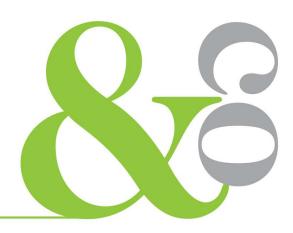
Investment Performance Review Period Ending June 30, 2019

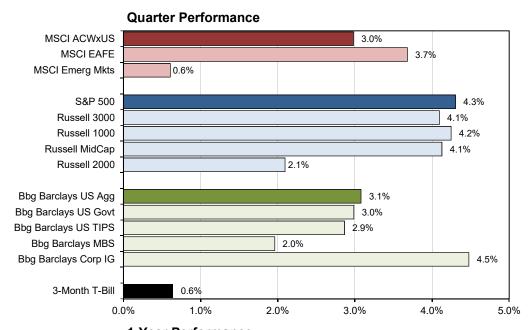
### **City of Venice Municipal Police Officers' Pension Trust Fund**

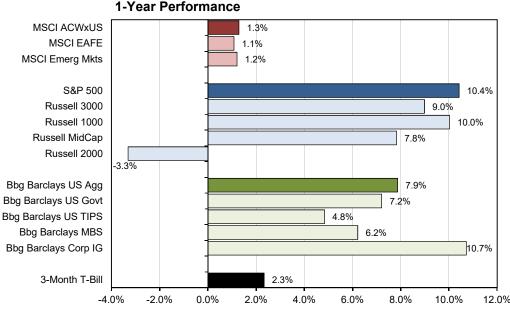


**2nd Quarter 2019 Market Environment** 



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

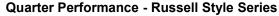


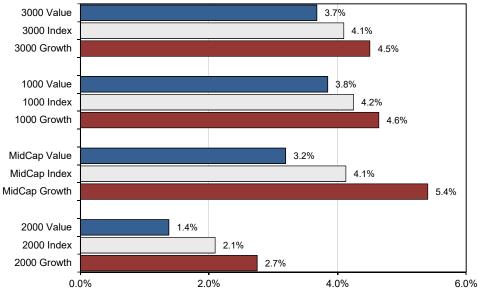




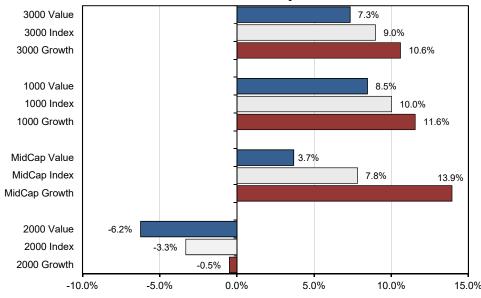
Source: Investment Metrics 2

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





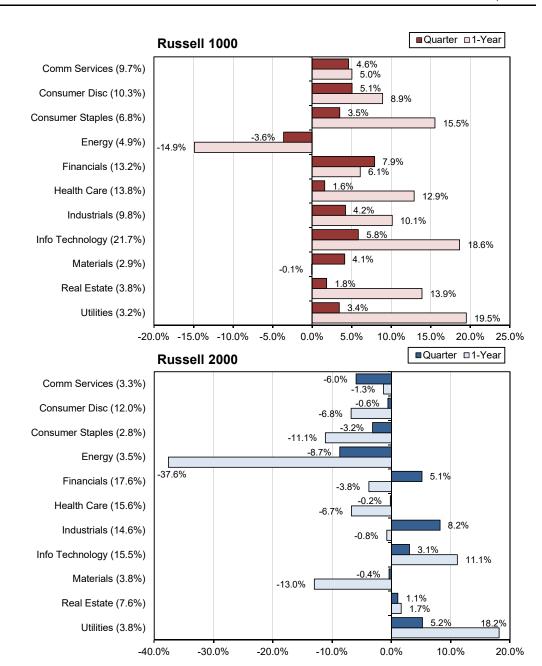
### 1-Year Performance - Russell Style Series





Source: Investment Metrics 3

- Sector performance was broadly positive across large cap sectors for the 2nd quarter. There were gains for ten out of eleven sectors within the Russell 1000 Index during the period with four sectors outpacing the return of the index. Cyclical sectors such as technology, industrials and consumer discretionary were some of the best performers through the quarter returning 5.8%, 4.2% and 5.1% respectively. Financials also outperformed, returning 7.9%, as investors weighed the benefits of continued economic expansion due to easing monetary policy against the effects of lower interest rates on bank earnings. More defensive higher yielding sectors such as consumer staples, real estate and utilities underperformed for the quarter returning 3.5%, 1.8% and 3.4% respectively. The energy sector was the only large cap sector to post a negative return during the quarter, falling -3.6%, as headwinds from weakening economic data and low oil and natural gas prices weighed on 1st quarter earnings. Health care stocks also lagged as continued discussions in Washington around the potential for increased regulation on drug pricing acted as a headwind. Returns over the 1-year period were positive with nine out of eleven sectors posting gains, six of which were over 10%. Defensive sectors such as utilities, REITs and consumer staples performed well returning 19.5%, 13.9% and 15.5% respectively. Technology returns were also strong gaining 18.6%. Energy and materials were the only sectors to post negative results over the 1-year period with energy falling -14.9% and materials returning -0.1%.
- Quarterly results for small cap sectors were generally worse than their large capitalization counterparts with only two of eleven sectors (industrials and utilities) outperforming their corresponding large cap equivalents. Five of eleven sectors produced gains during the period with four of eleven economic sectors outpacing the Russell 2000 Index return for the quarter. Similar to large caps, cyclical sectors performed well on hopes that any Fed policy easing would counteract the recent weakness in economic growth. The industrials sector performed particularly well returning 8.2%, financials posted a 5.1% gain and technology returned 3.1%. Utilities also outperformed returning 5.2%. The largest detractors over the period were energy and communication services which returned -8.7% and -6.0% respectively. Over the trailing 1-year period, returns were broadly negative. Utilities and technology were relative bright spots returning 18.2% and 11.1%. The energy sector was an outlier in terms of negative returns losing -37.6% during the period. There were also notable losses in materials and consumer staples with materials losing -13.0% and consumer staples falling -11.1%.



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

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

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

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

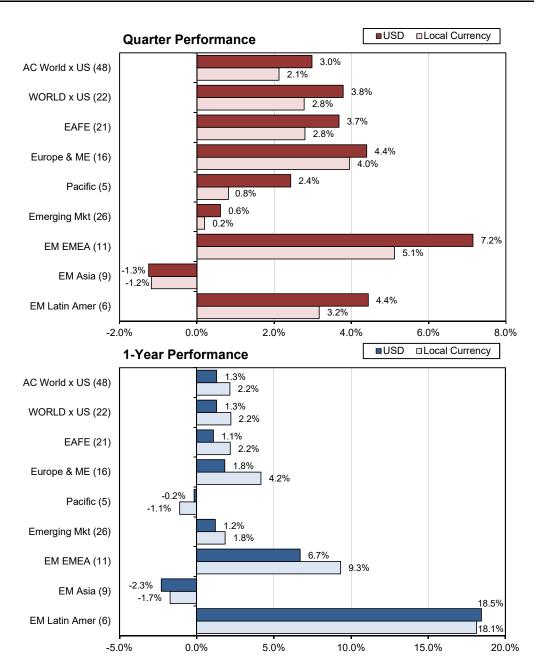
Bottom 10 Performing Stocks (by Quarter)								
Russell 1000	Weight	1 Qtr Return	1 Year Return	Sector				
2U Inc	0.01%	-46.9%	-55.0%	Information Technology				
Alkermes PLC	0.01%	-38.2%	-45.2%	Health Care				
Range Resources Corp	0.01%	-37.7%	-58.0%	Energy				
Antero Resources Corp	0.00%	-37.4%	-74.1%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

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

Source: Morningstar Direct 5



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



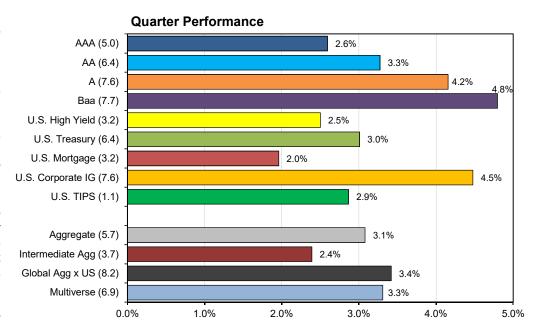


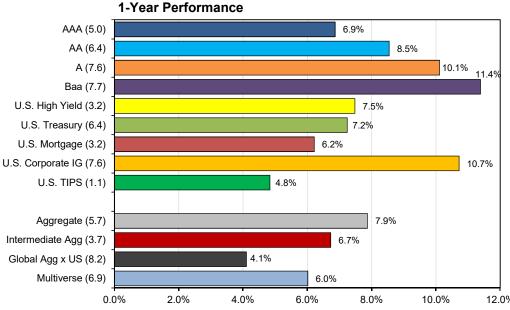
MSCI EAFE	Sector Weight	Quarter Return	1 Year Return
Communication Services	5.4%	4.0%	4.3%
Consumer Discretionary	11.1%	5.9%	-2.6%
Consumer Staples	11.7%	1.9%	4.8%
Energy	5.6%	0.4%	-5.5%
Financials	18.9%	4.3%	-2.9%
Health Care	11.2%	2.0%	7.5%
Industrials	14.8%	5.9%	2.4%
Information Technology	6.7%	6.6%	2.7%
Materials	7.4%	3.9%	0.2%
Real Estate	3.6%	-2.2%	2.3%
Utilities	3.6%	1.5%	9.8%
Total	100.0%	3.7%	1.1%
MSCI ACWIXUS	Sector Weight	Quarter Return	1 Year Return
Communication Services	6.9%	1.0%	5.6%
Consumer Discretionary	11.3%	3.8%	-3.6%
Consumer Staples	9.8%	2.2%	4.6%
Energy	7.2%	0.5%	-1.4%
Financials	21.9%	4.4%	2.0%
Health Care	8.3%	1.2%	4.2%
Industrials	11.9%	5.2%	2.9%
Information Technology	8.5%	4.0%	-0.7%
Materials	7.6%	2.9%	-0.5%
Real Estate	3.3%	-1.6%	4.3%
Utilities	3.3%	2.2%	10.1%
Total	100.0%	3.0%	1.3%
MSCI Emerging Mkt	Sector Weight	Quarter Return	1 Year Return
Communication Services	11.7%	-2.4%	4.5%
Consumer Discretionary	13.5%	-1.2%	-7.6%
Consumer Staples	6.6%	3.3%	0.9%
Energy	7.9%	1.2%	16.3%
Financials	25.2%	4.0%	11.9%
Health Care	2.6%	-6.6%	-24.7%
Industrials	5.3%	0.0%	4.1%
Information Technology	13.9%	-0.1%	-6.1%
Materials	7.6%	-1.2%	-1.9%
Real Estate	3.0%	-0.2%	10.1%
Utilities	2.7%	2.9%	9.0%
Total	100.0%	0.6%	1.2%

	MSCI EAFE	MSCI ACWIXUS	Quarter	1 Year
Country	Weight	Weight	Return	Return
Japan	23.7%	15.8%	1.0%	-4.2%
United Kingdom	16.8%	11.2%	0.9%	-2.1%
France	11.4%	7.6%	6.5%	3.0%
Switzerland	9.3%	6.2%	8.4%	19.8%
Germany	8.8%	5.9%	7.1%	-3.8%
Australia	7.1%	4.8%	7.3%	6.6%
Hong Kong	4.0%	2.7%	1.0%	10.4%
Netherlands	3.6%	2.4%	5.8%	5.3%
Spain	3.0%	2.0%	2.6%	-2.1%
Sweden	2.7%	1.8%	4.9%	3.4%
Italy	2.3%	1.6%	2.9%	-0.7%
Denmark	1.7%	1.1%	1.6%	5.8%
Singapore	1.4%	0.9%	7.0%	8.3%
Finland	1.0%	0.7%	0.2%	-4.7%
Belgium	1.0%	0.7%	1.2%	-9.1%
Norway	0.7%	0.5%	2.4%	-4.3%
Israel	0.6%	0.4%	-3.6%	-4.5%
Ireland	0.5%	0.4%	4.7%	-9.2%
New Zealand	0.3%	0.2%	3.9%	16.0%
Austria	0.2%	0.2%	0.8%	-13.1%
Portugal	0.2%	0.1%	1.6%	-4.6%
Total EAFE Countries	100.0%	66.8%	3.7%	1.1%
Canada	100.070	6.8%	4.9%	3.3%
Total Developed Countries		73.6%	3.8%	1.3%
China		8.3%	-4.0%	-6.7%
Korea		3.3%	-1.0%	-9.1%
Taiwan		2.9%	0.9%	1.1%
India		2.4%	0.5%	7.9%
Brazil		2.0%	7.2%	39.4%
South Africa		1.6%	6.6%	-0.8%
Russia		1.1%	16.9%	27.1%
Thailand		0.8%	9.3%	19.8%
Saudi Arabia		0.8%	0.6%	11.0%
Mexico		0.7%	1.1%	-7.4%
Indonesia		0.6%	3.2%	20.3%
Malaysia		0.6%	1.2%	-0.8%
Philippines		0.3%	4.4%	19.7%
Poland		0.3%	3.5%	10.5%
Qatar		0.3%	0.6%	18.8%
Chile		0.2%	-5.6%	-12.1%
United Arab Emirates		0.2%	-2.7%	3.0%
Turkey		0.1%	2.8%	-17.1%
Colombia		0.1%	-2.4%	-3.7%
Peru		0.1%	-1.9%	3.5%
Argentina		0.1%	31.7%	15.8%
Greece		0.1%	16.2%	-9.2%
Hungary		0.1%	-4.1%	12.7%
Czech Republic		0.1%	2.6%	1.1%
Egypt		0.0%	7.8%	5.4%
		0.0%	-20.8%	-36.7%
Dakietan				
Pakistan Total Emerging Countries		26.4%	0.6%	1,2%



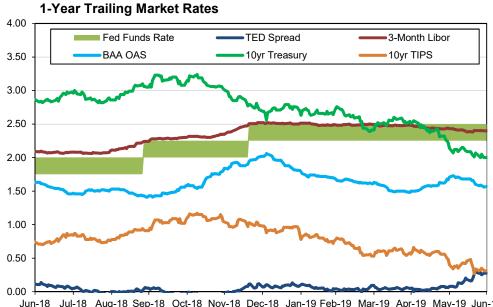
- Broad fixed income benchmarks built on their early 2019 gains during the 2nd guarter. During the 1st guarter, the Federal Open Market Committee (FOMC) reacted to a difficult end to 2018 by issuing guidance that the FOMC is no longer projecting any further interest rate increases through 2019. Federal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



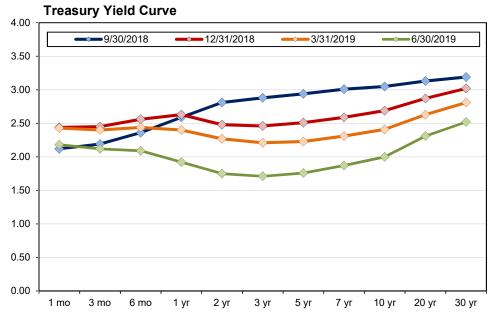




- Global fixed income returns were in line with their domestic counterparts, slightly outperforming during the 2nd guarter. These indices have lower, or in some cases (Germany, Japan), negative yields, but have higher durations. The returns of these indices are also significantly influenced by fluctuations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



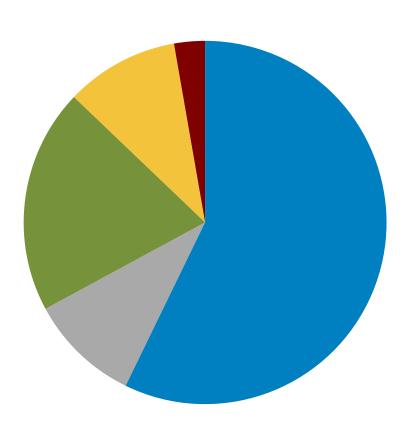
Jun-18 Jul-18 Aug-18 Sep-18 Oct-18 Nov-18 Dec-18 Jan-19 Feb-19 Mar-19 Apr-19 May-19 Jun-19

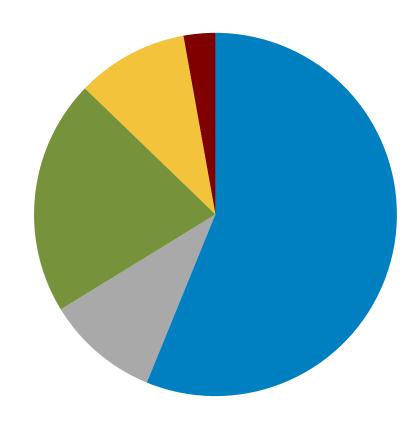




Asset Allocation By Segment as of March 31, 2019 : \$37,106,154

Asset Allocation By Segment as of June 30, 2019 : \$37,890,138



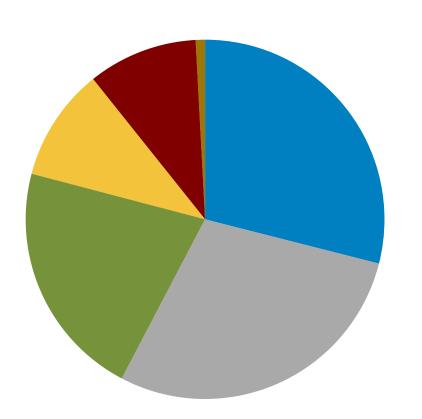


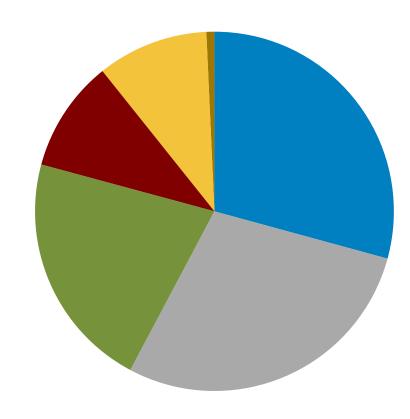
ocation					
Segments	Market Value	Allocation	Segments	Market Value	Allocation
■ Domestic Equity	21,228,314	57.2	■ Domestic Equity	21,285,212	56.2
International Equity	3,671,909	9.9	International Equity	3,814,128	10.1
■ Domestic Fixed Income	7,429,291	20.0	Domestic Fixed Income	7,945,045	21.0
Real Estate	3,753,611	10.1	Real Estate	3,772,865	10.0
Cash Equivalent	1,023,029	2.8	Cash Equivalent	1,072,888	2.8



Asset Allocation By Manager as of March 31, 2019 : \$37,106,154

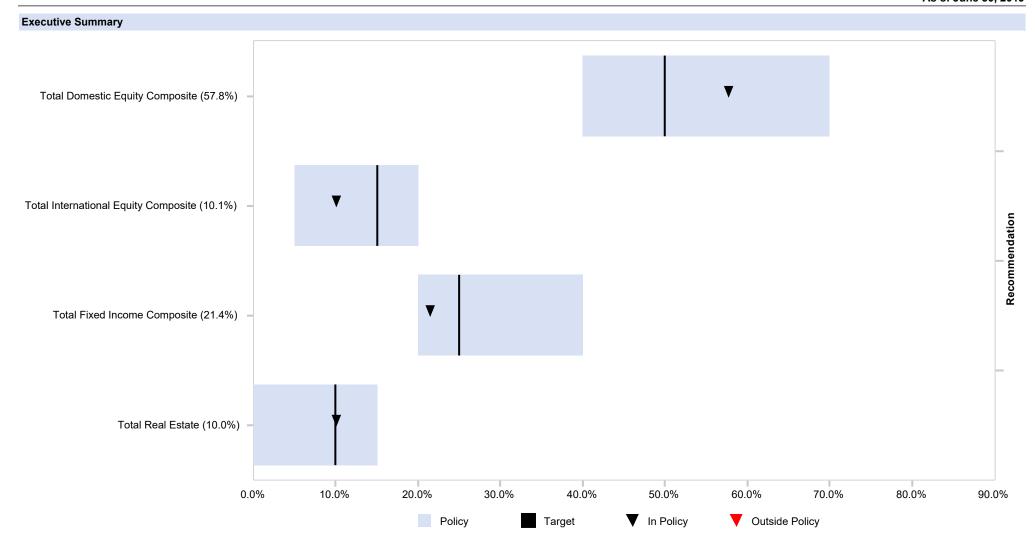
Asset Allocation By Manager as of June 30, 2019 : \$37,890,138





ocation			Allocation		
	Market Value	Allocation		Market Value	Allocation
Fred Alger Large Growth	10,746,422	29.0	Fred Alger Large Growth	11,077,260	29.2
■ Brandywine Dynamic Value	10,657,872	28.7	Brandywine Dynamic Value	10,810,253	28.5
■ Garcia Hamilton Fixed Income	7,942,628	21.4	■ Garcia Hamilton Fixed Income	8,121,882	21.4
ASB (Real Estate)	3,775,036	10.2	American Funds EuroPacific Gr R5 (RERGX)	3,814,128	10.1
■ American Funds EuroPacific Gr R5 (RERGX)	3,671,909	9.9	ASB (Real Estate)	3,794,230	10.0
R&D Account	312,287	0.8	R&D Account	272,385	0.7





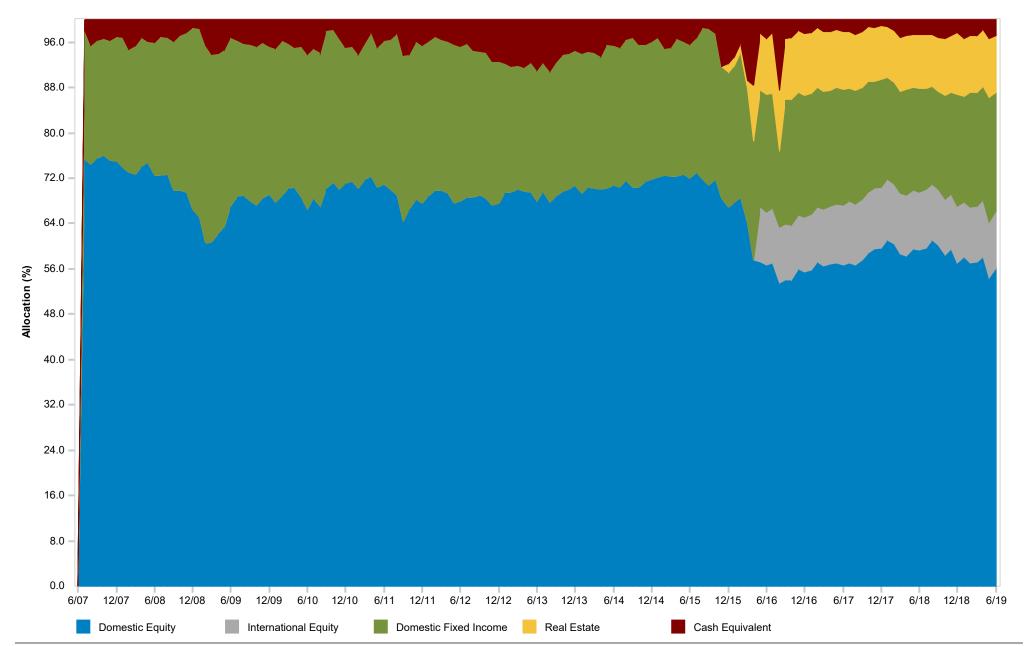
Asset Allocation Compliance				
	Minimum Allocation (%)	Maximum Allocation (%)	Current Allocation (%)	Target Allocation (%)
Total Real Estate	0.0	15.0	10.0	10.0
Total International Equity Composite	5.0	20.0	10.1	15.0
Total Fixed Income Composite	20.0	40.0	21.4	25.0
Total Domestic Equity Composite	40.0	70.0	57.8	50.0
Total Fund	N/A	N/A	100.0	100.0



Asset Allocation Attributes										
	Jun-2	018	Sep-2	018	Dec-2	Dec-2018 Ma		019	Jun-2	019
	(\$)	%	(\$)	%	(\$)	%	(\$)	%	(\$)	%
Total Equity Composite	27,045,157	70.90	27,693,942	71.11	23,455,014	68.39	25,076,203	67.58	25,701,641	67.83
Total Domestic Equity Composite	23,141,774	60.67	23,823,385	61.17	20,071,902	58.53	21,404,295	57.68	21,887,513	57.77
Brandywine Dynamic Value	10,972,227	28.76	11,621,522	29.84	10,014,157	29.20	10,657,872	28.72	10,810,253	28.53
Fred Alger Large Growth	12,169,548	31.90	12,201,863	31.33	10,057,744	29.33	10,746,422	28.96	11,077,260	29.24
Total International Equity Composite	3,903,383	10.23	3,870,557	9.94	3,383,112	9.87	3,671,909	9.90	3,814,128	10.07
American Funds EuroPacific Gr R5 (RERGX)	3,903,383	10.23	3,870,557	9.94	3,383,112	9.87	3,671,909	9.90	3,814,128	10.07
Total Fixed Income Composite	7,213,188	18.91	6,951,815	17.85	6,873,768	20.04	7,942,628	21.41	8,121,882	21.44
Garcia Hamilton Fixed Income	7,213,188	18.91	6,951,815	17.85	6,873,768	20.04	7,942,628	21.41	8,121,882	21.44
ASB (Real Estate)	3,653,405	9.58	3,691,923	9.48	3,712,123	10.82	3,775,036	10.17	3,794,230	10.01
R&D Account	234,719	0.62	609,060	1.56	252,685	0.74	312,287	0.84	272,385	0.72
Total Fund	38,146,469	100.00	38,946,740	100.00	34,293,590	100.00	37,106,154	100.00	37,890,138	100.00



### **Historical Asset Allocation by Segment**





### Financial Reconciliation Total Fund

1 Quarter Ending June 30, 2019

Financial Reconciliation Quarter to Date	M =l. = 4 \ / = l.	NI - 4				041		A	Mandard V. I
	Market Value 04/01/2019	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Market Value 06/30/2019
Total Equity Composite	25,076,203	-340,000	-	-	-39,642	-	93,917	911,163	25,701,641
Total Domestic Equity Composite	21,404,295	-340,000	-	-	-39,642	-	88,135	774,726	21,887,513
Brandywine Dynamic Value	10,657,872	-70,000	-	-	-22,180	-	64,894	179,667	10,810,253
Fred Alger Large Growth	10,746,422	-270,000	-	-	-17,463	-	23,241	595,059	11,077,260
Total International Equity Composite	3,671,909	-	-		-	-	5,782	136,437	3,814,128
American Funds EuroPacific Gr R5 (RERGX)	3,671,909	-	-	-	-	-	5,782	136,437	3,814,128
Total Fixed Income Composite	7,942,628	-	-	-	-4,964	-	65,435	118,783	8,121,882
Garcia Hamilton Fixed Income	7,942,628	-	-	-	-4,964	-	65,435	118,783	8,121,882
ASB (Real Estate)	3,775,036	-21,425	-	-	-11,894	-	33,259	19,254	3,794,230
R&D Account	312,287	361,425	351,369	-723,383	_	-30,274	962	-	272,385
TOO TOO SHIP	012,201	001, <del>12</del> 0	001,000	120,000		00,217			2,2,300
Total Fund	37,106,154	-	351,369	-723,383	-56,500	-30,274	193,573	1,049,200	37,890,138



### Financial Reconciliation Total Fund October 1, 2018 To June 30, 2019

	Market Value	Nat			Managamant	Othor		Ammuna /	Markat Value
	Market Value 10/01/2018	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Market Value 06/30/2019
Total Equity Composite	27,693,942	-2,140,000	-	-	-128,199	-	390,158	-114,259	25,701,641
Total Domestic Equity Composite	23,823,385	-1,990,000	-	-	-128,199	-	284,220	-101,893	21,887,513
Brandywine Dynamic Value	11,621,522	-670,000	-	-	-54,787	-	205,798	-292,279	10,810,253
Fred Alger Large Growth	12,201,863	-1,320,000	-	-	-73,412	-	78,422	190,386	11,077,260
Total International Equity Composite	3,870,557	-150,000	-	-	-	-	105,938	-12,367	3,814,128
American Funds EuroPacific Gr R5 (RERGX)	3,870,557	-150,000	-	-	-	-	105,938	-12,367	3,814,128
Total Fixed Income Composite	6,951,815	750,000	-	-	-13,608	-	183,217	250,458	8,121,882
Garcia Hamilton Fixed Income	6,951,815	750,000	-	-	-13,608	-	183,217	250,458	8,121,882
ASB (Real Estate)	3,691,923	-43,043	-	-	-35,432	-	33,259	147,523	3,794,230
R&D Account	609,060	1,433,043	1,147,161	-2,829,595	-	-90,242	2,958	-	272,385
Total Fund	38.946.740	_	1,147,161	-2,829,595	-177,240	-90.242	609.593	283,721	37,890,138



Comparative Performance Trailing Returns												
	QT	R	FY	ΓD	1 Y	R	3 YF	₹	5 YR	10 YR	Inception	Inception Date
Total Fund (Net)	3.23		2.05		7.06		10.55		6.72	10.05	8.93	08/01/1986
Total Fund Policy	3.74		4.13		7.94		9.41		6.69	9.85	8.54	
Total Fund (Gross)	3.39	(30)	2.55	(80)	7.70	(13)	11.06	(2)	7.20 (4)	10.52 (3)	9.21 (1)	08/01/1986
Total Fund Policy	3.74	(8)	4.13	(25)	7.94	(10)	9.41	(28)	6.69 (15)	9.85 (24)	8.54 (8)	
All Public Plans-Total Fund Median	3.23		3.39		6.31		8.91		5.93	9.19	8.24	
Total Equity	4.06		1.53		8.43		14.67		9.19	13.65	11.36	08/01/1986
Total Equity Policy	3.90		1.60		7.35		13.12		8.47	12.87	9.87	
Total Domestic Equity Composite	4.09	(62)	1.31	(57)	9.54	(36)	N/A		N/A	N/A	15.31 (9)	09/01/2016
Total Domestic Equity Policy	4.10	(58)	1.74	(42)	8.98	(44)	N/A		N/A	N/A	13.24 (41)	
IM U.S. All Cap Core Equity (SA+CF) Median	4.38		1.52		7.94		13.12		8.81	14.36	12.75	
Brandywine Dynamic Value	2.30	(81)	-0.61	(61)	7.68	(37)	N/A		N/A	N/A	11.78 (28)	09/01/2016
Russell 1000 Value Index	3.84	(51)	2.61	(27)	8.46	(31)	10.19	(71)	7.46 (58)	13.19 (59)	9.41 (66)	
IM U.S. Large Cap Value Equity (SA+CF) Median	3.89		0.63		6.45		11.42		7.79	13.44	10.39	
Fred Alger Large Growth	5.87	(32)	3.30	(57)	11.51	(58)	N/A		N/A	N/A	18.81 (30)	09/01/2016
Russell 1000 Growth Index	4.64	(63)	2.19	(68)	11.56	(57)	18.07	(45)	13.39 (43)	16.28 (40)	17.51 (43)	
IM U.S. Large Cap Growth Equity (SA+CF) Median	5.30		3.99		12.28		17.75	, ,	12.90	15.87	16.94	
Total International Equity	3.87	(71)	2.77	(40)	1.90	(54)	10.83	(21)	N/A	N/A	9.80 (22)	06/01/2016
Total International Equity Policy	3.22	(85)	0.99	(62)	1.80	(56)	9.91	(42)	N/A	N/A	9.10 (38)	
IM International Large Cap Growth Equity (MF) Median	4.36		1.95		2.14		9.61		3.08	7.39	8.51	
American Funds EuroPacific Gr R5 (RERGX)	3.87	(71)	2.77	(40)	1.90	(54)	10.83	(21)	N/A	N/A	9.80 (22)	06/01/2016
MSCI AC World ex USA	3.22	(85)	0.99	(62)	1.80	(56)	9.91	(42)	2.65 (62)	7.03 (57)	9.10 (38)	
IM International Large Cap Growth Equity (MF) Median	4.36		1.95		2.14		9.61		3.08	7.39	8.51	



	QTR	F	YTD	1 YR	3 YR	5 YR	10 YR	Inception	Inceptior Date
Total Fixed Income Composite	2.32	5.9	0	5.86	2.47	2.68	4.15	5.77	03/01/1988
Total Fixed Income Policy	3.08	7.8	5	7.87	2.31	2.95	3.99	6.14	
Garcia Hamilton Fixed Income	2.32 (9	7) 5.9	0 (98)	5.86 (98)	N/A	N/A	N/A	2.28 (85)	09/01/2016
Blmbg. Barc. U.S. Aggregate Index	3.08 (6	<sup>68)</sup> 7.8	5 (64)	7.87 (79)	2.31 (87)	2.95 (88)	3.90 (94)	2.27 (87)	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	3.14	7.9	3	8.12	2.80	3.29	4.60	2.70	
ASB (Real Estate)	1.40 (6	66) 4.9	6 (81)	7.03 (77)	6.22 (91)	N/A	N/A	6.18 (94)	01/01/2016
NCREIF Fund Index-Open End Diversified Core (EW)	1.35 (7	(0) 4.7	3 (85)	6.91 (81)	7.88 (72)	10.03 (48)	9.74 (63)	8.12 (65)	
IM U.S. Open End Private Real Estate (SA+CF) Median	1.48	5.1	8	7.59	8.14	9.91	10.59	8.40	



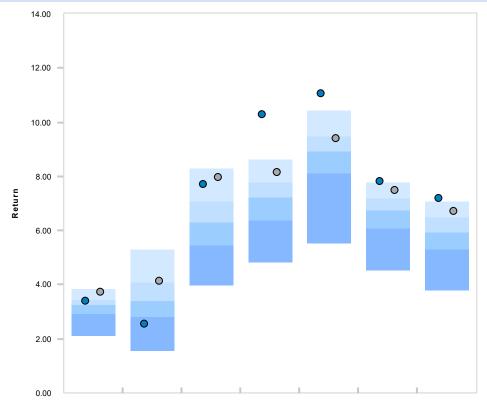
Comparative Performance Fiscal Year Returns	Oct-2		Oct-201 To		t-2015 To	Oct-2014 To	Oct-2013 To	Oct-2		Oct-2		Oct-2		Oct-2	
	Sep-2		Sep-201		-2016	Sep-2015	Sep-2014	Sep-2		Sep-2		Sep-2		Sep-2	
Total Fund (Net)	13.30		13.42	11.2	0	-5.00	11.67	11.43		18.57		-0.08		12.94	
Total Fund Policy	8.48		12.14	10.9	1	-0.92	10.97	12.41		19.02		0.77		10.08	
Total Fund (Gross)	13.77	(1)	13.93 (1	4) 11.6	4 (12)	-4.57 (95)	12.11 (12)	11.89	(52)	19.06	(23)	0.34	(56)	13.39	(3)
Total Fund Policy	8.48	(25)	12.14 (4	6) 10.9	1 (21)	-0.92 (55)	10.97 (32)	12.41	(45)	19.02	(24)	0.77	(48)	10.08	(47)
All Public Plans-Total Fund Median	7.10		11.84	9.7	4	-0.78	9.93	12.08		17.67		0.69		9.90	
Total Equity Composite	18.41		20.46	15.0	5	-6.76	16.51	18.21		26.58		-1.95		15.54	
Total Equity Policy	13.94		19.11	13.7	9	-3.15	14.79	20.60		26.65		-2.04		10.75	
Total Domestic Equity Composite	21.58	(16)	20.41 (3	1) N/	A	N/A	N/A	N/A		N/A		N/A		N/A	
Total Domestic Equity Policy	17.58	(38)	18.71 (5	5) N/	A	N/A	N/A	N/A		N/A		N/A		N/A	
IM U.S. All Cap Core Equity (SA+CF) Median	16.68		18.88	11.9	4	-0.47	16.38	24.50		27.38		1.04		11.05	
Brandywine Dynamic Value	15.34	(19)	19.03 (3	8) N/	A	N/A	N/A	N/A		N/A		N/A		N/A	
Russell 1000 Value Index	9.45	(77)	15.12 (7	5) 16.1	9 (26)	-4.42 (64)	18.89 (43)	22.30	(60)	30.92	(26)	-1.89	(62)	8.90	(55)
IM U.S. Large Cap Value Equity (SA+CF) Median	11.72		17.89	13.2	2	-3.29	18.40	23.76		28.16		-0.98		9.32	
Fred Alger Large Growth	27.77	(28)	21.75 (3	8) N/	A	N/A	N/A	N/A		N/A		N/A		N/A	
Russell 1000 Growth Index	26.30	(37)	21.94 (3	7) 13.7	6 (23)	3.17 (55)	19.15 (40)	19.27	(63)	29.19	(39)	3.78	(30)	12.65	(35)
IM U.S. Large Cap Growth Equity (SA+CF) Median	24.44		20.81	11.6	9	3.60	18.19	20.25		27.65		1.38		11.27	
Total International Equity Composite	1.47	(57)	20.63 (9	) <b>N</b> /	A	N/A	N/A	N/A		N/A		N/A		N/A	
Total International Equity Policy	2.25	(47)	20.15 (2	0) N/	A	N/A	N/A	N/A		N/A		N/A		N/A	
IM International Large Cap Growth Equity (MF) Median	2.00		17.83	7.8	7	-5.67	4.38	18.00		17.66		-10.78		7.40	
American Funds EuroPacific Gr R5 (RERGX)	1.47	(57)	20.63 (9	) N/	A	N/A	N/A	N/A		N/A		N/A		N/A	
MSCI AC World ex USA	2.25	(47)	20.15 (2	0) 9.8	0 (28)	-11.78 (87)	5.22 (30)	16.98	(60)	15.04	(74)	-10.42	(47)	8.00	(48)
IM International Large Cap Growth Equity (MF) Median	2.00		17.83	7.8	7	-5.67	4.38	18.00		17.66		-10.78		7.40	
Total Fixed Income Composite	0.79		0.36	4.5	1	1.92	2.77	-0.91		5.42		4.80		10.26	
Total Fixed Income Policy	-1.22		0.07	5.1	9	2.94	3.96	-1.68		5.16		5.26		8.73	
Garcia Hamilton Fixed Income	0.79	(4)	0.36 (6	6) N/	A	N/A	N/A	N/A		N/A		N/A		N/A	
Blmbg. Barc. U.S. Aggregate Index	-1.22	(89)	0.07 (8	7) 5.1	9 (81)	2.94 (60)	3.96 (81)	-1.68	(80)	5.16	(91)	5.26	(49)	8.16	(86)
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	-0.74		0.62	5.6	7	3.02	4.51	-1.22		6.62		5.26		9.26	

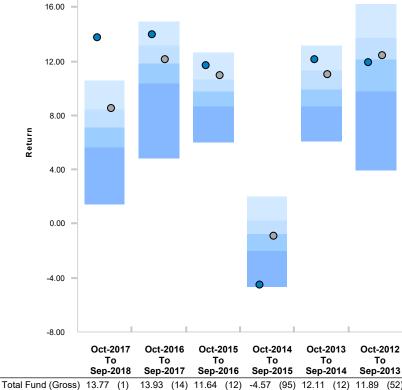


	Oct-2017 To Sep-2018	Oct-2016 To Sep-2017	Oct-2015 To Sep-2016	Oct-2014 To Sep-2015	Oct-2013 To Sep-2014	Oct-2012 To Sep-2013	Oct-2011 To Sep-2012	Oct-2010 To Sep-2011	Oct-2009 To Sep-2010
ASB (Real Estate)	8.30 (69)	3.61 (100)	N/A						
NCREIF Fund Index-Open End Diversified Core (EW)	8.82 (59)	7.81 (60)	10.62 (69)	14.71 (62)	12.39 (68)	12.47 (67)	11.77 (63)	18.03 (44)	6.14 (55)
IM U.S. Open End Private Real Estate (SA+CF) Median	9.04	8.29	11.32	15.45	12.78	13.18	12.87	16.96	6.43
Bowen Hanes Balanced Portfolio	N/A	N/A	N/A	-5.47 (97)	12.93 (7)	10.99 (66)	19.10 (23)	-0.09 (67)	12.69 (6)
Total Bowen Policy	10.86 (4)	11.80 (52)	11.63 (12)	0.76 (18)	13.62 (4)	12.60 (42)	21.06 (5)	2.69 (18)	10.08 (47)
All Public Plans-Total Fund Median	7.10	11.84	9.74	-0.78	9.93	12.08	17.67	0.69	9.90
Bowen Hanes Equity	N/A	N/A	N/A	-7.77 (98)	17.54 (69)	16.04 (88)	25.68 (75)	-2.07 (83)	14.02 (9)
Russell 1000 Index	17.76 (43)	18.54 (56)	14.93 (30)	-0.61 (63)	19.01 (53)	20.91 (47)	30.05 (46)	0.91 (55)	10.75 (34)
IM U.S. Large Cap Core Equity (SA+CF) Median	17.31	18.74	13.26	0.09	19.21	20.66	29.63	1.16	9.53
Bowen Hanes Fixed Income	N/A	N/A	N/A	1.43 (98)	2.28 (100)	-0.52 (20)	5.72 (81)	4.72 (74)	11.03 (17)
Total Fixed Income Policy	-1.22 (89)	0.07 (87)	5.19 (81)	2.94 (60)	3.96 (81)	-1.68 (80)	5.16 (91)	5.26 (49)	8.73 (65)
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
Rockwood Balanced Portfolio	N/A	N/A	N/A	-1.43 (65)	10.08 (48)	14.93 (11)	19.47 (19)	1.66 (33)	15.65 (1)
Total Rockwood Policy	10.74 (5)	11.91 (50)	11.65 (12)	0.84 (17)	12.85 (7)	13.03 (36)	21.16 (5)	2.47 (21)	10.37 (38)
All Public Plans-Total Fund Median	7.10	11.84	9.74	-0.78	9.93	12.08	17.67	0.69	9.90
Rockwood Equity	N/A	N/A	N/A	-3.60 (85)	13.41 (77)	24.29 (52)	29.61 (33)	-2.18 (78)	21.00 (1)
Russell 3000 Index	17.58 (38)	18.71 (55)	14.96 (16)	-0.49 (51)	17.76 (32)	21.60 (79)	30.20 (30)	0.55 (60)	10.96 (51)
IM U.S. All Cap Core Equity (SA+CF) Median	16.68	18.88	11.94	-0.47	16.38	24.50	27.38	1.04	11.05
Rockwood Fixed Income	N/A	N/A	N/A	2.93 (60)	3.76 (91)	-1.80 (88)	4.83 (96)	5.25 (51)	8.28 (81)
Total Fixed Income Policy	-1.22 (89)	0.07 (87)	5.19 (81)	2.94 (60)	3.96 (81)	-1.68 (80)	5.16 (91)	5.26 (49)	8.73 (65)
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



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





20.00

	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
<ul><li>Total Fund (Gross)</li></ul>	3.39 (30)	2.55 (80)	7.70 (13)	10.28 (1)	11.06 (2)	7.83 (5)	7.20 (4)
<ul><li>Total Fund Policy</li></ul>	3.74 (8)	4.13 (25)	7.94 (10)	8.13 (13)	9.41 (28)	7.47 (15)	6.69 (15)
Median	3 23	3 39	6.31	7.22	8 91	6.73	5 93

	Sep-2	2018	Sep-2	-	Sep-2	-	Sep-2	-	Sep-2	•	Sep-2	2013
<ul><li>Total Fund (Gross)</li></ul>	13.77	(1)	13.93	(14)	11.64	(12)	-4.57	(95)	12.11	(12)	11.89	(52)
<ul><li>Total Fund Policy</li></ul>	8.48	(25)	12.14	(46)	10.91	(21)	-0.92	(55)	10.97	(32)	12.41	(45)
Median	7.10		11.84		9.74		-0.78		9.93		12.08	

Comparative Performance						
	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018	1 Qtr Ending Dec-2017
Total Fund (Gross)	10.24 (6)	-10.02 (95)	5.02 (2)	2.35 (5)	0.28 (17)	5.55 (1)
Total Fund Policy	9.57 (16)	-8.39 (72)	3.66 (10)	1.52 (28)	-0.93 (82)	4.05 (25)
All Public Plans-Total Fund Median	8.38	-7.55	2.58	1.03	-0.32	3.61



Standard

### 3 Yr Rolling Under/Over Performance - 5 Years Total Fund (Gross) (%) 16.0 8.0 12.0 8.0 4.0 Over Performance 8.0 Under Performance 0.0 4.0 8.0 12.0 16.0 20.0 Total Fund Policy (%)

### 3 Yr Rolling Percentile Ranking - 5 Years Return Percentile Rank 25.0 50.0 75.0 100.0 3/15 3/16 9/17 3/18 9/18 6/19 9/15 9/16 3/17

	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count	
<ul><li>Total Fund (Gross)</li></ul>	20	8 (40%)	8 (40%)	3 (15%)	1 (5%)	
<ul><li>Total Fund Policy</li></ul>	20	7 (35%)	13 (65%)	0 (0%)	0 (0%)	

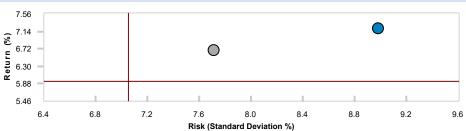
### Peer Group Scattergram - 3 Years 11.52 Return (%) $\bigcirc$ 7.92 6.84 7.20 7.56 7.92 8.28 8.64 9.36 9.00 Risk (Standard Deviation %)

Under Performance

X Latest Date

Peer	Group	Scattergram	- 5	Years	

9/14



Return	Deviation
7.20	8.99
6.69	7.71
5.94	7.06
	7.20 6.69

	Return	Standard Deviation
<ul><li>Total Fund (Gross)</li></ul>	11.06	8.78
<ul> <li>Total Fund Policy</li> </ul>	9.41	7.60
Median	8.91	6.91

### **Historical Statistics - 3 Years**

Over Performance

Earliest Date

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Fund (Gross)	1.98	115.71	113.41	0.36	0.81	1.09	1.13	5.72
<b>Total Fund Policy</b>	0.00	100.00	100.00	0.00	N/A	1.05	1.00	4.90

### **Historical Statistics - 5 Years**

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Fund (Gross)	2.39	111.43	113.97	-0.30	0.25	0.73	1.13	5.85
Total Fund Policy	0.00	100.00	100.00	0.00	N/A	0.77	1.00	4.82



# Peer Group Analysis - IM U.S. Large Cap Core Equity (SA+CF) 24.00 16.00 12.00 4.00 -4.00

	32.00											
	26.00	-										
	20.00	-	•		• •							0
Ę	14.00		0				• •			•		
Return	8.00	-										
	2.00	-										
	-4.00								0			
	-10.00	_										
	-16.00		Oct-20	17	Oct-2016	<u>.                                    </u>	Oct-2015	<u> </u>	Oct-2014	Oct-20	13	Oct-2012

38.00

	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR	
<ul><li>Total Equity</li></ul>	4.06 (58)	1.53 (57)	8.43 (58)	12.84 (30)	14.67 (27)	9.93 (64)	9.19 (72)	
<ul><li>Equity Policy</li></ul>	3.90 (60)	1.60 (57)	7.35 (65)	10.22 (70)	13.12 (57)	9.49 (73)	8.47 (84)	
Median	4.28	2.01	9.03	11.61	13.60	10.43	10.25	

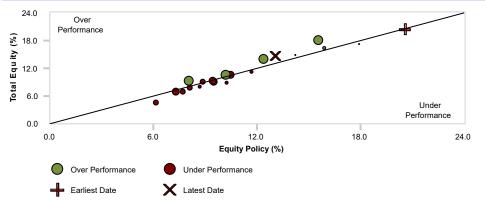
-8.00

	To Sep-2018	To Sep-2017	To Sep-2016	To Sep-2015	To Sep-2014	To Sep-2013
<ul><li>Total Equity</li></ul>	18.41 (32)	20.46 (29)	15.05 (27)	-6.76 (96)	16.51 (79)	18.21 (78)
<ul><li>Equity Policy</li></ul>	13.94 (76)	19.11 (44)	13.79 (42)	-3.15 (85)	14.79 (89)	20.60 (51)
Median	17.31	18.74	13.26	0.09	19.21	20.66

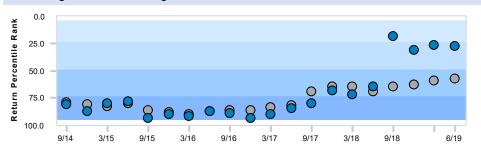
Comparative Performance						
	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018	1 Qtr Ending Dec-2017
Total Equity	14.02 (30)	-14.43 (64)	6.80 (62)	2.89 (52)	0.29 (29)	7.45 (26)
Equity Policy	13.21 (51)	-13.62 (46)	5.66 (81)	2.44 (65)	-0.74 (62)	6.05 (69)
IM U.S. Large Cap Core Equity (SA+CF) Median	13.23	-13.84	7.15	2.90	-0.44	6.66



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

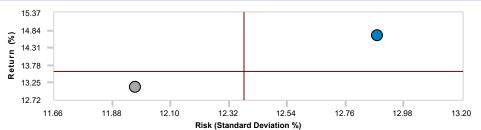


### 3 Yr Rolling Percentile Ranking - 5 Years



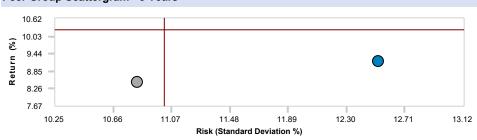
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count	
<ul><li>Total Equ</li></ul>	ity 20	1 (5%)	3 (15%)	3 (15%)	13 (65%)	
<ul><li>Equity Po</li></ul>	licy 20	0 (0%)	0 (0%)	8 (40%)	12 (60%)	

### Peer Group Scattergram - 3 Years



	Return	Standard Deviation
<ul><li>Total Equity</li></ul>	14.67	12.88
<ul><li>Equity Policy</li></ul>	13.12	11.97
Median	13.60	12.38

### Peer Group Scattergram - 5 Years



	Return	Standard Deviation
<ul><li>Total Equity</li></ul>	9.19	12.53
<ul><li>Equity Policy</li></ul>	8.47	10.83
Median	10.25	11.02

### **Historical Statistics - 3 Years**

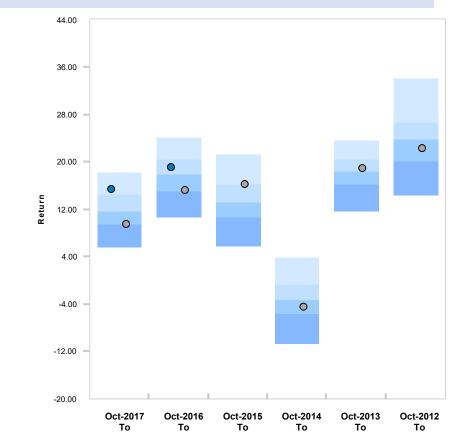
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Equity	2.40	109.24	106.30	0.54	0.63	1.04	1.07	8.41
<b>Equity Policy</b>	0.00	100.00	100.00	0.00	N/A	1.00	1.00	7.86

### **Historical Statistics - 5 Years**

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Equity	3.10	103.40	99.24	0.37	0.25	0.69	1.05	8.42
<b>Equity Policy</b>	0.00	100.00	100.00	0.00	N/A	0.68	1.00	7.71



### Peer Group Analysis - IM U.S. Large Cap Value Equity (SA+CF) 24.00 20.00 16.00 12.00 0 0 00 0 8.00 0 0 Return 4.00 0 0 0.00 -4.00 -8.00



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
<ul><li>Brandywine</li></ul>	2.30 (81)	-0.61 (61)	7.68 (37)	10.10 (25)	N/A	N/A	N/A
○ R1000V	3.84 (51)	2.61 (27)	8.46 (31)	7.61 (55)	10.19 (71)	8.31 (53)	7.46 (58)
Median	3 91	0.62	6 44	7 95	11 42	8 43	7 79

-12.00

	Sep-2018	Sep-2017	Sep-2016	Sep-2015	Sep-2014	Sep-2013
<ul><li>Brandywine</li></ul>	15.34 (19)	19.03 (38)	N/A	N/A	N/A	N/A
	9.45 (77)	15.12 (75)	16.19 (26)	-4.42 (64)	18.89 (43)	22.30 (60)
Median	11.72	17.89	13.22	-3.29	18.40	23.76

Comparative Performance						
	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018	1 Qtr Ending Dec-2017
Brandywine	12.52 (34)	-13.65 (54)	8.34 (8)	0.55 (82)	-2.72 (71)	8.84 (4)
R1000V	11.93 (46)	-11.72 (30)	5.70 (50)	1.18 (66)	-2.83 (74)	5.33 (76)
IM U.S. Large Cap Value Equity (SA+CF) Median	11.75	-13.51	5.70	1.73	-1.98	6.31

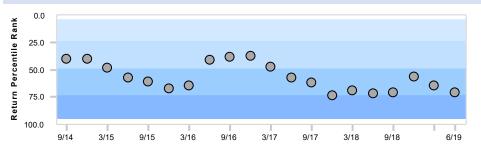


### 3 Yr Rolling Under/Over Performance - 5 Years

No data found.

### 3 Yr Rolling Percentile Ranking - 5 Years

Peer Group Scattergram - 5 Years



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count	
<ul><li>Brandywine</li></ul>	0	0	0	0	0	-
R1000V	20	0 (0%)	7 (35%)	13 (65%)	0 (0%)	

### Peer Group Scattergram - 3 Years 11.89 11.48 11.07 10.66 10.25 9.84 10.75 11.00 11.25 11.50 11.75 12.00 12.25

	Return	Standard Deviation
<ul><li>Brandywine</li></ul>	N/A	N/A
<ul><li>R1000V</li></ul>	10.19	10.99
Median	11.42	12.05

Risk (Standard Deviation %)

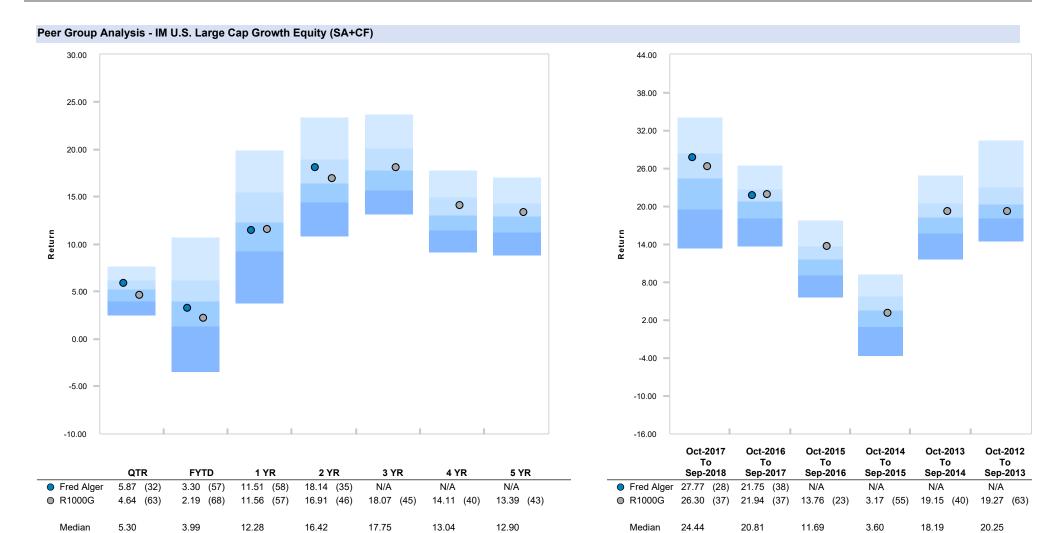
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Risk (Standard Deviation %)

	Return	Standard Deviation
<ul><li>Brandywine</li></ul>	N/A	N/A
R1000V	7.46	10.19
Median	7.79	11.03

<b>Historical Statist</b>	ics - 3 Years							
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Brandywine	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
R1000V	0.00	100.00	100.00	0.00	N/A	0.76	1.00	7.98
<b>Historical Statist</b>	ics - 5 Years							
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Brandywine	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
R1000V	0.00	100.00	100.00	0.00	N/A	0.60	1.00	7.69





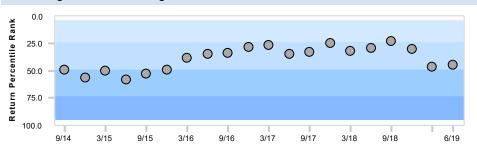
Comparative Performance						
	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018	1 Qtr Ending Dec-2017
Fred Alger	15.81 (52)	-15.75 (58)	7.95 (55)	7.11 (18)	3.01 (38)	7.27 (35)
R1000G	16.10 (46)	-15.89 (61)	9.17 (23)	5.76 (42)	1.42 (61)	7.86 (21)
IM U.S. Large Cap Growth Equity (SA+CF) Median	15.90	-15.14	8.14	5.26	2.09	6.89



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

No data found.

### 3 Yr Rolling Percentile Ranking - 5 Years



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count	
<ul><li>Fred Alger</li></ul>	0	0	0	0	0	
<ul><li>R1000G</li></ul>	20	2 (10%)	15 (75%)	3 (15%)	0 (0%)	

### Peer Group Scattergram - 3 Years



	Return	Standard Deviation
<ul><li>Fred Alger</li></ul>	N/A	N/A
<ul><li>R1000G</li></ul>	18.07	13.21
Median	17.75	13.12

### Peer Group Scattergram - 5 Years



	Return	Standard Deviation
<ul><li>Fred Alger</li></ul>	N/A	N/A
<ul><li>R1000G</li></ul>	13.39	12.92
Median	12.90	13.03

### **Historical Statistics - 3 Years**

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Fred Alger	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
R1000G	0.00	100.00	100.00	0.00	N/A	1.23	1.00	8.45

### **Historical Statistics - 5 Years**

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Fred Alger	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
R1000G	0.00	100.00	100.00	0.00	N/A	0.98	1.00	7.79



### Peer Group Analysis - IM International Large Cap Growth Equity (MF) 17.00 36.00 28.00 14.00 00 20.00 11.00 0 0 12.00 0 8.00 4.00 Return 00 Return • 5.00 0 0 0 -4.00 0 0 0 2.00 00 0 0 -12.00 -1.00 -20.00 -4.00 -28.00 -7.00 -36.00 Oct-2017 Oct-2016 Oct-2015 Oct-2014 Oct-2013 Oct-2012 To To Τo To To QTR **FYTD** 1 YR 2 YR 3 YR 4 YR 5 YR Sep-2018 Sep-2017 Sep-2016 Sep-2015 Sep-2014 Sep-2013 2.77 (40) 5.56 (40) 10.83 (21) AF EuroPacific (RERGX) 3.87 (71) 1.90 (54) N/A N/A AF EuroPacific (RERGX) 1.47 (57) 20.63 (9) MSCI AC World ex USA 3.22 (85) 0.99 (62) 1.80 (56) 4.75 (54) 9.91 (42) 2.65 (62) MSCI AC World ex USA 2.25 (47) 20.15 (20) 9.80 (28) 11.78 (87) 4.61 (41) 5.22 (30) 16.98 (60) Median 4.36 1.95 2.14 4.97 9.61 4.12 3.08 Median 2.00 17.83 7.87 -5.67 4.38 18.00 **Comparative Performance** 1 Qtr 1 Qtr 1 Qtr 1 Qtr 1 Qtr 1 Qtr



Ending

Dec-2017

(42)

(12)

4.23

5.06

4.10

**Ending** 

Sep-2018

(82)

-0.84

0.80 (39)

0.24

**Ending** 

Jun-2018

-2.82 (58)

(49)

-2.39

-2.51

**Ending** 

Mar-2018

-1.08

-0.68

1.03 (19)

(62)

Ending

Dec-2018

-12.59 (44)

-11.41 (27)

-12.68

Ending

Mar-2019

13.19 (27)

10.44 (92)

12.38

AF EuroPacific (RERGX)

MSCI AC World ex USA

IM International Large Cap Growth Equity (MF) Median

0 (0%)

3 (15%)

# 3 Yr Rolling Under/Over Performance - 5 Years 11.2 Over Performance 10.0 Under Performance 10.0 10.4 10.8 11.2 MSCI AC World ex USA (%)

### 3 Yr Rolling Percentile Ranking - 5 Years Return Percentile Rank 0 25.0 00000 50.0 00000 0 75.0 100.0 3/15 9/15 3/16 9/16 3/17 9/17 3/18 9/18 6/19 9/14 5-25 25-Median Median-75 75-95 **Total Period** Count Count Count Count

Pe	er Group Sca	ttergram - 3 Y	ears				
	11.18						
(9	10.75 —						
_							
Retur	9.89 -	$\circ$					
œ	9.46 -						
	9.03			1		1	
	11.04	11.27	11.50	11.73	11.96	12.19	12.42

Risk (Standard Deviation %)

X Latest Date

Peer Group Scat	tergram - 5 Years			
3.20				
§ 3.00 -				
2.80 —				
₹ 2.60			O	
2.40				
12.38	12.40	12.42	12.44	12.46
	Ri	sk (Standard Deviation %)		

1 (100%)

2 (10%)

0 (0%)

5 (25%)

0 (0%)

10 (50%)

	Return	Standard Deviation
<ul> <li>AF EuroPacific (RERGX)</li> </ul>	10.83	12.20
<ul> <li>MSCI AC World ex USA</li> </ul>	9.91	11.24
Median	9.61	12.20

	Return	Standard Deviation
AF EuroPacific (RERGX)	N/A	N/A
<ul> <li>MSCI AC World ex USA</li> </ul>	2.65	12.45
Median	3.08	12.40

Historical Statistics - 3 Years								
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
AF EuroPacific (RERGX)	2.86	105.36	101.74	0.38	0.33	0.79	1.06	7.75
MSCI AC World ex USA	0.00	100.00	100.00	0.00	N/A	0.78	1.00	7.27

AF EuroPacific (RERGX)

MSCI AC World ex USA

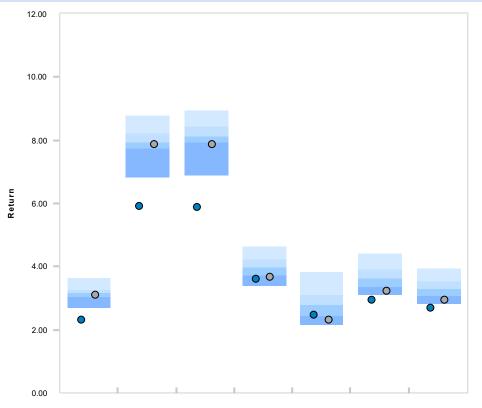
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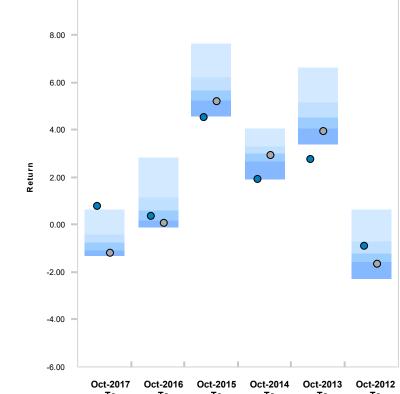
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Historical Statistics - 5 Years									
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk	
AF EuroPacific (RERGX)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
MSCI AC World ex USA	0.00	100.00	100.00	0.00	N/A	0.20	1.00	8.34	



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





10.00

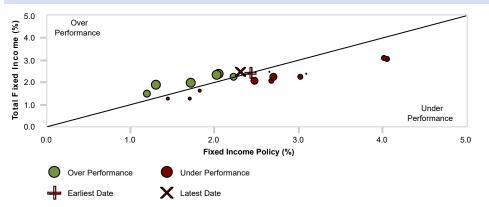
	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
<ul><li>Total Fixed Income</li></ul>	2.32 (97)	5.90 (98)	5.86 (98)	3.59 (90)	2.47 (74)	2.94 (98)	2.68 (99)
<ul><li>Fixed Income Policy</li></ul>	3.08 (68)	7.85 (64)	7.87 (79)	3.65 (84)	2.31 (87)	3.22 (89)	2.95 (89)
Median	3.14	7.93	8.12	3.98	2.79	3.62	3.29

	To Sep-2018	То	То	To Sep-2015	То	То
<ul><li>Total Fixed Income</li></ul>	0.79 (4)	0.36 (66)	4.51 (96)	1.92 (94)	2.77 (98)	-0.91 (35)
<ul> <li>Fixed Income Policy</li> </ul>	-1.22 (89)	0.07 (87)	5.19 (81)	2.94 (60)	3.96 (81)	-1.68 (80)
Median	-0.74	0.62	5.67	3.02	4.51	-1.22

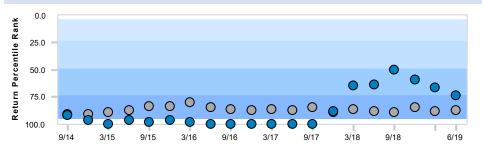
Comparative Performance						
	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018	1 Qtr Ending Dec-2017
Total Fixed Income	2.35 (98)	1.12 (74)	-0.04 (90)	0.56 (2)	-0.63 (8)	0.90 (6)
Fixed Income Policy	2.94 (83)	1.64 (23)	0.02 (83)	-0.16 (73)	-1.46 (68)	0.39 (80)
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	3.22	1.40	0.18	-0.09	-1.37	0.51



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

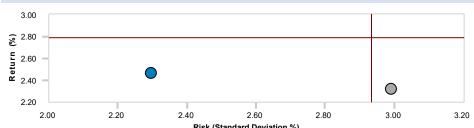


### 3 Yr Rolling Percentile Ranking - 5 Years



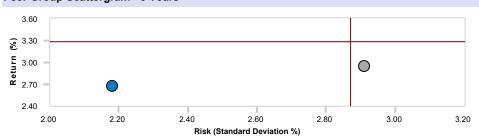
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
<ul><li>Total Fixed Income</li></ul>	20	0 (0%)	1 (5%)	5 (25%)	14 (70%)
<ul> <li>Fixed Income Policy</li> </ul>	20	0 (0%)	0 (0%)	0 (0%)	20 (100%)

### Peer Group Scattergram - 3 Years



	KISK (Standard Deviation %)		
	Return	Standard Deviation	
<ul> <li>Total Fixed Income</li> </ul>	2.47	2.30	
<ul> <li>Fixed Income Policy</li> </ul>	2.31	2.99	
Median	2.79	2.94	

### Peer Group Scattergram - 5 Years



	Return	Standard Deviation
<ul> <li>Total Fixed Income</li> </ul>	2.68	2.18
<ul> <li>Fixed Income Policy</li> </ul>	2.95	2.91
Median	3.29	2.87

### **Historical Statistics - 3 Years**

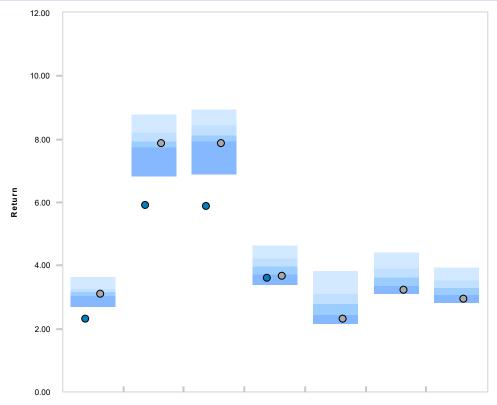
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Fixed Income	1.11	79.15	57.36	0.77	0.12	0.50	0.73	1.37
Fixed Income Policy	0.00	100.00	100.00	0.00	N/A	0.34	1.00	1.85

### **Historical Statistics - 5 Years**

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Fixed Income	1.30	75.76	58.88	0.66	-0.22	0.86	0.68	1.16
Fixed Income Policy	0.00	100.00	100.00	0.00	N/A	0.73	1.00	1.63



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



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR	
<ul><li>Garcia Hamilton</li></ul>	2.32 (97)	5.90 (98)	5.86 (98)	3.59 (90)	N/A	N/A	N/A	
<ul><li>Barclays Agg</li></ul>	3.08 (68)	7.85 (64)	7.87 (79)	3.65 (84)	2.31 (87)	3.22 (89)	2.95 (89)	
Median	3.14	7.93	8.12	3.98	2.79	3.62	3.29	

	a Hamilton ays Agg	0.79 -1.22	2018 (4)	76 Sep-2 0.36 0.07	2 <b>017</b> (66)	N/A 5.19	2016	Sep-2 N/A 2.94	2015	N/A 3.96	o 2014	N/A -1.68	)
	-6.00	Oct-2	2017	Oct-2	2016	Oct-2	0015	Oct-2	2014	Oct-2	0042	Oct-2	1012
	-4.00 —												
	-2.00	C	)									C	
	0.00	•		• (	)								
Return	2.00								)				
	4.00 —										)		
	6.00 -						)						
	8.00 -												

5.67

10.00

Median

-0.74

0.62

Comparative Performance						
	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018	1 Qtr Ending Dec-2017
Garcia Hamilton	2.35 (98)	1.12 (74)	-0.04 (90)	0.56 (2)	-0.63 (8)	0.90 (6)
Barclays Agg	2.94 (83)	1.64 (23)	0.02 (83)	-0.16 (73)	-1.46 (68)	0.39 (80)
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	3.22	1.40	0.18	-0.09	-1.37	0.51



-1.22

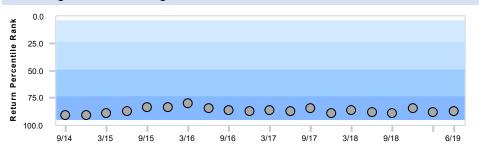
4.51

3.02

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

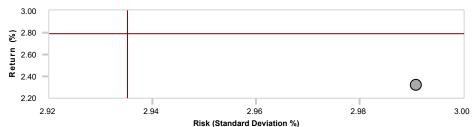
No data found.

### 3 Yr Rolling Percentile Ranking - 5 Years



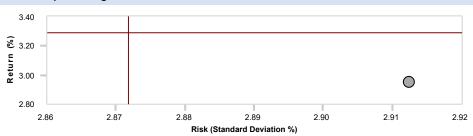
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
<ul> <li>Garcia Hamilton</li> </ul>	0	0	0	0	0
<ul> <li>Barclavs Agg</li> </ul>	20	0 (0%)	0 (0%)	0 (0%)	20 (100%)

### Peer Group Scattergram - 3 Years



	Return	Standard Deviation
<ul><li>Garcia Hamilton</li></ul>	N/A	N/A
<ul><li>Barclays Agg</li></ul>	2.31	2.99
Median	2.79	2.94

### Peer Group Scattergram - 5 Years



	Return	Deviation
<ul><li>Garcia Hamilton</li></ul>	N/A	N/A
<ul> <li>Barclays Agg</li> </ul>	2.95	2.91
Median	3.29	2.87

### **Historical Statistics - 3 Years**

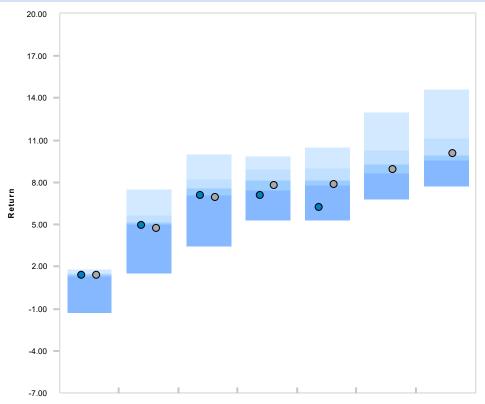
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Garcia Hamilton	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Barclays Agg	0.00	100.00	100.00	0.00	N/A	0.34	1.00	1.85

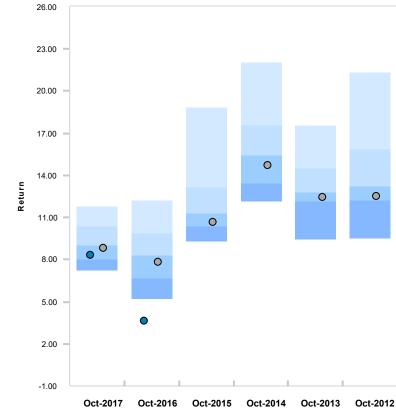
### **Historical Statistics - 5 Years**

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Garcia Hamilton	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Barclays Agg	0.00	100.00	100.00	0.00	N/A	0.73	1.00	1.63



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





	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
<ul> <li>ASB (Real Estate)</li> </ul>	1.40 (66)	4.96 (81)	7.03 (77)	7.04 (80)	6.22 (91)	N/A	N/A
<ul><li>NCREIF ODCE</li></ul>	1.35 (70)	4.73 (85)	6.91 (81)	7.76 (71)	7.88 (72)	8.94 (70)	10.03 (48)
Median	1.48	5 18	7 59	8 15	8 14	9 26	9 91

	To Sep-2018	To Sep-2017	To Sep-2016	To Sep-2015	To Sep-2014	To Sep-2013
<ul><li>ASB (Real Estate)</li></ul>	8.30 (69)	3.61 (100)	N/A	N/A	N/A	N/A
NCREIF ODCE	8.82 (59)	7.81 (60)	10.62 (69)	14.71 (62)	12.39 (68)	12.47 (67)
Median	9.04	8.29	11.32	15.45	12.78	13.18

Comparative Performance								
	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018	1 Qtr Ending Mar-2018	1 Qtr Ending Dec-2017		
ASB (Real Estate)	2.02 (42)	1.46 (70)	1.98 (58)	2.01 (69)	2.01 (69)	2.06 (71)		
NCREIF ODCE	1.69 (82)	1.62 (62)	2.09 (54)	2.13 (61)	2.17 (55)	2.15 (57)		
IM U.S. Open End Private Real Estate (SA+CF) Median	1.99	1.76	2.10	2.22	2.21	2.25		



# 3 Yr Rolling Under/Over Performance - 5 Years 9.6 Over Performance 8.8 9.6 0.4 7.2 NCREIF ODCE (%) 9.6 Voer Performance Under Performance 9.6 NCREIF ODCE (%)

X Latest Date

### 3 Yr Rolling Percentile Ranking - 5 Years 25.0 75.0 9/14 3/15 9/15 3/16 9/16 3/17 9/17 3/18 9/18 6/19

		Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
_	<ul><li>ASB (Real Estate)</li></ul>	3	0 (0%)	0 (0%)	0 (0%)	3 (100%)
	<ul> <li>NCREIF ODCE</li> </ul>	20	0 (0%)	1 (5%)	18 (90%)	1 (5%)

### Peer Group Scattergram - 3 Years 8.96 % 8.32 7.68 7.04 0 6.40 5.76 0.40 0.50 0.60 0.70 0.80 0.90 1.00 1.20 1.10 Risk (Standard Deviation %)

Earliest Date

Under Performance

Pee	er Group Sca	attergram -	5 Years					
Return (%)	10.10 10.05 10.00 9.95	0						
	9.90 9.85 1.40	1.47	1.54	I 1.61 Risk (Standard I	1.68 Deviation %)	1.75	1.82	1.89

	Return	Standard Deviation
<ul><li>ASB (Real Estate)</li></ul>	6.22	1.03
<ul><li>NCREIF ODCE</li></ul>	7.88	0.53
Median	8.14	0.93

	Return	Standard Deviation
<ul><li>ASB (Real Estate)</li></ul>	N/A	N/A
<ul><li>NCREIF ODCE</li></ul>	10.03	1.49
Median	9.91	1.81

<b>Historical Statistics</b>	s - 3 Years							
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
ASB (Real Estate)	1.18	79.52	N/A	0.04	-1.32	1.78	0.79	0.00
NCREIF ODCE	0.00	100.00	N/A	0.00	N/A	1.99	1.00	0.00
Historical Statistics	s - 5 Years							
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
ASB (Real Estate)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NCREIF ODCE	0.00	100.00	N/A	0.00	N/A	2.08	1.00	0.00



Total Fund Policy			
Allocation Mandate	Weight (%)	Allocation Mandate	Weight (%)
Aug-1986		Jan-1999	
FTSE 3 Month T-Bill	55.00	Russell 1000 Index	60.00
Russell 1000 Index	45.00	Blmbg. Barc. U.S. Gov't/Credit	35.00
		FTSE 3 Month T-Bill	5.00
Jan-1988			
Russell 1000 Index	50.00	Apr-2000	05.00
Blmbg. Barc. U.S. Gov't/Credit	45.00	Russell 1000 Index	65.00
FTSE 3 Month T-Bill	5.00	Blmbg. Barc. U.S. Gov't/Credit	30.00
Jul-1989		FTSE 3 Month T-Bill	5.00
Russell 1000 Index	55.00	Oct-2010	
Blmbg. Barc. U.S. Gov't/Credit	40.00	Russell 3000 Index	50.00
FTSE 3 Month T-Bill	5.00	MSCI AC World ex USA	15.00
	5.55	Blmbg. Barc. U.S. Aggregate Index	35.00
Jul-1990			
Russell 1000 Index	60.00		
Blmbg. Barc. U.S. Gov't/Credit	35.00		
FTSE 3 Month T-Bill	5.00		
Jul-1991			
Russell 1000 Index	55.00		
Blmbg. Barc. U.S. Gov't/Credit	20.00		
FTSE 3 Month T-Bill	25.00		
Jan-1993			
Russell 1000 Index	45.00		
Blmbg. Barc. U.S. Gov't/Credit	15.00		
FTSE 3 Month T-Bill	40.00		
Apr-1994 Russell 1000 Index	50.00		
	35.00		
Blmbg. Barc. U.S. Gov't/Credit FTSE 3 Month T-Bill	35.00 15.00		
FISE 3 MONUTI-BIII	15.00		
Apr-1995			
Russell 1000 Index	65.00		
Blmbg. Barc. U.S. Gov't/Credit	25.00		
FTSE 3 Month T-Bill	10.00		
Jul-1996			
Russell 1000 Index	70.00		
Blmbg. Barc. U.S. Gov't/Credit	25.00		
FTSE 3 Month T-Bill	5.00		



Total Rockwood Policy		
Allocation Mandate	Weight (%)	
Oct-2009		
Russell 3000 Index	60.00	
Blmbg. Barc. U.S. Aggregate Index	40.00	
Oct-2010		
Russell 3000 Index	65.00	
Blmbg. Barc. U.S. Aggregate Index	35.00	

Total Equity Policy	
Allocation Mandate	Weight (%)
Aug-1986	
Russell 1000 Index	100.00
Oct-2010	
Russell 3000 Index	77.00
MSCI AC World ex USA	23.00

Total Fixed Income Policy	
Allocation Mandate	Weight (%)
Jan-1973	
Blmbg. Barc. U.S. Gov't/Credit	100.00
Oct-2010	
Blmbg. Barc. U.S. Aggregate Index	100.00

Total Domestic Equity Policy		
Allocation Mandate	Weight (%)	
Sep-2016		
Russell 3000 Index	100.00	

Total International Equity Policy	
Allocation Mandate	Weight (%)
Jun-2016	
MSCI AC World ex USA	100.00



Total Fund Compliance:								Yes	s No	N/A
Equity Compliance:								Yes	No	N/A
Fixed Income Compliance:								Yes	s No	N/A
Manager Compliance:										
	Yes I	No N/A	Yes No	N/A	Yes No	N/A	Yes No	N/A	Yes N	lo N/A



### Venice Municipal Police Officers' Pension Trust Fund Fee Analysis

As of June 30, 2019

	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
Fred Alger Large Growth	0.65	11,077,260	72,002	0.65 % of Assets
Brandywine Dynamic Value	0.40	10,810,253	43,241	0.40 % of Assets
American Funds EuroPacific Gr R5 (RERGX)	0.49	3,814,128	18,689	0.49 % of Assets
Garcia Hamilton Fixed Income	0.25	8,121,882	20,305	0.25 % of Assets
ASB (Real Estate)	1.25	3,794,230	47,428	1.25 % of Assets
R&D Account		272,385	-	
Total Fund	0.53	37,890,138	201,665	



**Active Return** 

- 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.



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