Investment Performance Review
Period Ending June 30, 2019

Employees' Retirement System of the City of Norfolk

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Executive Summary

HIGHLIGHTS

Winners for the recent quarter
– Barclays Corp IG +4.5%
– S&P 500 +4.3%
– Russell 1000 +4.2%
Losers for the recent quarter
– None
Areas of strength for the recent quarter
– Domestic Equities
– Corporate Bonds

Winners for the trailing year
– Barclays Corp IG +10.7%
– S&P 500 +10.4%
– Russell 1000 +10.0%
Losers for the trailing year
– Russell 2000 -3.3%
Areas of strength for the trailing year
– Domestic Equities
– Corporate Bonds

COMMENTARY

• Allocation to equities ended the quarter at 56%, inside the target range of 45%-65%. Market value for the **Total Fund** was $1.086 billion by quarter-end versus $ 1.079 billion in the previous quarter. The Total Fund posted an 2.7% return for the trailing quarter and 5.5% for the trailing 12 months. The Total Fund underperformed the Policy Index by 65 bps for the quarter and underperformed its Policy Index by 71 bps over the trailing year.

• The **Total Fund** ranked in the 87th percentile in the peer universe for the quarter and 72nd percentile over the last 12 months.

• The **Global Equity Composite** returned 3.5% for the quarter, outperforming the index by 16 bps and ranking in the 54th percentile versus peers. Over the trailing 12 months, the portfolio returned 5.0%, outperforming the benchmark by 46 bps and ranking in the 59th percentile of the peer universe.

• The **Fixed Income Composite** returned 3.0% over the quarter, underperforming the index by 8 bps and ranking in the 53rd percentile versus universe peers. Over the trailing 12 months, the composite returned 7.7% and underperformed the Index by 17 bps and ranked in the 43rd percentile of the peer universe.

• The **Real Estate Composite** returned -1.3% for the quarter and 2.7% for the trailing 12 months.

• The **MLP Composite** returned -0.4% for the quarter, underperforming the index by 55 bps and ranking in the 41st percentile versus peers. For the trailing year, the composite has returned 2.0% and has underperformed the benchmark by 107 bps, ranking in the 23rd percentile versus peers. Since inception, the MLP Composite is ahead of its Alerian MLP Index benchmark by 419 bps and has returned 2.5%.

REBALANCING ACTIVITY FOR THE QUARTER

Raise cash for benefit payments:

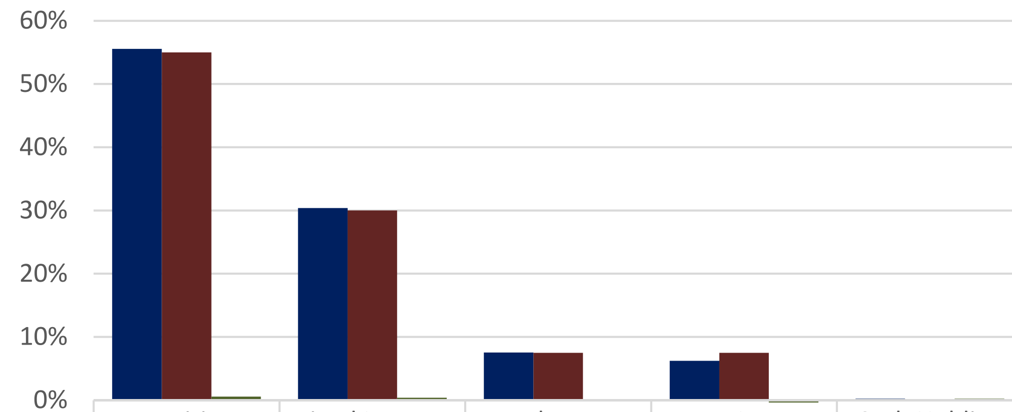
SSgA MSCI ACWI IMI Index Fund
To cash $7,750,000
April 2019

SSgA MSCI ACWI IMI Index Fund
To cash $6,900,000
May 2019

SSgA MSCI ACWI IMI Index Fund
To cash $6,900,000
June 2019

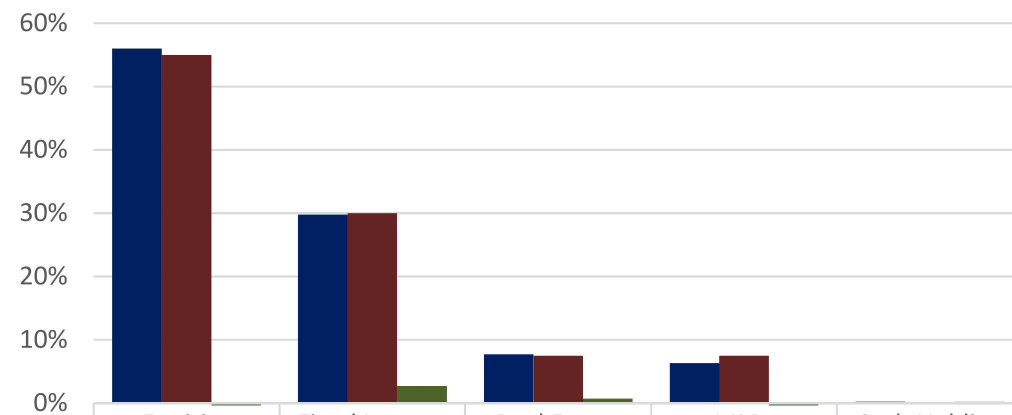
PIMCO Total Return Fund
To cash $500,000
June 2019

Asset Allocation – June 30, 2019



	Equities	Fixed Income	Real Estate	MLPs	Cash Holding
Actual Allocation	55.6%	30.4%	7.6%	6.3%	0.2%
Target Allocation	55.0%	30.0%	7.5%	7.5%	0.0%
Difference vs Target	0.6%	0.4%	0.1%	-1.2%	0.2%

Asset Allocation – March 31, 2019



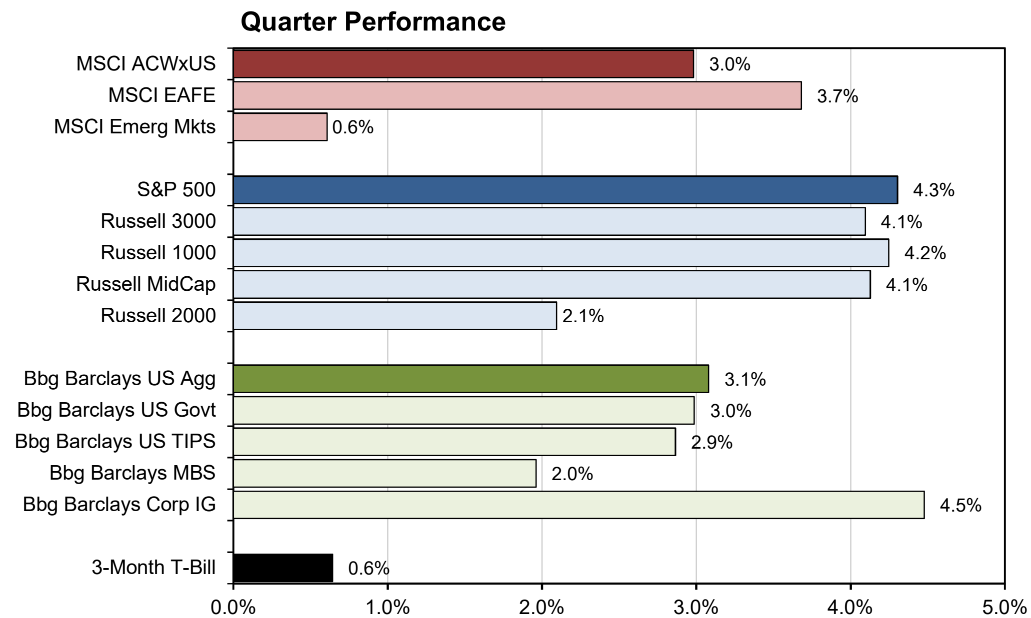
	Equities	Fixed Income	Real Estate	MLPs	Cash Holding
Actual Allocation	56.0%	29.8%	7.7%	6.3%	0.2%
Target Allocation	55.0%	30.0%	7.5%	7.5%	0.0%
Difference vs Target	-1.8%	2.7%	0.7%	-1.9%	0.2%

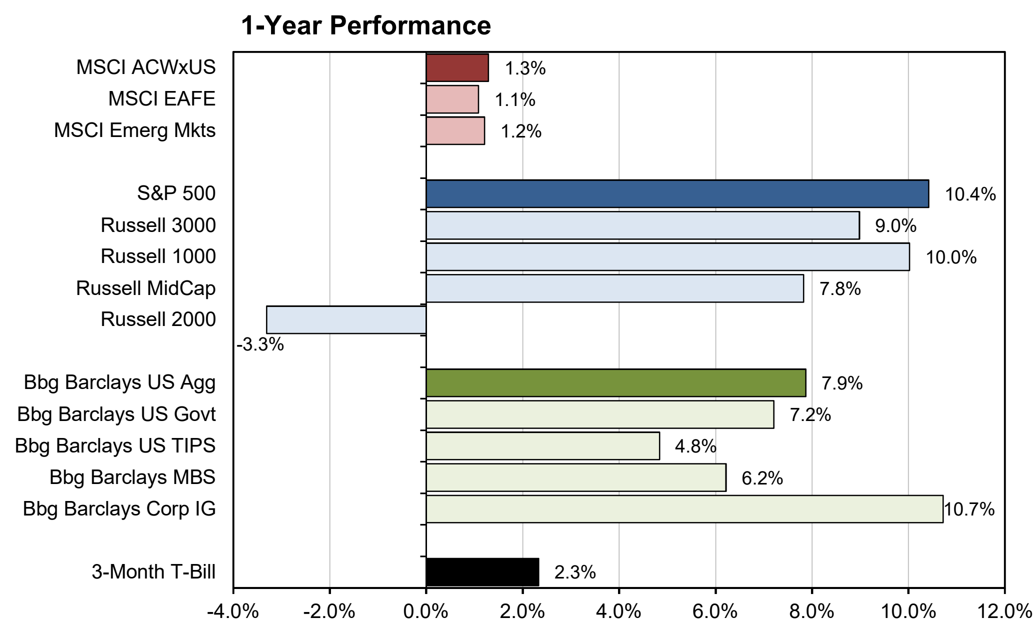
2nd Quarter 2019 Market Environment

- Broad asset class returns were positive during the 2nd quarter of 2019 with both equity and fixed income indices extending their year-to-date gains. US stocks outperformed international stocks during a very volatile quarter. Equity indices rose to start the period as progress in global trade negotiations outweighed signs of weakness in macroeconomic data. However, trade discussions between the US and China fell apart in May prompting increased tariffs and sharp declines in equity markets. The softening in economic data, stubbornly low inflation and the threat of slower future growth caused by ongoing disruption in trade led the Federal Reserve (Fed) to communicate a shift toward a more accommodative policy stance. This change in central bank posture caused markets to rebound strongly, ending the quarter higher for the period. Fixed income returns were also positive during the quarter as the prospect of more accommodative monetary policy pushed interest rates lower, increasing bond prices. Within domestic equity markets, large cap stocks outperformed small cap equities during the quarter with the S&P 500 Index returning 4.3% versus a 2.1% return on the small cap Russell 2000 Index. US equity returns over the 1-year period were positive within large and mid cap stocks, returning 10.4% and 7.8% respectively, but small cap stocks posted a loss, falling -3.3%.

- Similar to US markets, international markets were volatile during the 2nd quarter as investors reacted to mixed economic data, heightened geopolitical 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.



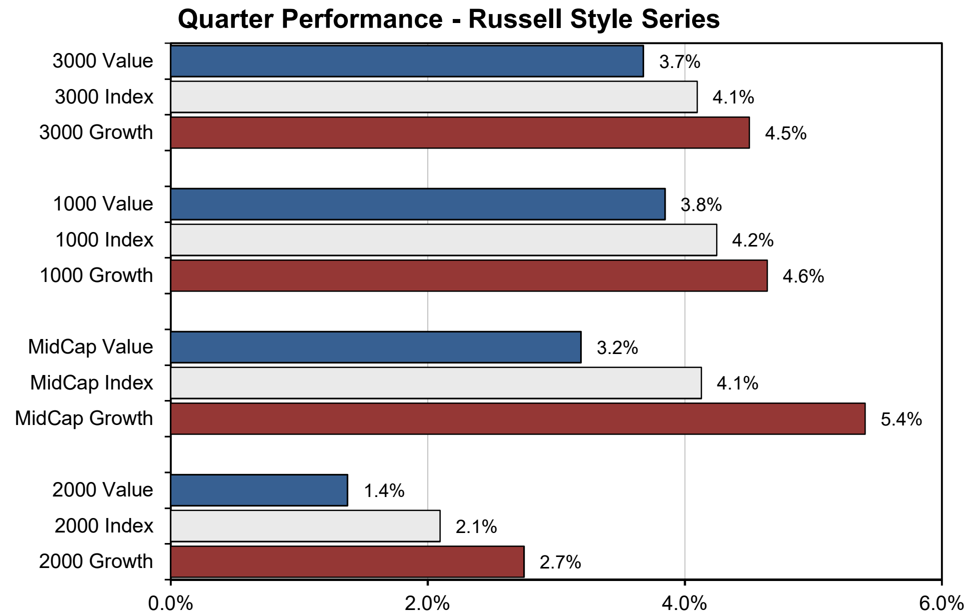


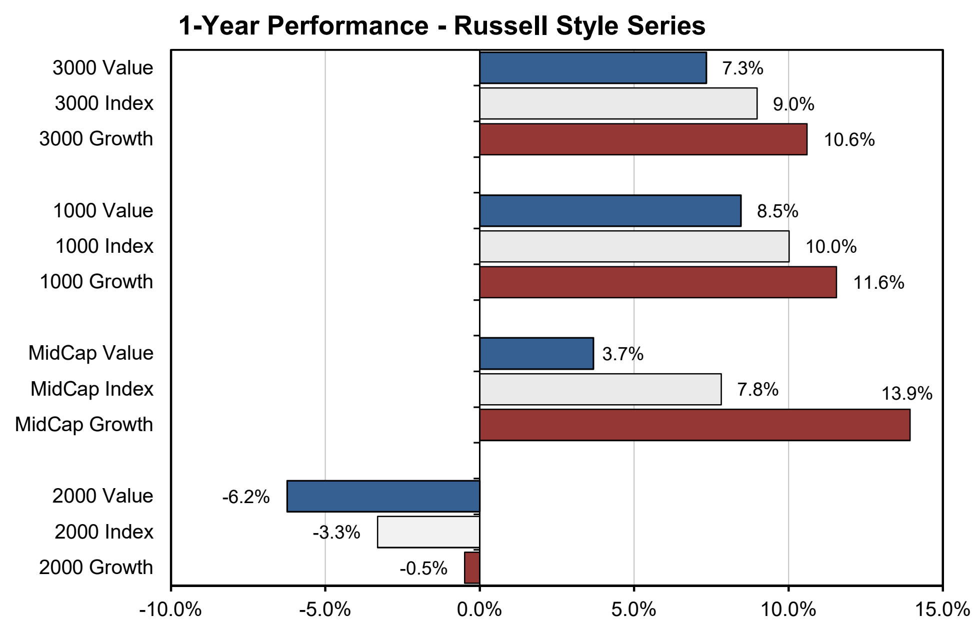
Source: Investment Metrics

- US equity index returns were modestly positive across the style and capitalization spectrum for the 2nd quarter. Corporate earnings reported during the quarter surprised to the upside, but economic data released during the period showed signs of slowing growth. Developments around global trade were particularly prominent during the period, heavily influencing market sentiment. Positive developments in trade negotiations with China came to an abrupt halt in May leading the US to increase tariffs on $200 billion of Chinese imports from 10% to 25% and announce that the US would consider tariffs on the remaining $300 billion in goods imported from China. China retaliated by increasing the tariff range on $60 billion of US goods from 5-10% to 5-25%. Additionally, the US instituted a ban on sales of technology equipment to Chinese telecommunications firm Huawei citing national security risks. China is expected to take similar action in retaliation although nothing has been announced. Trade talks are ready to resume and both sides have agreed to cease escalations following a meeting between President Trump and President Jinping at the G20 summit held at the end of the quarter. In addition, President Trump threatened a 5% tariff on all Mexican imports as a tact to reduce the level of illegal immigration at the US border with Mexico, and US waivers on sanctions for Iranian oil ended leading to increased tensions in the region that were further escalated after Iran downed a US drone. Despite these headwinds, markets rose following comments from an increasingly accommodative Fed as investors priced in greater odds of easy monetary policy going forward.

- During the quarter, higher market cap stocks outperformed lower market cap stocks across the style spectrum with the only exception being the outperformance of mid cap growth stocks relative to large cap growth stocks. The large cap Russell 1000 Index gained 4.2% during the period versus a 4.1% return for the Russell MidCap Index and a 2.1% gain on the small cap Russell 2000 Index as market participants may be moving toward the relative safety of large cap names as the economy continues to show growing signs of weakness. When viewed over the most recent 1-year period, large cap stocks outperformed relative to small cap stocks. The Russell 1000 returned 10.0% for the year while the Russell 2000 fell -3.3%.

- Growth indices outperformed value indices across the market cap spectrum during the 2nd quarter. Growth stocks have outperformed value in nine of the last ten quarters. The Russell MidCap Growth Index was the best performing style index for the period, returning 5.4% for the quarter with the small cap value index posting the lowest relative return, a gain of 1.4%. The trend of growth outperformance is also visible over the 1-year period as growth indices have benefitted from larger exposures to technology which has been a large driver of index performance over the last year, as well as a meaningful underweight to energy which has been a relative detractor.

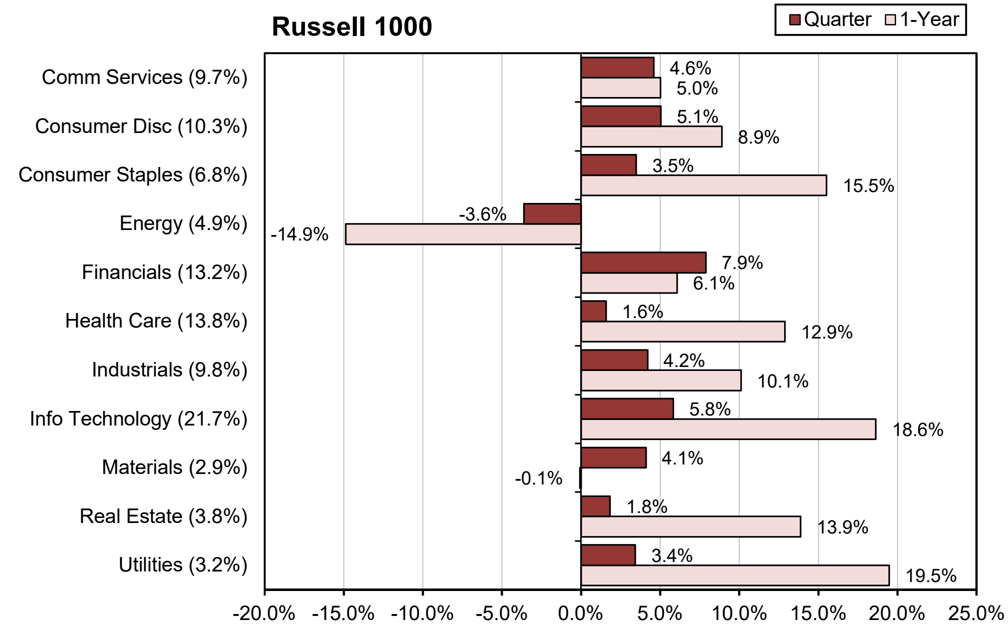


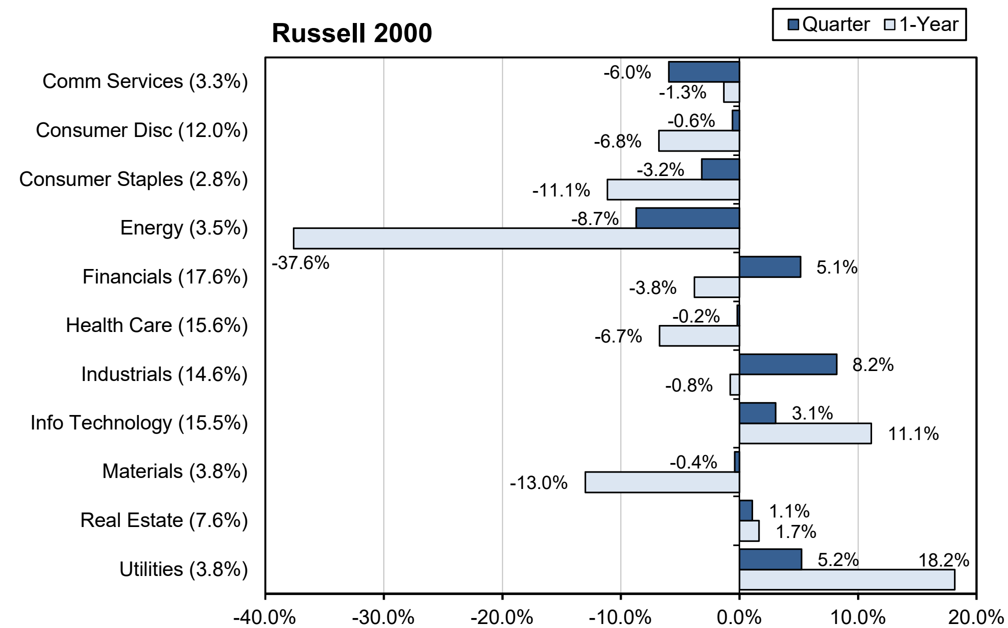


Source: Investment Metrics

- 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%.





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

Top 10 Index Weights & Quarterly Performance for the Russell 1000 & 2000

As of June 30, 2019

Top 10 Weighted Stocks

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

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

Bottom 10 Performing Stocks (by Quarter)

Russell 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)

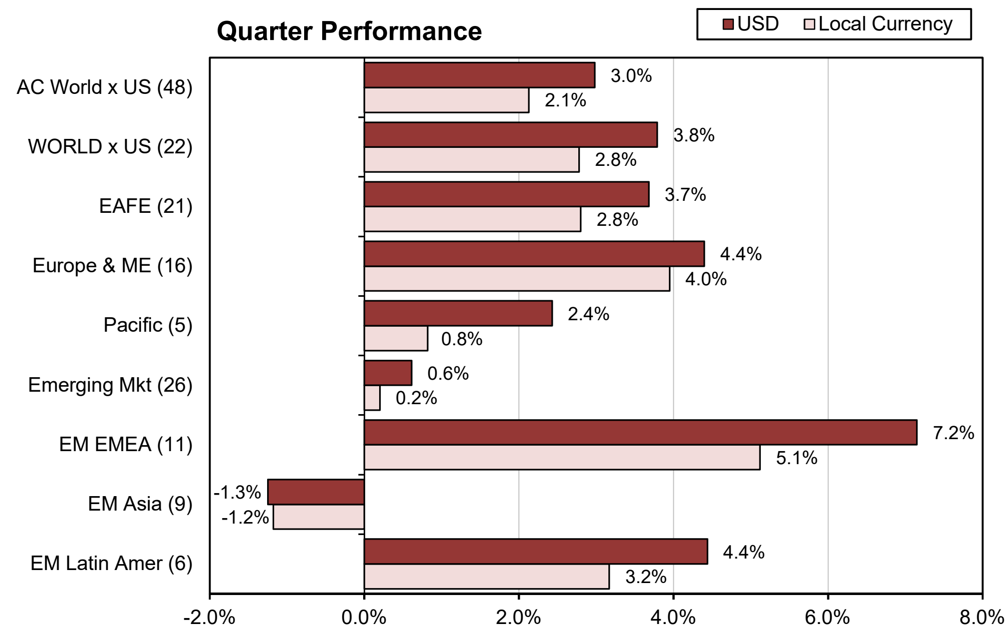
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
FuelCell Energy Inc	0.00%	-94.0%	-98.9%	Industrials
Halcon Resources Corp	0.00%	-86.9%	-96.0%	Energy
Pioneer Energy Services Corp	0.00%	-85.7%	-95.7%	Energy
Eros International PLC	0.00%	-85.2%	-89.6%	Communication Services
Superior Energy Services 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

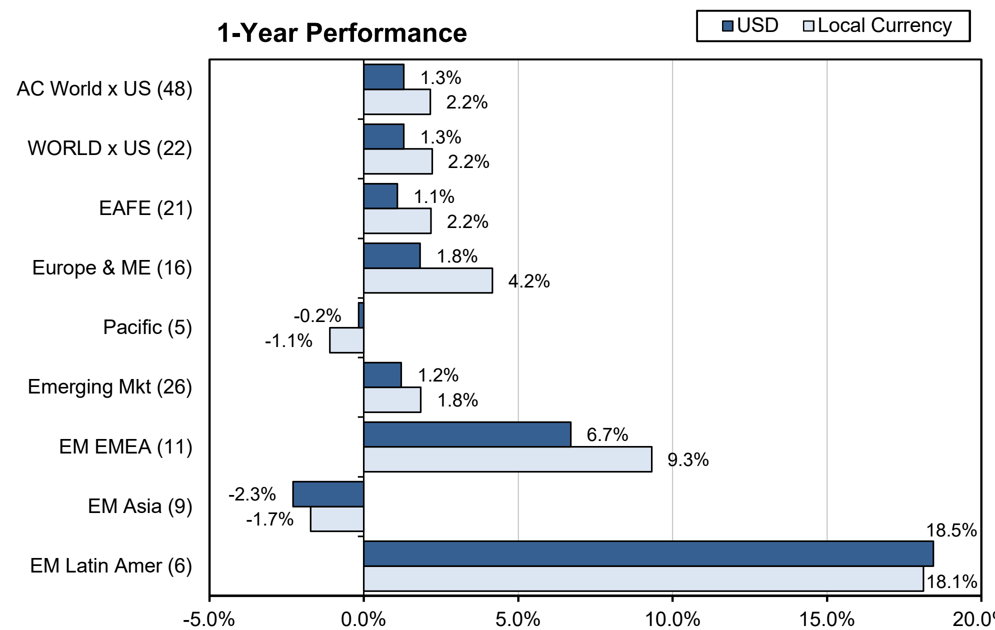
Source: Morningstar Direct

- 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.





Source: MSCI Global Index Monitor (Returns are Net)

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%**

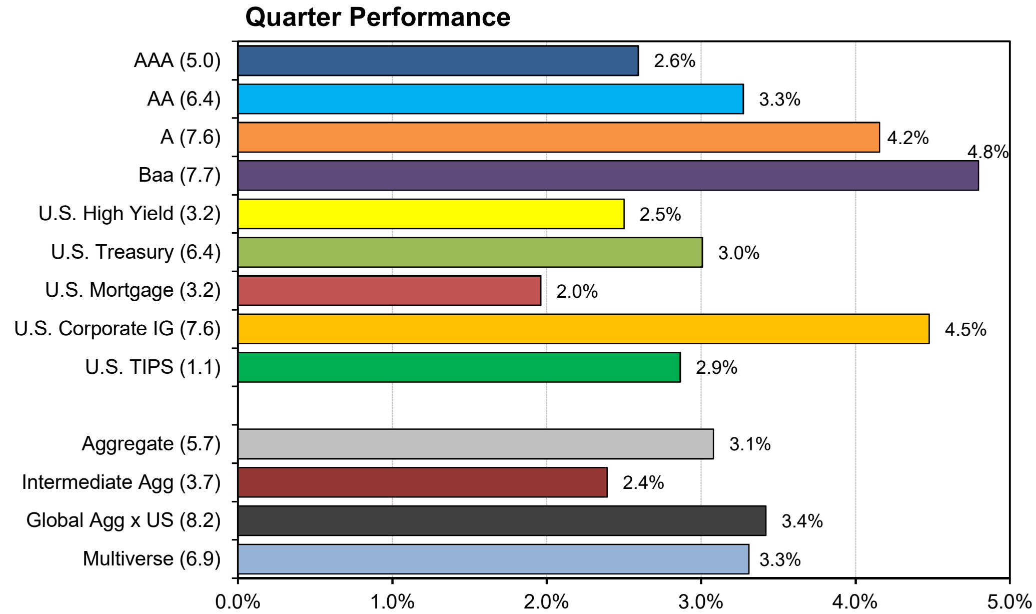
Country	MSCI-EAFE Weight	MSCI-ACWIxUS Weight	Quarter Return	1- Year Return
Japan	23.7%	15.8%	1.0%	-4.2%
United Kingdom	16.8%	11.2%	0.9%	-2.1%
France	11.4%	7.6%	6.5%	3.0%
Switzerland	9.3%	6.2%	8.4%	19.8%
Germany	8.8%	5.9%	7.1%	-3.8%
Australia	7.1%	4.8%	7.3%	6.6%
Hong Kong	4.0%	2.7%	1.0%	10.4%
Netherlands	3.6%	2.4%	5.8%	5.3%
Spain	3.0%	2.0%	2.6%	-2.1%
Sweden	2.7%	1.8%	4.9%	3.4%
Italy	2.3%	1.6%	2.9%	-0.7%
Denmark	1.7%	1.1%	1.6%	5.8%
Singapore	1.4%	0.9%	7.0%	8.3%
Finland	1.0%	0.7%	0.2%	-4.7%
Belgium	1.0%	0.7%	1.2%	-9.1%
Norway	0.7%	0.5%	2.4%	-4.3%
Israel	0.6%	0.4%	-3.6%	-4.5%
Ireland	0.5%	0.4%	4.7%	-9.2%
New Zealand	0.3%	0.2%	3.9%	16.0%
Austria	0.2%	0.2%	0.8%	-13.1%
Portugal	0.2%	0.1%	1.6%	-4.6%
Total EAFE Countries	**100.0%**	**66.8%**	**3.7%**	**1.1%**
Canada		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		0.0%	2.6%	1.1%
Egypt		0.0%	7.8%	5.4%
Pakistan		0.0%	-20.8%	-36.7%
Total Emerging Countries		**26.4%**	**0.6%**	**1.2%**
Total ACWIxUS Countries		**100.0%**	**3.0%**	**1.3%**

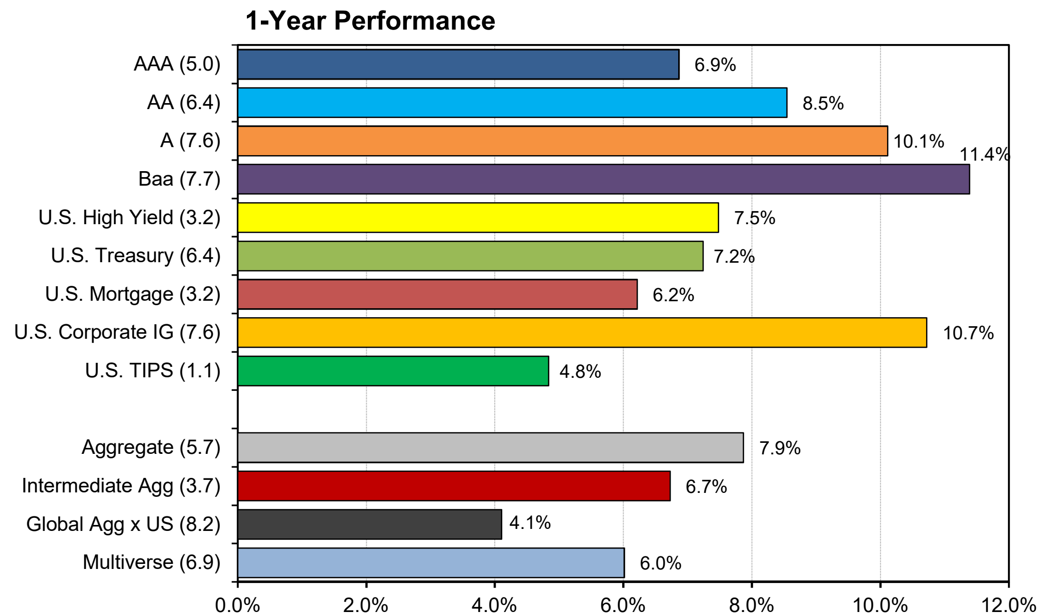
Source: Morningstar Direct, MSCI Global Index Monitor (Returns are Net in USD)
As a result of the GICS classification changes on 9/28/2018 and certain associated reporting limitations, sector performance represents backward looking performance for the prior year of each sector's current constituency, post creation of the Communication Services sector.

- Broad fixed income benchmarks built on their early 2019 gains during the 2nd quarter. During the 1st quarter, the Federal Open Market Committee (FOMC) reacted to a difficult end to 2018 by issuing guidance that the FOMC is no longer projecting any further interest rate increases through 2019. Federal Reserve Chair Jerome Powell also stated that the Fed would begin tapering the roll off from the planned balance sheet reduction program in May with a plan to halt the program entirely in September. The stoppage of the balance sheet reduction program represents an easing of monetary policy. The Fed took an increasingly dovish stance during the 2nd quarter reacting to softening economic data, tepid inflation and increased risks around global trade. While the committee left interest rates unchanged, the minutes from the June FOMC meeting indicate that the committee felt "downside risks to the outlook for economic activity had risen materially" during the quarter with several participants noting that a "near-term cut in the target range for the Federal Funds Rate could help cushion the effects of possible future adverse shocks to the economy". These comments led market participants to forecast greater odds of an interest rate cut this year, pushing markets higher. Interest rates fell across all maturities on the US Treasury Yield Curve with the greatest declines occurring in the mid- and long-term issues. The curve remains inverted with short-term maturities paying higher interest rates than issues in the mid- to long-end of the curve. The bellwether Bloomberg Barclays US Aggregate Index posted positive returns for both the 1st quarter and the 1-year period, returning 3.1% and 7.9% respectively.

- Within investment grade credit, lower quality issues outperformed higher quality issues as investors gravitated toward higher risk securities during the quarter. Lower quality issues also benefitted from their higher durations. On an absolute basis, without negating the duration differences in the sub-indices, Baa rated credit was the best performing investment grade credit quality segment returning 4.8% for the quarter, while AAA was the worst performing, returning 2.6%. High yield issues returned 2.5% for the quarter as these issues did not commensurately benefit from the drop in interest rates due to their lower durations. Returns over the 1-year period generally show lower quality securities outperforming higher quality issues.

- Investment grade corporates outperformed the more defensive Treasury and mortgage backed sectors of the Bloomberg Barclays US Aggregate Index's three broad sectors during the 2nd quarter. Investment grade corporate credit returned 4.5%, as falling interest rates benefitted these securities to a greater degree and credit spreads have continued to tighten since the end of 2018. When viewed over the 1-year period, corporate credit outperformed both Treasuries and mortgage backed securities. Corporate issues returned 10.7% versus a 6.2% return for mortgages and 7.2% gain on Treasury securities.





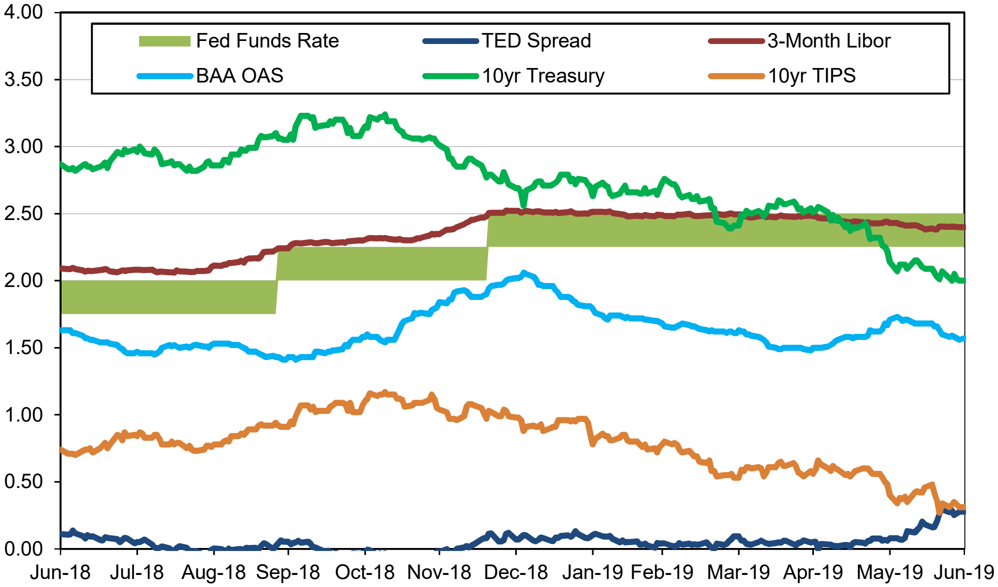
Source: Bloomberg

- Global fixed income returns were in line with their domestic counterparts, slightly outperforming during the 2nd quarter. These indices have lower, or in some cases (Germany, Japan), negative yields, but have higher durations. The returns of these indices are also significantly influenced by fluctuations in their currency denomination relative to the USD. The USD depreciated against most other developed currencies, acting as a tailwind to global bond indices. The return on global bonds, as represented by the Bloomberg Barclays Global Aggregate ex US Index, was 3.4%. Global bonds still trail over the 1-year period with the Global Aggregate ex US Index returning 4.1% versus a 7.9% return on the domestically focused Barclays Aggregate Index. As global growth has shown signs of stalling, several international central banks have started to step back from more restrictive postures. The ECB and the PBoC have moved toward an easing of monetary policy and implemented various stimulus programs designed to support their respective economies. The Bank of England and the Bank of Japan made no major policy changes during the quarter as they continue to review macroeconomic data within their respective countries.

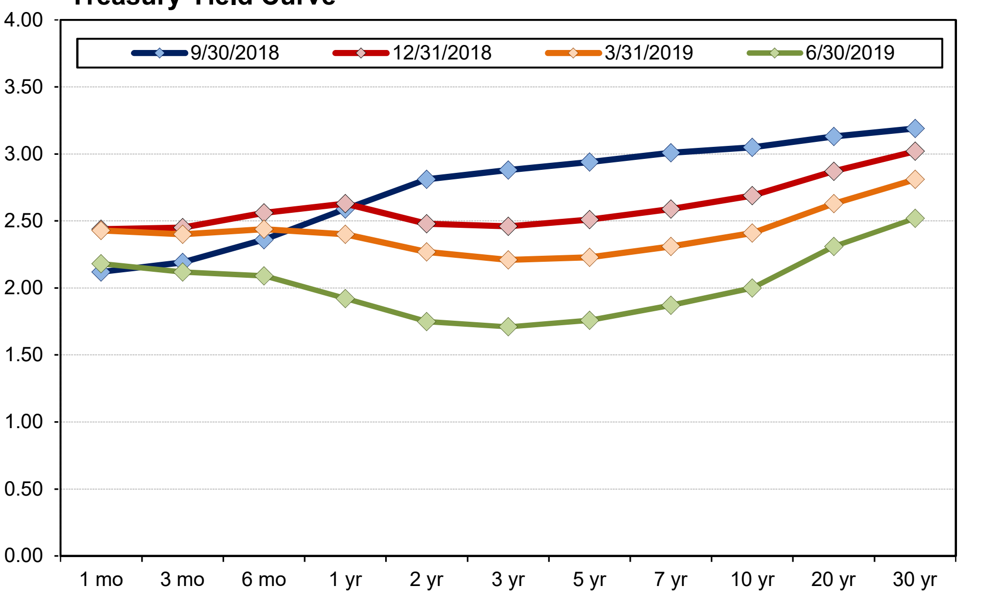
- Much of the index performance detailed in the bar graphs on the previous page is visible on a time series basis by reviewing the line graphs to the right. The '1-Year Trailing Market Rates' chart illustrates that the 10-year Treasury yield (green line) fell from recent high's greater than 3.0%, to 2.0% to end the quarter. The blue line illustrates changes in the BAA OAS (Option Adjusted Spread). This measure quantifies the additional yield premium that investors require to purchase and hold non-Treasury issues. This line illustrates an abrupt increase in credit spreads during the 4th quarter of 2018 as investors moved to higher quality assets during the quarter's risk-off environment. Subsequently, spreads dropped steadily until they rose again in May and then later declined in June. This spread tightening is equivalent to an interest rate decrease on corporate bonds, which produces an additional tailwind for corporate bond index returns. These credit spreads have tightened by about 6 basis points over the last three months. The green band across the graph illustrates the gradual increase in the Federal Funds Rate due to the tightening of US monetary policy during 2018. There have been no changes to the Federal Funds Rate in 2019.

- The lower graph provides a snapshot of the US Treasury yield curve at the end of each of the last four calendar quarters. The downward shift in interest rates as well as a general steepening of the yield curve are clearly visible over the last quarter. As mentioned, the yield curve continues to invert as yields on shorter-term maturities fell less than interest rates in the middle- to long-end of the curve.

1-Year Trailing Market Rates



Treasury Yield Curve



Source: US Department of Treasury, FRED (Federal Reserve of St. Louis)

Employees' Retirement System of the City of Norfolk

Annual Asset Class Performance

June 30, 2019

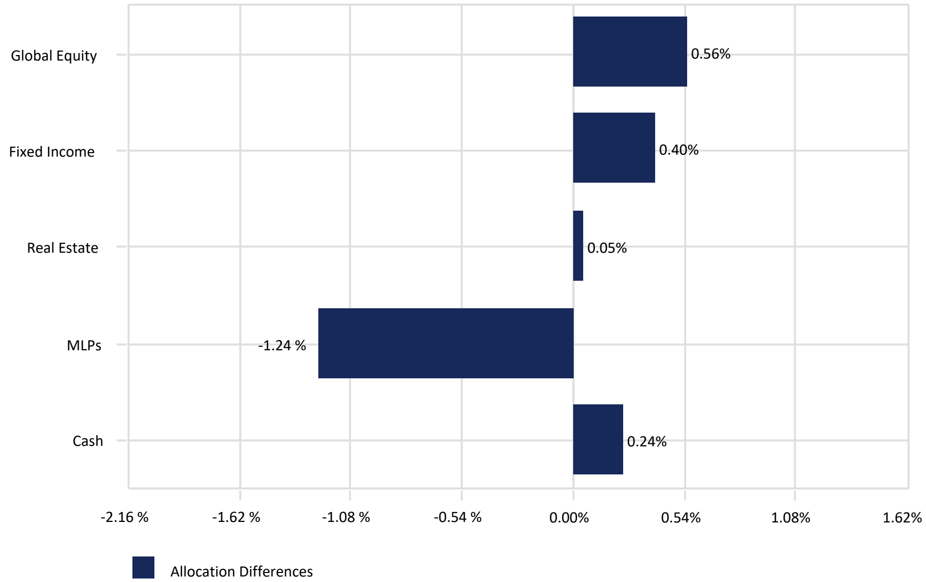
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	YTD
Best	MSCI Emerging Mkts (Net) 34.0 %	MSCI Emerging Mkts (Net) 32.2 %	MSCI Emerging Mkts (Net) 39.4 %	Blmbg Barc US Agg 5.2 %	MSCI Emerging Mkts (Net) 78.5 %	Russell 2000 Growth 29.1 %	NCREIF ODCE (EW) (Net) 15.0 %	MSCI Emerging Mkts (Net) 18.2 %	Russell 2000 Growth 43.3 %	S&P 500 13.7 %	NCREIF ODCE (EW) (Net) 14.2 %	Russell 2000 Value 31.7 %	MSCI Emerging Mkts (Net) 37.3 %	NCREIF ODCE (EW) (Net) 7.3 %	Russell 1000 Growth 21.5 %
	NCREIF ODCE (EW) (Net) 19.0 %	MSCI EAFE (Net) 26.3 %	NCREIF ODCE (EW) (Net) 15.0 %	Blmbg Barc Global Agg Ex USD 4.4 %	Blmbg Barc US Corp High Yield 58.2 %	Russell 2000 Value 24.5 %	Blmbg Barc US Agg 7.8 %	Russell 2000 Value 18.1 %	Russell 2000 Value 34.5 %	Russell 1000 Value 13.5 %	Russell 1000 Growth 5.7 %	Russell 1000 Value 17.3 %	Russell 1000 Growth 30.2 %	Blmbg Barc US Agg 0.0 %	Russell 2000 Growth 20.4 %
	MSCI EAFE (Net) 13.5 %	Russell 2000 Value 23.5 %	Russell 1000 Growth 11.8 %	NCREIF ODCE (EW) (Net) -11.1 %	Russell 1000 Growth 37.2 %	MSCI Emerging Mkts (Net) 18.9 %	Blmbg Barc US Corp High Yield 5.0 %	Russell 1000 Value 17.5 %	Russell 1000 Growth 33.5 %	Russell 1000 Growth 13.1 %	S&P 500 1.4 %	Blmbg Barc US Corp High Yield 17.1 %	MSCI EAFE (Net) 25.0 %	Russell 1000 Growth -1.5 %	S&P 500 18.5 %
	Russell 1000 Value 7.1 %	Russell 1000 Value 22.2 %	MSCI EAFE (Net) 11.2 %	Strategic Policy -23.5 %	Russell 2000 Growth 34.5 %	Russell 1000 Growth 16.7 %	Blmbg Barc Global Agg Ex USD 4.4 %	MSCI EAFE (Net) 17.3 %	Russell 1000 Value 32.5 %	NCREIF ODCE (EW) (Net) 11.4 %	Blmbg Barc US Agg 0.5 %	S&P 500 12.0 %	Russell 2000 Growth 22.2 %	Blmbg Barc US Corp High Yield -2.1 %	Russell 1000 Value 16.2 %
	Russell 1000 Growth 5.3 %	S&P 500 15.8 %	Blmbg Barc Global Agg Ex USD 11.0 %	Blmbg Barc US Corp High Yield -26.2 %	MSCI EAFE (Net) 31.8 %	Russell 1000 Value 15.5 %	Russell 1000 Growth 2.6 %	S&P 500 16.0 %	S&P 500 32.4 %	Strategic Policy 6.2 %	MSCI EAFE (Net) -0.8 %	Russell 2000 Growth 11.3 %	S&P 500 21.8 %	Blmbg Barc Global Agg Ex USD -2.1 %	MSCI EAFE (Net) 14.0 %
	S&P 500 4.9 %	NCREIF ODCE (EW) (Net) 15.1 %	Strategic Policy 7.2 %	Russell 2000 Value -28.9 %	S&P 500 26.5 %	Blmbg Barc US Corp High Yield 15.1 %	S&P 500 2.1 %	Blmbg Barc US Corp High Yield 15.8 %	MSCI EAFE (Net) 22.8 %	Blmbg Barc US Agg 6.0 %	Russell 2000 Growth -1.4 %	MSCI Emerging Mkts (Net) 11.2 %	Strategic Policy 13.8 %	S&P 500 -4.4 %	Russell 2000 Value 13.5 %
	Russell 2000 Value 4.7 %	Russell 2000 Growth 13.3 %	Russell 2000 Growth 7.0 %	Russell 1000 Value -36.8 %	Russell 2000 Value 20.6 %	NCREIF ODCE (EW) (Net) 15.1 %	Strategic Policy 0.7 %	Russell 1000 Growth 15.3 %	Strategic Policy 14.6 %	Russell 2000 Growth 5.6 %	Strategic Policy -1.9 %	NCREIF ODCE (EW) (Net) 8.4 %	Russell 1000 Value 13.7 %	Strategic Policy -5.8 %	Strategic Policy 12.2 %
	Russell 2000 Growth 4.2 %	Blmbg Barc US Corp High Yield 11.9 %	Blmbg Barc US Agg 7.0 %	S&P 500 -37.0 %	Strategic Policy 20.4 %	S&P 500 15.1 %	Russell 1000 Value 0.4 %	Russell 2000 Growth 14.6 %	NCREIF ODCE (EW) (Net) 12.4 %	Russell 2000 Value 4.2 %	Russell 1000 Value -3.8 %	Strategic Policy 7.9 %	Blmbg Barc Global Agg Ex USD 10.5 %	Russell 1000 Value -8.3 %	MSCI Emerging Mkts (Net) 10.6 %
	Strategic Policy 4.0 %	Strategic Policy 11.2 %	S&P 500 5.5 %	Russell 1000 Growth -38.4 %	Russell 1000 Value 19.7 %	Strategic Policy 12.0 %	Russell 2000 Growth -2.9 %	Strategic Policy 12.1 %	Blmbg Barc US Corp High Yield 7.4 %	Blmbg Barc US Corp High Yield 2.5 %	Blmbg Barc US Corp High Yield -4.5 %	Russell 1000 Growth 7.1 %	Russell 2000 Value 7.8 %	Russell 2000 Growth -9.3 %	Blmbg Barc US Corp High Yield 9.9 %
	Blmbg Barc US Corp High Yield 2.7 %	Russell 1000 Growth 9.1 %	Blmbg Barc US Corp High Yield 1.9 %	Russell 2000 Growth -38.5 %	Blmbg Barc Global Agg Ex USD 7.5 %	MSCI EAFE (Net) 7.8 %	Russell 2000 Value -5.5 %	NCREIF ODCE (EW) (Net) 9.9 %	Blmbg Barc US Agg -2.0 %	MSCI Emerging Mkts (Net) -2.2 %	Blmbg Barc Global Agg Ex USD -6.0 %	Blmbg Barc US Agg 2.6 %	Blmbg Barc US Corp High Yield 7.5 %	Russell 2000 Value -12.9 %	Blmbg Barc US Agg 6.1 %
	Blmbg Barc US Agg 2.4 %	Blmbg Barc Global Agg Ex USD 8.2 %	Russell 1000 Value -0.2 %	MSCI EAFE (Net) -43.4 %	Blmbg Barc US Agg 5.9 %	Blmbg Barc US Agg 6.5 %	MSCI EAFE (Net) -12.1 %	Blmbg Barc US Agg 4.2 %	MSCI Emerging Mkts (Net) -2.6 %	Blmbg Barc Global Agg Ex USD -3.1 %	Russell 2000 Value -7.5 %	Blmbg Barc Global Agg Ex USD 1.5 %	NCREIF ODCE (EW) (Net) 6.9 %	MSCI EAFE (Net) -13.8 %	Blmbg Barc Global Agg Ex USD 5.0 %
Worst	Blmbg Barc Global Agg Ex USD -8.7 %	Blmbg Barc US Agg 4.3 %	Russell 2000 Value -9.8 %	MSCI Emerging Mkts (Net) -53.3 %	NCREIF ODCE (EW) (Net) -31.3 %	Blmbg Barc Global Agg Ex USD 4.9 %	MSCI Emerging Mkts (Net) -18.4 %	Blmbg Barc Global Agg Ex USD 4.1 %	Blmbg Barc Global Agg Ex USD -3.1 %	MSCI EAFE (Net) -4.9 %	MSCI Emerging Mkts (Net) -14.9 %	MSCI EAFE (Net) 1.0 %	Blmbg Barc US Agg 3.5 %	MSCI Emerging Mkts (Net) -14.6 %	NCREIF ODCE (EW) (Net) 2.6 %

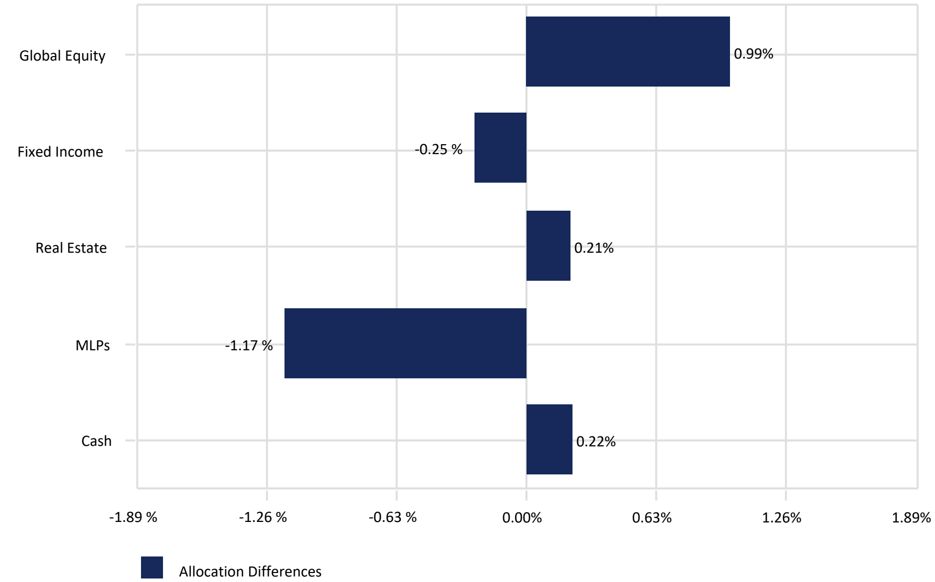
Total Fund

Employees' Retirement System of the City of Norfolk

Asset Allocation vs. Target Allocation

June 30, 2019





June 30, 2019

	Market Value ($)	Allocation (%)	Target (%)
Global Equity	603,496,822	55.56	55.00
Fixed Income	330,215,935	30.40	30.00
Real Estate	81,997,636	7.55	7.50
MLPs	67,988,099	6.26	7.50
Cash	2,595,083	0.24	0.00
Total Fund	1,086,293,574	100.00	100.00

March 31, 2019

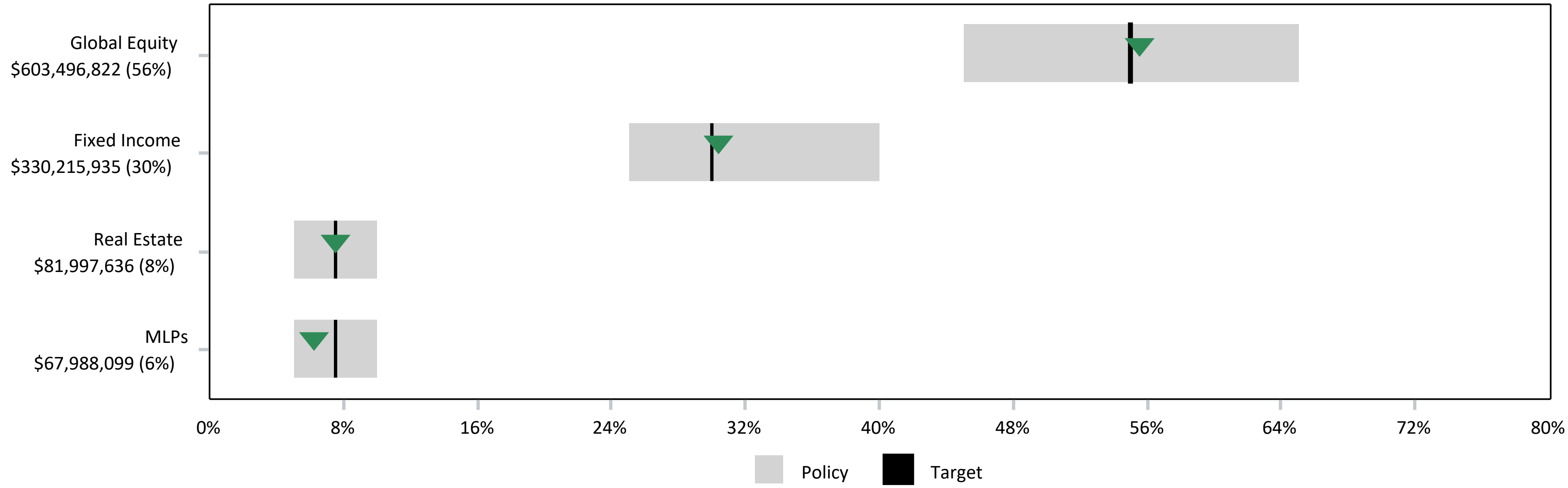
	Market Value ($)	Allocation (%)	Target (%)
Global Equity	604,392,483	55.99	55.00
Fixed Income	321,105,176	29.75	30.00
Real Estate	83,229,012	7.71	7.50
MLPs	68,282,862	6.33	7.50
Cash	2,405,611	0.22	0.00
Total Fund	1,079,415,145	100.00	100.00

Employees' Retirement System of the City of Norfolk

Asset Allocation Compliance

June 30, 2019

Executive Summary

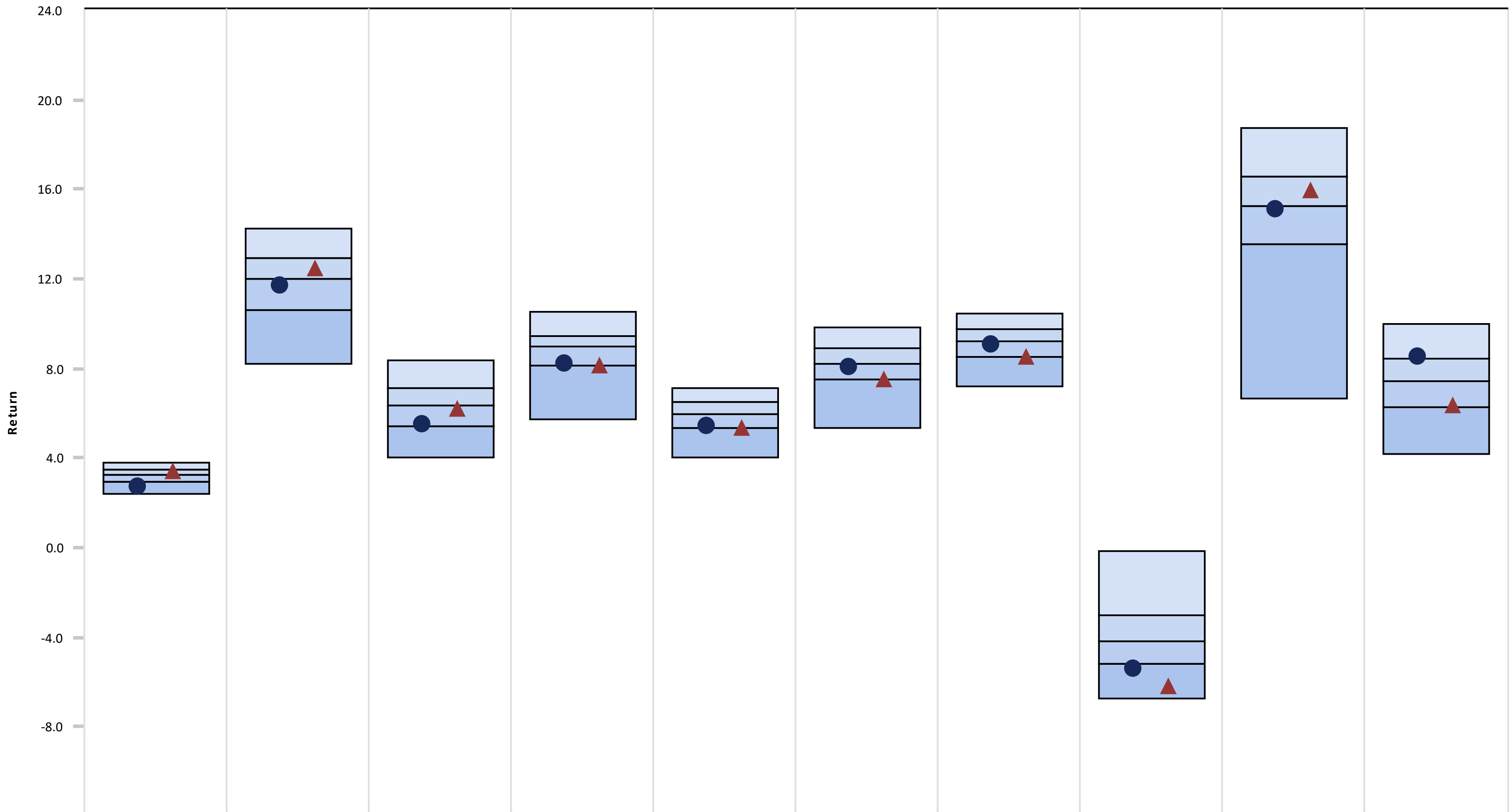


	Asset Allocation $ ($)	Current Allocation (%)	Target Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)	Target Rebalance ($)
Total Fund	**1,086,293,574**	**100.00**	**100.00**			
Global Equity	**603,496,822**	**55.56**	**55.00**	**45.00**	**65.00**	**(6,035,356)**
SSgA MSCI ACWI IMI Index Fund	603,496,822	55.56				
Fixed Income	**330,215,935**	**30.40**	**30.00**	**25.00**	**40.00**	**(4,327,863)**
PIMCO Total Return	168,179,160	15.48				
SSgA Bond Market Index	162,036,775	14.92				
Real Assets	**149,985,734**	**13.81**	**15.00**			**12,958,302**
Real Estate	**81,997,636**	**7.55**	**7.50**	**5.00**	**10.00**	**(525,618)**
JP Morgan Asset Management Strategic Property Fund	42,347,520	3.90				
UBS Trumbull Property Fund	39,650,116	3.65				
MLPs	**67,988,099**	**6.26**	**7.50**	**5.00**	**10.00**	**13,483,919**
Harvest MLP	34,235,839	3.15				
Tortoise Capital Advisors	33,752,260	3.11				
Cash	2,595,083	0.24				

Employees' Retirement System of the City of Norfolk

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

June 30, 2019



	3 Month	CYTD	1 Year	3 Year	5 Year	7 Year	10 Year	2018	2017	2016
● Total Fund Composite	2.73 (87)	11.73 (55)	5.52 (72)	8.19 (74)	5.41 (73)	8.02 (57)	9.06 (54)	-5.43 (81)	15.10 (55)	8.48 (24)
▲ Total Fund Policy	3.38 (33)	12.44 (39)	6.17 (56)	8.09 (76)	5.33 (75)	7.49 (76)	8.49 (75)	-6.19 (90)	15.91 (38)	6.39 (74)
5th Percentile	3.81	14.24	8.36	10.53	7.09	9.83	10.44	-0.13	18.72	9.96
1st Quartile	3.45	12.94	7.11	9.45	6.52	8.91	9.77	-2.99	16.58	8.44
Median	**3.23**	**11.99**	**6.34**	**8.95**	**5.97**	**8.22**	**9.18**	**-4.16**	**15.24**	**7.45**
3rd Quartile	2.92	10.61	5.42	8.12	5.32	7.51	8.49	-5.21	13.56	6.29
95th Percentile	2.42	8.19	4.03	5.71	4.04	5.31	7.24	-6.75	6.68	4.17

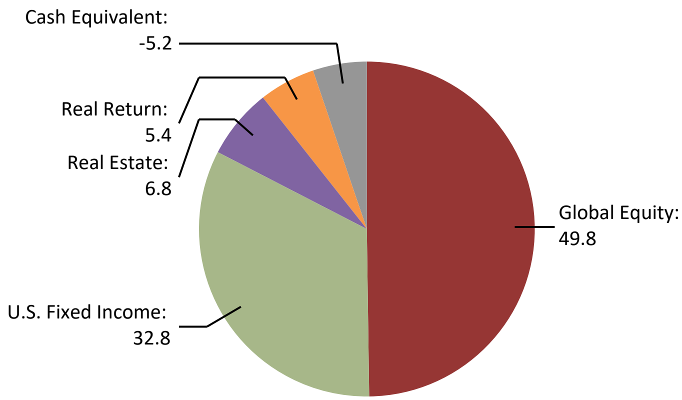
Parentheses contain percentile rankings.

Employees' Retirement System of the City of Norfolk

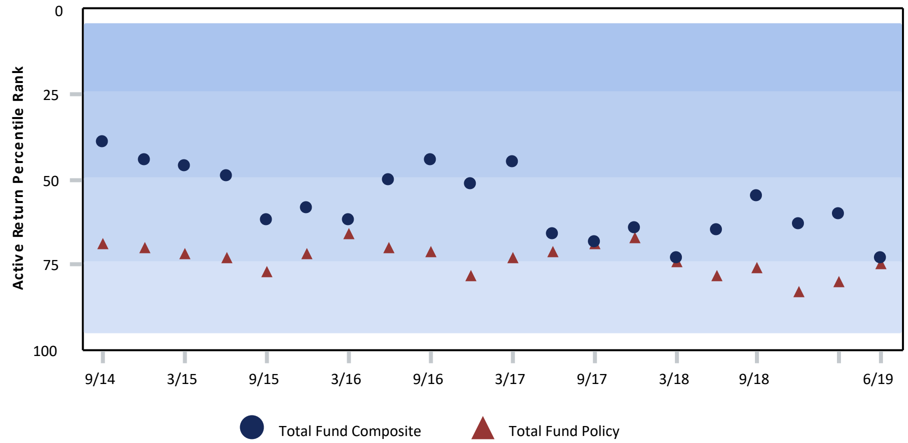
Total Fund Composite

June 30, 2019

Asset Allocation by Segment

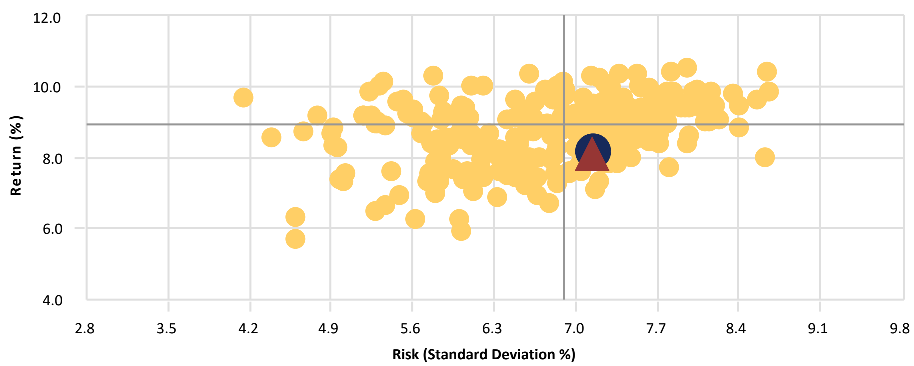


3 Year Rolling Return Rank



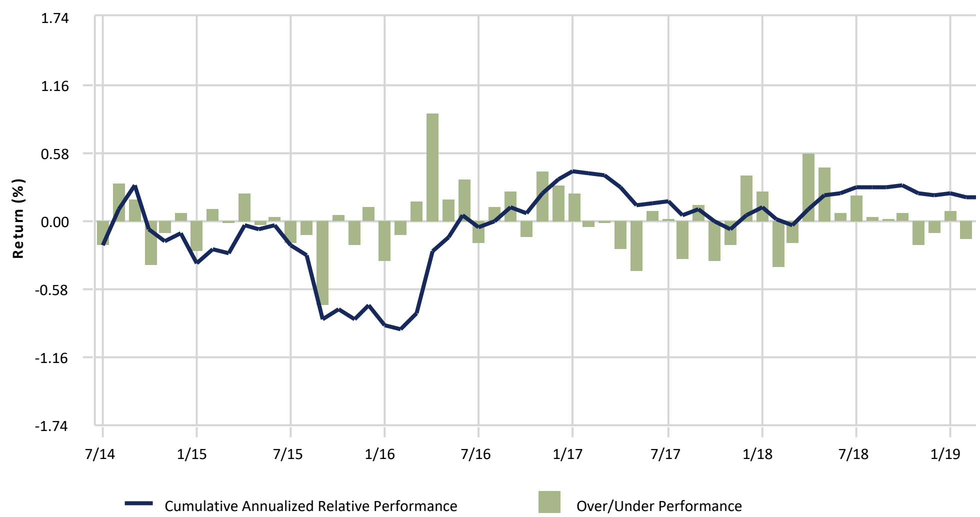
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Total Fund Composite	20	0 (0%)	7 (35%)	13 (65%)	0 (0%)
Total Fund Policy	20	0 (0%)	0 (0%)	14 (70%)	6 (30%)

Risk vs. Return (07/01/16 - 06/30/19)



	Return	Standard Deviation
Total Fund Composite	8.19	7.16
Total Fund Policy	8.09	7.14
Median	8.95	6.90

Relative Performance vs. Total Fund Policy



Note: Cash Equivalent allocation includes manager cash.

Global Equity

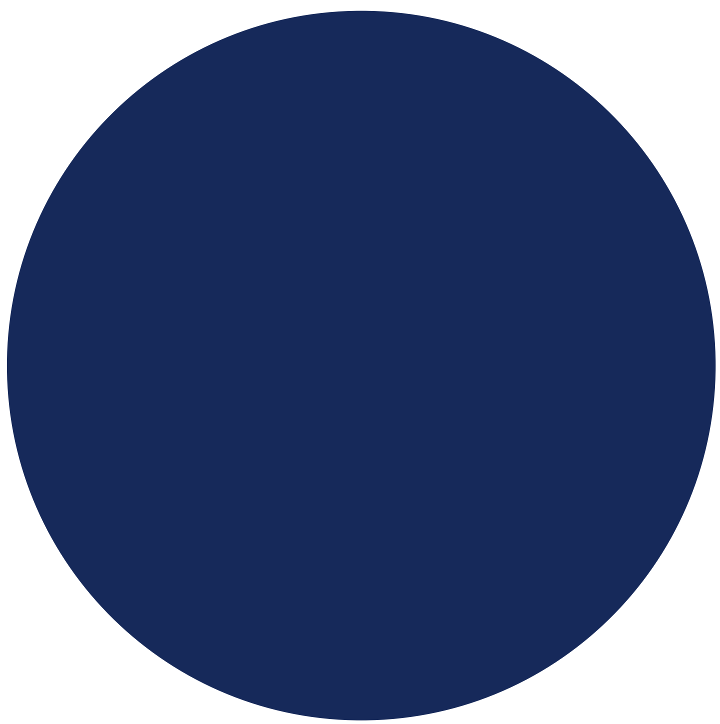
Employees' Retirement System of the City of Norfolk

Global Equity Composite vs. MSCI AC World IMI (Net)

June 30, 2019

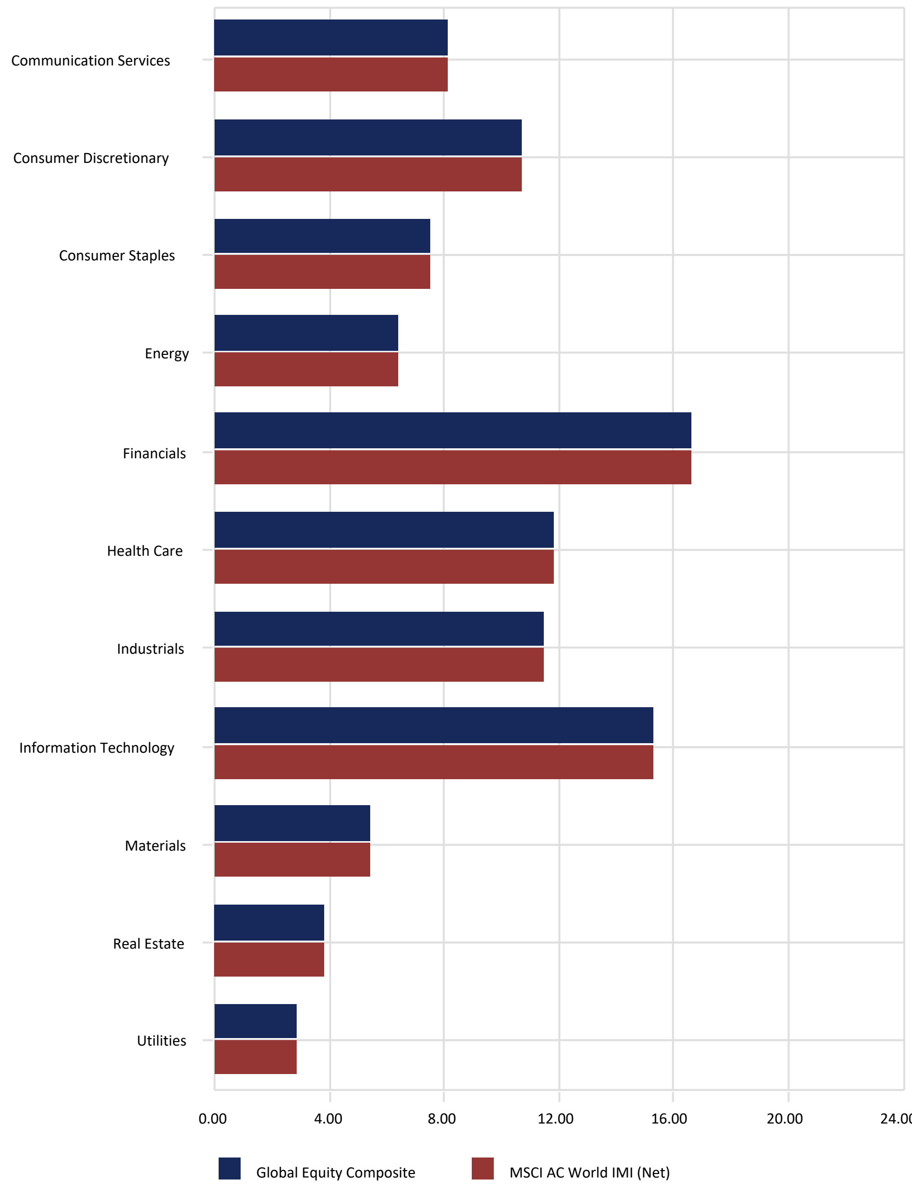
Manager Allocation

June 30, 2019 : $603,496,822



	Market Value ($)	Allocation (%)
SSgA MSCI ACWI IMI Index Fund	603,496,822	100.00

Sector Allocation - Holdings Based

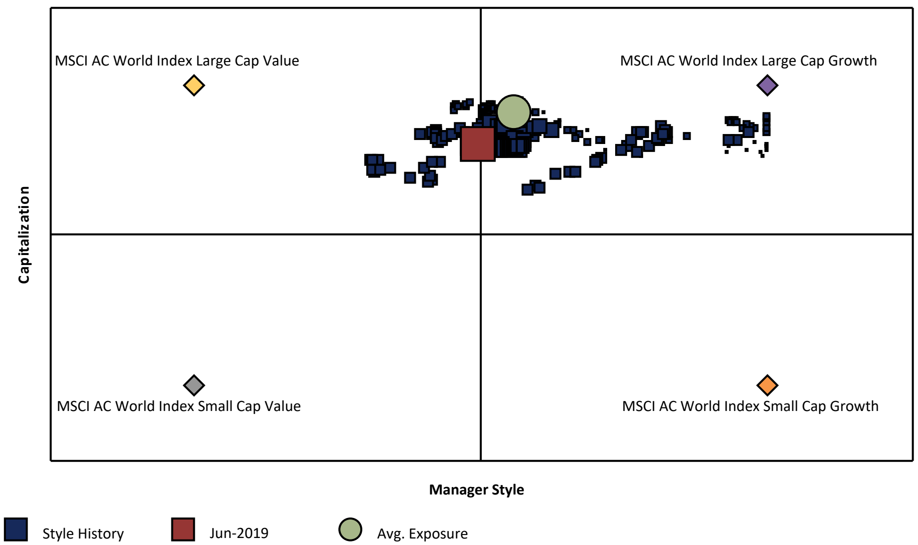


Employees' Retirement System of the City of Norfolk

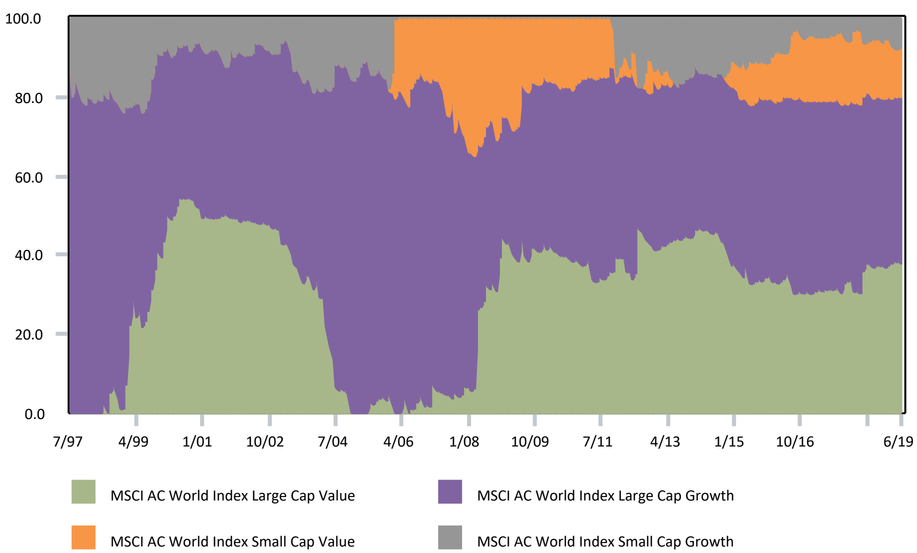
Global Equity Composite vs. MSCI AC World IMI (Net)

June 30, 2019

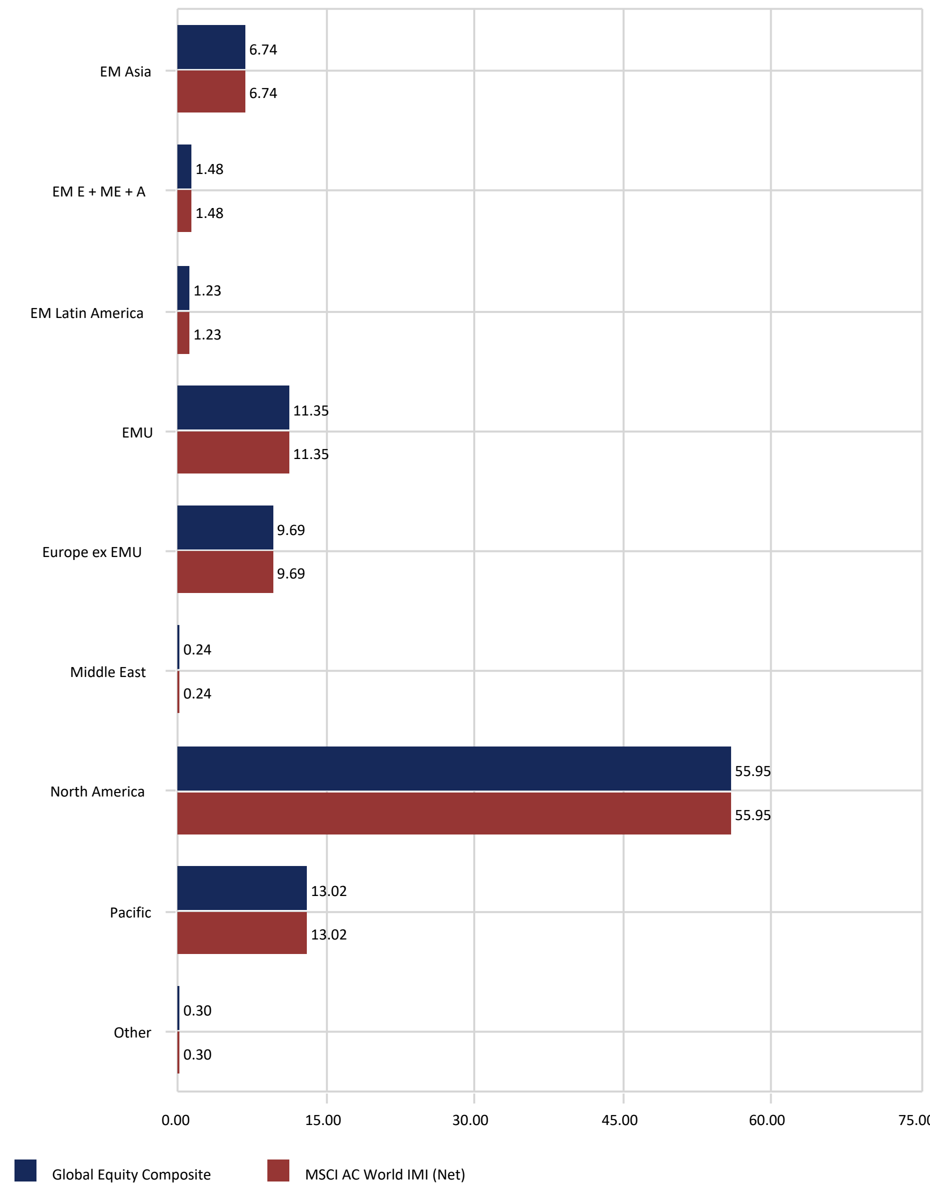
Style Analysis - Returns Based



3 Year Style Analysis



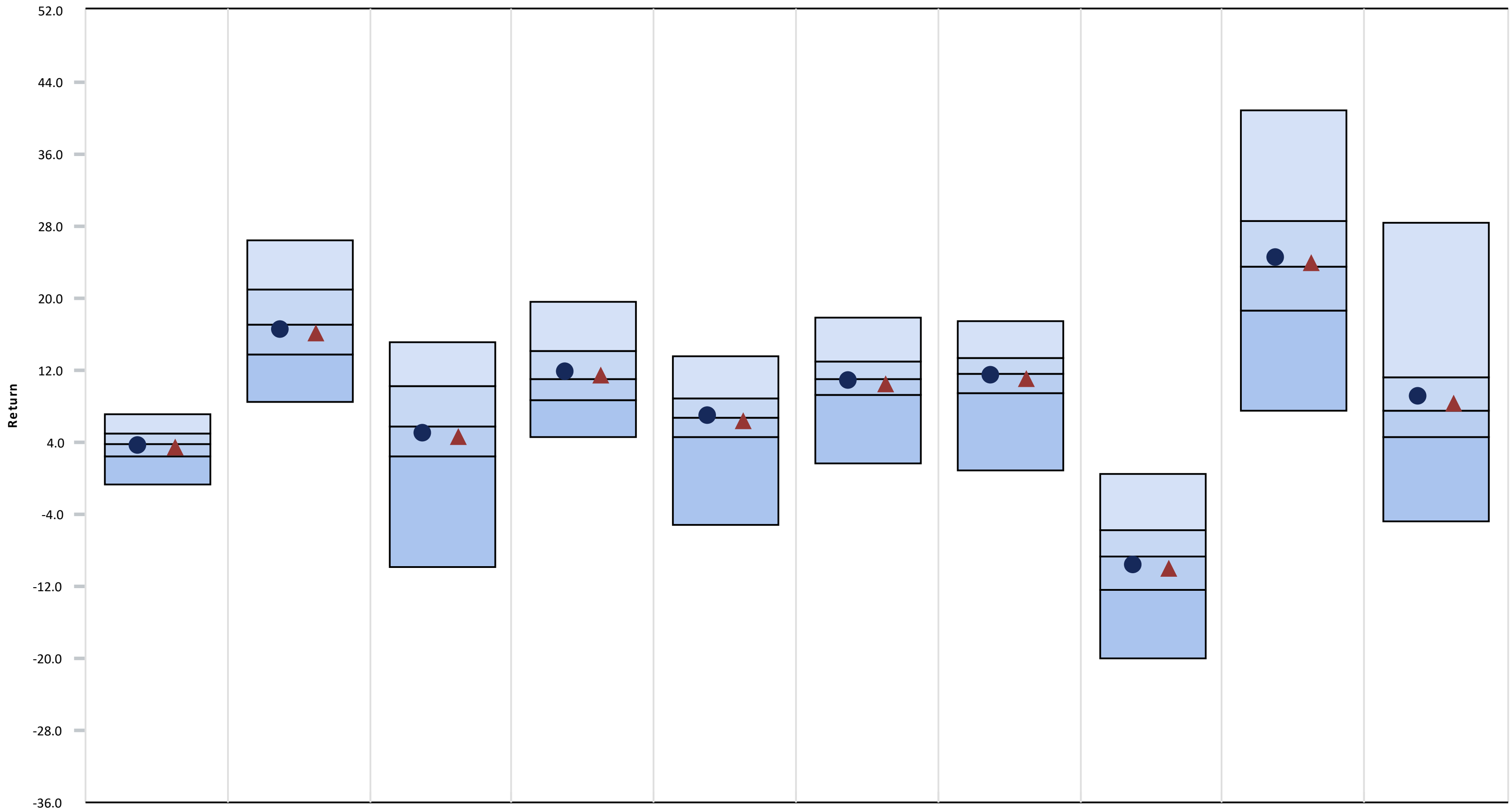
Region Allocation - Holdings Based



Employees' Retirement System of the City of Norfolk

Global Equity Composite vs. IM Global Equity (MF)

June 30, 2019



	3 Month	CYTD	1 Year	3 Year	5 Year	7 Year	10 Year	2018	2017	2016
● Global Equity Composite	3.53 (54)	16.41 (55)	5.02 (59)	11.89 (44)	6.86 (46)	10.76 (58)	11.41 (52)	-9.73 (62)	24.48 (47)	8.99 (38)
▲ Global Equity Policy	3.37 (58)	16.08 (57)	4.56 (63)	11.42 (49)	6.43 (57)	10.43 (63)	11.12 (57)	-10.08 (65)	23.95 (49)	8.34 (41)
5th Percentile	7.15	26.50	15.12	19.58	13.52	17.87	17.52	0.45	40.96	28.41
1st Quartile	5.06	20.95	10.30	14.18	8.81	12.95	13.29	-5.77	28.56	11.17
Median	**3.78**	**17.04**	**5.82**	**11.10**	**6.68**	**11.08**	**11.52**	**-8.74**	**23.61**	**7.56**
3rd Quartile	2.39	13.66	2.44	8.75	4.66	9.33	9.52	-12.45	18.59	4.53
95th Percentile	-0.76	8.53	-9.91	4.63	-5.17	1.61	0.96	-19.96	7.57	-4.73

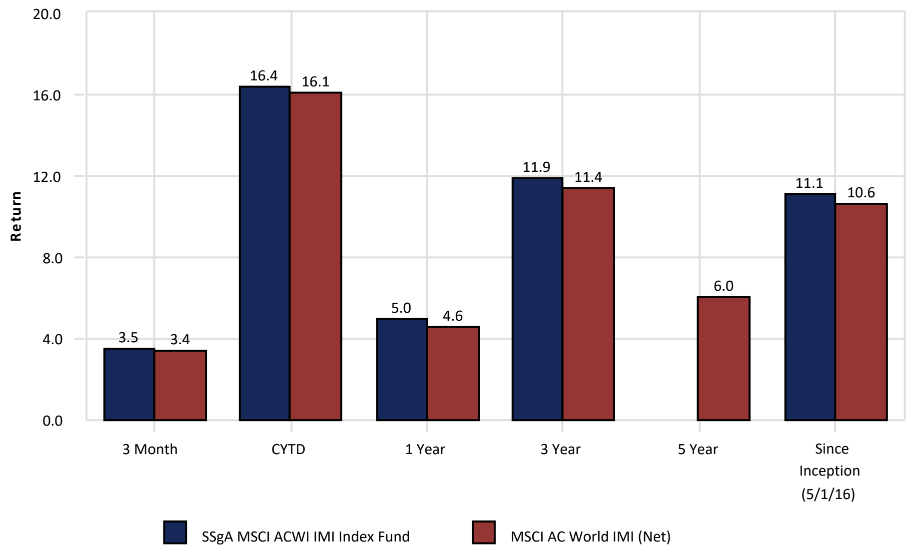
gross of fees

Employees' Retirement System of the City of Norfolk

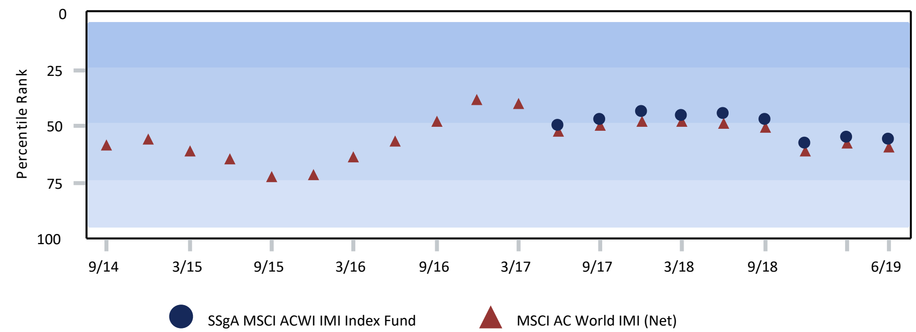
SSgA MSCI ACWI IMI Index Fund vs. IM Global Equity (SA+CF)

June 30, 2019

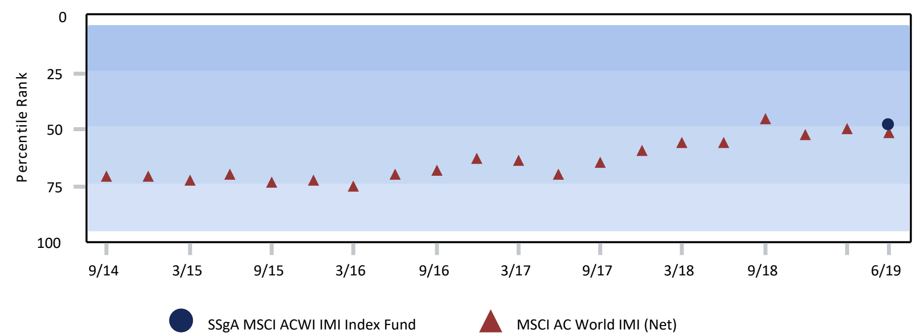
Comparative Performance



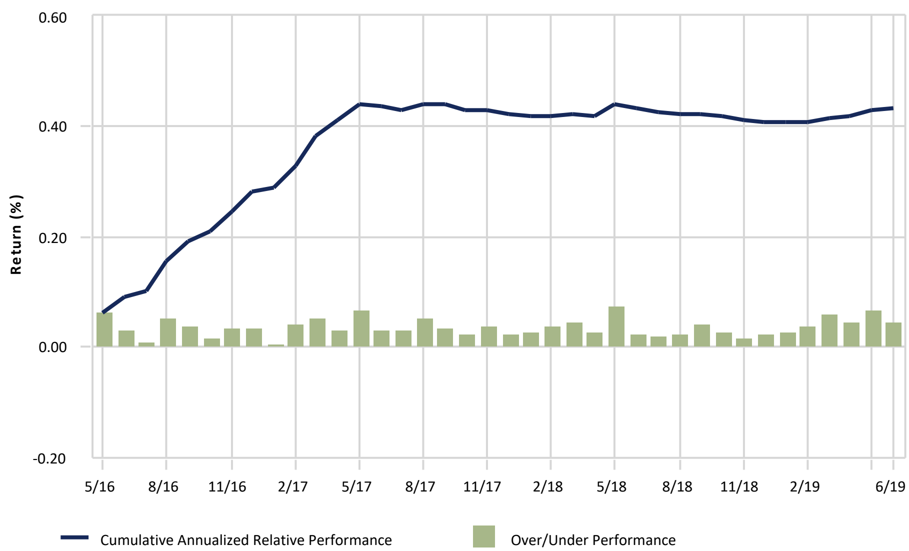
1 Year Rolling Percentile Ranking



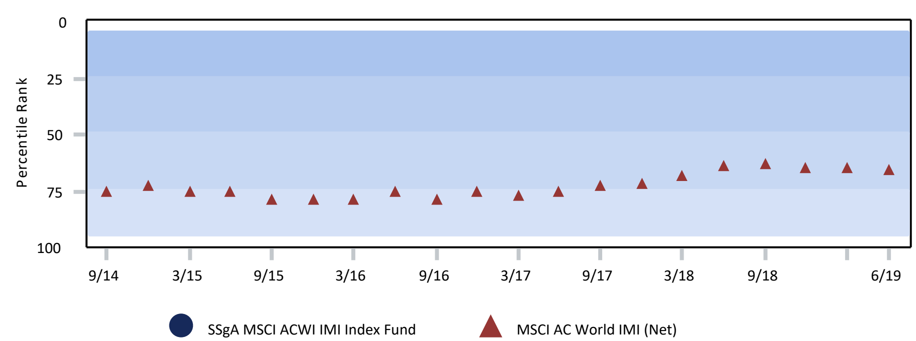
3 Year Rolling Percentile Ranking



Relative Performance vs MSCI AC World IMI (Net)



5 Year Rolling Percentile Ranking



gross of fees

Employees' Retirement System of the City of Norfolk

SSgA MSCI ACWI IMI vs. MSCI AC World IMI (Net)

June 30, 2019

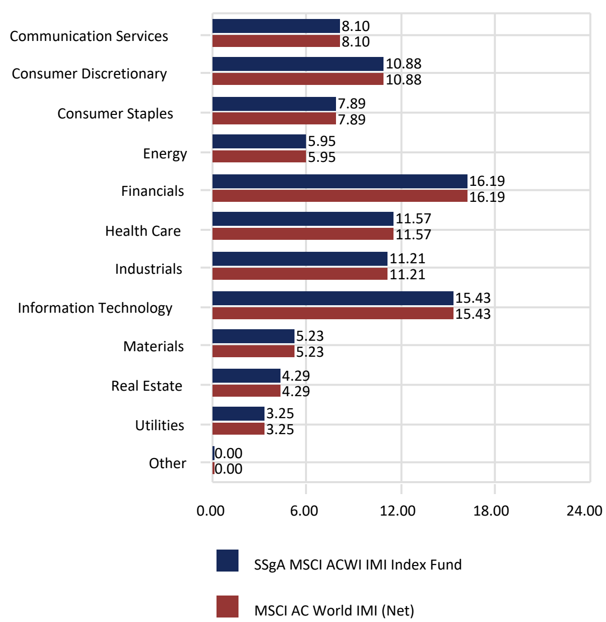
Portfolio Characteristics

	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap ($000)	136,029,109	136,029,109
Median Mkt. Cap ($000)	1,678,889	1,678,889
Price/Earnings ratio	16.94	16.94
Price/Book ratio	2.80	2.80
5 Yr. EPS Growth Rate (%)	12.99	12.99
Current Yield (%)	2.54	2.54
Beta (3 Years, Monthly)	1.00	1.00
Number of Stocks	8,866	8,866

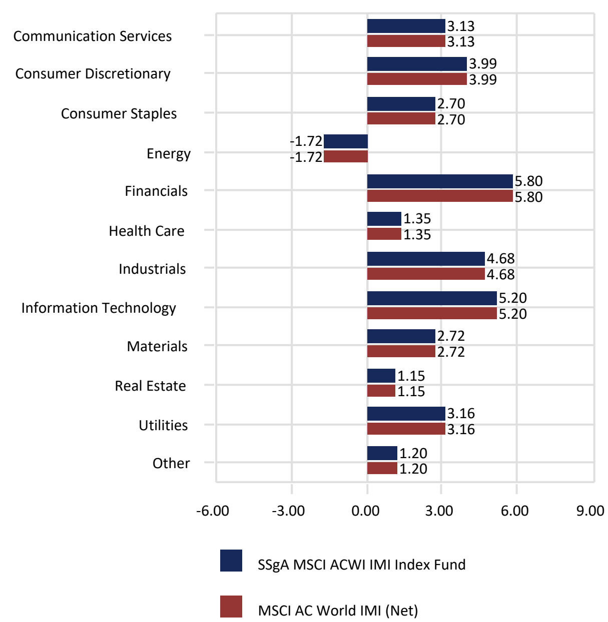
Top Ten Equity Holdings

	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Microsoft Corp	1.83	1.83	0.00	14.00
Apple Inc	1.75	1.75	0.00	4.60
Amazon.com Inc	1.48	1.48	0.00	6.34
Facebook Inc	0.86	0.86	0.00	15.78
Johnson & Johnson	0.69	0.69	0.00	0.32
JPMorgan Chase & Co	0.68	0.68	0.00	11.28
Alphabet Inc	0.64	0.64	0.00	-7.88
Exxon Mobil Corp	0.61	0.61	0.00	-4.08
Alphabet Inc Class A	0.61	0.61	0.00	-8.00
Nestle SA, Cham Und Vevey	0.59	0.59	0.00	11.47
% of Portfolio	9.74	9.74	0.00	

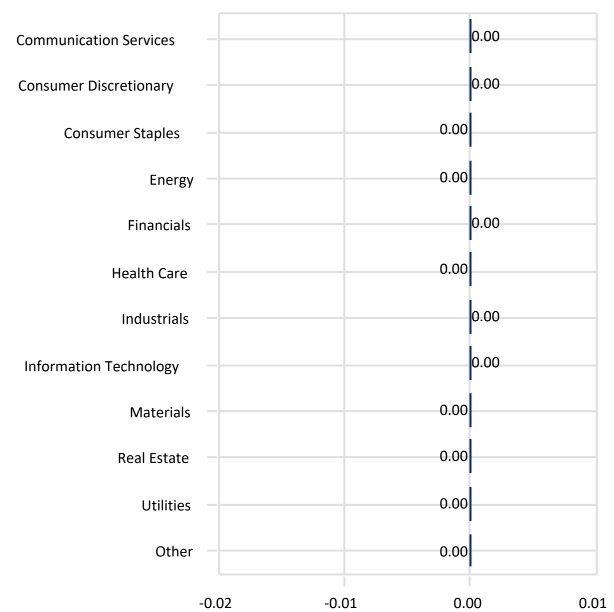
Sector Allocation



Sector Performance



Total Sector Attribution

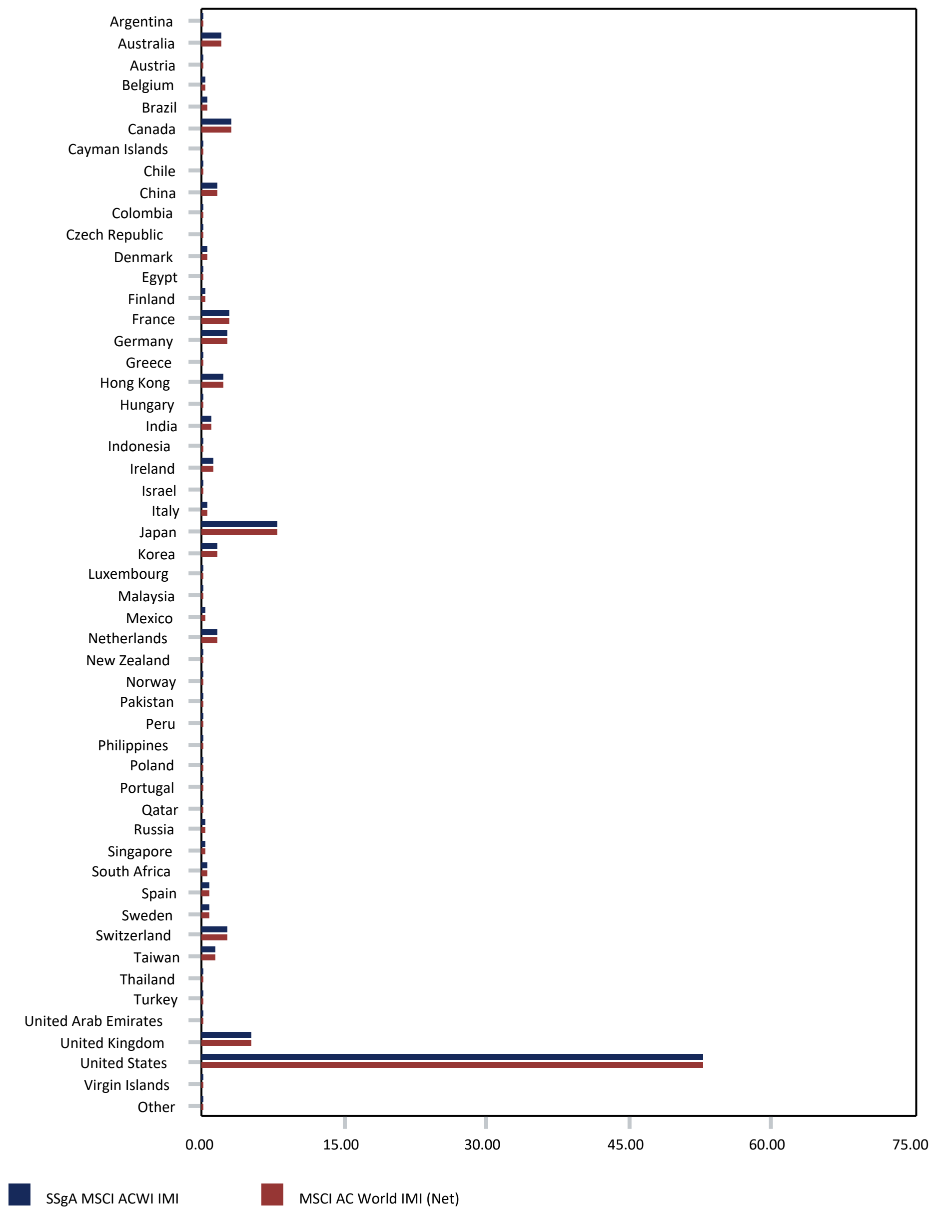


Employees' Retirement System of the City of Norfolk

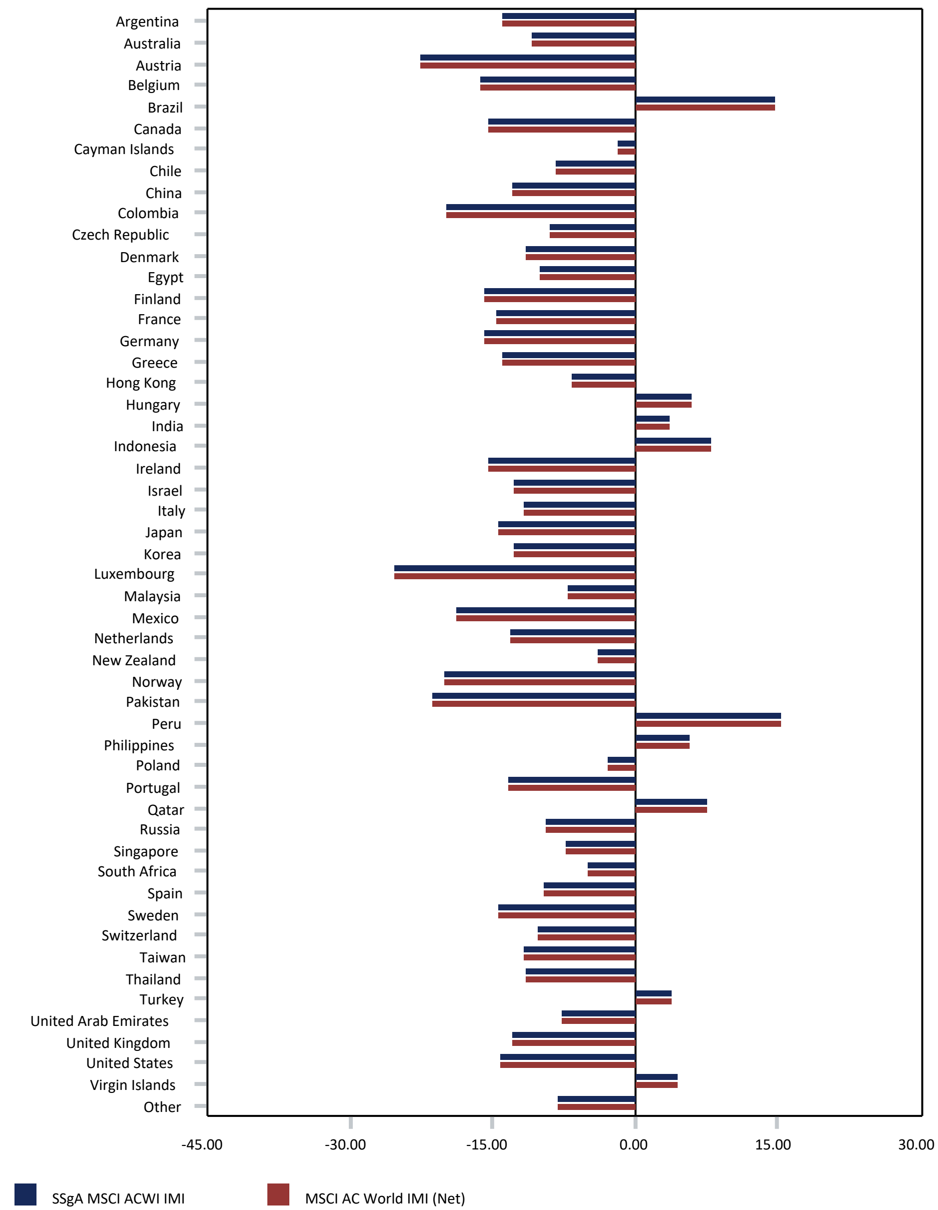
SSgA MSCI ACWI IMI vs. MSCI AC World IMI (Net)

June 30, 2019

Country Allocation



Country Performance



Fixed Income

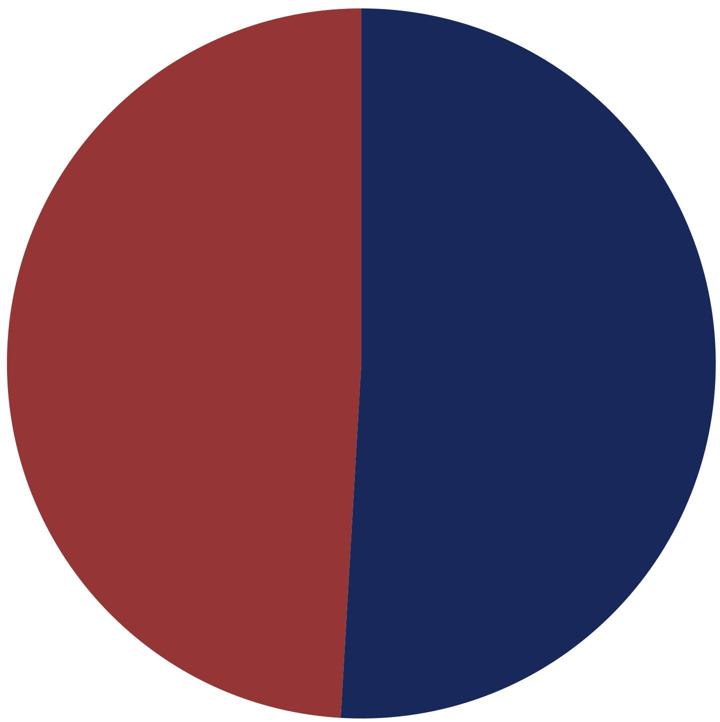
Employees' Retirement System of the City of Norfolk

Fixed Income

June 30, 2019

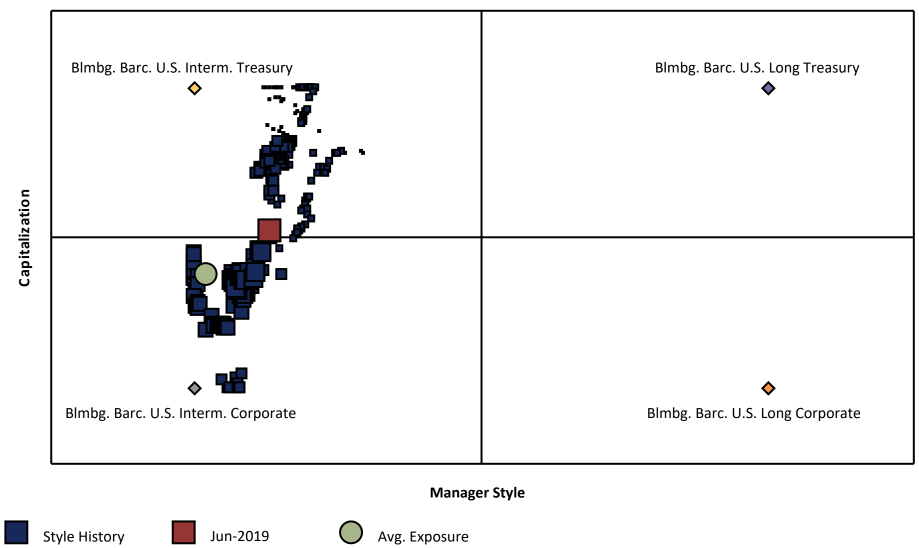
Manager Allocation

June 30, 2019 : $330,215,935

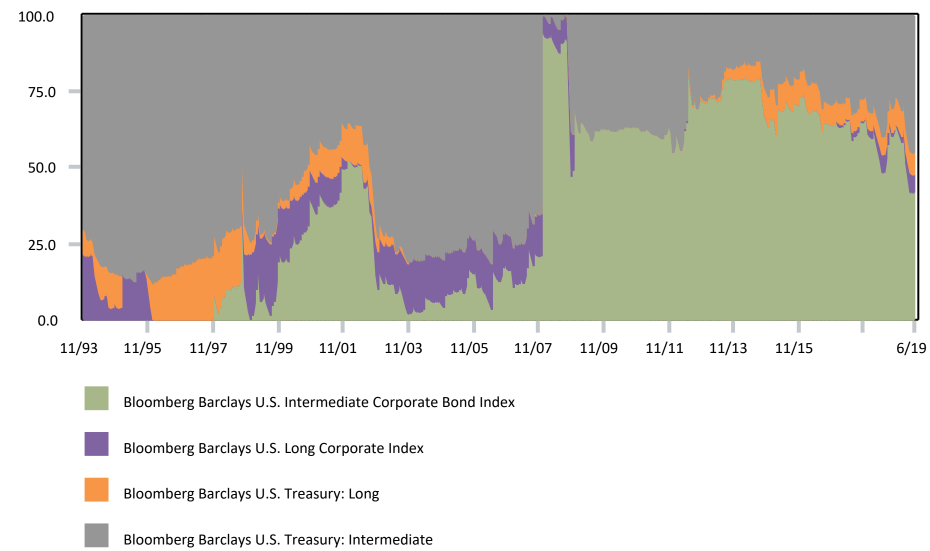


	Market Value ($)	Allocation (%)
PIMCO Total Return	168,179,160	50.93
SSgA Bond Market Index	162,036,775	49.07

Style Analysis - Returns Based



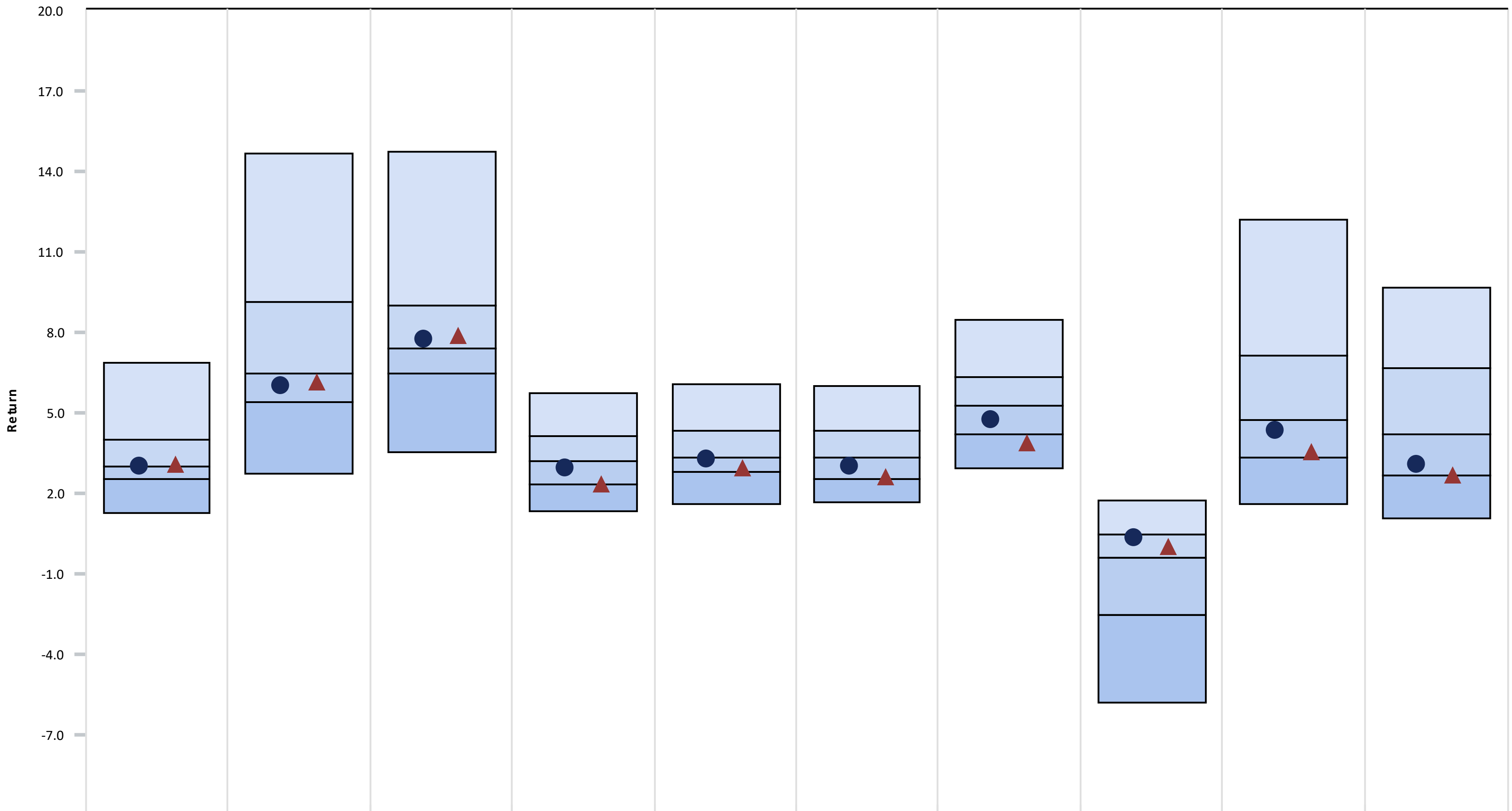
3 Year Style Analysis



Employees' Retirement System of the City of Norfolk

Plan Sponsor Peer Group Analysis - All Master Trust-US Fixed Income Segment

June 30, 2019



	3 Month	CYTD	1 Year	3 Year	5 Year	7 Year	10 Year	2018	2017	2016
● Fixed Income	3.00 (53)	6.03 (62)	7.70 (43)	2.90 (59)	3.28 (52)	2.98 (62)	4.71 (59)	0.35 (28)	4.34 (56)	3.05 (68)
▲ Blmbg. Barc. U.S. Aggregate	3.08 (47)	6.11 (59)	7.87 (39)	2.31 (77)	2.95 (69)	2.62 (73)	3.90 (83)	0.01 (37)	3.54 (69)	2.65 (77)
5th Percentile	6.83	14.68	14.75	5.77	6.05	5.99	8.45	1.75	12.17	9.64
1st Quartile	3.99	9.12	9.02	4.16	4.34	4.35	6.34	0.50	7.10	6.67
Median	**3.02**	**6.45**	**7.42**	**3.18**	**3.33**	**3.33**	**5.28**	**-0.37**	**4.70**	**4.18**
3rd Quartile	2.55	5.39	6.44	2.35	2.83	2.52	4.19	-2.51	3.32	2.68
95th Percentile	1.28	2.71	3.55	1.33	1.62	1.65	2.95	-5.82	1.61	1.08

gross of fees

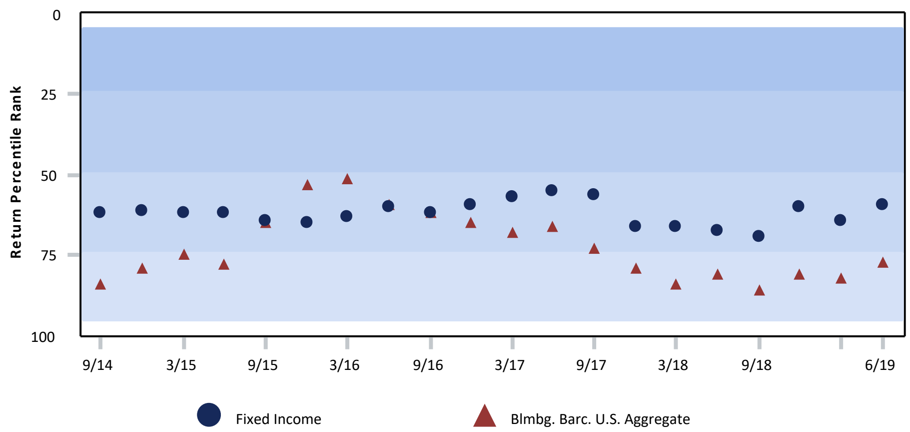
Parentheses contain percentile rankings.

Employees' Retirement System of the City of Norfolk

Fixed Income

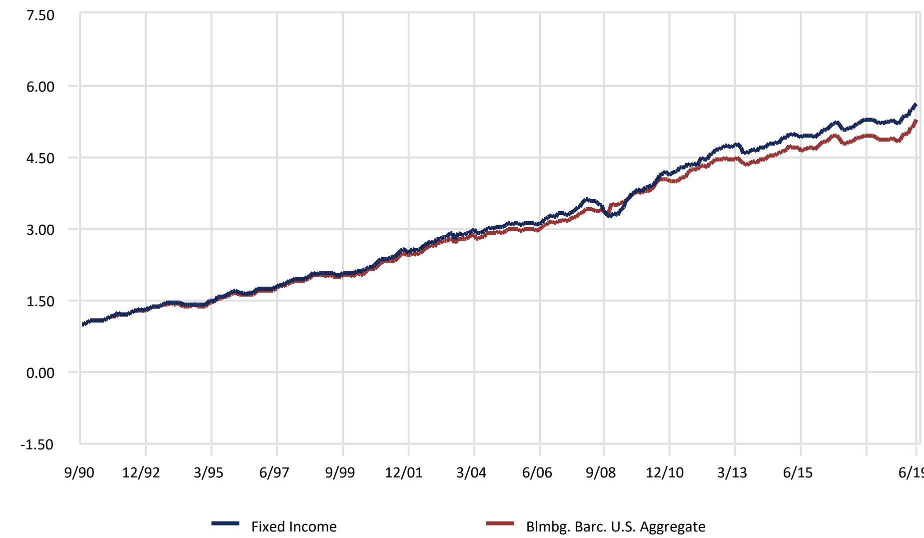
June 30, 2019

3 Year Rolling Return Rank

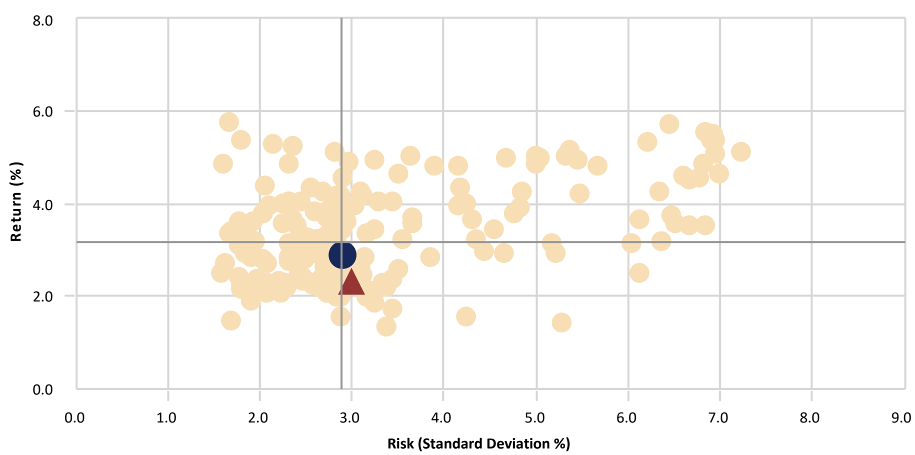


	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
● Fixed Income	20	0 (0%)	0 (0%)	20 (100%)	0 (0%)
▲ Blmbg. Barc. U.S. Aggregate	20	0 (0%)	0 (0%)	10 (50%)	10 (50%)

Growth of $1 - Since Inception (10/01/90)

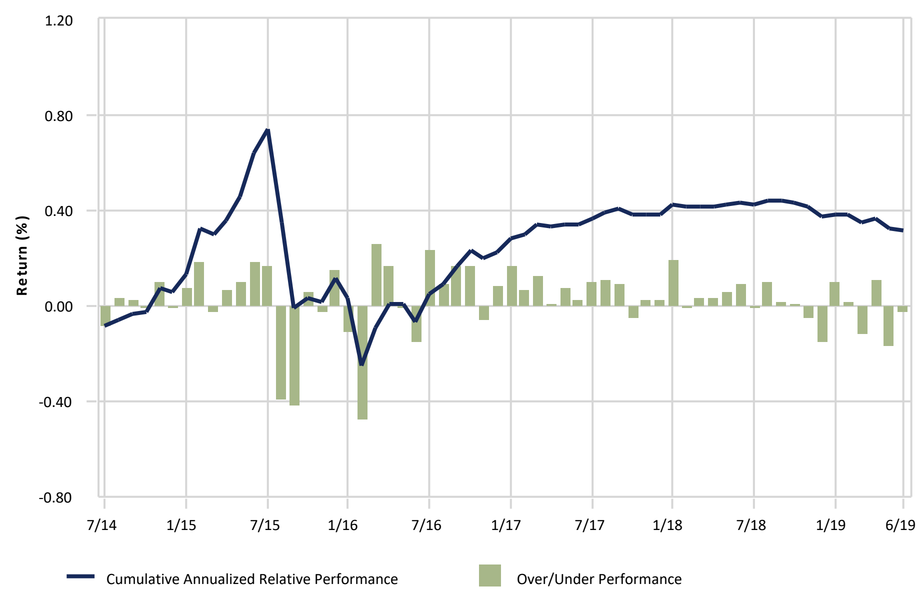


Risk vs. Return (07/01/16 - 06/30/19)

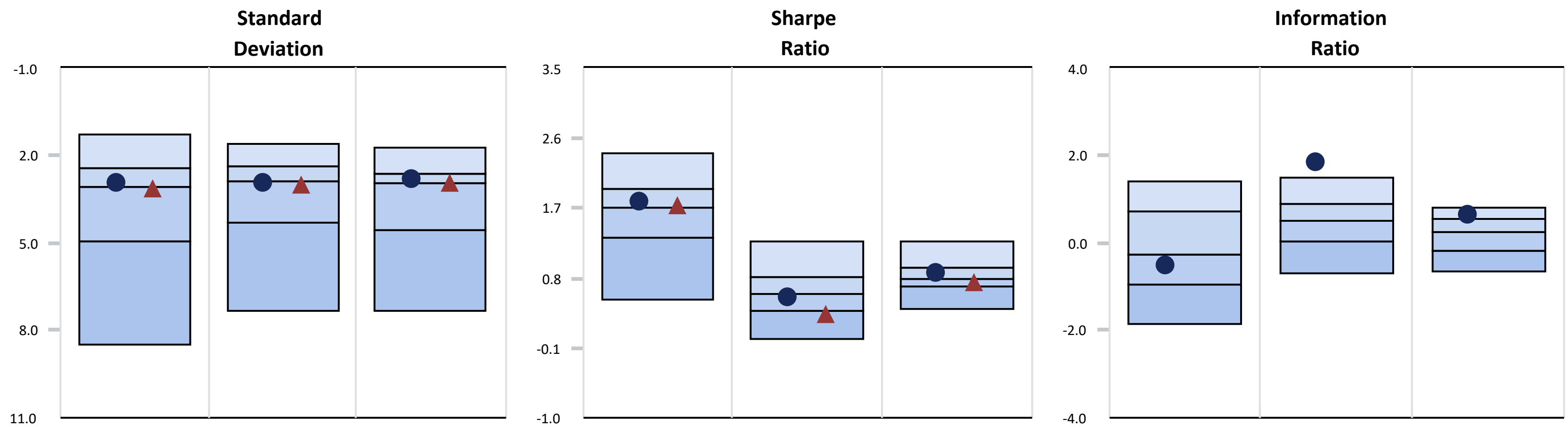


	Return	Standard Deviation
● Fixed Income	2.90	2.91
▲ Blmbg. Barc. U.S. Aggregate	2.31	2.99
— Median	3.18	2.88

Relative Performance vs. Blmbg. Barc. U.S. Aggregate

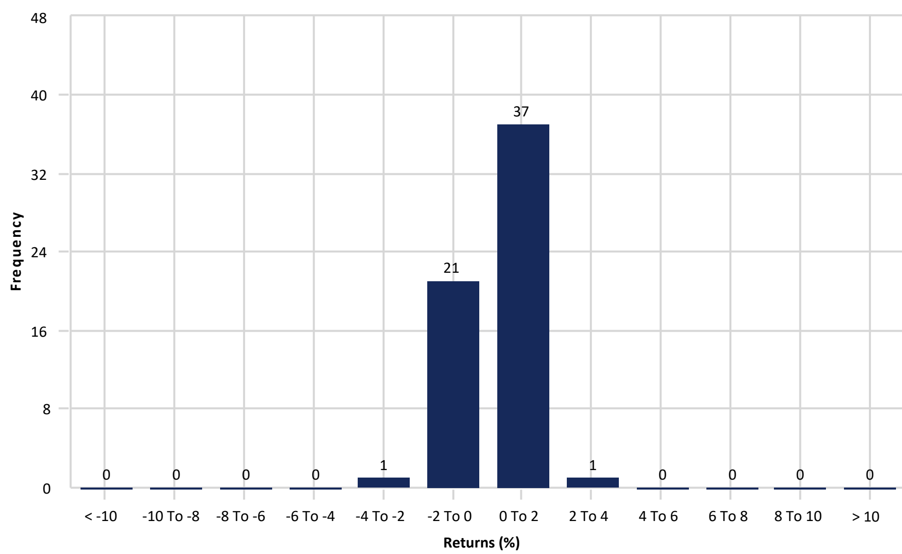


Peer Group Analysis: All Master Trust-US Fixed Income Segment

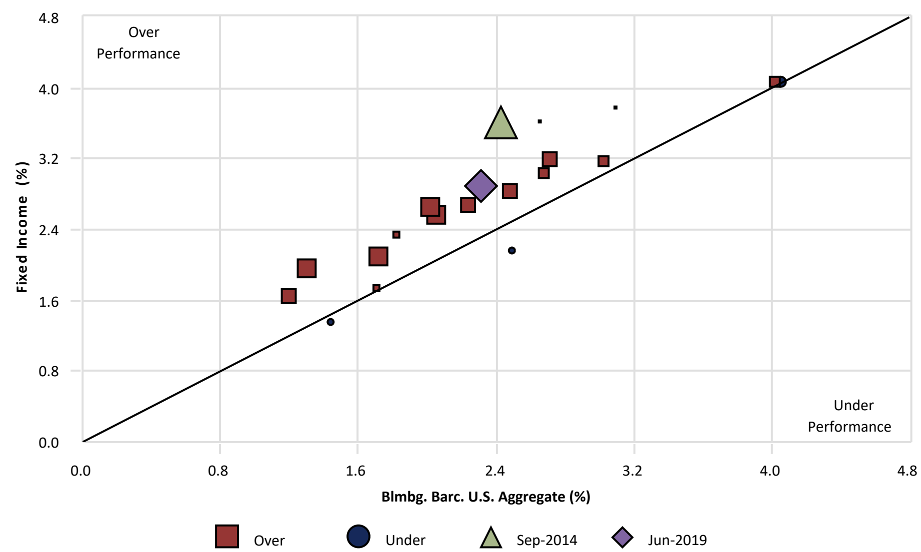


	1 Year	3 Year	5 Year	1 Year	3 Year	5 Year	1 Year	3 Year	5 Year
● Fixed Income	2.95 (44)	2.91 (52)	2.84 (40)	1.79 (43)	0.55 (53)	0.87 (36)	-0.51 (61)	1.83 (2)	0.65 (18)
▲ Blmbg. Barc. U.S. Aggregate	3.14 (51)	2.99 (57)	2.91 (46)	1.73 (49)	0.34 (82)	0.73 (63)	-	-	-
Median	**3.08**	**2.88**	**2.97**	**1.71**	**0.60**	**0.78**	**-0.27**	**0.51**	**0.28**

Monthly Distribution of Returns



3 Year Rolling Under/Over Performance

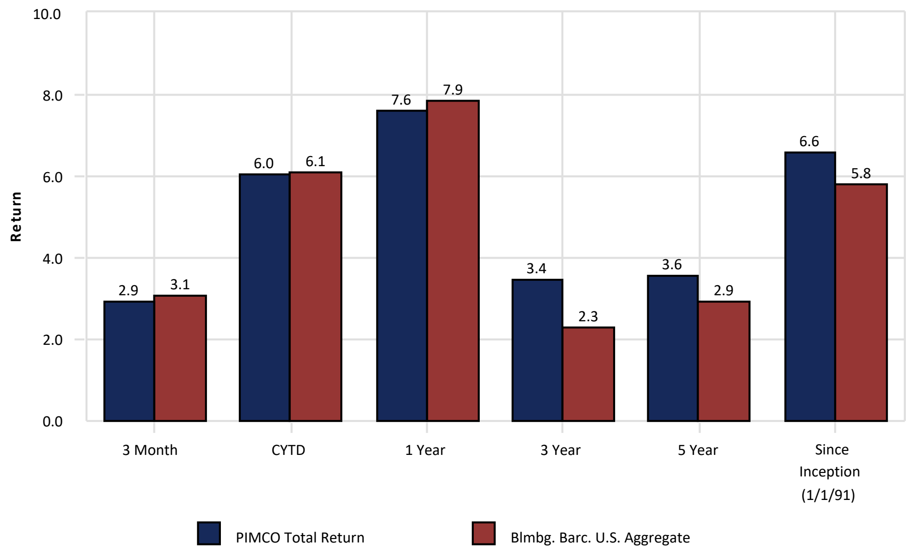


Employees' Retirement System of the City of Norfolk

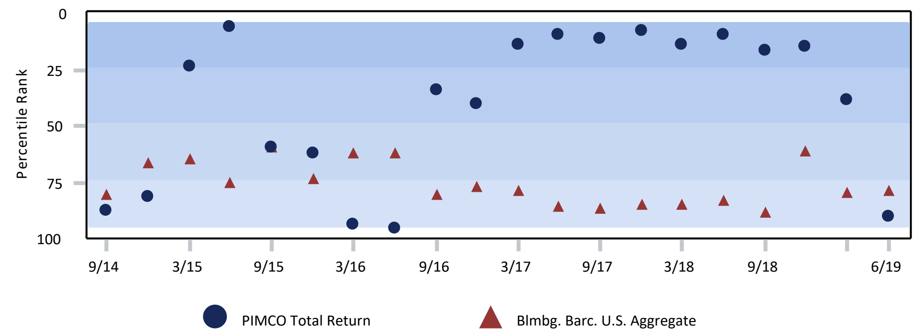
PIMCO Total Return vs. IM U.S. Broad Market Core Fixed Income (SA+CF)

June 30, 2019

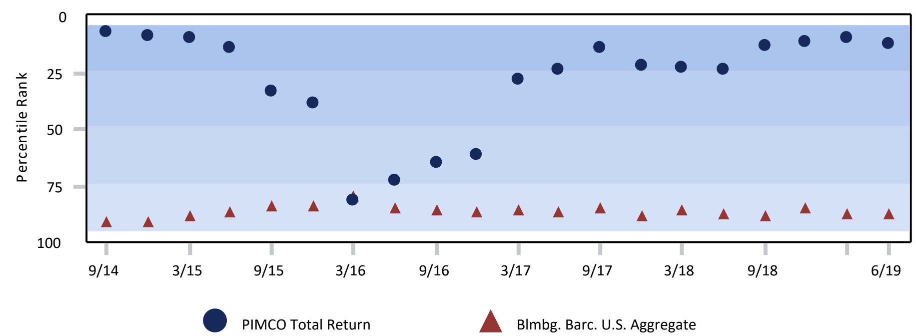
Comparative Performance



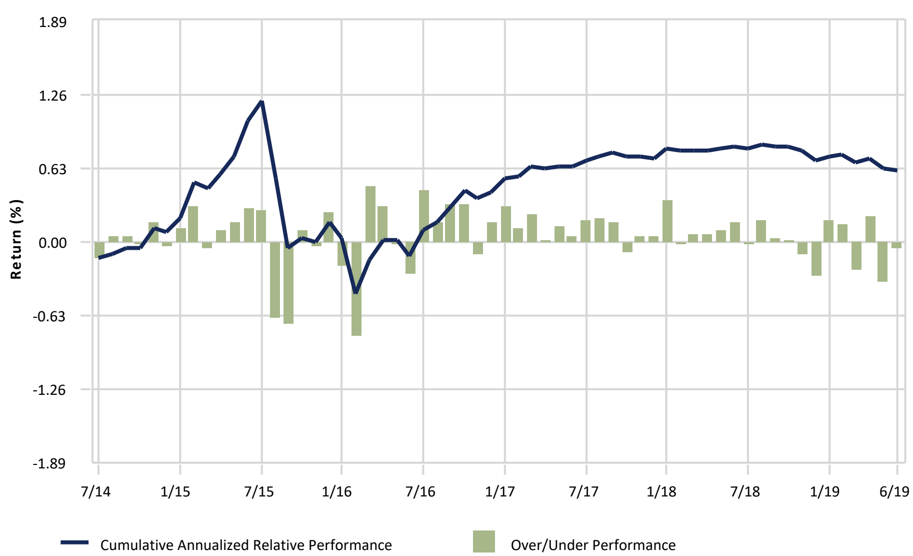
1 Year Rolling Percentile Ranking



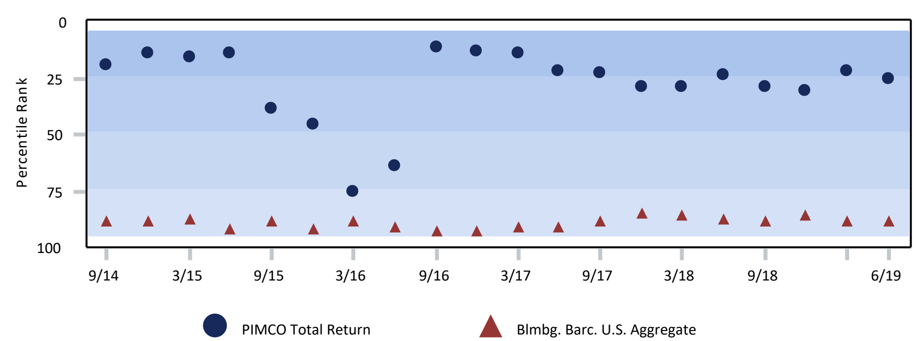
3 Year Rolling Percentile Ranking



Relative Performance vs Blmbg. Barc. U.S. Aggregate



5 Year Rolling Percentile Ranking



gross of fees

Employees' Retirement System of the City of Norfolk

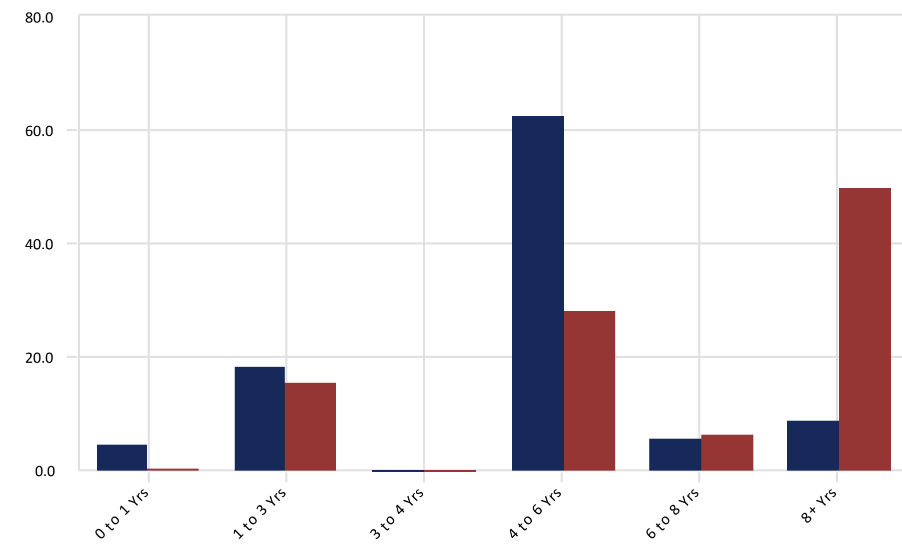
PIMCO Total Return vs. Blmbg. Barc. U.S. Aggregate

June 30, 2019

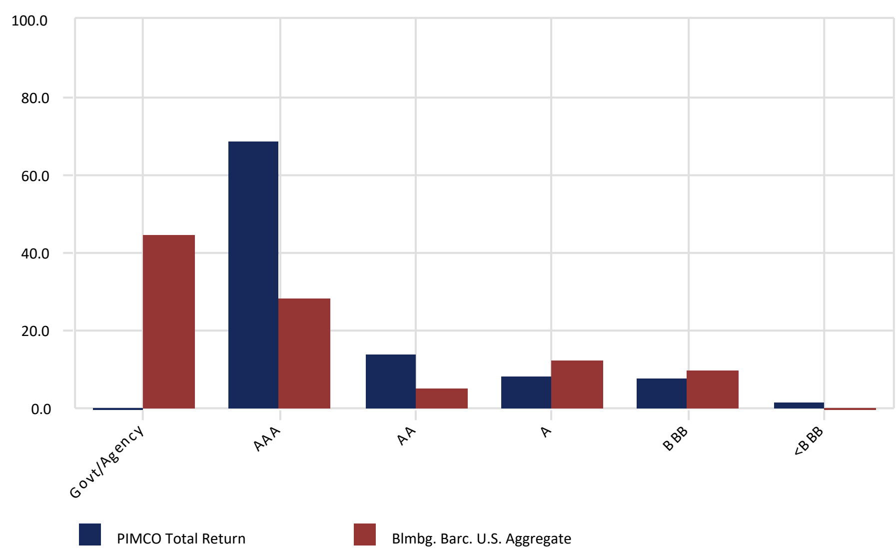
Portfolio Characteristics

	Portfolio	Benchmark
Avg. Maturity	6.56	7.87
Avg. Quality	AA	AA
Coupon Rate (%)	3.16	3.29
Convexity	-	0.14
Effective Duration	4.82	5.55

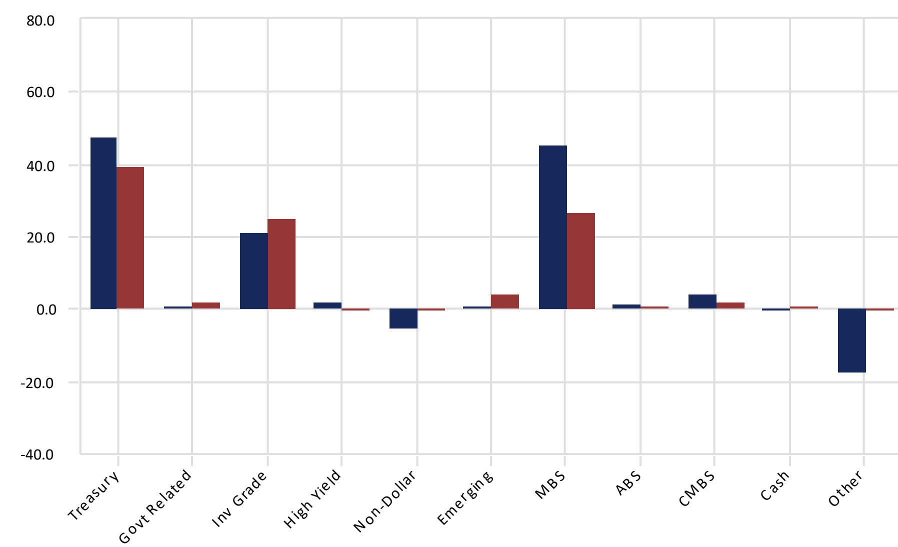
Duration Distribution (%)



Credit Quality Distribution (%)



Sector Distribution (%)

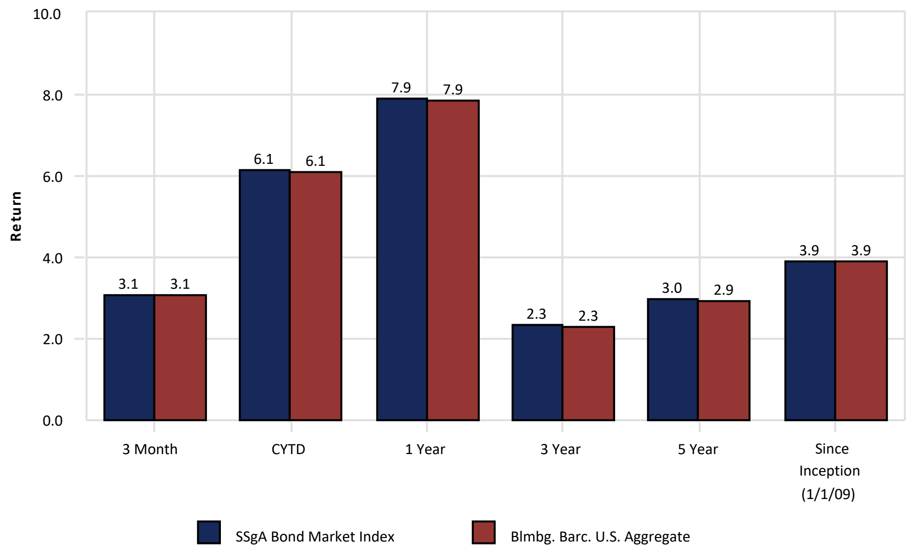


Employees' Retirement System of the City of Norfolk

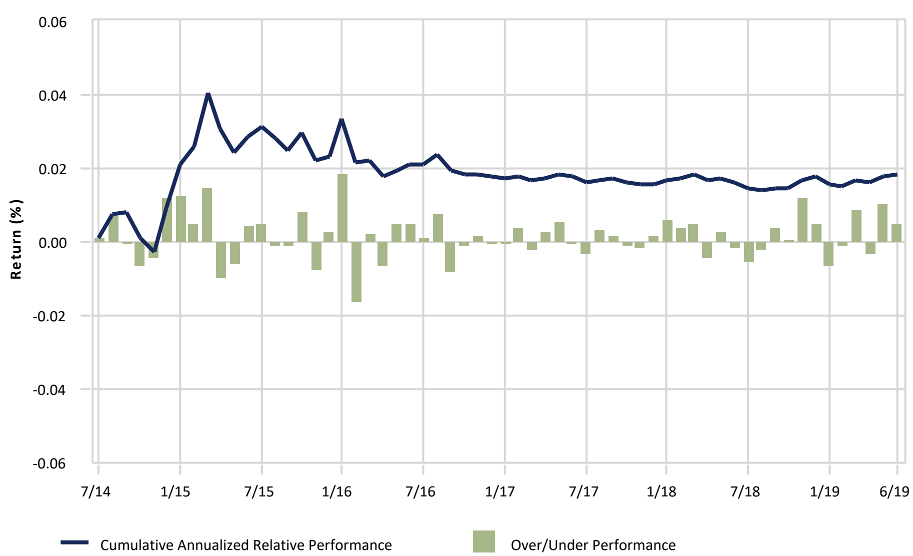
SSgA Bond Market Index vs. IM U.S. Broad Market Core Fixed Income (SA+CF)

June 30, 2019

Comparative Performance

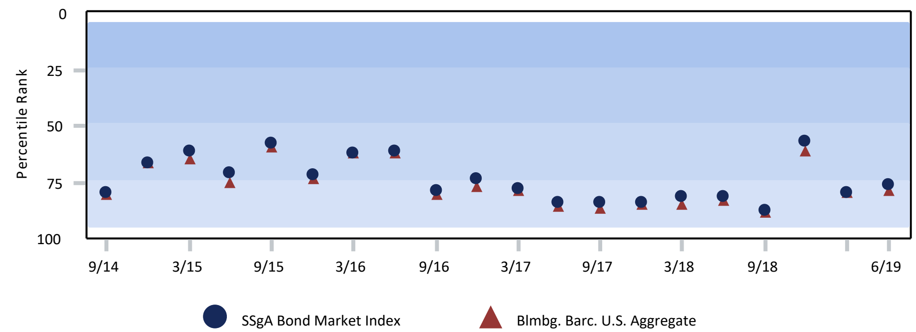


Relative Performance vs Blmbg. Barc. U.S. Aggregate

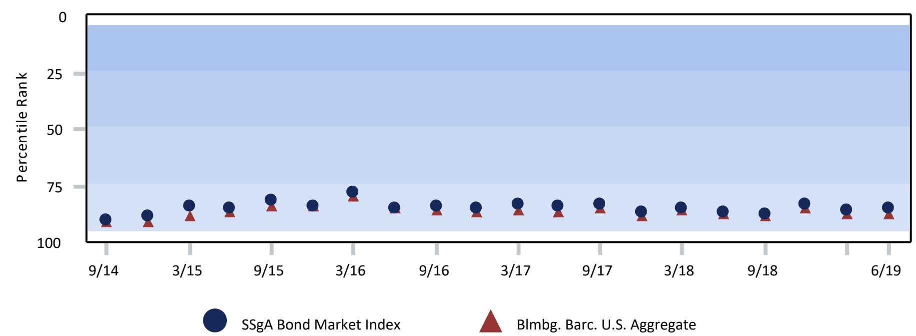


gross of fees

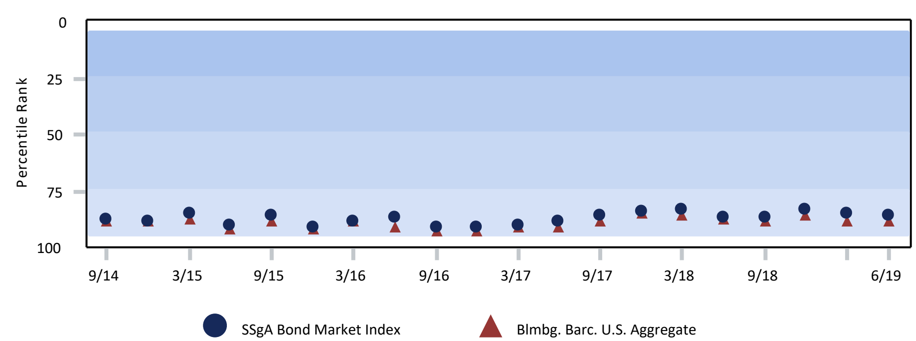
1 Year Rolling Percentile Ranking



3 Year Rolling Percentile Ranking



5 Year Rolling Percentile Ranking



Employees' Retirement System of the City of Norfolk

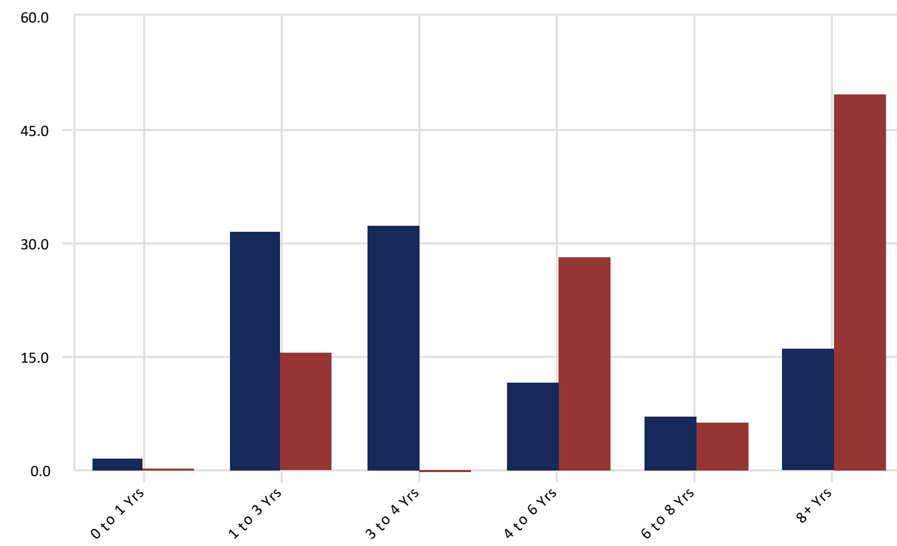
SSgA Bond Market Index vs. Blmbg. Barc. U.S. Aggregate

June 30, 2019

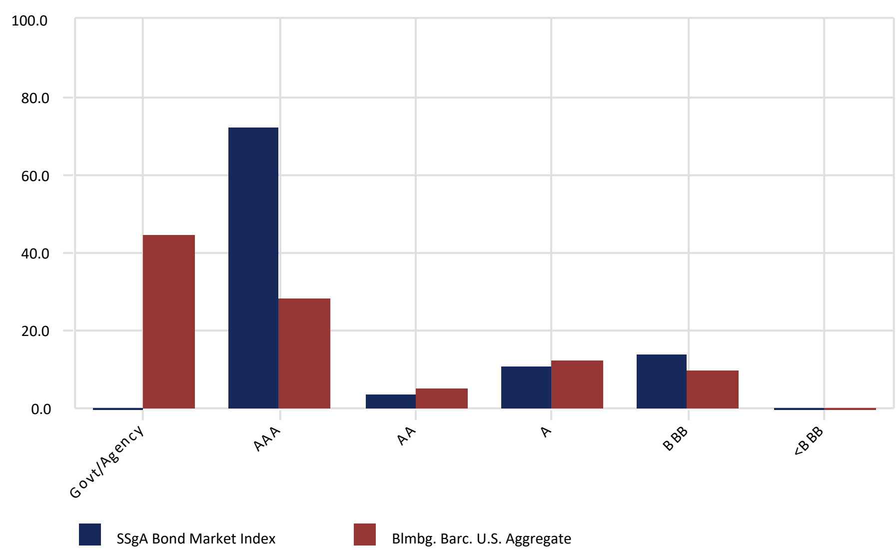
Portfolio Characteristics

	Portfolio	Benchmark
Avg. Maturity	7.81	7.87
Avg. Quality	Aa2	AA
Yield To Maturity (%)	2.50	2.46
Modified Duration	5.73	5.54
Convexity	0.24	0.14

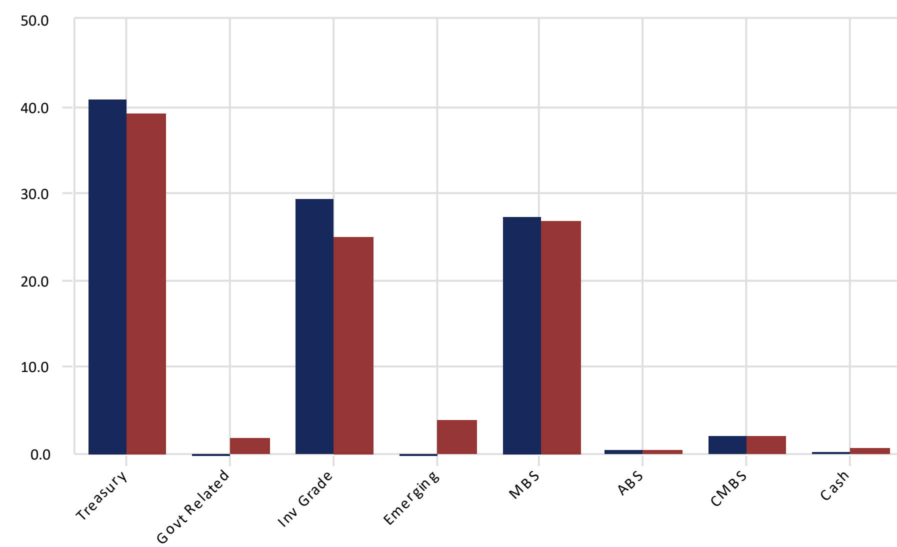
Duration Distribution (%)



Credit Quality Distribution (%)



Sector Distribution (%)



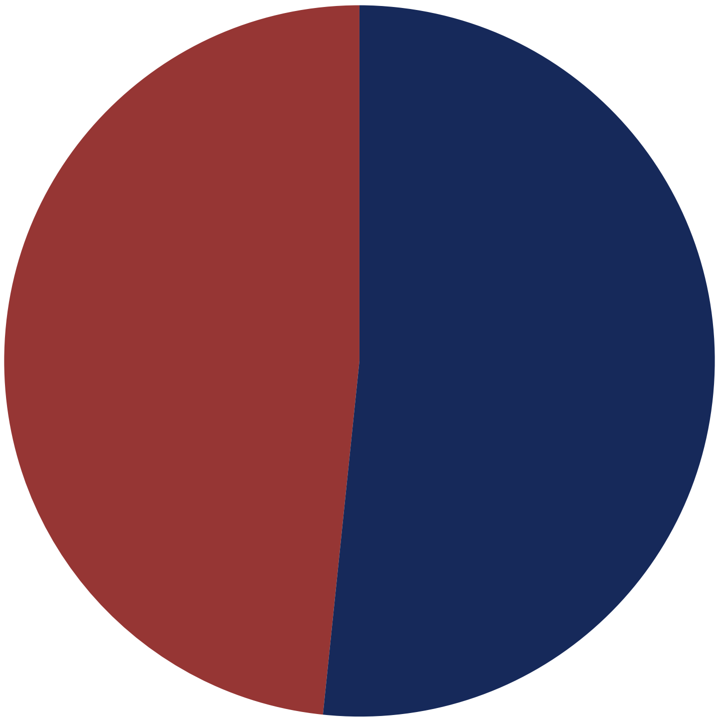
Real Estate

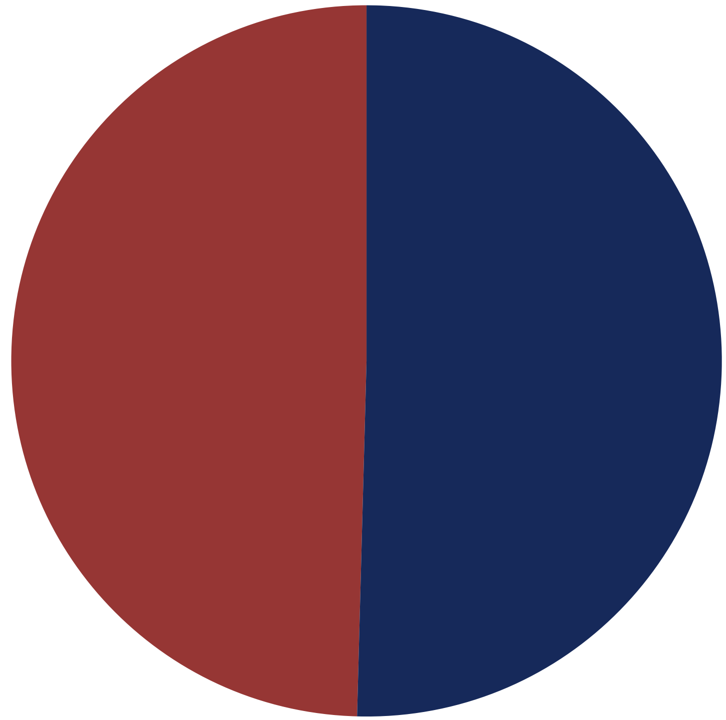
Employees' Retirement System of the City of Norfolk

Asset Allocation By Manager - Real Estate

June 30, 2019

June 30, 2019 : $81,997,636	March 31, 2019 : $83,229,012





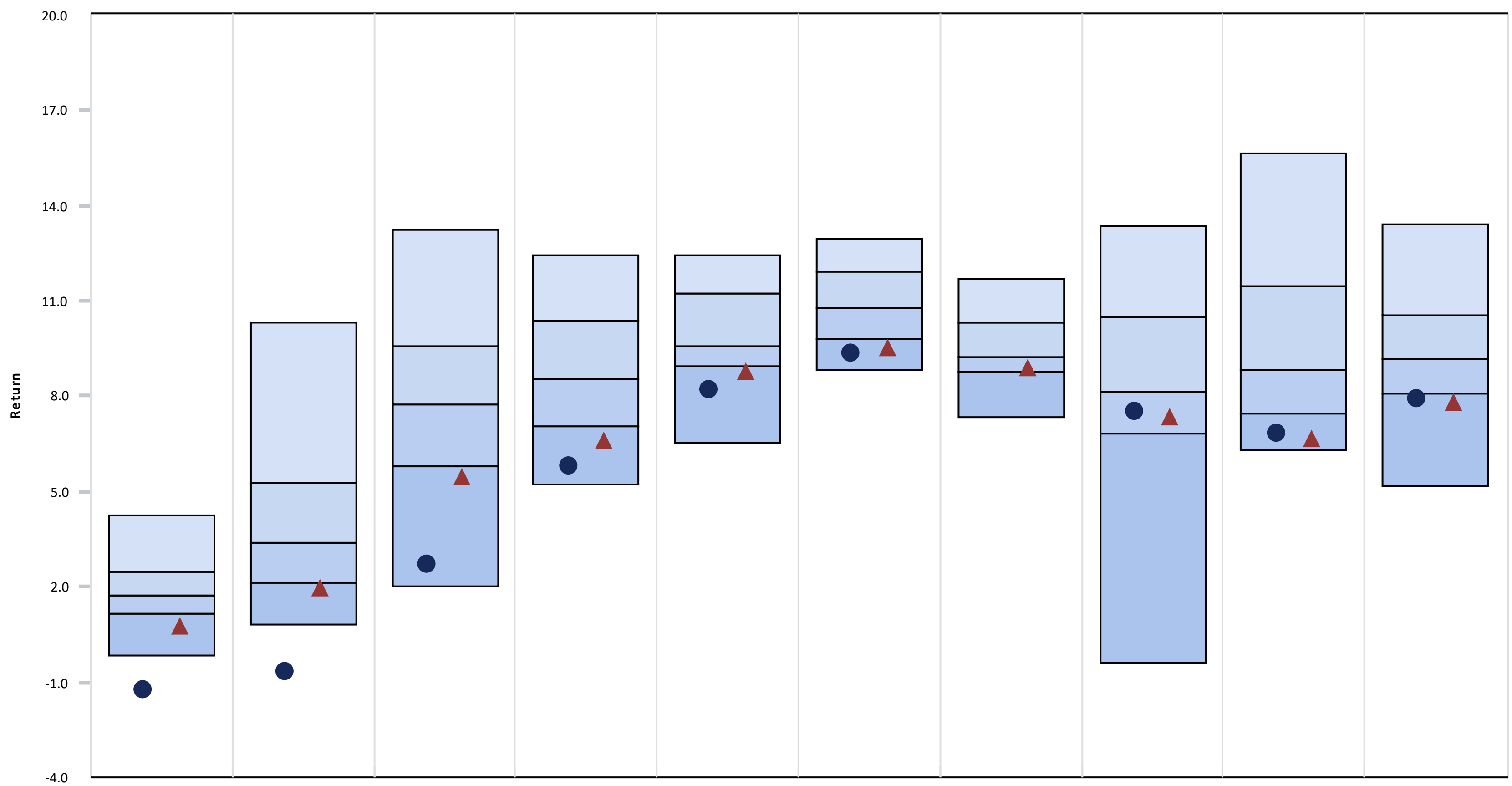
	Market Value ($)	Allocation (%)
JP Morgan Asset Management Strategic Property Fund	42,347,520	51.64
UBS Trumbull Property Fund	39,650,116	48.36

	Market Value ($)	Allocation (%)
JP Morgan Asset Management Strategic Property Fund	41,970,859	50.43
UBS Trumbull Property Fund	41,258,153	49.57

Employees' Retirement System of the City of Norfolk

Plan Sponsor Peer Group Analysis - All Master Trust-Real Estate Segment

June 30, 2019



	3 Month		CYTD		1 Year		3 Year		5 Year		7 Year		10 Year		2018		2017		2016	
● Real Estate	-1.25	(97)	-0.69	(98)	2.71	(93)	5.79	(94)	8.23	(89)	9.37	(88)	-		7.52	(68)	6.81	(91)	7.90	(78)
▲ NCREIF Fund Index-ODCE (Net)	0.77	(87)	1.98	(80)	5.46	(78)	6.61	(88)	8.76	(80)	9.51	(84)	8.87	(70)	7.36	(70)	6.66	(95)	7.79	(79)
5th Percentile	4.26		10.32		13.21		12.44		12.43		12.93		11.71		13.36		15.63		13.44	
1st Quartile	2.49		5.26		9.57		10.39		11.21		11.91		10.32		10.47		11.48		10.56	
Median	**1.74**		**3.40**		**7.73**		**8.53**		**9.59**		**10.76**		**9.20**		**8.13**		**8.84**		**9.18**	
3rd Quartile	1.14		2.15		5.80		7.08		8.94		9.79		8.75		6.80		7.43		8.06	
95th Percentile	-0.17		0.83		2.04		5.24		6.52		8.83		7.31		-0.38		6.33		5.16	
Population	148		128		102		69		50		34		23		89		85		83	

gross of fees

Parentheses contain percentile rankings.

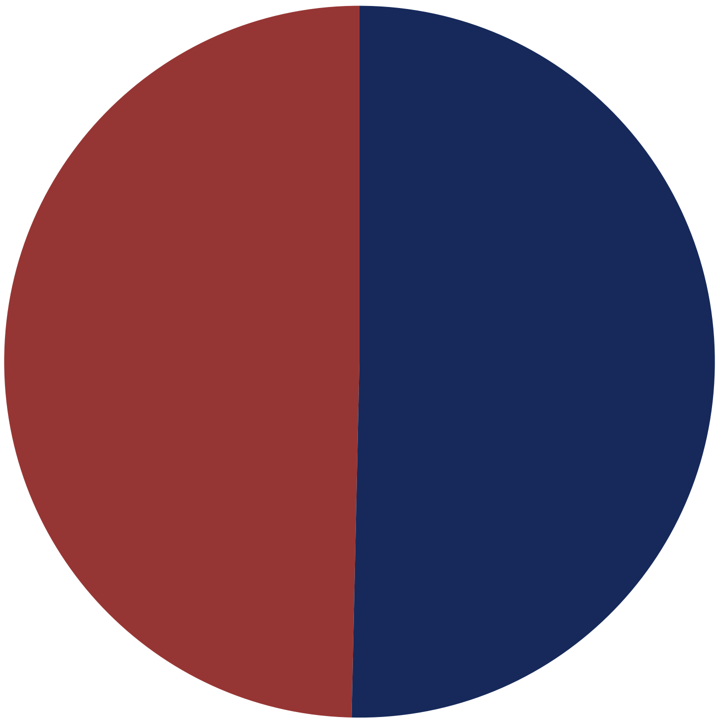
Master Limited Partnerships

Employees' Retirement System of the City of Norfolk

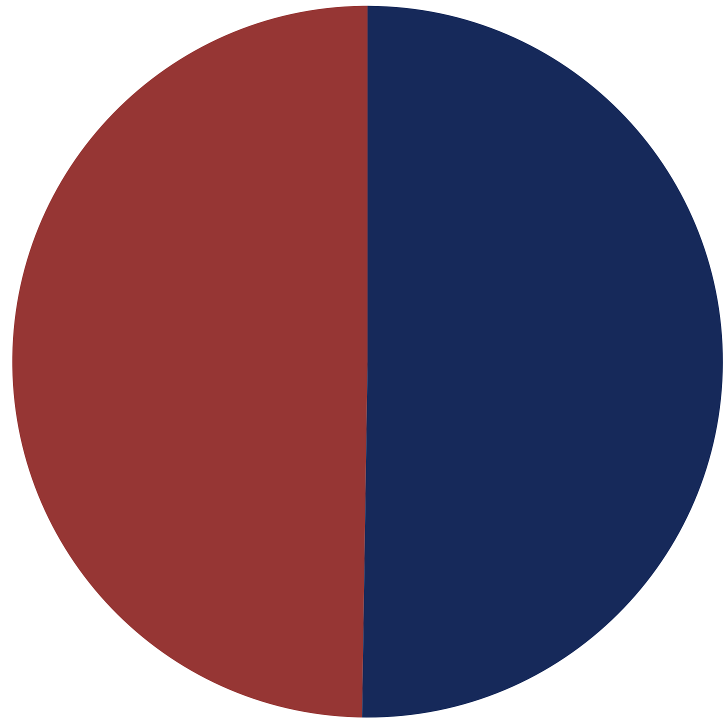
Asset Allocation By Manager - MLPs

June 30, 2019

June 30, 2019 : $67,988,099	March 31, 2019 : $68,282,862



	Market Value ($)	Allocation (%)
Harvest MLP	34,235,839	50.36
Tortoise Capital Advisors	33,752,260	49.64

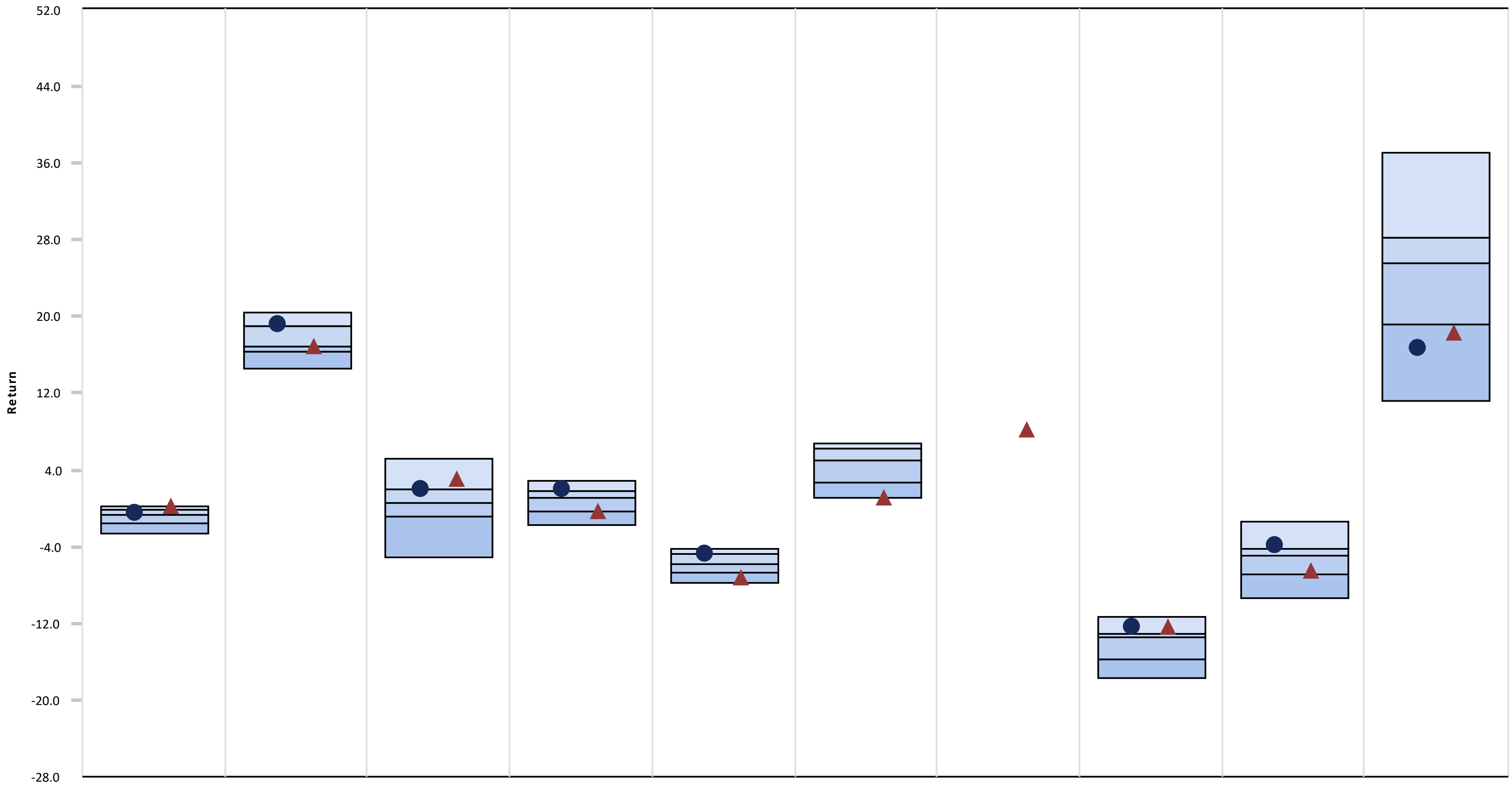


	Market Value ($)	Allocation (%)
Harvest MLP	34,312,647	50.25
Tortoise Capital Advisors	33,970,215	49.75

Employees' Retirement System of the City of Norfolk

MLPs vs. Master Limited Partnerships (SA+CF)

June 30, 2019



	3 Month	CYTD	1 Year	3 Year	5 Year	7 Year	10 Year	2018	2017	2016
● MLPs	-0.43 (41)	19.19 (24)	2.02 (23)	1.99 (16)	-4.71 (25)	-	-	-12.45 (9)	-3.96 (20)	16.68 (85)
▲ Alerian MLP Index	0.12 (5)	16.96 (51)	3.09 (19)	-0.42 (77)	-7.20 (82)	1.02 (99)	8.21 (-)	-12.42 (9)	-6.52 (70)	18.31 (79)
5th Percentile	0.12	20.38	5.23	2.81	-4.26	6.78	-	-11.38	-1.40	37.03
1st Quartile	-0.17	19.01	1.99	1.72	-4.73	6.28	-	-13.06	-4.17	28.24
Median	**-0.69**	**16.96**	**0.62**	**1.14**	**-5.81**	**5.02**	**-**	**-13.48**	**-4.94**	**25.56**
3rd Quartile	-1.53	16.38	-0.83	-0.25	-6.77	2.74	-	-15.77	-6.94	19.24
95th Percentile	-2.65	14.60	-5.20	-1.77	-7.77	1.15	-	-17.66	-9.41	11.22

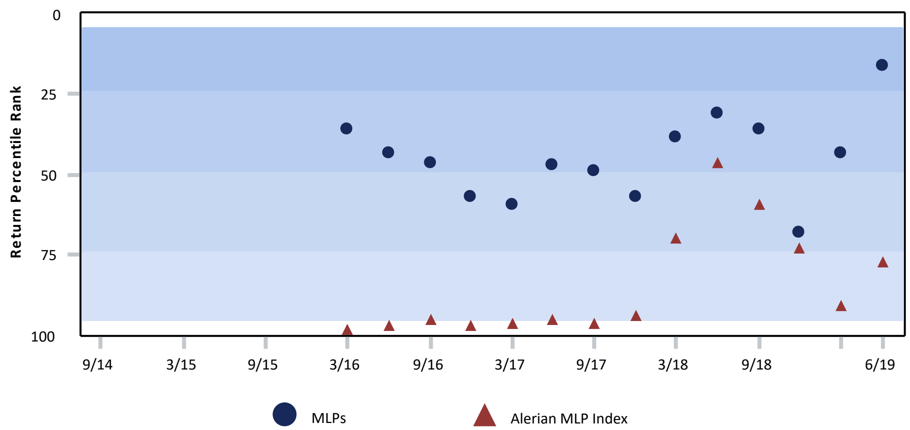
gross of fees

Employees' Retirement System of the City of Norfolk

MLPs

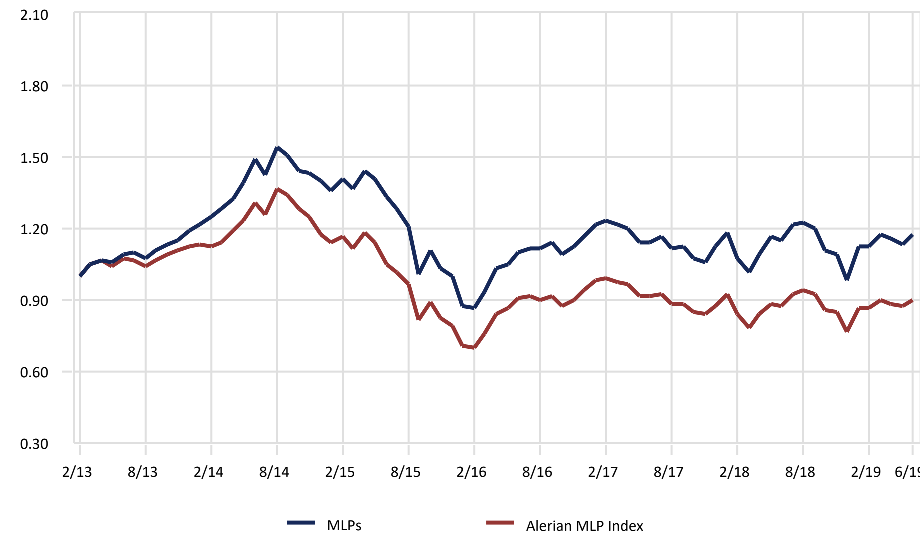
June 30, 2019

3 Year Rolling Return Rank

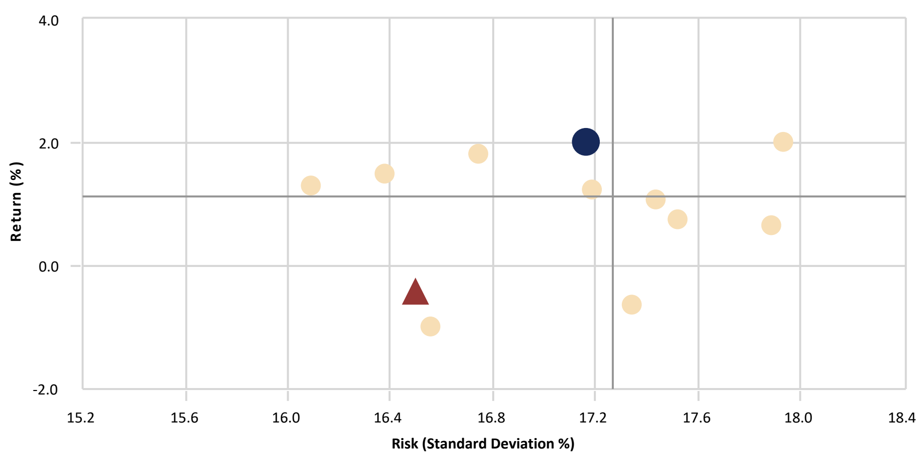


	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
MLPs	14	1 (7%)	9 (64%)	4 (29%)	0 (0%)
Alerian MLP Index	14	0 (0%)	1 (7%)	3 (21%)	10 (71%)

Growth of $1 - Since Inception (03/01/13)

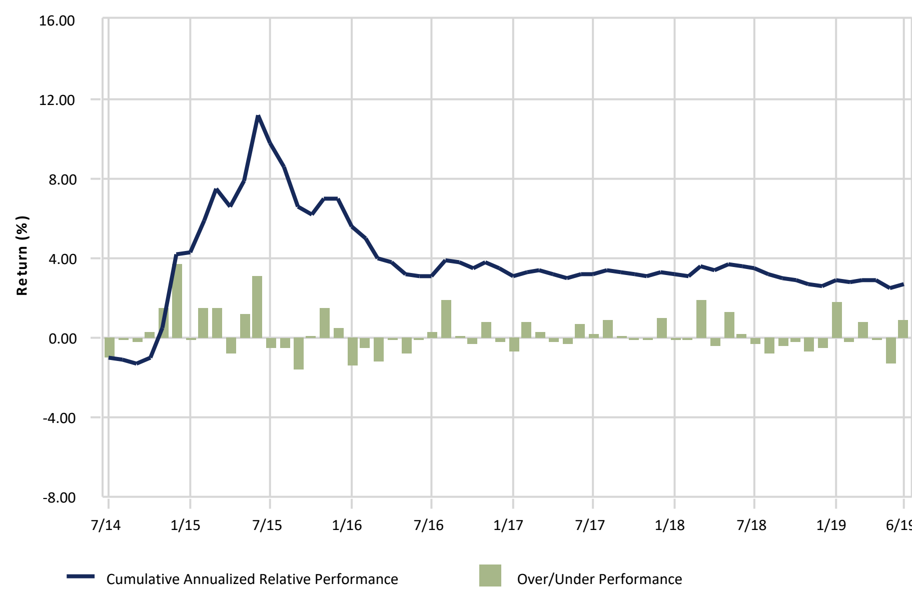


Risk vs. Return (07/01/16 - 06/30/19)



	Return	Standard Deviation
MLPs	1.99	17.17
Alerian MLP Index	-0.42	16.50
Median	1.14	17.27

Relative Performance vs. Alerian MLP Index

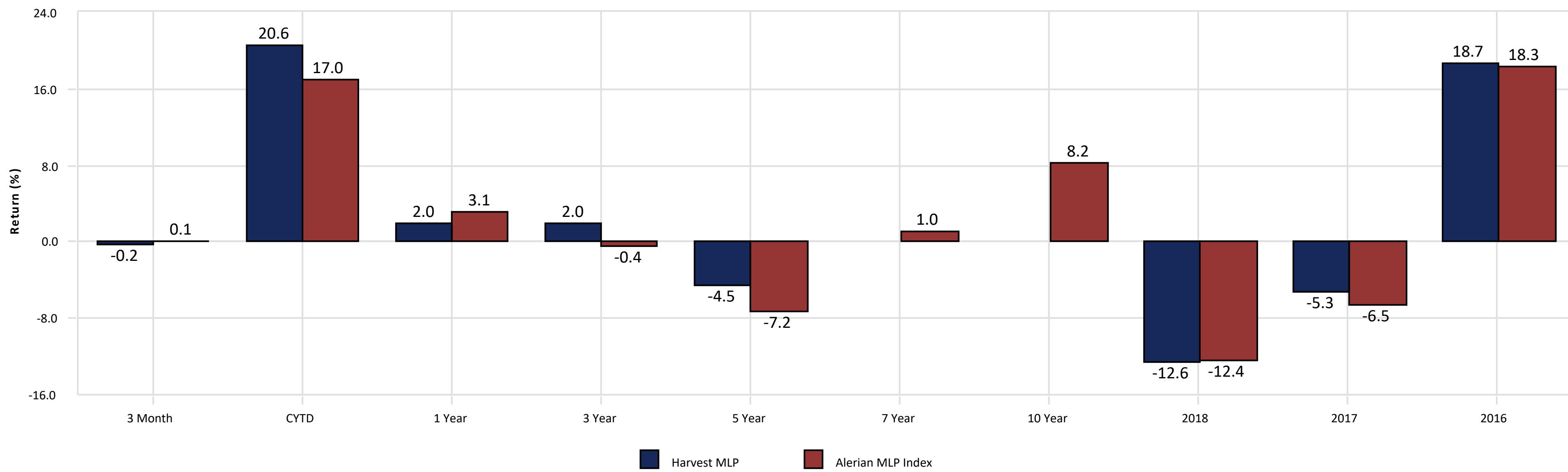


Employees' Retirement System of the City of Norfolk

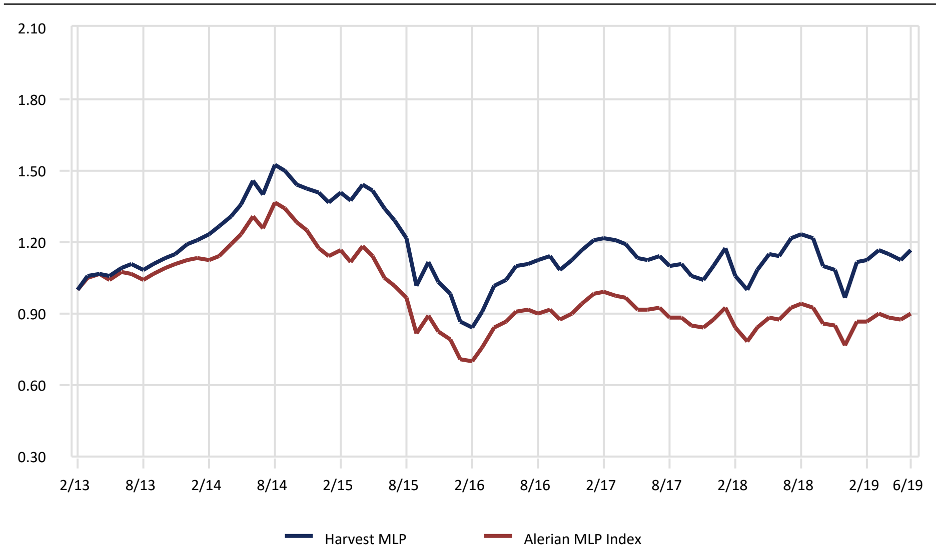
Harvest MLP

June 30, 2019

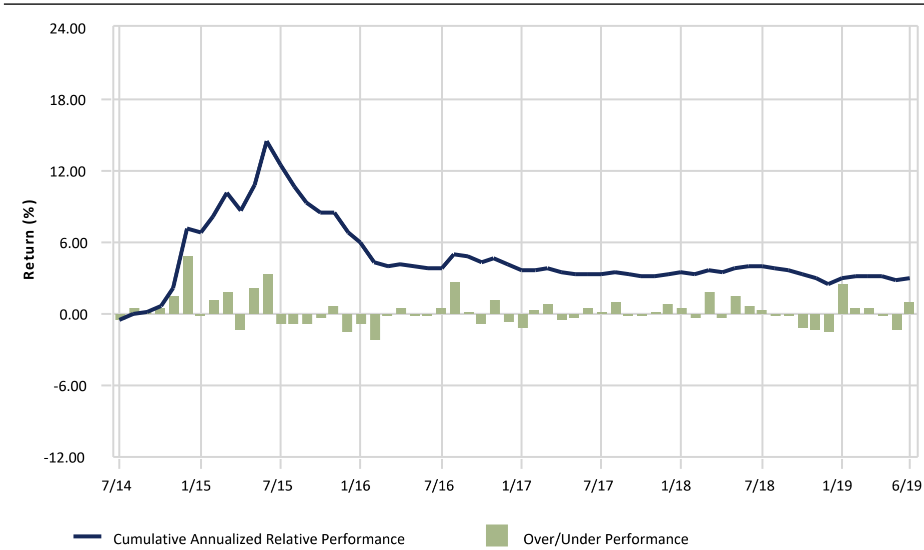
Comparative Performance



Growth of $1 - Since Inception (03/01/13)



Relative Performance vs. Alerian MLP Index



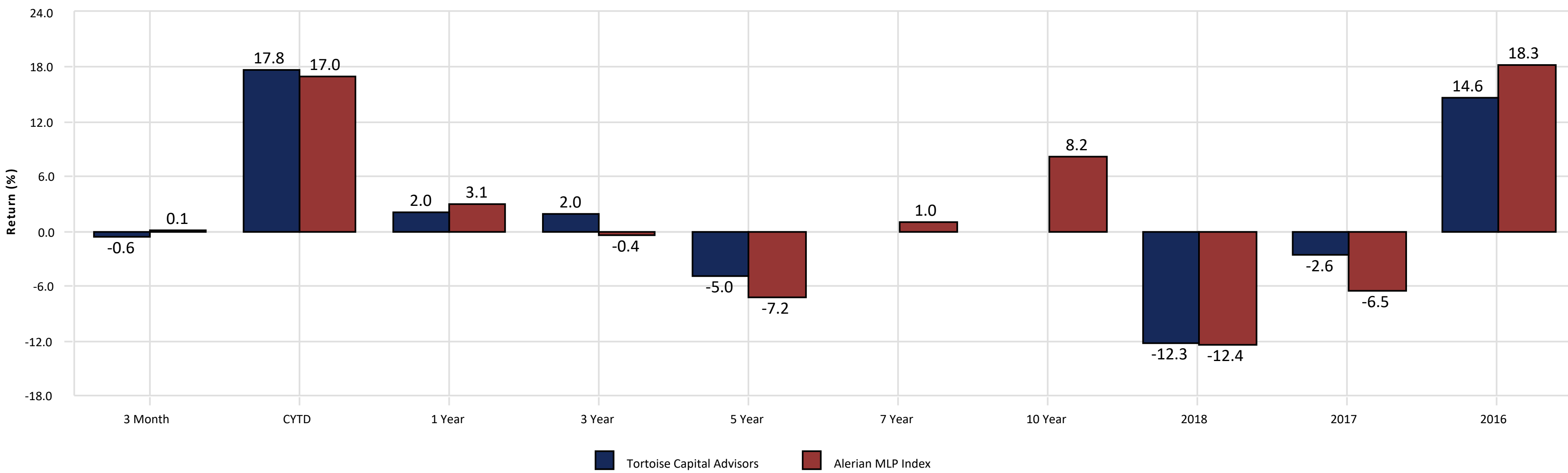
gross of fees

Employees' Retirement System of the City of Norfolk

Tortoise Capital Advisors

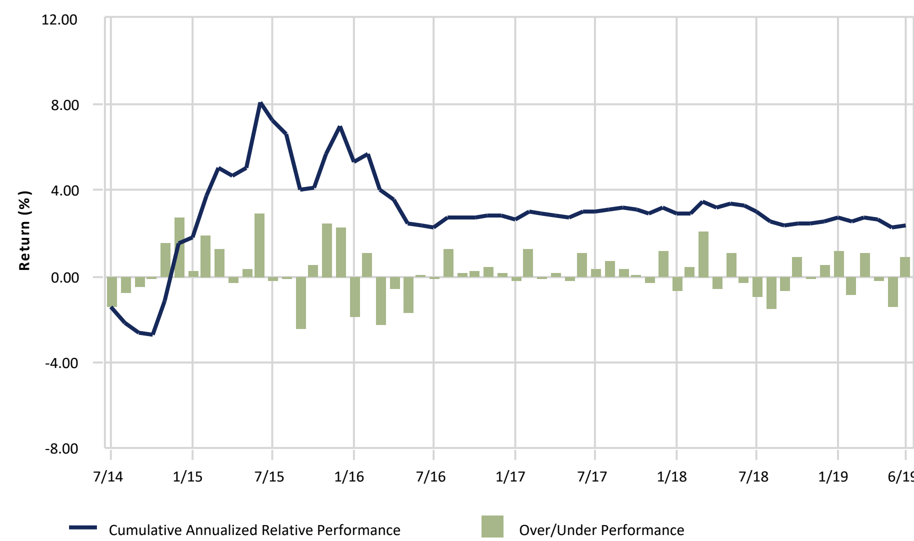
June 30, 2019

Comparative Performance



Growth of $1 - Since Inception (04/01/13)

Relative Performance vs. Alerian MLP Index



gross of fees

Appendix

Employees' Retirement System of the City of Norfolk

Asset Allocation & Performance (gross of fees)

June 30, 2019

	Asset $	Asset %	3 Month		CYTD		1 Year		2 Year		3 Year		5 Year		Since Inception		Inception Date
Total Fund	**1,086,293,574**	**100.00**	**2.73**	**(87)**	**11.73**	**(55)**	**5.52**	**(72)**	**6.40**	**(76)**	**8.19**	**(74)**	**5.41**	**(73)**	**8.24**	**(65)**	**Oct-1990**
Total Fund Policy			*3.38*		*12.44*		*6.17*		*6.47*		*8.09*		*5.33*		*8.12*		
Excess Return			-0.65		-0.71		-0.65		-0.07		0.10		0.08		0.12		
Total Fund Strategy Index			*2.95*		*12.18*		*5.91*		*6.08*		*7.57*		*5.00*		*8.12*		
Excess Return			-0.22		-0.45		-0.39		0.32		0.62		0.41		0.12		
Global Equity	603,496,822	55.56	3.53	(54)	16.41	(55)	5.02	(59)	8.27	(49)	11.89	(44)	6.86	(46)	9.17	(72)	Oct-1990
Global Equity Policy			*3.37*		*16.08*		*4.56*		*7.80*		*11.42*		*6.43*		*9.28*		
Excess Return			0.16		0.33		0.46		0.47		0.47		0.43		-0.11		
Fixed Income	330,215,935	30.40	3.00	(53)	6.03	(62)	7.70	(43)	3.94	(48)	2.90	(59)	3.28	(52)	6.21	(-)	Oct-1990
Blmbg. Barc. U.S. Aggregate			*3.08*		*6.11*		*7.87*		*3.65*		*2.31*		*2.95*		*5.95*		
Excess Return			-0.08		-0.08		-0.17		0.29		0.59		0.33		0.26		
Real Estate	81,997,636	7.55	-1.25	(97)	-0.69	(98)	2.71	(93)	5.22	(92)	5.79	(94)	8.23	(89)	10.05	(77)	Apr-2011
NCREIF Fund Index-ODCE (Net)			*0.77*		*1.98*		*5.46*		*6.46*		*6.61*		*8.76*		*10.00*		
Excess Return			-2.02		-2.67		-2.75		-1.24		-0.82		-0.53		0.05		
MLPs	67,988,099	6.26	-0.43	(41)	19.19	(24)	2.02	(23)	1.12	(12)	1.99	(16)	-4.71	(25)	2.52	(48)	Mar-2013
Alerian MLP Index			*0.12*		*16.96*		*3.09*		*-0.82*		*-0.42*		*-7.20*		*-1.67*		
Excess Return			-0.55		2.23		-1.07		1.94		2.41		2.49		4.19		
Cash	2,591,148	0.24	0.60		4.71		9.11		5.16		3.62		2.24		1.89		Jul-2003
FTSE 3 Month T-Bill			*0.61*		*1.21*		*2.30*		*1.81*		*1.36*		*0.84*		*1.29*		
Excess Return			-0.01		3.50		6.81		3.35		2.26		1.40		0.60		

Employees' Retirement System of the City of Norfolk

Asset Allocation & Performance (gross of fees)

June 30, 2019

	Asset $	3 Month		CYTD		1 Year		2 Year		3 Year		5 Year		Since Inception		Inception Date
Global Equity																
SSgA MSCI ACWI IMI Index Fund	603,496,822	3.53	(54)	16.41	(55)	5.02	(59)	8.27	(49)	11.89	(44)	-		11.09	(45)	May-2016
MSCI AC World IMI (Net)		*3.37*		*16.08*		*4.56*		*7.80*		*11.42*		-		*10.60*		
Excess Return		0.16		0.33		0.46		0.47		0.47		-		0.49		
Fixed Income																
PIMCO Total Return	168,179,160	2.90	(90)	6.04	(81)	7.63	(90)	4.23	(24)	3.44	(12)	3.58	(25)	6.61	(8)	Jan-1991
Blmbg. Barc. U.S. Aggregate		*3.08*		*6.11*		*7.87*		*3.65*		*2.31*		*2.95*		*5.82*		
Excess Return		-0.18		-0.07		-0.24		0.58		1.13		0.63		0.79		
SSgA Bond Market Index	162,036,775	3.09	(63)	6.13	(78)	7.90	(76)	3.67	(82)	2.33	(85)	2.97	(86)	3.91	(92)	Jan-2009
Blmbg. Barc. U.S. Aggregate		*3.08*		*6.11*		*7.87*		*3.65*		*2.31*		*2.95*		*3.89*		
Excess Return		0.01		0.02		0.03		0.02		0.02		0.02		0.02		
Real Assets																
JP Morgan Asset Management Strategic Property Fund	42,347,520	1.15	(84)	1.61	(95)	5.35	(95)	6.61	(93)	7.05	(83)	9.09	(88)	11.06	(76)	Apr-2011
NCREIF Fund Index-ODCE (Net)		*0.77*		*1.98*		*5.46*		*6.46*		*6.61*		*8.76*		*10.00*		
Excess Return		0.38		-0.37		-0.11		0.15		0.44		0.33		1.06		
UBS Trumbull Property Fund	39,650,116	-3.69	(100)	-3.03	(100)	0.04	(100)	3.79	(100)	4.39	(100)	7.22	(100)	8.12	(-)	Dec-2011
NCREIF Fund Index-ODCE (Net)		*0.77*		*1.98*		*5.46*		*6.46*		*6.61*		*8.76*		*9.60*		
Excess Return		-4.46		-5.01		-5.42		-2.67		-2.22		-1.54		-1.48		
MLPs																
Harvest MLP	34,235,839	-0.22	(33)	20.63	(1)	2.01	(24)	1.52	(6)	1.97	(16)	-4.47	(8)	2.42	(49)	Mar-2013
Alerian MLP Index		*0.12*		*16.96*		*3.09*		*-0.82*		*-0.42*		*-7.20*		*-1.67*		
Excess Return		-0.34		3.67		-1.08		2.34		2.39		2.73		4.09		
Tortoise Capital Advisors	33,752,260	-0.64	(47)	17.76	(36)	2.04	(23)	0.73	(32)	2.00	(16)	-4.97	(32)	1.82	(23)	Apr-2013
Alerian MLP Index		*0.12*		*16.96*		*3.09*		*-0.82*		*-0.42*		*-7.20*		*-2.52*		
Excess Return		-0.76		0.80		-1.05		1.55		2.42		2.23		4.34		

Employees' Retirement System of the City of Norfolk

Asset Allocation & Performance - (net of fees)

June 30, 2019

	Asset $	Asset %	1 Month	3 Month	CYTD	FYTD	1 Year	3 Year	5 Year	Since Inception	Inception Date
Total Fund Composite	**1,086,293,574**	**100.00**	**3.98**	**2.69**	**11.64**	**5.35**	**5.35**	**8.00**	**5.24**	**8.05**	**Oct -1990**
Total Fund Policy			*4.49*	*3.38*	*12.44*	*6.17*	*6.17*	*8.09*	*5.33*	*8.12*	
Excess Return			-0.51	-0.69	-0.80	-0.82	-0.82	-0.09	-0.09	-0.07	
Total Fund Strategy Index			*4.17*	*2.95*	*12.18*	*5.91*	*5.91*	*7.57*	*5.00*	*8.12*	
Excess Return			-0.19	-0.26	-0.54	-0.56	-0.56	0.43	0.24	-0.07	
Global Equity	603,496,822	55.56	6.47	3.52	16.38	4.97	4.97	11.85	6.83	8.99	Oct -1990
Global Equity Policy			*6.43*	*3.37*	*16.08*	*4.56*	*4.56*	*11.42*	*6.43*	*9.28*	
Excess Return			0.04	0.15	0.30	0.41	0.41	0.43	0.40	-0.29	
Fixed Income	330,215,935	30.40	1.23	2.99	5.98	7.58	7.58	2.79	3.16	6.01	Oct -1990
Blmbg. Barc. U.S. Aggregate			*1.26*	*3.08*	*6.11*	*7.87*	*7.87*	*2.31*	*2.95*	*5.95*	
Excess Return			-0.03	-0.09	-0.13	-0.29	-0.29	0.48	0.21	0.06	
Real Estate	81,997,636	7.55	-1.79	-1.48	-1.15	1.90	1.90	4.85	7.21	9.04	Apr -2011
NCREIF Fund Index-ODCE (VW) (Net)			*0.77*	*0.77*	*1.98*	*5.46*	*5.46*	*6.61*	*8.76*	*10.00*	
Excess Return			-2.56	-2.25	-3.13	-3.56	-3.56	-1.76	-1.55	-0.96	
MLPs	67,988,099	6.26	3.60	-0.62	18.76	1.24	1.24	1.22	-5.37	1.83	Mar -2013
Alerian MLP Index			*2.64*	*0.12*	*16.96*	*3.09*	*3.09*	*-0.42*	*-7.20*	*-1.67*	
Excess Return			0.96	-0.74	1.80	-1.85	-1.85	1.64	1.83	3.50	
Cash	2,595,083	0.24	0.17	0.48	1.05	2.89	2.89	1.66	1.08	1.53	Jul -2003
FTSE 3 Month T-Bill			*0.20*	*0.61*	*1.21*	*2.30*	*2.30*	*1.36*	*0.84*	*1.29*	
Excess Return			-0.03	-0.13	-0.16	0.59	0.59	0.30	0.24	0.24	

Employees' Retirement System of the City of Norfolk

Asset Allocation & Performance - (net of fees)

June 30, 2019

	Asset $	Asset %	1 Month	3 Month	CYTD	FYTD	1 Year	3 Year	5 Year	Since Inception	Inception Date
Global Equity											
SSgA MSCI ACWI IMI Index Fund	603,496,822	55.56	6.47	3.52	16.38	4.97	4.97	11.85	-	11.05	May -2016
MSCI AC World IMI (Net)			*6.43*	*3.37*	*16.08*	*4.56*	*4.56*	*11.42*	-	*10.60*	
Excess Return			0.04	0.15	0.30	0.41	0.41	0.43	-	0.45	
Fixed Income											
PIMCO Total Return	168,179,160	15.48	1.20	2.90	5.96	7.42	7.42	3.23	3.39	6.36	Jan -1991
Blmbg. Barc. U.S. Aggregate			*1.26*	*3.08*	*6.11*	*7.87*	*7.87*	*2.31*	*2.95*	*5.82*	
Excess Return			-0.06	-0.18	-0.15	-0.45	-0.45	0.92	0.44	0.54	
SSgA Bond Market Index	162,036,775	14.92	1.26	3.09	6.12	7.88	7.88	2.32	2.95	3.90	Jan -2009
Blmbg. Barc. U.S. Aggregate			*1.26*	*3.08*	*6.11*	*7.87*	*7.87*	*2.31*	*2.95*	*3.89*	
Excess Return			0.00	0.01	0.01	0.01	0.01	0.01	0.00	0.01	
Real Estate											
JP Morgan Asset Management Strategic Property Fund	42,347,520	3.90	0.26	0.90	1.11	4.57	4.57	6.10	8.09	10.08	Apr -2011
NCREIF Fund Index-ODCE (VW) (Net)			*0.77*	*0.77*	*1.98*	*5.46*	*5.46*	*6.61*	*8.76*	*10.00*	
Excess Return			-0.51	0.13	-0.87	-0.89	-0.89	-0.51	-0.67	0.08	
UBS Trumbull Property Fund	39,650,116	3.65	-3.90	-3.90	-3.44	-0.80	-0.80	3.46	6.19	7.12	Jan -2012
NCREIF Fund Index-ODCE (VW) (Net)			*0.77*	*0.77*	*1.98*	*5.46*	*5.46*	*6.61*	*8.76*	*9.55*	
Excess Return			-4.67	-4.67	-5.42	-6.26	-6.26	-3.15	-2.57	-2.43	
MLPs											
Harvest MLP	34,235,839	3.15	3.65	-0.41	20.20	1.21	1.21	1.20	-5.14	1.72	Mar -2013
Alerian MLP Index			*2.64*	*0.12*	*16.96*	*3.09*	*3.09*	*-0.42*	*-7.20*	*-1.67*	
Excess Return			1.01	-0.53	3.24	-1.88	-1.88	1.62	2.06	3.39	
Tortoise Capital Advisors	33,752,260	3.11	3.54	-0.83	17.34	1.28	1.28	1.24	-5.62	1.13	Apr -2013
Alerian MLP Index			*2.64*	*0.12*	*16.96*	*3.09*	*3.09*	*-0.42*	*-7.20*	*-2.52*	
Excess Return			0.90	-0.95	0.38	-1.81	-1.81	1.66	1.58	3.65	

Employees' Retirement System of the City of Norfolk

Fee Schedule

June 30, 2019

	Fee Schedule	Market Value As of 06/30/2019 ($)	Estimated Annual Fee ($)	Estimated Annual Fee (%)
Total Fund		**1,086,293,574**	**2,215,910**	**0.20**
Global Equity		**603,496,822**	**241,399**	**0.04**
SSgA MSCI ACWI IMI Index Fund	0.04 % of Assets	603,496,822	241,399	0.04
Fixed Income		**330,215,935**	**721,942**	**0.22**
PIMCO Total Return	0.41 % of Assets	168,179,160	689,535	0.41
SSgA Bond Market Index	0.02 % of Assets	162,036,775	32,407	0.02
Real Assets		**149,985,734**	**1,252,569**	**0.84**
Real Estate		**81,997,636**	**742,659**	**0.91**
JP Morgan Strategic Property Fund	1.00 % of Assets	42,347,520	423,475	1.00
UBS Trumbull Property Fund	0.81 % of Assets	39,650,116	319,183	0.81
MLPs		**67,988,099**	**509,911**	**0.75**
Harvest MLP	0.75 % of Assets	34,235,839	256,769	0.75
Tortoise Capital Advisors	0.75 % of Assets	33,752,260	253,142	0.75
Cash		2,595,083	-	-

Pimco has a minimum base fee of 15 bps. The maximum fee includes the base fee of 15 bps and a performance fee of 26 bps, with a total cap of 0.41%. UBS Trumbull has waived the TPF Variable fee (0-25 bps) through March 2020.

Employees' Retirement System of the City of Norfolk

Financial Reconciliation

1 Quarter Ending June 30, 2019

	Market Value As of 04/01/2019	Net Transfers	Contributions	Distributions	Mgmt Fees	Income	Apprec./ Deprec.	Market Value As of 06/30/2019
Total Fund Composite	**1,079,415,145**	**-**	**-**	**-21,750,000**	**-387,228**	**2,874,791**	**26,142,491**	**1,086,293,574**
Global Equity	**604,392,483**	**-21,550,000**	**-**	**-**	**-63,313**	**-**	**20,717,652**	**603,496,822**
SSgA MSCI ACWI IMI Index	604,392,483	-21,550,000	-	-	-63,313	-	20,717,652	603,496,822
Fixed Income	**321,105,176**	**-500,000**	**-**	**-**	**-7,762**	**1,276,047**	**8,344,100**	**330,215,935**
PIMCO Total Return	163,921,003	-500,000	-	-	-	1,276,047	3,483,736	168,179,160
SSgA Bond Market Index	157,184,173	-	-	-	-7,762	-	4,860,364	162,036,775
Real Estate	**83,229,012**	**-55**	**-**	**-**	**-190,780**	**415,933**	**-1,456,475**	**81,997,636**
JP Morgan Strategic Property	41,970,859	-55	-	-	-104,711	55	481,373	42,347,520
UBS Trumbull Property	41,258,153	-	-	-	-86,069	415,879	-1,937,847	39,650,116
MLPs	**68,282,862**	**125,372**	**-**	**-**	**-125,372**	**1,168,258**	**-1,463,022**	**67,988,099**
Harvest MLP	34,312,647	61,678	-	-	-61,678	570,080	-646,888	34,235,839
Tortoise Capital Advisors	33,970,215	63,694	-	-	-63,694	598,178	-816,134	33,752,260
Cash	2,405,611	21,924,682	-	-21,750,000	-	14,553	236	2,595,083

Employees' Retirement System of the City of Norfolk

Financial Reconciliation

Year To Date Ending June 30, 2019

	Market Value As of 01/01/2019	Net Transfers	Contributions	Distributions	Mgmt Fees	Income	Apprec./ Deprec.	Market Value As of 06/30/2019
Total Fund Composite	**1,013,822,346**	**-**	**-**	**-44,050,000**	**-876,634**	**4,931,120**	**112,468,367**	**1,086,293,574**
Global Equity	**539,745,314**	**-23,950,000**	**-**	**-**	**-123,754**	**-**	**87,825,262**	**603,496,822**
SSgA MSCI ACWI IMI Index	539,745,314	-23,950,000	-	-	-123,754	-	87,825,262	603,496,822
Fixed Income	**331,649,951**	**-20,380,834**	**-**	**-**	**-134,456**	**2,064,332**	**17,018,567**	**330,215,935**
PIMCO Total Return	178,953,845	-20,380,834	-	-	-119,166	2,064,332	7,662,608	168,179,160
SSgA Bond Market Index	152,696,106	-	-	-	-15,290	-	9,355,958	162,036,775
Real Estate	**82,948,272**	**-55**	**-**	**-**	**-380,976**	**415,933**	**-985,539**	**81,997,636**
JP Morgan Strategic Property	41,884,538	-55	-	-	-207,720	55	670,702	42,347,520
UBS Trumbull Property	41,063,734	-	-	-	-173,256	415,879	-1,656,241	39,650,116
MLPs	**57,042,763**	**237,448**	**-**	**-**	**-237,448**	**2,334,651**	**8,610,685**	**67,988,099**
Harvest MLP	28,380,741	120,016	-	-	-120,016	1,150,846	4,704,252	34,235,839
Tortoise Capital Advisors	28,662,023	117,433	-	-	-117,433	1,183,804	3,906,433	33,752,260
Cash	2,436,046	44,093,440	-	-44,050,000	-	116,204	-607	2,595,083

Employees' Retirement System of the City of Norfolk

Historical Hybrid Composition

June 30, 2019

	(%)
Total Fund Policy : May-2016	
MSCI AC World IMI (Net)	62.50
Blmbg. Barc. U.S. Aggregate	37.50

	(%)
Total Fund Strategy Index : Jul-2016	
MSCI AC World IMI (Net)	55.00
Blmbg. Barc. U.S. Aggregate	30.00
NCREIF Fund Index-ODCE (VW) (Net)	7.50
Alerian MLP Index	7.50

Strategy Index is comprised of the returns of the various broad market benchmarks assigned to each manager and weighted to reflect the System's target asset allocation.

Employees' Retirement System of the City of Norfolk

Historical Hybrid Composition

June 30, 2019

Global Equity Policy

	(%)
May-2016	
MSCI AC World IMI (Net)	100.00
Sep-2009	
Russell 3000 Index	60.00
MSCI AC World ex USA (Net)	40.00
Jun-2009	
Russell 3000 Index	70.00
MSCI AC World ex USA (Net)	30.00
Jun-2006	
Russell 3000 Index	70.00
MSCI EAFE Index	30.00
Oct-1990	
S&P 500	100.00

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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