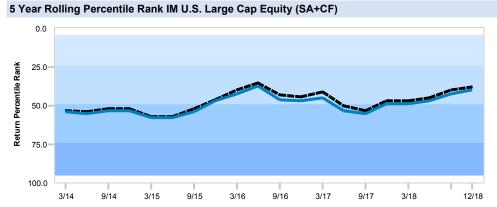
6 (30%)

0 (0%)

0 (0%)

0 (0%)

0 (0%)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	0 (0%)	11 (55%)	9 (45%)	0 (0%)
Index	20	0 (0%)	12 (60%)	8 (40%)	0 (0%)

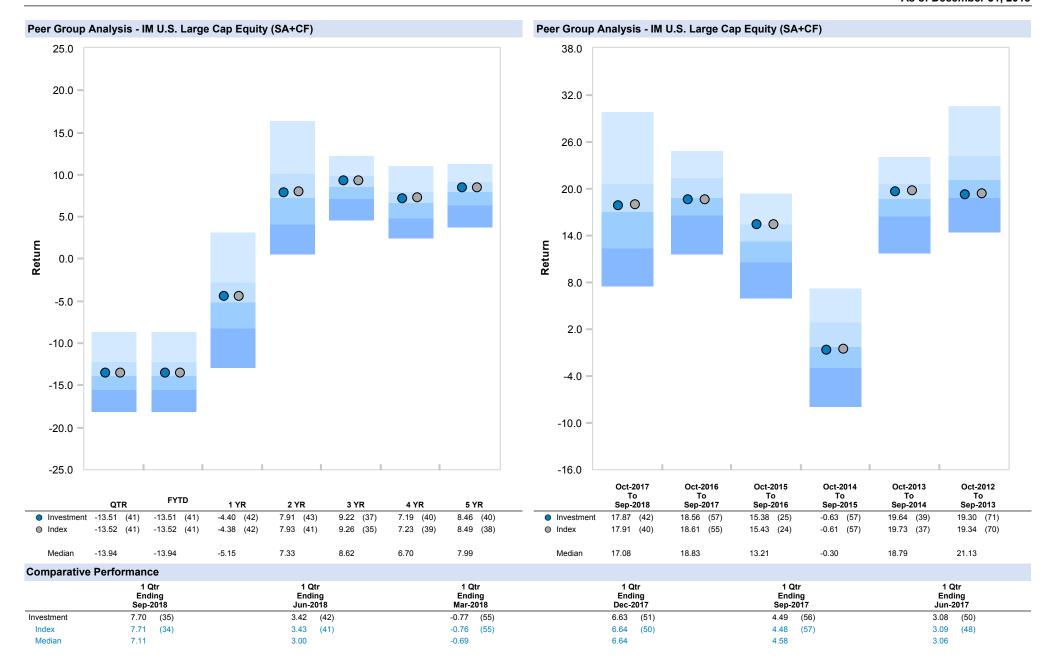


Investment

__ Index

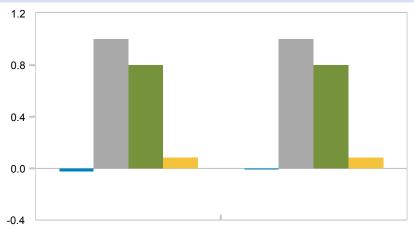
20

20



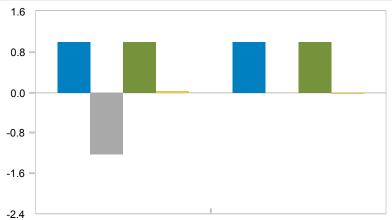


Risk / Reward Historical Statistics 3 Years Ending December 31, 2018



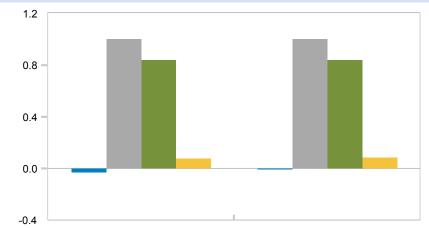
	Rhumbline S&P 500 Equity	S&P 500 Index
Alpha	-0.03	0.00
■ Beta	1.00	1.00
Sharpe Ratio	0.80	0.80
Treynor Ratio	0.09	0.09

Benchmark Relative Historical Statistics 3 Years Ending December 31, 2018



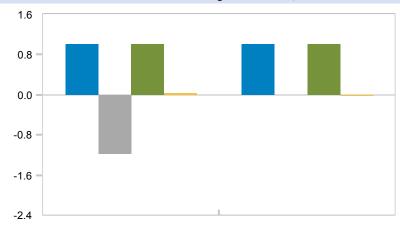
	Rhumbline S&P 500 Equity	S&P 500 Index
Actual Correlation	1.00	1.00
Information Ratio	-1.23	N/A
R-Squared	1.00	1.00
Tracking Error	0.03	0.00

Risk / Reward Historical Statistics 5 Years Ending December 31, 2018



	Rhumbline S&P 500 Equity	S&P 500 Index
Alpha	-0.03	0.00
■ Beta	1.00	1.00
Sharpe Ratio	0.84	0.84
Treynor Ratio	0.08	0.08

Benchmark Relative Historical Statistics 5 Years Ending December 31, 2018



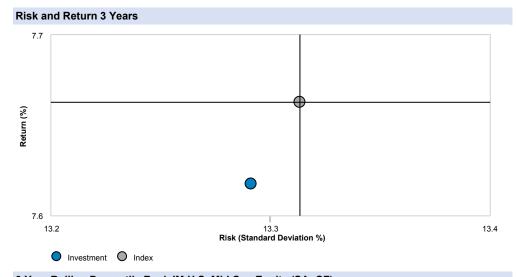
	Rhumbline S&P 500 Equity	S&P 500 Index
Actual Correlation	1.00	1.00
Information Ratio	-1.18	N/A
R-Squared	1.00	1.00
Tracking Error	0.03	0.00

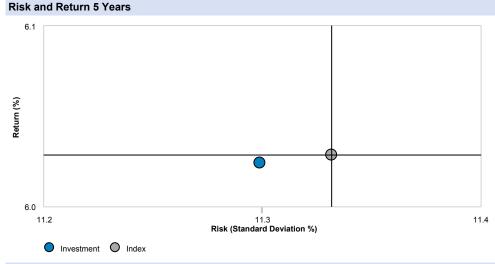
Benchmark: S&P 500 Index

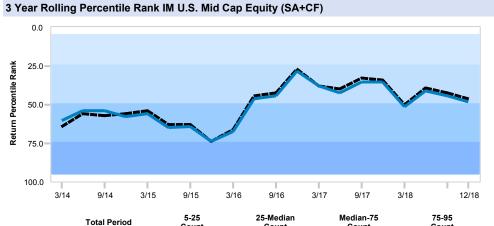


Historical Statistics 3 Years							
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	7.62	13.29	0.55	99.75	10	99.94	2
Index	7.66	13.31	0.55	100.00	10	100.00	2

Historical Statistics 5 Years							
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	6.02	11.30	0.52	99.76	15	99.64	5
Index	6.03	11.33	0.52	100.00	15	100.00	5







Count

10 (50%)

11 (55%)

Count

0 (0%)

0 (0%)

20

20

Count

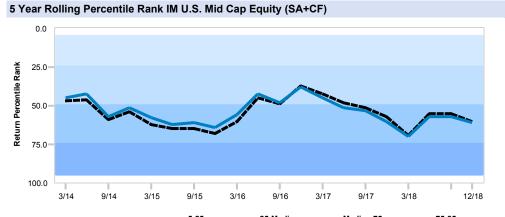
0 (0%)

0 (0%)

Count

10 (50%)

9 (45%)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count	
Investment	20	0 (0%)	6 (30%)	14 (70%)	0 (0%)	
Index	20	0 (0%)	7 (35%)	13 (65%)	0 (0%)	



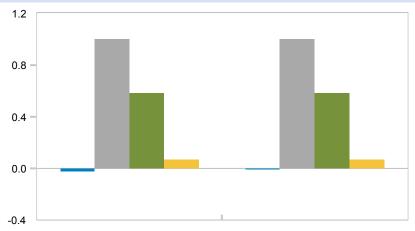
Investment

__ Index



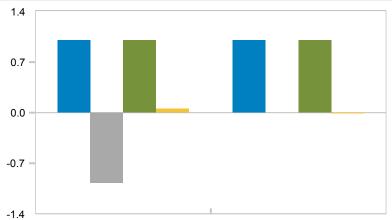


Risk / Reward Historical Statistics 3 Years Ending December 31, 2018



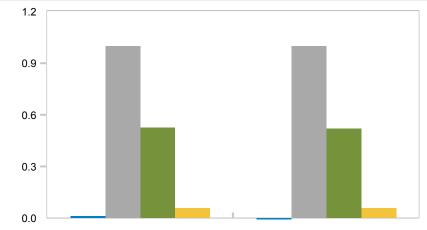
	Rhumbline S&P 400 Equity	S&P MidCap 400 Index
■ Alpha	-0.03	0.00
Beta	1.00	1.00
Sharpe Ratio	0.58	0.58
Treynor Ratio	0.07	0.07

Benchmark Relative Historical Statistics 3 Years Ending December 31, 2018



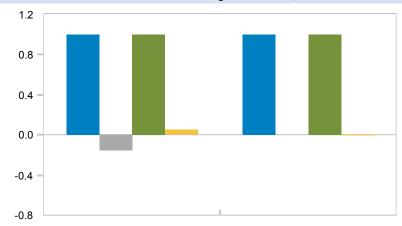
	Rhumbline S&P 400 Equity	S&P MidCap 400 Index
Actual Correlation	1.00	1.00
Information Ratio	-0.98	N/A
R-Squared	1.00	1.00
Tracking Error	0.05	0.00

Risk / Reward Historical Statistics 5 Years Ending December 31, 2018



	Rhumbline S&P 400 Equity	S&P MidCap 400 Index
Alpha	0.01	0.00
Beta	1.00	1.00
Sharpe Ratio	0.52	0.52
Treynor Ratio	0.06	0.06

Benchmark Relative Historical Statistics 5 Years Ending December 31, 2018



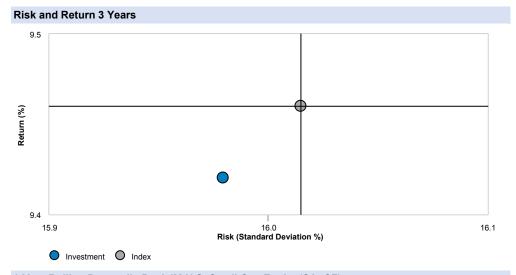
	Rhumbline S&P 400 Equity	S&P MidCap 400 Index
Actual Correlation	1.00	1.00
Information Ratio	-0.15	N/A
R-Squared	1.00	1.00
Tracking Error	0.05	0.00

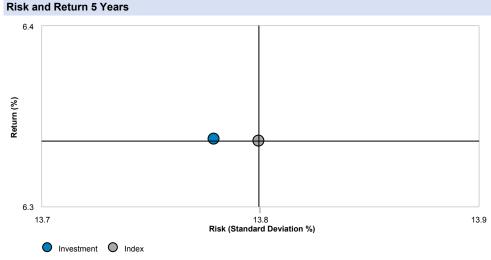
Benchmark: S&P MidCap 400 Index



Historical Statistics 3 Years									
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters		
Investment	9.42	15.98	0.58	99.72	11	99.80	1		
Index	9.46	16.02	0.58	100.00	11	100.00	1		

Historical Statis	stics 5 Years						
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	6.34	13.78	0.48	99.88	17	99.79	3
Index	6.34	13.80	0.48	100.00	17	100.00	3







Count

17 (85%)

16 (80%)

Count

0 (0%)

0 (0%)

Count

1 (5%)

1 (5%)

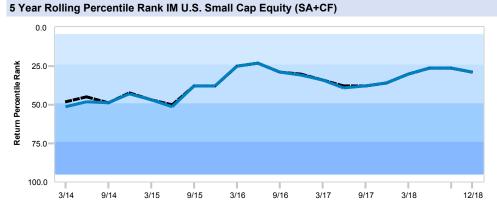
Count

2 (10%)

3 (15%)

20

20

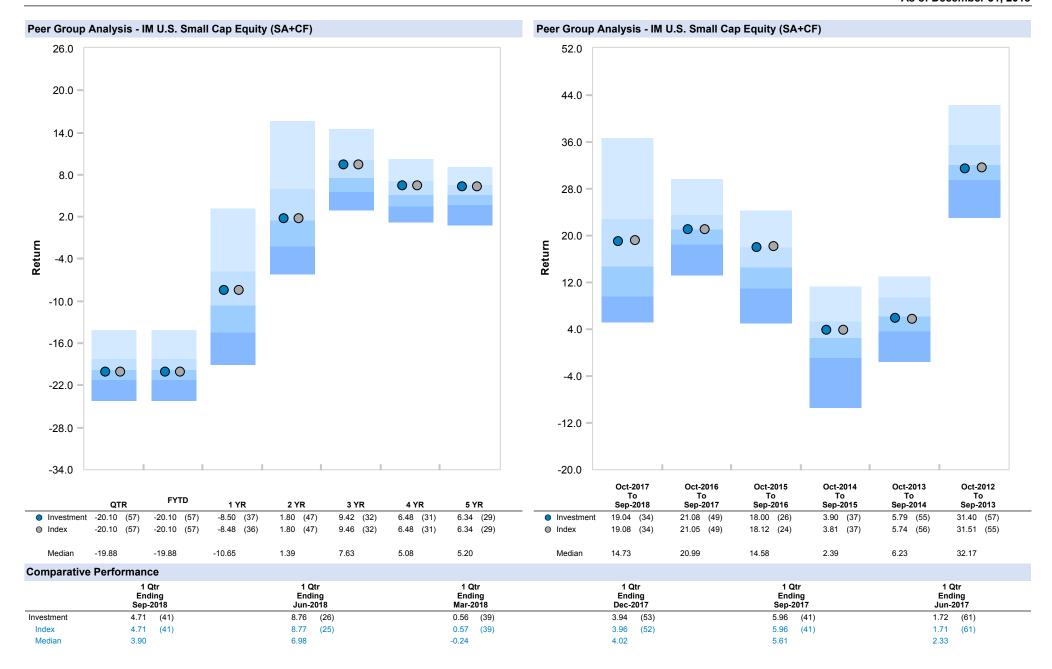


	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count	
Investment	20	2 (10%)	16 (80%)	2 (10%)	0 (0%)	
Index	20	2 (10%)	18 (90%)	0 (0%)	0 (0%)	



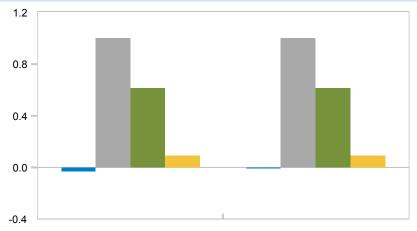
Investment

__ Index



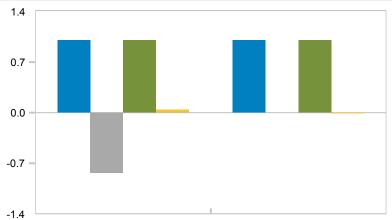


Risk / Reward Historical Statistics 3 Years Ending December 31, 2018



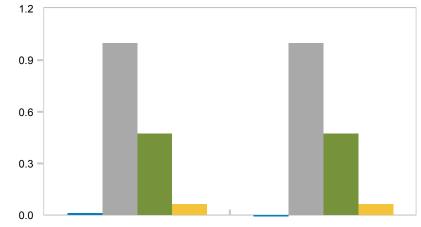
	Rhumbline S&P 600 Equity	S&P SmallCap 600 Index
Alpha	-0.03	0.00
■ Beta	1.00	1.00
Sharpe Ratio	0.62	0.62
Treynor Ratio	0.09	0.09

Benchmark Relative Historical Statistics 3 Years Ending December 31, 2018



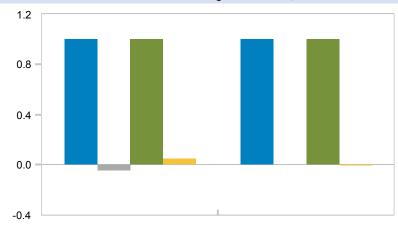
	Rhumbline S&P 600 Equity	S&P SmallCap 600 Index
Actual Correlation	1.00	1.00
Information Ratio	-0.84	N/A
R-Squared	1.00	1.00
Tracking Error	0.05	0.00

Risk / Reward Historical Statistics 5 Years Ending December 31, 2018



	Rhumbline S&P 600 Equity	S&P SmallCap 600 Index
■ Alpha	0.01	0.00
■ Beta	1.00	1.00
Sharpe Ratio	0.48	0.48
Treynor Ratio	0.07	0.07

Benchmark Relative Historical Statistics 5 Years Ending December 31, 2018



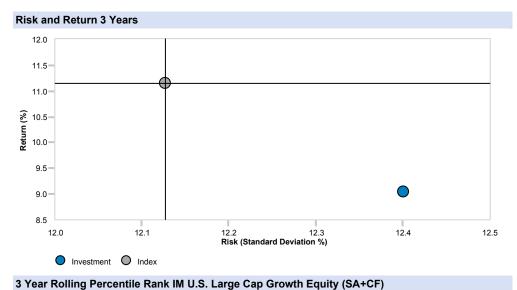
	Rhumbline S&P 600 Equity	S&P SmallCap 600 Index
Actual Correlation	1.00	1.00
Information Ratio	-0.04	N/A
R-Squared	1.00	1.00
Tracking Error	0.05	0.00

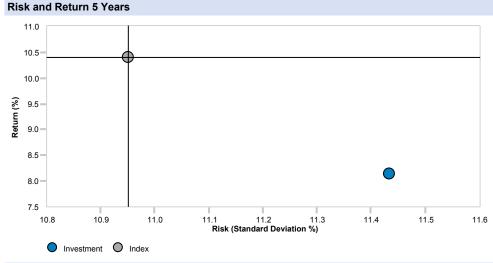
Benchmark: S&P SmallCap 600 Index

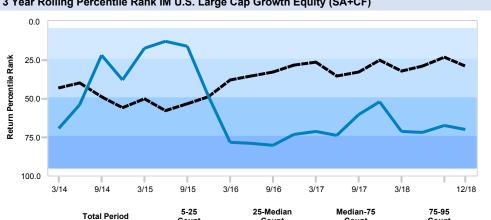


Historical Statistics 3 Years								
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters	
Investment	9.04	12.40	0.68	97.66	9	112.48	3	
Index	11 15	12 13	0.85	100.00	11	100.00	4	

Historical Statistics 5 Years									
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters		
Investment	8.14	11.43	0.69	90.09	15	113.69	5		
Index	10.40	10.95	0.91	100.00	18	100.00	2		







Count

2 (10%)

15 (75%)

Count

4 (20%)

2 (10%)

Count

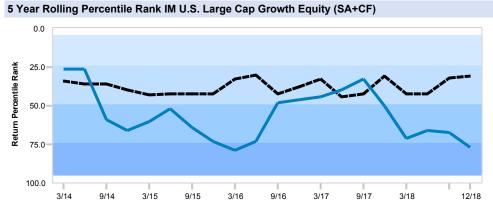
3 (15%)

0 (0%)

Count

11 (55%)

3 (15%)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count	
Investment	20	0 (0%)	8 (40%)	10 (50%)	2 (10%)	
Index	20	0 (0%)	20 (100%)	0 (0%)	0 (0%)	

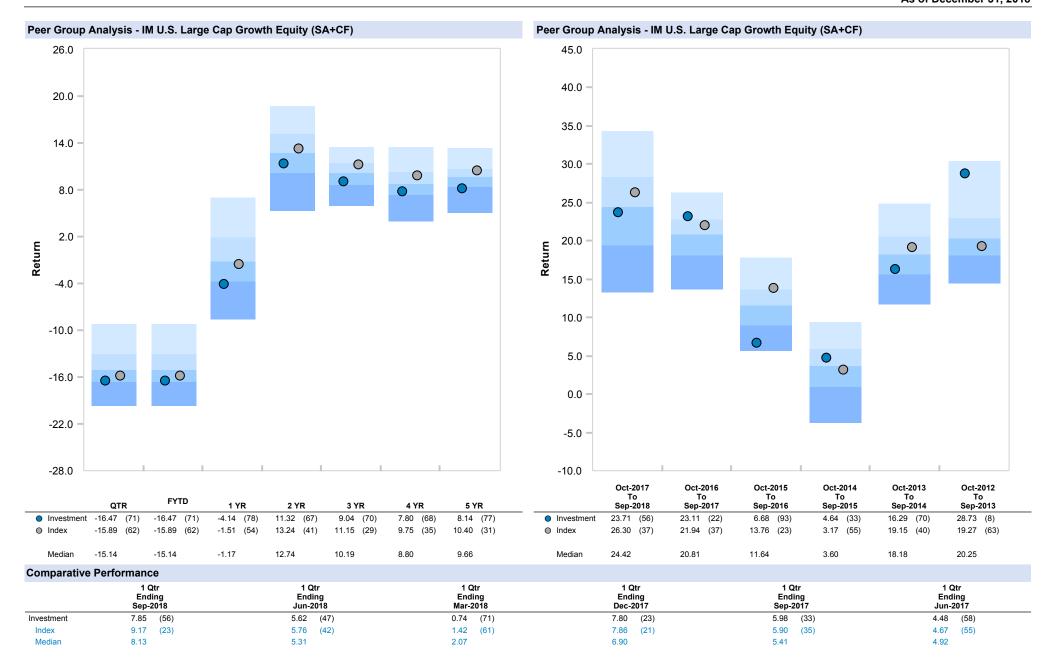


Investment

__ Index

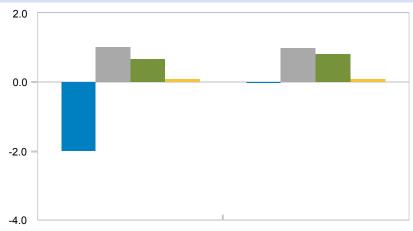
20

20



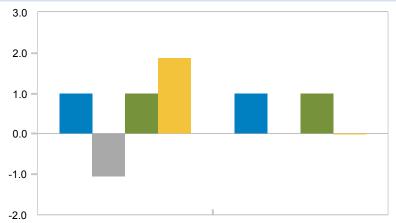


Risk / Reward Historical Statistics 3 Years Ending December 31, 2018



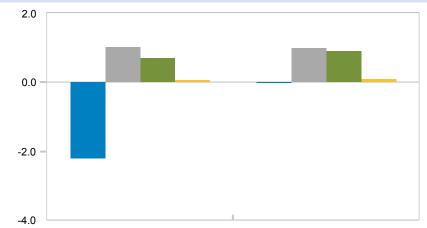
	Highland Capital Equity	Russell 1000 Growth Index
Alpha	-1.99	0.00
Beta	1.01	1.00
Sharpe Ratio	0.66	0.82
Treynor Ratio	0.09	0.11

Benchmark Relative Historical Statistics 3 Years Ending December 31, 2018



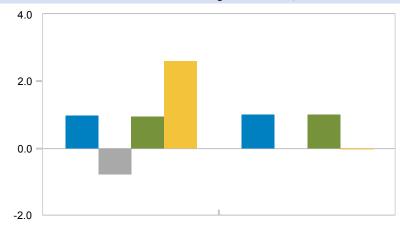
	Highland Capital Equity	Russell 1000 Growth Index
Actual Correlation	0.99	1.00
Information Ratio	-1.03	N/A
R-Squared	0.98	1.00
Tracking Error	1.86	0.00

Risk / Reward Historical Statistics 5 Years Ending December 31, 2018



	Highland Capital Equity	Russell 1000 Growth Index
■ Alpha	-2.22	0.00
■ Beta	1.02	1.00
Sharpe Ratio	0.69	0.91
Treynor Ratio	0.08	0.10

Benchmark Relative Historical Statistics 5 Years Ending December 31, 2018



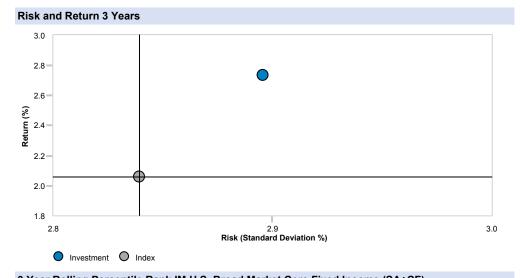
	Highland Capital Equity	Russell 1000 Growth Index
Actual Correlation	0.97	1.00
Information Ratio	-0.79	N/A
R-Squared	0.95	1.00
Tracking Error	2.59	0.00

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	2.73	2.90	0.60	110.31	9	94.40	3		
Index	2.06	2 84	0.38	100.00	q	100.00	3		

Historical Statistics 5 Years									
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters		
Investment	2.72	2.88	0.73	101.99	15	91.10	5		
Index	2.52	2.89	0.65	100.00	15	100.00	5		







7 (35%)

0 (0%)

2 (10%)

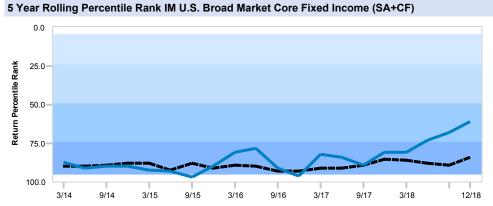
0 (0%)

11 (55%)

20 (100%)

0 (0%)

0 (0%)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	0 (0%)	0 (0%)	3 (15%)	17 (85%)
Index	20	0 (0%)	0 (0%)	0 (0%)	20 (100%)



Investment

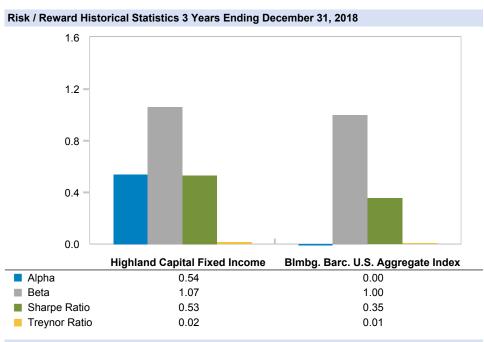
__ Index

20

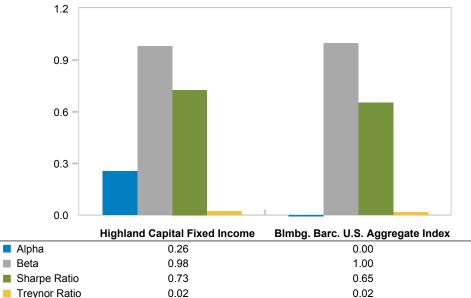
20



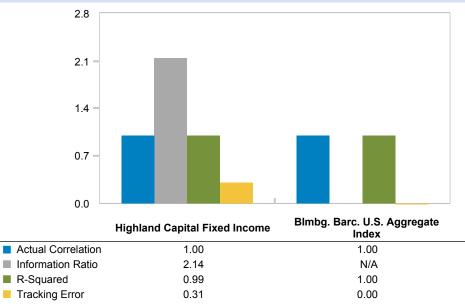




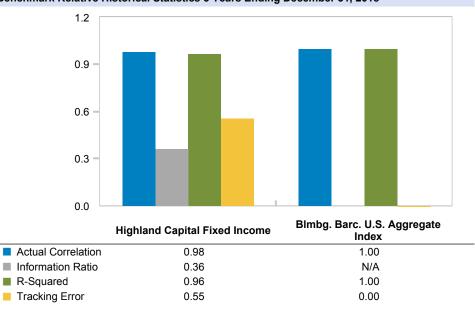
Risk / Reward Historical Statistics 5 Years Ending December 31, 2018



Benchmark Relative Historical Statistics 3 Years Ending December 31, 2018



Benchmark Relative Historical Statistics 5 Years Ending December 31, 2018

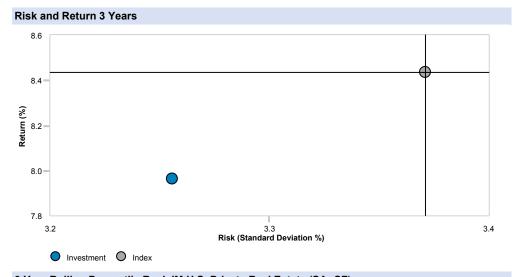


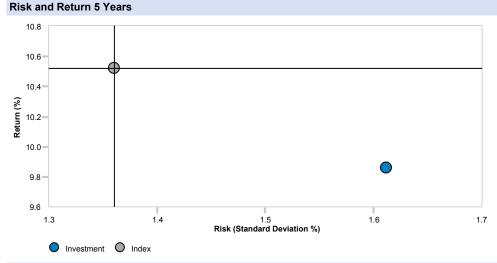
Benchmark: Blmbg. Barc. U.S. Aggregate Index

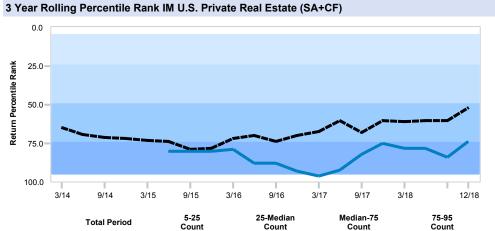


Historical Statistics 3 Years									
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters		
Investment	7.97	3.26	2.09	94.58	12	N/A	N/A		
Index	8 44	3 37	2 14	100.00	12	N/A	N/A		

Historical Statistics 5 Years								
	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters	
Investment	9.86	1.61	5.03	94.00	20	N/A	N/A	
Index	10.52	1.36	5.89	100.00	20	N/A	N/A	







0 (0%)

0 (0%)

2 (13%)

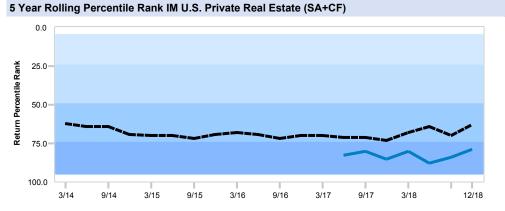
18 (90%)

13 (87%)

2 (10%)

0 (0%)

0 (0%)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	7	0 (0%)	0 (0%)	0 (0%)	7 (100%)
Index	20	0 (0%)	0 (0%)	20 (100%)	0 (0%)

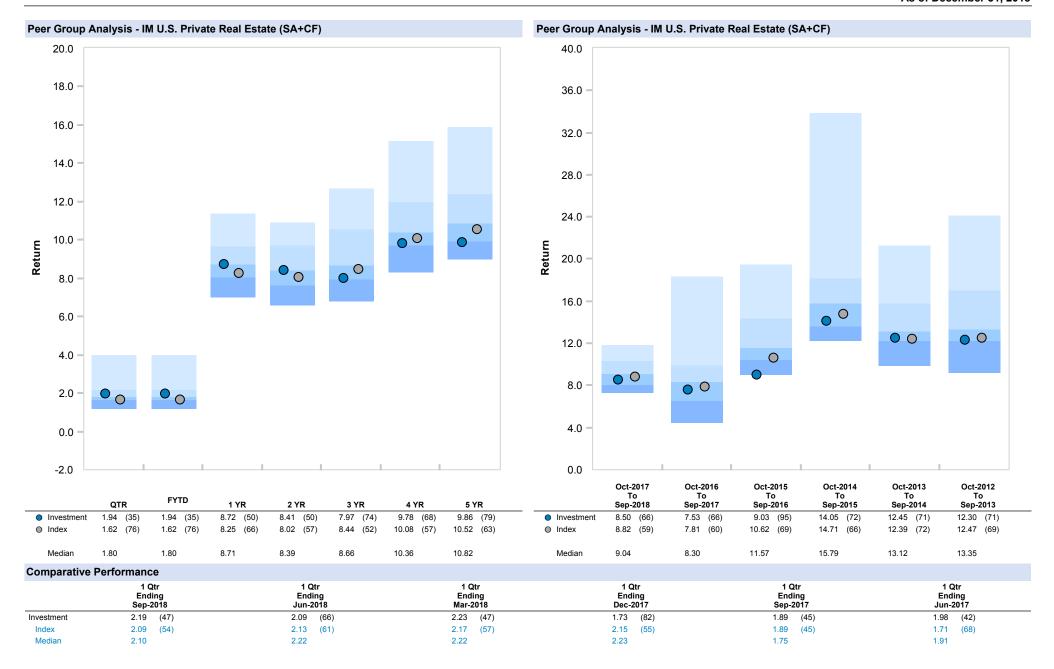


Investment

__ Index

15

20





	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
Rhumbline S&P 500 Equity	0.05	23,184,252	11,592	0.05 % of Assets
Rhumbline S&P 400 Equity	0.05	8,713,662	4,357	0.05 % of Assets
Rhumbline S&P 600 Equity	0.05	8,799,832	4,400	0.05 % of Assets
Rhumbline International Equity	0.05	8,277,743	4,139	0.05 % of Assets
Highland Capital Balanced	0.42	30,899,533	128,373	0.50 % of First \$10 M 0.38 % Thereafter
American Realty	1.10	9,443,455	103,878	1.10 % of Assets
R&D Cash		2,182	-	
Total Fund Composite	0.29	89,320,659	256,739	

Total Policy Historical Hybrid Composition		Total Equity Historical Hybrid Composition	Total Equity Historical Hybrid Composition		
Allocation Mandate	Weight (%)	Allocation Mandate	Weight (%)		
Mar-1992		Jun-2000			
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	Jan-2003			
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	lan 2004			
		Jan-2004 S&P 500 Index	60.00		
Oct-2010			60.00		
Blmbg. Barc. U.S. Aggregate Index	31.00	S&P MidCap 400 Index	20.00		
S&P 500 Index	25.00	S&P SmallCap 600 Index	20.00		
S&P MidCap 400 Index	10.00	Jan-2007			
Russell 1000 Growth Index	10.00	S&P 500 Index	62.00		
MSCI EAFE Index	10.00	S&P MidCap 400 Index	15.00		
S&P SmallCap 600 Index	10.00	S&P SmallCap 600 Index	15.00		
FTSE Non-U.S. World Government Bond	4.00	MSCI EAFE Index	8.00		
Apr-2012		Oct-2007			
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	Russell 1000 Glowill Index	13.40		
FTSE Non-U.S. World Government Bond	4.00				
NCREIF Property Index	2.00				
Oct-2015					
Blmbg. Barc. U.S. Aggregate Index	26.00				
S&P 500 Index	25.00				
S&P MidCap 400 Index	10.00				
Russell 1000 Growth Index	10.00				
MSCI EAFE Index	10.00	Total Fixed Income Historical Hybrid Composition	Total Fixed Income Historical Hybrid Composition		
S&P SmallCap 600 Index	10.00	Allocation Mandate	Weight (%)		
FTSE Non-U.S. World Government Bond	4.00		Worght (70)		
NCREIF Fund Index-Open End Diversified Core (EW)	5.00	Apr-1994	90.00		
		Blmbg. Barc. U.S. Aggregate Index FTSE Non-U.S. World Government Bond	89.00 11.00		
		FISE Non-U.S. World Government Bond	11.00		



Δ	cti	ve	R	۵tı	ırn

- Arithmetic difference between the manager's performance and the designated benchmark return over a specified time period.

Alpha

- 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.

Beta

- A measure of the sensitivity of a portfolio to the movements in the market. It is a measure of the portfolio's systematic risk.

Consistency

- 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.

Distributed to Paid In (DPI)

- 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.

Down Market Capture

- The ratio of average portfolio performance over the designated benchmark during periods of negative returns. A lower value indicates better product performance

Downside Risk

- 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.

Excess Return

- Arithmetic difference between the manager's performance and the risk-free return over a specified time period.

Excess Risk

- A measure of the standard deviation of a portfolio's performance relative to the risk free return.

Information Ratio

- 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.

Public Market Equivalent (PME)

- 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.

R-Squared

- 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.

Return

- Compounded rate of return for the period.

Sharpe Ratio

- 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.

Standard Deviation

- 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.

Total Value to Paid In (TVPI)

- 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

Tracking Error

- This is a measure of the standard deviation of a portfolio's returns in relation to the performance of its designated market benchmark.

Treynor Ratio

- 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.

Up Market Capture

- 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.

AndCo uses time-weighted calculations which are founded on standards recommended by the CFA Institute. The calculations and values shown are based on information that is received from custodians. AndCo analyzes transactions as indicated on the custodian statements and reviews the custodial market values of the portfolio. As a result, this provides AndCo with a reasonable basis that the investment information presented is free from material misstatement. This methodology of evaluating and measuring performance provides AndCo with a practical foundation for our observations and recommendations. Nothing came to our attention that would cause AndCo to believe that the information presented is significantly misstated.

This performance report is based on data obtained by the client's custodian(s), investment fund administrator, or other sources believed to be reliable. While these sources are believed to be reliable, the data providers are responsible for the accuracy and completeness of their statements. Clients are encouraged to compare the records of their custodian(s) to ensure this report fairly and accurately reflects their various asset positions.

The strategies listed may not be suitable for all investors. We believe the information provided here is reliable, but do not warrant its accuracy or completeness. Past performance is not an indication of future performance. Any information contained in this report is for informational purposes only and should not be construed to be an offer to buy or sell any securities, investment consulting, or investment management services.

Additional information included in this document may contain data provided by from index databases, public economic sources and the managers themselves.

This document may contain data provided by Bloomberg Barclays. Bloomberg Barclays Index data provided by way of Barclays Live.

This document may contain data provided by Standard and Poor's. Nothing contained within any document, advertisement or presentation from S&P Indices constitutes an offer of services in jurisdictions where S&P Indices does not have the necessary licenses. All information provided by S&P Indices is impersonal and is not tailored to the needs of any person, entity or group of persons. Any returns or performance provided within any document is provided for illustrative purposes only and does not demonstrate actual performance. Past performance is not a guarantee of future investment results.

This document may contain data provided by MSCI, Inc. Copyright MSCI, 2017. Unpublished. All Rights Reserved. This information may only be used for your internal use, may not be reproduced or redisseminated in any form and may not be used to create any financial instruments or products or any indices. This information is provided on an "as is" basis and the user of this information assumes the entire risk of any use it may make or permit to be made of this information. Neither MSCI, any of its affiliates or any other person involved in or related to compiling, computing or creating this information makes any express or implied warranties or representations with respect to such information or the results to be obtained by the use thereof, and MSCI, its affiliates and each such other person hereby expressly disclaim all warranties (including, without limitation, all warranties of originality, accuracy, completeness, timeliness, non-infringement, merchantability and fitness for a particular purpose) with respect to this information. Without limiting any of the foregoing, in no event shall MSCI, any of its affiliates or any other person involved in or related to compiling, computing or creating this information have any liability for any direct, indirect, special, incidental, punitive, consequential or any other damages (including, without limitation, lost profits) even if notified of, or if it might otherwise have anticipated, the possibility of such damages.

This document may contain data provided by Russell Investment Group. Russell Investment Group is the source owner of the data contained or reflected in this material and all trademarks and copyrights related thereto. The material may contain confidential information and unauthorized use, disclosure, copying, dissemination or redistribution is strictly prohibited. This is a user presentation of the data. Russell Investment Group is not responsible for the formatting or configuration of this material or for any inaccuracy in presentation thereof.

This document may contain data provided by Morningstar. All rights reserved. Use of this content requires expert knowledge. It is to be used by specialist institutions only. The information contained herein: (1) is proprietary to Morningstar and/or its content providers; (2) may not be copied, adapted or distributed; and (3) is not warranted to be accurate, complete or timely. Neither Morningstar nor its content providers are responsible for any damages or losses arising from any use of this information, except where such damages or losses cannot be limited or excluded by law in your jurisdiction. Past financial performance is not quarantee of future results.



Putting clients first.



CHICAGO | CLEVELAND | DALLAS | DETROIT | ORLANDO | PITTSBURGH | RENO | TULSA