

Bristol County Retirement System

Analysis of Investment Performance

As of June 30, 2019

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ANALYSIS OF INVESTMENT PERFORMANCE

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Ranked #1 U.S. Investment Consulting Business

Segal Marco Advisors was named a 2018 Greenwich Quality Leader among Large U.S. Investment Consultants and ranked **#1 overall** in the 2018 Greenwich Quality Index among the top 15 investment consultants,* placing 1st, 2nd or 3rd in 13 out of 14 criteria.



- Understanding Clients' Goals and Objectives
- Advice on Long-Term Asset Allocation
- Provision of Proactive Advice/ Innovative Ideas
- Capability of Consultant Assigned to Fund

- Credibility with Investment Committee
- Knowledge of Investment Managers
- Satisfaction with Manager Recommendations
- Usefulness of Personal Meetings
- Usefulness of Written Investment Reviews



- Timeliness of Providing Written Reports
- Sufficient Professional Resources to Meet Needs



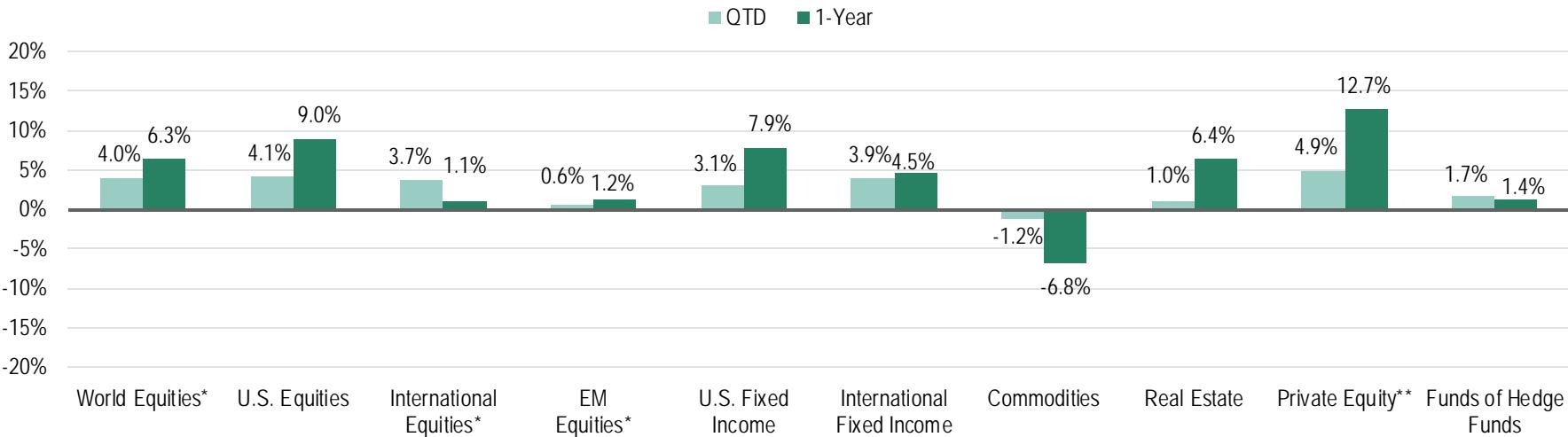
- Advice on DC Plan Structure and Design
- Reasonable Fees (Relative to Value Delivered)

* Top 15 based on 2018 P&I Investment Consultants Special Report
Source: Greenwich Associates, USII-SWAP-18

Financial Market Conditions

Q2 2019 In Review

Summary of Investment Returns



Quarterly Synopsis

- World equity markets rose in Q2. Fears over U.S./China trade relations lessened and central banks were accommodative.
- U.S. equity was positive in the quarter. Economic data was broadly positive and the Federal Reserve suggested it may cut rates.
- International equities were higher with optimism over global trade and with the European Central Bank not raising rates.
- Emerging market equity rose slightly in Q2 with a weaker USD and hopes for a Fed interest rate cut.
- U.S. fixed income rose in the quarter. The prospect of an interest rate cut boosted investment grade credit and Treasuries.
- Non-U.S. fixed income also gained in Q2, with investor expectations that central banks would keep monetary policy loose.
- Hedge funds rose during the quarter. Global macro strategies were the top performers.

* Net of Dividends

** Performance as of Q1 2019 because Q2 2019 performance data is not yet available.

Sources: Investment Metrics, Thomson One, FactSet

Q2 2019 Index Returns

Asset Class	Indices	QTD	YTD	1-Year	3-Year	5-Year	10-Year
World Equity	MSCI World ¹	4.00	16.98	6.33	11.77	6.60	10.72
U.S. Equity	Russell 3000	4.10	18.71	8.98	14.02	10.19	14.67
Non-U.S. Equity	MSCI EAFE ¹	3.68	14.03	1.08	9.11	2.25	6.90
Emerging Market Equity	MSCI EM ¹	0.61	10.58	1.21	10.66	2.49	5.81
U.S. Fixed Income	Bloomberg Barclays U.S. Aggregate	3.08	6.11	7.87	2.31	2.95	3.90
Non-U.S. Fixed Income	FTSE ² Non-U.S. WGBI (Unhedged)	3.93	5.50	4.54	0.83	0.19	1.88
Commodities	Bloomberg Commodity Index	-1.19	5.06	-6.75	-2.18	-9.15	-3.74
Private Real Estate	NFI-ODCE ³	0.99	2.42	6.41	7.57	9.76	9.88
Private Equity	Thomson Reuters Private Equity ⁴	4.9	4.9	12.7	14.7	12.1	15.2
Hedge Funds	HFRI Fund of Funds Composite	1.69	6.38	1.36	4.32	2.23	3.23

¹ Net of Dividends

² Formerly Citigroup Non-U.S. WGBI. Citigroup's fixed income indices were purchased by London Stock Exchange Group (LSEG) and were all rebranded to FTSE by July 31, 2018. FTSE Russell is a unit of LSEG's Information Services Division and a wholly owned subsidiary of LSEG.

³ NCREIF Fund Index (NFI) – Open End Diversified Core Equity (ODCE)

⁴ Performance as of Q1 2019 because Q2 2019 performance data is not yet available.

Sources: Investment Metrics, Thomson One, FactSet

Q2 2019 Index Returns

Equity Indices	QTD	YTD	1-Year	3-Year	5-Year	10-Year
S&P 500®	4.30	18.54	10.42	14.19	10.71	14.70
Russell 1000	4.25	18.84	10.02	14.15	10.45	14.77
Russell 1000 Growth	4.64	21.49	11.56	18.07	13.39	16.28
Russell 1000 Value	3.84	16.24	8.46	10.19	7.46	13.19
Russell 2000	2.10	16.98	-3.31	12.30	7.06	13.45
Russell 2000 Growth	2.75	20.36	-0.49	14.69	8.63	14.41
Russell 2000 Value	1.38	13.47	-6.24	9.81	5.39	12.40
Russell 3000	4.10	18.71	8.98	14.02	10.19	14.67
MSCI EAFE*	3.68	14.03	1.08	9.11	2.25	6.90
MSCI World*	4.00	16.98	6.33	11.77	6.60	10.72
MSCI EM*	0.61	10.58	1.21	10.66	2.49	5.81

Fixed-Income Indices	QTD	YTD	1-Year	3-Year	5-Year	10-Year
Blbg Bar U.S. Aggregate	3.08	6.11	7.87	2.31	2.95	3.90
Blbg Bar U.S. Govt/Credit	3.53	6.90	8.52	2.41	3.11	4.09
Blbg Bar U.S. Intermediate Govt/Credit	2.59	4.97	6.93	1.99	2.39	3.24
Blbg Bar U.S. L/T Govt/Credit	6.59	13.46	13.82	3.76	5.68	7.62
Blbg Bar U.S. Government	2.99	5.15	7.21	1.39	2.48	2.97
Blbg Bar U.S. Credit	4.27	9.35	10.34	3.74	3.92	5.77
Blbg Bar U.S. Mortgage-Backed Securities	1.96	4.17	6.22	2.06	2.56	3.23
BofA ML U.S. High Yield Master II	2.50	9.94	7.48	7.52	4.70	9.24
Citigroup Non-U.S. WGBI (Unhedged)	3.93	5.50	4.54	0.83	0.19	1.88
Citigroup 3-Month T-Bill	0.61	1.21	2.30	1.36	0.84	0.46

Other Indices	QTD	YTD	1-Year	3-Year	5-Year	10-Year
Hueler Stable Value	0.63	1.24	2.43	2.12	1.97	2.21
Bloomberg Commodity	-1.19	5.06	-6.75	-2.18	-9.15	-3.74
HFRI Fund of Funds Composite	1.69	6.38	1.36	4.32	2.23	3.23
NCREIF NFI-ODCE	0.99	2.42	6.41	7.57	9.76	9.88
Thomson Reuters Private Equity**	4.9	4.9	12.7	14.7	12.1	15.2

* Net of Dividends

** Performance reported as of Q1 2019 because Q2 2019 performance data is not yet available.

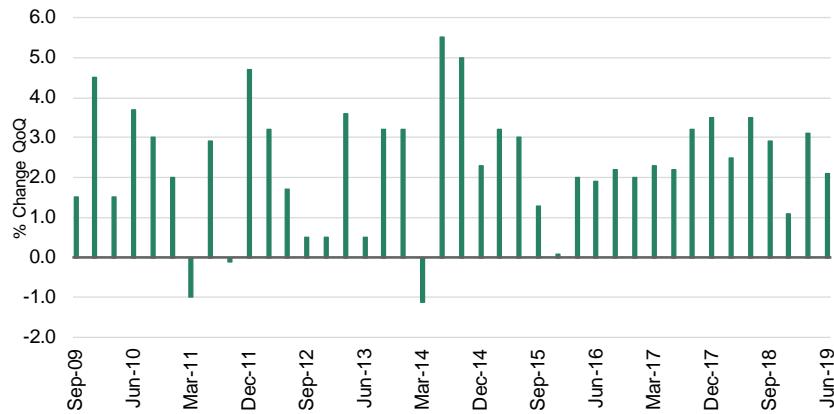
Sources: eVestment Alliance, Hueler Analytics, Investment Metrics, Thomson One, FactSet

Q2 2019 In Review: U.S. Economy

GDP Growth

- U.S. GDP growth rose by 2.1% in Q1 2019.
- Consumer spending jumped 4.3% in Q2, the strongest pace of growth since late 2017. Spending was up on everything from big-ticket items like cars to food and clothing.
- However, business investment declined for the first time since early 2016. Nonresidential fixed investment, ie software, R&D and equipment spending, fell 0.6% after rising 4.4% in Q1.

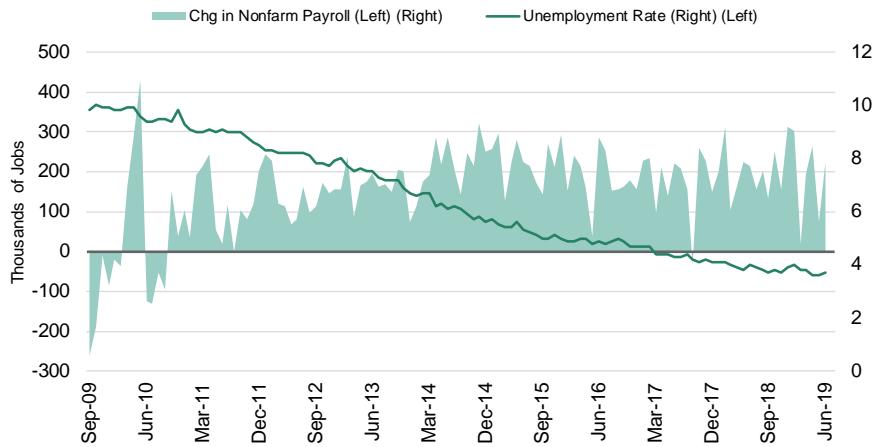
U.S. Real GDP Growth



Employment Picture

- The unemployment rate fell to 3.7% in June. Nonfarm payrolls rose by 512,000 over the quarter.
- Employment gains were led by professional and business services, health care, transportation and warehousing, and construction.
- Employment in industries such as mining, wholesale trade, retail trade, information, financial activities, and leisure and hospitality showed little change.

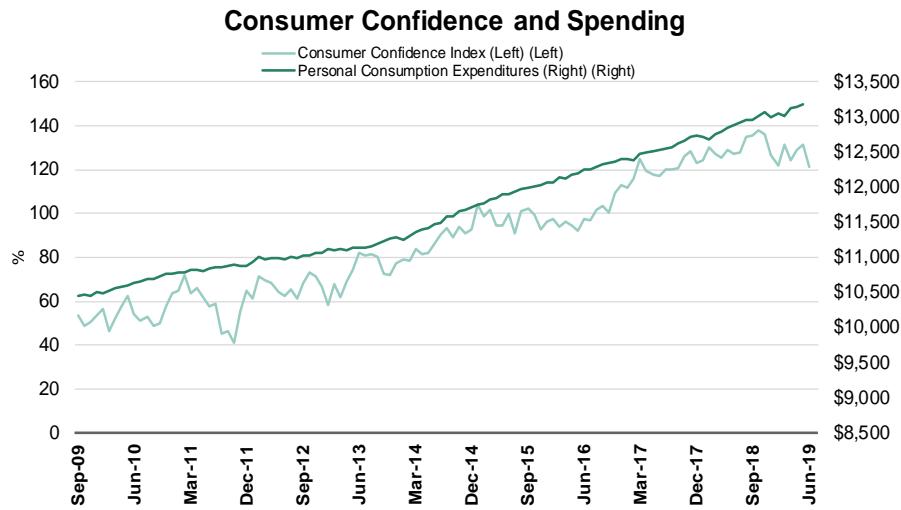
U.S. Nonfarm Payrolls and Unemployment Rate



Q2 2019 In Review: U.S. Economy

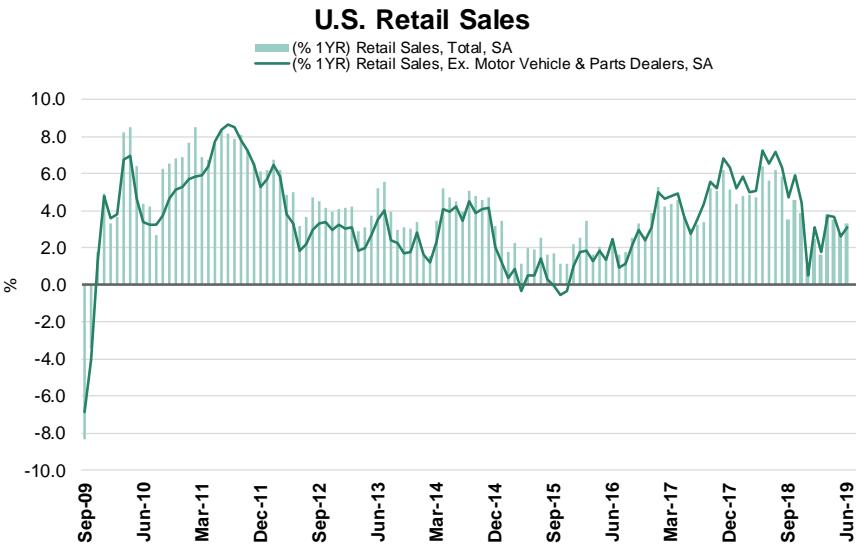
Consumer Confidence and Spending

- Sentiment declined again in Q2, as the Conference Board's Consumer Confidence Index decreased from 124.1 at the end of March to 121.5 at the end of June.
- Personal consumption expenditures rose in May*.
- Consumer confidence fell as global trade tensions persisted and worries grew about the state of the global economy.



Retail Sales

- Retail sales ended June* up 3.4% from one year ago.
- Motor vehicle and parts dealers, building materials and clothing sales gained the most in June.
- Even as nervousness about the global economy persists, a tight labor market helped bolster spending and retail sales in Q2.



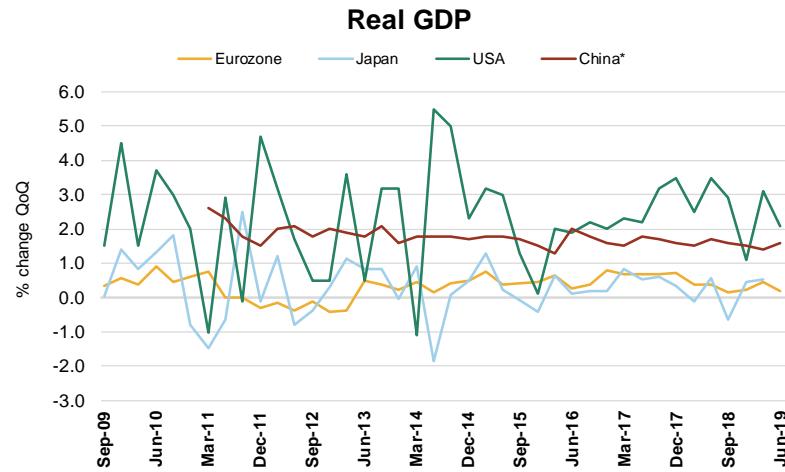
*The most recent data available.

Source this page: FactSet

Q2 2019 In Review: Global Economy

World GDP Growth

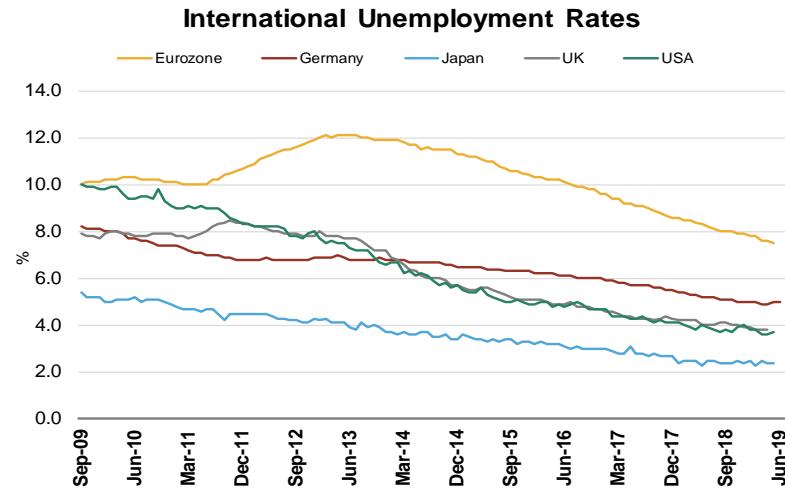
- Eurozone GDP grew 0.2% quarter over quarter (QoQ), matching market expectations. The Eurozone's annual growth rate slowed to 1.06%.
- China's GDP growth grew by 0.2% QoQ to 1.6% in Q2. The country's annual growth rate fell to 6.2%.
- Japan's GDP climbed again QoQ in Q1**, coming in at 0.6%. The Japanese economy's annual growth rate grew to 0.9%.
- U.S. GDP grew 2.1% in Q2.



Note that the figures in the graph above represent the percent change in real GDP from the previous quarter, not the annual growth rate of these economies.

Global Employment Picture

- Eurozone unemployment fell to 7.5% in May 2019**, the region's lowest-recorded rate since July 2008. The Czech Republic (2.2%), Germany (3.1%) and the Netherlands (3.3%) had the lowest unemployment rates in the EU.
- Japan's unemployment rate ticked up to 2.4% in May. While higher than its earlier historic low of 2.2%, unemployment remained quite modest in Japan.



*Quarter over quarter data calculations began in 2011.

**Most recent data available.

Source this page: FactSet

Q2 2019 In Review: Global Equity Overview

Equity Indices	QTD	YTD	1-Year	3-Year	5-Year	10-Year
S&P 500	4.30	18.54	10.42	14.19	10.71	14.70
MSCI Europe, Australasia and Far East (EAFE)*	3.68	14.03	1.08	9.11	2.25	6.90
MSCI Emerging Markets (EM)*	0.61	10.58	1.21	10.66	2.49	5.81

All data in the table are percentages.

* Net of dividends

Global Equity Performance and Valuations

- Equity markets were broadly higher in Q2 despite ongoing global trade tensions and disappointing economic data. The markets' gains came with the possibility of a rate cut from the Federal Reserve as well as hopes that trade relations between the U.S. and China may be improving.
- While stocks were lower in May when worries around trade tensions escalated, they bounced back in June with prospects of a Fed rate cut.
- Developed market equities were positive in the quarter, though they lagged U.S. stocks. Emerging markets had a much sharper reaction to the renewed tariff threats and the MSCI EM Index made a smaller gain relative to its developed counterparts.
- Global equity valuations were elevated, with P/E ratios on U.S. and emerging market stocks above historic medians. Only developed market equity valuations were a bit below median at the end of Q2.



Data range is from 3/31/00-06/30/19. P/E ratios are forward 12 months.

Q2 2019 In Review: U.S. Equity

U.S. Equity Indices	QTD	YTD	1-Year	3-Year	5-Year	10-Year
S&P 500	4.30	18.54	10.42	14.19	10.71	14.70
Russell 1000	4.25	18.84	10.02	14.15	10.45	14.77
Russell 1000 Growth	4.64	21.49	11.56	18.07	13.39	16.28
Russell 1000 Value	3.84	16.24	8.46	10.19	7.46	13.19
Russell 2000	2.10	16.98	-3.31	12.30	7.06	13.45
Russell 2000 Growth	2.75	20.36	-0.49	14.69	8.63	14.41
Russell 2000 Value	1.38	13.47	-6.24	9.81	5.39	12.40
Russell 3000	4.10	18.71	8.98	14.02	10.19	14.67

All data in the tables are percentages.

Performance

- Fueled by optimism about future U.S./China trade relations, the S&P 500 hit a record high during 2Q. The top performing sector in 2Q was Financials with a return of +8% in 2Q19. The next two were Materials (+6.3%) and Technology (+6.1%). The Fed's dovish pivot and an ensuing decline in longer rates drove performance in the defensive Real Estate (+2.5%) and Utilities (+3.5%).
- Energy was the worst performing sector in the S&P 500 during 2Q (-2.8%). No other sector posted negative returns. The energy sector has seen two abysmal quarters over the past year with primarily supply driven volatility for oil and gas prices.
- All capitalization sizes were positive in the quarter. Both growth and value stocks gained, though growth outperformed value.

S&P 500 Sector Returns	QTD	1-Year
Cons. Disc.	5.28	10.17
Cons. Staples	3.72	16.39
Energy	-2.83	-13.25
Financials	8.00	6.31
Healthcare	1.38	12.99
Industrials	3.57	10.43
IT	6.06	14.34
Materials	6.31	3.20
Telecom	4.49	13.66
Real Estate	2.46	16.80
Utilities	3.48	19.03

Q2 2019 In Review: International Equity

MSCI International Equity Indices	QTD	YTD	1-Year	3-Year	5-Year	10-Year
World ex. U.S.	3.79	14.64	1.29	9.01	2.04	6.75
EAFE	3.68	14.03	1.08	9.11	2.25	6.90
EAFE Local Currency	2.80	13.68	2.17	9.80	5.85	8.35
Europe	4.48	15.80	1.88	9.11	1.27	6.99
Europe ex U.K.	5.82	16.88	3.39	10.00	1.91	6.99
U.K.	0.91	12.91	-2.05	6.90	-0.31	6.82
Japan	1.02	7.75	-4.19	8.06	4.47	5.85
Pacific Asia ex Japan	5.16	18.03	8.06	11.94	4.04	8.92

All data in the tables are percentages and net of dividends.

Performance

- Following a strong Q1, international developed markets continued to rise in Q2, though the pace of gains slowed. The MSCI EAFE, a proxy for international developed markets, rose 3.7%, trailing domestic markets. Switzerland, Australia and Germany were the top performers, all returning between 7 and 9%, while Israel (-3.6%), Austria and Finland lagged.
- Brexit continues to loom over UK stocks, with lingering fears of an abrupt “no-deal” exit from the EU. Ex UK, however, European stocks made solid gains, with global trade tensions staying relatively stable in the quarter and with European Central Bank President Mario Draghi hinting at further monetary easing to come.
- While Real Estate was negative in Q2, all other EAFE sectors were positive. Cyclical sectors such as Information Technology, Consumer Discretionary and Industrials led, while defensive sectors, such as Consumer Staples, Utilities and Healthcare, lagged the benchmark.

MSCI EAFE Sector Returns	QTD	1-Year
Consumer Disc.	5.90	-2.57
Cons. Staples	1.91	4.81
Energy	0.37	-5.54
Financials	4.28	-2.89
Healthcare	2.04	7.50
Industrials	5.88	2.40
IT	6.56	2.68
Materials	3.91	0.15
Telecom	4.03	4.34
Utilities	1.49	9.80
Real Estate	-2.17	2.30

Q2 2019 In Review: Emerging Market Equity

MSCI EM Equity Indices	QTD	YTD	1-Year	3-Year	5-Year	10-Year
Emerging Markets	0.61	10.58	1.21	10.66	2.49	5.81
EM Local Currency	0.20	10.05	1.84	11.06	6.08	7.80
Asia	-1.25	9.72	-2.29	11.21	4.49	7.48
EMEA	7.15	13.06	6.70	8.35	-1.29	3.70
Latin America	4.44	12.64	18.45	10.79	-0.75	2.34

All data in the tables are percentages and net of dividends.

Performance

- Emerging market equity performance slowed in Q2 with a return of less than 1%, trailing U.S. and international developed equities.
- Emerging market stocks fell sharply in May after trade talks between the U.S. and China broke down. Stocks then recovered in June after the G20 meeting, when hopes for new trade talks emerged.
- China equities struggled in the quarter, posting a -4% loss amid continuing worries surrounding trade as well as slowing economic growth in the country. While Asia stocks were negative, Latin America and EMEA stocks made gains.
- Emerging market sectors were inconsistent for the quarter. Half of the sectors posted negative returns, with Healthcare, Telecom and Materials lagging behind, while Financials and Consumer Staples both posted single digit positive returns.

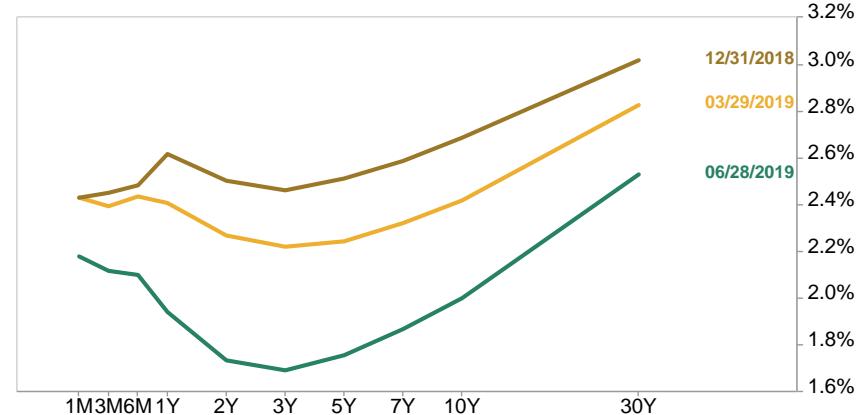
MSCI EM Sector Returns	QTD	1-Year
Cons. Disc.	-1.16	-7.57
Cons. Staples	3.32	0.93
Energy	1.24	16.25
Financials	3.97	11.92
Healthcare	-6.60	-24.66
Industrials	0.02	4.05
IT	-0.06	-6.11
Materials	-1.22	-1.94
Telecom	-2.44	4.53
Utilities	2.91	9.01
Real Estate	-0.16	10.07

Q2 2019 In Review: Fixed Income Overview

Yield Curve

- Treasury yields continued to fall across the curve in Q2, with the Fed now ruling out interest rate hikes in 2019, and with global growth slowing.
- Global demand for Treasuries also contributed to lower yields across all tenors. Trends from Q1 among shorter maturities continued, with the 5-yr yield (1.76%) falling below the 3 month yield (2.12%).
- The 30-year Treasury ended the quarter yielding 2.18%, which was 25 basis points (bps) lower than its yield at the end of Q1. The 2-year Treasury ended the quarter at 1.75%, which was 25 bps lower than the prior quarter.

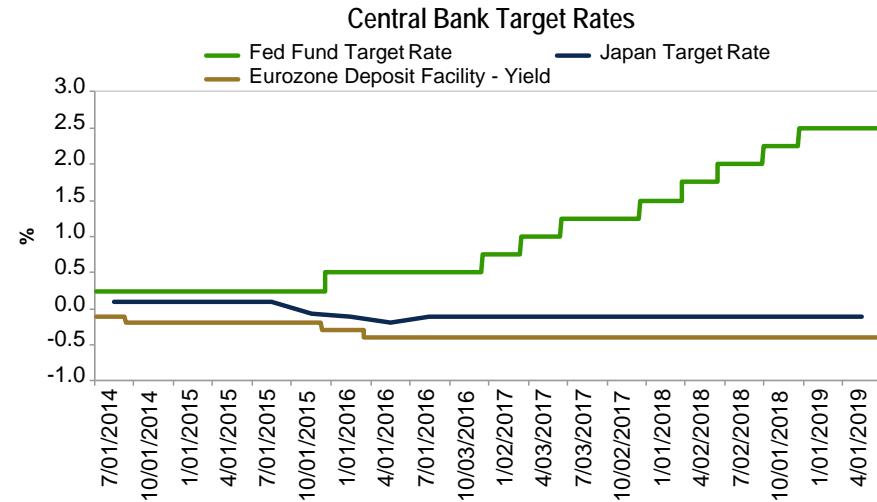
United States Treasury Yield Curve



Monetary Policies/Global Interest Rates

- Central bank deposit rates remained negative in Japan and Europe. Slow growth and worries surrounding global trade uncertainty kept central banks on hold.
- The U.S. continues to be a global outlier with its policy rate at 2.5%. Policy rates in the Eurozone and Japan remain negative.
- The Fed did not hike in Q2 as its plans for future rate increases have been dashed due to uncertainty surrounding economic growth and the effect of trade tensions.

Interest Rates	Fed Funds Rate	EZ Deposit Facility Rate
Average	5.15% (1971-2019)	1.02% (1999-2019)
Max	20.00% (Mar. 1980)	3.75% (Oct. 2000)
Min	0.25% (Dec. 2008)	-0.40% (Mar. 2016)



Q2 2019 In Review: U.S. Fixed Income

U.S. Fixed Income Indices*	QTD	YTD	1-Year	3-Year	5-Year	10-Year
U.S. Aggregate	3.08	6.11	7.87	2.31	2.95	3.90
Government/Credit	3.53	6.90	8.52	2.41	3.11	4.09
Government	2.99	5.15	7.21	1.39	2.48	2.97
Investment Grade Corporate	4.48	9.85	10.72	3.94	4.08	6.07
Investment Grade CMBS	3.26	6.59	8.95	2.91	3.35	7.16
U.S. Corporate High Yield	2.50	9.94	7.48	7.52	4.70	9.24
FTSE** 3-Month T-Bill	0.61	1.21	2.30	1.36	0.84	0.46
Hueler Stable Value	0.63	1.24	2.43	2.12	1.97	2.21

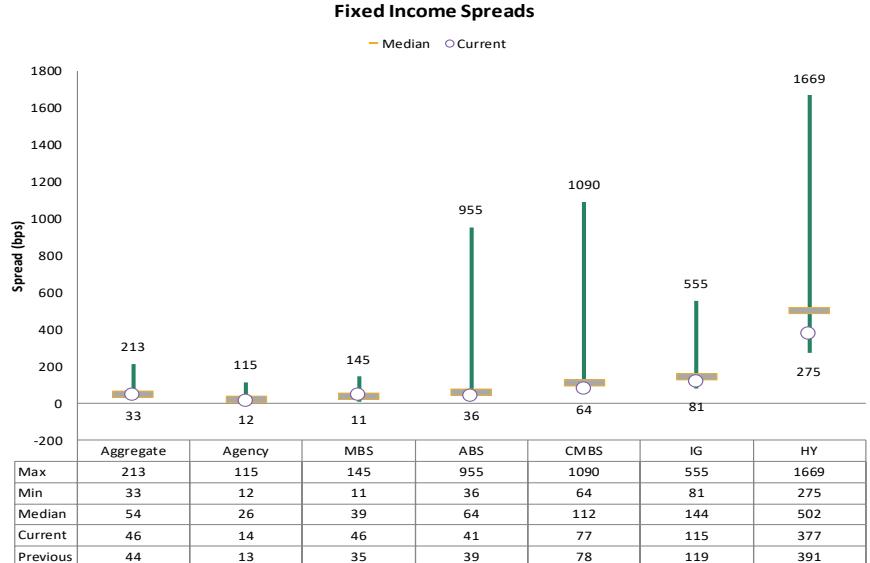
* Bloomberg Barclays Indices, unless otherwise noted.

** Formerly Citigroup. Citigroup's fixed income indices were purchased by London Stock Exchange Group (LSEG) and were rebranded to FTSE by July 31, 2018. FTSE Russell is a unit of LSEG's Information Services Division and a wholly owned subsidiary of LSEG.

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Performance and Spreads

- The U.S. Aggregate Index was positive in Q2. In absolute terms, the US Investment Grade Corporate sector generated the strongest returns (+4.48%). Given the sizeable Treasury weight in the index, that sector's solid performance was a significant positive contributor (+3.01%).
- After generating a 7.26% return in Q1, high yield continued to rise in Q2, generating 2.50% for the quarter. Higher quality credits outperformed the CCC and below sector.
- With the exception of bank loans, most domestic fixed income spreads were either tighter than or in line with end of Q1 levels, but still wider than the levels seen at the end of the third quarter of 2018.



Q2 2019 In Review: International Fixed Income

Global Fixed Income Indices	QTD	YTD	1-Year	3-Year	5-Year	10-Year
Bloomberg Barclays Global Aggregate	3.29	5.57	5.85	1.62	1.20	2.89
Bloomberg Barclays Global Aggregate (Hgd)	2.92	6.00	7.80	2.95	3.82	4.23
FTSE Non-U.S. WGBI*	3.93	5.50	4.54	0.83	0.19	1.88
FTSE Non-U.S. WGBI (Hgd)	3.15	6.34	8.18	3.21	4.73	4.38
JPM EMBI Global Diversified**	4.08	11.31	12.45	5.47	5.30	7.79
JPM GBI-EM Global Diversified***	5.64	8.72	8.99	4.24	-0.45	3.41

All data in the table are percentages.

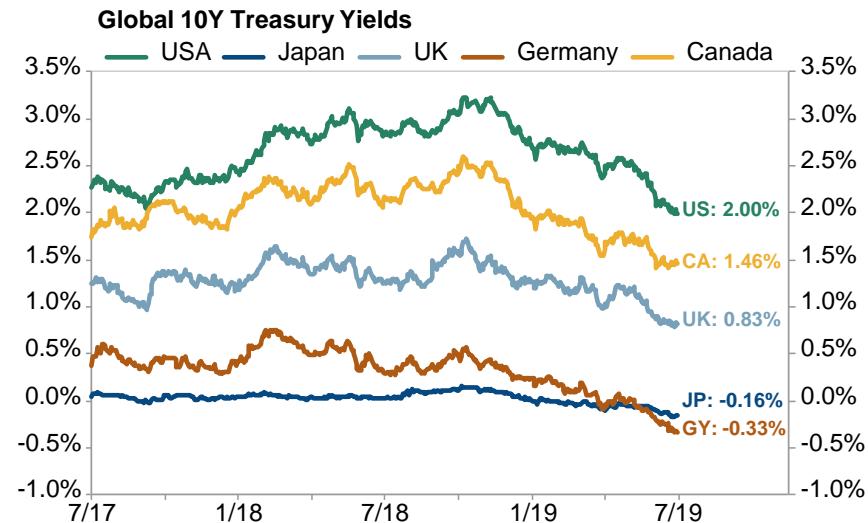
* Formerly Citigroup. The FTSE Non-U.S. World Government Bond Index (WGBI) measures the performance of fixed-rate, local currency, investment grade sovereign bonds excluding the U.S.

** The JP Morgan Emerging Market Bond Index (EMBI) Global Diversified index measures government bonds in hard currencies.

*** The JP Morgan Government Bond Index – Emerging Markets (GBI-EM) Global Diversified index measures government bonds in local currencies.

Global Performance and Yields

- Government yields fell in Q2 across developed markets.
- Rhetoric from central banks was more dovish than the prior quarter due to escalating global trade tensions and unresolved or underwhelming growth in major international regions like the Eurozone.
- The euro and yen appreciated relative to the U.S. dollar, while the British pound depreciated.
- In emerging markets, mixed results were seen in both Asia ex-Japan and Latin America.



Q2 2019 In Review: Absolute Return Strategies

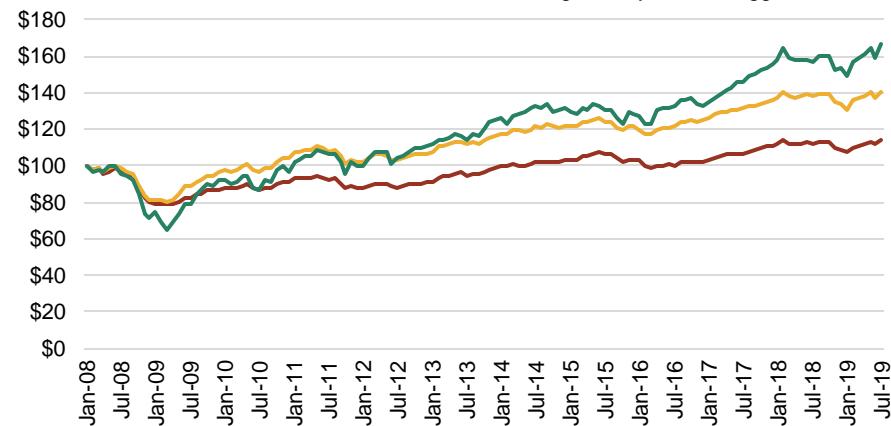
HFRI Indices	QTD	YTD	1-Year	3-Year	5-Year	10-Year
Fund of Funds Composite	1.69	6.38	1.36	4.32	2.23	3.23
Fund Weighted Composite	1.89	7.44	1.52	5.01	2.95	4.71
Event Driven	1.40	5.61	1.34	6.36	2.81	6.09
Equity Hedge	1.76	9.47	0.48	6.84	3.47	5.39
Macro	2.69	5.01	2.56	0.40	1.43	1.41
Emerging Markets	1.20	8.71	0.55	6.38	2.57	4.26
Relative Value	1.54	5.38	3.20	4.98	3.29	6.15

Hedge Fund Performance

- The HFRI Fund Weighted Composite increased 1.9% during Q2, and all of the major hedge fund strategies were positive during the quarter. Hedge fund strategies reported the best first half since 2009.
- Macro was the strongest performing strategy in Q2 amid increased geopolitical and headline risk across the globe, which translated to market inefficiencies in select pockets of the capital markets. Meanwhile, Equity Hedge continued its strong performance on the back of effective stock selection on both the long and short sides.
- The Fund Weighted Composite and Fund of Funds Composite indices were both positive but underperformed the 60/40 Balanced MSCI ACWI/Bloomberg Barclays Global Aggregate index, which gained roughly 3.5% during the quarter.

HFR Hedge Fund and Fund of Fund Weighted Composite Growth of \$100 | January 2008 - June 2019

— FOF Composite
— Fund Weighted Composite
— 60% MSCI ACWI-GD/40% Bloomberg Barclays Global Agg



Q2 2019 In Review: Private Equity

Performance

- The total return for private equity funds, comprising performance across all regions and strategies, was 4.9% in Q1 2019* and 12.7% over the 1-year period ending Q1.
- The 5-, 10-, and 20-year returns for private equity funds were 12.1%, 15.2% and 12.6%, respectively, at the end of Q1. Venture funds continued to outperform other strategies over the most recent five years, however, fewer distributions were seen from Venture funds than others.
- The 2017-vintages generated a double-digit return across strategies by Q1 2019.

Fundraising

- Globally, private equity funds raised approximately \$220.9 billion across 527 funds through June 2019, which was about the same amount that was raised in 1H 2018.
- In Q2 2019, fundraising activity was still focused on North America, while Europe and Asia closed fewer funds with less capital.
- Dry powder** continues to reach new records, with \$1.54 trillion as of June 2019, increased \$0.28 trillion in a quarter.

Exit Activity

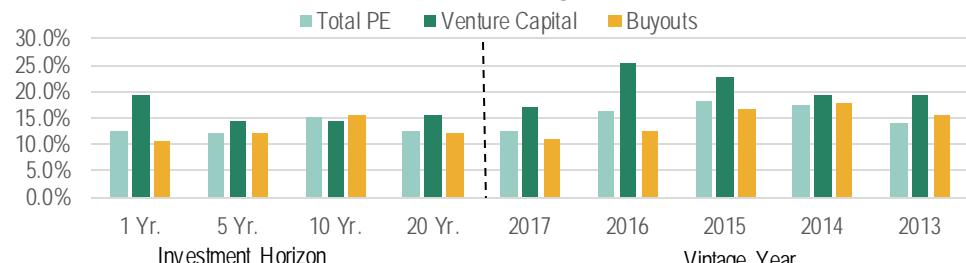
- Buyout-backed exit activities continued to slow down in Q2 2019 as 451 exits were made in the quarter. Aggregate deal value spiked to \$133 billion, however, from \$44 billion in Q1.
- Venture-backed exit activities have been building momentum and Q2 saw the greatest number of exits, excluding write-offs, announced since Q4 2017. The value of those exits reached \$56 billion, the highest quarterly total ever since a year ago. This was driven by a number of high-profile mega exits, including the IPO of Uber.

*Most recent data available.

**Dry powder is capital raised that hasn't yet been invested.

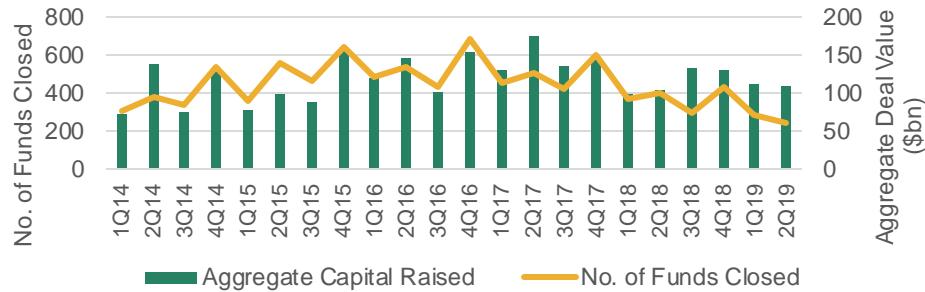
Sources this page: Thomson Reuters, Preqin

Global Private Equity Performance by Investment Horizon and Vintage Year

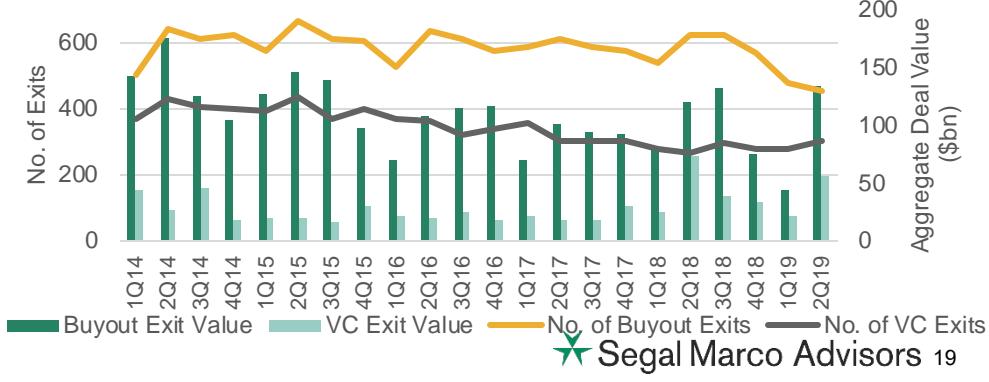


"Vintage year" refers to the first year that capital was committed in a particular fund. Vintage-year performance is calculated as the median percentile returns of all funds reporting as pooled IRRs.

Global Private Equity Fundraising



Global Private Equity Exit

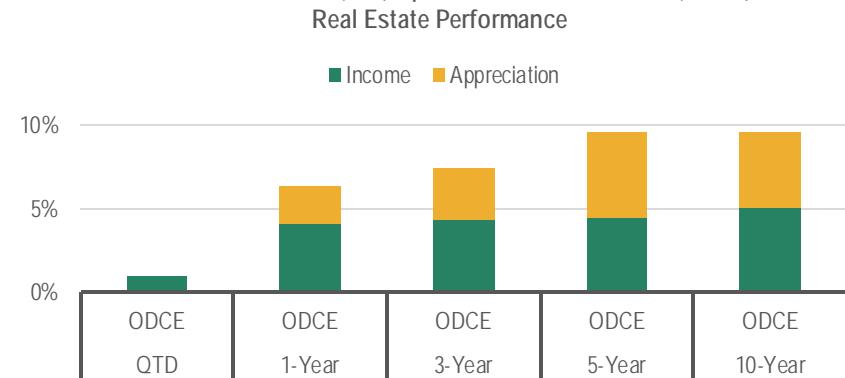


Q2 2019 In Review: Real Estate

Real Estate Performance

- NFI ODCE was up 99 bps for the quarter, while the NCREIF NPI gained 151 bps and the NAREIT Equity REIT Index gained 179 bps
- Income for the NFI-ODCE was 101 bps for the quarter, and has been consistently between 4.1% - 5.1% over a trailing 1-3-5-10 year basis
- Decreasing deal flow along with an efficiently priced market has made for little appreciation in core real estate in Q2.
- Income has remained steady as many managers have focused on increased occupancy across their portfolios amid late-cycle fears.

NCREIF Fund Index (NFI) Open-End Diversified Core (ODCE)



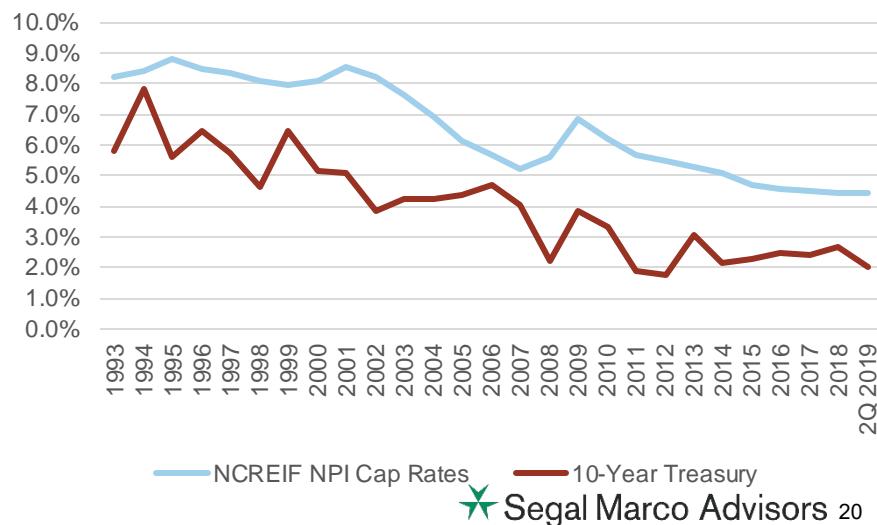
The NFI-ODCE (Open-end Diversified Core Equity) is defined by NCREIF as a fund-level cap-weighted, gross of fee, time-weighted return index with an inception date of December 31, 1977.

The NFI-CVA Index, which is a quarter lagged in performance reporting, is defined by NCREIF as a capitalization-weighted, gross of fees, time-weighted return index. Funds included in the index must be closed-end with a value-add strategy operated for U.S. institutional investors and must comply with NCREIF's data collection and reporting standards.

Real Estate Capitalization Rates* vs. Treasuries

- Asset values remain steady for the most part; however, lower quality properties possess the most risk potential
- Prevailing cap rates have been buoyed by historically wide spreads versus financing costs and persistent demand for real estate.
- Treasury rate decreases in 2019 relative to more consistent cap rates have resulted in a 241 bps spread as of 2Q 2019, the widest spread since 2015

Capitalization Rates & 10-Year U.S. Treasury Rates



*A cap rate is the potential rate of return on a real estate investment. Assuming no change in net operating income, real estate valuations rise when cap rates fall. Comparing cap rates to the 10-year U.S. Treasury provides investors with an estimated spread for expected returns from real estate (higher risk) vs. fixed rate bond (lower risk) investments.

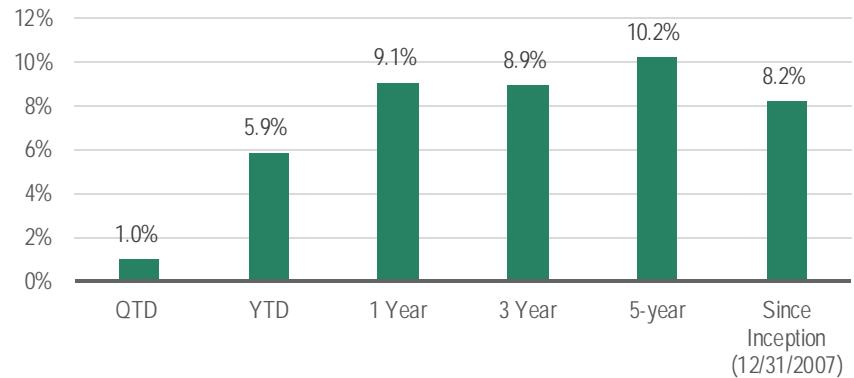
Sources this page: NCREIF, Bloomberg

Q2 2019 In Review: Infrastructure

Infrastructure Performance

- Private infrastructure gained 1.0% in Q3 2018* and 9.1% over the 1-year period ending September 30, 2018
- The 1-, 3-, and 5-year results exceeded the since-inception return, indicating the asset class has recovered well from the global financial crisis. Unless there is a strong 4th Quarter return, 2018 will be a modest year for private infrastructure returns.
- The number of deals completed in Q2 2019 rose to 602 but is still well below the quarterly average number of deals. At \$422.2 million, the average deal size year to date is on pace to be a record high, continuing the trend toward larger deals.
- Public infrastructure registered a 4.6% return in Q2 2019, as per the FTSE Global Infrastructure 50/50 Index. The index protected on the downside in May and participated in June's equity rally.

Preqin Infrastructure Annualized Return as of 9/30/2018*

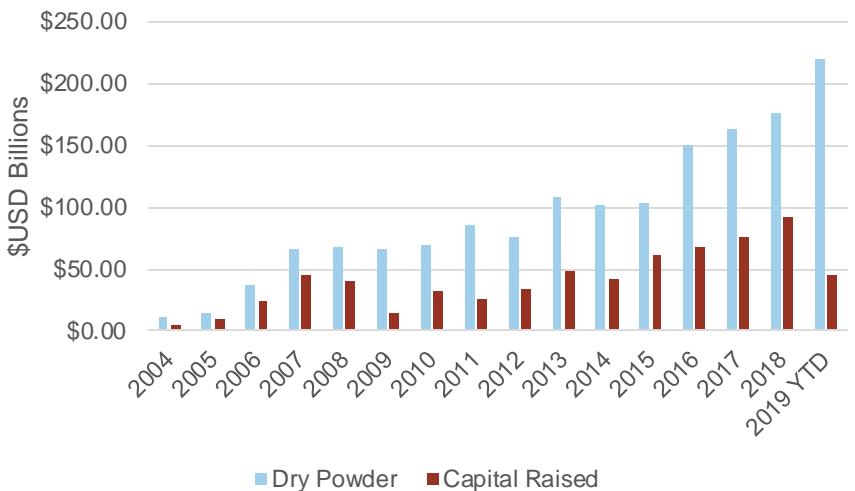


According to Preqin, the Preqin Infrastructure Index captures the average returns earned by investors in their infrastructure portfolios, based on the actual amount of money invested. The Preqin Infrastructure index is calculated on a quarterly basis using data from Preqin's Infrastructure Online services.

Dry Powder and Fundraising

- Infrastructure fundraising remains strong with large funds successfully driving capital inflows into the asset class. \$16.8 billion in funds were raised in Q2 2019 with an average fund size of \$841 billion. Q2 2019 was much more in line with historical averages relative to Q1 2019, which set the record for average quarterly fund size.
- Dry powder** has increased to \$219 billion, as the asset class continues to gain traction with investors with a growing universe of fund managers.
- North American funds drove the growth in dry powder in Q2 2019, rising by \$16 billion. The \$20 billion Blackstone Infrastructure Fund that closed at the end of June contributed considerably to this total.

Dry Powder and Fundraising



*The most recent data available. Preqin did not report Q4 2018 numbers by the time of this publication.

**Dry powder is capital raised that hasn't yet been invested.

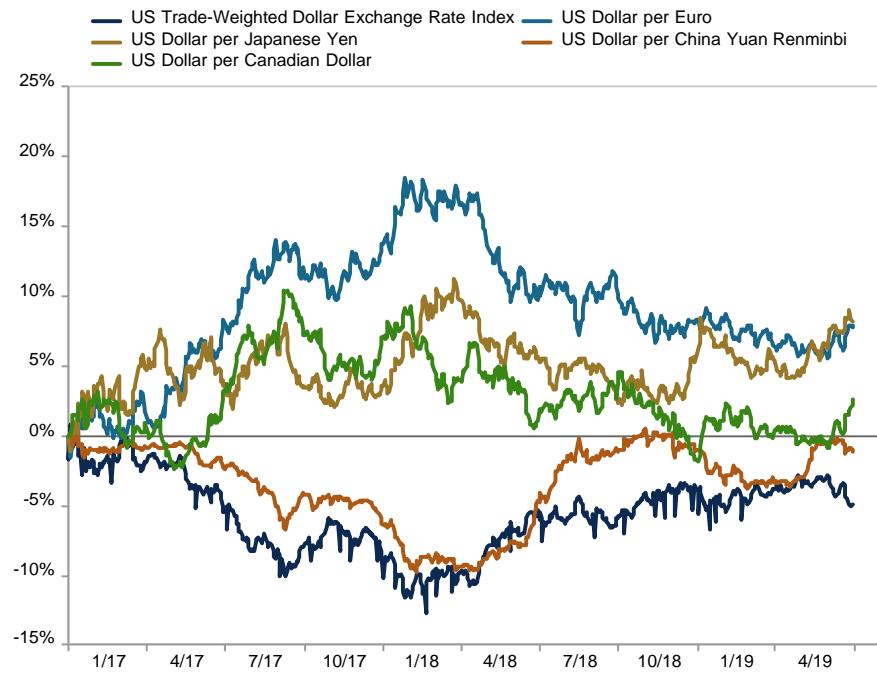
Sources this page: Preqin

Q2 2019 In Review: Commodities and Currencies

BCOM Indices	QTD	YTD	1-Year	3-Year	5-Year	10-Year
Bloomberg Commodity Index (BCOM)	-1.19	5.06	-6.75	-2.18	-9.15	-3.74
Energy	-4.56	10.64	-14.28	-0.52	-18.19	-11.87
Agriculture	4.50	1.18	-4.18	-10.27	-9.75	-2.91
Industrial Metals	-7.23	4.68	-10.99	6.40	-2.98	-0.43
Precious Metals	7.15	7.17	7.61	-0.75	-1.27	3.00
Livestock	-11.01	-6.84	-3.50	-2.54	-7.14	-2.08

Commodity and Currency Highlights

- The Bloomberg Commodity Index decreased during Q2, with 15 out of 23 constituents posting negative performance.
- Performance was mixed across sectors as Precious Metals and Agriculture generated positive returns. Precious Metals outperformed amid geopolitical and global growth concerns, while Agriculture rose due to expectations of lower supply amid planting delays in the Midwest as the result of record high rainfall.
- Livestock fell due to oversupply and counter-tariffs on Mexican imports of U.S. meat decreased demand. In spite of increased political tension between the U.S. and Iran, as well as expectations of OPEC production cuts, the Energy sector traded lower on expectations of slowing global growth.
- The USD declined against most major currencies in Q2. Expectations of an interest rate cut pushed the dollar lower.
- The euro, yen, Canadian dollar and the China renminbi all rose against the USD in Q2.



Total Fund

Bristol County Retirement System

Comparative Performance

As of June 30, 2019

	Allocation		Performance (%)										
	Market Value (\$000)	%	1 Quarter	1 Quarter Ending Mar-2019	1 Quarter Ending Dec-2018	Year To Date	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
Total Fund	685,136	100.00	3.00	7.52	-5.97	10.74	6.81	9.54	5.95	8.98	9.64	7.48	01/01/2000
Total Plan Index			3.38	8.31	-7.01	11.97	6.82	8.75	5.95	8.49	9.26	4.97	
Total Plan Allocation Index			3.06	8.27	-6.71	11.58	6.61	N/A	N/A	N/A	N/A	N/A	
Total Domestic Equity	147,254	21.49	3.16	15.01	-17.32	18.64	3.38	12.63	8.43	13.24	14.08	5.43	01/01/2000
S&P 500 Index			4.30	13.65	-13.52	18.54	10.42	14.19	10.71	13.98	14.70	5.65	
Russell 3000 Index			4.10	14.04	-14.30	18.71	8.98	14.02	10.19	13.79	14.67	6.02	
ClearBridge Large Cap Growth	27,965	4.08	5.38	16.12	-13.29	22.38	N/A	N/A	N/A	N/A	N/A	8.93	09/01/2018
Russell 1000 Growth Index			4.64	16.10	-15.89	21.49	11.56	18.07	13.39	15.76	16.28	2.76	
Columbia	28,618	4.18	4.33	22.16	-19.67	27.45	10.01	17.82	12.24	N/A	N/A	13.87	09/01/2013
Russell 1000 Growth Index			4.64	16.10	-15.89	21.49	11.56	18.07	13.39	15.76	16.28	15.34	
LSV	32,038	4.68	2.24	10.93	-13.86	13.41	2.70	10.89	7.39	13.52	14.02	8.79	09/01/2004
Russell 1000 Value Index			3.84	11.93	-11.72	16.24	8.46	10.19	7.46	12.09	13.19	7.93	
Lyrical	29,796	4.35	1.63	13.46	-17.41	15.31	-1.65	8.40	4.43	N/A	N/A	9.49	09/01/2013
Russell 1000 Value Index			3.84	11.93	-11.72	16.24	8.46	10.19	7.46	12.09	13.19	10.07	
Frontier Capital Appreciation	14,936	2.18	2.46	15.12	N/A	17.94	N/A	N/A	N/A	N/A	N/A	4.81	12/01/2018
Russell 2000 Growth Index			2.75	17.14	-21.65	20.36	-0.49	14.69	8.63	12.87	14.41	6.30	
Earnest Partners	13,902	2.03	2.62	12.21	-18.35	15.15	-4.11	11.65	8.10	12.89	13.97	11.42	04/01/2003
Russell 2000 Value Index			1.38	11.93	-18.67	13.47	-6.24	9.81	5.39	10.31	12.40	10.07	

Bristol County Retirement System

Comparative Performance

As of June 30, 2019

	Allocation		Performance (%)										
	Market Value (\$000)	%	1 Quarter	1 Quarter Ending Mar-2019	1 Quarter Ending Dec-2018	Year To Date	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
Total International Equity	167,810	24.49	3.77	10.01	-8.78	14.16	5.17	11.28	3.79	8.87	9.55	9.84	01/01/2000
MSCI EAFE (net)			3.68	9.98	-12.54	14.03	1.08	9.11	2.25	7.31	6.90	3.04	
MSCI AC World ex USA			3.22	10.44	-11.41	14.00	1.80	9.91	2.65	6.85	7.03	4.02	
Arrowstreet Capital	27,928	4.08	3.37	10.75	-12.77	14.49	2.79	10.76	4.44	9.34	9.07	7.47	07/01/2001
MSCI AC World ex USA			3.22	10.44	-11.41	14.00	1.80	9.91	2.65	6.85	7.03	6.15	
Freedom Capital Intl	34,247	5.00	2.45	10.21	-14.11	12.92	-1.54	12.72	4.36	11.15	11.74	9.15	06/01/1998
MSCI EAFE (net)			3.68	9.98	-12.54	14.03	1.08	9.11	2.25	7.31	6.90	4.19	
Fiera International Equity	32,546	4.75	6.96	12.00	N/A	19.79	N/A	N/A	N/A	N/A	N/A	16.85	12/01/2018
MSCI EAFE (Net)			3.68	9.98	-12.54	14.03	1.08	9.11	2.25	7.31	6.90	8.49	
Lazard Emerging Markets	37,143	5.42	2.59	7.07	-5.30	9.84	2.35	7.01	-0.53	2.49	5.34	2.52	05/01/2007
MSCI Emerging Markets Index			0.74	9.97	-7.40	10.78	1.61	11.06	2.87	4.53	6.17	3.47	
Aberdeen Emerging Markets	35,945	5.25	3.99	10.86	-3.21	15.28	11.27	N/A	N/A	N/A	N/A	8.57	03/01/2017
MSCI Emerging Markets Index			0.74	9.97	-7.40	10.78	1.61	11.06	2.87	4.53	6.17	8.27	
Global REITs													
Brookfield Global Real Estate	14,654	2.14	-0.12	15.22	N/A	15.08	N/A	N/A	N/A	N/A	N/A	8.35	12/01/2018
FTSE EPRA/NAREIT Developed Index			0.20	14.86	-5.46	15.09	8.64	5.45	5.79	8.16	11.45	8.85	

Bristol County Retirement System

Comparative Performance

As of June 30, 2019

	Allocation		Performance (%)										
	Market Value (\$000)	%	1 Quarter	1 Quarter Ending Mar-2019	1 Quarter Ending Dec-2018	Year To Date	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
Total Domestic Fixed	54,261	7.92	3.41	3.21	1.14	6.73	7.99	2.66	3.30	3.26	4.96	5.70	01/01/2000
Barclays Cap Aggregate			3.08	2.94	1.64	6.11	7.87	2.31	2.95	2.62	3.90	5.03	
Income Research & Management	41,915	6.12	3.68	3.40	1.43	7.21	8.89	2.91	3.60	3.58	5.21	5.75	12/01/1996
Bloomberg Barc. U.S. Gov't/Credit			3.53	3.26	1.46	6.90	8.52	2.41	3.11	2.73	4.09	5.12	
IR+M TIPS	12,093	1.77	2.54	2.61	-0.03	5.22	4.74	2.01	1.45	1.10	3.07	3.68	02/01/2007
Barclays Cap US Treas: US TIPS			2.86	3.19	-0.42	6.15	4.84	2.08	1.76	1.17	3.64	4.13	
Total Global Fixed	116,043	16.94	2.72	5.06	-0.58	7.92	8.23	4.98	3.60	4.01	6.21	6.58	01/01/2000
Barclays Cap Global Aggregate			3.29	2.20	1.20	5.57	5.85	1.63	1.20	1.57	2.89	4.52	
Franklin Templeton Global Bond	22,573	3.29	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.32	05/01/2019
FTSE World Government Bond Index			3.57	1.74	1.75	5.38	5.48	1.00	0.85	0.89	2.21	4.09	
PIMCO Diversified Income	42,434	6.19	3.62	5.81	-1.26	9.64	10.09	6.72	5.00	5.44	7.93	6.75	08/01/2006
Global Diversified Index**			3.31	5.10	-1.27	8.59	8.22	4.52	3.23	4.28	6.46	6.13	
GoldenTree Multi-Sector Opportunistic Fund	20,114	2.94	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.57	05/01/2019
Global Diversified Index**			3.31	5.10	-1.27	8.59	8.22	4.52	3.23	4.28	6.46	2.94	
Stone Harbor EMD	16,045	2.34	4.78	5.97	-0.99	11.03	9.42	N/A	N/A	N/A	N/A	4.16	11/01/2016
50%/50% Blend **			4.86	4.93	0.43	10.03	10.77	4.91	2.46	3.02	5.65	4.65	
Ashmore Emerging Markets Total Return	14,877	2.17	4.44	5.54	-0.16	10.23	11.49	N/A	N/A	N/A	N/A	7.06	01/01/2017
50%/50% Blend **			4.86	4.93	0.43	10.03	10.77	4.91	2.46	3.02	5.65	6.72	

Bristol County Retirement System

Comparative Performance

As of June 30, 2019

	Allocation		Performance (%)										
	Market Value (\$000)	%	1 Quarter	1 Quarter Ending Mar-2019	1 Quarter Ending Dec-2018	Year To Date	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
PRIT Absolute Return	35,120	5.13	2.86	3.10	-3.53	6.06	3.20	5.98	3.00	5.36	5.01	4.17	10/01/2008
HFRI Fund of Funds Composite Index		1.49	4.60	-4.94	6.16	1.15	4.25	2.19	3.67	3.21	2.46		
HFRI FOF: Diversified Index		1.70	4.32	-4.60	6.09	1.81	4.11	2.20	3.65	3.28	2.54		
Total Real Estate	60,437	8.82	1.06	1.35	3.33	2.43	8.57	10.13	9.98	9.44	6.47	7.13	01/01/1995
NCREIF Property Index			1.51	1.80	1.37	3.34	6.51	6.89	8.83	9.43	9.25	9.41	
RREEF America REIT II	13,615	1.99	1.79	1.85	1.16	3.67	7.48	8.14	10.50	11.33	11.05	7.57	04/01/2005
NCREIF Property Index			1.51	1.80	1.37	3.34	6.51	6.89	8.83	9.43	9.25	8.31	
Intercontinental	30,181	4.41	1.45	1.97	2.14	3.45	8.33	N/A	N/A	N/A	N/A	9.11	01/01/2017
NCREIF Property Index			1.51	1.80	1.37	3.34	6.51	6.89	8.83	9.43	9.25	6.83	
Total Infrastructure	35,484	5.18	4.33	2.79	2.71	7.24	16.77	12.76	N/A	N/A	N/A	13.57	03/01/2016
IFM	27,643	4.03	4.05	3.39	1.48	7.58	16.58	N/A	N/A	N/A	N/A	16.55	04/01/2017
Bristol County Cash	6,026	0.88	0.73	0.62	1.01	1.35	2.85	2.01	1.60	1.22	1.00	2.78	01/01/1997
90 Day U.S. Treasury Bill			0.64	0.60	0.56	1.24	2.31	1.37	0.85	0.63	0.47	2.18	

**Stone Harbor 50/50 Blend: 50% JPM EMBI Global Diversified Index/50% JPM GBI-EM Global Diversified US Index

**PIMCO Index: 33% BC Global Agg/33% ML Global HY/33% JPM EMBI Global.

Bristol County Retirement System

As of June 30, 2019

Internal Rates of Return

	Market Value (\$)	%	1 Quarter	1 Quarter Ending Mar-2019	1 Quarter Ending Dec-2018	1 Quarter Ending Sep-2018	1 Year	3 Years	5 Years	7 Years	Since Inception	Inception Date
Other Fixed Income												
Invesco Mortgage Recovery Fund	252,222	0.04	0.00	1.35	5.23	3.83	11.79	-2.40	19.83	16.69	13.96	03/31/2010
Real Assets												
Active Funds:												
Brookfield Timberlands Fund V	1,129,040	0.17	0.00	3.19	-8.23	7.65	2.00	9.08	8.81	N/A	8.87	12/23/2013
Eastern Timberland Opportunities II	2,945,390	0.43	0.91	4.40	-0.94	2.00	6.43	8.11	9.01	N/A	9.01	07/03/2014
GCM Customized Infrastructures Strategies II, LP	7,840,764	1.14	5.35	-0.05	5.77	3.33	15.56	10.91	N/A	N/A	10.57	03/10/2016
Invesco Mortgage Recovery II	5,477,121	0.80	0.00	0.75	10.59	1.75	12.64	15.34	N/A	N/A	12.69	05/20/2016
TerraCap Partners IV	11,100,417	1.62	0.00	-0.33	4.19	3.45	7.51	N/A	N/A	N/A	7.51	07/31/2018
Funds in Liquidation												
Hunt RIVA (FKA SSgA Tuckerman)	63,885	0.01	0.00	0.00	-1.51	0.12	-1.08	-8.27	-1.25	8.25	0.00	10/01/2004

Bristol County Retirement System

As of June 30, 2019

Internal Rates of Return

	Market Value (\$)	%	1 Quarter	1 Quarter Ending Mar-2019	1 Quarter Ending Dec-2018	1 Quarter Ending Sep-2018	1 Year	3 Years	5 Years	7 Years	Since Inception	Inception Date
Total Private Equity	43,972,351	6.42	3.07	2.08	1.50	5.72	12.75	14.34	8.72	9.37	177.68	01/05/1995
Active Funds:												
BlackRock Vesey Street Fund III	346,572	0.05	0.00	0.23	-5.36	0.30	-5.29	-4.81	3.24	8.77	4.17	07/17/2006
DuPont Capital Management II	657,729	0.10	0.00	0.00	-1.21	-0.70	-1.98	0.83	-3.50	1.90	0.69	08/14/2006
DN Partners II	1,072,419	0.16	0.00	0.00	0.00	0.00	0.00	16.02	-15.19	-12.52	-11.17	01/11/2007
BlackRock Vesey Street Fund IV	4,330,209	0.63	0.00	0.00	0.11	5.46	5.97	7.54	5.35	10.29	8.05	02/24/2009
Mesirow PE Fund V	3,864,203	0.56	0.00	4.43	2.81	2.69	10.43	15.30	14.51	15.83	14.17	04/09/2009
PRIT Vintage 2014	8,669,457	1.27	7.71	-1.10	5.63	7.92	21.73	24.25	19.99	N/A	19.24	05/01/2014
PRIT Vintage 2015	12,947,706	1.89	8.36	-0.36	8.99	5.60	24.30	25.85	N/A	N/A	21.48	03/01/2015
PRIT Vintage 2016	5,387,715	0.79	3.58	-4.25	0.99	7.79	6.53	4.04	N/A	N/A	3.00	03/01/2016
PRIT Vintage 2017	4,167,885	0.61	-5.23	28.02	-28.95	13.26	3.91	N/A	N/A	N/A	-0.70	04/30/2017
PRIT Vintage 2018	2,046,671	0.30	-16.17	17.40	-27.77	-5.34	-28.62	N/A	N/A	N/A	-28.50	05/30/2018
PRIT Vintage 2019	336,669	0.05	-0.65	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-0.65	03/31/2019
Funds in Liquidation:												
Charles River XI	145,117	0.02	0.04	0.02	3.14	-0.02	3.18	7.92	13.33	14.19	8.85	11/22/2000

Policy Index	Weight (%)
Jan-1976	
Bloomberg Barc. U.S. Aggregate	35.00
MSCI EAFE (Net)	15.00
S&P 500	50.00
Jul-2007	
Bloomberg Barc. U.S. Aggregate	33.00
MSCI EAFE (Net)	22.00
S&P 500	45.00
Jul-2010	
Bloomberg Barc. U.S. Aggregate	33.00
MSCI EAFE (Net)	25.50
S&P 500	41.50
Jan-2017	
Bloomberg Barc. U.S. Aggregate	18.00
Russell 3000 Index	34.00
Bloomberg Barc. Global Aggregate	16.50
MSCI AC World ex USA	24.00
NCREIF Property Index	7.50

As of June 30, 2019

Policy Index	Weight (%)
Jan-2017	
Russell 3000 Index	30.00
NCREIF Timberland Index	3.00
FTSE EPRA/NAREIT Developed Index	2.00
MSCI EAFE Index	12.50
MSCI Emerging Markets Index	10.50
Blmbg. Barc. U.S. Aggregate	11.00
Blmbg. Barc. U.S. TIPS	2.00
Blmbg. Barc. Global Aggregate	6.50
50% JPM EMBI Global Div./ 50% JPM GBI-EM Global Div.	7.00
FTSE High Yield Market Capped Index	3.00
HFRI FOF: Diversified Index	5.00
NCREIF Property Index	7.50

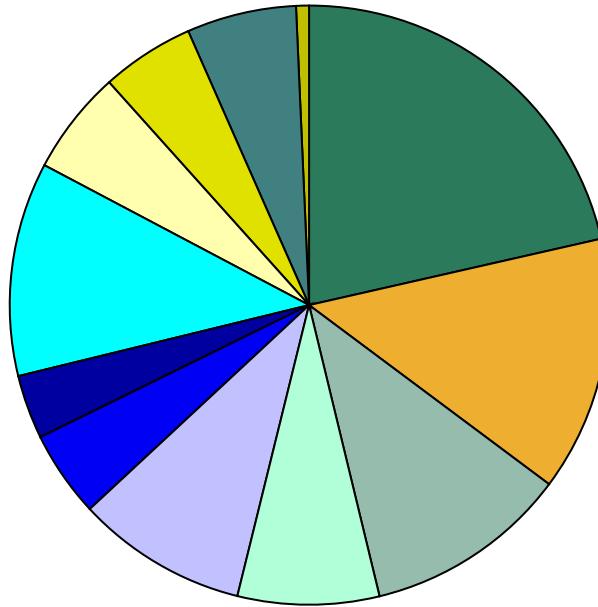
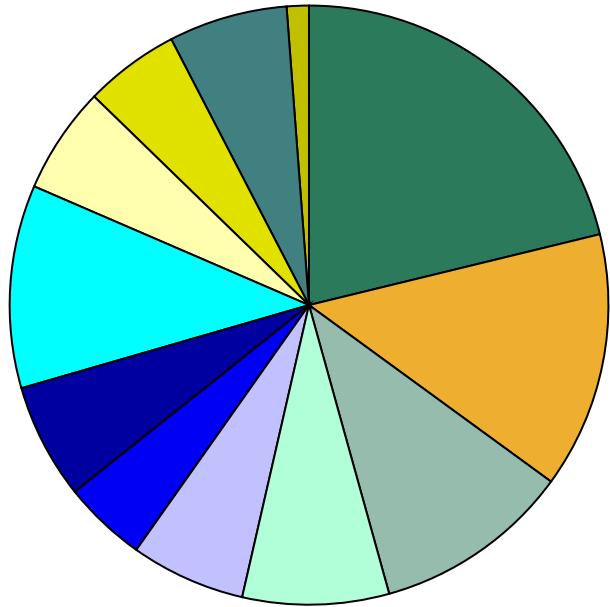
Bristol County Retirement System

Total Fund

As of June 30, 2019

Jun-2019 : \$685,136,382

Mar-2019 : \$679,551,690



Segments	Market Value (\$)	Allocation (%)
Domestic Equity	145,209,977	21.19
International Equity	94,721,148	13.83
Emerging Equity	73,088,374	10.67
Domestic Fixed Income	54,143,062	7.90
International Fixed Income	42,433,988	6.19
Emerging Fixed Income	30,922,014	4.51
Global Fixed Income	42,687,366	6.23
Real Estate	75,091,333	10.96
Alternative Investment	39,557,960	5.77
Hedge Fund	35,120,196	5.13
Private Equity	43,972,351	6.42
Cash Equivalent	8,188,613	1.20

Segments	Market Value (\$)	Allocation (%)
Domestic Equity	145,671,156	21.44
International Equity	93,533,771	13.76
Emerging Equity	74,870,304	11.02
Domestic Fixed Income	51,869,770	7.63
International Fixed Income	62,768,706	9.24
Emerging Fixed Income	31,581,830	4.65
Global Fixed Income	23,496,663	3.46
Real Estate	78,432,346	11.54
Alternative Investment	38,193,245	5.62
Hedge Fund	34,142,340	5.02
Private Equity	40,248,164	5.92
Cash Equivalent	4,743,395	0.70

Bristol County Retirement System

Financial Reconciliation

1 Quarter Ending June 30, 2019

	Market Value As of 04/01/2019	Contributions	Distributions	Fees	Expenses	Return On Investment	Market Value As of 06/30/2019
Domestic Equity							
ClearBridge Large Cap Growth	27,771,427	-	-1,250,000	-43,825	-	1,487,373	27,964,975
Columbia	28,634,356	-	-1,250,000	-	-	1,233,678	28,618,034
LSV	32,598,520	-	-1,250,000	-46,354	-	735,836	32,038,002
Lyrical	30,552,833	-	-1,250,000	-57,394	-	550,614	29,796,052
Earnest Partners	13,574,479	-	-	-28,842	-	355,938	13,901,574
Frontier Capital Appreciation	14,577,654	-	-	-	-	357,932	14,935,586
International Equity							
Arrowstreet Capital	29,550,246	-	-2,500,000	-71,652	-	949,161	27,927,754
Freedom Capital Intl	33,498,390	-	-	-73,686	-	822,763	34,247,467
Fiera International Equity	30,485,136	-	-	-58,828	-	2,119,619	32,545,926
Lazard Emerging Markets	40,223,935	-	-4,000,000	-	-	919,285	37,143,220
Aberdeen Emerging Markets	34,646,370	-	-	-82,656	-	1,381,441	35,945,154
Global REITs							
Brookfield Global Real Estate	14,671,846	-	-	-	-	-18,012	14,653,833
Domestic Fixed Income							
Income Research & Management	40,460,354	-	-	-32,831	-	1,487,790	41,915,313
IRM-TIPS	11,796,301	-	-	-2,923	-	300,108	12,093,486
Invesco Mortgage Recovery Fund	252,222	-	-	-	-	-	252,222
International Fixed Income							
Colchester Global Bond	23,496,663	-	-23,396,028	-11,554	-	-89,081	-
Franklin Templeton Global Bond	-	22,500,000	-	-	-	73,052	22,573,052
PIMCO Diversified Income	62,768,706	-	-22,000,000	-	-	1,665,282	42,433,988
GoldenTree Multi-Sector Opportunistic Fund	-	20,000,000	-	-	-	114,314	20,114,314
Stone Harbor EMD	17,338,186	-	-2,000,000	-24,351	-	731,618	16,045,453
Ashmore Emerging Markets Total Return	14,243,644	-	-	-	-	632,918	14,876,561

Bristol County Retirement System

Financial Reconciliation

1 Quarter Ending June 30, 2019

	Market Value As of 04/01/2019	Contributions	Distributions	Fees	Expenses	Return On Investment	Market Value As of 06/30/2019
Short Term Investments							
Bristol County Cash	2,042,617	63,752,044	-59,792,090	-	-	23,838	6,026,408
Total Private Equity							
DN Partners II	1,072,419	-	-	-	-	-	1,072,419
Charles River XI	145,057	-	-	-	-	60	145,117
DuPont Capital Management II	657,729	-	-	-	-	-	657,729
BlackRock Vesey Street Fund III	346,572	-	-	-	-	-	346,572
BlackRock Vesey Street Fund IV	4,685,644	-	-355,435	-	-	-	4,330,209
Mesirow PE Fund V	4,089,203	-	-225,000	-	-	-	3,864,203
PRIT Vintage 2014	7,897,241	179,194	-21,067	-703	-573	615,366	8,669,457
PRIT Vintage 2015	11,263,857	844,615	-138,077	-8,442	-1,676	987,429	12,947,706
PRIT Vintage 2016	4,817,729	392,056	-	-446	-644	179,019	5,387,715
PRIT Vintage 2017	3,584,976	781,095	1,164	-331	-1,374	-197,645	4,167,885
PRIT Vintage 2018	1,672,252	677,047	-	-233	-1,287	-301,109	2,046,671
PRIT Vintage 2019	15,485	324,232	-1,869	-202	-527	-450	336,669
Real Assets							
Hunt RIVA (FKA SSgA Tuckerman)	63,885	-	-	-	-	-	63,885
RREEF America REIT II	13,406,954	-	-	-32,034	-	240,342	13,615,262
Intercontinental	29,814,991	-	-	-66,834	-	432,657	30,180,814
Brookfield Timberlands Fund V	1,141,722	2,901	-15,583	-2,739	-162	2,901	1,129,040
Eastern Timberland Opportunities II	2,990,142	-	-71,859	-	-	27,107	2,945,390
GCM Customized Infrastructures Strategies II, LP	7,442,932	-	-	-	-	397,832	7,840,764
Invesco Mortgage Recovery II	9,339,178	-	-3,862,057	-	-	-	5,477,121
IFM	26,618,449	-	-	-51,874	-	1,076,192	27,642,767
TerraCap Partners IV	11,100,417	-	-	-	-	-	11,100,417
Hedge Fund of Funds							
PRIT Absolute Return	34,142,340	-	-	-	-	977,856	35,120,196
Total Fund	679,551,690	109,453,184	-123,436,535	-698,736	-6,245	20,273,025	685,136,382

Bristol County Retirement System

Financial Reconciliation

1 Year Ending June 30, 2019

	Market Value As of 07/01/2018	Contributions	Distributions	Fees	Expenses	Return On Investment	Market Value As of 06/30/2019
Domestic Equity							
ClearBridge Large Cap Growth	-	27,000,000	-1,250,000	-108,330	-	2,323,304	27,964,975
Intech Large Cap Growth	26,537,727	-	-27,619,588	-34,646	-	1,116,507	-
Columbia	33,835,501	-	-7,250,000	-	-	2,032,533	28,618,034
LSV	32,592,838	-	-1,250,000	-186,021	-	881,185	32,038,002
Lyrical	31,749,746	-	-1,250,000	-229,191	-	-474,503	29,796,052
Earnest Partners	14,618,583	-	-	-115,875	-	-601,134	13,901,574
Frontier Capital Appreciation	-	14,250,000	-	-	-	685,586	14,935,586
Rice Hall James	15,274,695	-	-14,163,559	-71,499	-	-1,039,637	-
International Equity							
Arrowstreet Capital	29,819,718	-	-2,500,000	-169,892	-	777,928	27,927,754
Freedom Capital Intl	43,767,530	-	-8,500,000	-329,489	-	-690,575	34,247,467
Fiera International Equity	-	27,500,000	-	-135,680	-	5,181,606	32,545,926
MFS International Equity	31,440,235	-	-29,377,556	-	-	-2,062,679	-
Lazard Emerging Markets	37,039,615	5,000,000	-6,000,000	-	-	1,103,605	37,143,220
Aberdeen Emerging Markets	27,451,872	5,000,000	-	-304,427	-	3,797,709	35,945,154
Global REITs							
Brookfield Global Real Estate	-	13,450,000	-	-	-	1,203,833	14,653,833
CBRE Clarion Global REITs	13,968,789	-	-13,453,192	-59,076	-	-456,521	-
Domestic Fixed Income							
Income Research & Management	41,522,024	-	-3,000,000	-129,492	-	3,522,781	41,915,313
IRM-TIPS	11,557,468	-	-	-11,553	-	547,571	12,093,486
Invesco Mortgage Recovery Fund	342,476	-	-126,979	-	-	36,725	252,222
International Fixed Income							
Colchester Global Bond	26,119,932	-	-26,396,028	-123,146	-	399,242	-
Franklin Templeton Global Bond	-	22,500,000	-	-	-	73,052	22,573,052
PIMCO Diversified Income	58,915,306	5,000,000	-27,000,000	-	-	5,518,682	42,433,988
GoldenTree Multi-Sector Opportunistic Fund	-	20,000,000	-	-	-	114,314	20,114,314
Stone Harbor EMD	15,972,012	2,500,000	-4,000,000	-96,856	-	1,670,297	16,045,453

Bristol County Retirement System

Financial Reconciliation

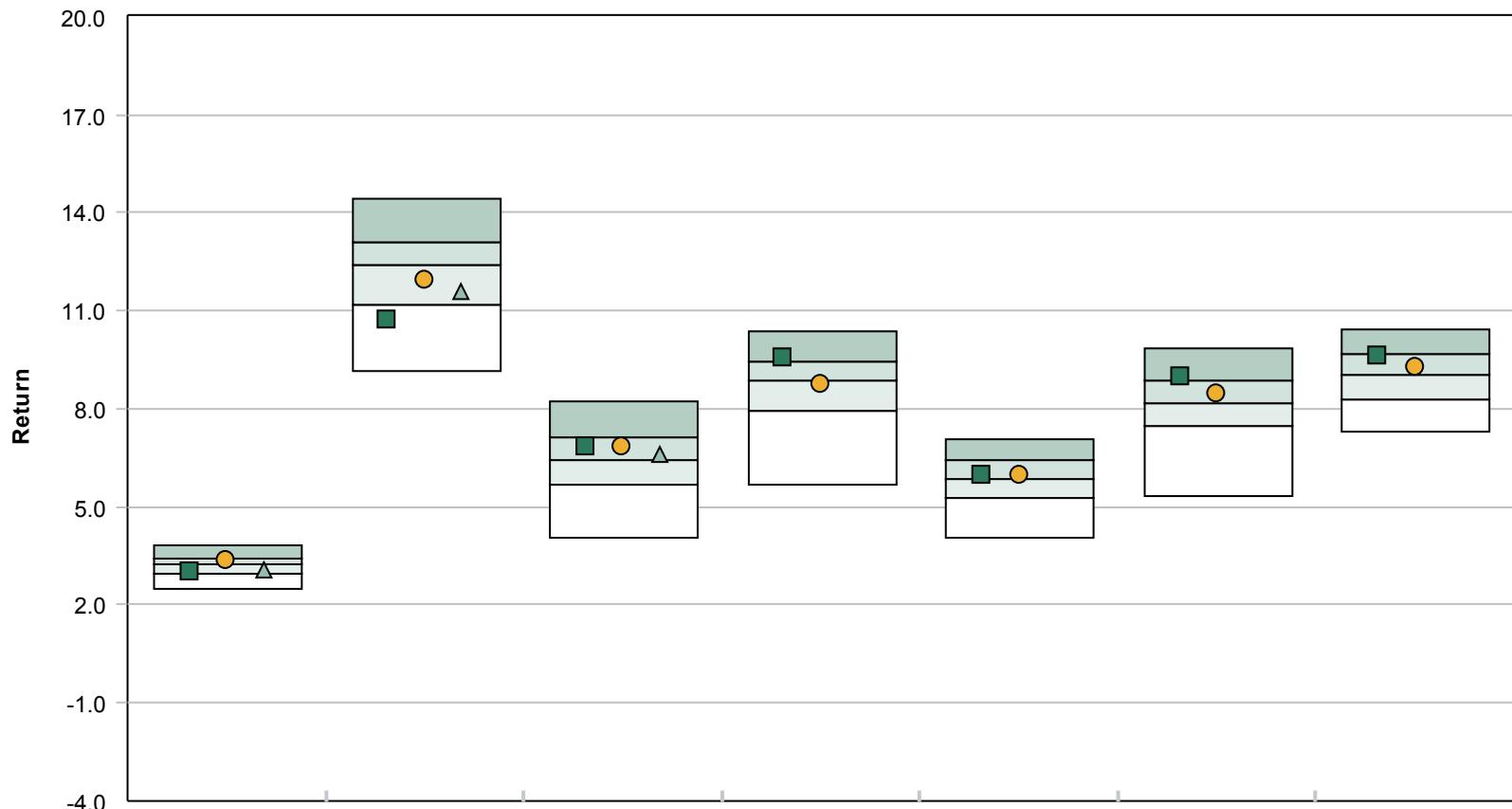
1 Year Ending June 30, 2019

	Market Value As of 07/01/2018	Contributions	Distributions	Fees	Expenses	Return On Investment	Market Value As of 06/30/2019
Ashmore Emerging Markets Total Return	12,672,576	2,500,000	-2,000,000	-	-	1,703,985	14,876,561
Short Term Investments							
Bristol County Cash	1,635,545	220,699,929	-216,437,727	-	-	128,661	6,026,408
Total Private Equity							
DN Partners II	1,072,419	-	-	-	-	-	1,072,419
Charles River XI	140,640	-	-	-	-	4,477	145,117
DuPont Capital Management II	863,781	3,722	-195,037	-3,722	-	-11,015	657,729
BlackRock Vesey Street Fund III	537,457	4,601	-172,500	-	-4,601	-18,385	346,572
BlackRock Vesey Street Fund IV	5,085,218	157,163	-1,187,596	-	-36,726	312,150	4,330,209
Mesirow PE Fund V	4,326,870	100,350	-975,000	-9,112	-350	421,445	3,864,203
PRIT Vintage 2014	7,767,720	785,581	-1,439,656	-2,997	-63,204	1,622,012	8,669,457
PRIT Vintage 2015	8,304,787	2,612,164	-241,475	-35,525	-94,157	2,401,912	12,947,706
PRIT Vintage 2016	3,112,481	2,086,624	-81,004	-3,717	-72,761	346,091	5,387,715
PRIT Vintage 2017	1,370,805	2,717,187	-18,858	-3,683	-102,069	204,503	4,167,885
PRIT Vintage 2018	131,967	2,263,728	-50	-3,702	-19,376	-325,896	2,046,671
PRIT Vintage 2019	-	339,717	-1,869	-232	-527	-419	336,669
Real Assets							
Hunt RIVA (FKA SSgA Tuckerman)	120,528	-	-55,805	-	-	-838	63,885
RREEF America REIT II	12,787,260	-	-	-125,724	-	953,727	13,615,262
Intercontinental	28,252,609	-	-	-413,601	-	2,341,806	30,180,814
Brookfield Timberlands Fund V	1,243,402	12,193	-149,869	-10,955	-1,237	35,507	1,129,040
Eastern Timberland Opportunities II	3,010,937	-	-250,175	-	-	184,628	2,945,390
GCM Customized Infrastructures Strategies II, LP	6,912,680	1,171,067	-1,278,158	-71,827	-51,375	1,158,376	7,840,764
Invesco Mortgage Recovery II	7,498,574	1,347,230	-4,342,569	-	-	973,886	5,477,121
IFM	23,930,879	-	-	-238,524	-	3,950,412	27,642,767
TerraCap Partners IV	-	10,566,939	-249,893	-	-	783,371	11,100,417
Hedge Fund of Funds							
PRIT Absolute Return	34,031,768	-	-	-224,083	-	1,312,512	35,120,196
Total Fund	657,336,970	389,568,194	-402,214,142	-3,252,578	-446,383	44,144,320	685,136,382

Bristol County Retirement System

All Public Plans < \$1B-Total Fund

As of June 30, 2019



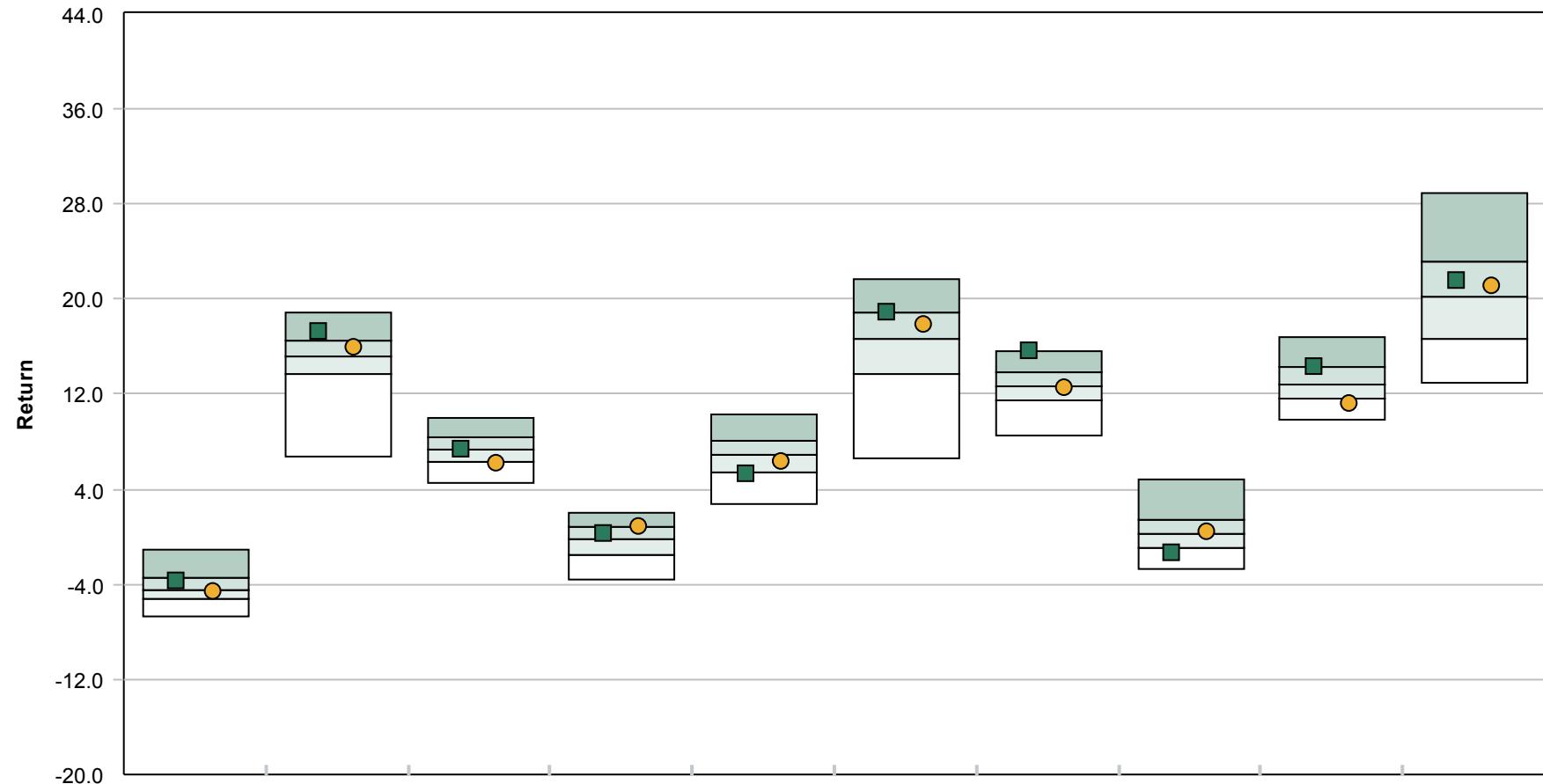
	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs
Total Fund	3.00 (74)	10.74 (82)	6.81 (36)	9.54 (19)	5.95 (48)	8.98 (20)	9.64 (27)
Total Plan Index	3.38 (35)	11.97 (61)	6.82 (35)	8.75 (54)	5.95 (48)	8.49 (40)	9.26 (42)
Total Plan Allocation Index	3.06 (71)	11.58 (69)	6.61 (44)	N/A	N/A	N/A	N/A
5th Percentile	3.80	14.43	8.22	10.38	7.06	9.84	10.42
1st Quartile	3.43	13.13	7.15	9.42	6.46	8.89	9.70
Median	3.26	12.38	6.42	8.85	5.85	8.16	9.03
3rd Quartile	2.98	11.21	5.70	7.96	5.26	7.45	8.28
95th Percentile	2.52	9.15	4.07	5.70	4.04	5.31	7.29
Population	285	282	276	256	247	236	201

Parentheses contain percentile rankings.
Calculation based on quarterly periodicity.

Bristol County Retirement System

All Public Plans < \$1B-Total Fund

As of June 30, 2019



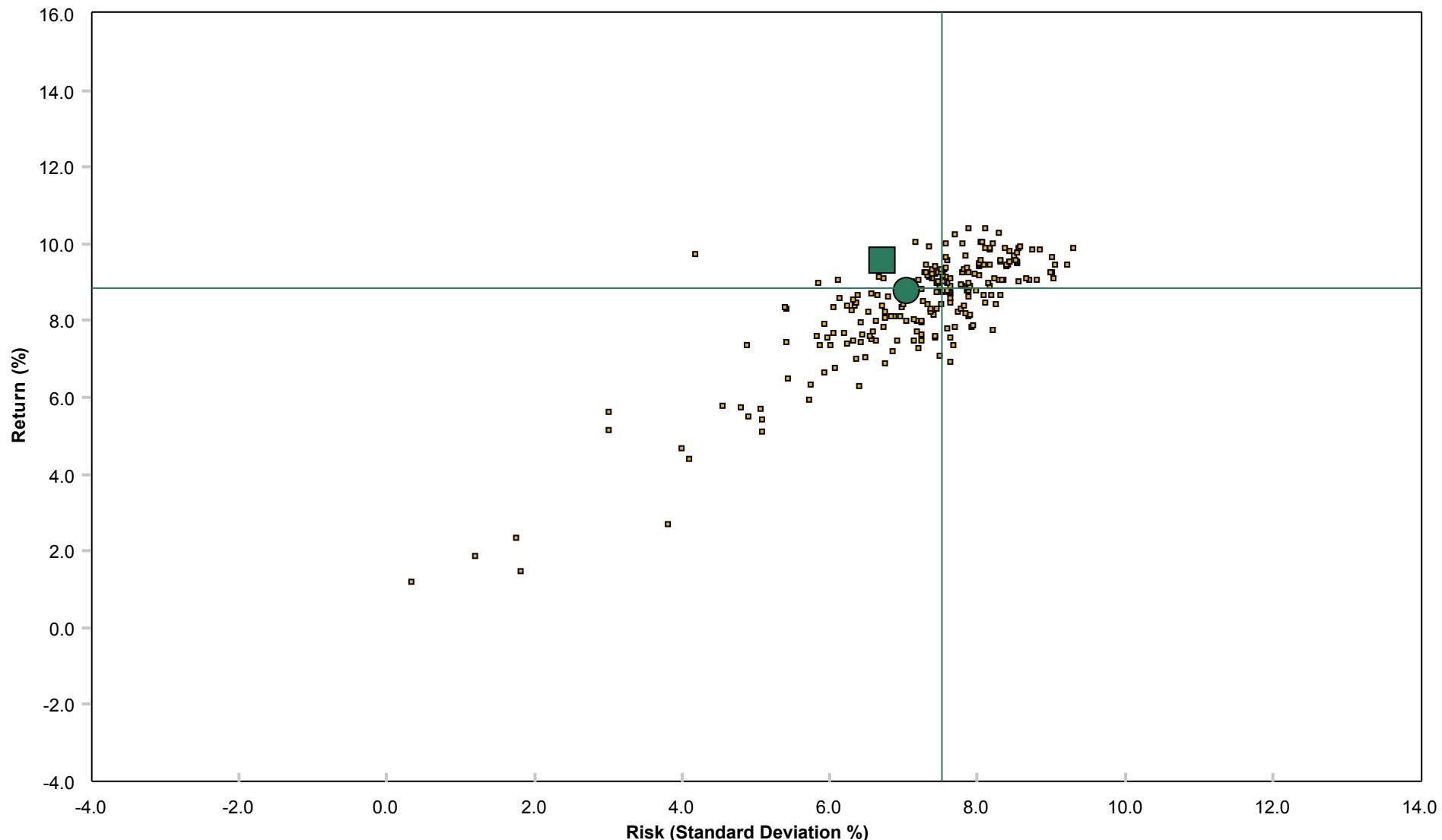
	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
Total Fund	-3.79 (34)	17.25 (14)	7.32 (52)	0.21 (39)	5.30 (76)	18.86 (25)	15.68 (4)	-1.44 (82)	14.26 (25)	21.58 (40)
Total Plan Index	-4.59 (54)	15.96 (33)	6.19 (77)	0.79 (25)	6.25 (63)	17.81 (39)	12.59 (53)	0.45 (44)	11.21 (82)	21.02 (44)
5th Percentile	-1.04	18.86	9.98	2.06	10.29	21.73	15.60	4.76	16.81	28.99
1st Quartile	-3.45	16.48	8.35	0.77	8.03	18.86	13.85	1.47	14.26	23.20
Median	-4.46	15.19	7.37	-0.26	6.84	16.72	12.71	0.25	12.75	20.14
3rd Quartile	-5.26	13.64	6.24	-1.55	5.40	13.76	11.54	-0.97	11.59	16.72
95th Percentile	-6.76	6.68	4.55	-3.61	2.79	6.55	8.58	-2.69	9.79	13.01
Population	349	358	402	406	409	415	427	418	406	390

Parentheses contain percentile rankings.
Calculation based on quarterly periodicity.

Bristol County Retirement System

All Public Plans < \$1B-Total Fund

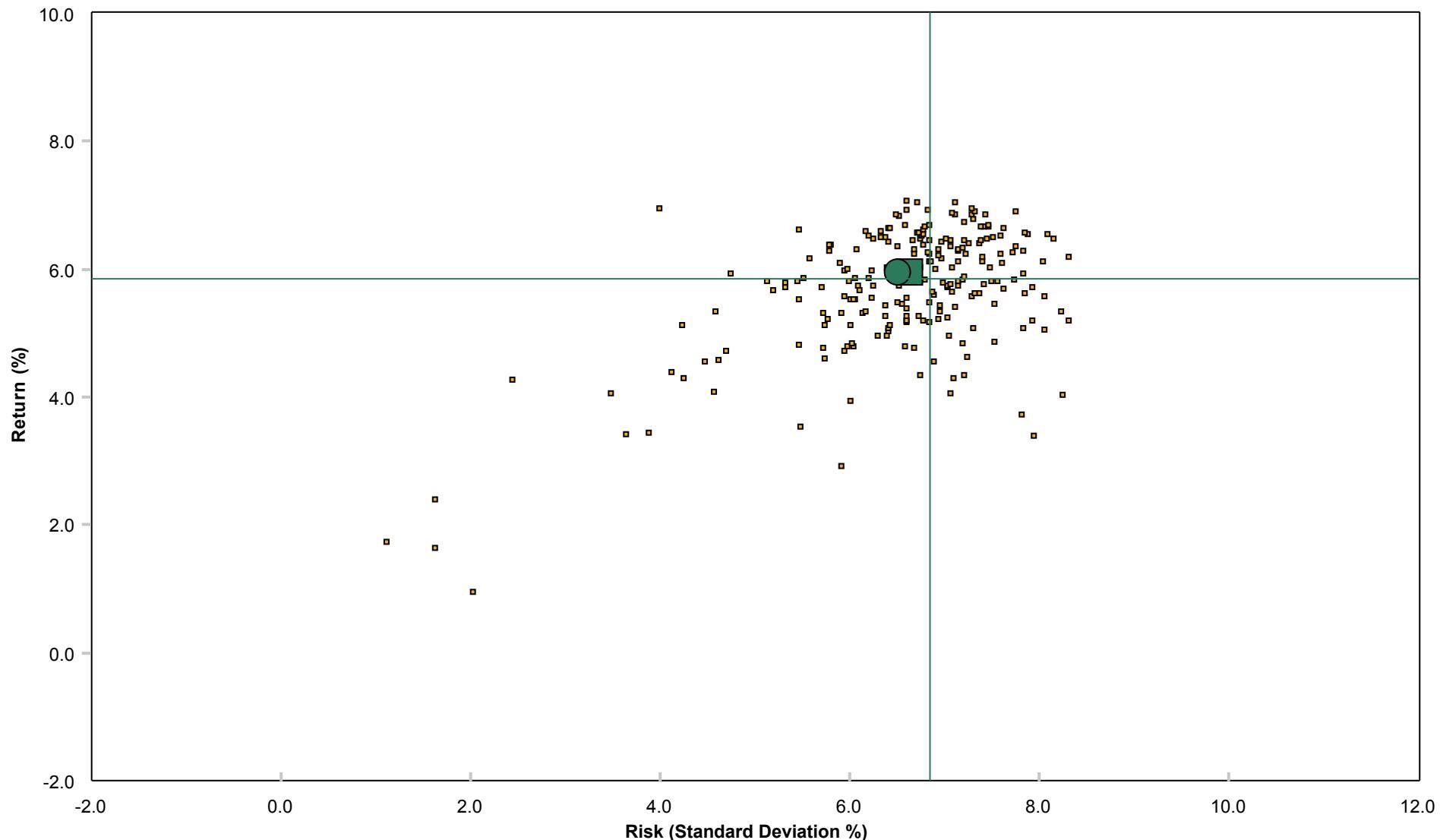
3 Years Ending June 30, 2019



Calculation based on quarterly periodicity.

Bristol County Retirement System**All Public Plans < \$1B-Total Fund**

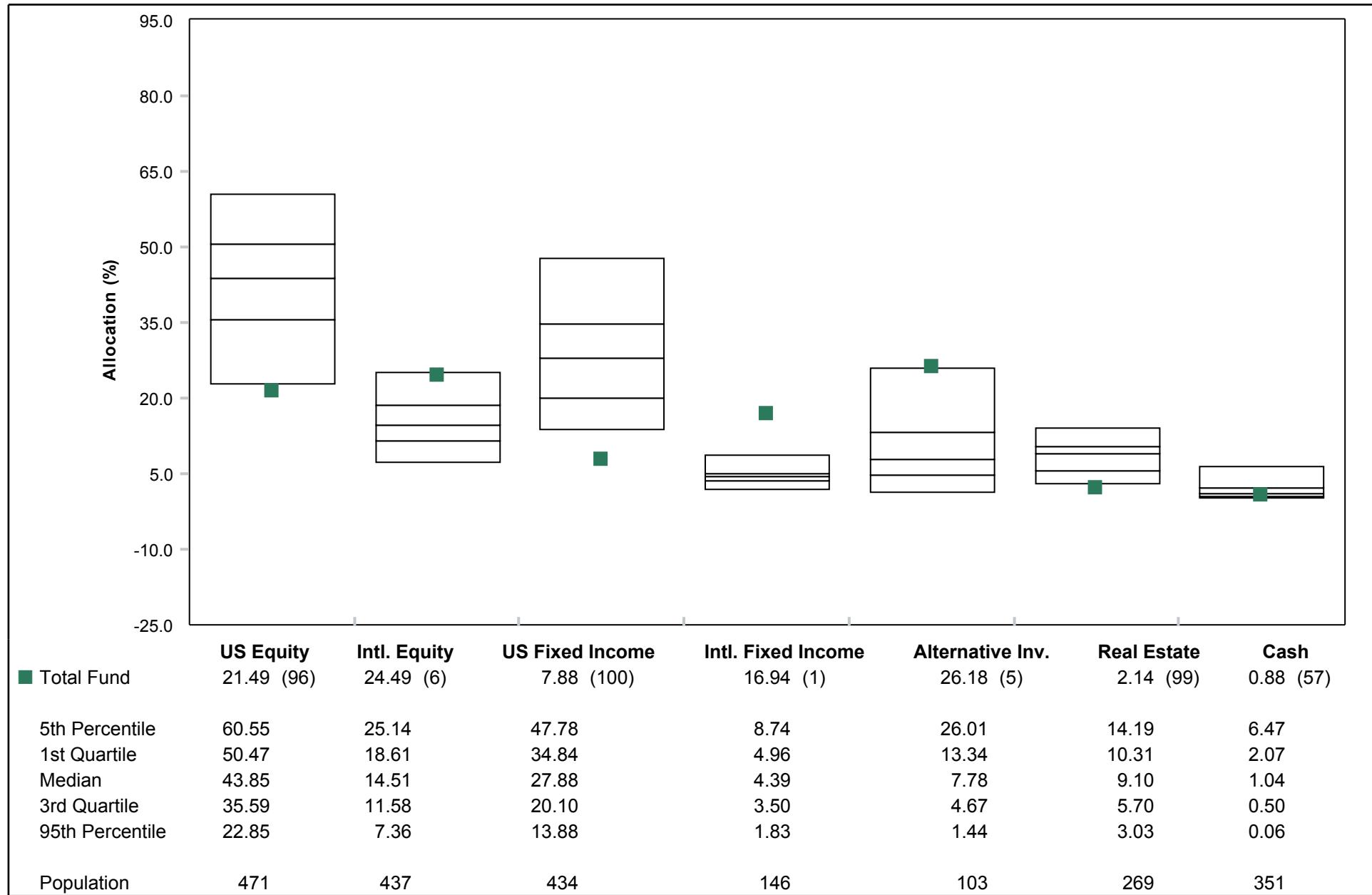
5 Years Ending June 30, 2019



Calculation based on quarterly periodicity.

As of June 30, 2019

All Public Plans < \$1B-Total Fund



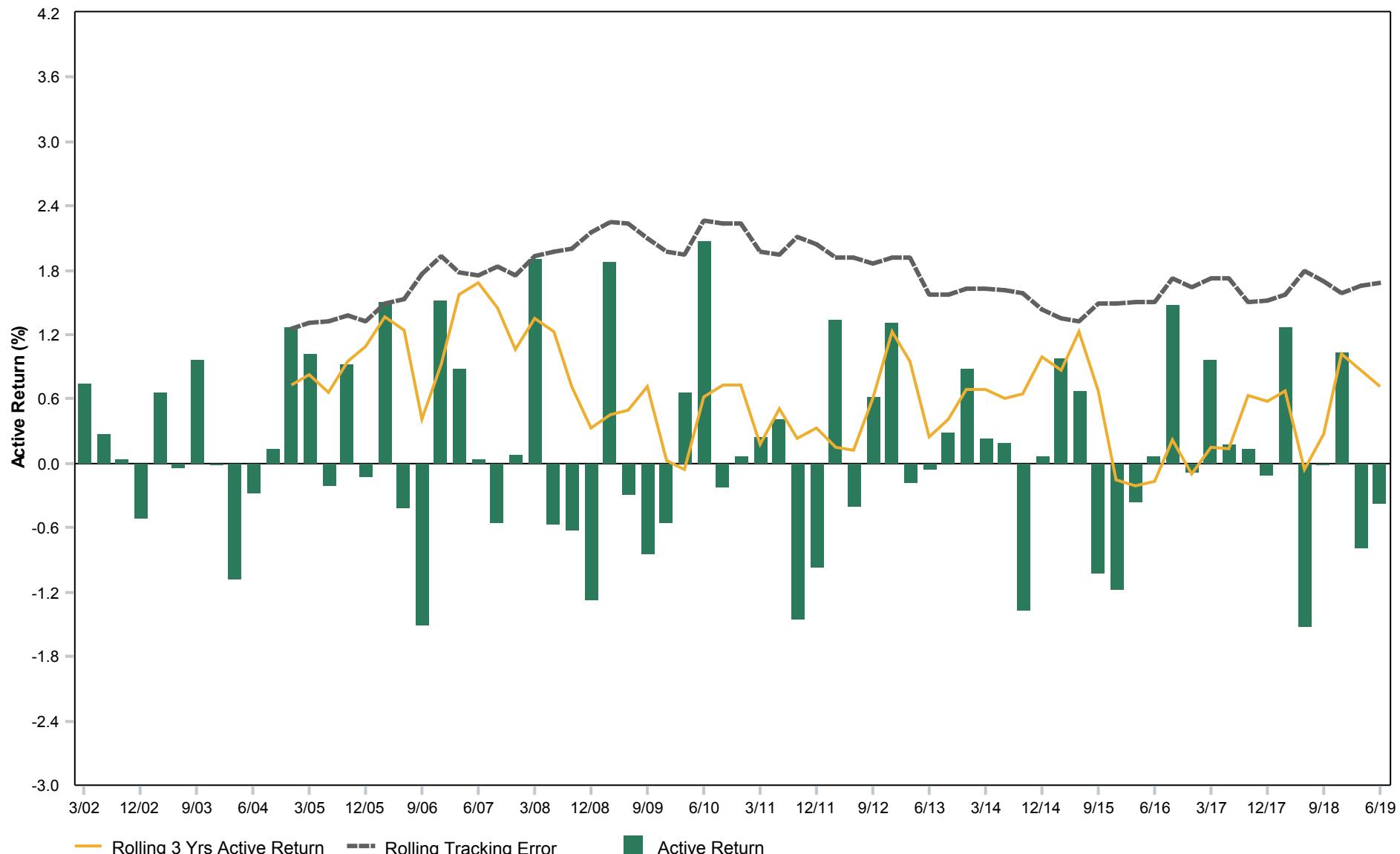
Parentheses contain percentile rankings.
Calculation based on monthly periodicity.

Bristol County Retirement System

Comparative Performance & Rolling Return

As of June 30, 2019

	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	2018	2017	2016	2015
Total Fund	3.00	10.74	6.81	9.54	5.95	8.98	9.64	-3.79	17.25	7.32	0.21
Total Plan Index	3.38	11.97	6.82	8.75	5.95	8.49	9.26	-4.59	15.96	6.19	0.79
Difference	-0.38	-1.23	-0.01	0.79	0.00	0.49	0.38	0.80	1.29	1.13	-0.58



Gross of Fees

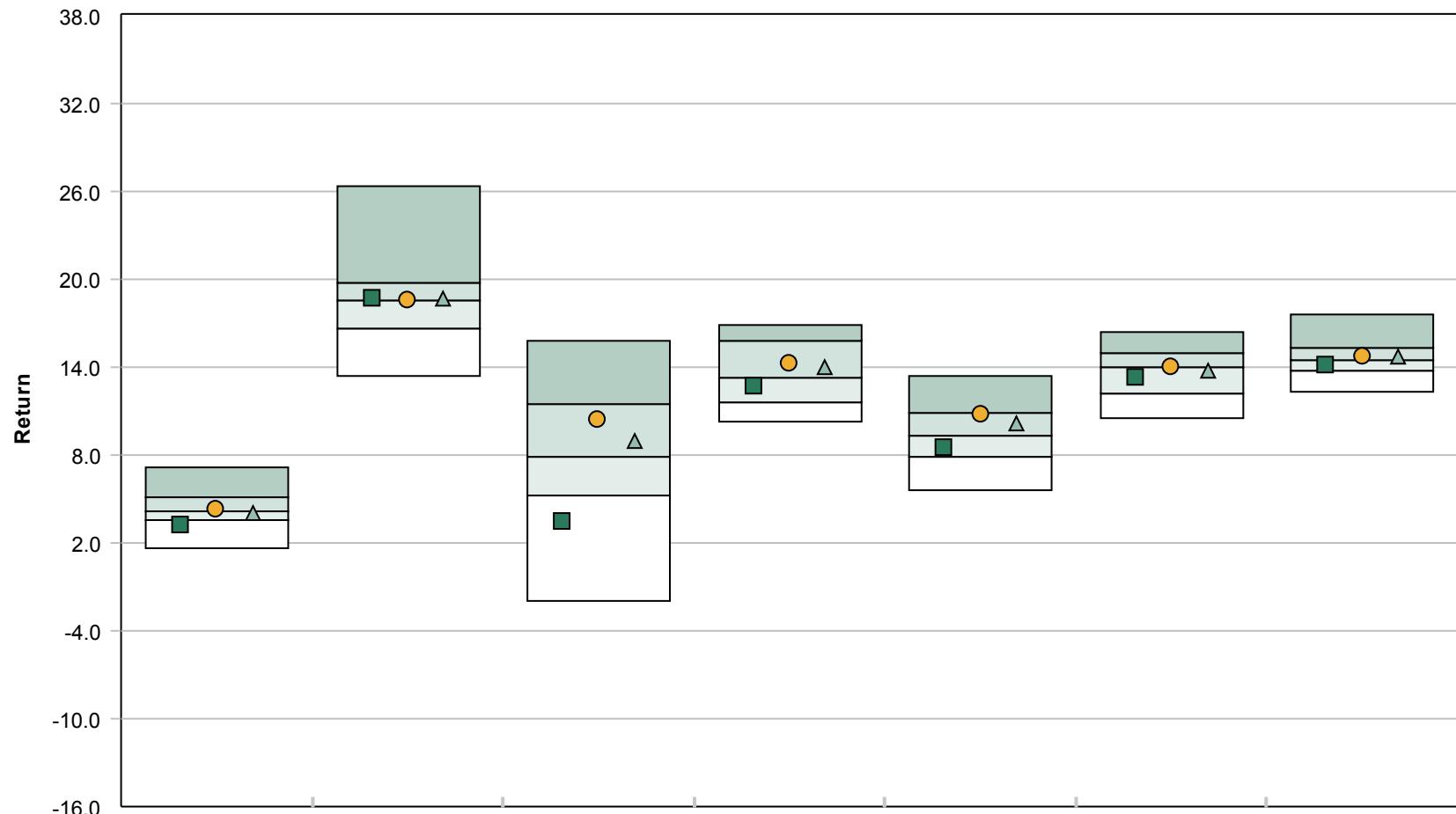
 Segal Marco Advisors

Domestic Equity

Bristol County Retirement System

IM U.S. All Cap Core Equity (SA+CF)

As of June 30, 2019



	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs
Total Domestic Equity	3.16 (77)	18.64 (48)	3.38 (83)	12.63 (67)	8.43 (62)	13.24 (62)	14.08 (64)
S&P 500 Index	4.30 (49)	18.54 (53)	10.42 (31)	14.19 (40)	10.71 (32)	13.98 (50)	14.70 (44)
Russell 3000 Index	4.10 (53)	18.71 (43)	8.98 (45)	14.02 (45)	10.19 (41)	13.79 (54)	14.67 (45)
5th Percentile	7.16	26.35	15.82	16.84	13.45	16.38	17.57
1st Quartile	5.12	19.81	11.43	15.76	10.83	14.94	15.35
Median	4.19	18.60	7.94	13.34	9.37	13.98	14.49
3rd Quartile	3.53	16.64	5.20	11.56	7.93	12.19	13.74
95th Percentile	1.65	13.41	-1.93	10.28	5.65	10.54	12.34

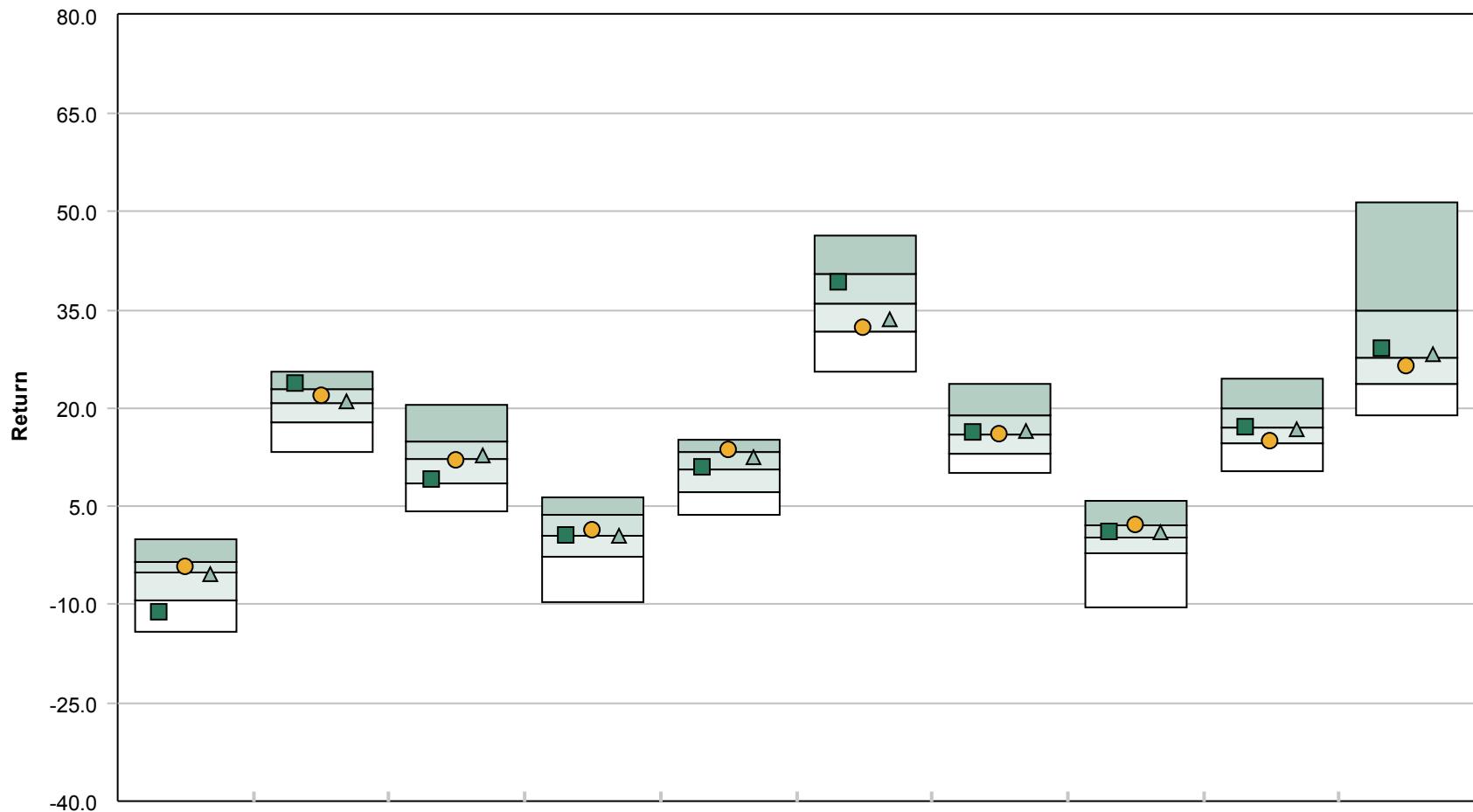
Parentheses contain percentile rankings.

Calculation based on monthly periodicity.

Bristol County Retirement System

IM U.S. All Cap Core Equity (SA+CF)

As of June 30, 2019



5th Percentile	-0.08	25.61	20.45	6.38	15.10	46.48	23.62	5.78	24.54	51.35
1st Quartile	-3.51	23.00	14.94	3.65	13.30	40.43	18.95	2.01	20.06	34.84
Median	-5.19	20.91	12.17	0.45	10.80	35.95	15.97	0.32	16.99	27.82
3rd Quartile	-9.43	17.90	8.41	-2.75	7.21	31.68	13.08	-2.23	14.77	23.68
95th Percentile	-14.11	13.36	4.18	-9.67	3.86	25.65	10.00	-10.48	10.29	18.88

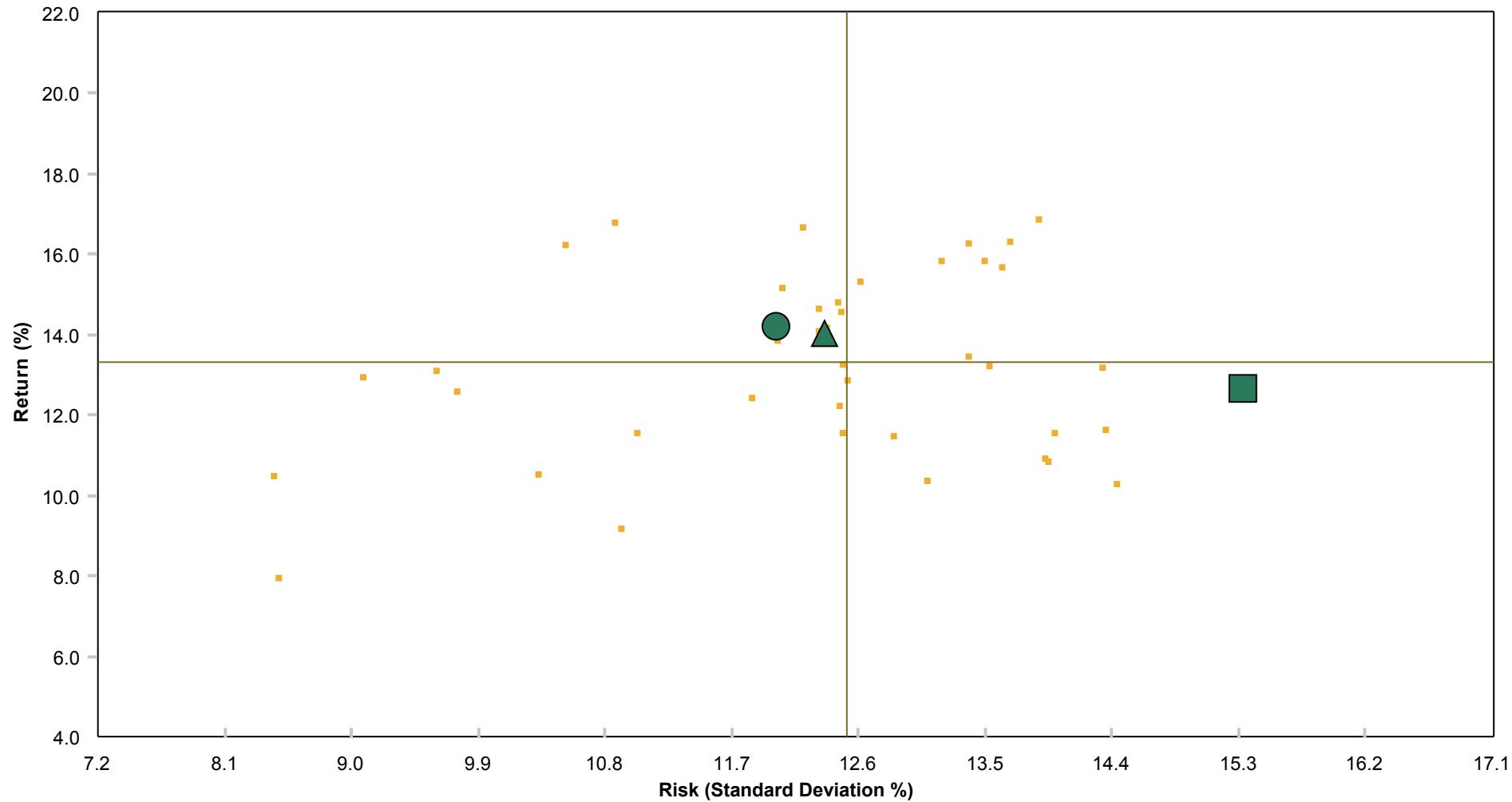
Parentheses contain percentile rankings.
Calculation based on monthly periodicity.

Bristol County Retirement System

Peer Group Scattergram

3 Years Ending June 30, 2019

IM U.S. All Cap Core Equity (SA+CF)



	Return	Standard Deviation
Total Domestic Equity	12.63	15.33
S&P 500 Index	14.19	12.02
Russell 3000 Index	14.02	12.36
Median	13.34	12.51

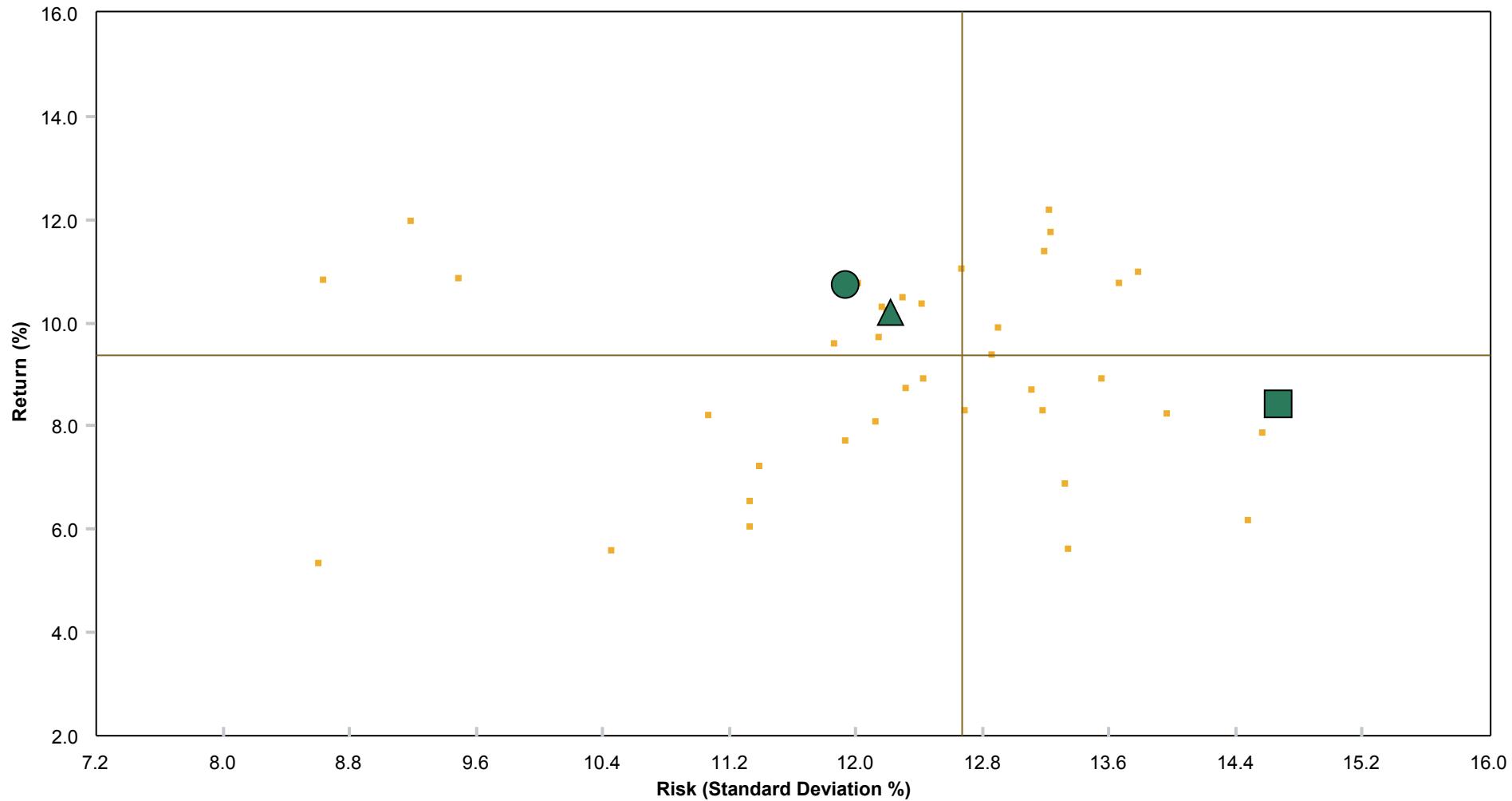
Calculation based on monthly periodicity.

Bristol County Retirement System

Peer Group Scattergram

5 Years Ending June 30, 2019

IM U.S. All Cap Core Equity (SA+CF)



	Return	Standard Deviation
Total Domestic Equity	8.43	14.68
S&P 500 Index	10.71	11.93
Russell 3000 Index	10.19	12.22
Median	9.37	12.68

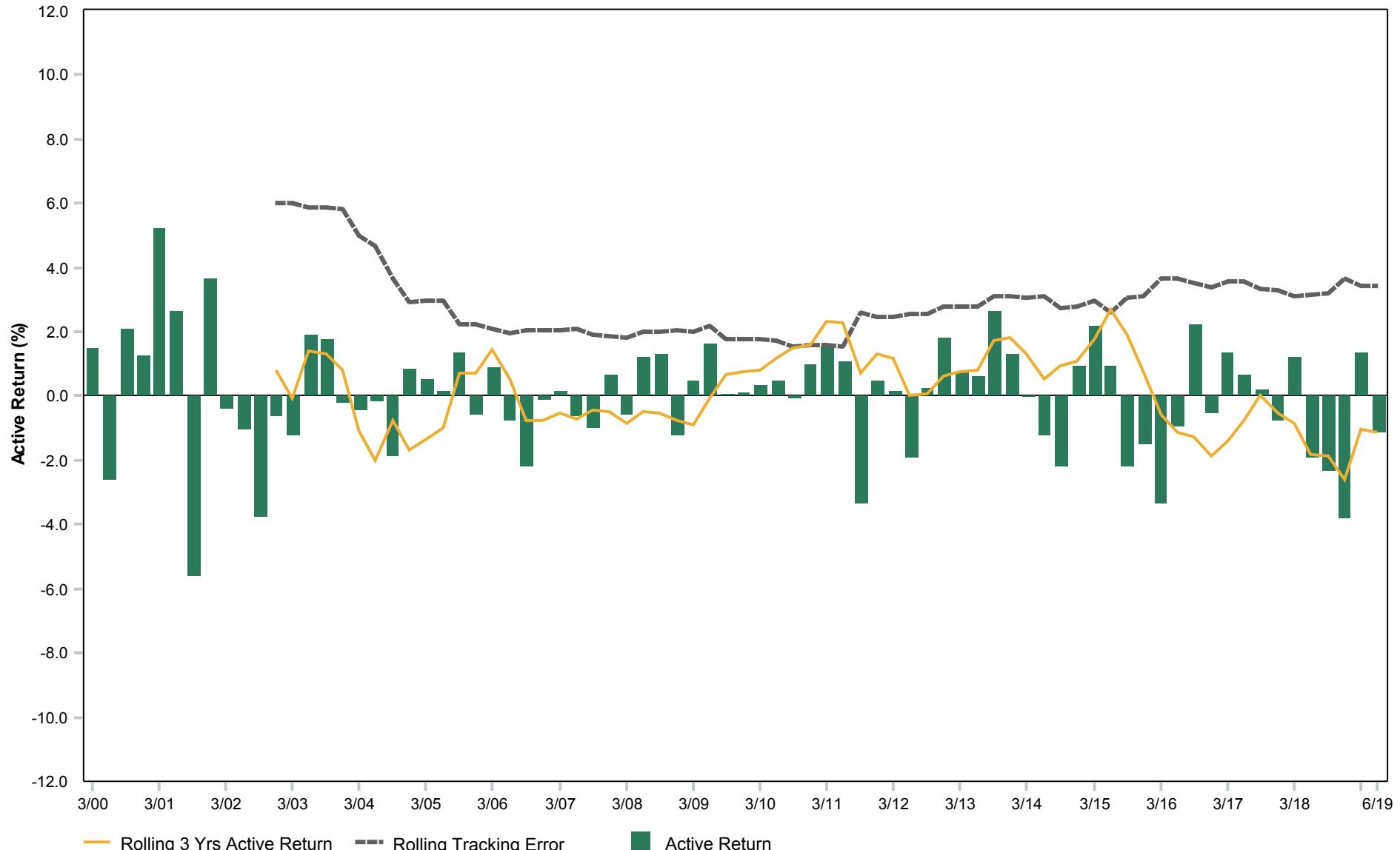
Calculation based on monthly periodicity.

Bristol County Retirement System

Comparative Performance & Rolling Return

As of June 30, 2019

	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	2018	2017	2016	2015
Total Domestic Equity	3.16	18.64	3.38	12.63	8.43	13.24	14.08	-11.11	23.61	9.01	0.66
S&P 500 Index	4.30	18.54	10.42	14.19	10.71	13.98	14.70	-4.38	21.83	11.96	1.38
Difference	-1.14	0.10	-7.04	-1.56	-2.28	-0.74	-0.62	-6.73	1.78	-2.95	-0.72



Bristol County Retirement System

Total Domestic Equity

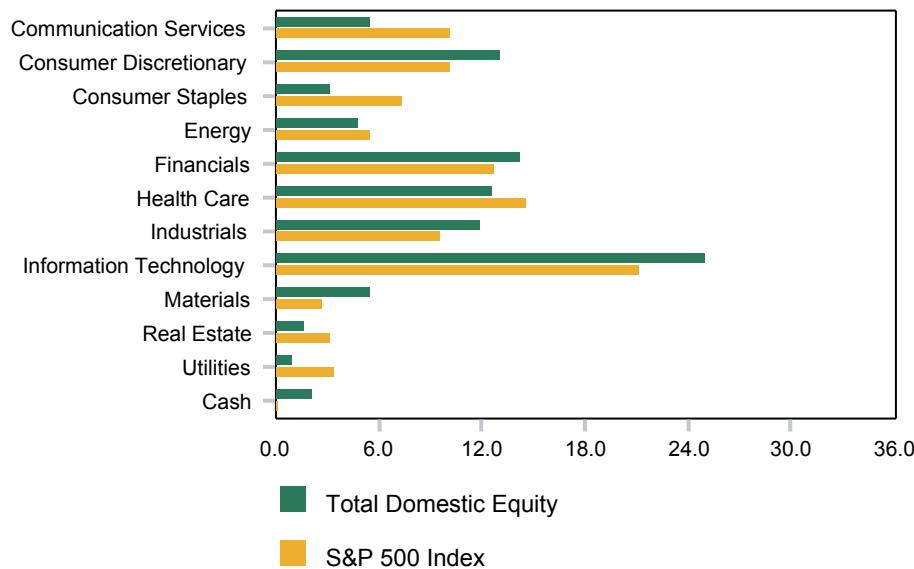
1 Quarter Ending June 30, 2019

Buy-and-Hold Portfolio	3.43
Portfolio Trading	-0.27
Actual Return	3.16
Benchmark Return	4.30
Actual Active Return	-1.14
Stock Selection	-0.75
Sector Selection	0.16
Interaction	-0.19
Total Selection	-0.78
Portfolio Trading	-0.27
Benchmark Trading	0.09
Active Trading Impact	-0.36
Buy & Hold Active Return	-1.14

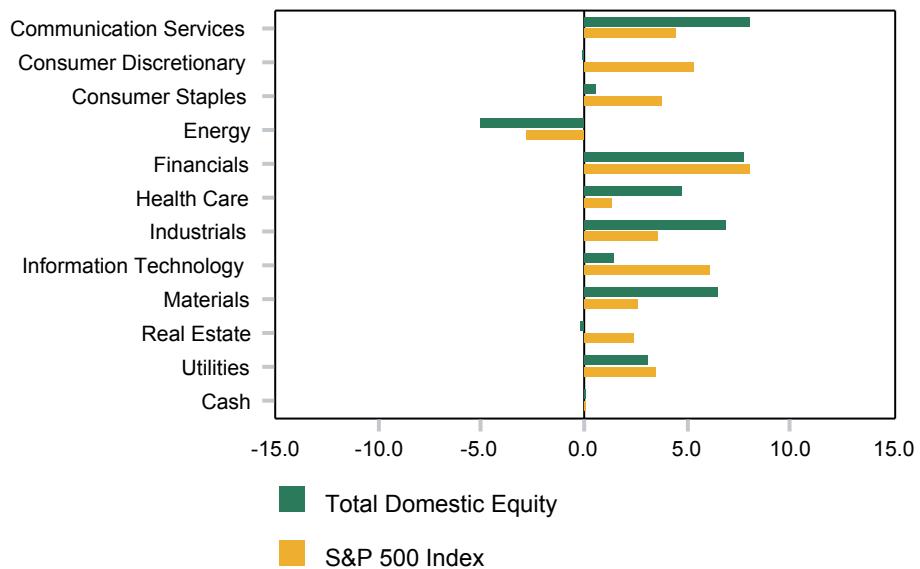
	Allocation — 04/01/2019		Performance — 1 Quarter Ending June 30, 2019		Attribution			Total
	Portfolio	Benchmark	Portfolio	Benchmark	Stock	Sector	Interaction	
Communication Services	5.42	10.11	8.06	4.49	0.36	-0.01	-0.17	0.18
Consumer Discretionary	13.06	10.15	-0.14	5.28	-0.55	0.03	-0.16	-0.68
Consumer Staples	3.09	7.33	0.55	3.74	-0.23	0.02	0.14	-0.08
Energy	4.82	5.43	-5.06	-2.82	-0.12	0.04	0.01	-0.07
Financials	14.13	12.69	7.76	7.99	-0.03	0.05	0.00	0.02
Health Care	12.59	14.57	4.73	1.38	0.49	0.06	-0.07	0.48
Industrials	11.82	9.48	6.88	3.60	0.31	-0.01	0.08	0.37
Information Technology	24.95	21.19	1.45	6.06	-0.98	0.07	-0.17	-1.08
Materials	5.42	2.64	6.44	2.66	0.10	-0.04	0.11	0.16
Real Estate	1.68	3.09	-0.19	2.45	-0.08	0.02	0.04	-0.02
Utilities	0.96	3.33	3.06	3.48	-0.01	0.02	0.01	0.01
Cash	2.05	0.00	0.00	0.00	0.00	-0.09	0.00	-0.09
Total	100.00	100.00	3.43	4.21	-0.75	0.16	-0.19	-0.78

Bristol County Retirement System

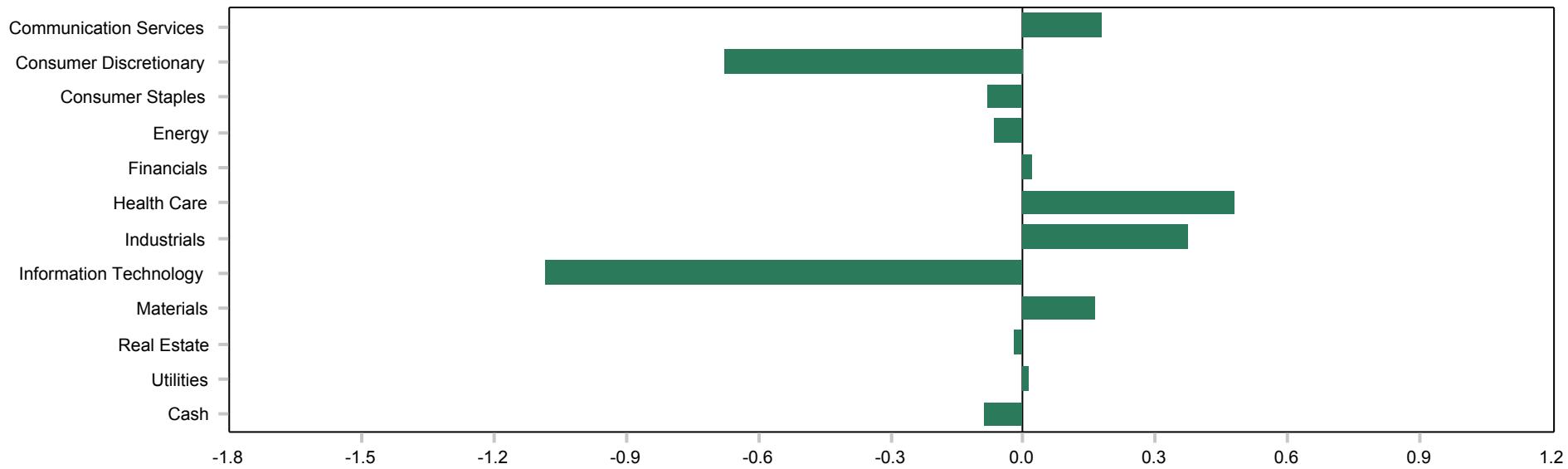
Allocation



Performance



Total Attribution



Buy and Hold Sector Attribution Graph

1 Quarter Ending June 30, 2019

Bristol County Retirement System
Buy and Hold Style Attribution

1 Quarter Ending June 30, 2019

Buy-and-Hold Portfolio	3.43
Portfolio Trading	-0.27
Actual Return	3.16
Benchmark Return	4.30
Actual Active Return	-1.14
Stock Selection	0.22
Style Selection	-0.81
Interaction	-0.19
Total Selection	-0.78
Portfolio Trading	-0.27
Benchmark Trading	0.09
Active Trading Impact	-0.36
Buy & Hold Active Return	-1.14

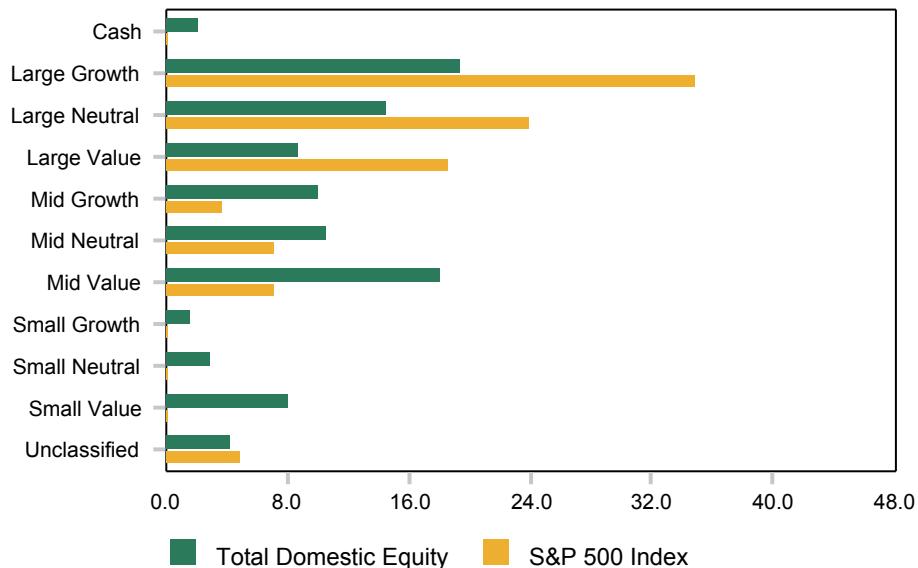
	Allocation-04/01/2019		Performance-1 Quarter Ending June 30, 2019		Attribution			Total
	Portfolio	Benchmark	Portfolio	Benchmark	Stock	Style	Interaction	
Cash	2.05	0.00	0.00	0.00	0.00	-0.09	0.00	-0.09
Large Growth	19.38	34.79	5.49	5.00	0.17	-0.12	-0.07	-0.03
Large Neutral	14.51	23.90	2.76	3.43	-0.16	0.07	0.06	-0.02
Large Value	8.73	18.51	4.82	3.97	0.16	0.02	-0.08	0.10
Mid Growth	10.04	3.68	3.70	4.04	-0.01	-0.01	-0.02	-0.05
Mid Neutral	10.58	7.06	5.78	5.08	0.05	0.03	0.02	0.10
Mid Value	18.01	7.14	1.52	2.34	-0.06	-0.20	-0.09	-0.35
Small Growth	1.62	0.00	-4.23	0.00	0.00	-0.14	0.00	-0.14
Small Neutral	2.87	0.00	-0.47	0.00	0.00	-0.13	0.00	-0.13
Small Value	8.04	0.00	1.23	0.00	0.00	-0.24	0.00	-0.24
Unclassified	4.17	4.93	6.51	4.94	0.08	-0.01	-0.01	0.06
Total	100.00	100.00	3.43	4.21	0.22	-0.81	-0.19	-0.78

Bristol County Retirement System

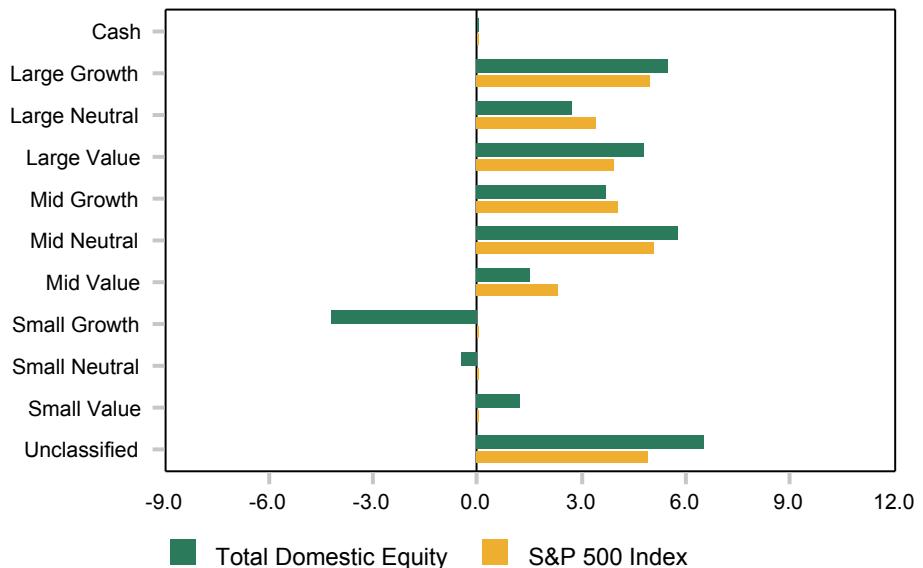
Buy and Hold Style Attribution Graph

1 Quarter Ending June 30, 2019

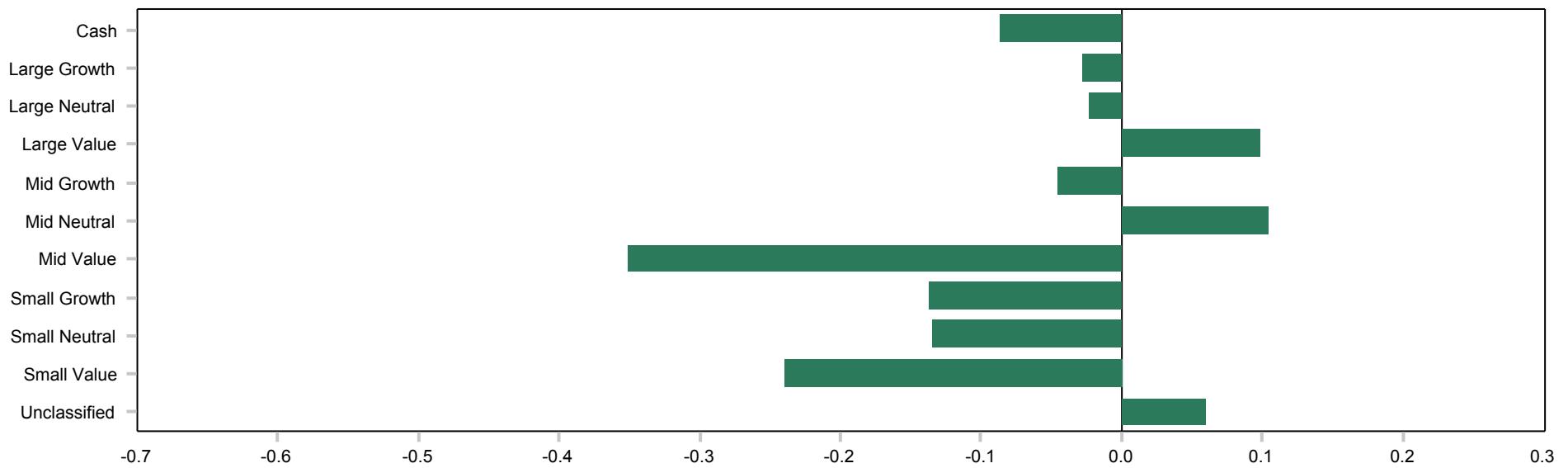
Allocation



Performance



Total Attribution



Bristol County Retirement System

Total Domestic Equity

As of June 30, 2019

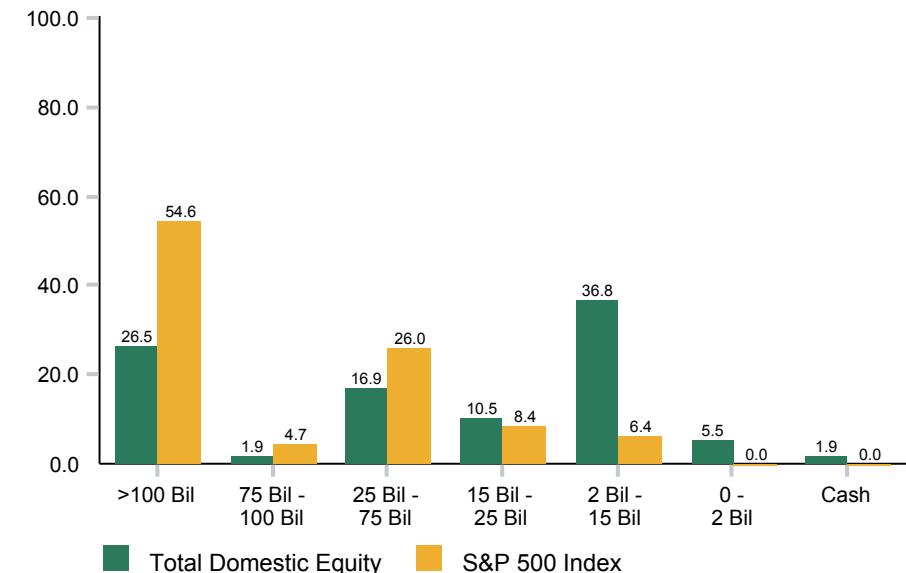
Top Ten Equity Holdings

	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Amazon.com Inc	2.09	3.21	-1.12	6.34
Facebook Inc	1.88	1.90	-0.02	15.78
HCA Healthcare Inc	1.52	0.15	1.37	4.02
Visa Inc	1.44	1.24	0.20	11.28
Adobe Inc	1.23	0.59	0.64	10.57
Unitedhealth Group Inc	1.21	0.95	0.26	-0.88
Celanese Corp	1.20	0.06	1.14	9.94
Alibaba Group Holding Ltd	1.07	0.00	1.07	-7.13
AerCap Holdings NV	1.06	0.00	1.06	11.75
Lincoln National Corp	1.00	0.05	0.95	10.45
% of Portfolio	13.70	8.15	5.55	

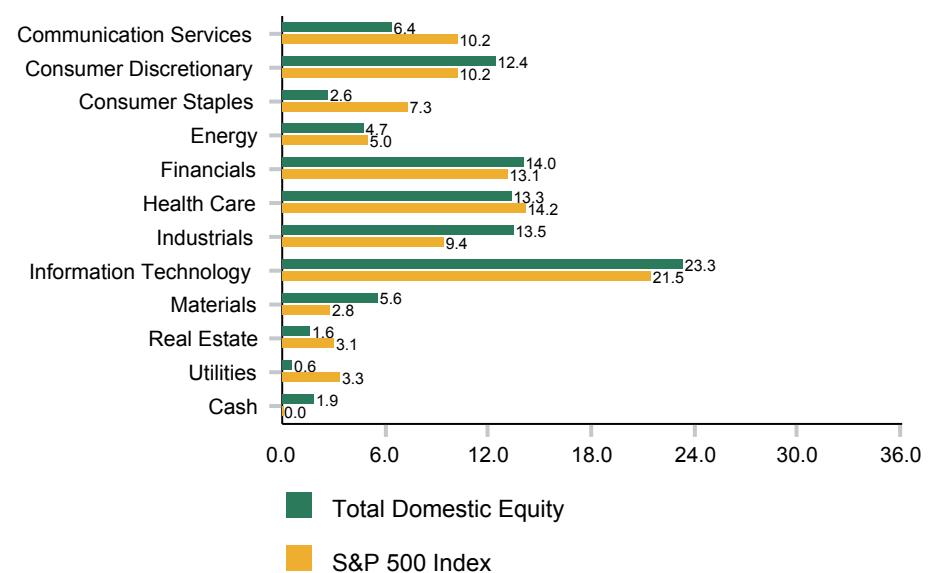
Portfolio Characteristics

	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$)	103,327,877,765	238,881,623,598
Median Mkt. Cap (\$)	6,799,710,675	22,706,756,860
Price/Earnings ratio	17.64	20.41
Price/Book ratio	3.03	3.52
5 Yr. EPS Growth Rate (%)	16.40	15.46
Current Yield (%)	1.47	1.97
Beta (5 Years, Monthly)	1.19	1.00
Number of Stocks	401	505

Distribution of Market Capitalization (%)



Sector Weights (%)



Bristol County Retirement System

Total Domestic Equity

As of June 30, 2019

Ten Best Performers

	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Adient Plc	0.26	0.00	0.26	87.27
Cardlytics Inc	0.07	0.00	0.07	57.07
Cypress Semiconductor Corp	0.03	0.00	0.03	49.80
Kratos Defense & Security Solutions Inc	0.03	0.00	0.03	46.45
Legg Mason Inc	0.10	0.00	0.10	39.86
EXACT Sciences Corp	0.49	0.00	0.49	36.27
QUALCOMM Inc.	0.34	0.38	-0.04	34.62
Itron Inc	0.11	0.00	0.11	34.13
Catalent Inc	0.29	0.00	0.29	33.55
KBR Inc	0.17	0.00	0.17	31.08
% of Portfolio	1.89	0.38	1.51	

Ten Worst Performers

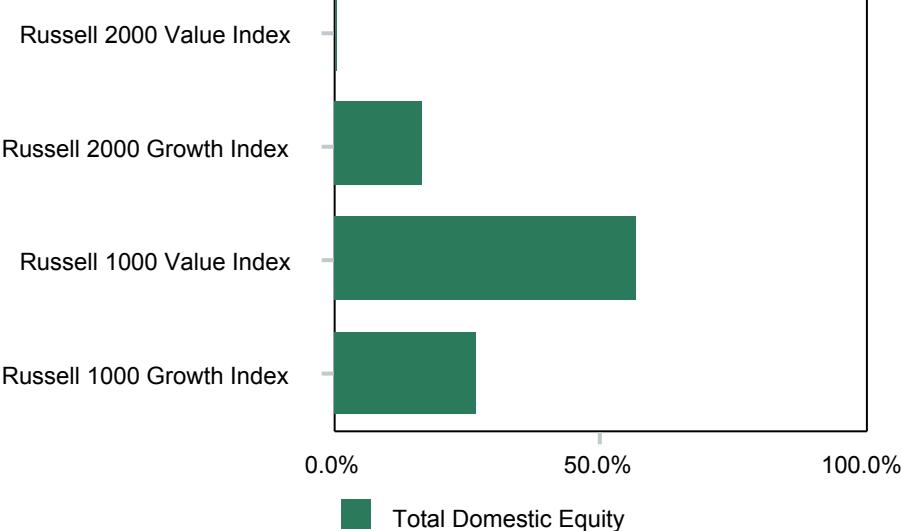
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
R.R. Donnelley & Sons Co	0.00	0.00	0.00	-57.86
Mallinckrodt Plc	0.01	0.00	0.01	-57.77
Tenneco Inc	0.13	0.00	0.13	-49.95
Amneal Pharmaceuticals Inc	0.02	0.00	0.02	-49.40
2U Inc	0.08	0.00	0.08	-46.87
TherapeuticsMD Inc	0.05	0.00	0.05	-46.61
GameStop Corp.	0.01	0.00	0.01	-46.16
Valaris plc	0.03	0.00	0.03	-45.74
Aqua Metals Inc	0.01	0.00	0.01	-45.60
Benefitfocus Inc	0.08	0.00	0.08	-45.17
% of Portfolio	0.42	0.00	0.42	

Bristol County Retirement System

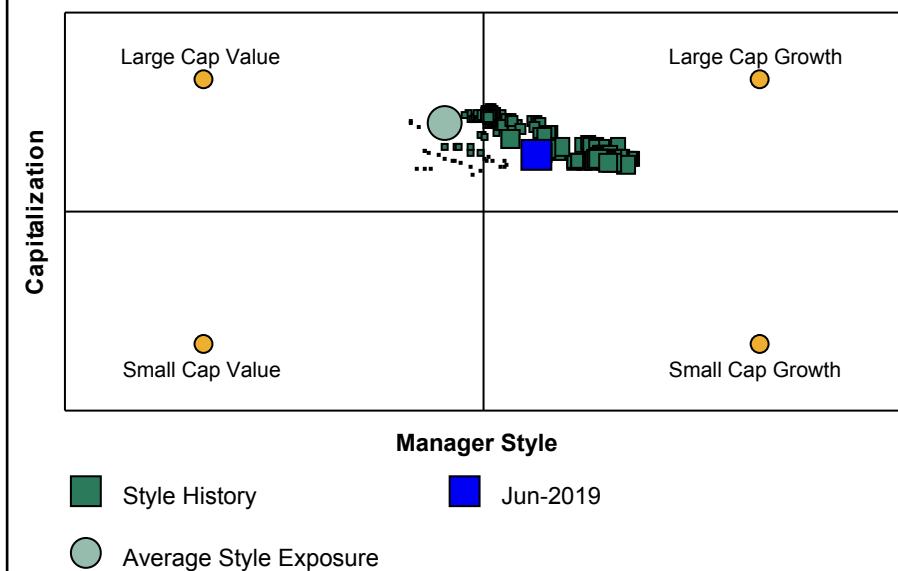
Style Analysis

Ending June 30, 2019

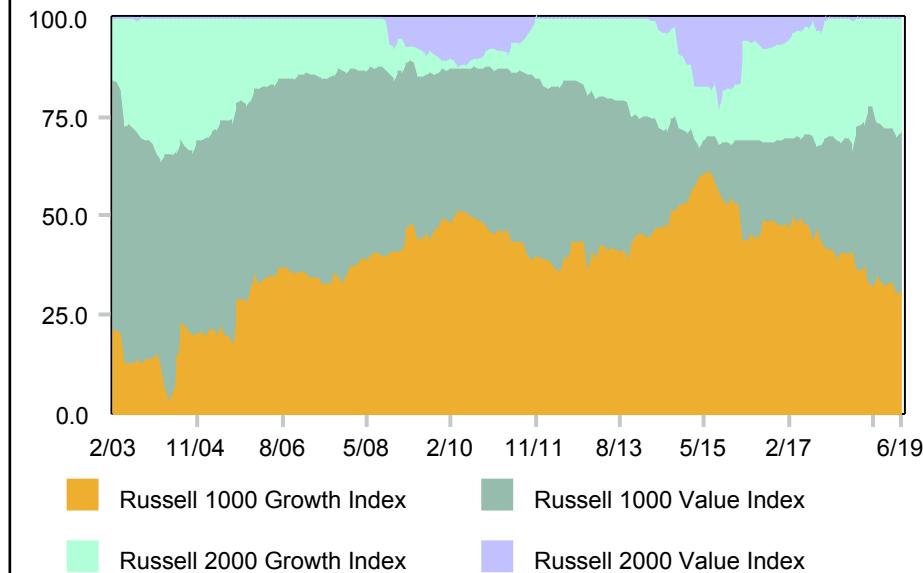
Investment Style Exposure



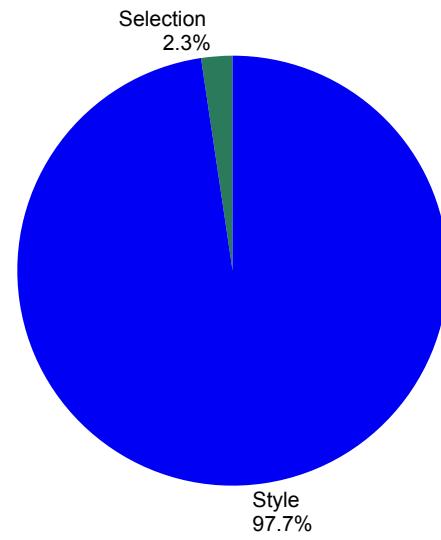
Style Map(ppp)



Style History(ppp)



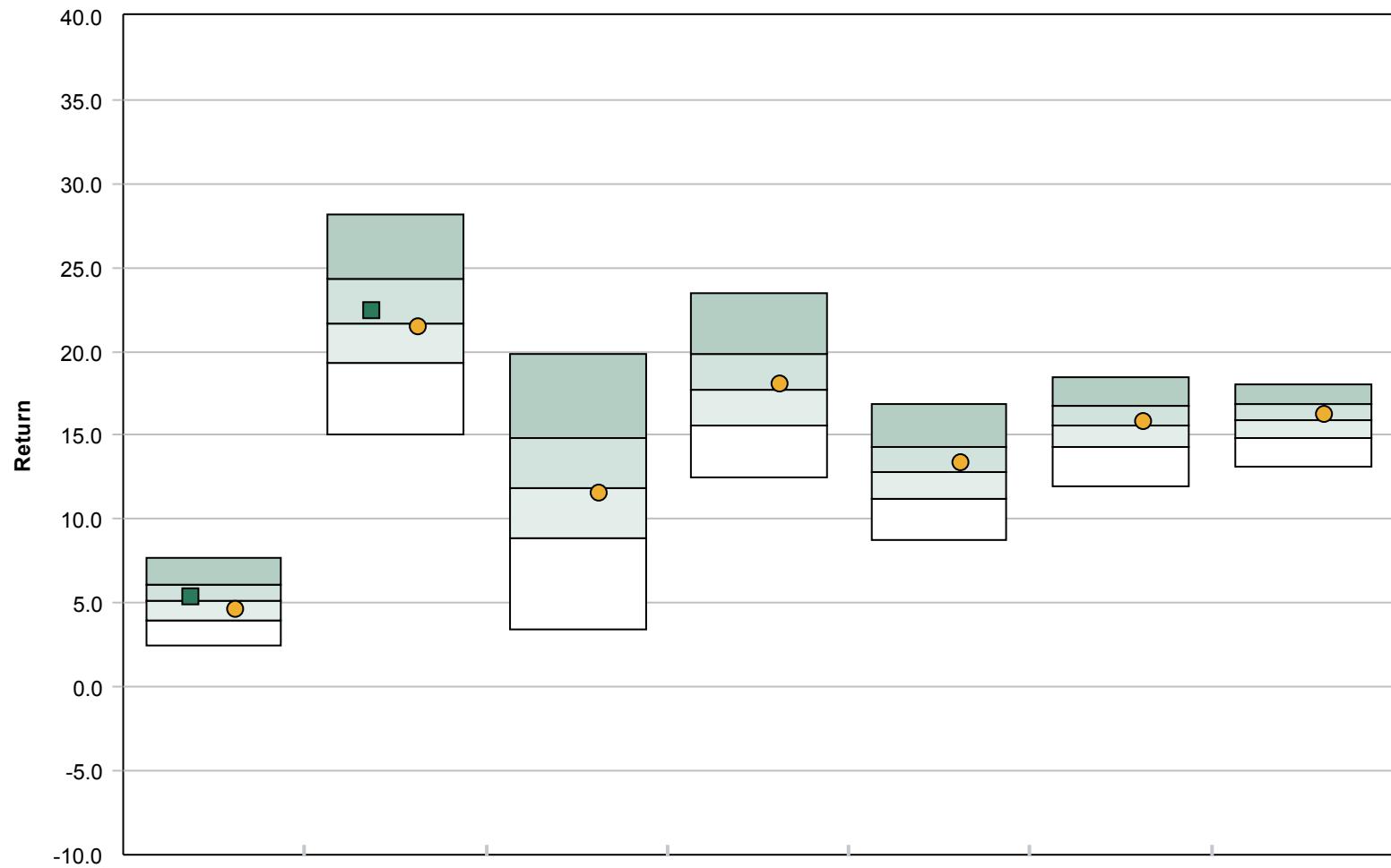
Return Variance



Bristol County Retirement System

IM U.S. Large Cap Growth Equity (SA+CF)

As of June 30, 2019



■ ClearBridge Large Cap Growth

● Russell 1000 Growth Index

1 Qtr **YTD** **1 Yr** **3 Yrs** **5 Yrs** **7 Yrs** **10 Yrs**

5th Percentile	7.73	28.20	19.87	23.46	16.83	18.42	18.01
1st Quartile	6.10	24.37	14.87	19.84	14.30	16.72	16.87
Median	5.11	21.69	11.89	17.73	12.85	15.58	15.87
3rd Quartile	3.95	19.27	8.83	15.58	11.21	14.28	14.86
95th Percentile	2.43	15.01	3.42	12.47	8.76	12.01	13.09

Parentheses contain percentile rankings.

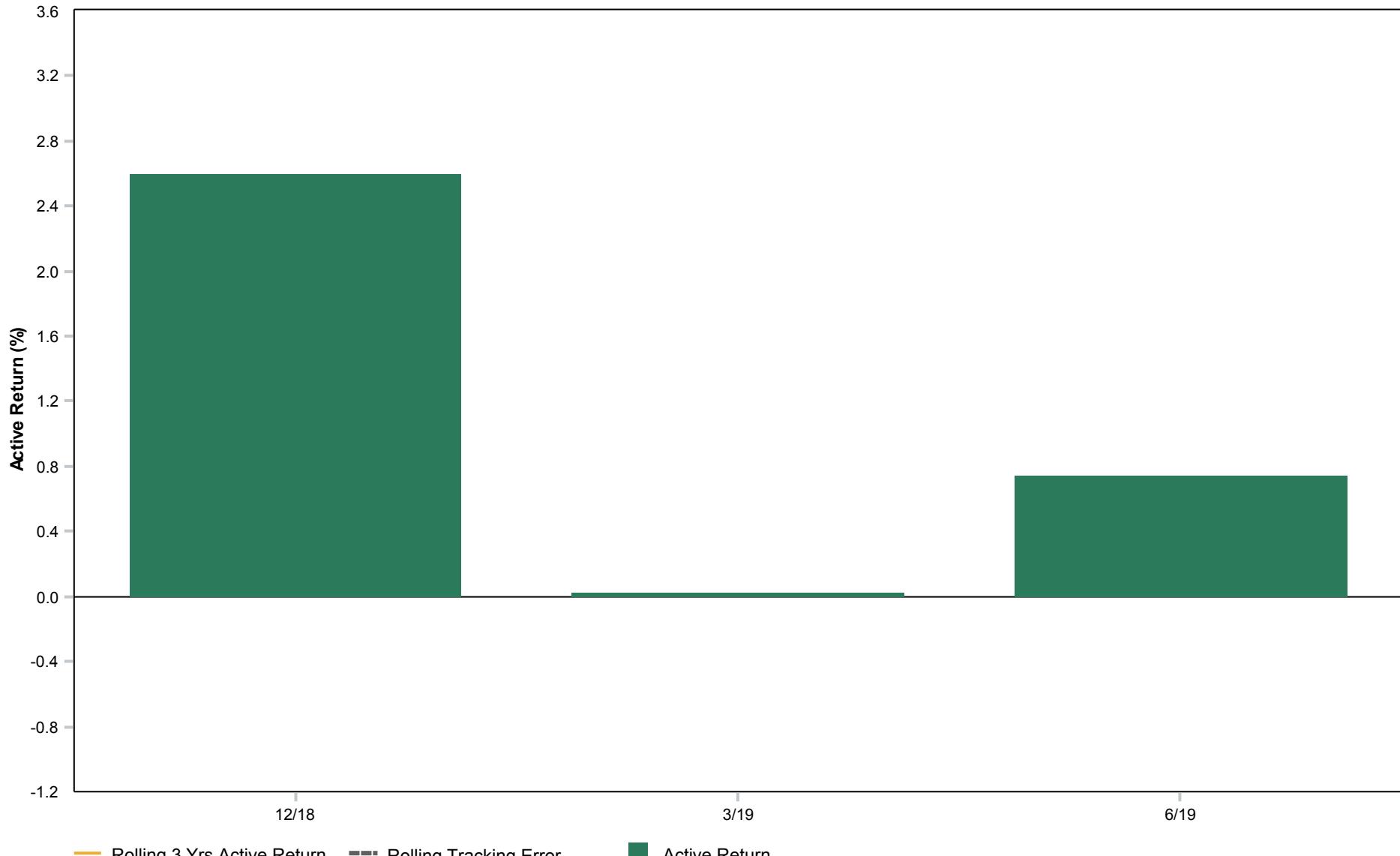
Calculation based on monthly periodicity.

Bristol County Retirement System

Comparative Performance & Rolling Return

As of June 30, 2019

	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	2018	2017	2016	2015
ClearBridge Large Cap Growth	5.38	22.38	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Russell 1000 Growth Index	4.64	21.49	11.56	18.07	13.39	15.76	16.28	-1.51	30.21	7.08	5.67
Difference	0.74	0.89	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A



Bristol County Retirement System
ClearBridge Large Cap Growth

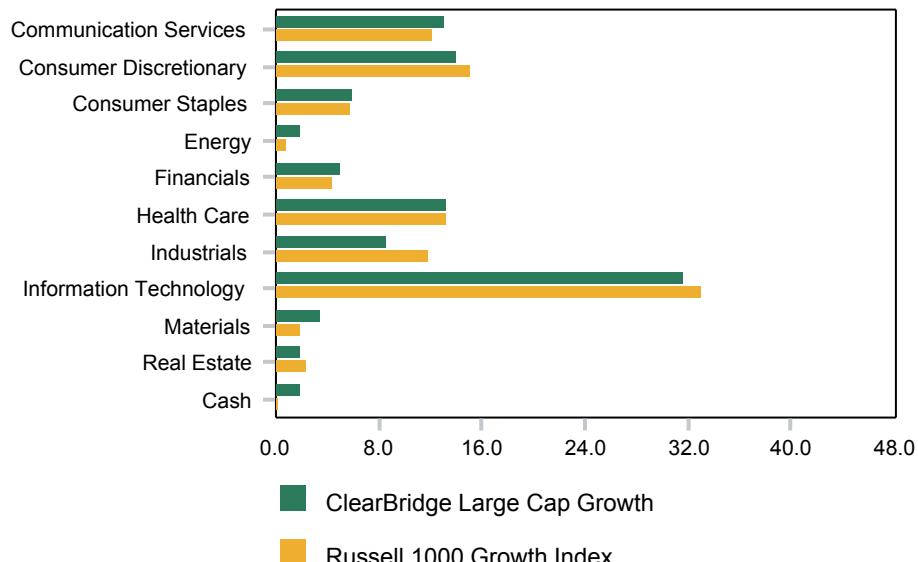
1 Quarter Ending June 30, 2019

Buy-and-Hold Portfolio	5.42
Portfolio Trading	-0.04
Actual Return	5.38
Benchmark Return	4.64
Actual Active Return	0.74
Stock Selection	0.76
Sector Selection	-0.06
Interaction	0.08
Total Selection	0.79
Portfolio Trading	-0.04
Benchmark Trading	0.00
Active Trading Impact	-0.04
Buy & Hold Active Return	0.74

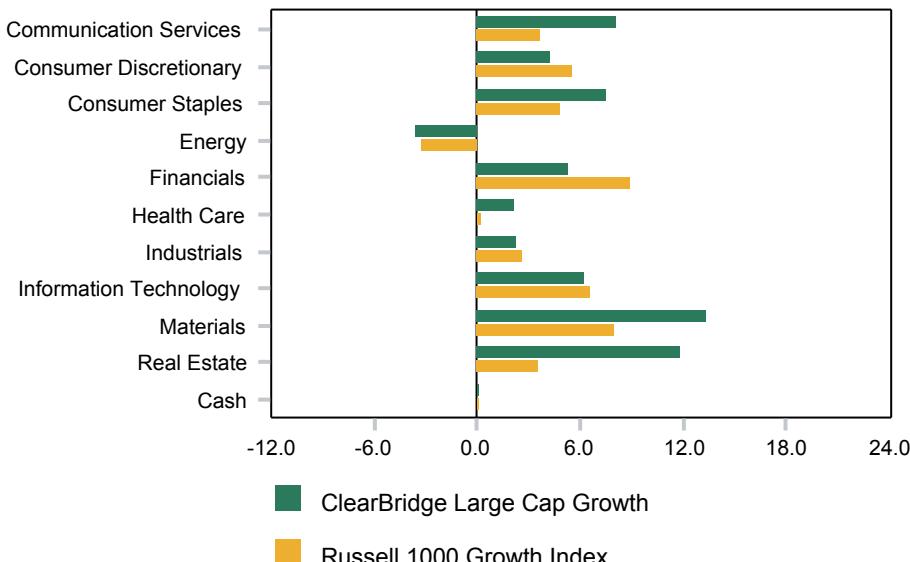
	Allocation — 04/01/2019		Performance — 1 Quarter Ending June 30, 2019		Attribution			Total
	Portfolio	Benchmark	Portfolio	Benchmark	Stock	Sector	Interaction	
Communication Services	13.04	12.06	8.08	3.62	0.54	-0.01	0.04	0.57
Consumer Discretionary	13.97	15.08	4.30	5.53	-0.19	-0.01	0.01	-0.18
Consumer Staples	5.93	5.75	7.55	4.79	0.16	0.00	0.00	0.16
Energy	1.80	0.74	-3.58	-3.31	0.00	-0.08	0.00	-0.09
Financials	5.03	4.27	5.30	8.86	-0.15	0.03	-0.03	-0.15
Health Care	13.11	13.18	2.18	0.17	0.26	0.00	0.00	0.27
Industrials	8.50	11.76	2.30	2.62	-0.04	0.07	0.01	0.04
Information Technology	31.57	32.96	6.25	6.61	-0.12	-0.03	0.01	-0.14
Materials	3.40	1.81	13.30	7.97	0.10	0.05	0.08	0.23
Real Estate	1.81	2.39	11.85	3.59	0.20	0.01	-0.05	0.16
Cash	1.84	0.00	0.00	0.00	0.00	-0.09	0.00	-0.09
Total	100.00	100.00	5.42	4.64	0.76	-0.06	0.08	0.79

Bristol County Retirement System

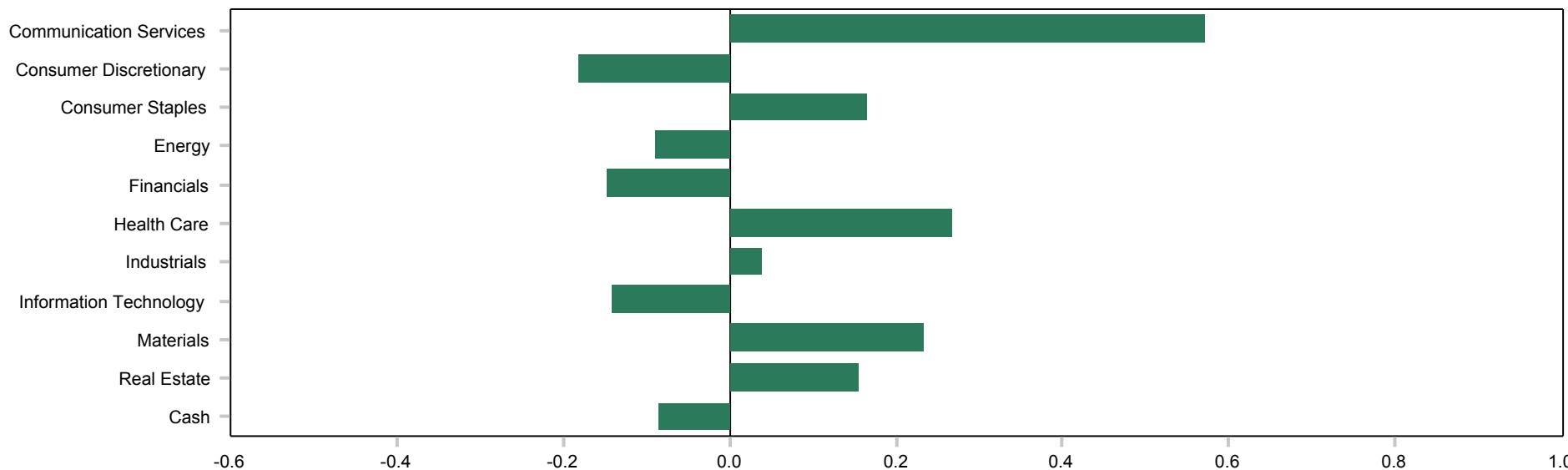
Allocation



Performance



Total Attribution



Buy and Hold Sector Attribution Graph

1 Quarter Ending June 30, 2019

Bristol County Retirement System

Buy and Hold Style Attribution

1 Quarter Ending June 30, 2019

Buy-and-Hold Portfolio	5.42
Portfolio Trading	-0.04
Actual Return	5.38
Benchmark Return	4.64
Actual Active Return	0.74
Stock Selection	1.38
Style Selection	-0.38
Interaction	-0.22
Total Selection	0.79
Portfolio Trading	-0.04
Benchmark Trading	0.00
Active Trading Impact	-0.04
Buy & Hold Active Return	0.74

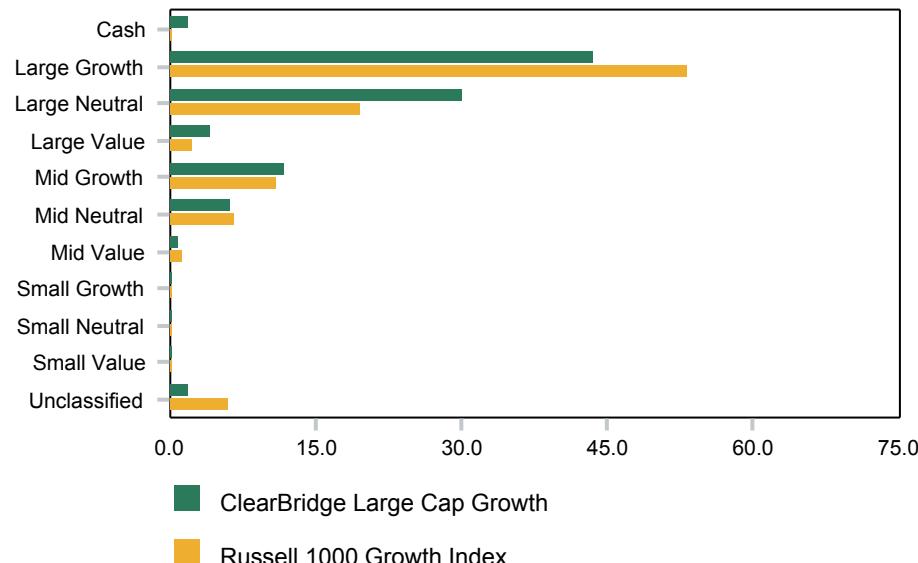
	Allocation-04/01/2019		Performance-1 Quarter Ending June 30, 2019		Attribution			Total
	Portfolio	Benchmark	Portfolio	Benchmark	Stock	Style	Interaction	
Cash	1.84	0.00	0.00	0.00	0.00	-0.09	0.00	-0.09
Large Growth	43.65	53.20	8.49	5.03	1.84	-0.04	-0.33	1.47
Large Neutral	29.97	19.54	5.15	2.53	0.51	-0.22	0.27	0.56
Large Value	4.02	2.19	7.81	5.26	0.06	0.01	0.05	0.11
Mid Growth	11.75	10.97	-6.97	5.15	-1.33	0.00	-0.09	-1.42
Mid Neutral	6.08	6.51	8.26	5.64	0.17	0.00	-0.01	0.15
Mid Value	0.83	1.33	1.04	4.14	-0.04	0.00	0.02	-0.02
Small Growth	0.00	0.10	0.00	5.86	0.00	0.00	0.00	0.00
Small Neutral	0.00	0.16	0.00	-0.44	0.00	0.01	0.00	0.01
Small Value	0.00	0.09	0.00	-5.93	0.00	0.01	0.00	0.01
Unclassified	1.87	5.92	9.13	6.20	0.17	-0.06	-0.12	-0.01
Total	100.00	100.00	5.42	4.64	1.38	-0.38	-0.22	0.79

Bristol County Retirement System

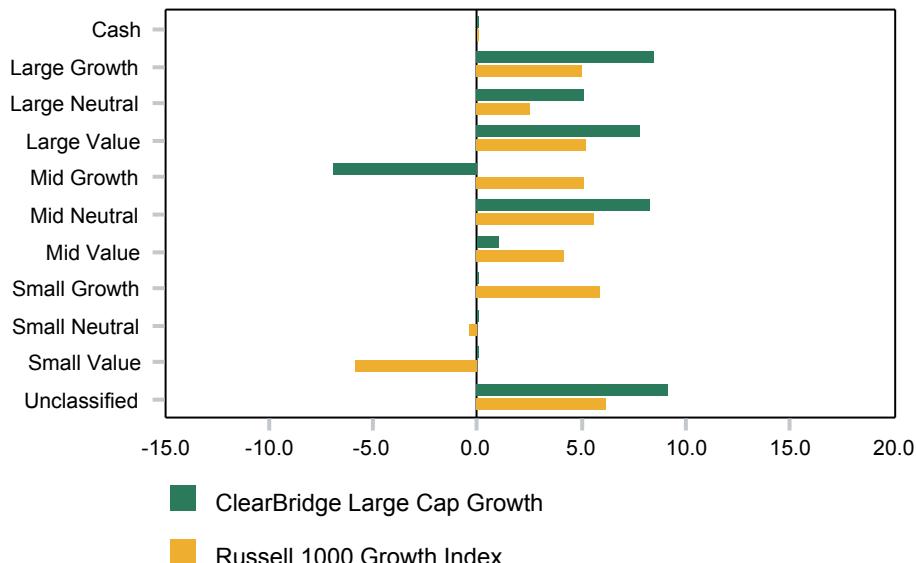
Buy and Hold Style Attribution Graph

1 Quarter Ending June 30, 2019

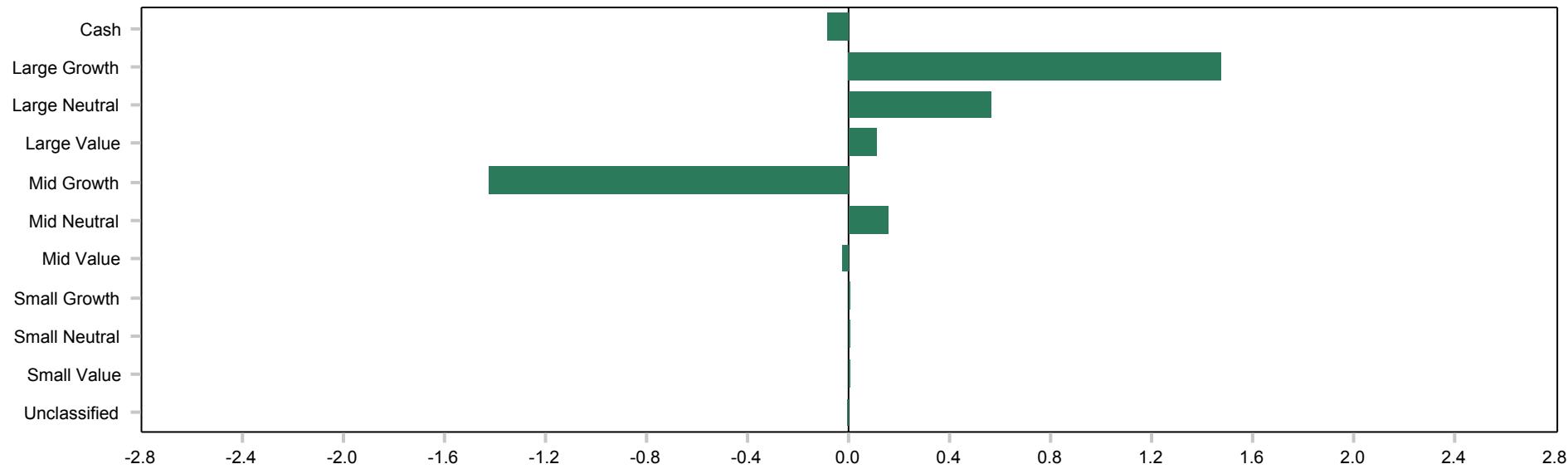
Allocation



Performance



Total Attribution



Bristol County Retirement System

ClearBridge Large Cap Growth

As of June 30, 2019

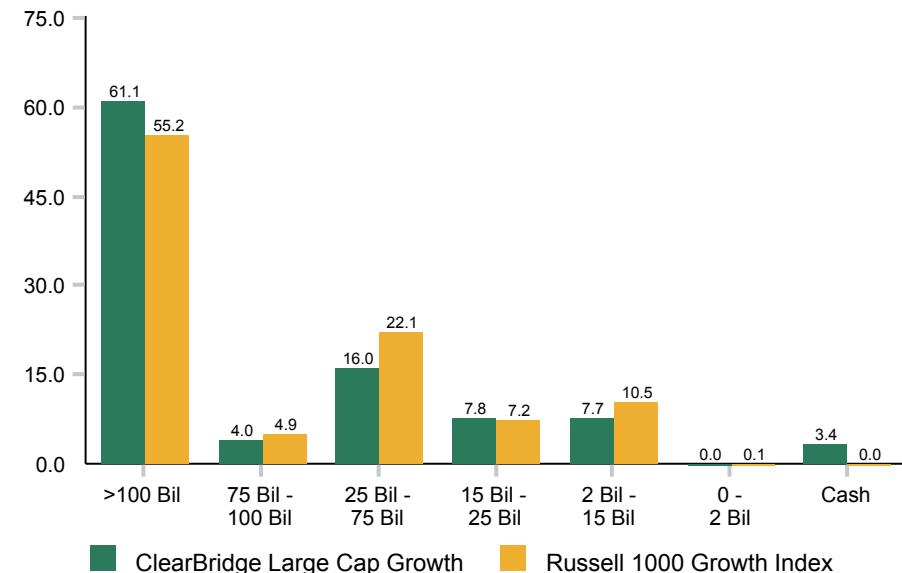
Top Ten Equity Holdings

	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Amazon.com Inc	6.43	5.60	0.83	6.34
Facebook Inc	5.16	3.30	1.86	15.78
Microsoft Corp	4.82	6.91	-2.09	14.00
Visa Inc	4.38	2.20	2.18	11.28
Unitedhealth Group Inc	3.06	1.68	1.38	-0.88
Adobe Inc	2.91	1.04	1.87	10.57
Alphabet Inc	2.73	2.37	0.36	-7.88
Walt Disney Co (The)	2.68	1.07	1.61	25.77
Zoetis Inc	2.48	0.40	2.08	12.92
Thermo Fisher Scientific Inc	2.36	0.05	2.31	7.36
% of Portfolio	37.01	24.62	12.39	

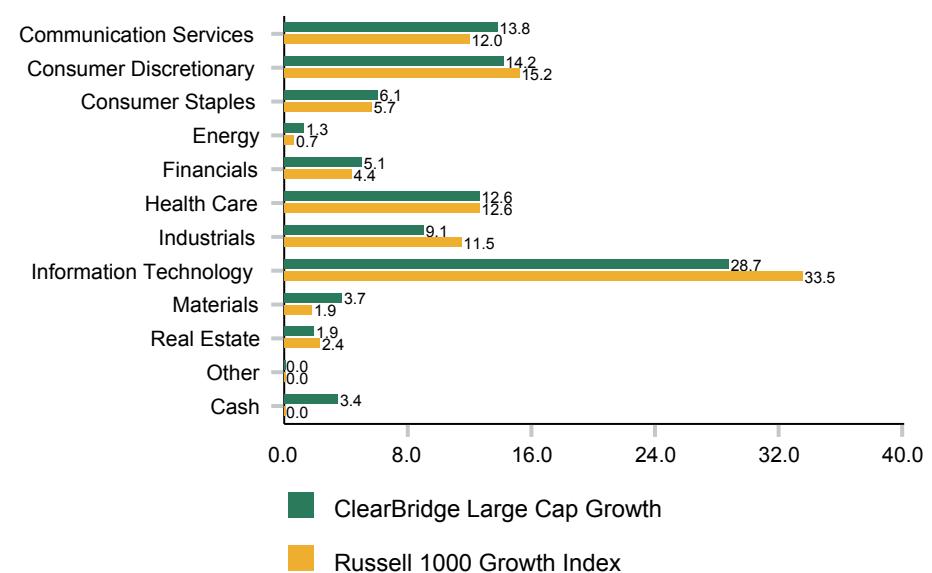
Portfolio Characteristics

	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$)	273,245,627,487	300,665,806,279
Median Mkt. Cap (\$)	100,016,070,000	12,769,594,320
Price/Earnings ratio	27.48	24.67
Price/Book ratio	5.72	6.89
5 Yr. EPS Growth Rate (%)	22.22	23.40
Current Yield (%)	1.04	1.26
Beta	N/A	1.00
Number of Stocks	50	546

Distribution of Market Capitalization (%)



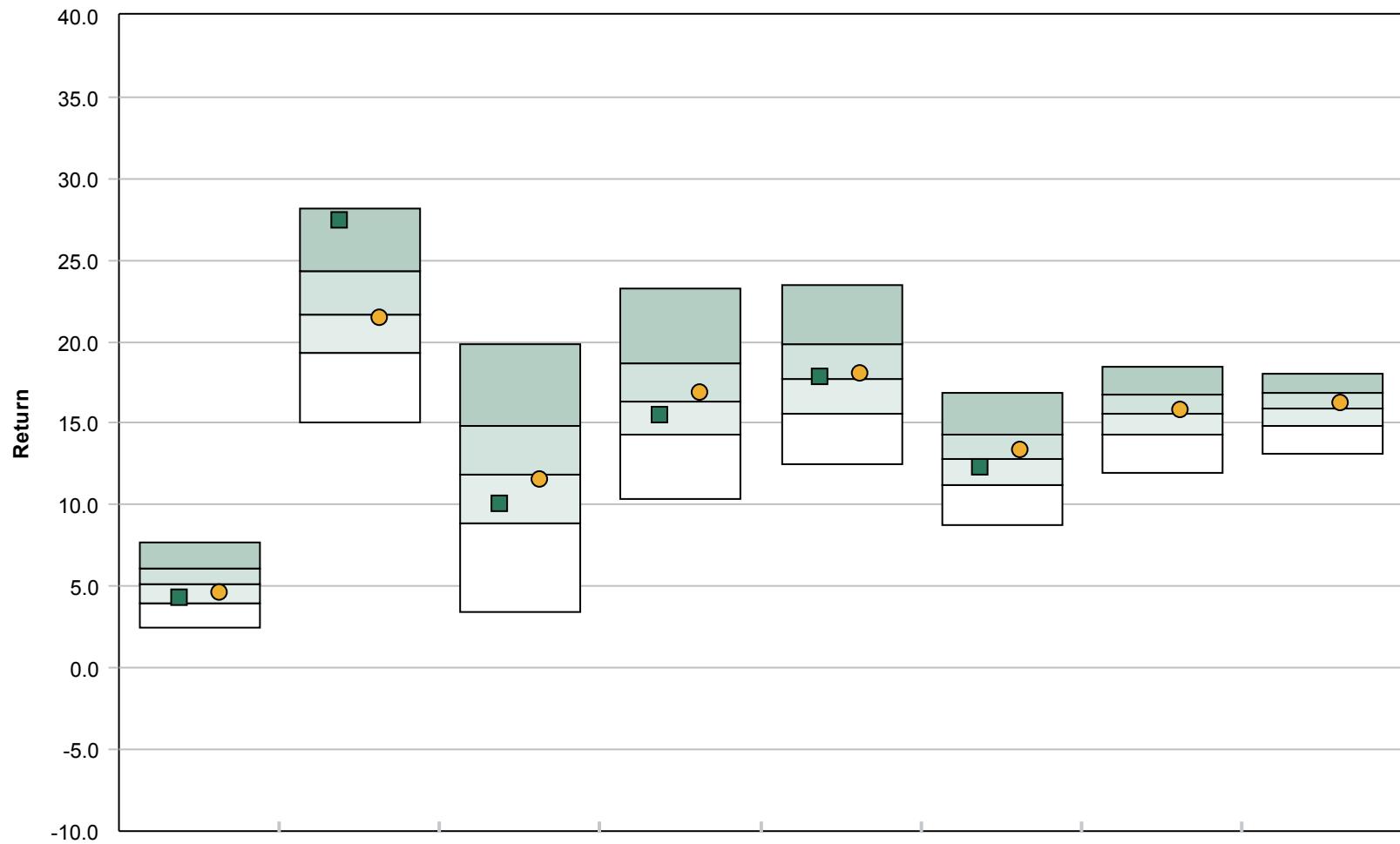
Sector Weights (%)



Bristol County Retirement System

IM U.S. Large Cap Growth Equity (SA+CF)

As of June 30, 2019



■ Columbia

● Russell 1000 Growth Index

1 Qtr YTD 1 Yr 2 Yrs 3 Yrs 5 Yrs 7 Yrs 10 Yrs

5th Percentile	7.73	28.20	19.87	23.24	23.46	16.83	18.42	18.01
1st Quartile	6.10	24.37	14.87	18.72	19.84	14.30	16.72	16.87
Median	5.11	21.69	11.89	16.32	17.73	12.85	15.58	15.87
3rd Quartile	3.95	19.27	8.83	14.35	15.58	11.21	14.28	14.86
95th Percentile	2.43	15.01	3.42	10.39	12.47	8.76	12.01	13.09

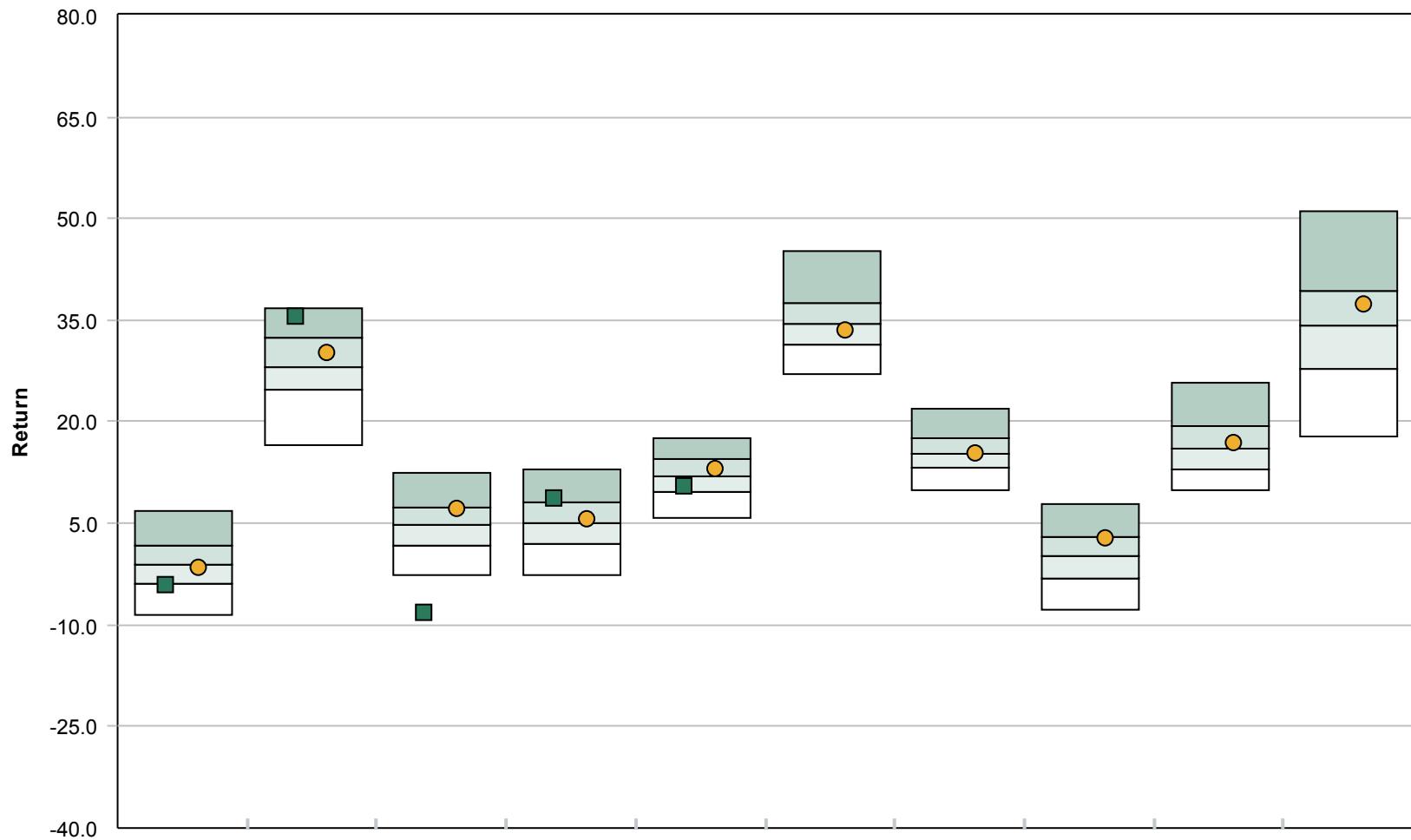
Parentheses contain percentile rankings.

Calculation based on monthly periodicity.

Bristol County Retirement System

IM U.S. Large Cap Growth Equity (SA+CF)

As of June 30, 2019



■ Columbia

● Russell 1000 Growth Index

2018 2017 2016 2015 2014 2013 2012 2011 2010 2009

5th Percentile	6.76	36.75	12.43	13.06	17.66	45.22	21.81	7.95	25.77	51.12
1st Quartile	1.70	32.35	7.25	8.00	14.38	37.46	17.67	2.93	19.29	39.39
Median	-1.17	28.16	4.66	5.02	11.99	34.52	15.18	0.18	16.00	34.11
3rd Quartile	-3.83	24.74	1.79	2.00	9.64	31.28	13.13	-3.21	13.06	27.73
95th Percentile	-8.55	16.49	-2.62	-2.77	5.89	26.93	9.82	-7.84	9.80	17.84

Parentheses contain percentile rankings.

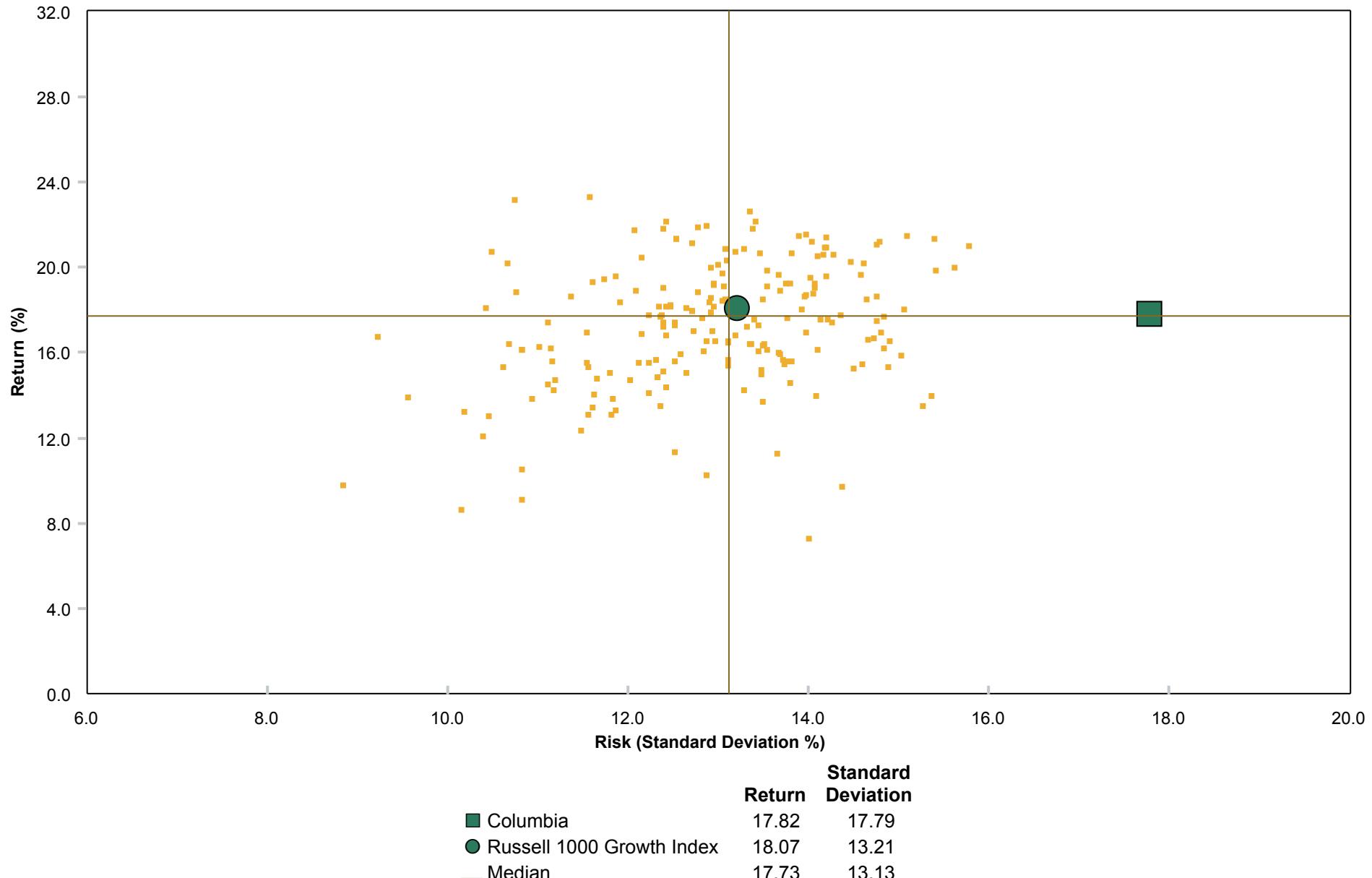
Calculation based on monthly periodicity.

Bristol County Retirement System

Peer Group Scattergram

IM U.S. Large Cap Growth Equity (SA+CF)

3 Years Ending June 30, 2019

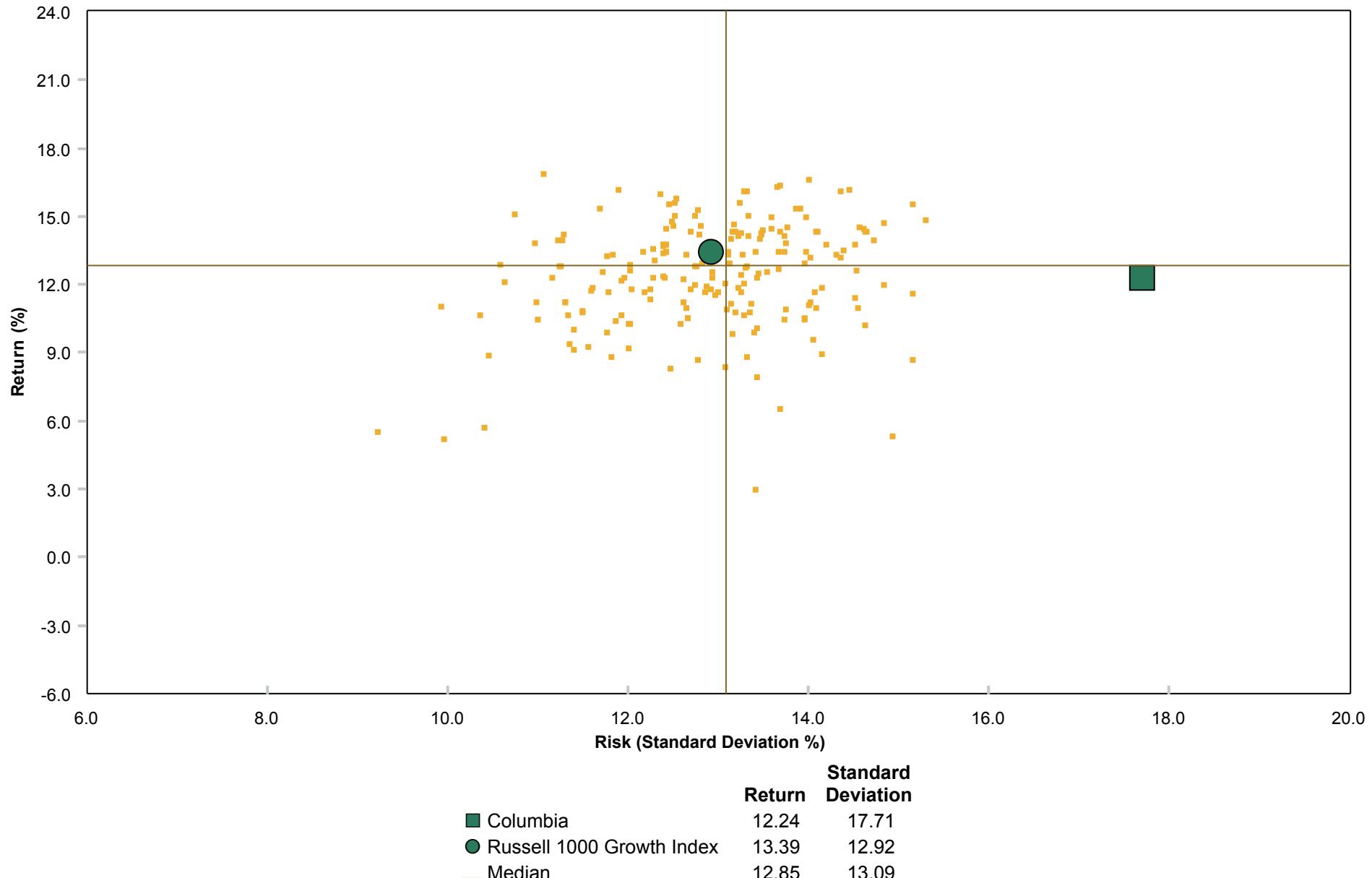


Calculation based on monthly periodicity.

Bristol County Retirement System**Peer Group Scattergram**

IM U.S. Large Cap Growth Equity (SA+CF)

5 Years Ending June 30, 2019



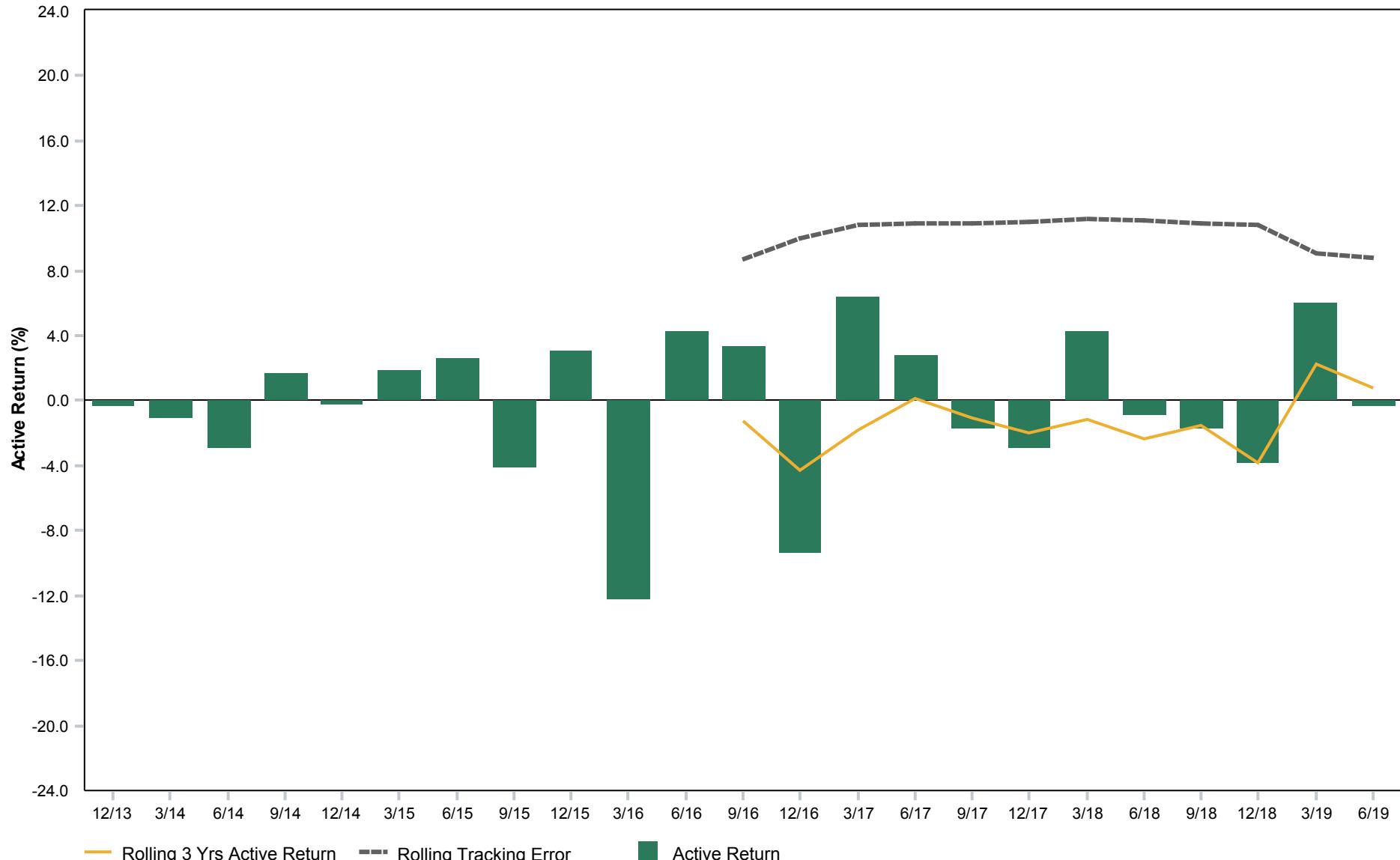
Calculation based on monthly periodicity.

Bristol County Retirement System

Comparative Performance & Rolling Return

As of June 30, 2019

	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	2018	2017	2016	2015
Columbia	4.33	27.45	10.01	17.82	12.24	N/A	N/A	-4.30	35.56	-8.17	8.65
Russell 1000 Growth Index	4.64	21.49	11.56	18.07	13.39	15.76	16.28	-1.51	30.21	7.08	5.67
Difference	-0.31	5.96	-1.55	-0.25	-1.15	N/A	N/A	-2.79	5.35	-15.25	2.98



Bristol County Retirement System

Columbia

1 Quarter Ending June 30, 2019

Buy-and-Hold Portfolio	4.49
Portfolio Trading	-0.16
Actual Return	4.33
Benchmark Return	4.64
Actual Active Return	-0.31
Stock Selection	0.47
Sector Selection	-0.22
Interaction	-0.40
Total Selection	-0.15
Portfolio Trading	-0.16
Benchmark Trading	0.00
Active Trading Impact	-0.16
Buy & Hold Active Return	-0.31

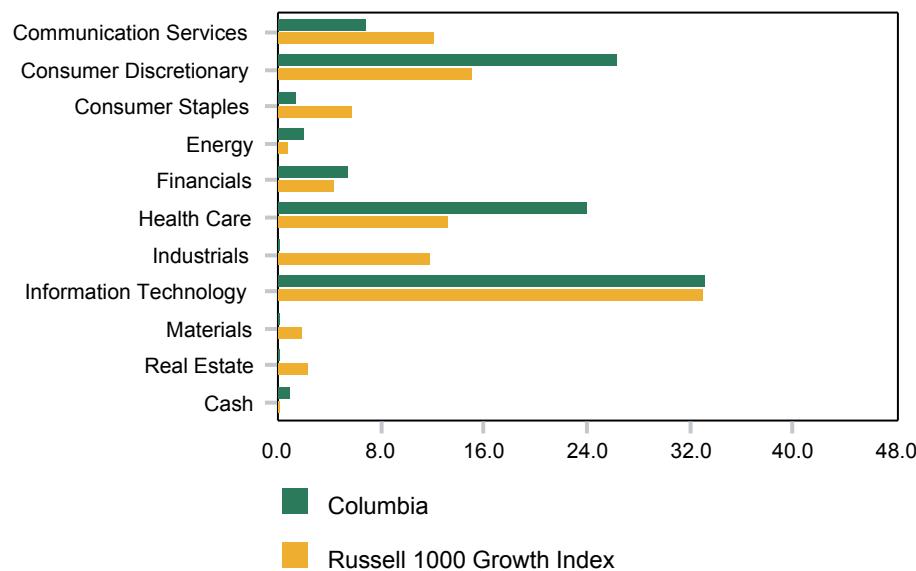
	Allocation — 04/01/2019		Performance — 1 Quarter Ending June 30, 2019		Attribution			Total
	Portfolio	Benchmark	Portfolio	Benchmark	Stock	Sector	Interaction	
Communication Services	6.74	12.06	11.97	3.62	1.01	0.05	-0.44	0.62
Consumer Discretionary	26.40	15.08	1.26	5.53	-0.64	0.10	-0.48	-1.03
Consumer Staples	1.45	5.75	9.43	4.79	0.27	-0.01	-0.20	0.06
Energy	1.99	0.74	1.04	-3.31	0.03	-0.10	0.05	-0.01
Financials	5.40	4.27	5.77	8.86	-0.13	0.05	-0.03	-0.12
Health Care	24.02	13.18	6.75	0.17	0.87	-0.48	0.71	1.10
Industrials	0.00	11.76	0.00	2.62	0.00	0.24	0.00	0.24
Information Technology	33.12	32.96	3.79	6.61	-0.93	0.00	0.00	-0.93
Materials	0.00	1.81	0.00	7.97	0.00	-0.06	0.00	-0.06
Real Estate	0.00	2.39	0.00	3.59	0.00	0.02	0.00	0.02
Cash	0.88	0.00	0.00	0.00	0.00	-0.04	0.00	-0.04
Total	100.00	100.00	4.49	4.64	0.47	-0.22	-0.40	-0.15

Bristol County Retirement System

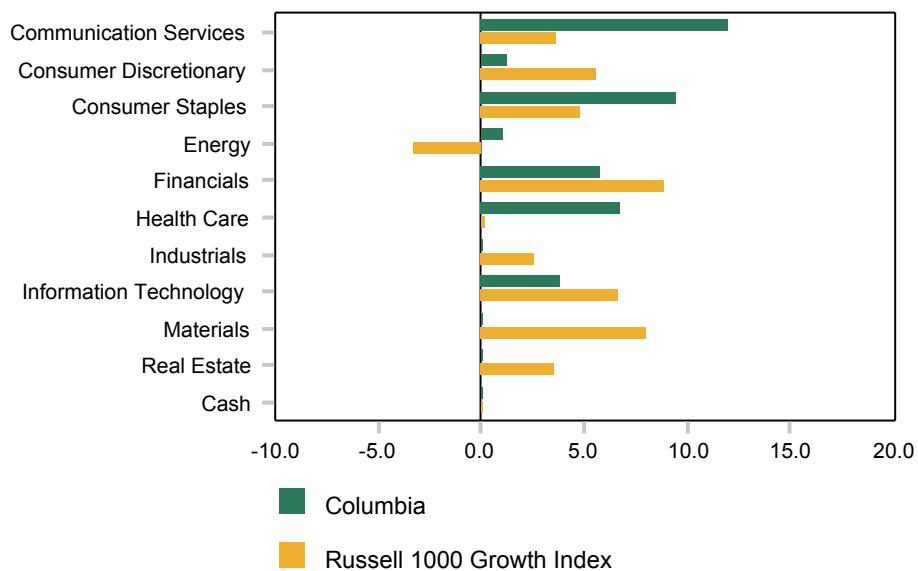
Buy and Hold Sector Attribution Graph

1 Quarter Ending June 30, 2019

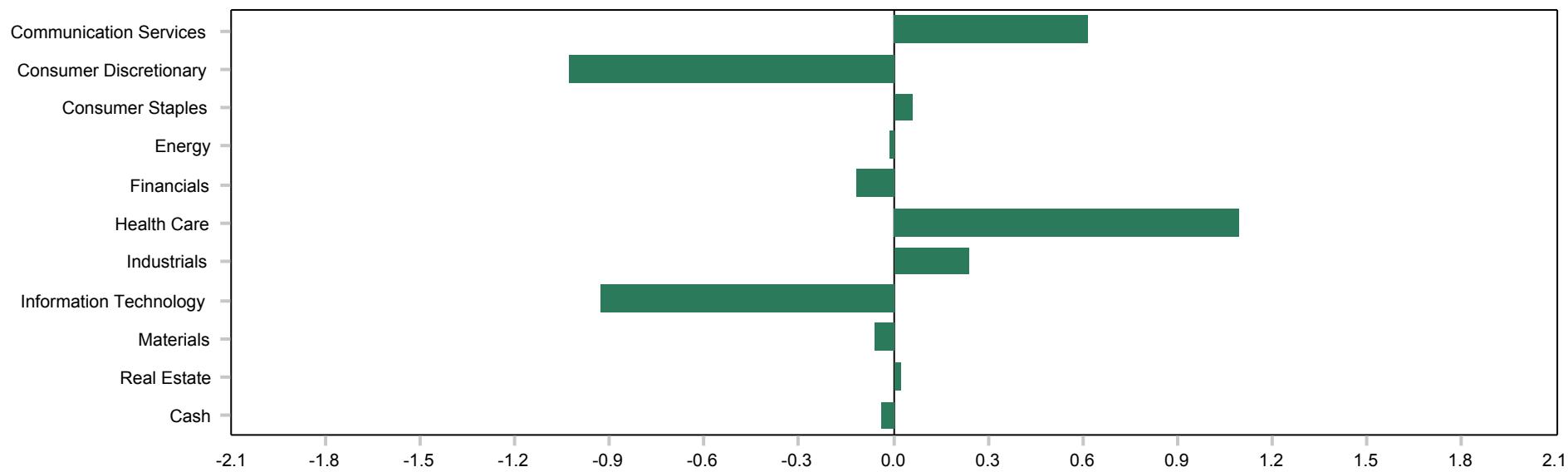
Allocation



Performance



Total Attribution



Bristol County Retirement System
Buy and Hold Style Attribution

1 Quarter Ending June 30, 2019

Buy-and-Hold Portfolio	4.49
Portfolio Trading	-0.16
Actual Return	4.33
Benchmark Return	4.64
Actual Active Return	-0.31
Stock Selection	0.61
Style Selection	-0.12
Interaction	-0.65
Total Selection	-0.15
Portfolio Trading	-0.16
Benchmark Trading	0.00
Active Trading Impact	-0.16
Buy & Hold Active Return	-0.31

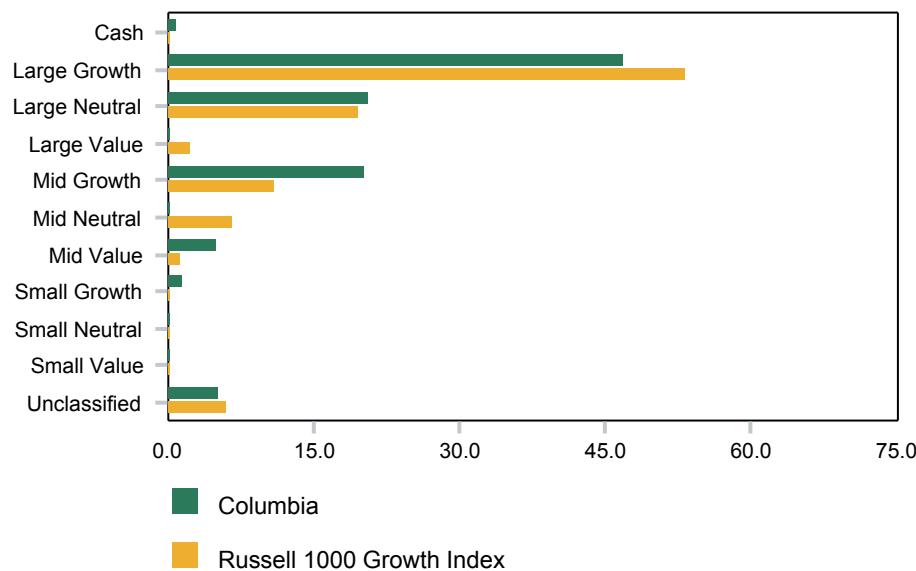
	Allocation-04/01/2019		Performance-1 Quarter Ending June 30, 2019		Attribution			Total
	Portfolio	Benchmark	Portfolio	Benchmark	Stock	Style	Interaction	
Cash	0.88	0.00	0.00	0.00	0.00	-0.04	0.00	-0.04
Large Growth	46.92	53.20	3.91	5.03	-0.59	-0.02	0.07	-0.55
Large Neutral	20.53	19.54	3.90	2.53	0.27	-0.02	0.01	0.26
Large Value	0.00	2.19	0.00	5.26	0.00	-0.01	0.00	-0.01
Mid Growth	20.12	10.97	7.02	5.15	0.21	0.05	0.17	0.42
Mid Neutral	0.00	6.51	0.00	5.64	0.00	-0.07	0.00	-0.07
Mid Value	4.98	1.33	-8.90	4.14	-0.17	-0.02	-0.48	-0.67
Small Growth	1.36	0.10	-19.35	5.86	-0.02	0.02	-0.32	-0.33
Small Neutral	0.00	0.16	0.00	-0.44	0.00	0.01	0.00	0.01
Small Value	0.00	0.09	0.00	-5.93	0.00	0.01	0.00	0.01
Unclassified	5.21	5.92	21.89	6.20	0.93	-0.01	-0.11	0.81
Total	100.00	100.00	4.49	4.64	0.61	-0.12	-0.65	-0.15

Bristol County Retirement System

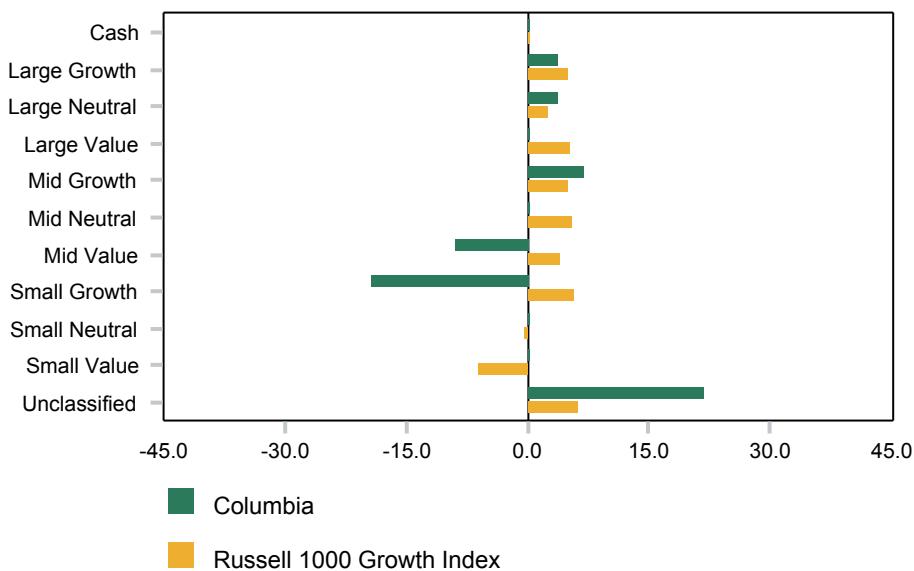
Buy and Hold Style Attribution Graph

1 Quarter Ending June 30, 2019

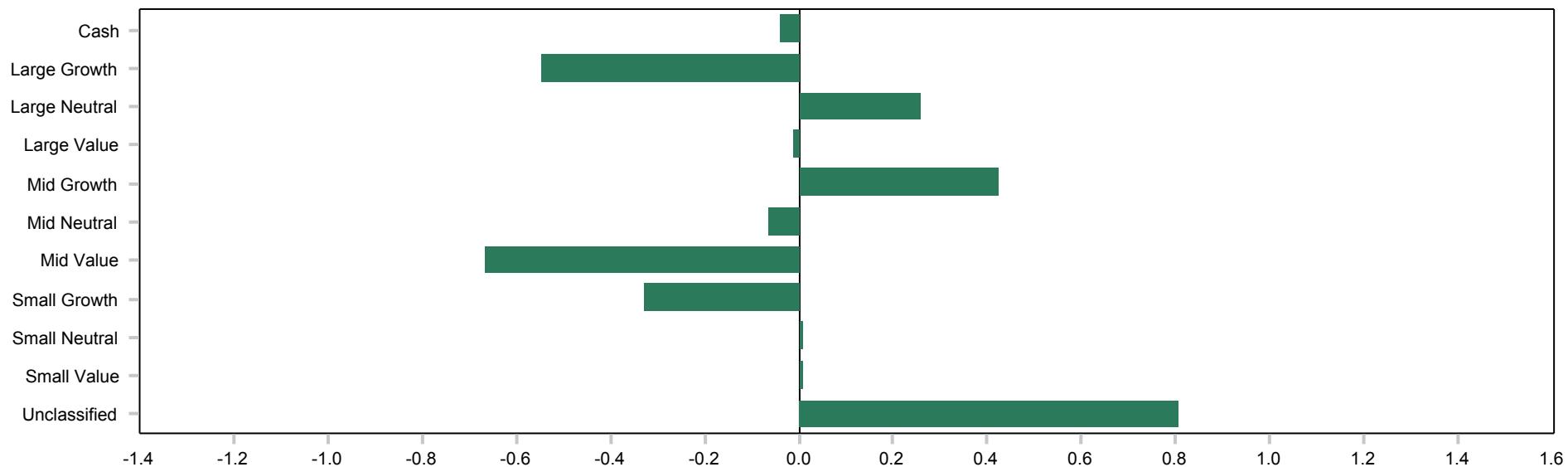
Allocation



Performance



Total Attribution



As of June 30, 2019

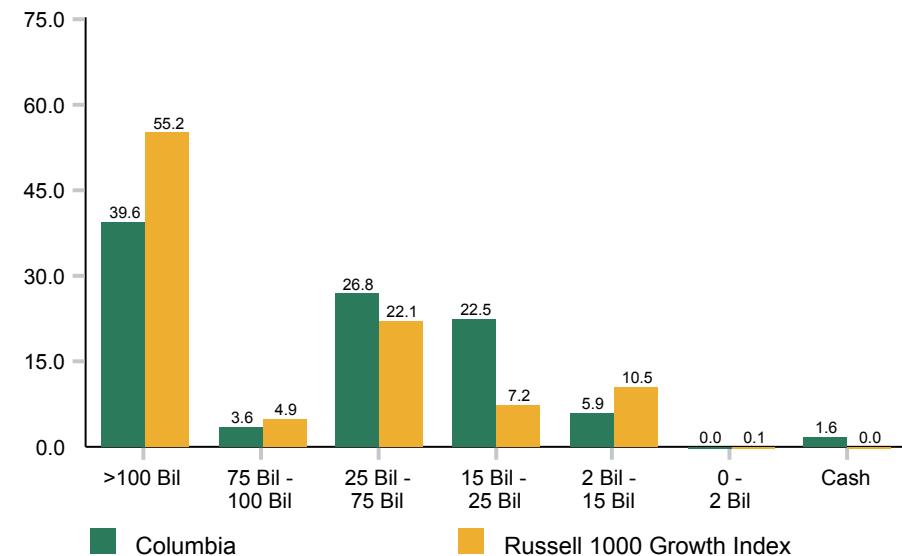
Top Ten Equity Holdings

	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Facebook Inc	4.64	3.30	1.34	15.78
Amazon.com Inc	4.47	5.60	-1.13	6.34
NVIDIA Corp	3.98	0.69	3.29	-8.43
Alibaba Group Holding Ltd	3.88	0.00	3.88	-7.13
Illumina Inc	3.85	0.39	3.46	18.50
salesforce.com Inc	3.67	0.79	2.88	-4.19
ServiceNow Inc	3.60	0.35	3.25	11.39
Booking Holdings Inc	3.57	0.62	2.95	7.44
PayPal Holdings Inc	3.57	0.97	2.60	10.23
Adobe Inc	3.50	1.04	2.46	10.57
% of Portfolio	38.73	13.75	24.98	

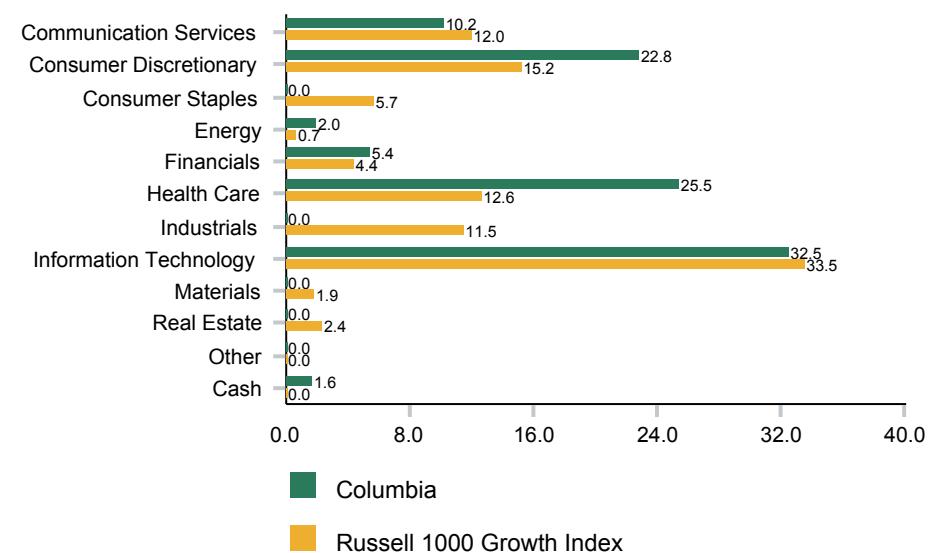
Portfolio Characteristics

	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$)	144,408,885,219	300,665,806,279
Median Mkt. Cap (\$)	46,376,777,275	12,769,594,320
Price/Earnings ratio	31.53	24.67
Price/Book ratio	6.77	6.89
5 Yr. EPS Growth Rate (%)	30.67	23.40
Current Yield (%)	0.43	1.26
Beta (5 Years, Monthly)	1.26	1.00
Number of Stocks	33	546

Distribution of Market Capitalization (%)



Sector Weights (%)

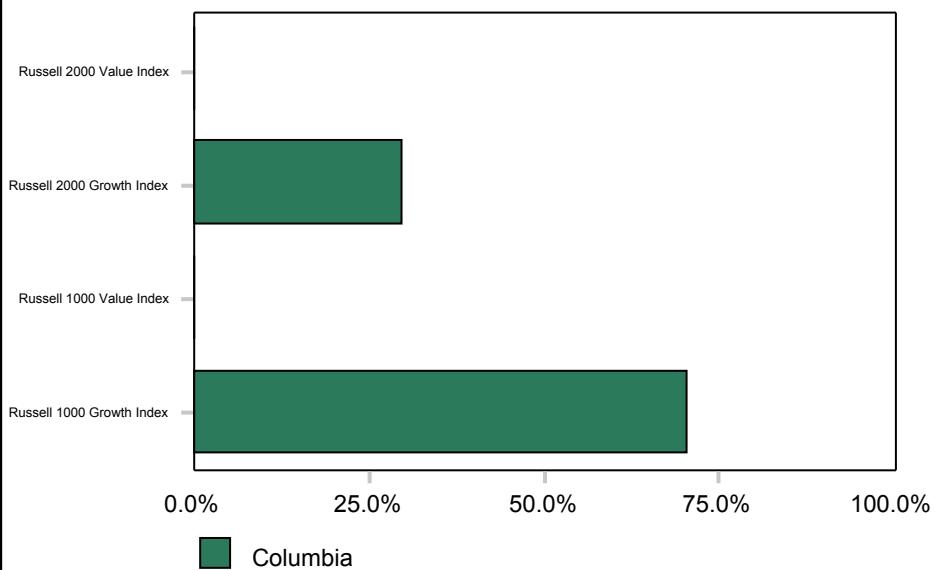


Bristol County Retirement System

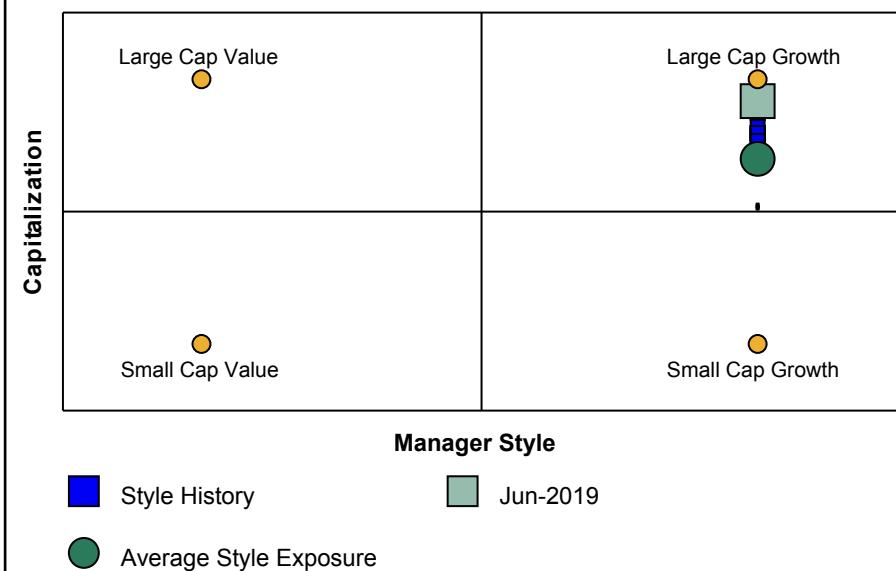
Style Analysis

Ending June 30, 2019

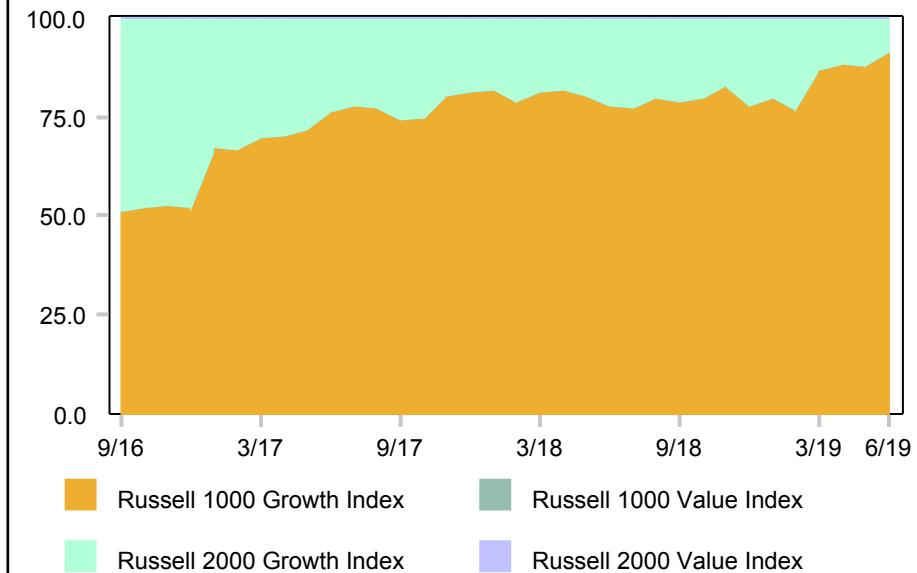
Investment Style Exposure



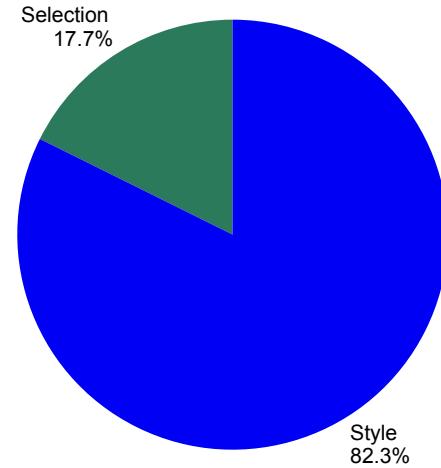
Style Map(ppp)



Style History(ppp)



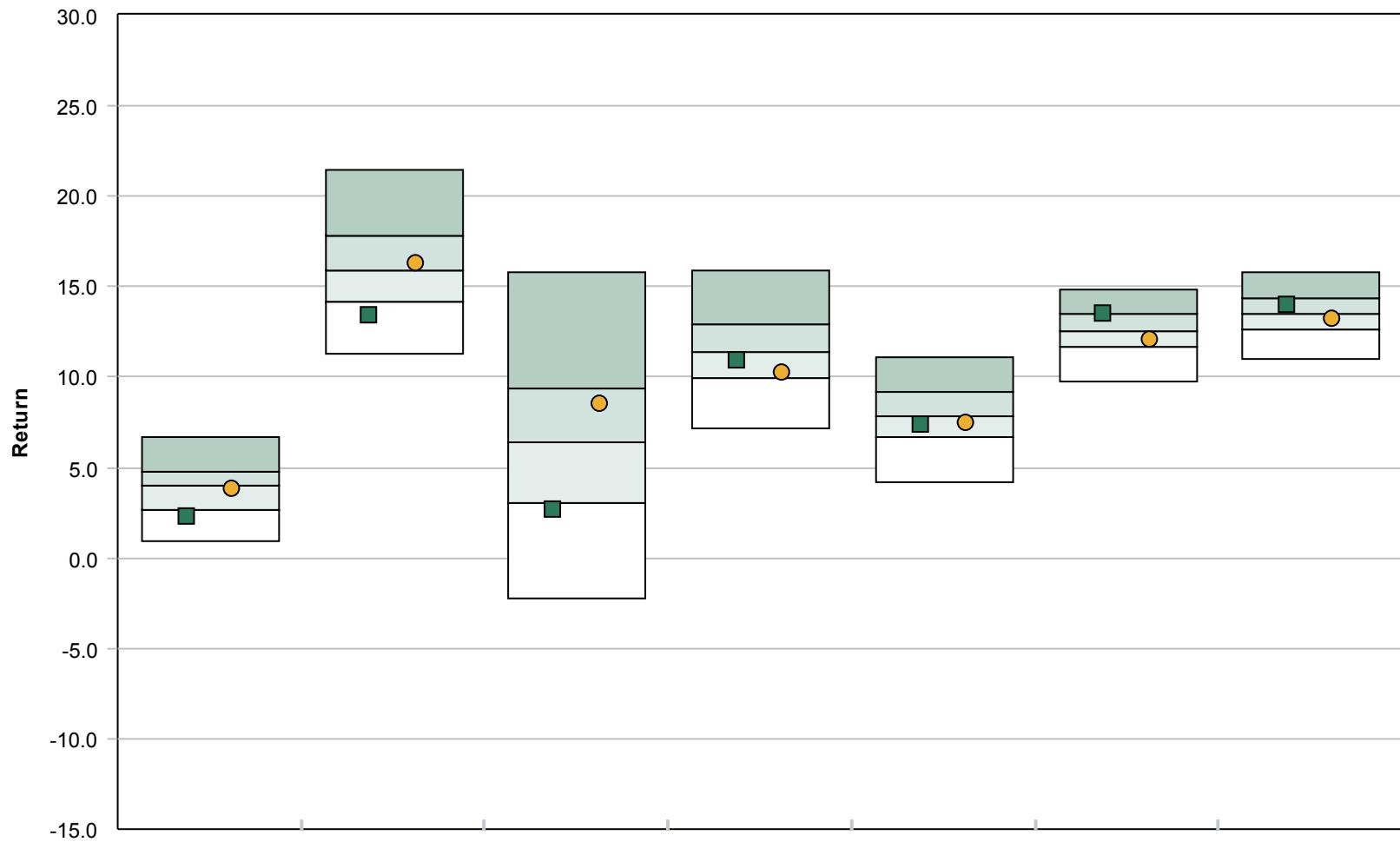
Return Variance



Bristol County Retirement System

IM U.S. Large Cap Value Equity (SA+CF)

As of June 30, 2019



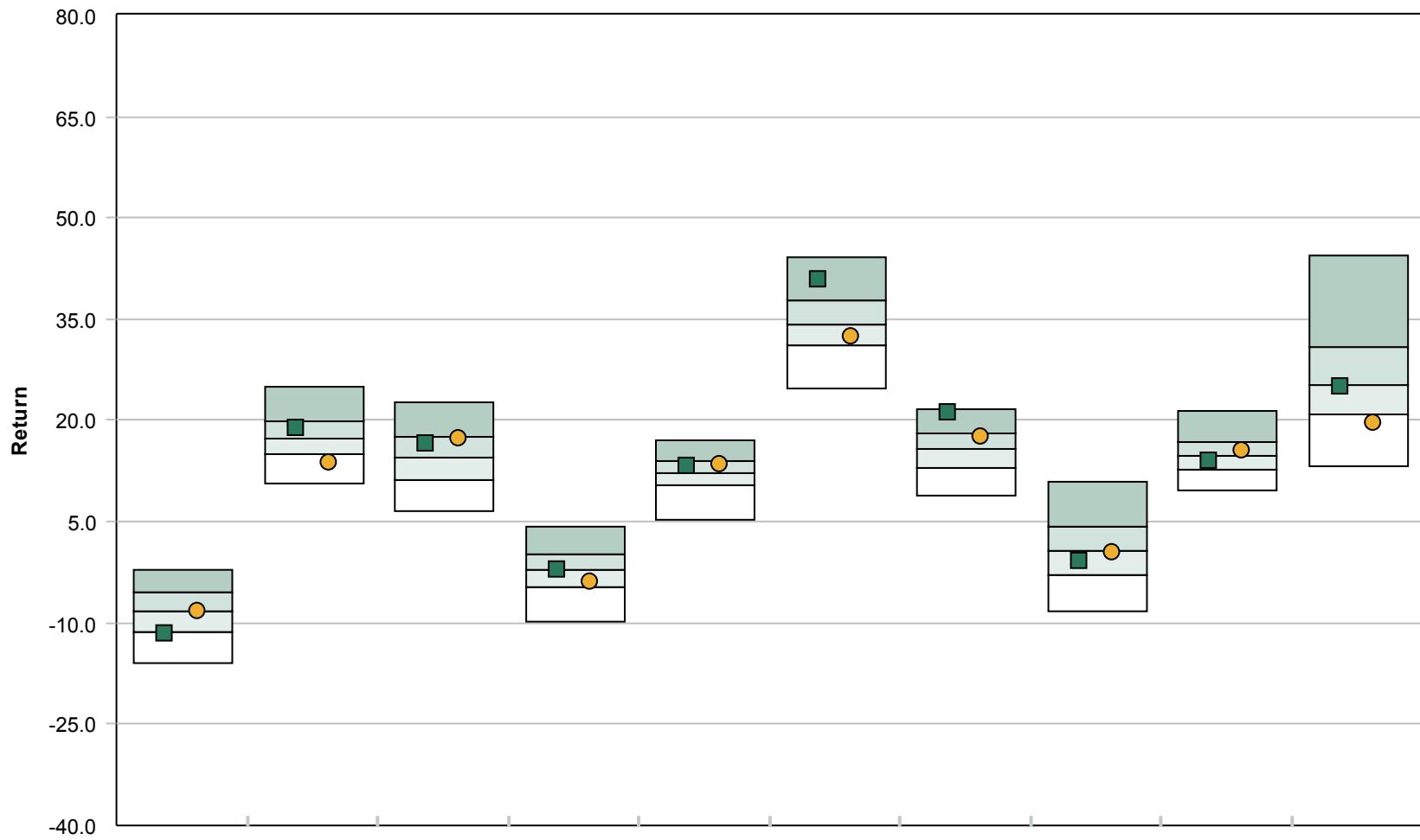
	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs
LSV	2.24 (82)	13.41 (82)	2.70 (78)	10.89 (59)	7.39 (61)	13.52 (23)	14.02 (31)
Russell 1000 Value Index	3.84 (53)	16.24 (43)	8.46 (32)	10.19 (71)	7.46 (59)	12.09 (63)	13.19 (61)
5th Percentile	6.66	21.43	15.82	15.85	11.10	14.84	15.76
1st Quartile	4.72	17.82	9.40	12.89	9.15	13.48	14.35
Median	3.95	15.92	6.44	11.34	7.79	12.56	13.50
3rd Quartile	2.63	14.19	3.08	9.98	6.72	11.67	12.66
95th Percentile	0.89	11.26	-2.24	7.16	4.15	9.73	11.02

Parentheses contain percentile rankings.
Calculation based on monthly periodicity.

Bristol County Retirement System

IM U.S. Large Cap Value Equity (SA+CF)

As of June 30, 2019



	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
LSV	-11.72 (78)	18.89 (34)	16.66 (30)	-2.14 (49)	13.25 (38)	40.94 (12)	21.22 (7)	-0.94 (63)	13.94 (59)	24.91 (53)
Russell 1000 Value Index	-8.27 (49)	13.66 (88)	17.34 (26)	-3.83 (69)	13.45 (35)	32.53 (62)	17.51 (29)	0.39 (52)	15.51 (41)	19.69 (80)
5th Percentile	-2.21	24.95	22.66	4.28	17.12	44.06	21.67	10.90	21.44	44.53
1st Quartile	-5.52	19.97	17.56	0.09	14.07	37.74	18.00	4.19	16.89	30.88
Median	-8.39	17.21	14.52	-2.25	12.19	34.26	15.67	0.61	14.63	25.25
3rd Quartile	-11.45	15.12	11.29	-4.75	10.31	31.11	12.95	-2.99	12.83	20.98
95th Percentile	-16.07	10.58	6.59	-9.72	5.18	24.83	8.91	-8.26	9.57	13.32

Parentheses contain percentile rankings.

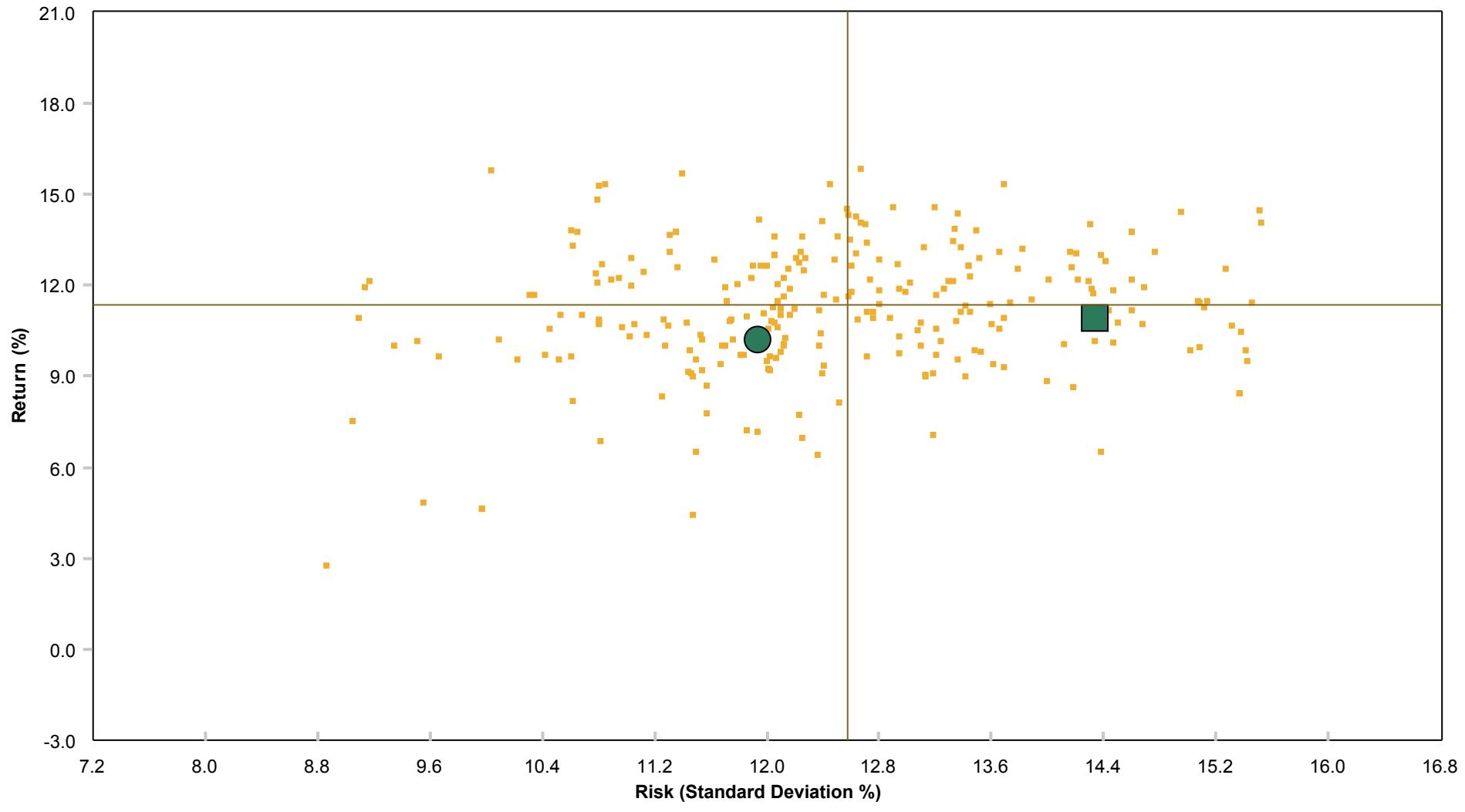
Calculation based on monthly periodicity.

Bristol County Retirement System

Peer Group Scattergram

IM U.S. Large Cap Value Equity (SA+CF)

3 Years Ending June 30, 2019



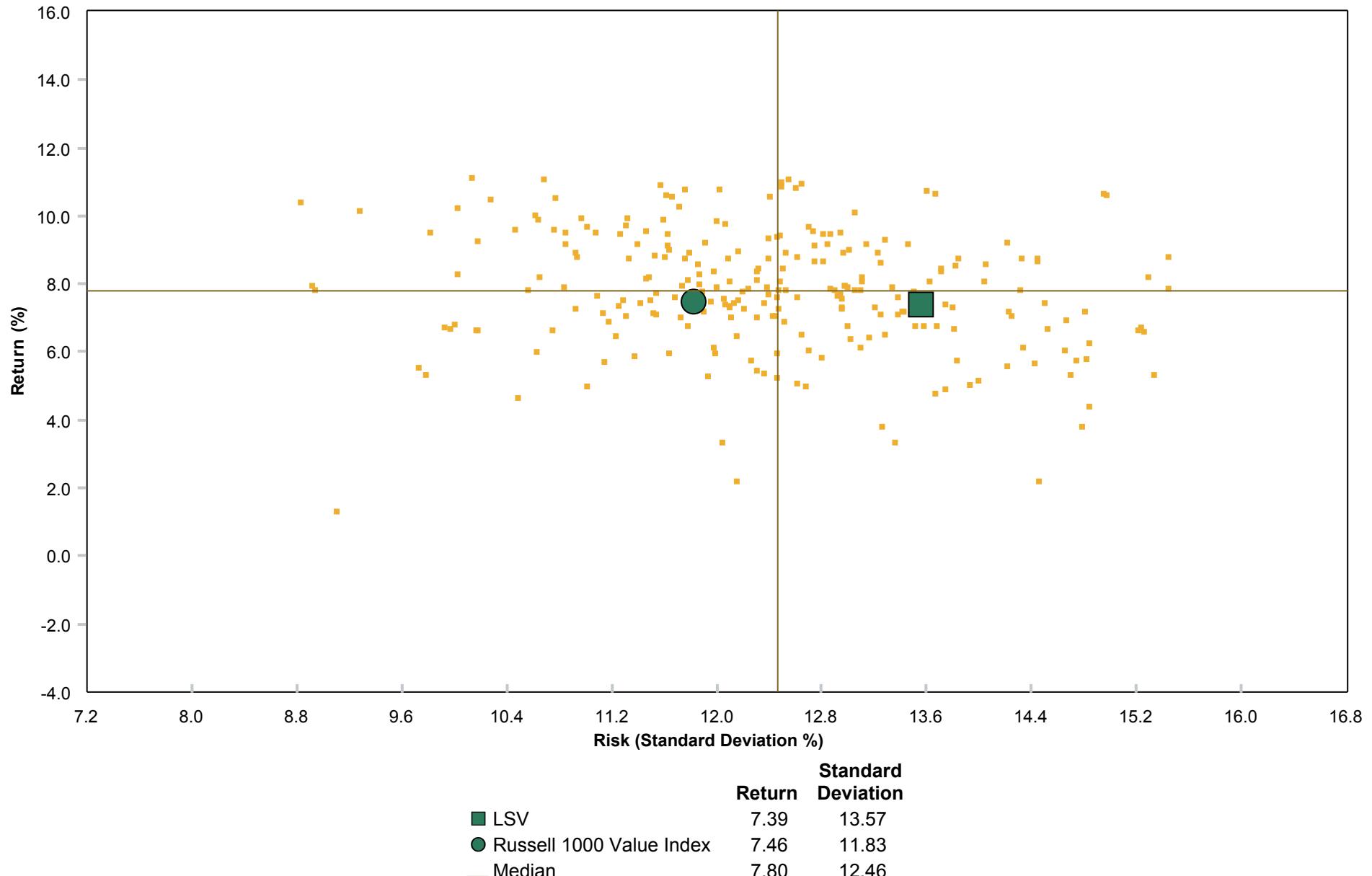
Calculation based on monthly periodicity.

Bristol County Retirement System

Peer Group Scattergram

IM U.S. Large Cap Value Equity (SA+CF)

5 Years Ending June 30, 2019



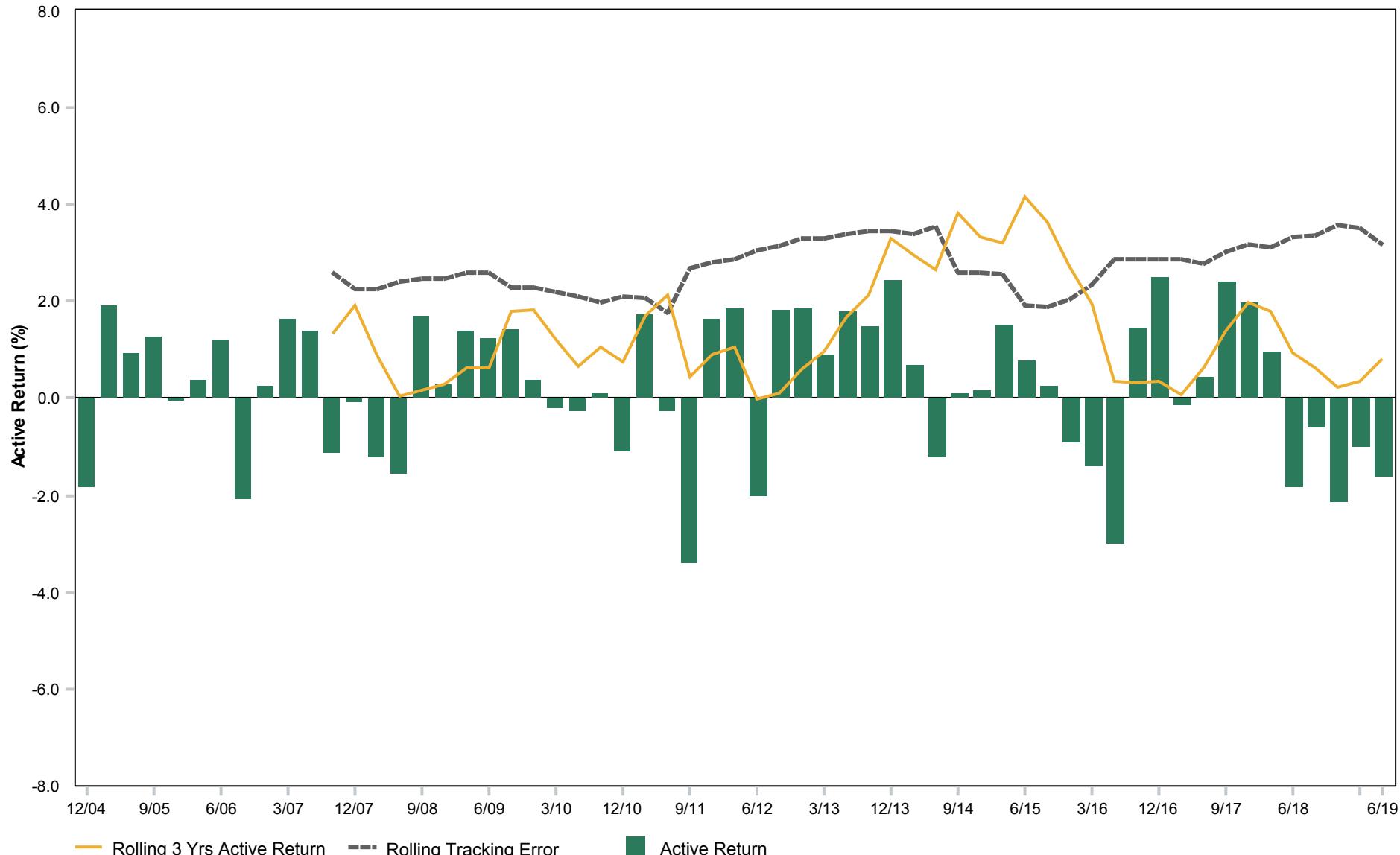
Calculation based on monthly periodicity.

Bristol County Retirement System

Comparative Performance & Rolling Return

As of June 30, 2019

	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	2018	2017	2016	2015
LSV	2.24	13.41	2.70	10.89	7.39	13.52	14.02	-11.72	18.89	16.66	-2.14
Russell 1000 Value Index	3.84	16.24	8.46	10.19	7.46	12.09	13.19	-8.27	13.66	17.34	-3.83
Difference	-1.60	-2.83	-5.76	0.70	-0.07	1.43	0.83	-3.45	5.23	-0.68	1.69



Bristol County Retirement System

LSV

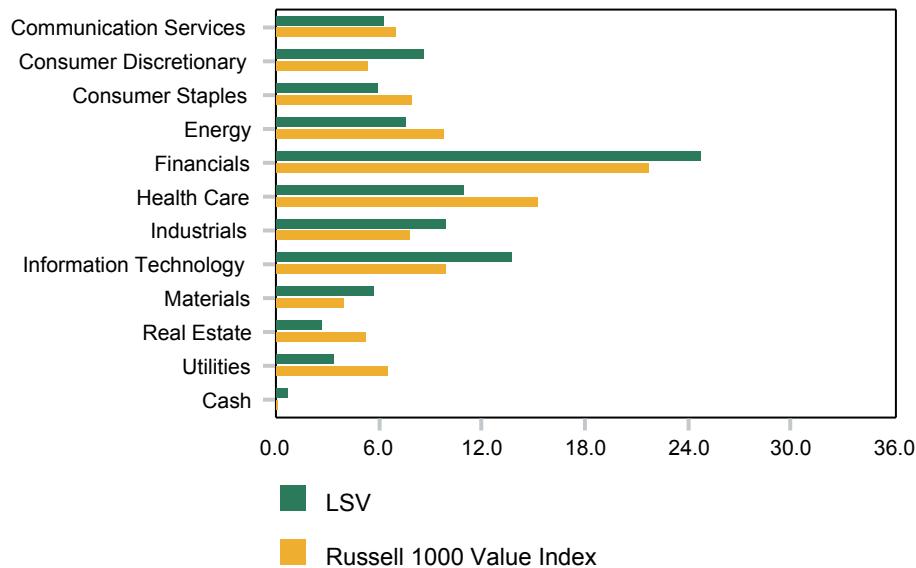
1 Quarter Ending June 30, 2019

Buy-and-Hold Portfolio	2.40
Portfolio Trading	-0.17
Actual Return	2.24
Benchmark Return	3.84
Actual Active Return	-1.61
Stock Selection	-1.67
Sector Selection	0.34
Interaction	0.07
Total Selection	-1.27
Portfolio Trading	-0.17
Benchmark Trading	0.17
Active Trading Impact	-0.34
Buy & Hold Active Return	-1.61

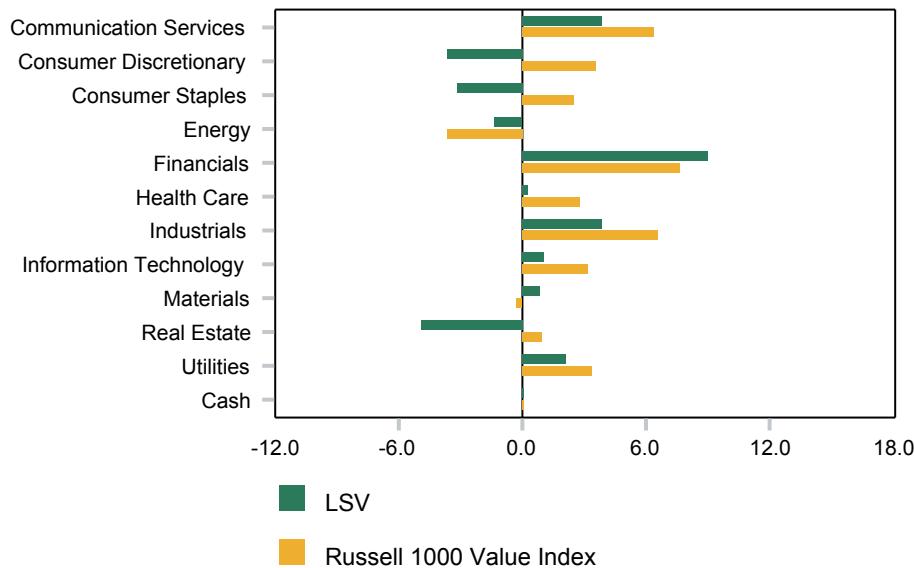
	Allocation — 04/01/2019		Performance — 1 Quarter Ending June 30, 2019		Attribution			Total
	Portfolio	Benchmark	Portfolio	Benchmark	Stock	Sector	Interaction	
Communication Services	6.22	6.92	3.88	6.41	-0.18	-0.02	0.02	-0.18
Consumer Discretionary	8.60	5.30	-3.71	3.60	-0.39	0.00	-0.24	-0.63
Consumer Staples	5.98	7.90	-3.22	2.56	-0.46	0.02	0.11	-0.32
Energy	7.56	9.71	-1.37	-3.63	0.22	0.16	-0.05	0.33
Financials	24.71	21.68	9.02	7.69	0.29	0.12	0.04	0.45
Health Care	10.86	15.27	0.26	2.84	-0.39	0.04	0.11	-0.24
Industrials	9.88	7.79	3.87	6.62	-0.21	0.06	-0.06	-0.21
Information Technology	13.74	9.82	1.08	3.17	-0.21	-0.02	-0.08	-0.31
Materials	5.74	3.98	0.91	-0.30	0.05	-0.07	0.02	0.00
Real Estate	2.67	5.19	-4.96	1.01	-0.31	0.07	0.15	-0.09
Utilities	3.33	6.45	2.09	3.42	-0.09	0.01	0.04	-0.04
Cash	0.72	0.00	0.00	0.00	0.00	-0.03	0.00	-0.03
Total	100.00	100.00	2.40	3.67	-1.67	0.34	0.07	-1.27

Bristol County Retirement System

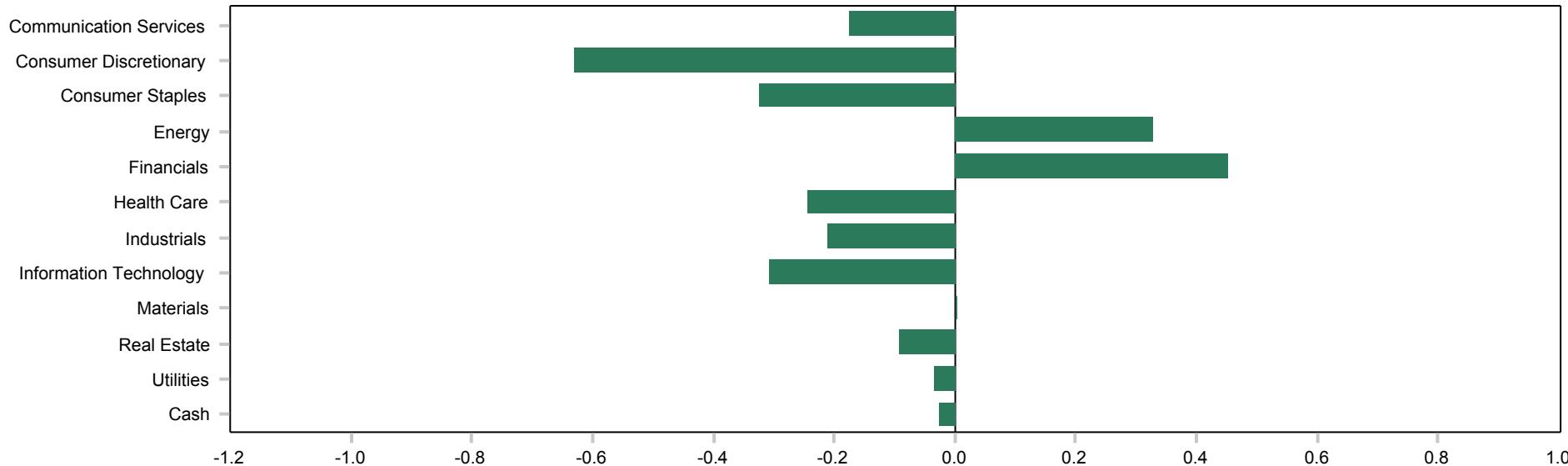
Allocation



Performance



Total Attribution



Bristol County Retirement System

Buy and Hold Style Attribution

1 Quarter Ending June 30, 2019

Buy-and-Hold Portfolio	2.40
Portfolio Trading	-0.17
Actual Return	2.24
Benchmark Return	3.84
Actual Active Return	-1.61
Stock Selection	-1.35
Style Selection	-0.47
Interaction	0.54
Total Selection	-1.27
Portfolio Trading	-0.17
Benchmark Trading	0.17
Active Trading Impact	-0.34
Buy & Hold Active Return	-1.61

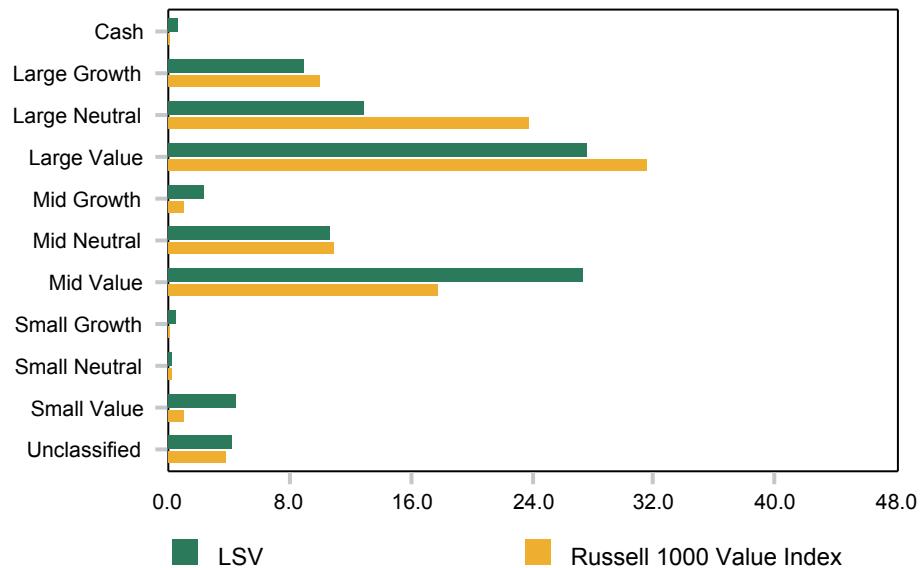
	Allocation-04/01/2019		Performance-1 Quarter Ending June 30, 2019			Attribution		
	Portfolio	Benchmark	Portfolio	Benchmark	Stock	Style	Interaction	Total
Cash	0.72	0.00	0.00	0.00	0.00	-0.03	0.00	-0.03
Large Growth	8.88	10.01	0.83	4.26	-0.34	-0.01	0.04	-0.31
Large Neutral	12.84	23.75	0.57	4.26	-0.88	-0.06	0.40	-0.54
Large Value	27.67	31.52	3.73	3.88	-0.05	-0.01	0.01	-0.05
Mid Growth	2.41	0.99	-2.00	3.85	-0.06	0.00	-0.08	-0.14
Mid Neutral	10.65	10.92	2.16	4.70	-0.28	0.00	0.01	-0.27
Mid Value	27.29	17.80	4.13	2.54	0.28	-0.11	0.15	0.33
Small Growth	0.54	0.02	-4.00	-4.57	0.00	-0.04	0.00	-0.04
Small Neutral	0.32	0.21	-5.74	-2.02	-0.01	-0.01	0.00	-0.02
Small Value	4.53	1.01	-1.19	-1.93	0.01	-0.20	0.03	-0.16
Unclassified	4.15	3.79	0.22	0.86	-0.02	-0.01	0.00	-0.04
Total	100.00	100.00	2.40	3.67	-1.35	-0.47	0.54	-1.27

Bristol County Retirement System

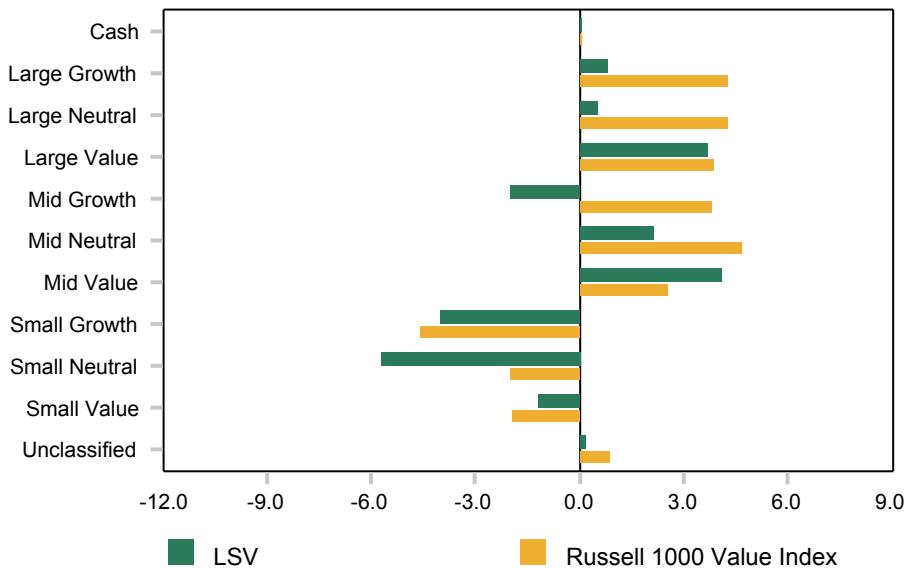
Buy and Hold Style Attribution Graph

1 Quarter Ending June 30, 2019

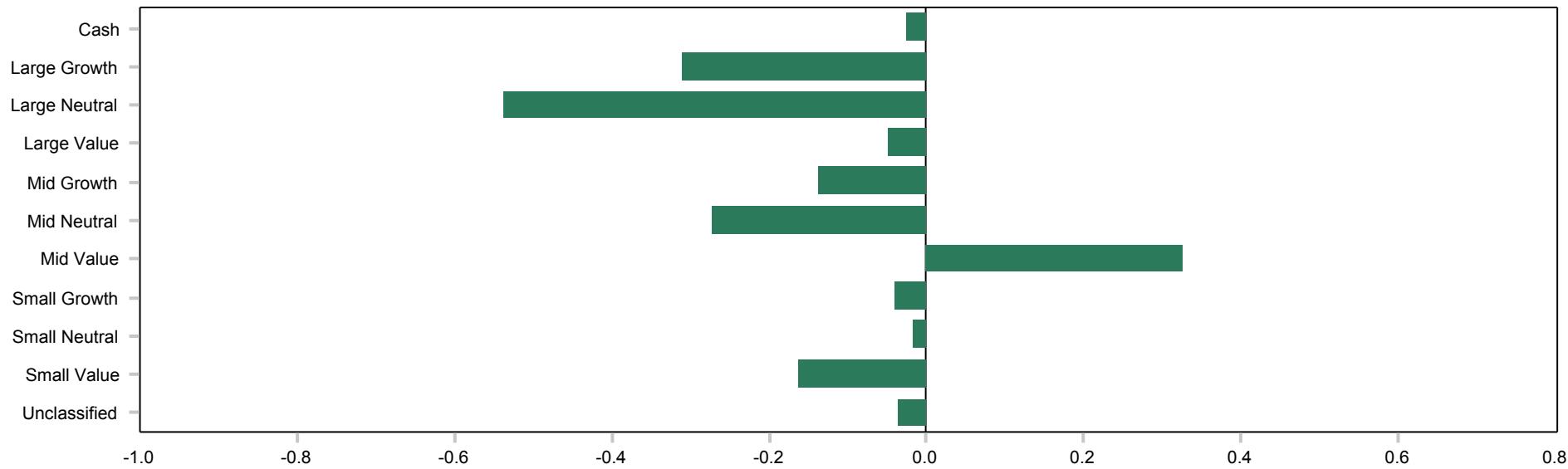
Allocation



Performance



Total Attribution



As of June 30, 2019

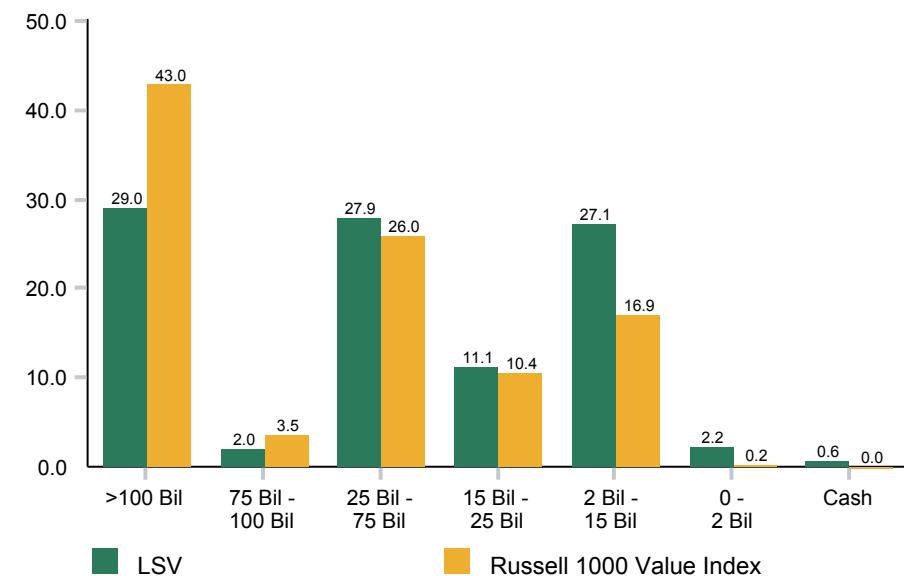
Top Ten Equity Holdings

	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
JPMorgan Chase & Co	2.90	2.75	0.15	11.28
Pfizer Inc	2.71	1.85	0.86	2.90
Verizon Communications Inc	2.55	1.76	0.79	-2.39
Intel Corp	2.41	1.60	0.81	-10.31
Citigroup Inc	2.34	1.24	1.10	13.27
Bank of America Corp	2.16	1.95	0.21	5.68
Amgen Inc	1.67	0.05	1.62	-2.17
Johnson & Johnson	1.52	2.28	-0.76	0.32
HCA Healthcare Inc	1.52	0.08	1.44	4.02
AT&T Inc	1.47	1.81	-0.34	8.57
% of Portfolio	21.25	15.37	5.88	

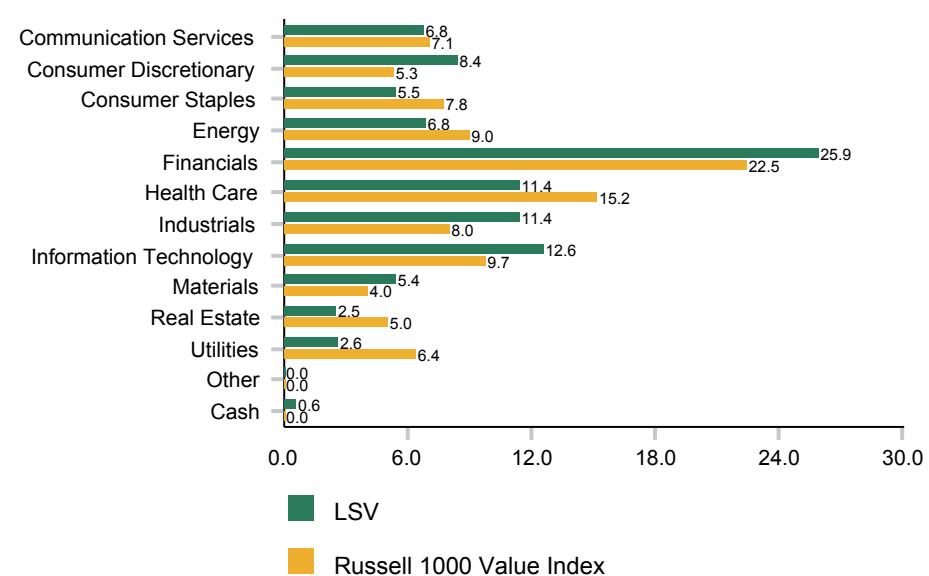
Portfolio Characteristics

	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$)	86,658,121,225	130,324,341,559
Median Mkt. Cap (\$)	16,360,824,830	9,656,273,640
Price/Earnings ratio	12.39	17.37
Price/Book ratio	2.11	2.26
5 Yr. EPS Growth Rate (%)	10.43	7.07
Current Yield (%)	3.02	2.59
Beta (5 Years, Monthly)	1.13	1.00
Number of Stocks	139	722

Distribution of Market Capitalization (%)



Sector Weights (%)



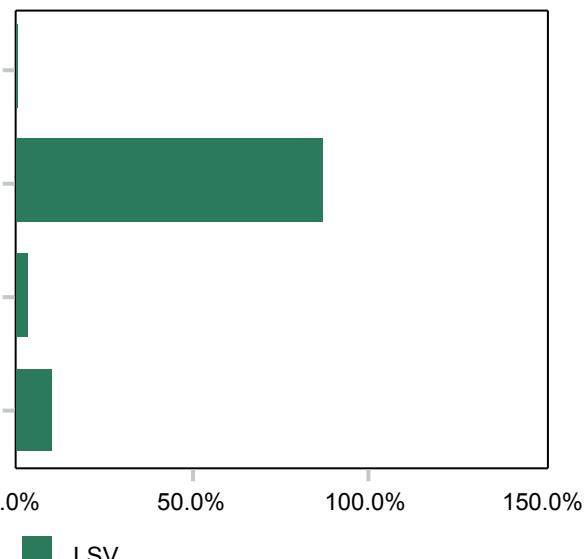
Bristol County Retirement System

Style Analysis

Ending June 30, 2019

Investment Style Exposure

Russell 1000 Growth Index

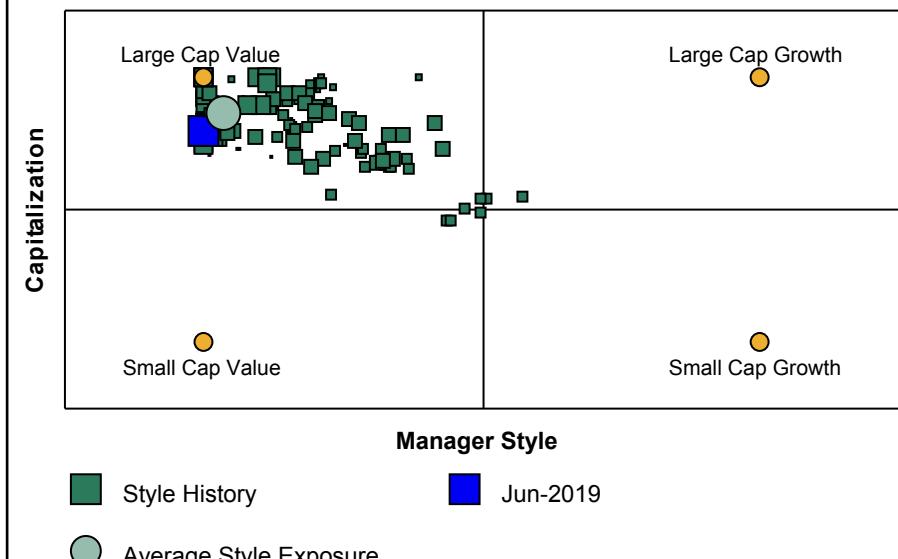


Russell 1000 Value Index

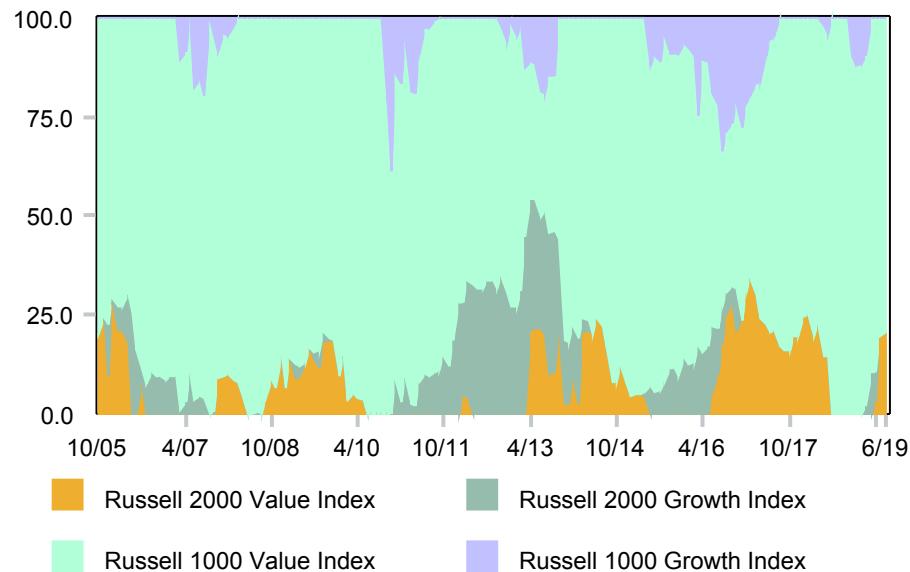
Russell 2000 Growth Index

Russell 2000 Value Index

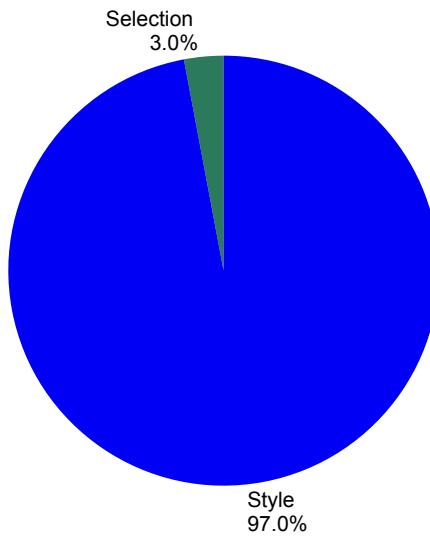
Style Map(ppp)



Style History(ppp)



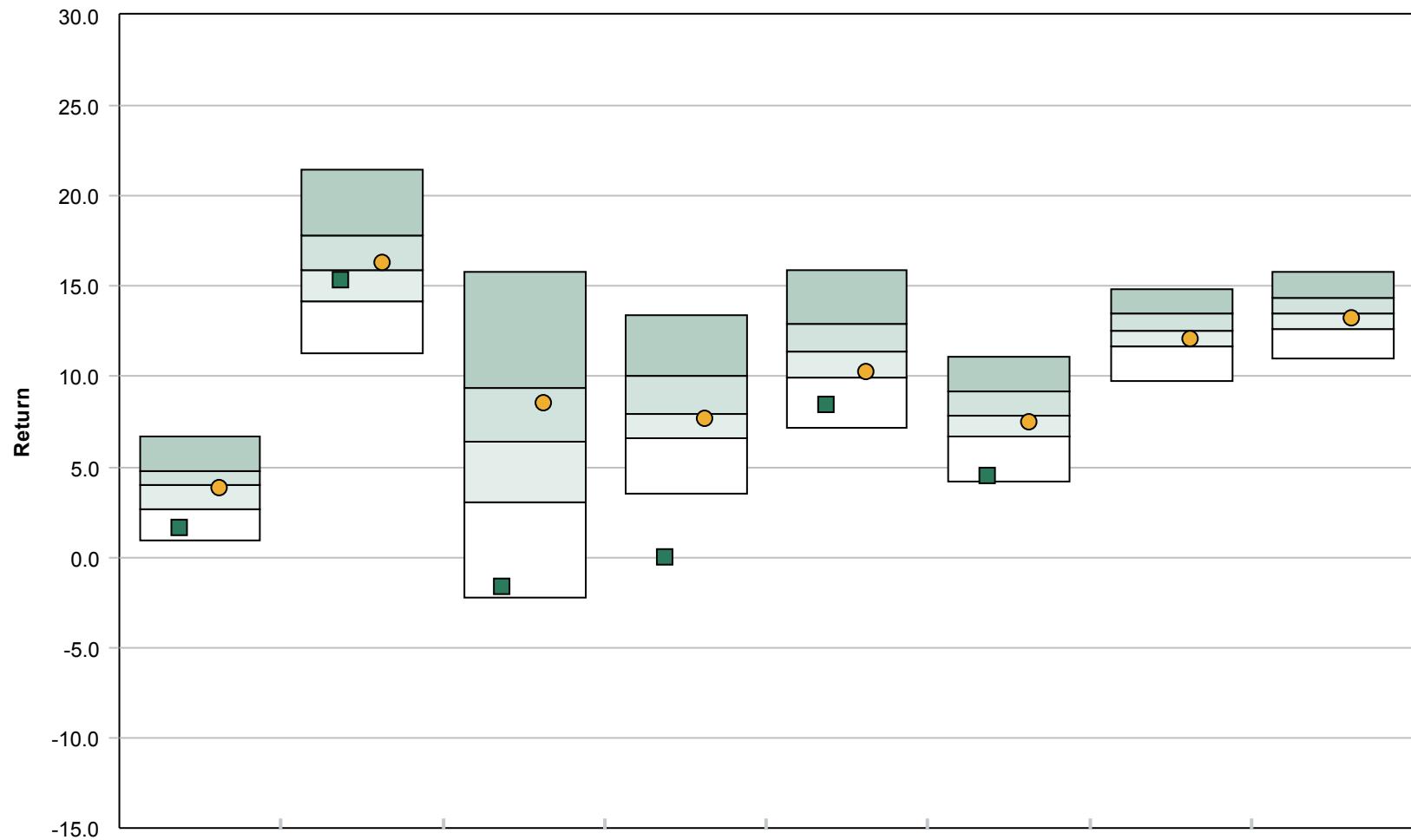
Return Variance



Bristol County Retirement System

IM U.S. Large Cap Value Equity (SA+CF)

As of June 30, 2019



	1 Qtr	YTD	1 Yr	2 Yrs	3 Yrs	5 Yrs	7 Yrs	10 Yrs
Lyrical	1.63 (91)	15.31 (60)	-1.65 (94)	-0.02 (100)	8.40 (92)	4.43 (95)	N/A	N/A
Russell 1000 Value Index	3.84 (53)	16.24 (43)	8.46 (32)	7.61 (55)	10.19 (71)	7.46 (59)	12.09 (63)	13.19 (61)
5th Percentile	6.66	21.43	15.82	13.43	15.85	11.10	14.84	15.76
1st Quartile	4.72	17.82	9.40	10.08	12.89	9.15	13.48	14.35
Median	3.95	15.92	6.44	7.95	11.34	7.79	12.56	13.50
3rd Quartile	2.63	14.19	3.08	6.57	9.98	6.72	11.67	12.66
95th Percentile	0.89	11.26	-2.24	3.56	7.16	4.15	9.73	11.02

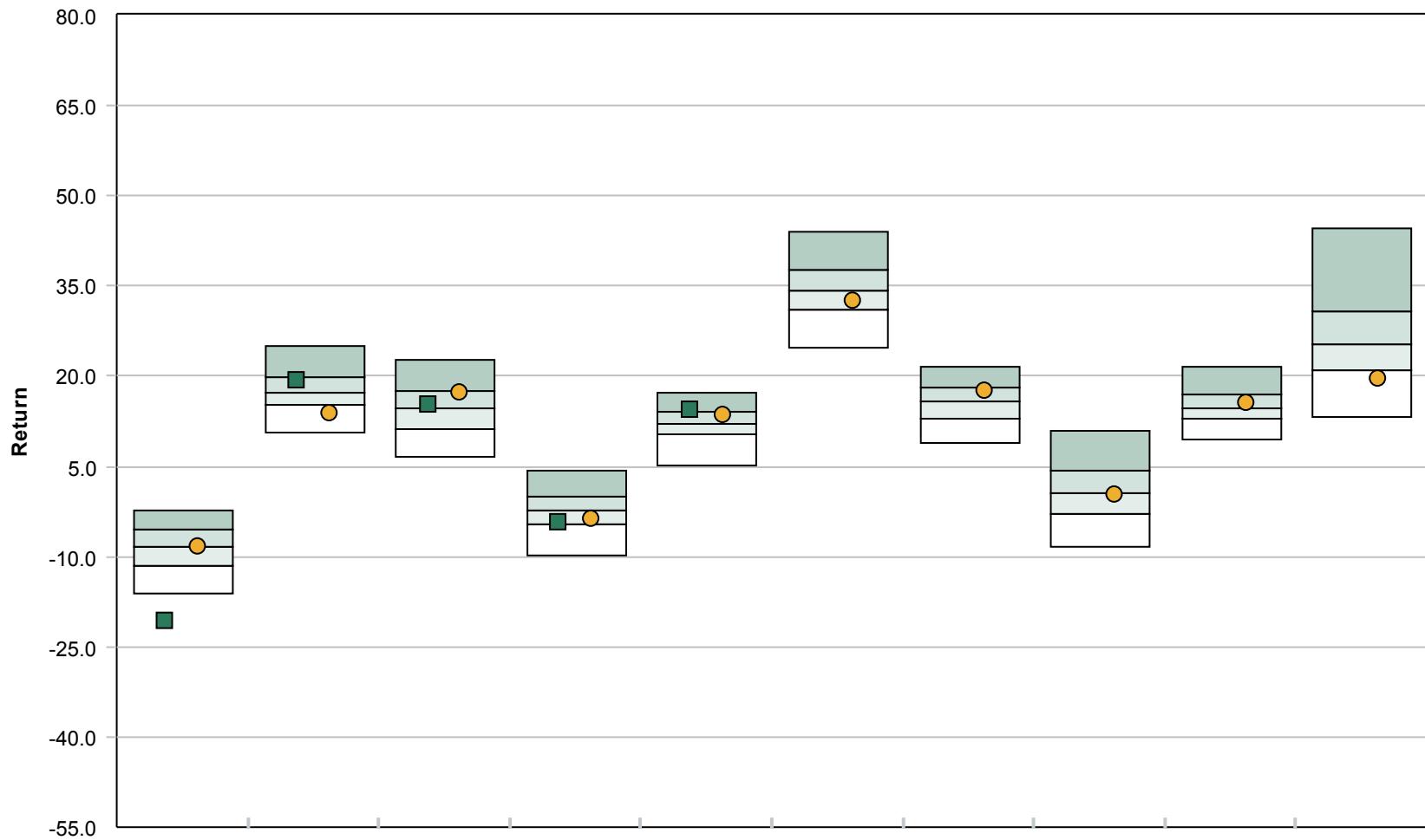
Parentheses contain percentile rankings.

Calculation based on monthly periodicity.

Bristol County Retirement System

IM U.S. Large Cap Value Equity (SA+CF)

As of June 30, 2019



	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
Lyrical	-20.80 (100)	19.32 (31)	15.33 (43)	-4.25 (72)	14.28 (23)	N/A	N/A	N/A	N/A	N/A
Russell 1000 Value Index	-8.27 (49)	13.66 (88)	17.34 (26)	-3.83 (69)	13.45 (35)	32.53 (62)	17.51 (29)	0.39 (52)	15.51 (41)	19.69 (80)
5th Percentile	-2.21	24.95	22.66	4.28	17.12	44.06	21.67	10.90	21.44	44.53
1st Quartile	-5.52	19.97	17.56	0.09	14.07	37.74	18.00	4.19	16.89	30.88
Median	-8.39	17.21	14.52	-2.25	12.19	34.26	15.67	0.61	14.63	25.25
3rd Quartile	-11.45	15.12	11.29	-4.75	10.31	31.11	12.95	-2.99	12.83	20.98
95th Percentile	-16.07	10.58	6.59	-9.72	5.18	24.83	8.91	-8.26	9.57	13.32

Parentheses contain percentile rankings.

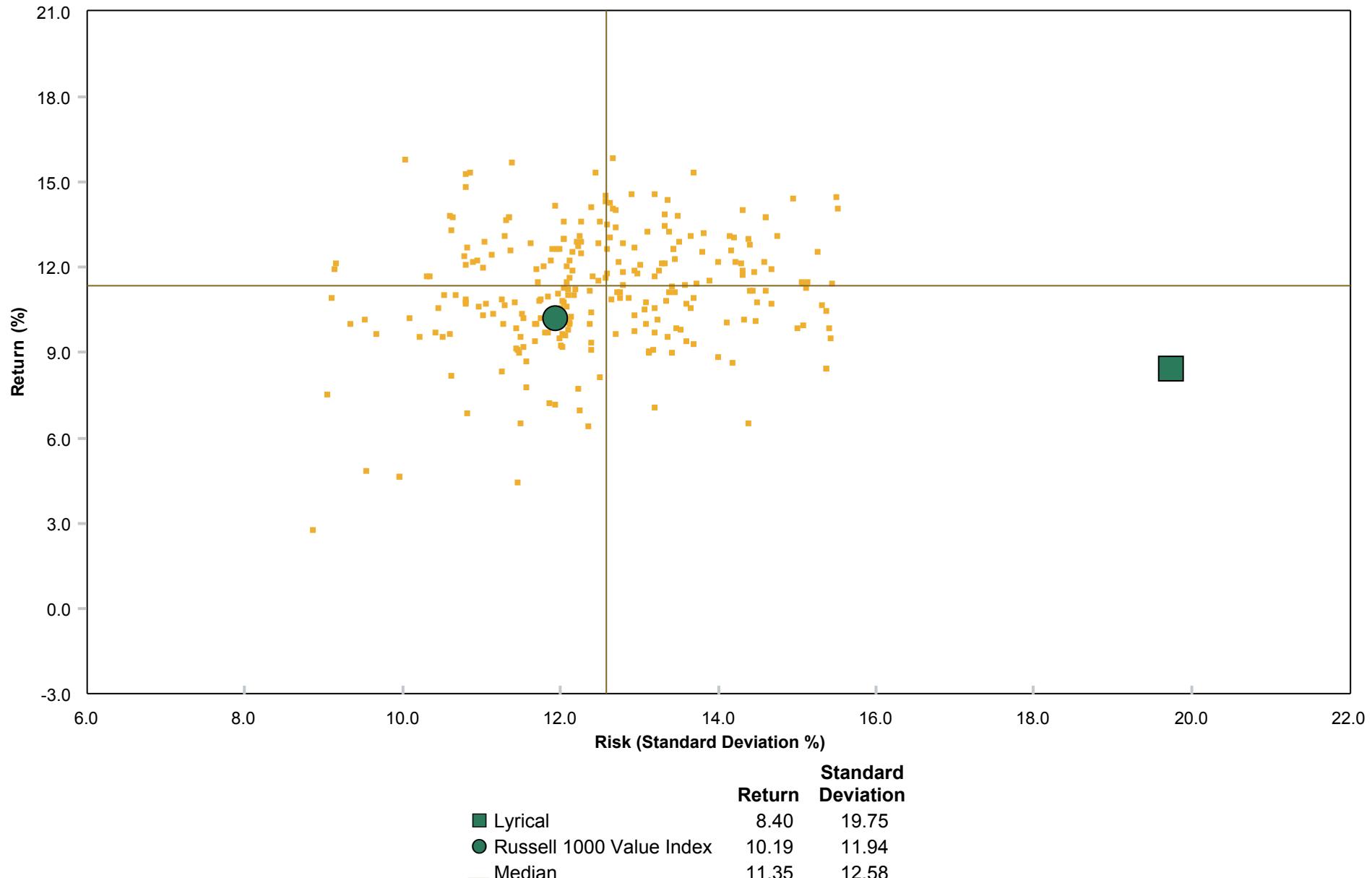
Calculation based on monthly periodicity.

Bristol County Retirement System

Peer Group Scattergram

IM U.S. Large Cap Value Equity (SA+CF)

3 Years Ending June 30, 2019



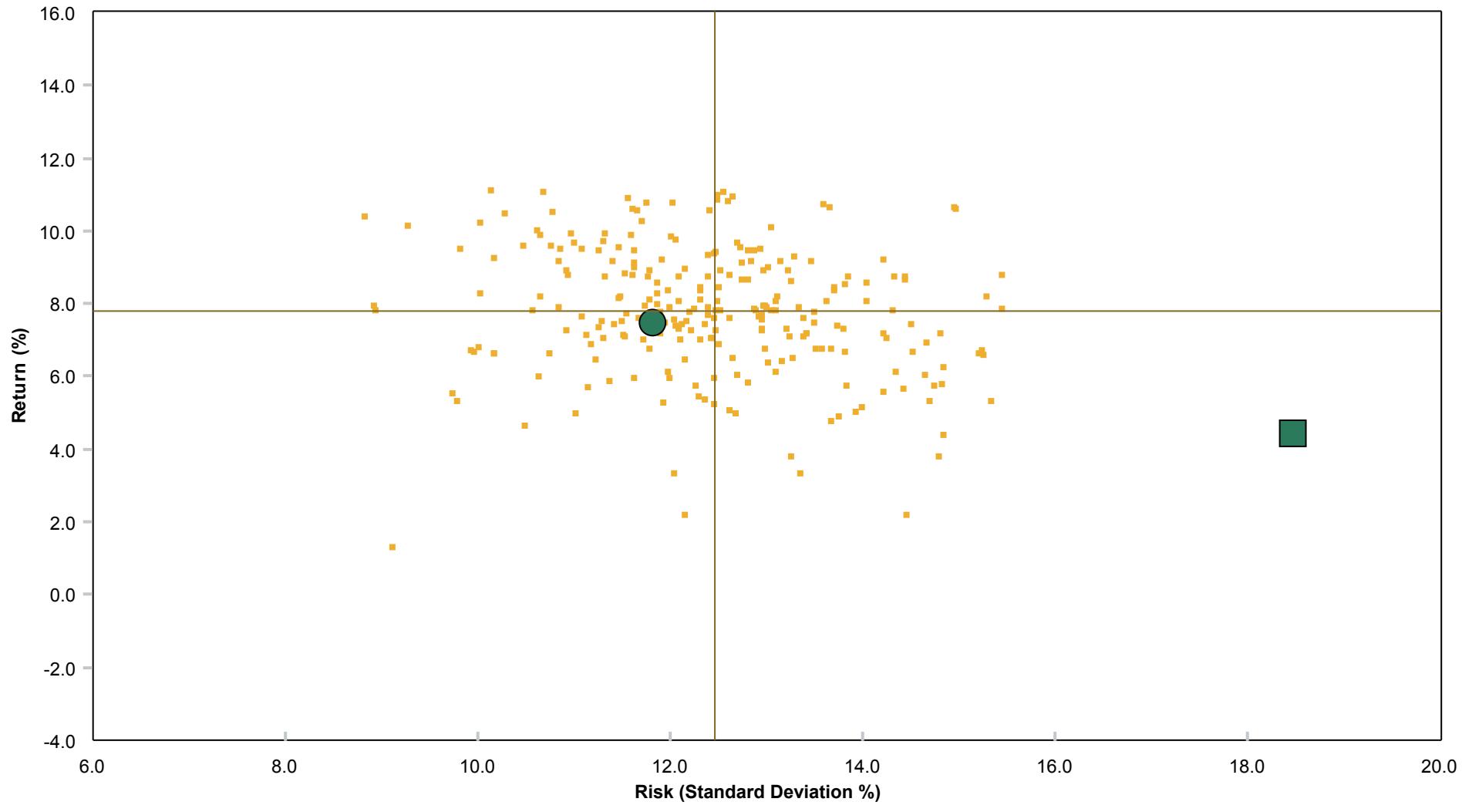
Calculation based on monthly periodicity.

Bristol County Retirement System

Peer Group Scattergram

IM U.S. Large Cap Value Equity (SA+CF)

5 Years Ending June 30, 2019



	Return	Standard Deviation
Lyrical	4.43	18.48
Russell 1000 Value Index	7.46	11.83
Median	7.80	12.46

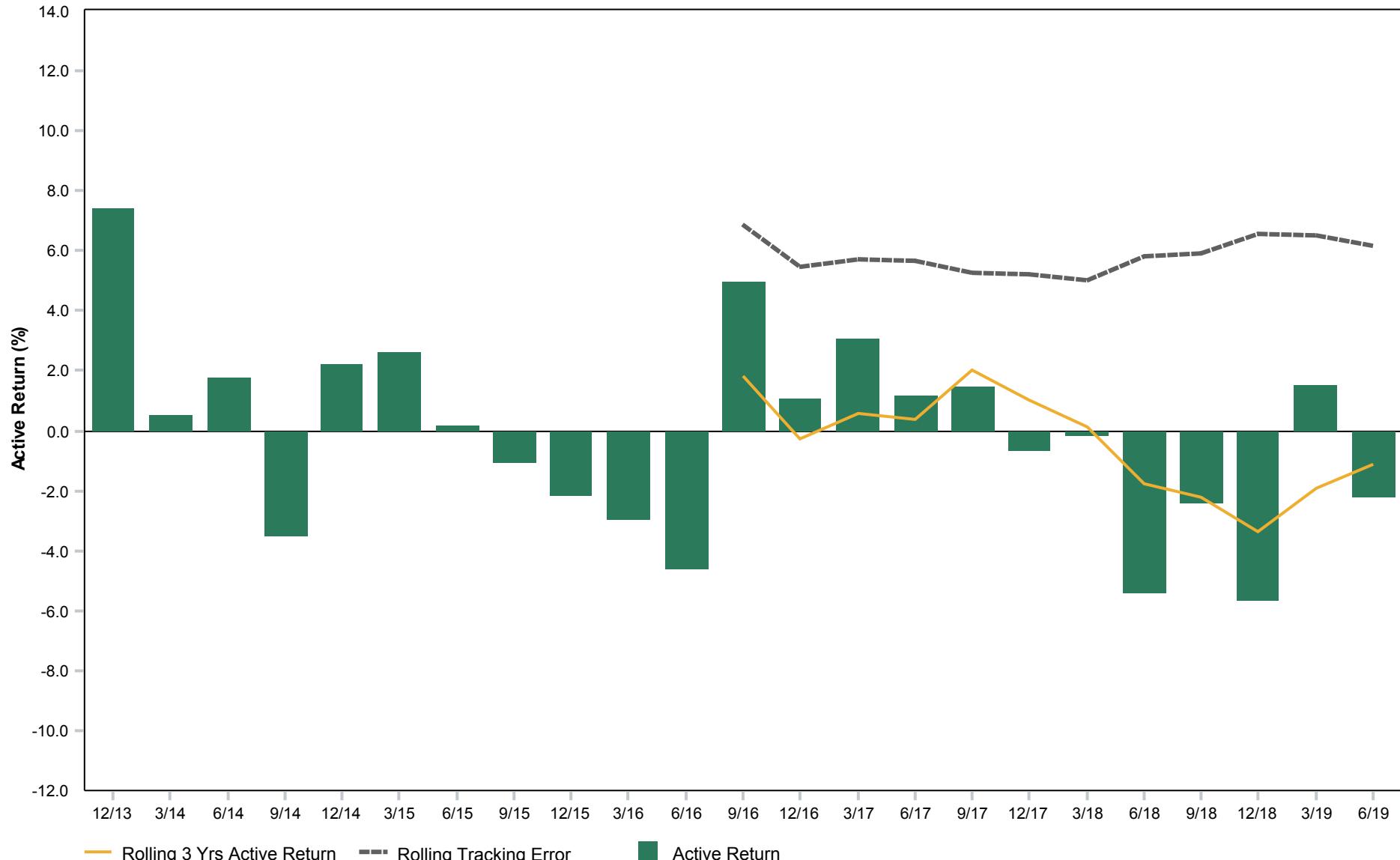
Calculation based on monthly periodicity.

Bristol County Retirement System

Comparative Performance & Rolling Return

As of June 30, 2019

	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	2018	2017	2016	2015
Lyrical	1.63	15.31	-1.65	8.40	4.43	N/A	N/A	-20.80	19.32	15.33	-4.25
Russell 1000 Value Index	3.84	16.24	8.46	10.19	7.46	12.09	13.19	-8.27	13.66	17.34	-3.83
Difference	-2.21	-0.93	-10.11	-1.79	-3.03	N/A	N/A	-12.53	5.66	-2.01	-0.42



— Rolling 3 Yrs Active Return - - - Rolling Tracking Error

■ Active Return

Bristol County Retirement System

Lyrical

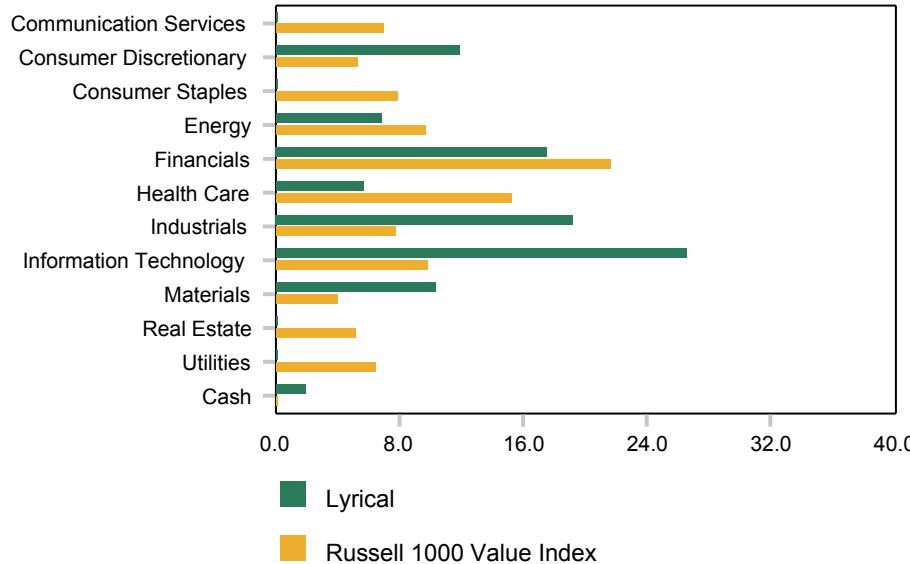
1 Quarter Ending June 30, 2019

Buy-and-Hold Portfolio	2.02
Portfolio Trading	-0.39
Actual Return	1.63
Benchmark Return	3.84
Actual Active Return	-2.21
Stock Selection	-0.49
Sector Selection	0.11
Interaction	-1.27
Total Selection	-1.65
Portfolio Trading	-0.39
Benchmark Trading	0.17
Active Trading Impact	-0.56
Buy & Hold Active Return	-2.21

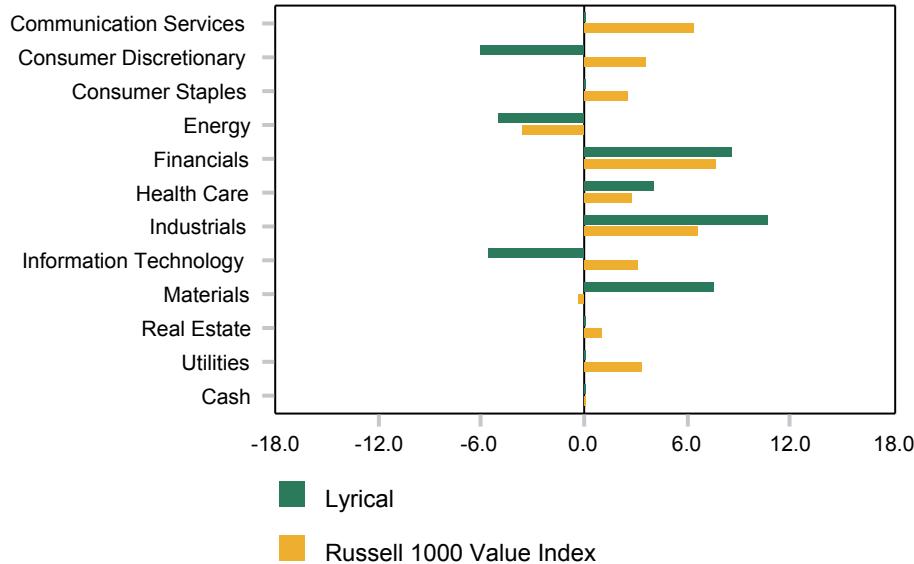
	Allocation — 04/01/2019		Performance — 1 Quarter Ending June 30, 2019		Attribution			
	Portfolio	Benchmark	Portfolio	Benchmark	Stock	Sector	Interaction	Total
Communication Services	0.00	6.92	0.00	6.41	0.00	-0.19	0.00	-0.19
Consumer Discretionary	11.93	5.30	-6.09	3.60	-0.51	0.00	-0.64	-1.16
Consumer Staples	0.00	7.90	0.00	2.56	0.00	0.09	0.00	0.09
Energy	6.85	9.71	-4.96	-3.63	-0.13	0.21	0.04	0.12
Financials	17.52	21.68	8.64	7.69	0.21	-0.17	-0.04	0.00
Health Care	5.71	15.27	4.02	2.84	0.18	0.08	-0.11	0.15
Industrials	19.29	7.79	10.68	6.62	0.32	0.34	0.47	1.12
Information Technology	26.54	9.82	-5.58	3.17	-0.86	-0.08	-1.46	-2.41
Materials	10.26	3.98	7.49	-0.30	0.31	-0.25	0.49	0.55
Real Estate	0.00	5.19	0.00	1.01	0.00	0.14	0.00	0.14
Utilities	0.00	6.45	0.00	3.42	0.00	0.02	0.00	0.02
Cash	1.90	0.00	0.00	0.00	0.00	-0.07	0.00	-0.07
Total	100.00	100.00	2.02	3.67	-0.49	0.11	-1.27	-1.65

Bristol County Retirement System

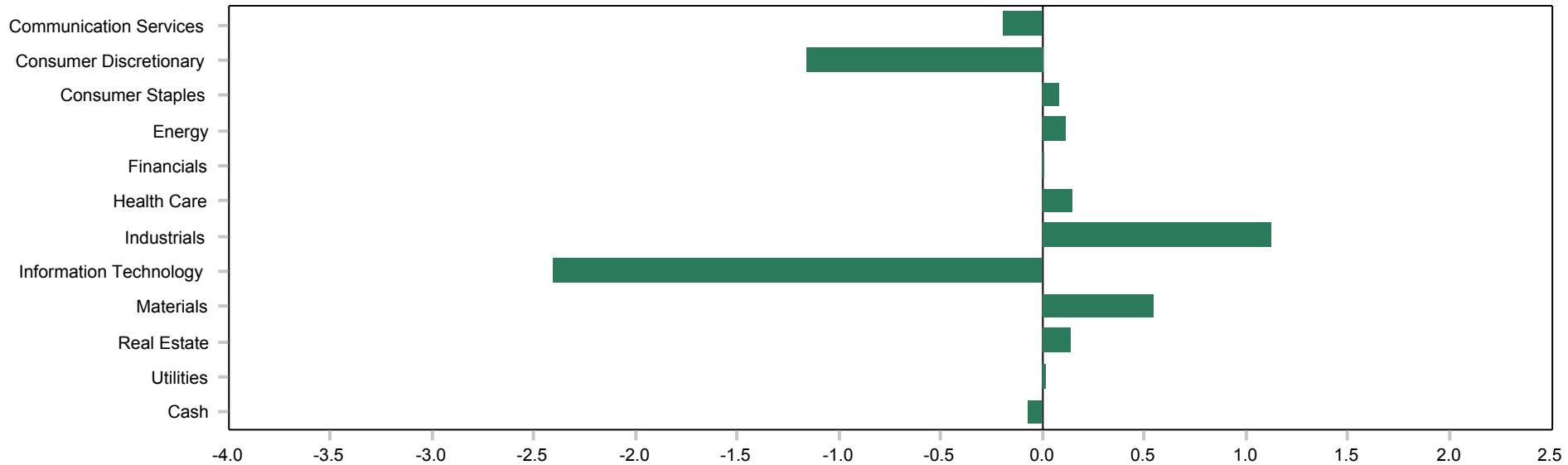
Allocation



Performance



Total Attribution



Buy and Hold Sector Attribution Graph

1 Quarter Ending June 30, 2019

Bristol County Retirement System

Buy and Hold Style Attribution

1 Quarter Ending June 30, 2019

Buy-and-Hold Portfolio	2.02
Portfolio Trading	-0.39
Actual Return	1.63
Benchmark Return	3.84
Actual Active Return	-2.21
Stock Selection	-0.83
Style Selection	-0.87
Interaction	0.05
Total Selection	-1.65
Portfolio Trading	-0.39
Benchmark Trading	0.17
Active Trading Impact	-0.56
Buy & Hold Active Return	-2.21

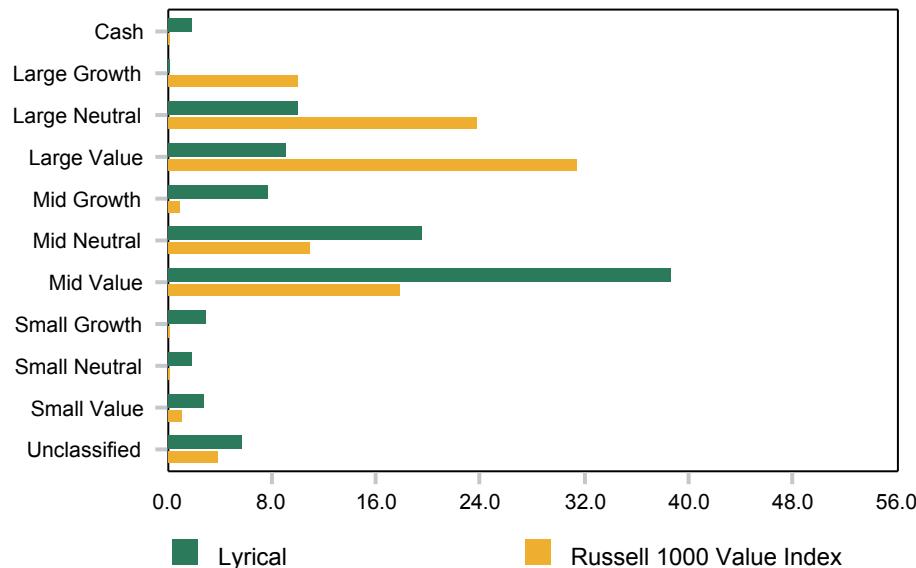
	Allocation-04/01/2019		Performance-1 Quarter Ending June 30, 2019			Attribution		
	Portfolio	Benchmark	Portfolio	Benchmark	Stock	Style	Interaction	Total
Cash	1.90	0.00	0.00	0.00	0.00	-0.07	0.00	-0.07
Large Growth	0.00	10.01	0.00	4.26	0.00	-0.06	0.00	-0.06
Large Neutral	9.99	23.75	-2.91	4.26	-1.70	-0.08	0.99	-0.80
Large Value	9.06	31.52	7.19	3.88	1.04	-0.05	-0.74	0.25
Mid Growth	7.66	0.99	4.83	3.85	0.01	0.01	0.07	0.09
Mid Neutral	19.56	10.92	5.72	4.70	0.11	0.09	0.09	0.29
Mid Value	38.65	17.80	0.27	2.54	-0.40	-0.24	-0.47	-1.11
Small Growth	2.95	0.02	0.86	-4.57	0.00	-0.24	0.16	-0.08
Small Neutral	1.78	0.21	-8.73	-2.02	-0.01	-0.09	-0.10	-0.21
Small Value	2.75	1.01	-1.04	-1.93	0.01	-0.10	0.02	-0.07
Unclassified	5.71	3.79	4.02	0.86	0.12	-0.05	0.06	0.13
Total	100.00	100.00	2.02	3.67	-0.83	-0.87	0.05	-1.65

Bristol County Retirement System

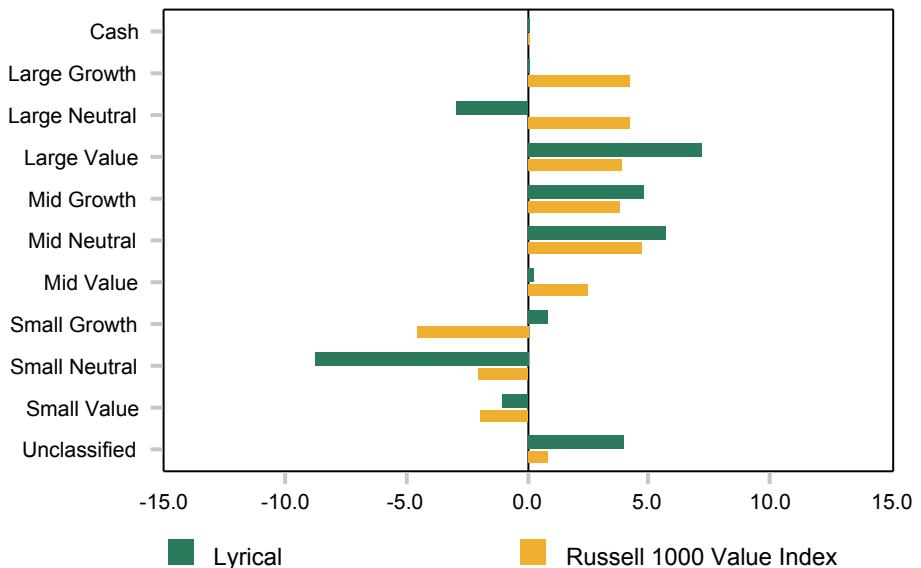
Buy and Hold Style Attribution Graph

1 Quarter Ending June 30, 2019

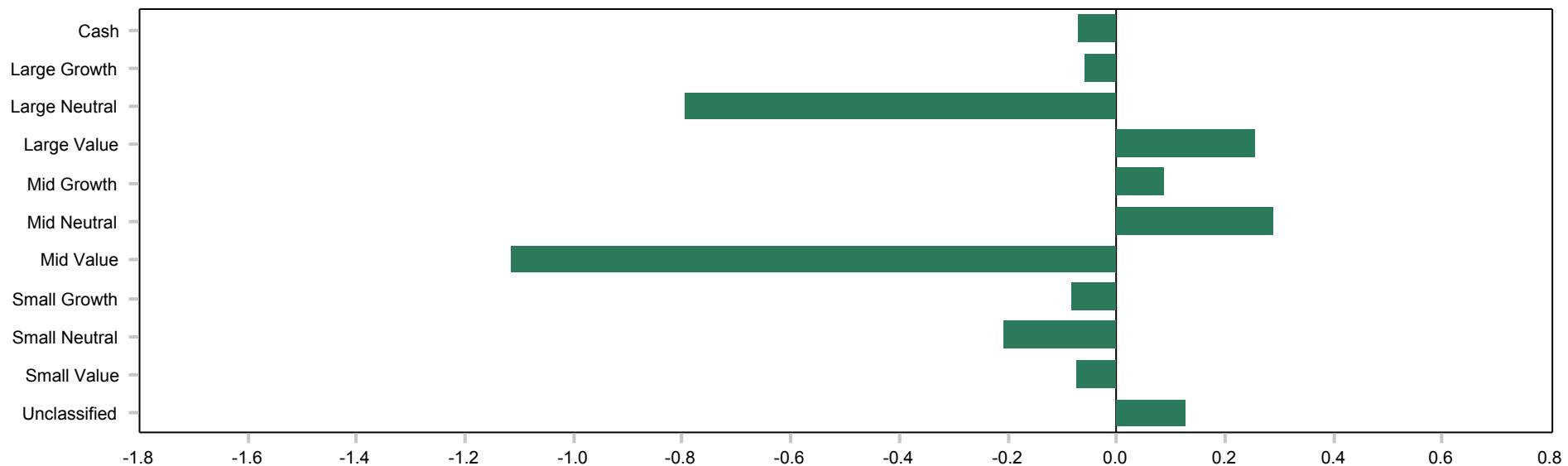
Allocation



Performance



Total Attribution



As of June 30, 2019

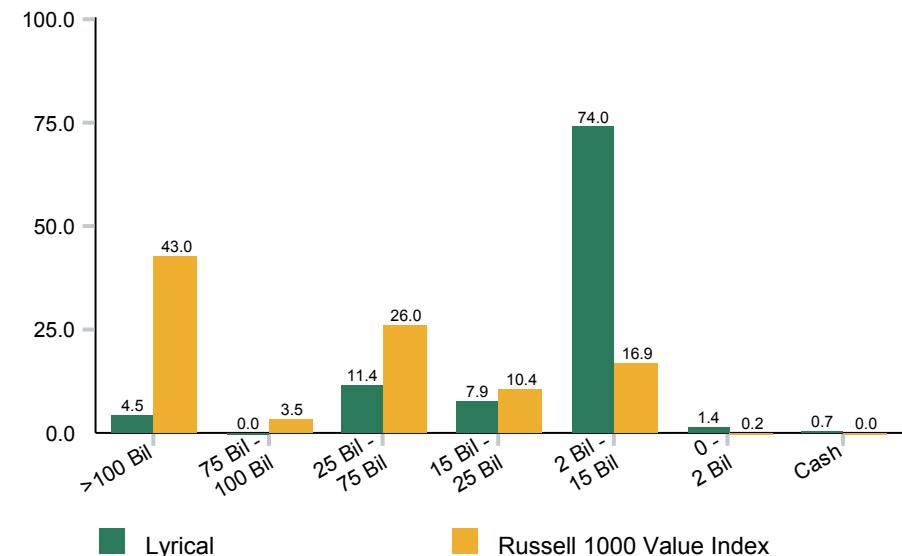
Top Ten Equity Holdings

	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
HCA Healthcare Inc	5.86	0.08	5.78	4.02
AerCap Holdings NV	5.26	0.00	5.26	11.75
Celanese Corp	5.09	0.04	5.05	9.94
Assurant Inc.	4.66	0.05	4.61	12.75
Crown Holdings Inc	4.55	0.00	4.55	11.97
Broadcom Inc	4.52	0.35	4.17	-3.35
Lincoln National Corp	4.26	0.10	4.16	10.45
Ameriprise Financial Inc	4.02	0.12	3.90	14.06
Tech Data Corp	3.98	0.00	3.98	2.14
Microchip Technology Inc	3.91	0.00	3.91	4.99
% of Portfolio	46.11	0.74	45.37	

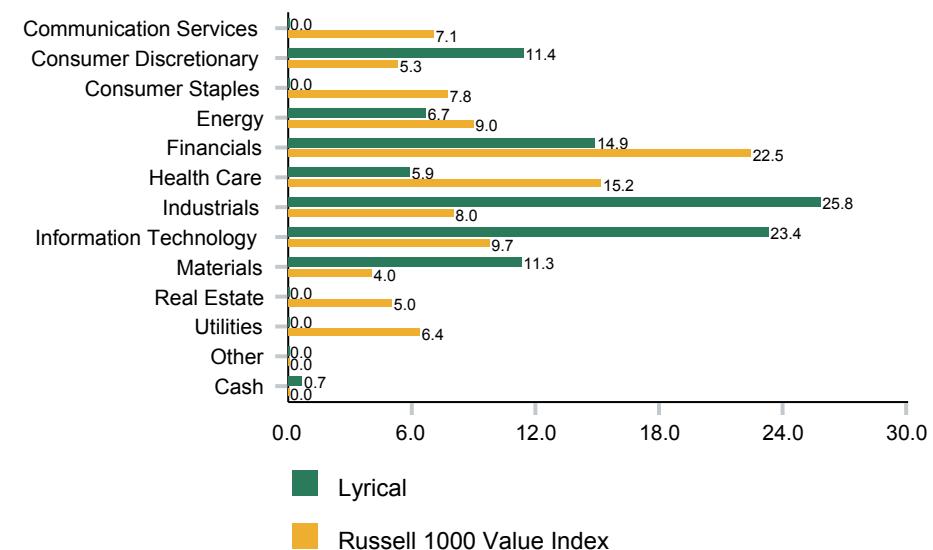
Portfolio Characteristics

	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$)	17,625,248,647	130,324,341,559
Median Mkt. Cap (\$)	6,224,530,620	9,656,273,640
Price/Earnings ratio	13.63	17.37
Price/Book ratio	2.21	2.26
5 Yr. EPS Growth Rate (%)	9.15	7.07
Current Yield (%)	1.47	2.59
Beta (5 Years, Monthly)	1.44	1.00
Number of Stocks	34	722

Distribution of Market Capitalization (%)



Sector Weights (%)

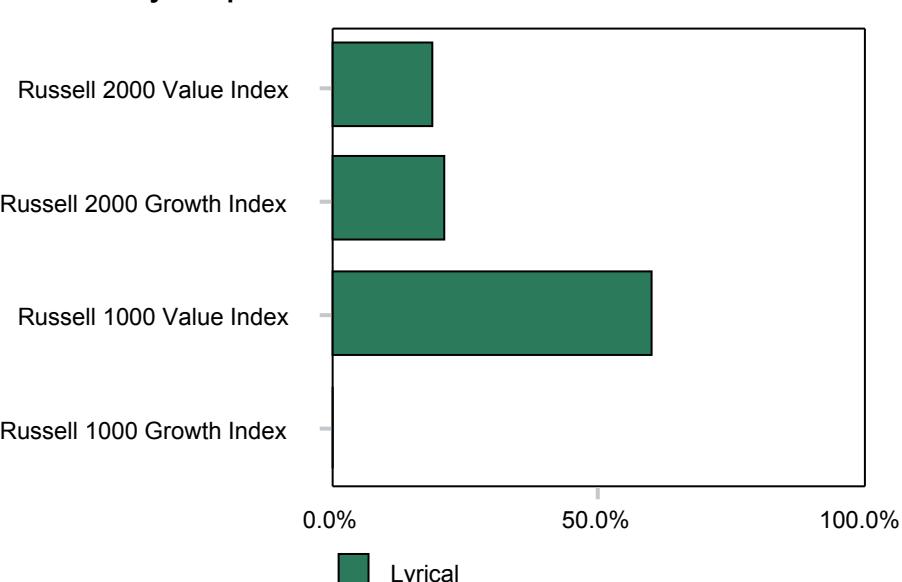


Bristol County Retirement System

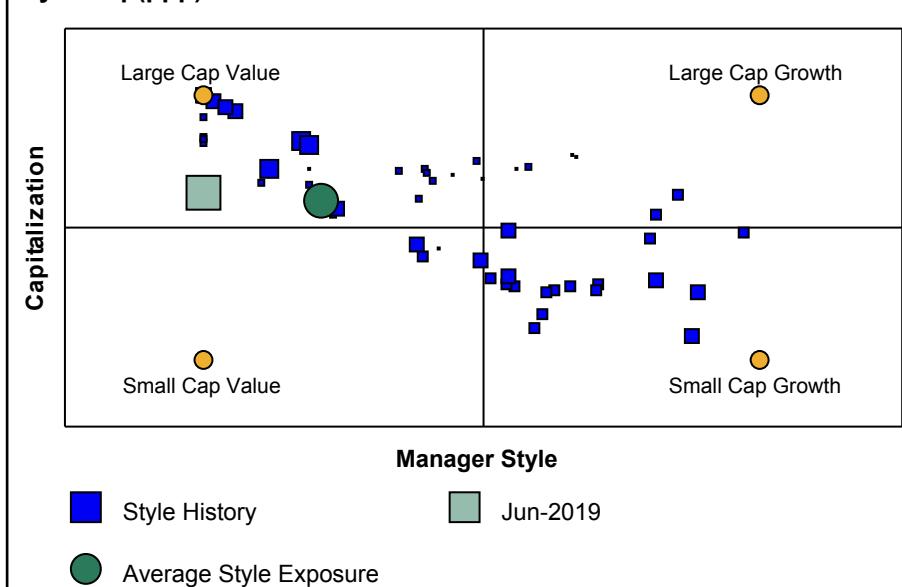
Style Analysis

Ending June 30, 2019

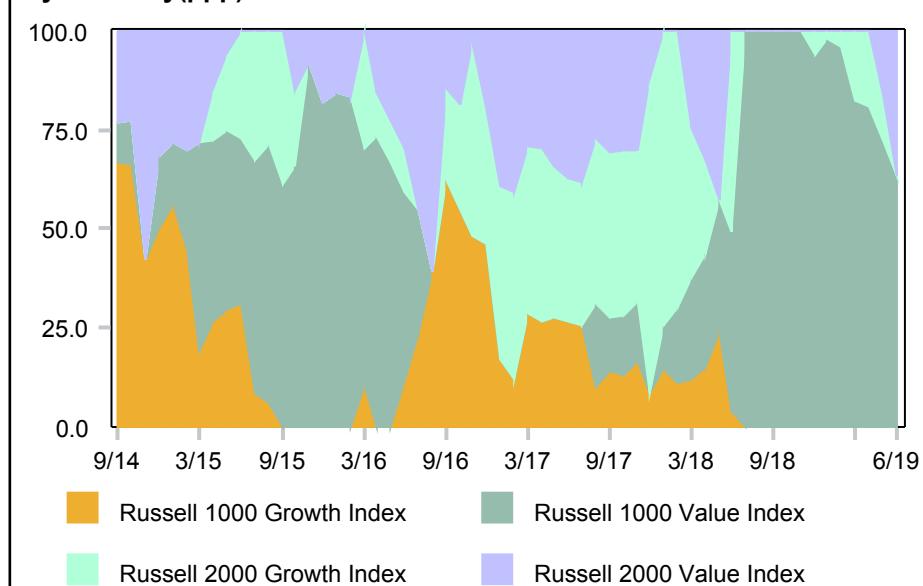
Investment Style Exposure



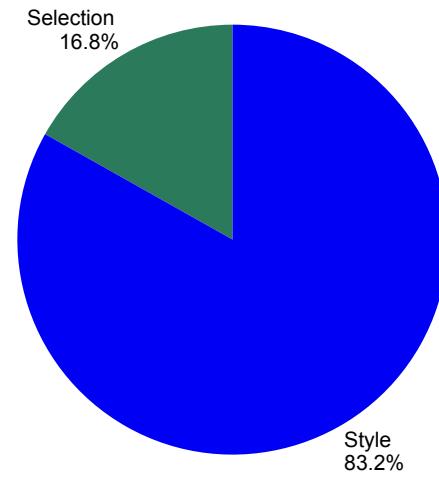
Style Map(ppp)



Style History(ppp)



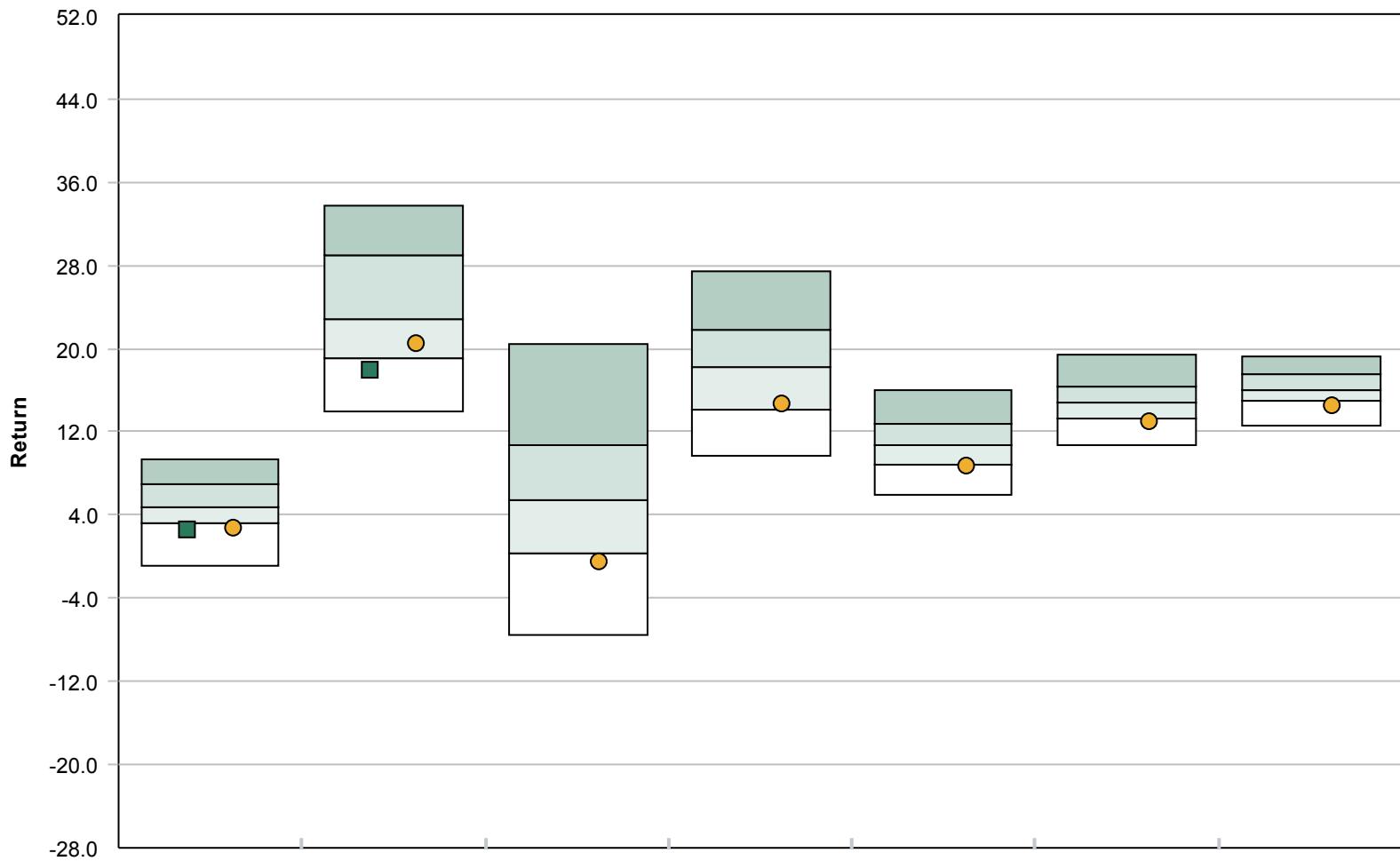
Return Variance



Bristol County Retirement System

IM U.S. Small Cap Growth Equity (SA+CF)

As of June 30, 2019



■ Frontier Capital Appreciation

● Russell 2000 Growth Index

1 Qtr **YTD** **1 Yr** **3 Yrs** **5 Yrs** **7 Yrs** **10 Yrs**

2.46 (84) 17.94 (77) N/A N/A N/A N/A N/A

2.75 (82) 20.36 (63) -0.49 (78) 14.69 (71) 8.63 (78) 12.87 (81) 14.41 (83)

5th Percentile

9.42 33.69 20.45 27.36 16.02 19.36 19.22

1st Quartile

6.89 29.05 10.66 21.87 12.70 16.34 17.60

Median

4.69 22.77 5.47 18.26 10.69 14.90 16.03

3rd Quartile

3.15 19.04 0.23 14.08 8.89 13.21 14.96

95th Percentile

-0.95 13.91 -7.46 9.71 5.96 10.78 12.58

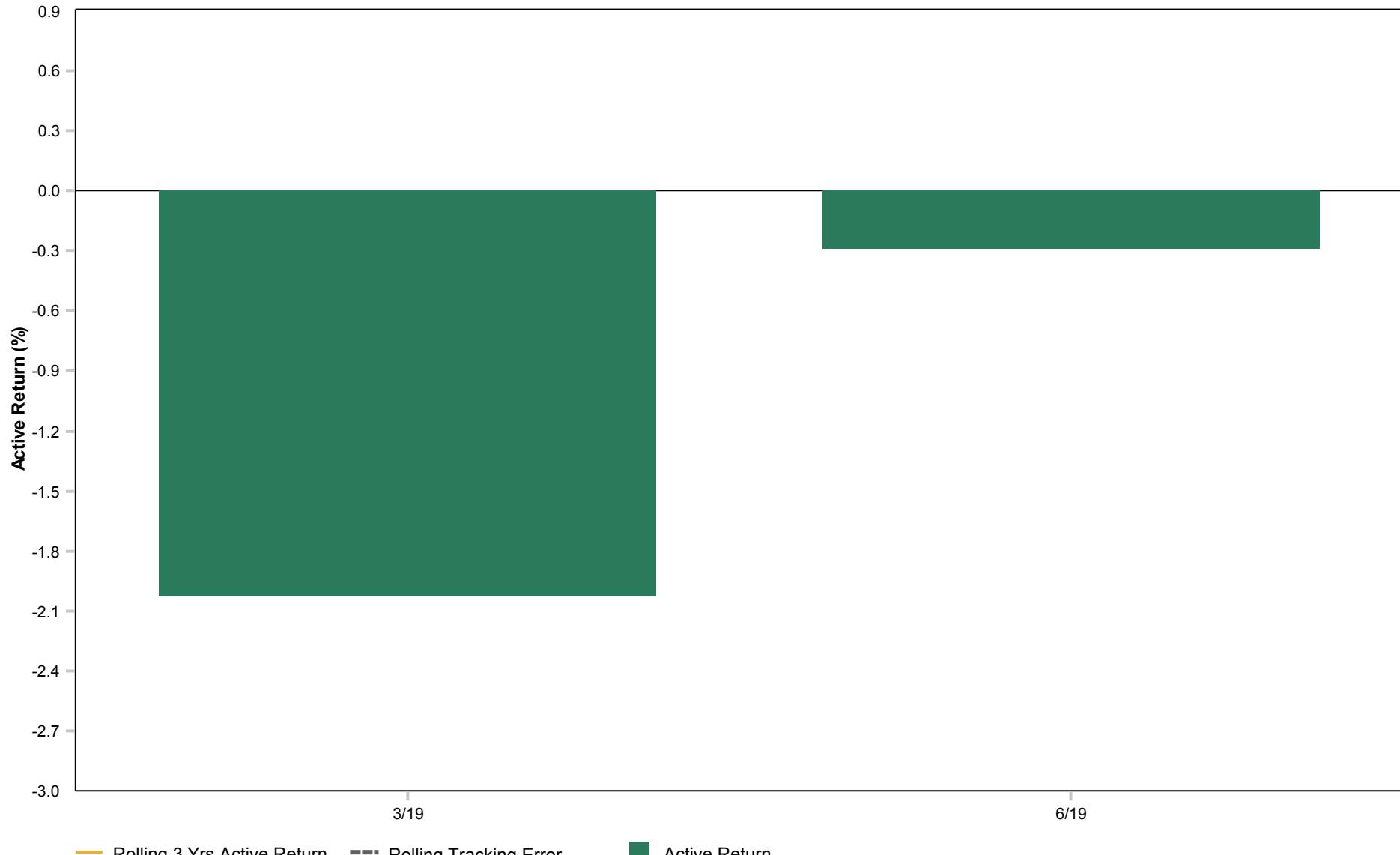
Parentheses contain percentile rankings.

Calculation based on monthly periodicity.

Bristol County Retirement System

Comparative Performance & Rolling Return

	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	2018	2017	2016	2015
Frontier Capital Appreciation	2.46	17.94	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Russell 2000 Growth Index	2.75	20.36	-0.49	14.69	8.63	12.87	14.41	-9.31	22.17	11.32	-1.38
Difference	-0.29	-2.42	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A



Bristol County Retirement System
Frontier Capital Appreciation

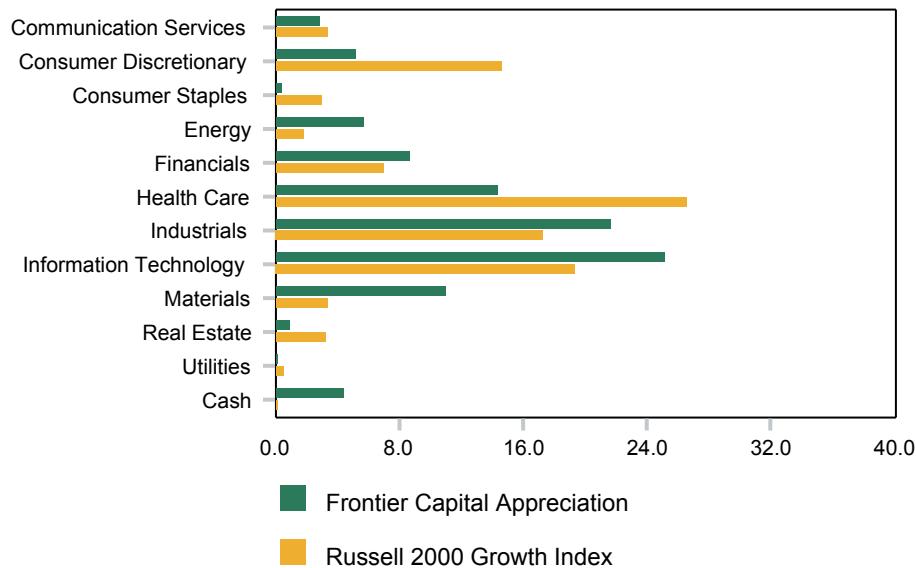
1 Quarter Ending June 30, 2019

Buy-and-Hold Portfolio	2.99
Portfolio Trading	-0.53
Actual Return	2.46
Benchmark Return	2.75
Actual Active Return	-0.29
Stock Selection	1.88
Sector Selection	0.15
Interaction	-1.78
Total Selection	0.26
Portfolio Trading	-0.53
Benchmark Trading	0.02
Active Trading Impact	-0.55
Buy & Hold Active Return	-0.29

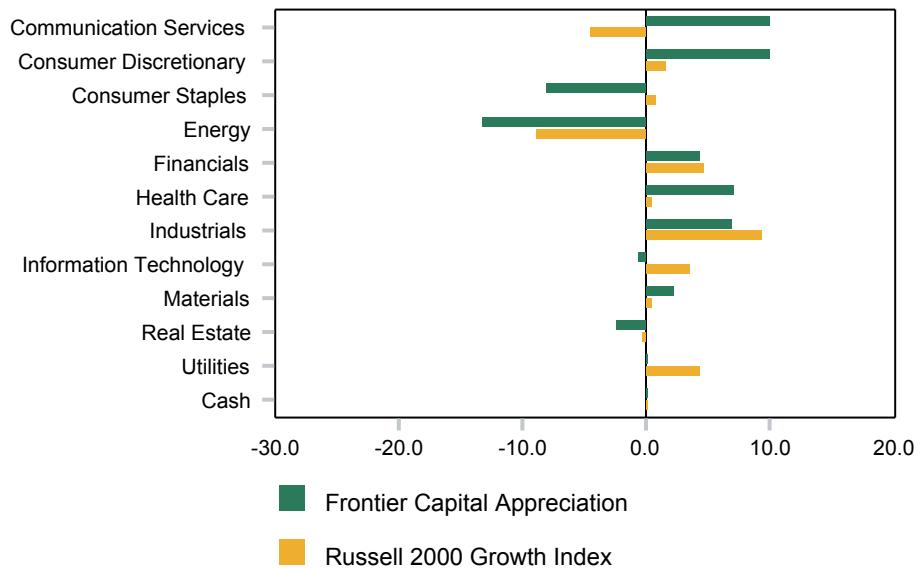
	Allocation — 04/01/2019		Performance — 1 Quarter Ending June 30, 2019		Attribution			Total
	Portfolio	Benchmark	Portfolio	Benchmark	Stock	Sector	Interaction	
Communication Services	2.90	3.31	10.06	-4.50	0.48	0.03	-0.06	0.45
Consumer Discretionary	5.13	14.61	9.98	1.63	1.22	0.10	-0.79	0.53
Consumer Staples	0.45	2.95	-8.13	0.83	-0.26	0.05	0.22	0.01
Energy	5.63	1.86	-13.26	-8.94	-0.08	-0.44	-0.16	-0.68
Financials	8.58	6.94	4.43	4.75	-0.02	0.03	-0.01	0.01
Health Care	14.27	26.63	7.15	0.52	1.77	0.27	-0.82	1.22
Industrials	21.69	17.27	6.97	9.35	-0.41	0.29	-0.11	-0.22
Information Technology	25.14	19.33	-0.68	3.49	-0.80	0.04	-0.24	-1.00
Materials	10.96	3.41	2.26	0.44	0.06	-0.17	0.14	0.03
Real Estate	0.87	3.16	-2.40	-0.27	-0.07	0.07	0.05	0.05
Utilities	0.00	0.52	0.00	4.29	0.00	-0.01	0.00	-0.01
Cash	4.38	0.00	0.00	0.00	0.00	-0.12	0.00	-0.12
Total	100.00	100.00	2.99	2.73	1.88	0.15	-1.78	0.26

Bristol County Retirement System

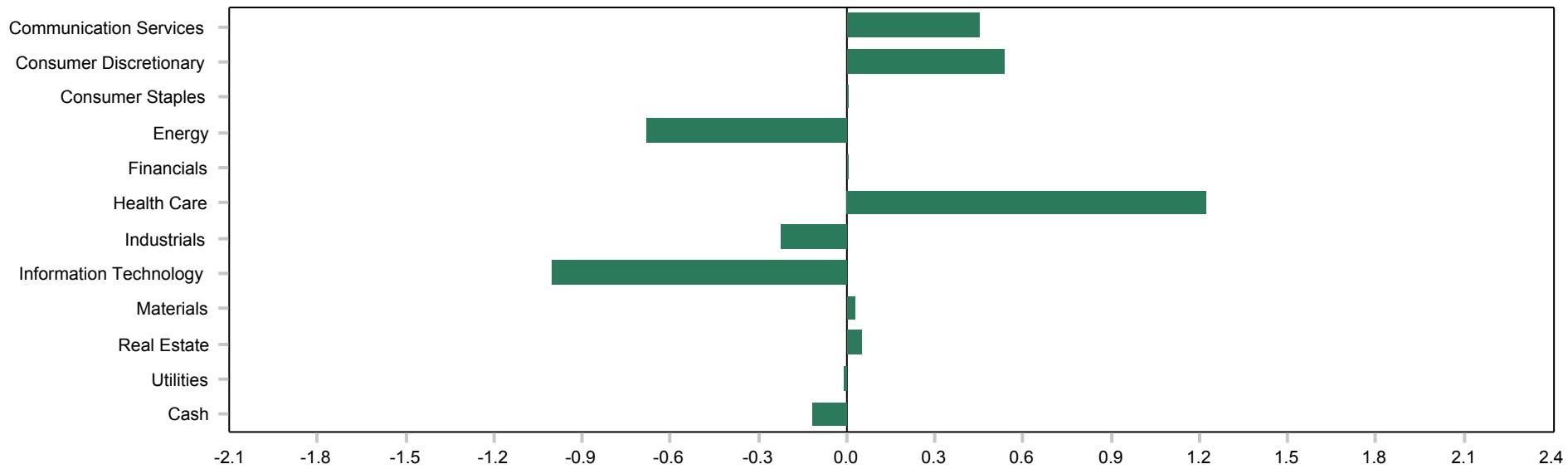
Allocation



Performance



Total Attribution



Bristol County Retirement System

Buy and Hold Style Attribution

1 Quarter Ending June 30, 2019

Buy-and-Hold Portfolio	2.99
Portfolio Trading	-0.53
Actual Return	2.46
Benchmark Return	2.75
Actual Active Return	-0.29
Stock Selection	1.24
Style Selection	1.23
Interaction	-2.21
Total Selection	0.26
Portfolio Trading	-0.53
Benchmark Trading	0.02
Active Trading Impact	-0.55
Buy & Hold Active Return	-0.29

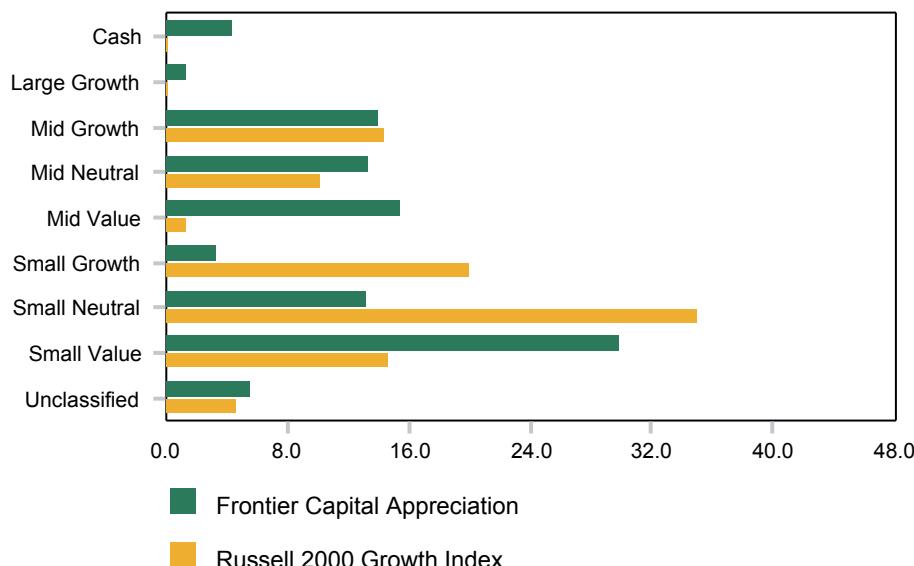
	Allocation-04/01/2019		Performance-1 Quarter Ending June 30, 2019			Attribution		
	Portfolio	Benchmark	Portfolio	Benchmark	Stock	Style	Interaction	Total
Cash	4.38	0.00	0.00	0.00	0.00	-0.12	0.00	-0.12
Large Growth	1.28	0.00	-3.44	0.00	0.00	-0.08	0.00	-0.08
Mid Growth	13.94	14.40	9.70	7.44	0.33	-0.02	-0.01	0.29
Mid Neutral	13.26	10.06	5.31	1.44	0.39	-0.04	0.12	0.47
Mid Value	15.43	1.33	5.36	11.82	-0.09	1.28	-0.91	0.28
Small Growth	3.30	19.94	1.02	1.72	-0.14	0.17	0.12	0.15
Small Neutral	13.09	34.99	6.60	2.08	1.58	0.14	-0.99	0.74
Small Value	29.83	14.61	-0.78	2.29	-0.45	-0.07	-0.47	-0.98
Unclassified	5.49	4.67	-9.38	-1.03	-0.39	-0.03	-0.07	-0.49
Total	100.00	100.00	2.99	2.73	1.24	1.23	-2.21	0.26

Bristol County Retirement System

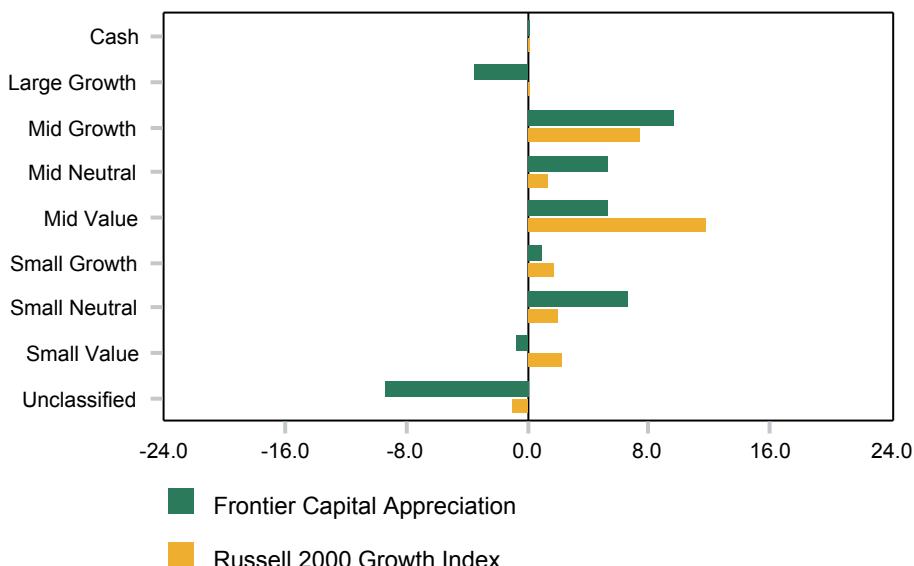
Buy and Hold Style Attribution Graph

1 Quarter Ending June 30, 2019

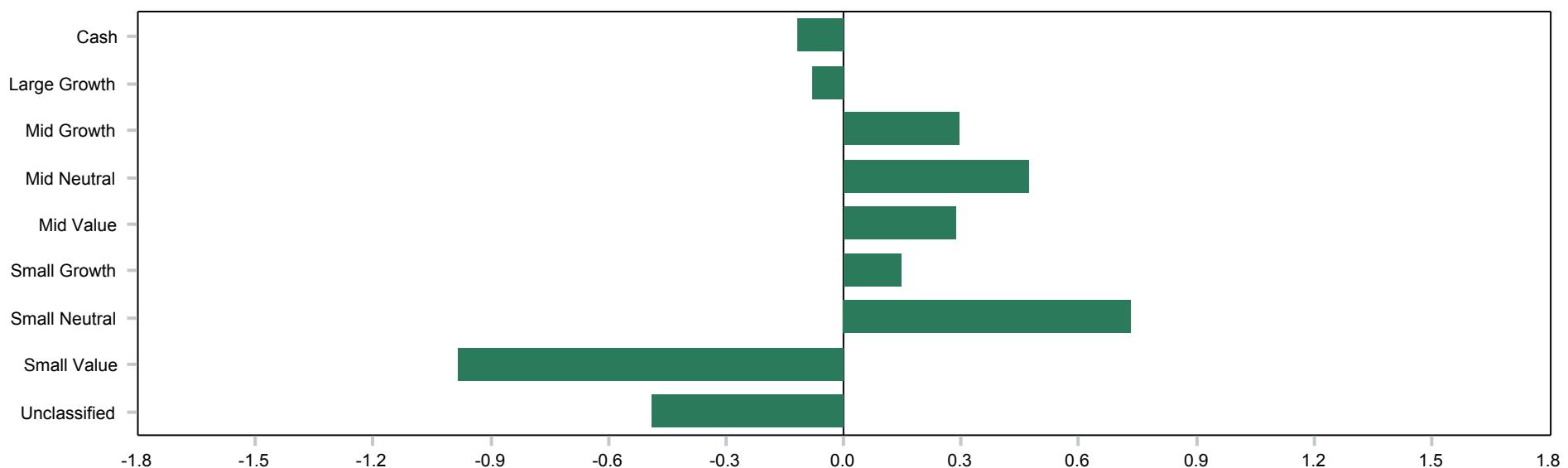
Allocation



Performance



Total Attribution



Bristol County Retirement System

Frontier Capital Appreciation

As of June 30, 2019

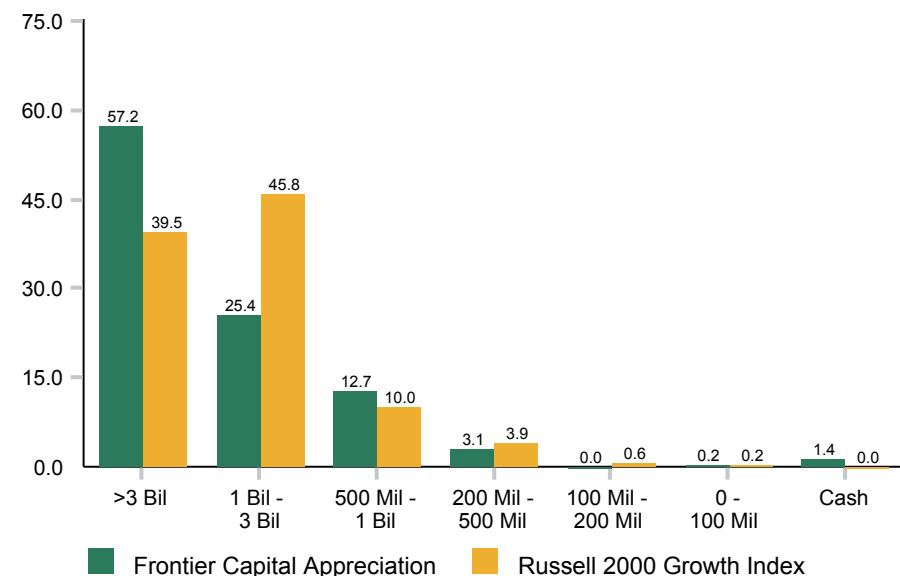
Top Ten Equity Holdings

	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
United Airlines Holdings Inc	3.21	0.00	3.21	9.74
Insulet Corp	2.74	0.00	2.74	25.55
Allegheny Technologies Inc	2.08	0.00	2.08	-1.45
Cooper Cos Inc (The)	2.06	0.00	2.06	13.75
Tutor Perini Corp	1.87	0.00	1.87	-18.98
Cogent Communications Holdings Inc	1.70	0.23	1.47	10.54
KBR Inc	1.66	0.00	1.66	31.08
Universal Display Corp	1.60	0.00	1.60	23.11
Monolithic Power Systems Inc	1.56	0.00	1.56	0.52
American Airlines Group Inc	1.52	0.00	1.52	2.98
% of Portfolio	20.00	0.23		19.77

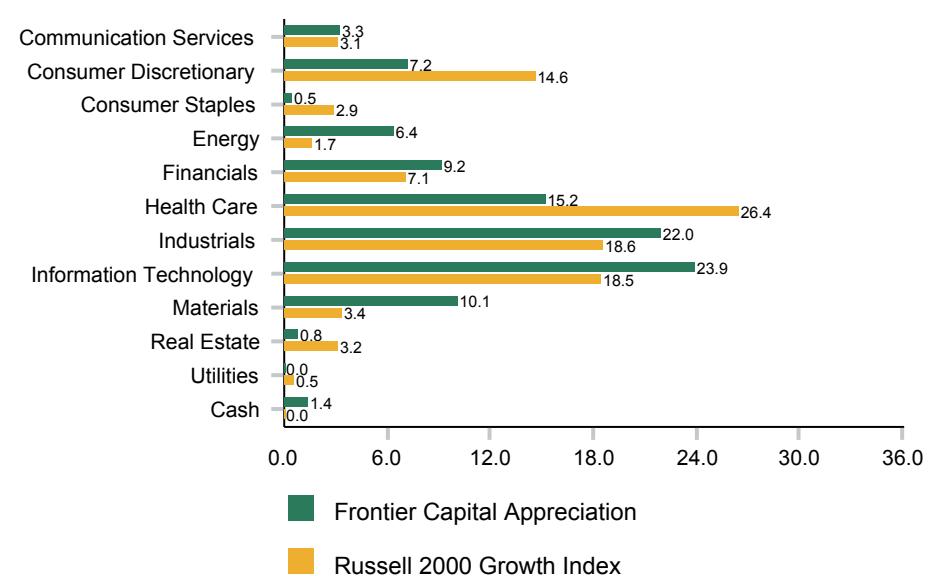
Portfolio Characteristics

	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$)	6,006,395,732	2,888,603,243
Median Mkt. Cap (\$)	2,728,058,780	884,483,685
Price/Earnings ratio	20.09	22.72
Price/Book ratio	2.60	3.96
5 Yr. EPS Growth Rate (%)	13.02	19.02
Current Yield (%)	0.86	0.72
Beta	N/A	1.00
Number of Stocks	141	1,228

Distribution of Market Capitalization (%)



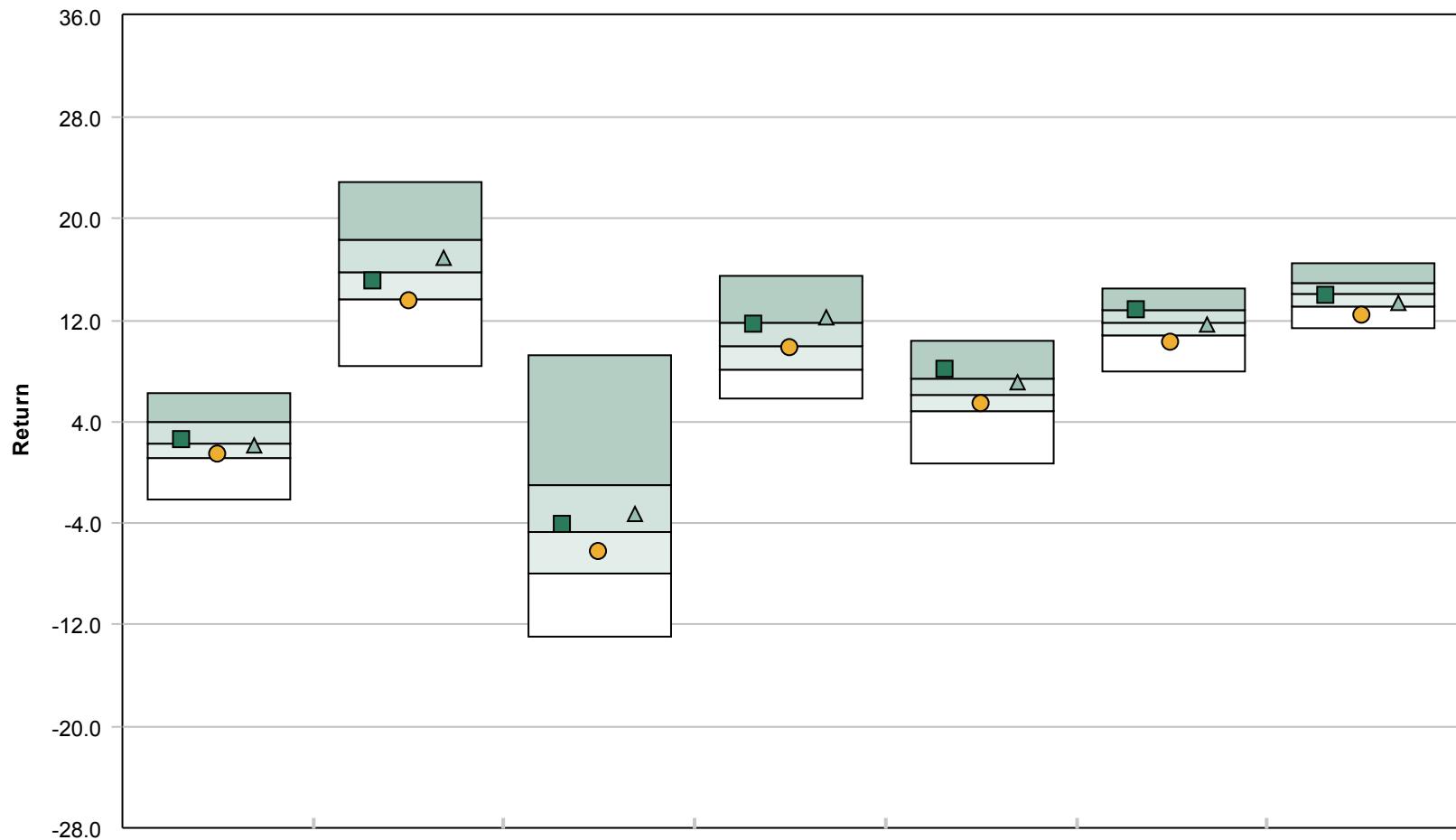
Sector Weights (%)



Bristol County Retirement System

IM U.S. Small Cap Value Equity (SA+CF)

As of June 30, 2019



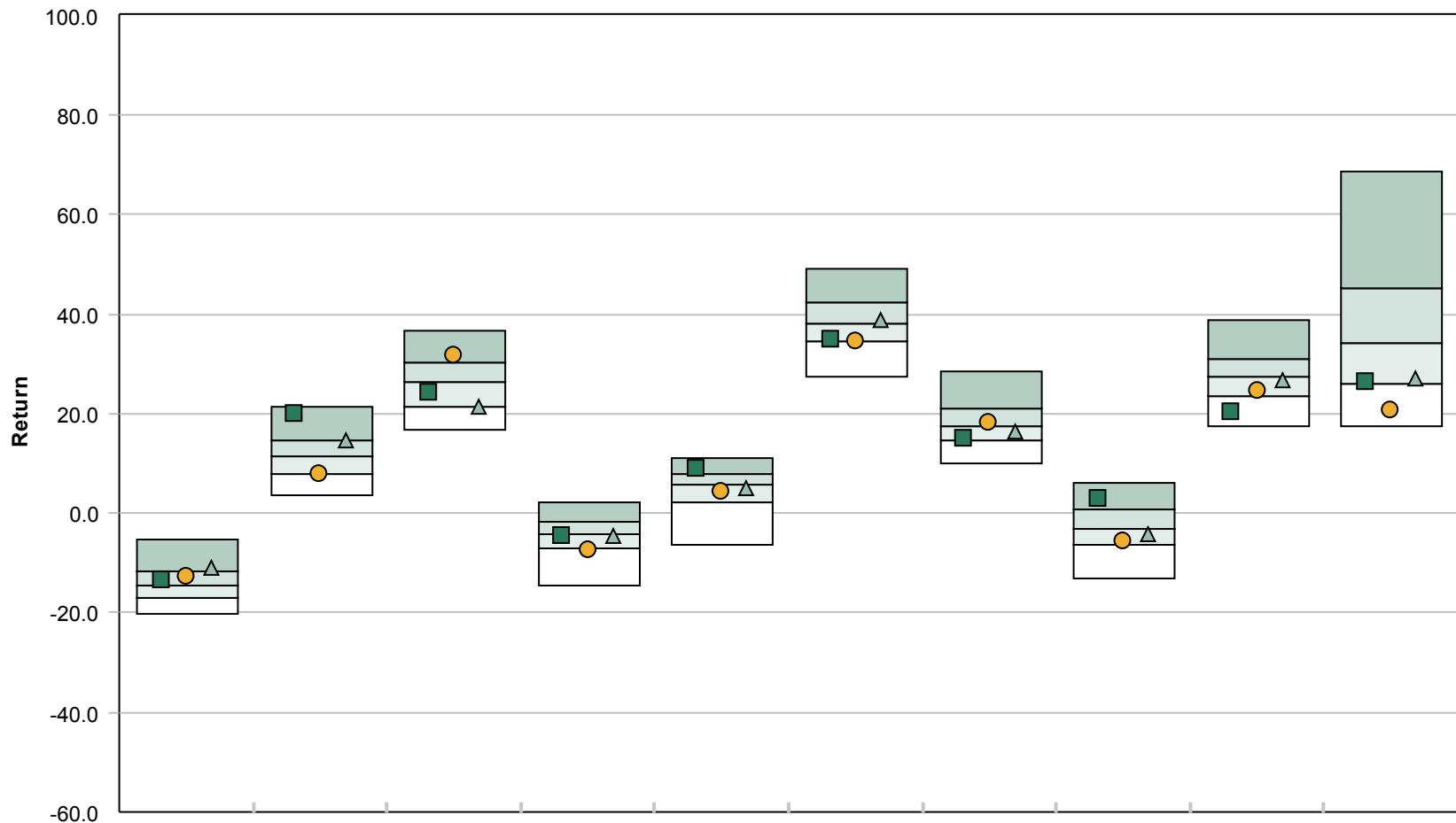
	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs
Earnest Partners	2.62 (46)	15.15 (59)	-4.11 (46)	11.65 (27)	8.10 (18)	12.89 (22)	13.97 (55)
Russell 2000 Value Index	1.38 (72)	13.47 (78)	-6.24 (62)	9.81 (52)	5.39 (67)	10.31 (83)	12.40 (86)
Russell 2000 Index	2.10 (57)	16.98 (38)	-3.31 (38)	12.30 (23)	7.06 (29)	11.63 (57)	13.45 (70)
5th Percentile	6.26	22.94	9.24	15.55	10.40	14.52	16.51
1st Quartile	4.02	18.42	-1.04	11.87	7.47	12.76	14.91
Median	2.32	15.80	-4.69	9.93	6.19	11.83	14.17
3rd Quartile	1.14	13.68	-7.98	8.15	4.91	10.77	13.04
95th Percentile	-2.15	8.35	-12.90	5.92	0.71	8.03	11.33

Parentheses contain percentile rankings.
Calculation based on monthly periodicity.

Bristol County Retirement System

IM U.S. Small Cap Value Equity (SA+CF)

As of June 30, 2019



	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
Earnest Partners	-13.38 (40)	20.01 (7)	24.39 (62)	-4.51 (54)	8.89 (14)	34.88 (74)	14.90 (74)	2.76 (12)	20.45 (90)	26.39 (74)
Russell 2000 Value Index	-12.86 (36)	7.84 (75)	31.74 (16)	-7.47 (78)	4.22 (66)	34.52 (75)	18.05 (47)	-5.50 (69)	24.50 (71)	20.58 (87)
Russell 2000 Index	-11.01 (23)	14.65 (25)	21.31 (78)	-4.41 (52)	4.89 (58)	38.82 (47)	16.35 (61)	-4.18 (60)	26.85 (55)	27.17 (71)
5th Percentile	-5.36	21.37	36.54	2.29	11.25	49.30	28.61	6.08	39.00	68.77
1st Quartile	-11.66	14.50	30.30	-1.71	7.93	42.29	21.19	0.75	31.03	45.11
Median	-14.33	11.59	26.39	-4.29	5.71	38.07	17.55	-3.15	27.51	34.20
3rd Quartile	-16.98	7.78	21.58	-6.97	2.27	34.41	14.72	-6.44	23.72	25.90
95th Percentile	-20.30	3.59	16.69	-14.58	-6.20	27.38	10.00	-13.09	17.68	17.54

Parentheses contain percentile rankings.

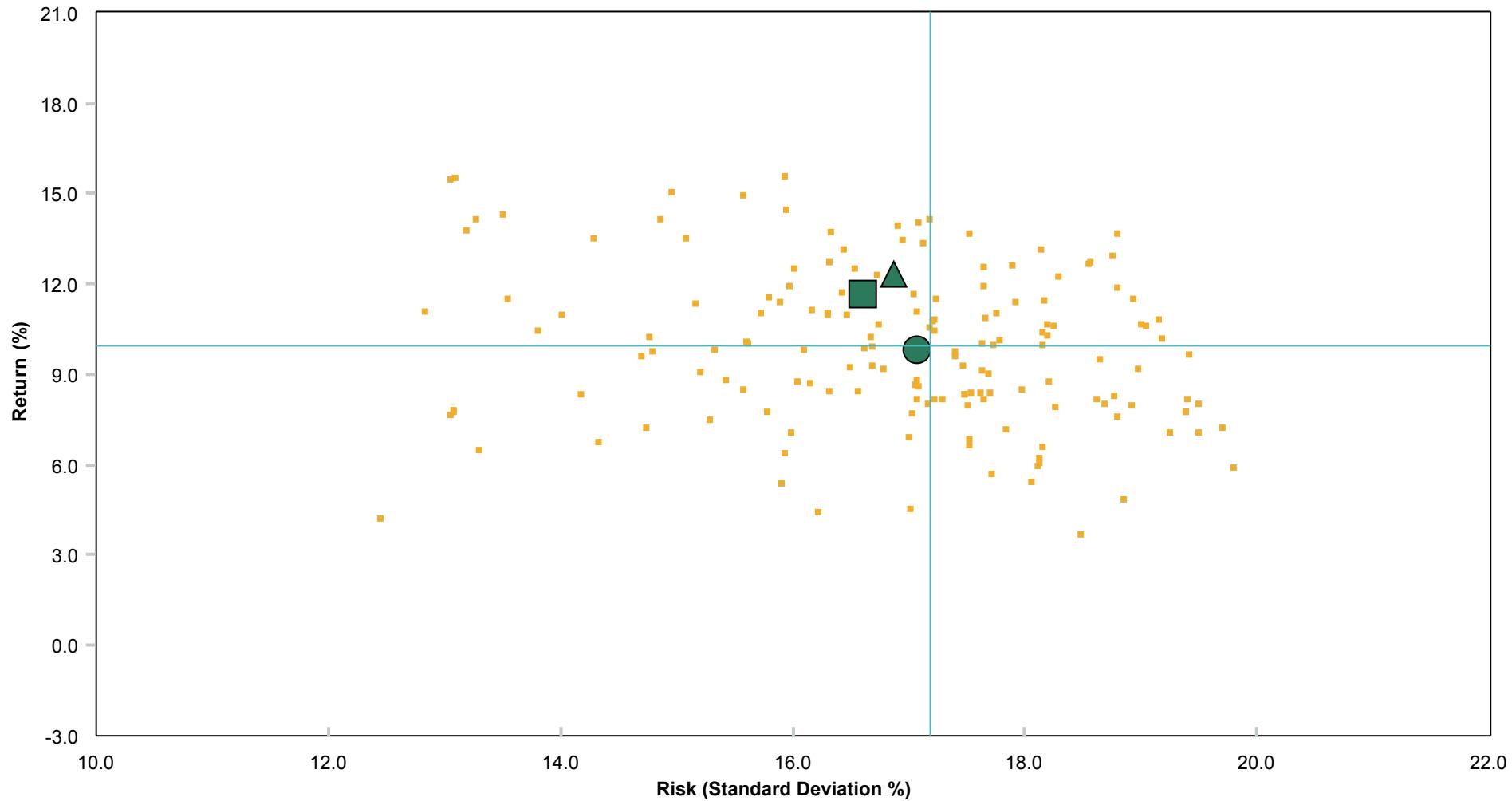
Calculation based on monthly periodicity.

Bristol County Retirement System

Peer Group Scattergram

IM U.S. Small Cap Value Equity (SA+CF)

3 Years Ending June 30, 2019



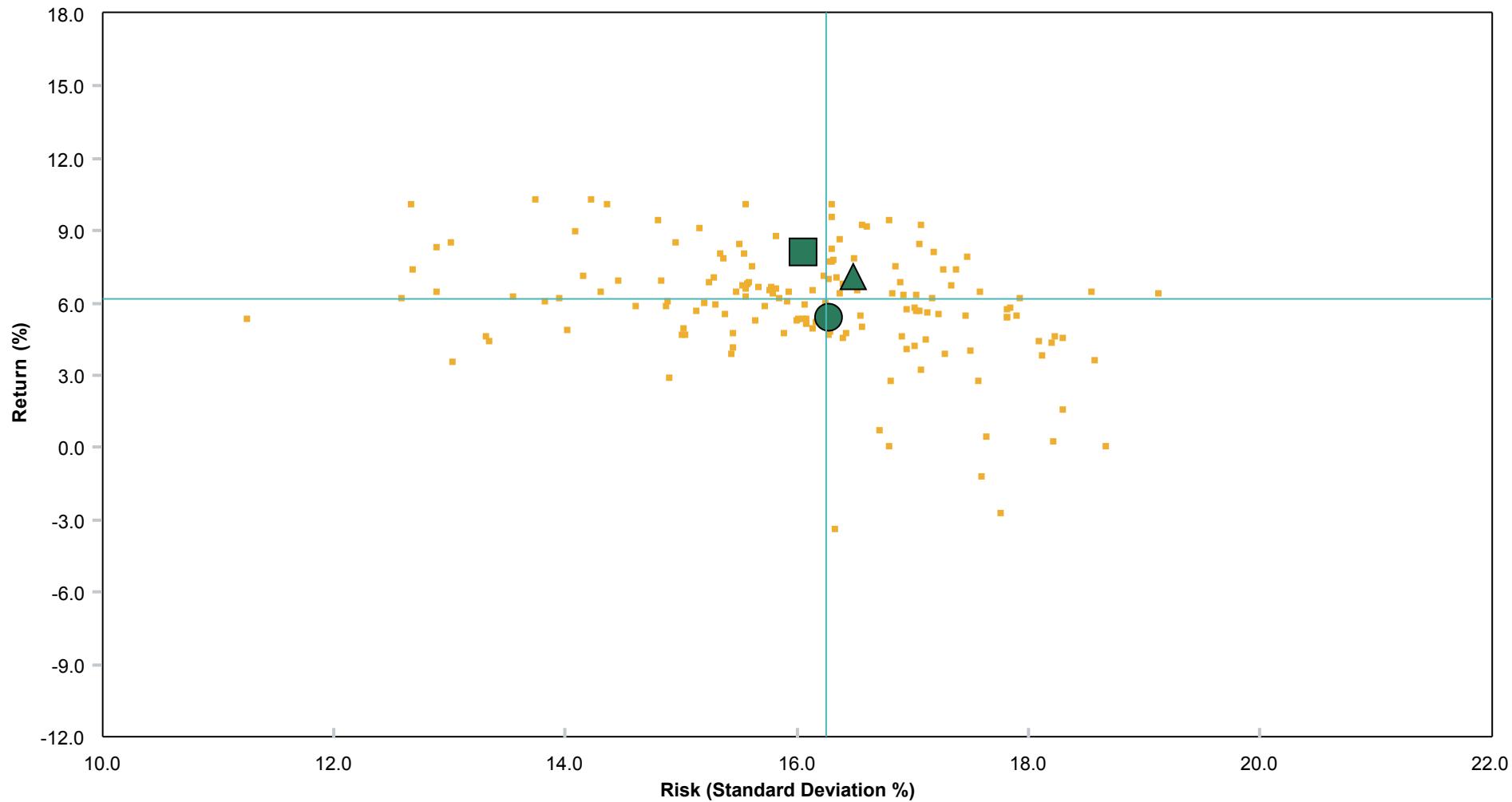
	Standard Return	Standard Deviation
Earnest Partners	11.65	16.62
Russell 2000 Value Index	9.81	17.08
Russell 2000 Index	12.30	16.87
Median	9.93	17.18

Calculation based on monthly periodicity.

Bristol County Retirement System**Peer Group Scattergram**

IM U.S. Small Cap Value Equity (SA+CF)

5 Years Ending June 30, 2019



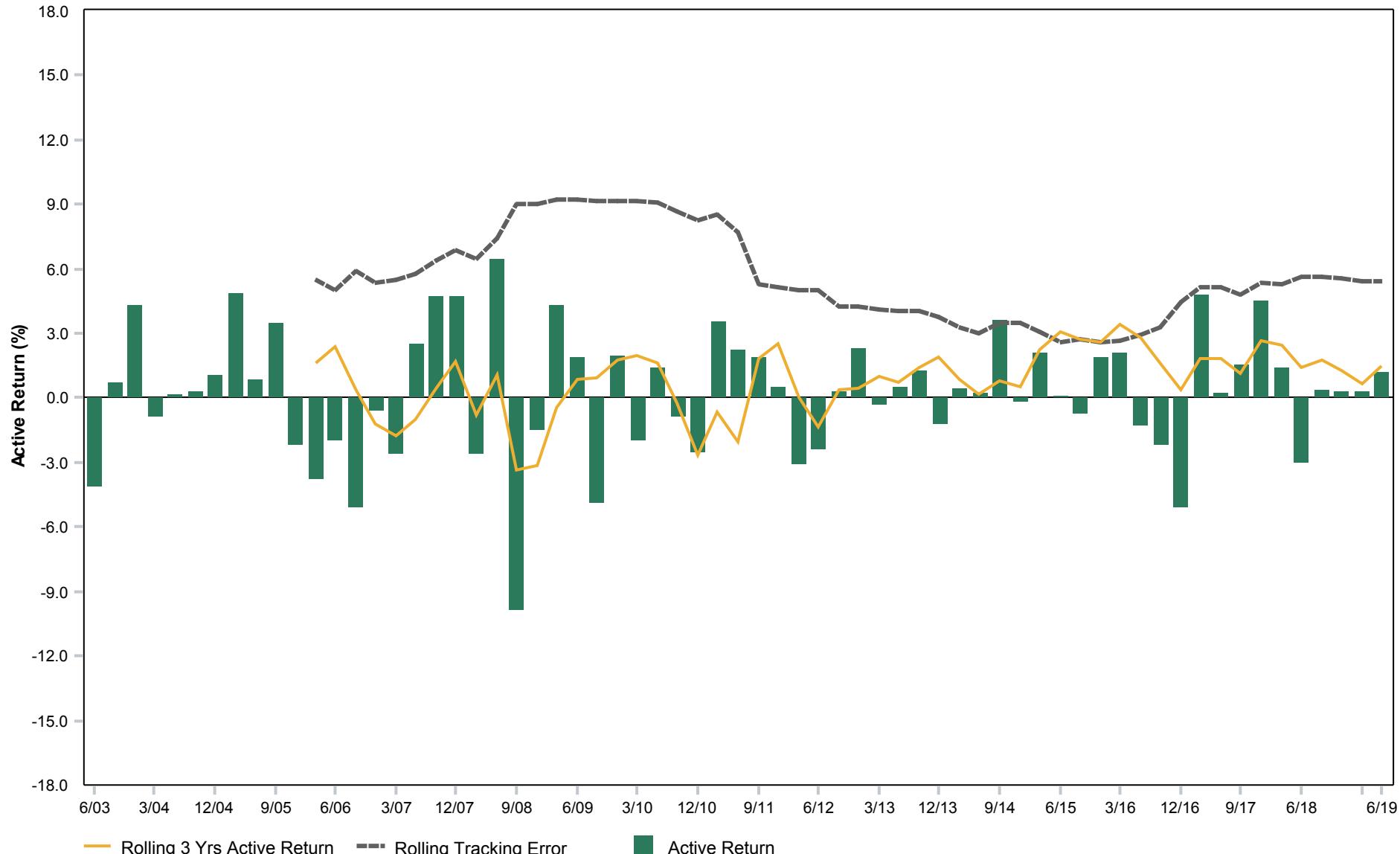
Calculation based on monthly periodicity.

Bristol County Retirement System

Comparative Performance & Rolling Return

As of June 30, 2019

	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	2018	2017	2016	2015
Earnest Partners	2.62	15.15	-4.11	11.65	8.10	12.89	13.97	-13.38	20.01	24.39	-4.51
Russell 2000 Value Index	1.38	13.47	-6.24	9.81	5.39	10.31	12.40	-12.86	7.84	31.74	-7.47
Difference	1.24	1.68	2.13	1.84	2.71	2.58	1.57	-0.52	12.17	-7.35	2.96



Bristol County Retirement System
Earnest Partners

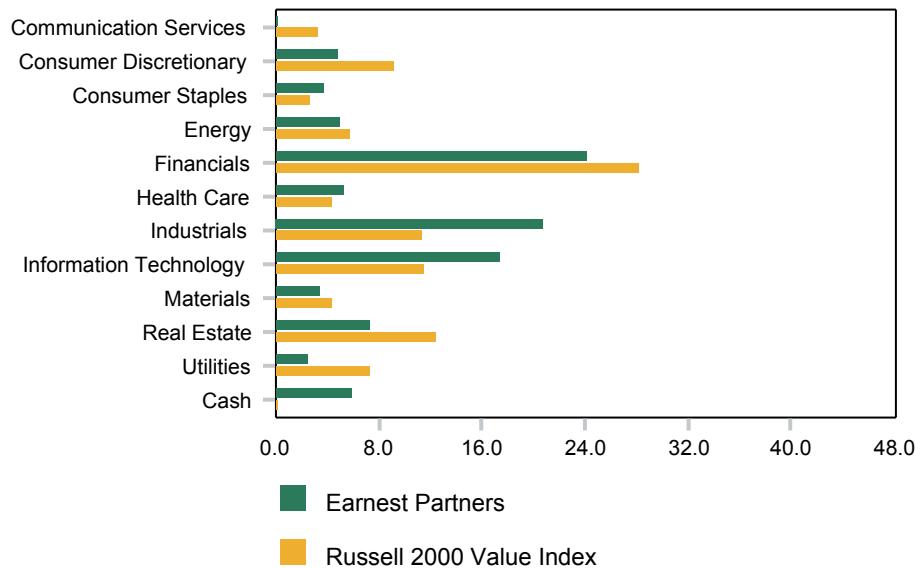
1 Quarter Ending June 30, 2019

Buy-and-Hold Portfolio	3.26
Portfolio Trading	-0.64
Actual Return	2.62
Benchmark Return	1.38
Actual Active Return	1.24
Stock Selection	1.23
Sector Selection	0.61
Interaction	0.04
Total Selection	1.89
Portfolio Trading	-0.64
Benchmark Trading	0.00
Active Trading Impact	-0.64
Buy & Hold Active Return	1.24

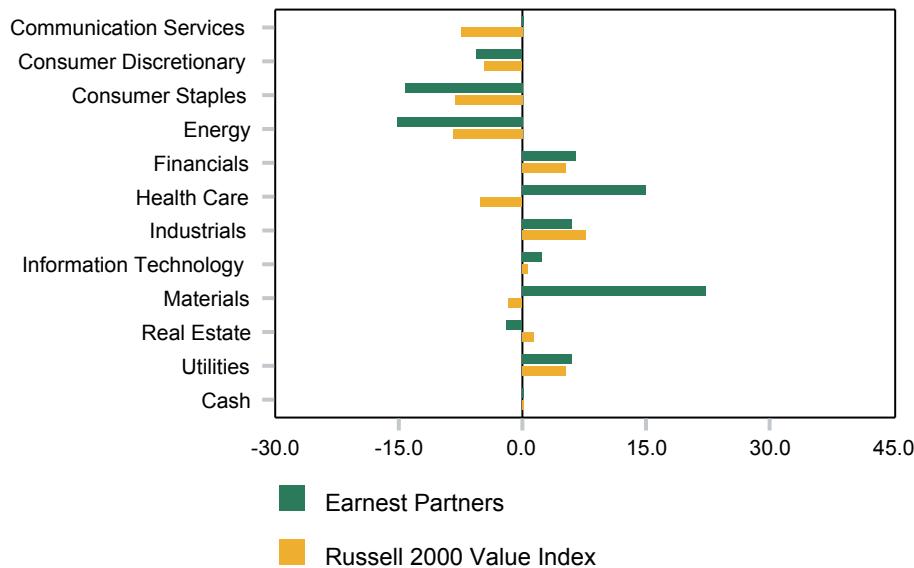
	Allocation — 04/01/2019		Performance — 1 Quarter Ending June 30, 2019		Attribution			Total
	Portfolio	Benchmark	Portfolio	Benchmark	Stock	Sector	Interaction	
Communication Services	0.00	3.19	0.00	-7.52	0.00	0.28	0.00	0.28
Consumer Discretionary	4.85	9.16	-5.64	-4.65	-0.09	0.26	0.04	0.21
Consumer Staples	3.64	2.61	-14.23	-8.15	-0.16	-0.10	-0.06	-0.32
Energy	4.93	5.74	-15.18	-8.42	-0.39	0.08	0.05	-0.25
Financials	24.11	28.25	6.46	5.25	0.34	-0.16	-0.05	0.13
Health Care	5.29	4.29	15.00	-5.00	0.86	-0.06	0.20	0.99
Industrials	20.77	11.27	6.08	7.69	-0.18	0.60	-0.15	0.27
Information Technology	17.28	11.51	2.40	0.79	0.18	-0.03	0.09	0.24
Materials	3.39	4.30	22.18	-1.66	1.03	0.03	-0.22	0.84
Real Estate	7.26	12.38	-1.85	1.53	-0.42	-0.01	0.17	-0.25
Utilities	2.52	7.31	6.11	5.32	0.06	-0.19	-0.04	-0.17
Cash	5.96	0.00	0.00	0.00	0.00	-0.08	0.00	-0.08
Total	100.00	100.00	3.26	1.37	1.23	0.61	0.04	1.89

Bristol County Retirement System

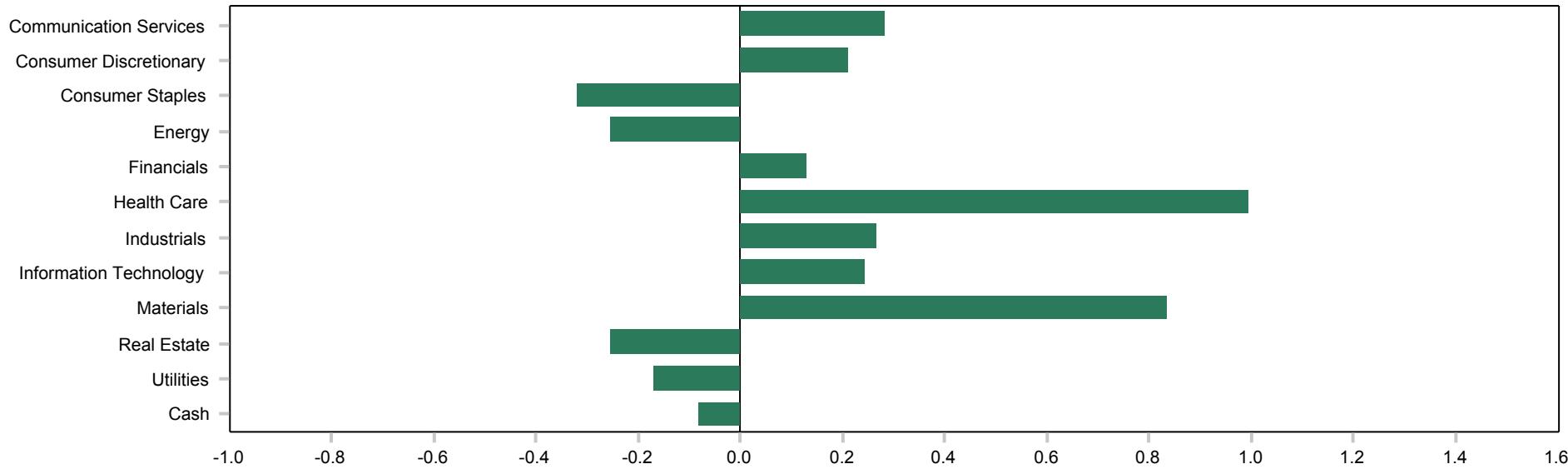
Allocation



Performance



Total Attribution



Bristol County Retirement System

Buy and Hold Style Attribution

1 Quarter Ending June 30, 2019

Buy-and-Hold Portfolio	3.26
Portfolio Trading	-0.64
Actual Return	2.62
Benchmark Return	1.38
Actual Active Return	1.24
Stock Selection	1.62
Style Selection	0.34
Interaction	-0.07
Total Selection	1.89
Portfolio Trading	-0.64
Benchmark Trading	0.00
Active Trading Impact	-0.64
Buy & Hold Active Return	1.24

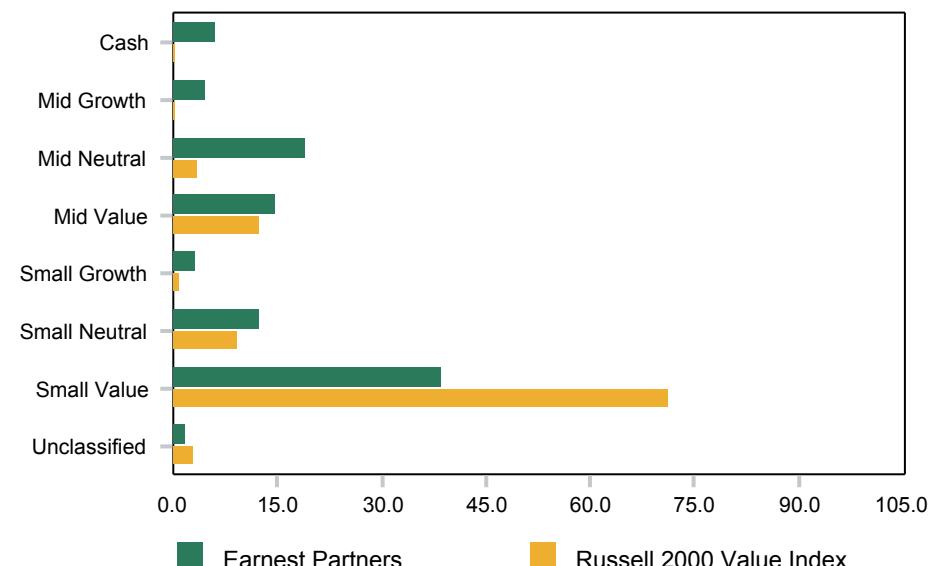
	Allocation-04/01/2019		Performance-1 Quarter Ending June 30, 2019		Attribution			
	Portfolio	Benchmark	Portfolio	Benchmark	Stock	Style	Interaction	Total
Cash	5.96	0.00	0.00	0.00	0.00	-0.08	0.00	-0.08
Mid Growth	4.73	0.17	12.01	1.34	0.02	0.00	0.49	0.50
Mid Neutral	18.81	3.41	9.54	-0.24	0.33	-0.25	1.50	1.59
Mid Value	14.66	12.26	0.53	4.36	-0.47	0.07	-0.09	-0.49
Small Growth	3.24	0.87	-7.10	8.18	-0.13	0.16	-0.36	-0.33
Small Neutral	12.37	9.22	-5.51	5.27	-0.99	0.12	-0.34	-1.21
Small Value	38.39	71.12	3.96	0.73	2.30	0.21	-1.06	1.45
Unclassified	1.84	2.94	11.44	-7.78	0.57	0.10	-0.21	0.45
Total	100.00	100.00	3.26	1.37	1.62	0.34	-0.07	1.89

Bristol County Retirement System

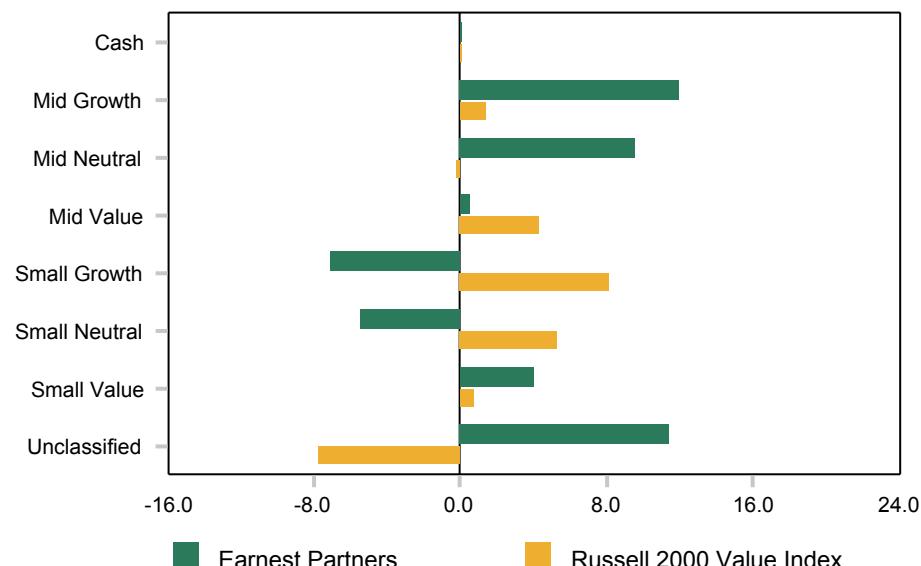
Buy and Hold Style Attribution Graph

1 Quarter Ending June 30, 2019

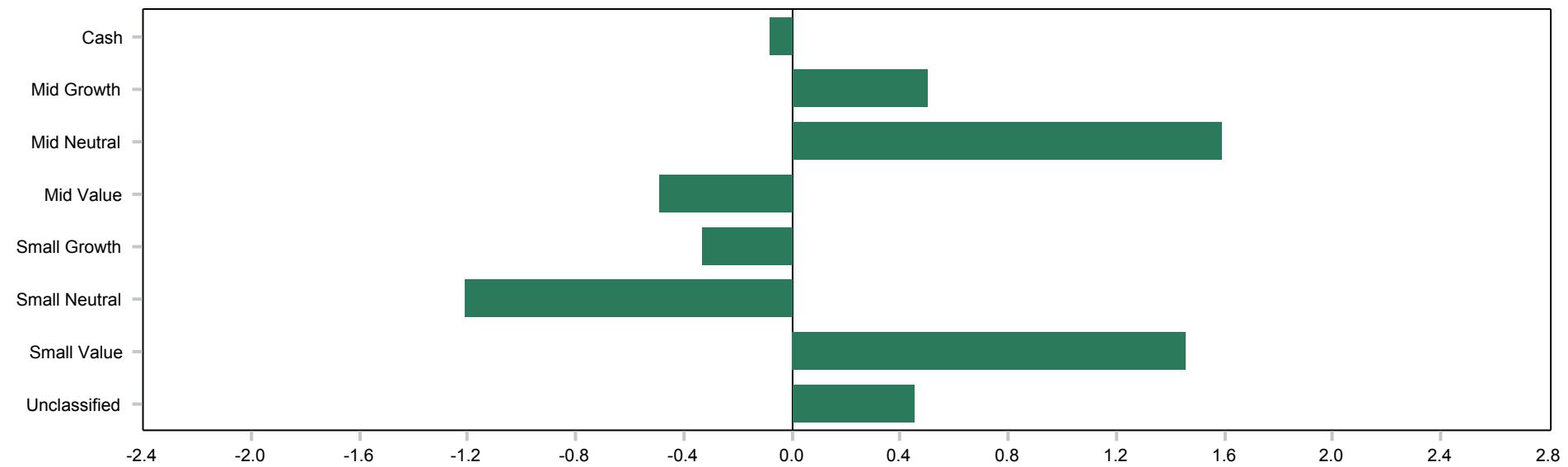
Allocation



Performance



Total Attribution



Bristol County Retirement System

Earnest Partners

As of June 30, 2019

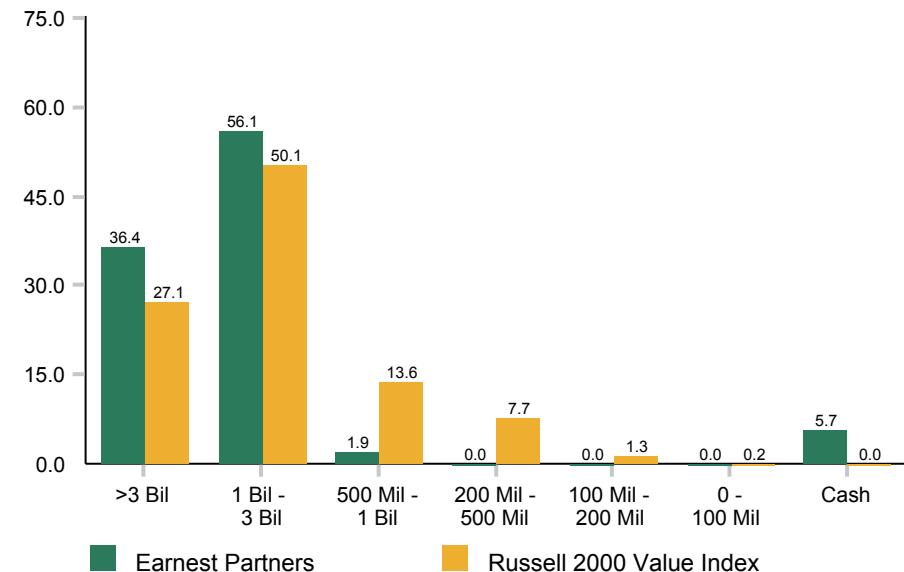
Top Ten Equity Holdings

	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Hexcel Corp	3.75	0.00	3.75	17.19
Franklin Electric Co Inc	3.04	0.01	3.03	-6.75
Catalent Inc	3.02	0.00	3.02	33.55
Molina Healthcare Inc.	2.75	0.00	2.75	0.83
Casella Waste Systems Inc	2.68	0.14	2.54	11.44
GATX Corp.	2.64	0.31	2.33	4.46
Scotts Miracle-Gro Co (The)	2.60	0.00	2.60	26.12
Monolithic Power Systems Inc	2.55	0.00	2.55	0.52
Emergent BioSolutions Inc	2.52	0.00	2.52	-4.37
Cabot Microelectronics Corp	2.52	0.00	2.52	-1.29
% of Portfolio	28.07	0.46	27.61	

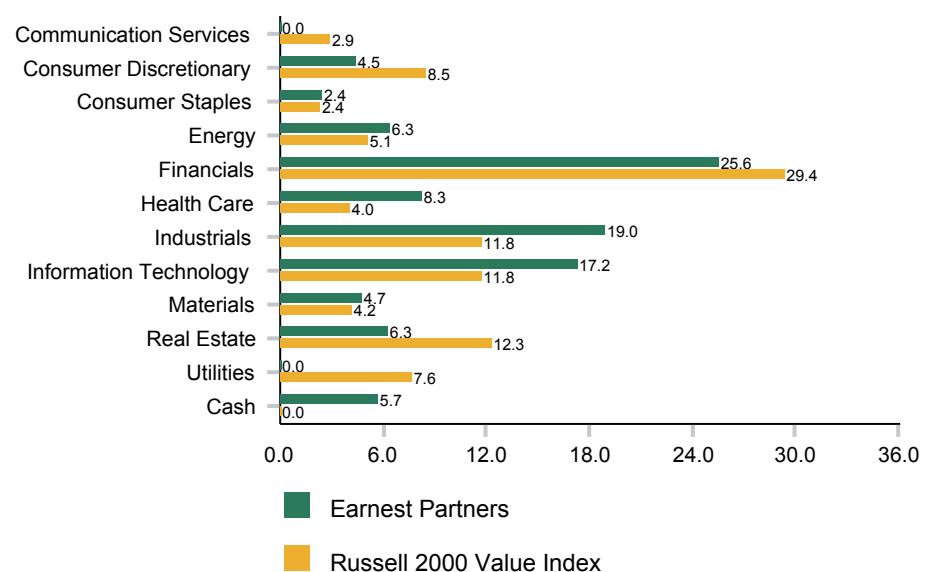
Portfolio Characteristics

	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$)	3,427,484,895	2,211,973,602
Median Mkt. Cap (\$)	2,475,717,400	696,721,320
Price/Earnings ratio	18.21	15.20
Price/Book ratio	2.09	1.65
5 Yr. EPS Growth Rate (%)	12.86	9.31
Current Yield (%)	1.49	2.21
Beta (5 Years, Monthly)	0.94	1.00
Number of Stocks	47	1,347

Distribution of Market Capitalization (%)



Sector Weights (%)

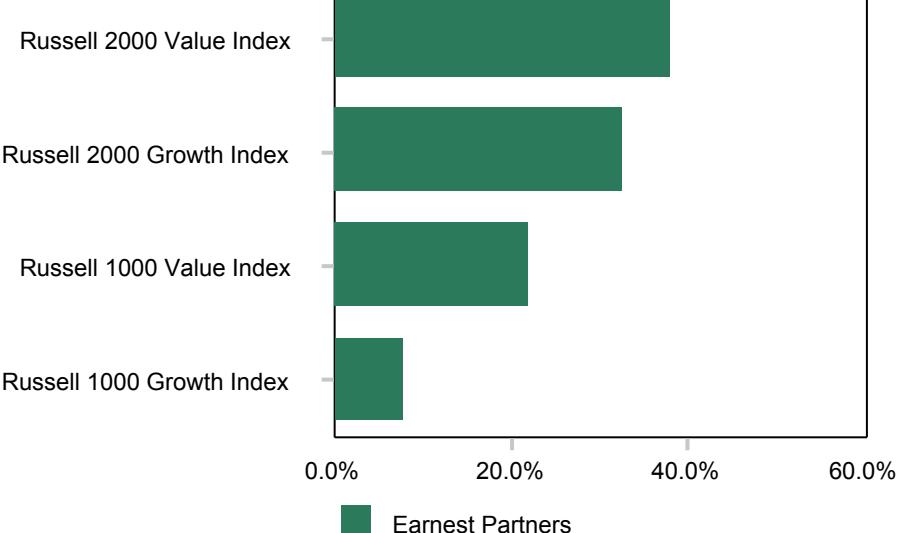


Bristol County Retirement System

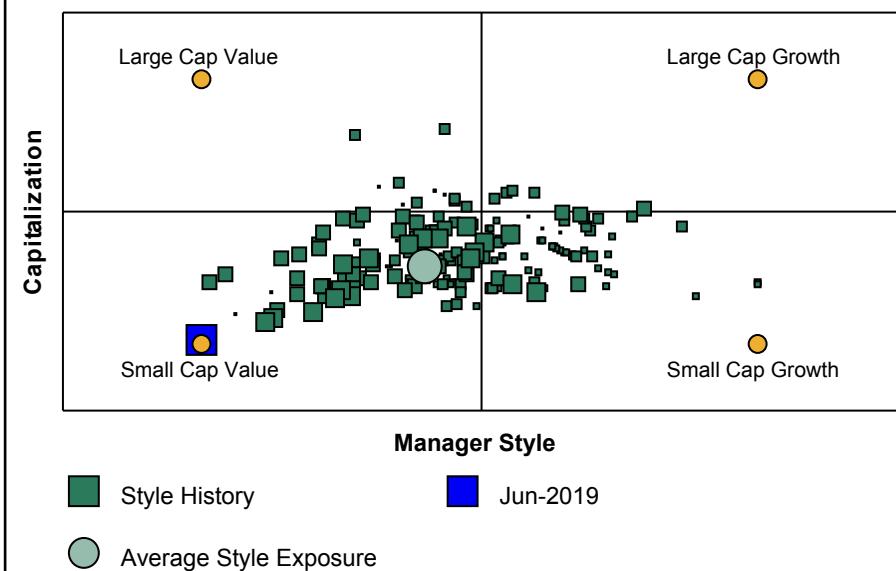
Earnest Partners

Ending June 30, 2019

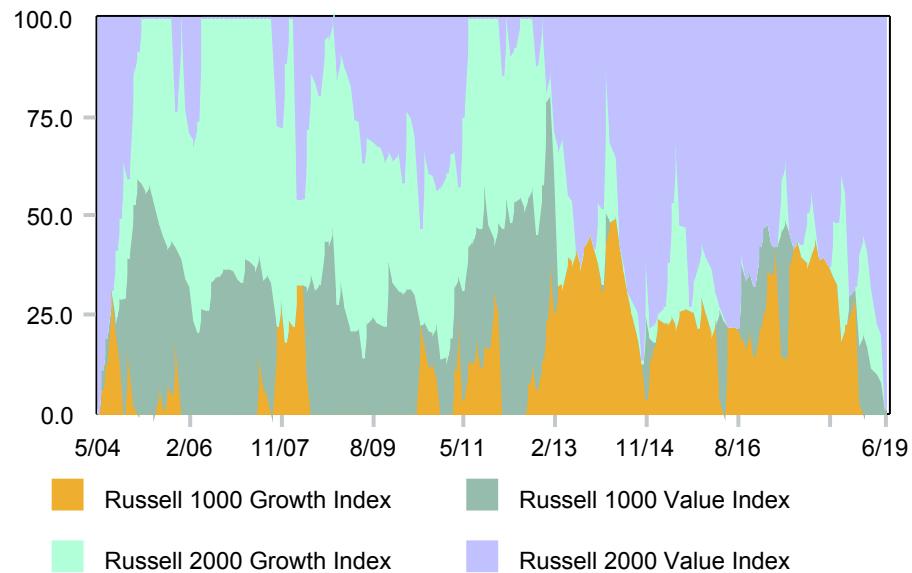
Investment Style Exposure



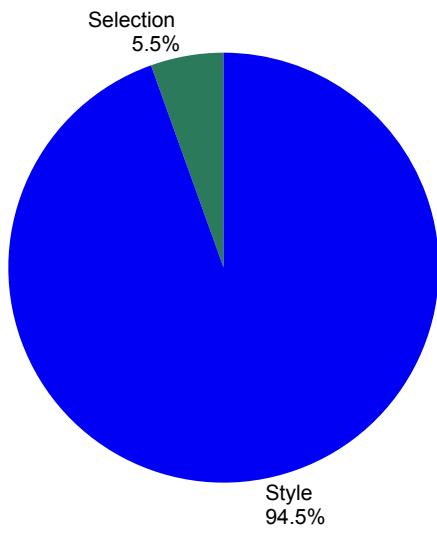
Style Map(ppp)



Style History(ppp)



Return Variance

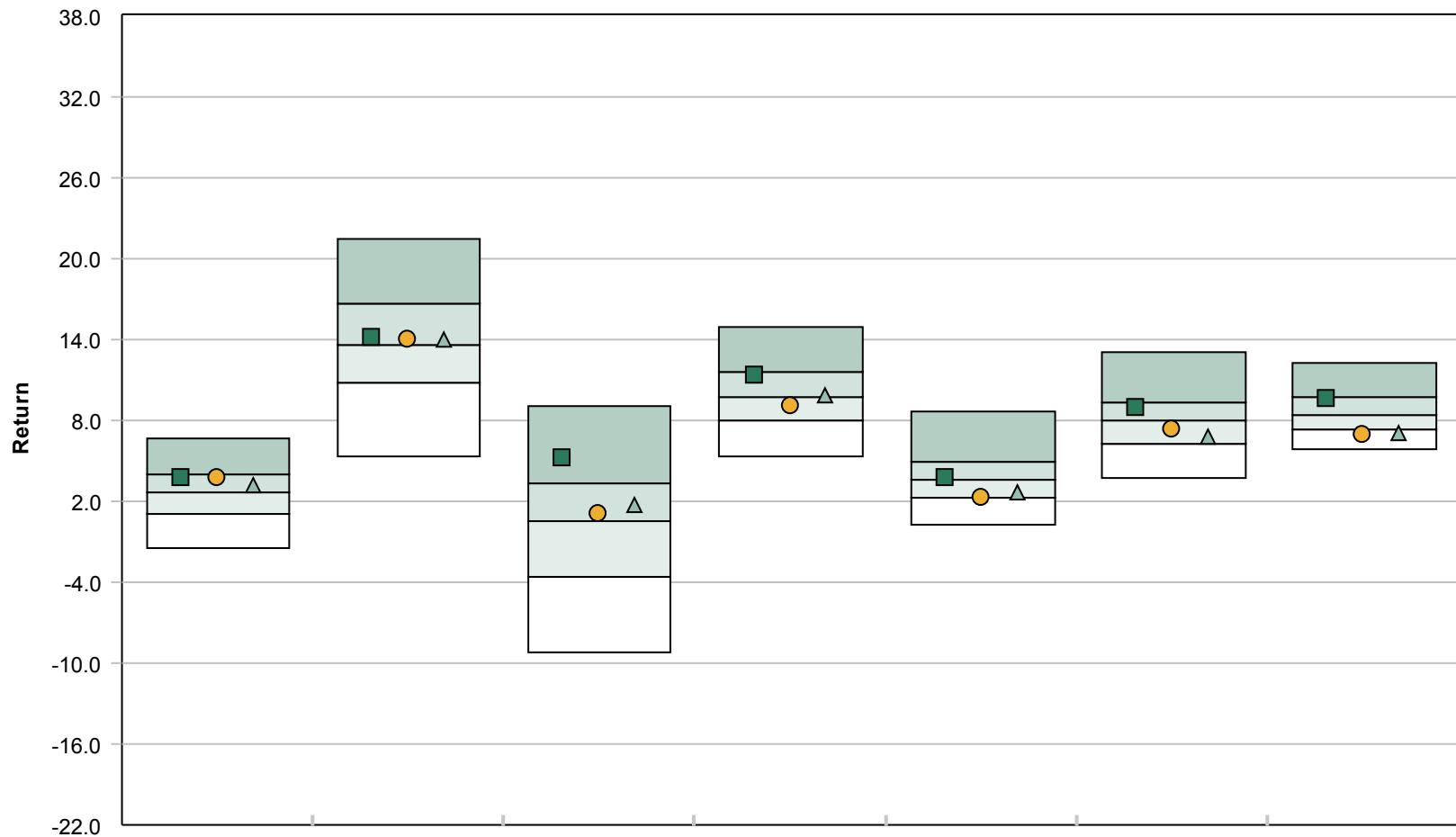


International Equity

Bristol County Retirement System

IM International Equity (SA+CF)

As of June 30, 2019



	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs
Total International Equity	3.77 (30)	14.16 (46)	5.17 (16)	11.28 (30)	3.79 (47)	8.87 (33)	9.55 (28)
MSCI EAFE (net)	3.68 (32)	14.03 (48)	1.08 (45)	9.11 (60)	2.25 (76)	7.31 (63)	6.90 (82)
MSCI AC World ex USA	3.22 (40)	14.00 (48)	1.80 (39)	9.91 (49)	2.65 (66)	6.85 (69)	7.03 (80)
5th Percentile	6.71	21.41	9.13	14.90	8.62	13.02	12.27
1st Quartile	4.06	16.67	3.38	11.63	4.98	9.36	9.74
Median	2.61	13.66	0.54	9.77	3.59	7.99	8.40
3rd Quartile	1.06	10.80	-3.54	8.05	2.25	6.26	7.30
95th Percentile	-1.48	5.30	-9.25	5.29	0.27	3.74	5.84

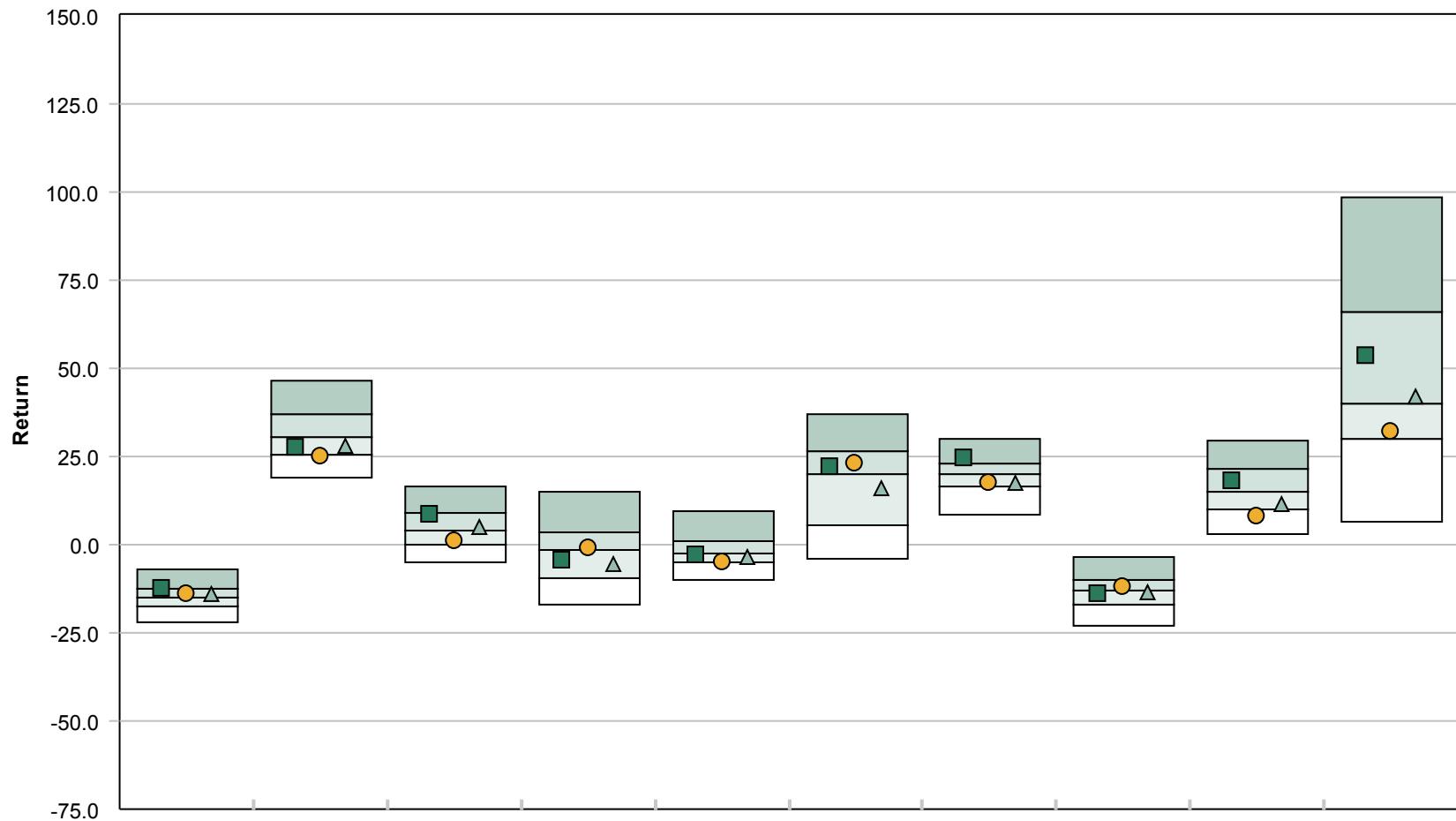
Parentheses contain percentile rankings.

Calculation based on monthly periodicity.

Bristol County Retirement System

IM International Equity (SA+CF)

As of June 30, 2019



	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
Total International Equity	-12.74 (27)	27.74 (65)	8.40 (28)	-4.29 (62)	-3.24 (57)	21.81 (44)	24.35 (18)	-14.17 (59)	17.77 (39)	53.39 (32)
MSCI EAFE (net)	-13.79 (38)	25.03 (80)	1.00 (70)	-0.81 (48)	-4.90 (74)	22.78 (41)	17.32 (70)	-12.14 (43)	7.75 (85)	31.78 (71)
MSCI AC World ex USA	-13.78 (38)	27.77 (65)	5.01 (44)	-5.25 (65)	-3.44 (59)	15.78 (61)	17.39 (70)	-13.33 (52)	11.60 (67)	42.14 (46)
5th Percentile	-6.92	46.73	16.66	14.88	9.38	37.09	30.09	-3.67	29.74	98.36
1st Quartile	-12.42	36.92	8.87	3.64	1.00	26.63	22.99	-10.07	21.29	66.17
Median	-14.88	30.55	3.82	-1.70	-2.53	19.88	19.84	-13.12	15.19	39.83
3rd Quartile	-17.49	25.68	0.22	-9.29	-5.05	5.47	16.74	-16.85	9.81	30.02
95th Percentile	-21.91	18.89	-5.23	-16.90	-9.79	-3.91	8.36	-23.13	2.89	6.38

Parentheses contain percentile rankings.

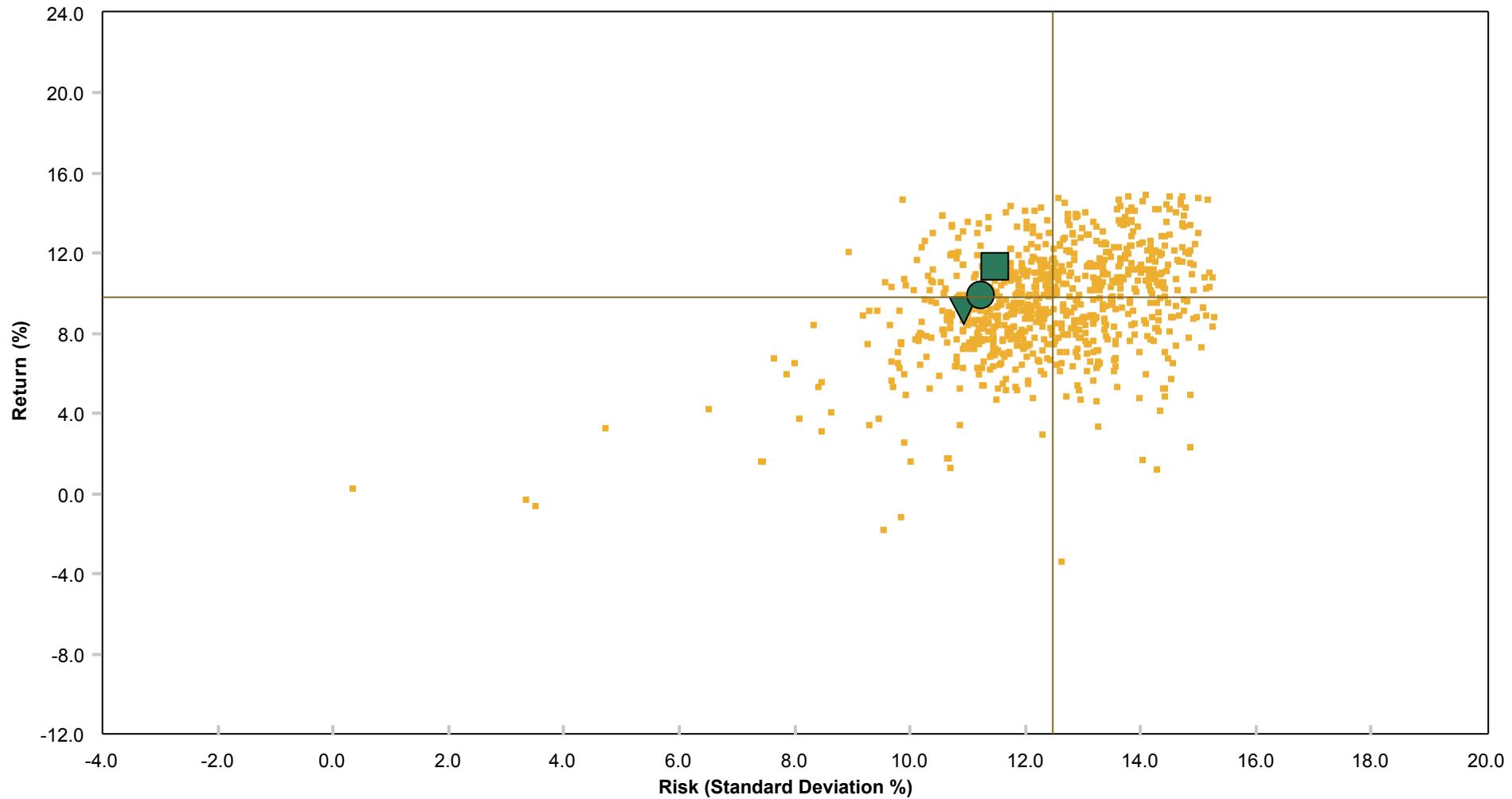
Calculation based on monthly periodicity.

Bristol County Retirement System

Peer Group Scattergram

IM International Equity (SA+CF)

3 Years Ending June 30, 2019



	Return	Standard Deviation
Total International Equity	11.28	11.49
MSCI EAFE (net)	9.11	10.92
MSCI AC World ex USA	9.91	11.24
Median	9.77	12.48

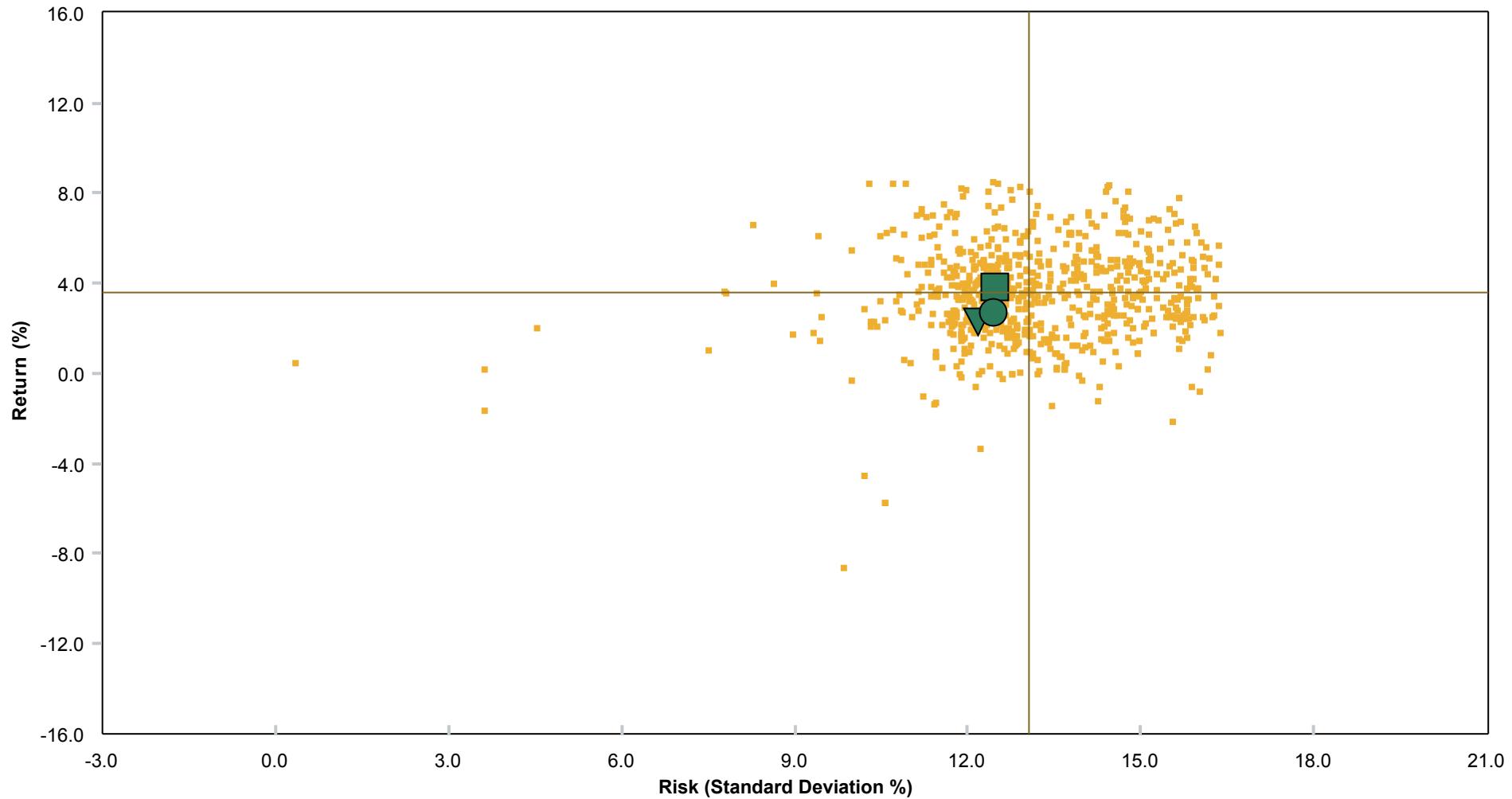
Calculation based on monthly periodicity.

Bristol County Retirement System

Peer Group Scattergram

IM International Equity (SA+CF)

5 Years Ending June 30, 2019



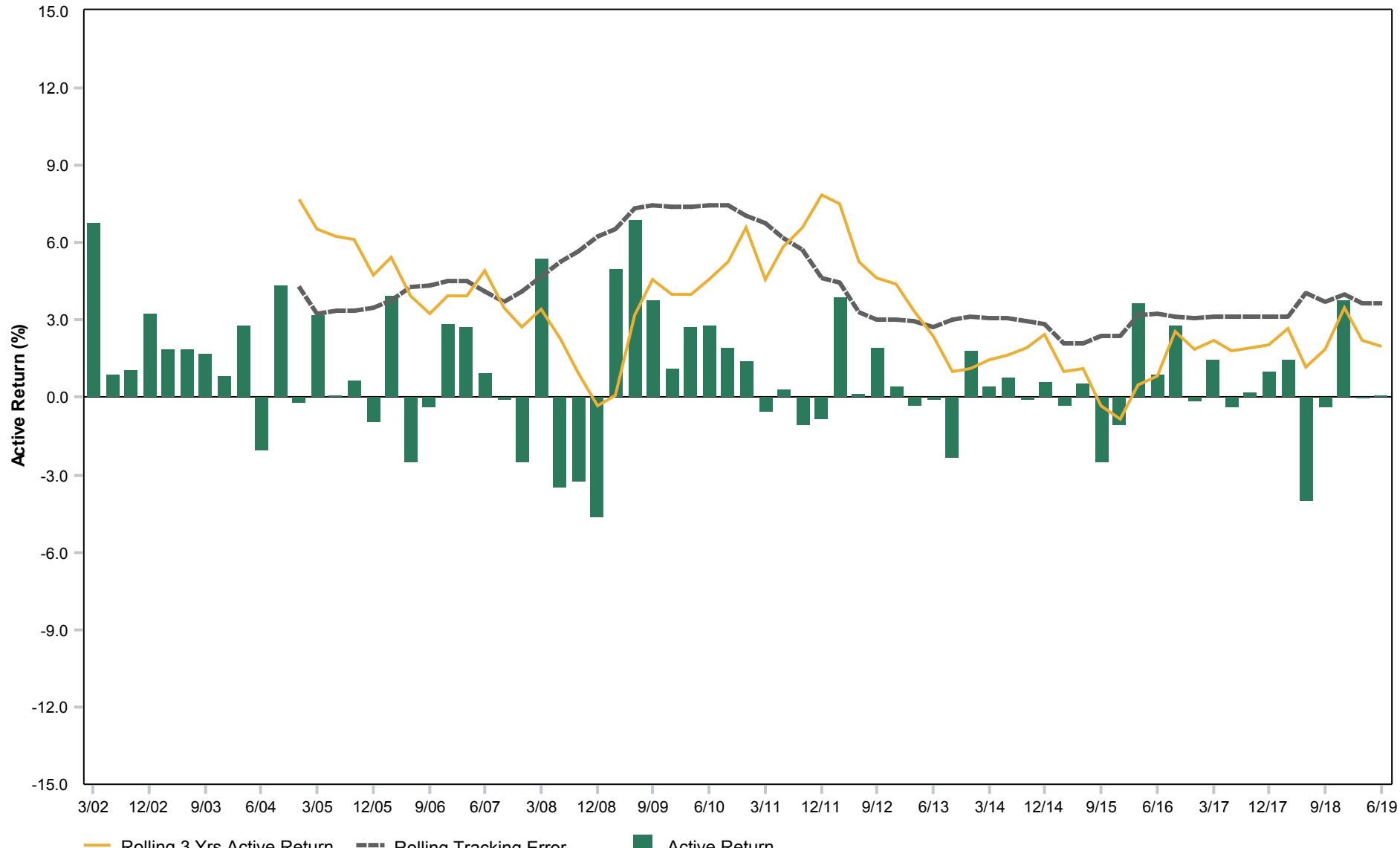
Calculation based on monthly periodicity.

Bristol County Retirement System

Comparative Performance & Rolling Return

As of June 30, 2019

	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	2018	2017	2016	2015
Total International Equity	3.77	14.16	5.17	11.28	3.79	8.87	9.55	-12.74	27.74	8.40	-4.29
MSCI EAFE (net)	3.68	14.03	1.08	9.11	2.25	7.31	6.90	-13.79	25.03	1.00	-0.81
Difference	0.09	0.13	4.09	2.17	1.54	1.56	2.65	1.05	2.71	7.40	-3.48



Bristol County Retirement System

Total International Equity

As of June 30, 2019

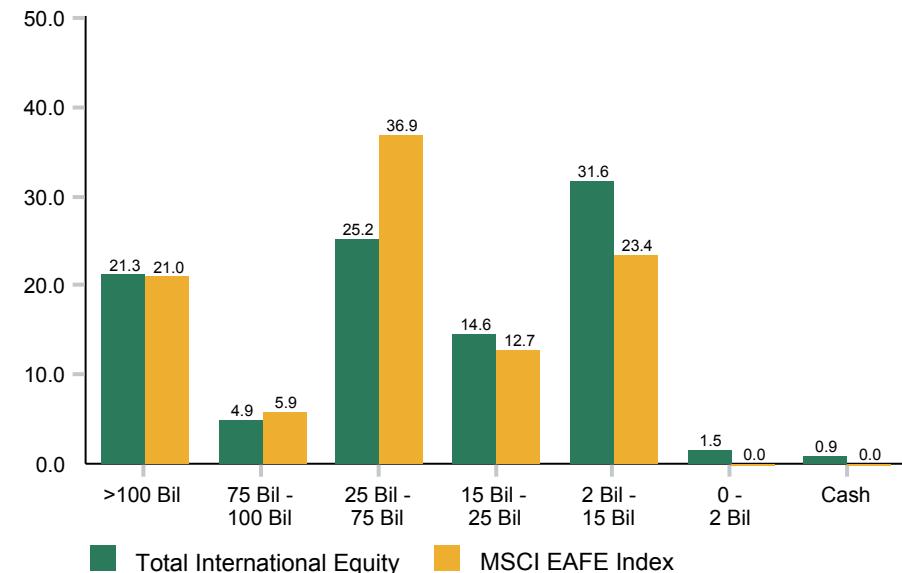
Top Ten Equity Holdings

	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Taiwan Semiconductor Manuf	1.69	0.00	1.69	0.12
Roche Holding AG	1.32	1.42	-0.10	2.14
Tencent Holdings LTD	1.24	0.00	1.24	-1.56
Keyence Corp	1.23	0.40	0.83	-1.43
China Construction Bank Corp	1.22	0.00	1.22	0.50
Samsung Electronics Co Ltd	1.18	0.00	1.18	4.67
Nestle SA, Cham Und Vevey	1.01	2.27	-1.26	11.44
Sberbank of Russia OJSC	0.97	0.00	0.97	23.48
Banco Do Brasil SA Bb Brasil	0.95	0.00	0.95	13.98
Taiwan Semiconductor	0.93	0.00	0.93	-1.32
% of Portfolio	11.74	4.09	7.65	

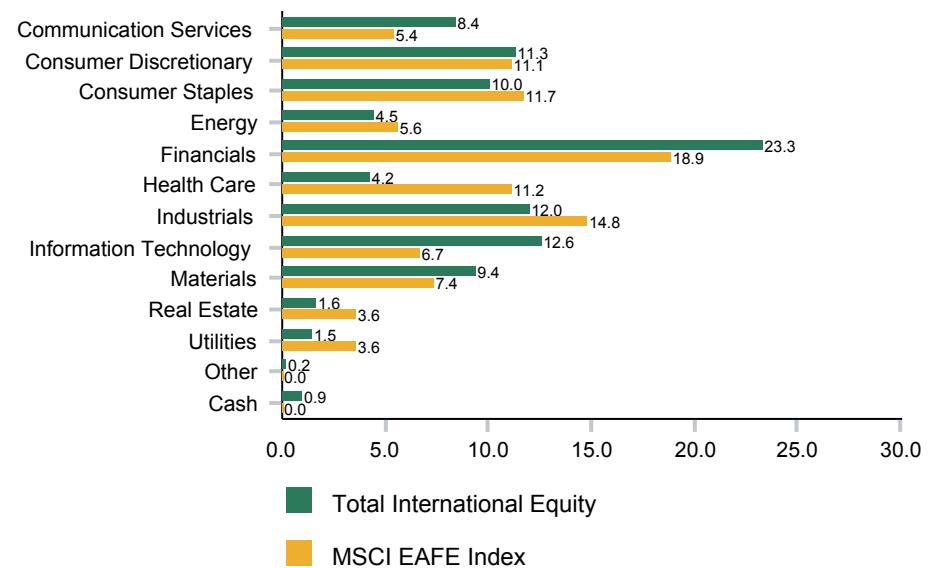
Portfolio Characteristics

	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$)	52,869,651,615	64,588,189,732
Median Mkt. Cap (\$)	8,530,168,000	10,228,173,176
Price/Earnings ratio	13.61	14.84
Price/Book ratio	2.45	2.26
5 Yr. EPS Growth Rate (%)	8.94	8.06
Current Yield (%)	3.24	3.58
Beta (5 Years, Monthly)	0.98	1.00
Number of Stocks	842	923

Distribution of Market Capitalization (%)



Sector Weights (%)



Bristol County Retirement System

Total International Equity

As of June 30, 2019

Ten Best Performers

	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Gazprom PJSC	0.09	0.00	0.09	62.30
Gazprom PJSC	0.40	0.00	0.40	62.09
Systema Corp	0.01	0.00	0.01	50.70
Gold Fields Ltd	0.02	0.00	0.02	47.01
Shopify Inc	0.01	0.00	0.01	45.27
NIB Holdings Ltd	0.01	0.00	0.01	44.57
Banco BTG Pactual SA	0.01	0.00	0.01	43.01
Panalpina Welttransport AG	0.01	0.00	0.01	38.33
Magellan Financial Group Ltd	0.03	0.00	0.03	38.27
CompuGroup Medical SE	0.02	0.00	0.02	38.26
% of Portfolio	0.61	0.00	0.61	

Ten Worst Performers

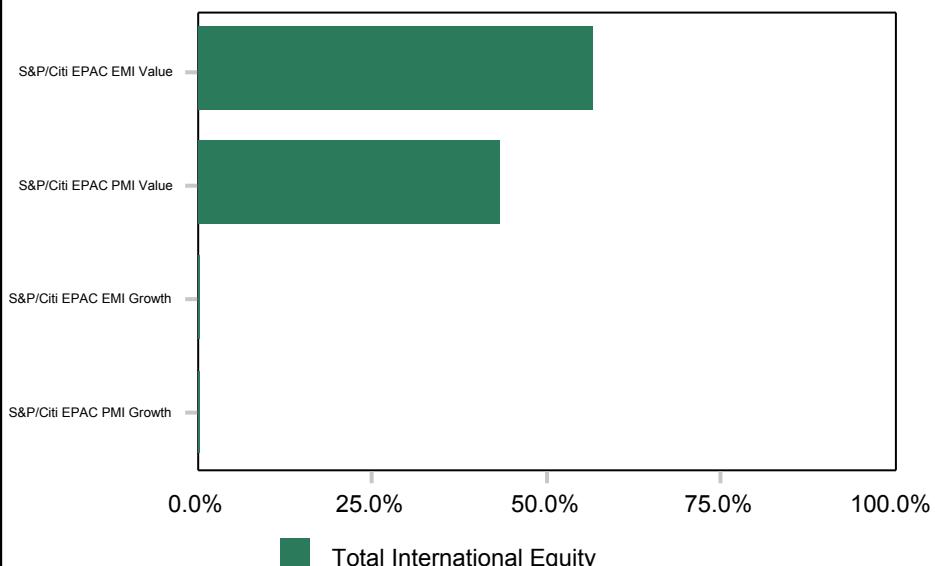
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Indivior PLC	0.00	0.00	0.00	-56.65
Teva Pharmaceutical Industries Ltd	0.05	0.07	-0.02	-41.14
Link Administration Holdings Ltd	0.00	0.00	0.00	-33.09
Seven Generations Energy Ltd	0.00	0.00	0.00	-32.02
Pakistan Petroleum Ltd	0.13	0.00	0.13	-31.69
Baidu Inc	0.19	0.00	0.19	-28.81
ARC Resources Ltd	0.01	0.00	0.01	-26.73
Cielo SA	0.18	0.00	0.18	-26.51
Hyundai Marine & Fire Insurance Company Co Ltd	0.01	0.00	0.01	-26.23
Habib Bank Ltd	0.04	0.00	0.04	-24.46
% of Portfolio	0.61	0.07	0.54	

Bristol County Retirement System

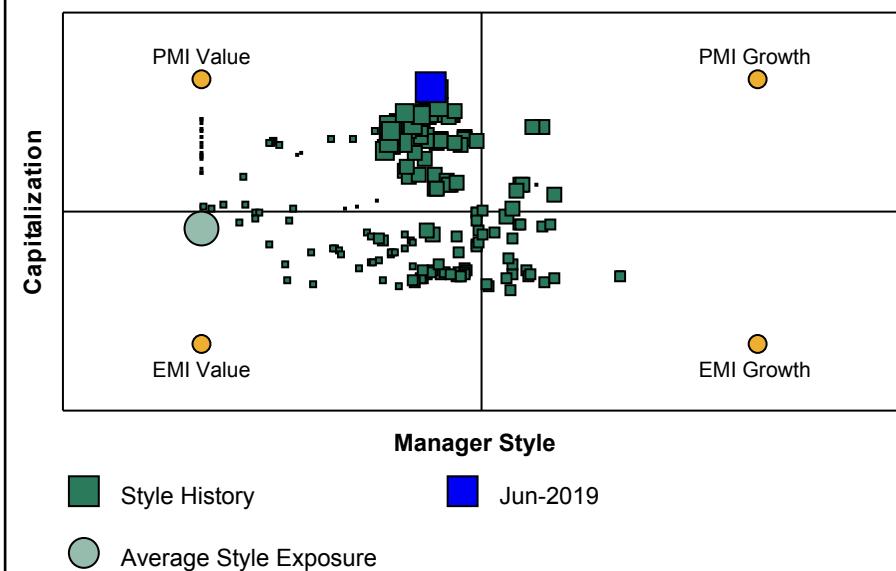
Style Analysis

Ending June 30, 2019

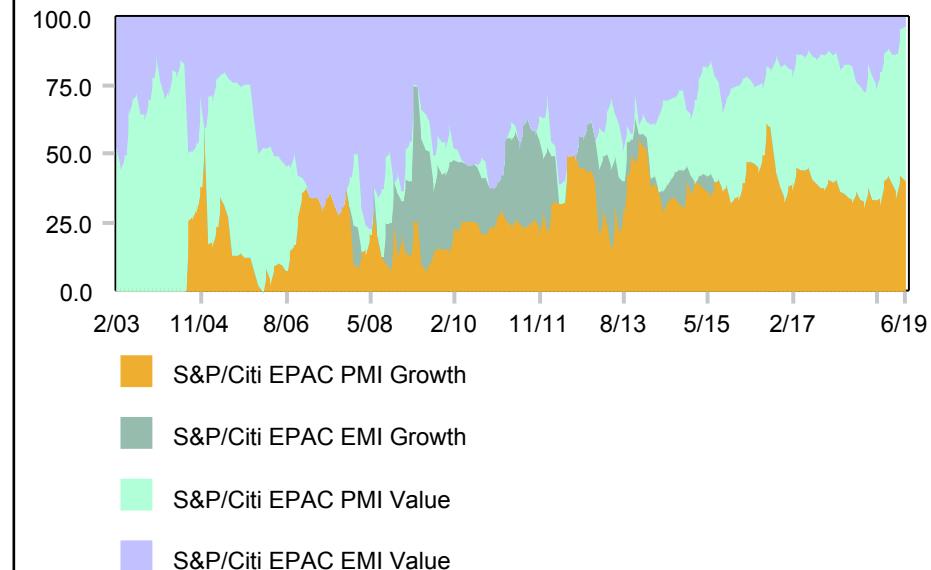
Investment Style Exposure



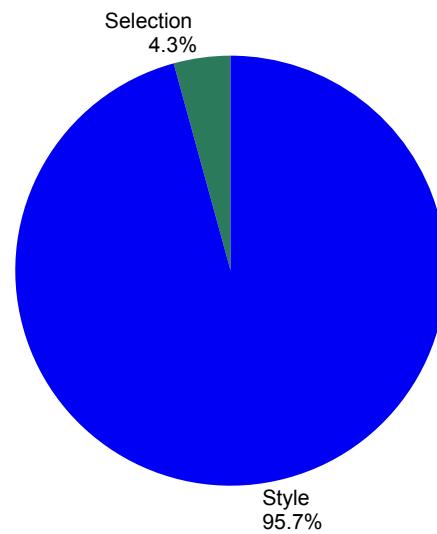
Style Map(ppp)



Style History(ppp)



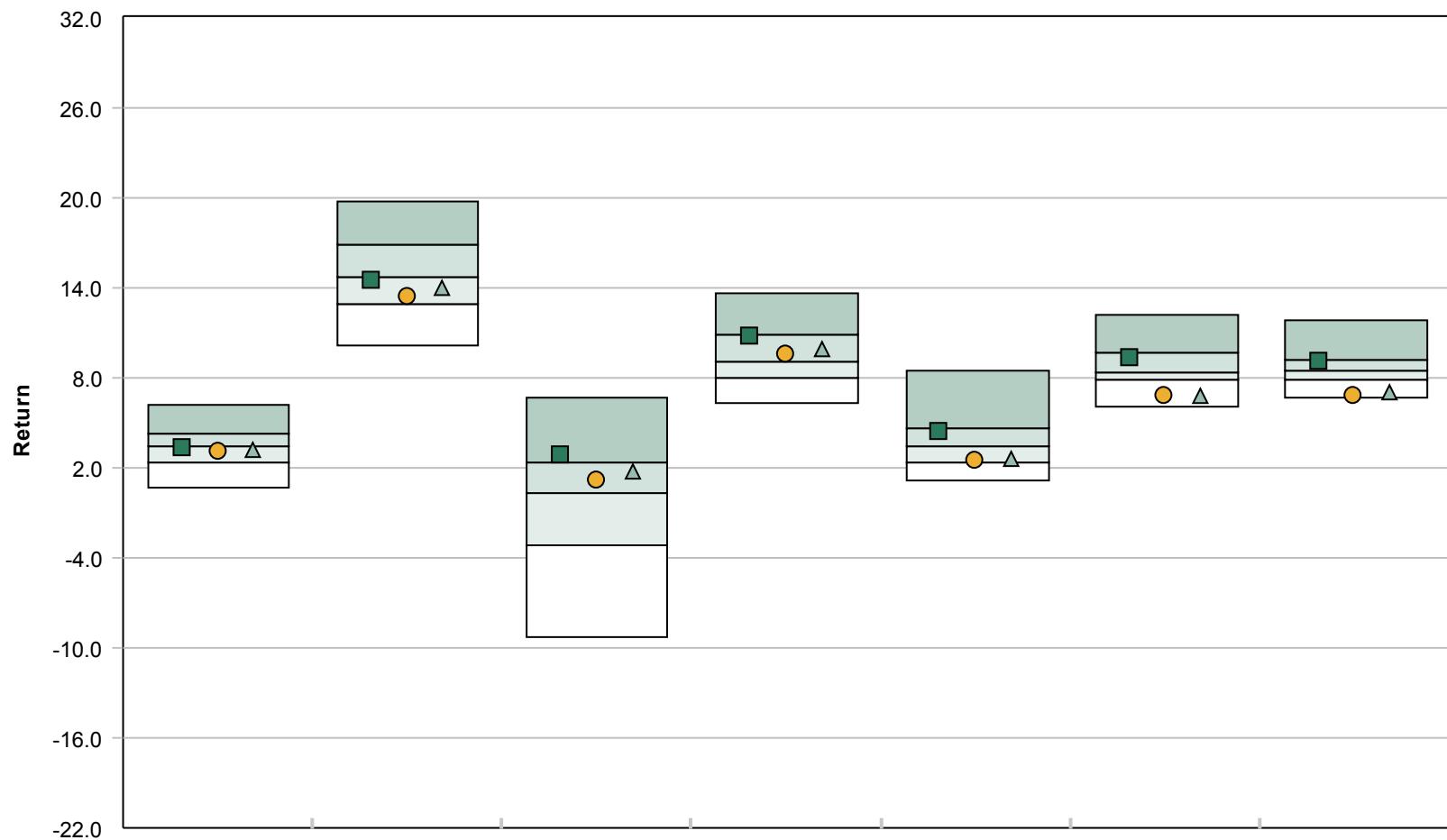
Return Variance



Bristol County Retirement System

IM International Core Equity (SA+CF)

As of June 30, 2019



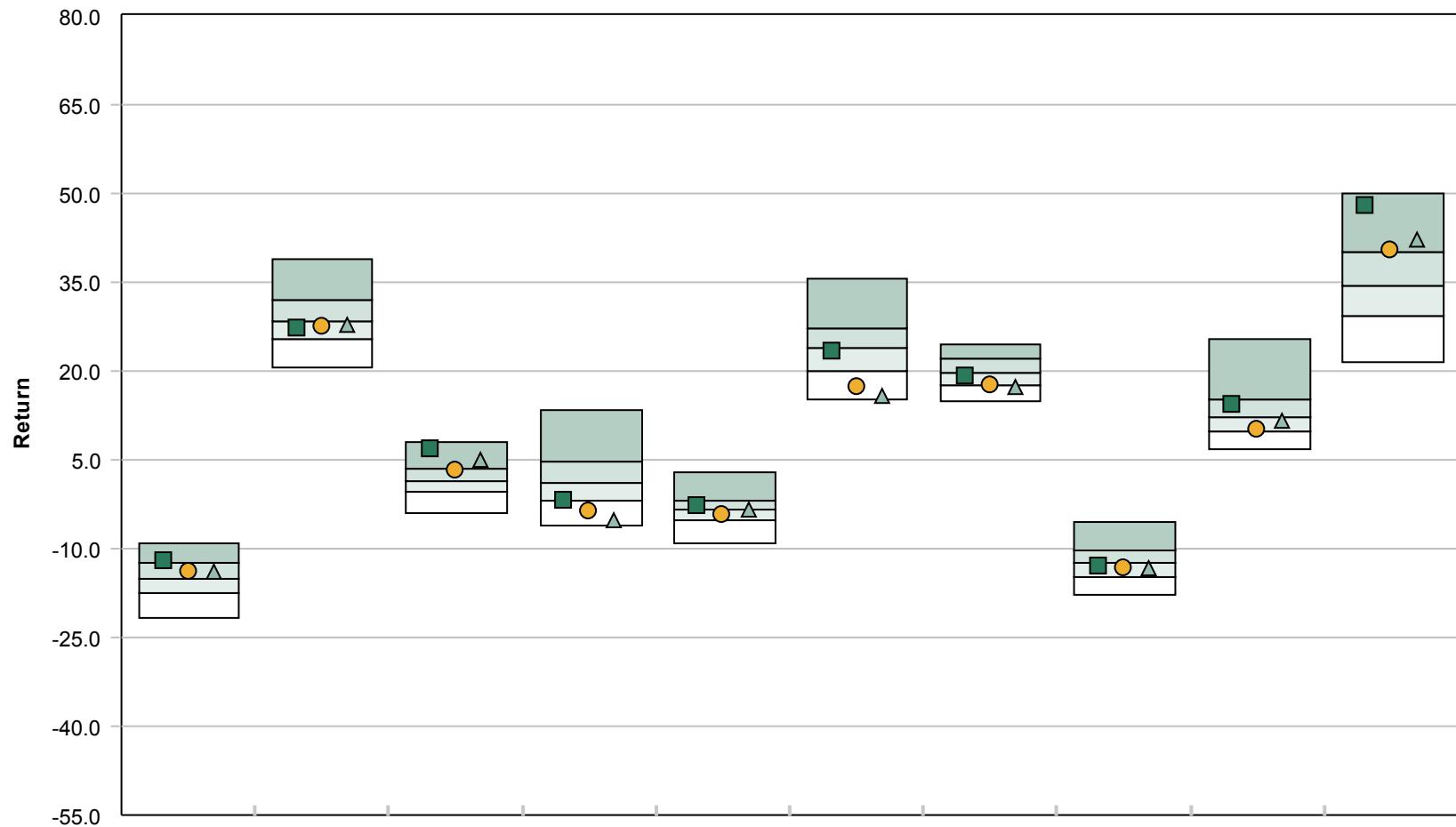
	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs
Arrowstreet Capital	3.37 (53)	14.49 (55)	2.79 (24)	10.76 (30)	4.44 (28)	9.34 (30)	9.07 (28)
Arrowstreet Capital Index*	3.09 (59)	13.38 (68)	1.22 (37)	9.54 (44)	2.44 (74)	6.81 (92)	6.83 (94)
MSCI AC World ex USA	3.22 (55)	14.00 (62)	1.80 (32)	9.91 (38)	2.65 (70)	6.85 (91)	7.03 (89)
5th Percentile	6.15	19.79	6.69	13.67	8.51	12.24	11.79
1st Quartile	4.29	16.89	2.39	10.90	4.61	9.63	9.21
Median	3.46	14.69	0.34	9.12	3.43	8.31	8.47
3rd Quartile	2.35	12.97	-3.15	8.02	2.35	7.84	7.83
95th Percentile	0.73	10.11	-9.33	6.37	1.18	6.09	6.73

*80% MSCI EAFE/20% MSCI EME

Bristol County Retirement System

IM International Core Equity (SA+CF)

As of June 30, 2019



	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
Arrowstreet Capital	-11.98 (20)	27.26 (56)	6.87 (10)	-1.88 (76)	-2.74 (38)	23.44 (56)	19.10 (62)	-12.96 (57)	14.39 (31)	47.80 (9)
Arrowstreet Capital Index*	-13.84 (35)	27.52 (56)	3.15 (32)	-3.64 (88)	-4.23 (59)	17.38 (85)	17.65 (76)	-13.27 (60)	9.98 (70)	40.33 (25)
MSCI AC World ex USA	-13.78 (34)	27.77 (54)	5.01 (19)	-5.25 (94)	-3.44 (50)	15.78 (94)	17.39 (78)	-13.33 (61)	11.60 (55)	42.14 (19)
5th Percentile	-8.99	38.76	8.11	13.29	2.95	35.70	24.58	-5.62	25.49	50.08
1st Quartile	-12.42	32.14	3.59	4.68	-1.94	27.21	22.01	-10.40	15.30	40.08
Median	-15.18	28.38	1.54	1.09	-3.45	24.02	19.76	-12.41	12.06	34.43
3rd Quartile	-17.62	25.34	-0.30	-1.86	-5.26	19.95	17.67	-14.82	9.71	29.23
95th Percentile	-21.65	20.65	-3.91	-6.15	-8.99	15.23	14.94	-17.91	6.70	21.59

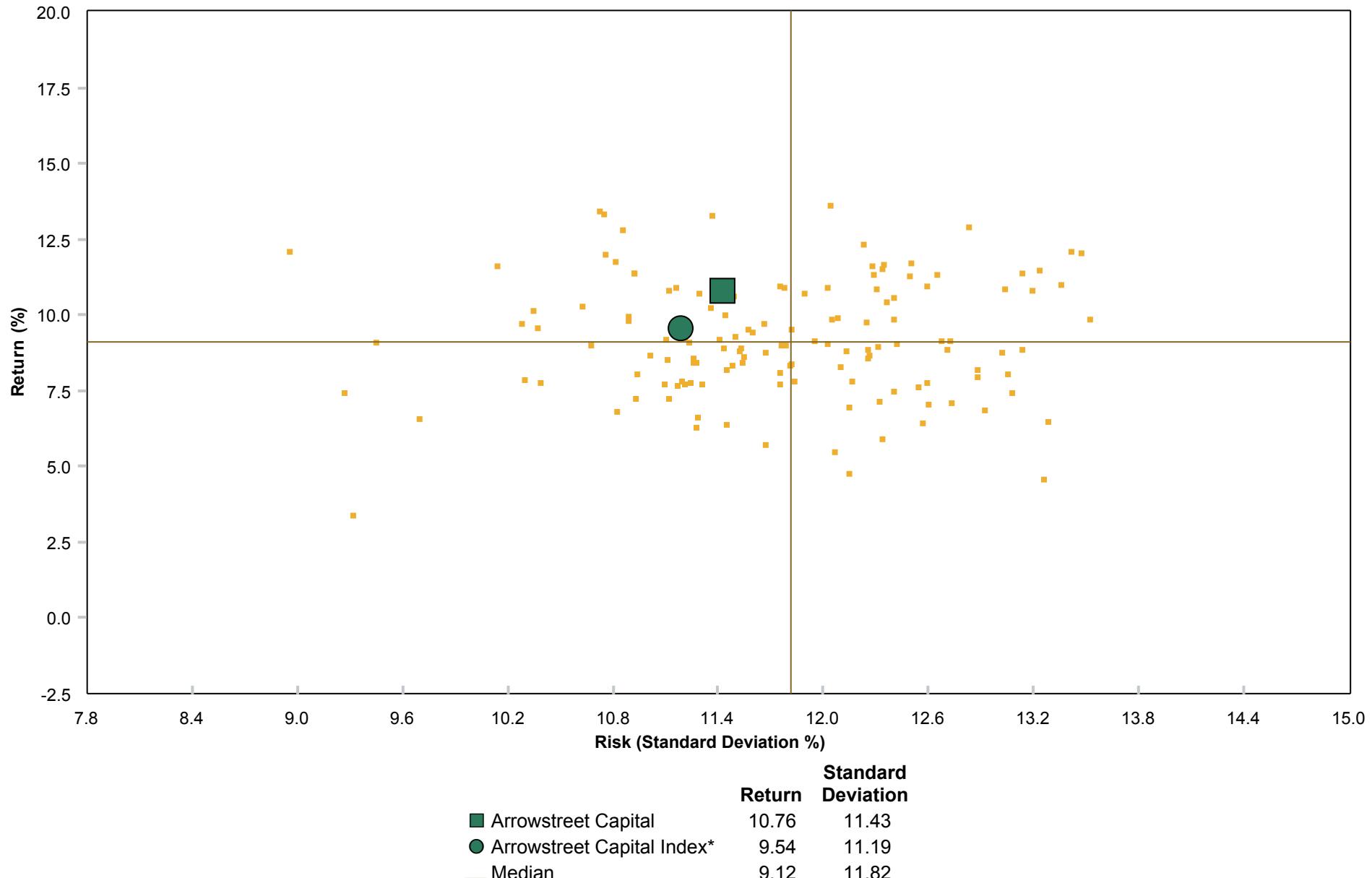
*80% MSCI EAFE/20% MSCI EME

Bristol County Retirement System

Peer Group Scattergram

IM International Core Equity (SA+CF)

3 Years Ending June 30, 2019



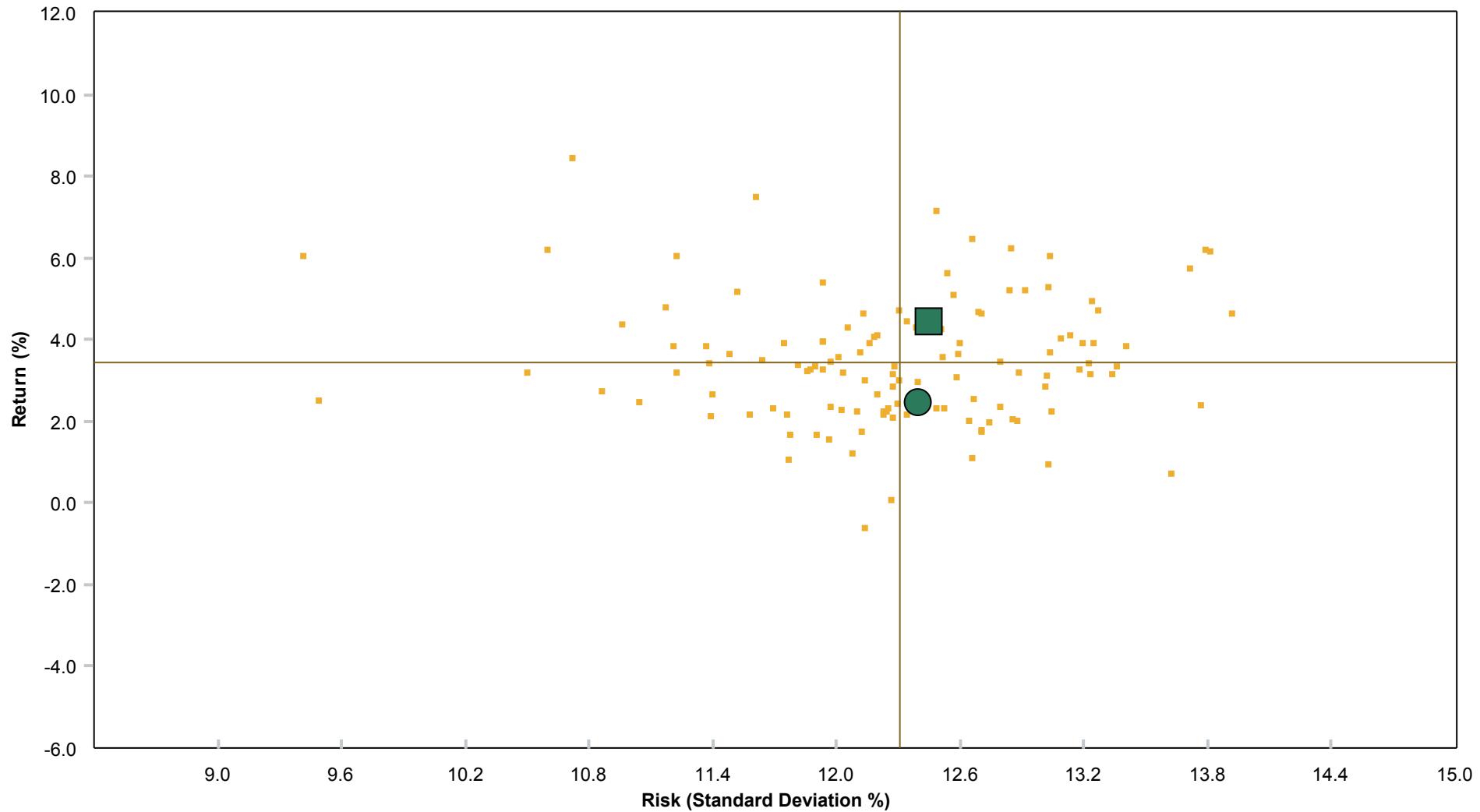
*80% MSCI EAFE/20% MSCI EME.

Bristol County Retirement System

Peer Group Scattergram

IM International Core Equity (SA+CF)

5 Years Ending June 30, 2019



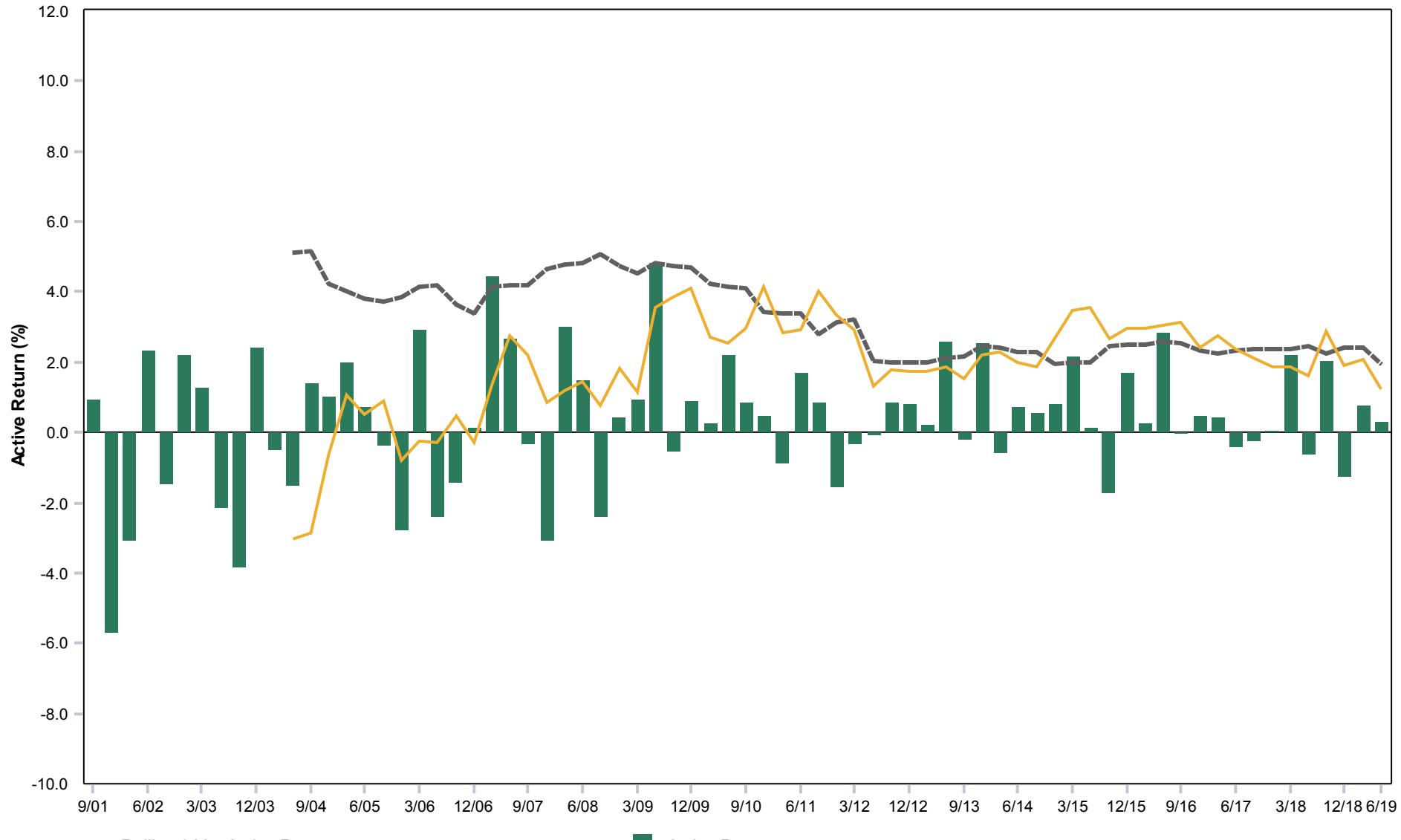
*80% MSCI EAFE/20% MSCI EME.

Bristol County Retirement System

Comparative Performance & Rolling Return

As of June 30, 2019

	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	2018	2017	2016	2015
Arrowstreet Capital	3.37	14.49	2.79	10.76	4.44	9.34	9.07	-11.98	27.26	6.87	-1.88
Arrowstreet Capital Index*	3.09	13.38	1.22	9.54	2.44	6.81	6.83	-13.84	27.52	3.15	-3.64
Difference	0.28	1.11	1.57	1.22	2.00	2.53	2.24	1.86	-0.26	3.72	1.76



*80% MSCI EAFE (Net)/20% MSCI EMF.

Gross of Fees

Bristol County Retirement System

Arrowstreet Capital

As of June 30, 2019

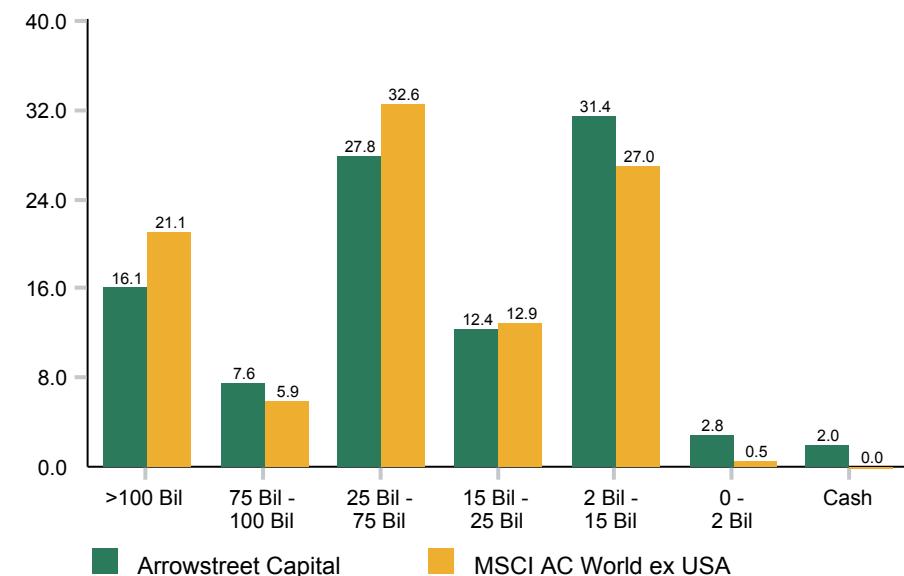
Top Ten Equity Holdings

	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Roche Holding AG	3.17	0.95	2.22	2.14
Samsung Electronics Co Ltd	1.55	0.93	0.62	4.24
Nestle SA, Cham Und Vevey	1.41	1.52	-0.11	11.47
Taiwan Semiconductor	1.33	0.91	0.42	-1.32
Enel Ente Nazionale Per L'Energia Elettrica SPA, Roma	1.30	0.27	1.03	9.14
Koninklijke Philips NV	1.28	0.19	1.09	9.15
SAP AG Systeme Anwendungen	1.06	0.65	0.41	20.41
Astrazeneca PLC	1.04	0.50	0.54	2.10
Rio Tinto Group	0.99	0.34	0.65	5.93
Allianz SE	0.93	0.49	0.44	13.31
% of Portfolio	14.06	6.75	7.31	

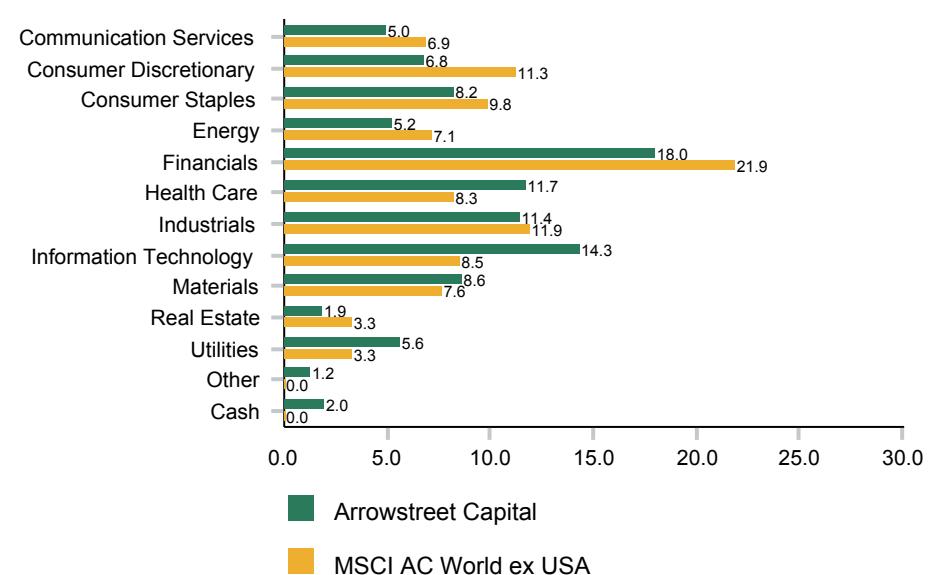
Portfolio Characteristics

	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$)	52,330,519,937	67,766,311,709
Median Mkt. Cap (\$)	7,846,125,630	7,981,912,699
Price/Earnings ratio	12.83	13.96
Price/Book ratio	2.26	2.23
5 Yr. EPS Growth Rate (%)	10.37	9.73
Current Yield (%)	3.72	3.40
Beta (5 Years, Monthly)	0.97	1.00
Number of Stocks	678	2,206

Distribution of Market Capitalization (%)



Sector Weights (%)

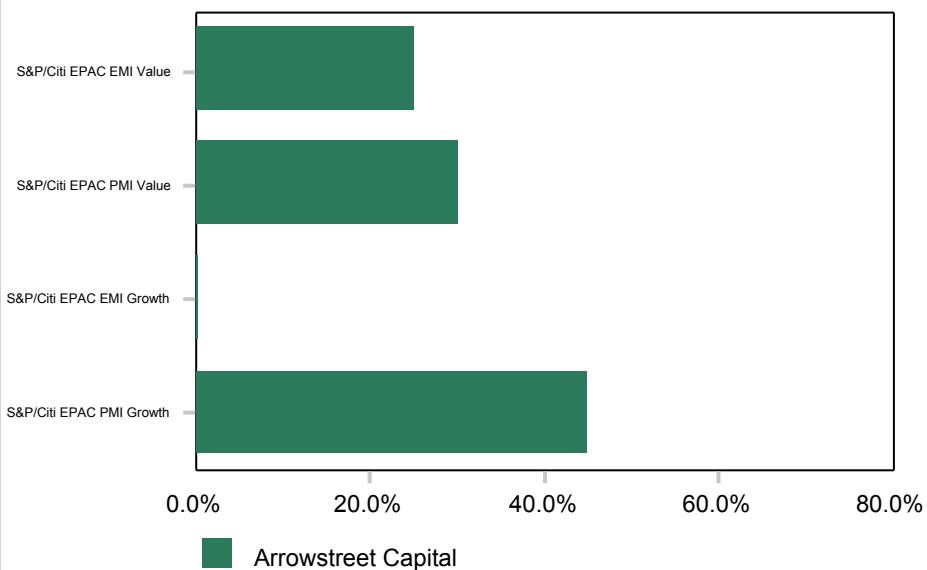


Bristol County Retirement System

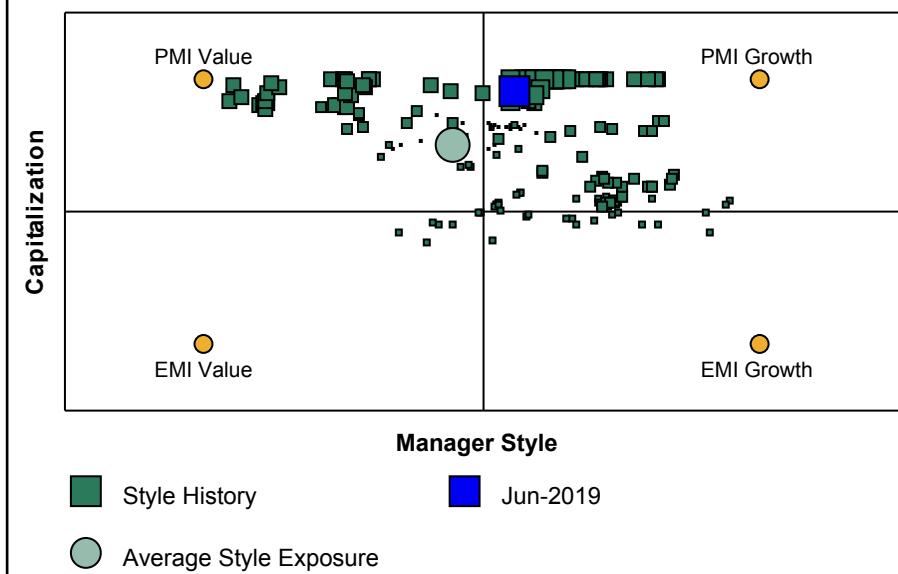
Style Analysis

Ending June 30, 2019

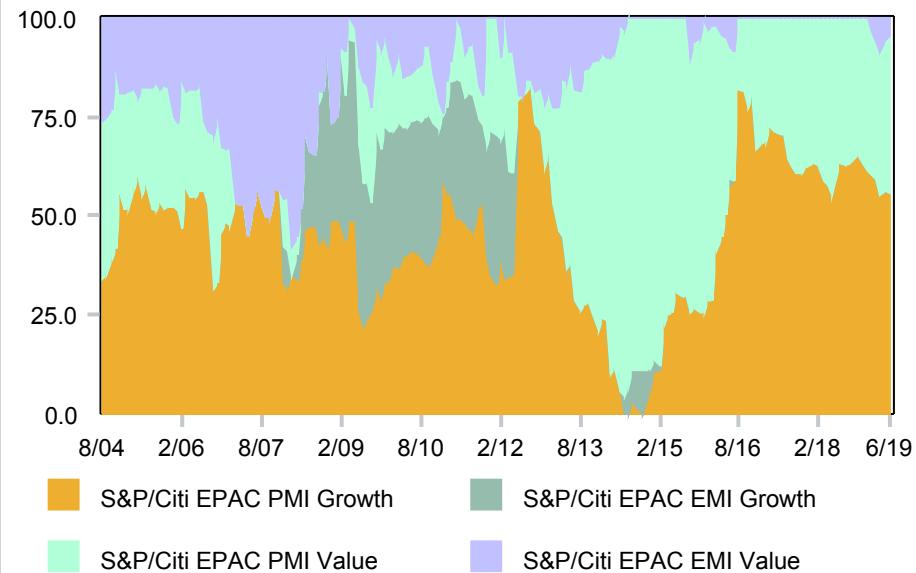
Investment Style Exposure



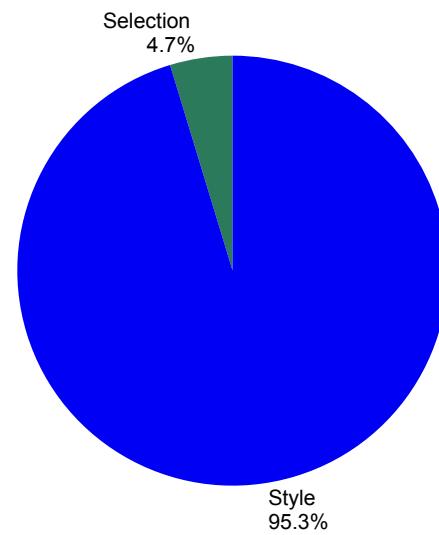
Style Map(ppp)



Style History(ppp)



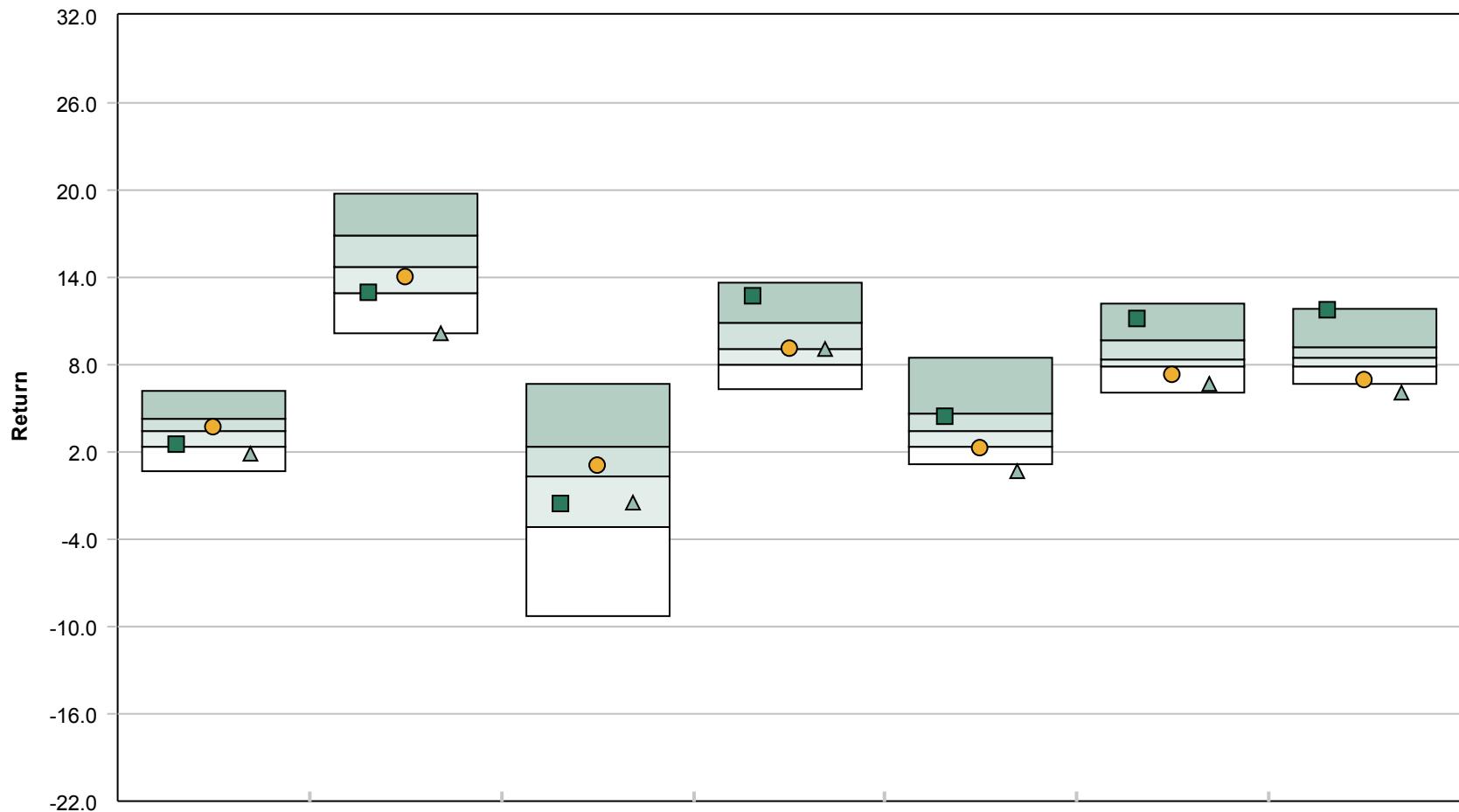
Return Variance



Bristol County Retirement System

IM International Core Equity (SA+CF)

As of June 30, 2019



	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs
Freedom Capital Intl	2.45 (75)	12.92 (76)	-1.54 (64)	12.72 (10)	4.36 (28)	11.15 (9)	11.74 (6)
MSCI EAFE (net)	3.68 (43)	14.03 (61)	1.08 (39)	9.11 (52)	2.25 (80)	7.31 (84)	6.90 (92)
MSCI EAFE Value	1.89 (82)	10.12 (95)	-1.48 (64)	9.11 (52)	0.63 (99)	6.64 (93)	6.10 (98)
5th Percentile	6.15	19.79	6.69	13.67	8.51	12.24	11.79
1st Quartile	4.29	16.89	2.39	10.90	4.61	9.63	9.21
Median	3.46	14.69	0.34	9.12	3.43	8.31	8.47
3rd Quartile	2.35	12.97	-3.15	8.02	2.35	7.84	7.83
95th Percentile	0.73	10.11	-9.33	6.37	1.18	6.09	6.73

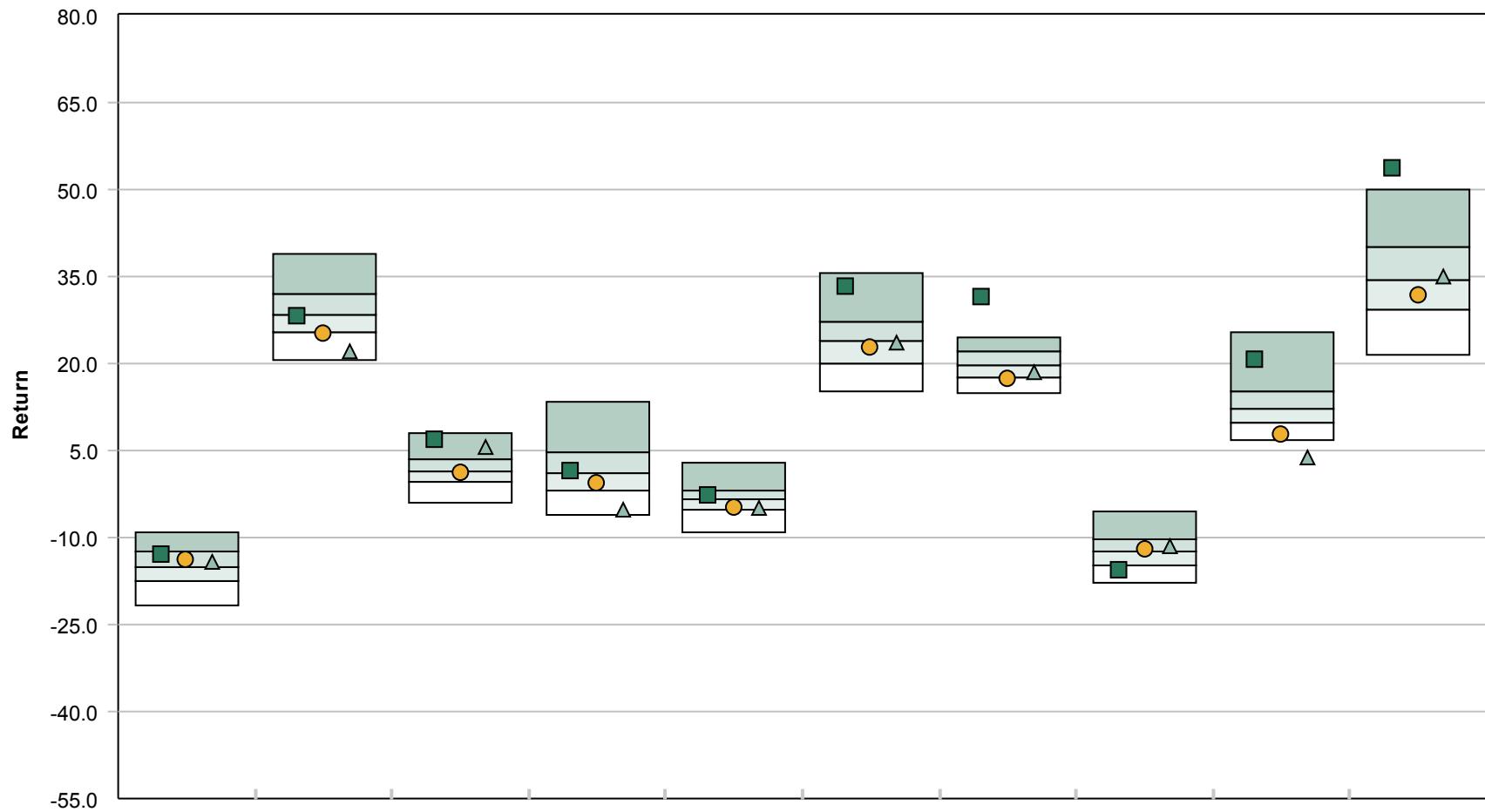
(Parentheses contain percentile rankings.)

Calculation based on monthly periodicity.

Bristol County Retirement System

IM International Core Equity (SA+CF)

As of June 30, 2019



	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
Freedom Capital Intl	-12.90 (28)	27.96 (53)	6.75 (10)	1.37 (48)	-2.88 (40)	33.24 (8)	31.46 (1)	-15.84 (87)	20.72 (13)	53.54 (3)
MSCI EAFE (net)	-13.79 (34)	25.03 (78)	1.00 (58)	-0.81 (67)	-4.90 (69)	22.78 (60)	17.32 (78)	-12.14 (46)	7.75 (92)	31.78 (61)
MSCI EAFE Value	-14.26 (41)	22.12 (94)	5.68 (15)	-5.22 (94)	-4.92 (69)	23.59 (54)	18.43 (70)	-11.65 (41)	3.81 (98)	35.06 (48)
5th Percentile	-8.99	38.76	8.11	13.29	2.95	35.70	24.58	-5.62	25.49	50.08
1st Quartile	-12.42	32.14	3.59	4.68	-1.94	27.21	22.01	-10.40	15.30	40.08
Median	-15.18	28.38	1.54	1.09	-3.45	24.02	19.76	-12.41	12.06	34.43
3rd Quartile	-17.62	25.34	-0.30	-1.86	-5.26	19.95	17.67	-14.82	9.71	29.23
95th Percentile	-21.65	20.65	-3.91	-6.15	-8.99	15.23	14.94	-17.91	6.70	21.59

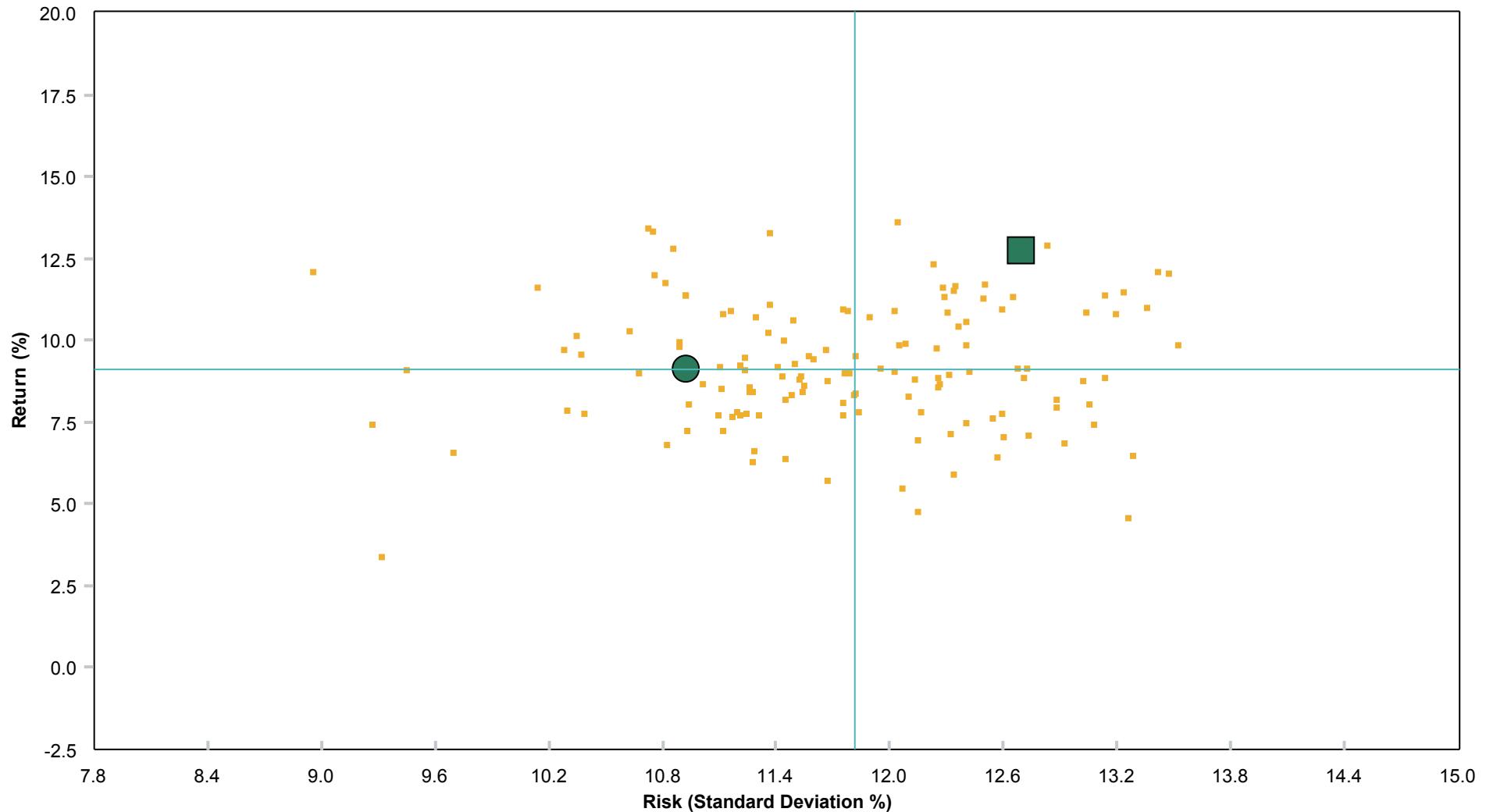
Parentheses contain percentile rankings.
Calculation based on monthly periodicity.

Bristol County Retirement System

Peer Group Scattergram

IM International Core Equity (SA+CF)

3 Years Ending June 30, 2019



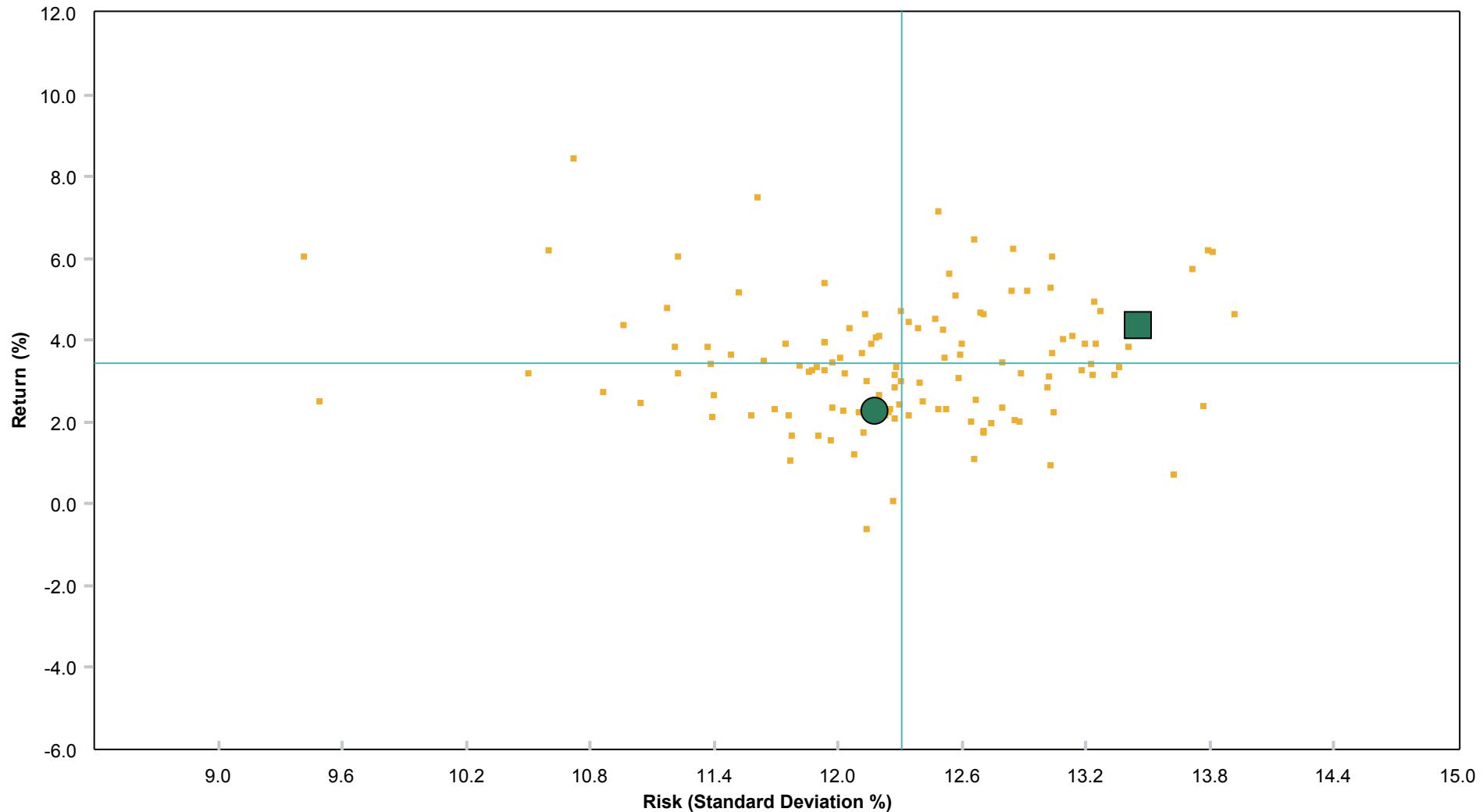
Calculation based on monthly periodicity.

Bristol County Retirement System

Peer Group Scattergram

IM International Core Equity (SA+CF)

5 Years Ending June 30, 2019



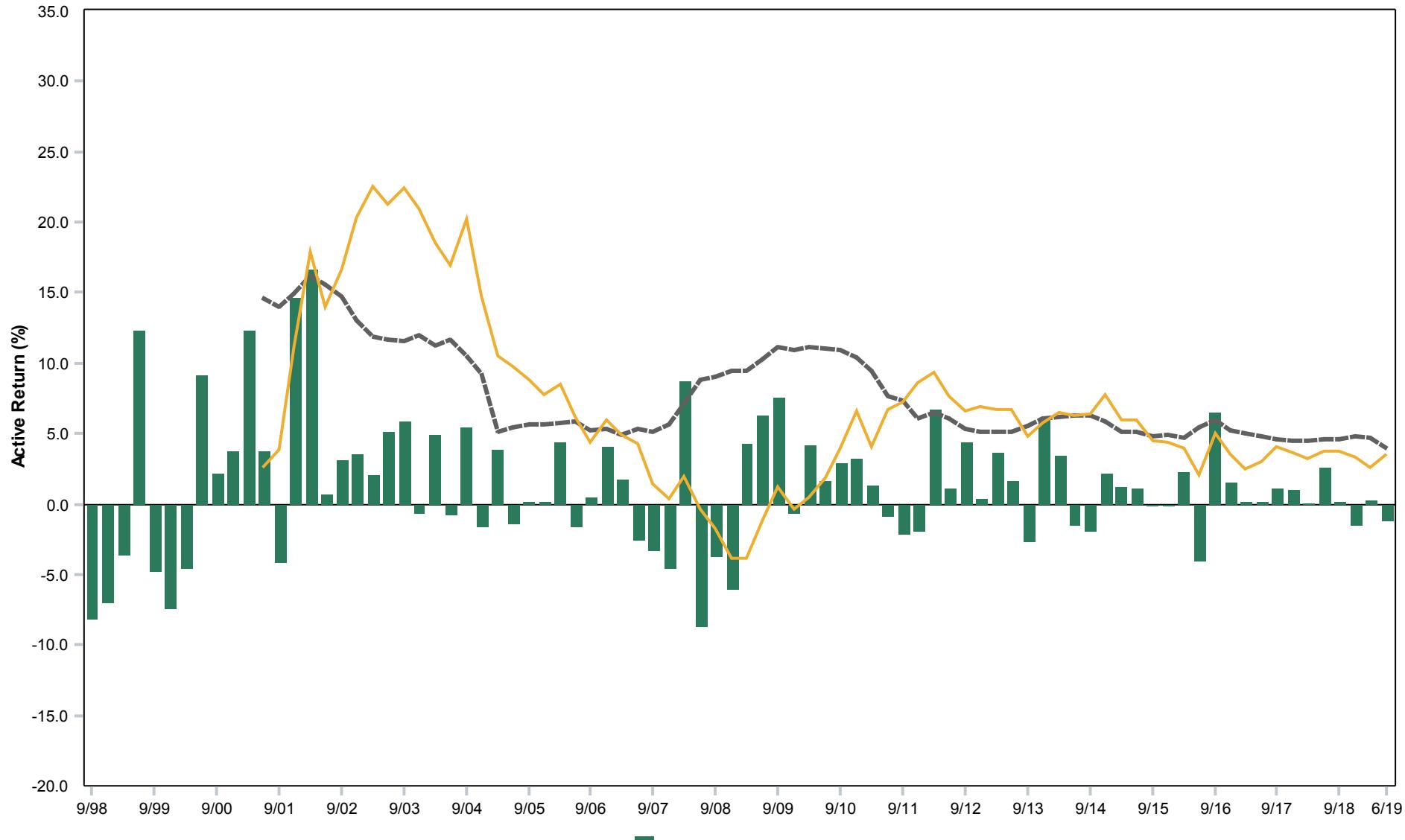
Calculation based on monthly periodicity.

Bristol County Retirement System

Comparative Performance & Rolling Return

As of June 30, 2019

	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	2018	2017	2016	2015
Freedom Capital Intl	2.45	12.92	-1.54	12.72	4.36	11.15	11.74	-12.90	27.96	6.75	1.37
MSCI EAFE (net)	3.68	14.03	1.08	9.11	2.25	7.31	6.90	-13.79	25.03	1.00	-0.81
Difference	-1.23	-1.11	-2.62	3.61	2.11	3.84	4.84	0.89	2.93	5.75	2.18



— Rolling 3 Yrs Active Return - - - Rolling Tracking Error

█ Active Return

Bristol County Retirement System

Freedom Capital Intl

As of June 30, 2019

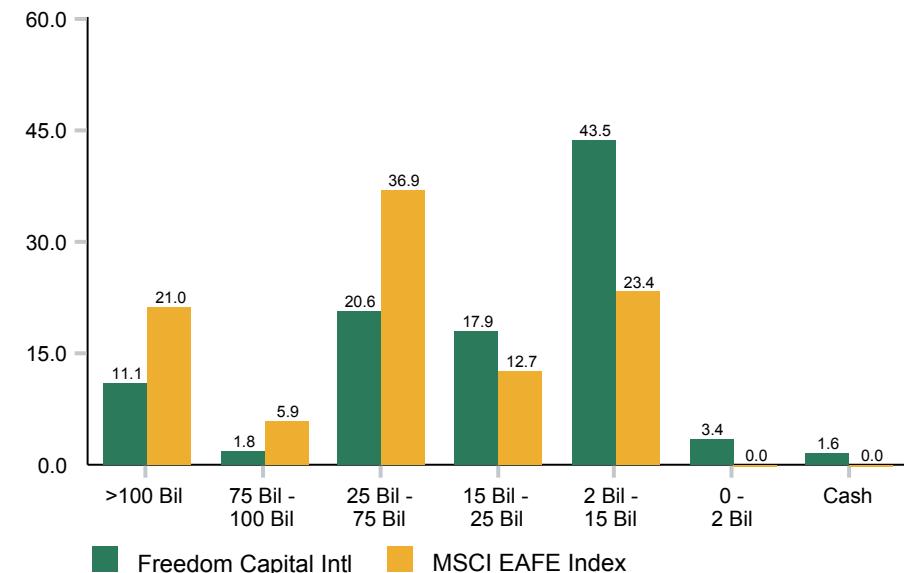
Top Ten Equity Holdings

	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Linde Plc	3.39	0.00	3.39	14.69
BHP Group Ltd	2.78	0.61	2.17	5.86
Infosys Ltd	2.67	0.00	2.67	-0.72
Hannover Rueck SE	2.60	0.07	2.53	17.31
Vinci SA	2.55	0.37	2.18	7.59
Novartis AG	2.55	1.42	1.13	7.34
Nexon Co Ltd	2.47	0.05	2.42	-7.39
Next PLC	2.46	0.07	2.39	-3.36
DnB ASA	2.46	0.13	2.33	6.21
Popular Inc	2.39	0.00	2.39	4.63
% of Portfolio	26.32	2.72	23.60	

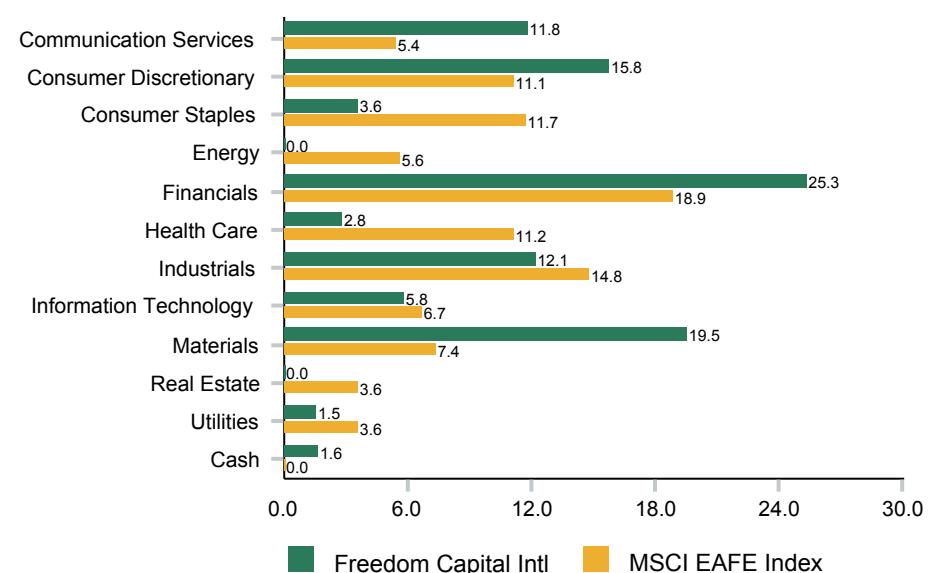
Portfolio Characteristics

	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$)	38,130,805,552	64,588,189,732
Median Mkt. Cap (\$)	13,118,461,663	10,228,173,176
Price/Earnings ratio	11.95	14.84
Price/Book ratio	1.80	2.26
5 Yr. EPS Growth Rate (%)	6.28	8.06
Current Yield (%)	3.89	3.58
Beta (5 Years, Monthly)	1.04	1.00
Number of Stocks	54	923

Distribution of Market Capitalization (%)



Sector Weights (%)

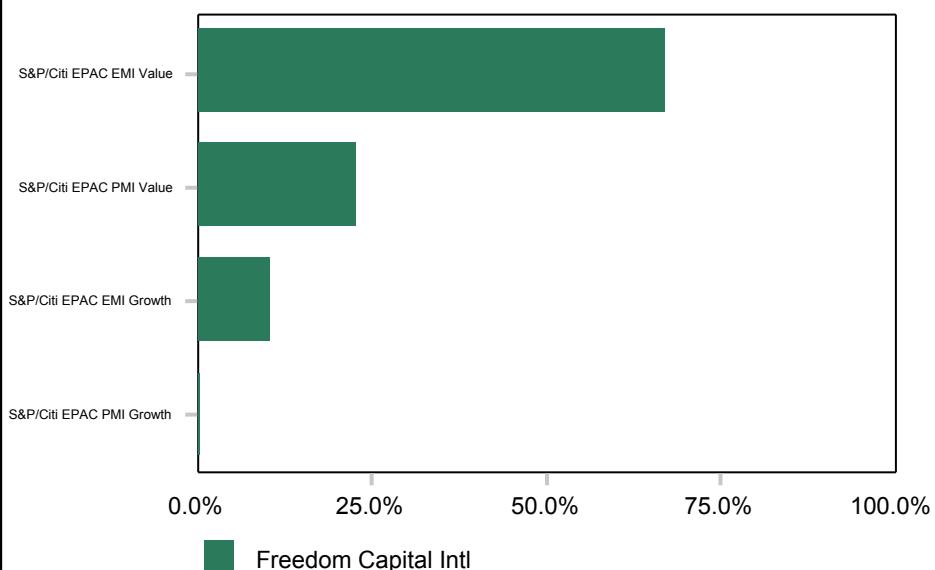


Bristol County Retirement System

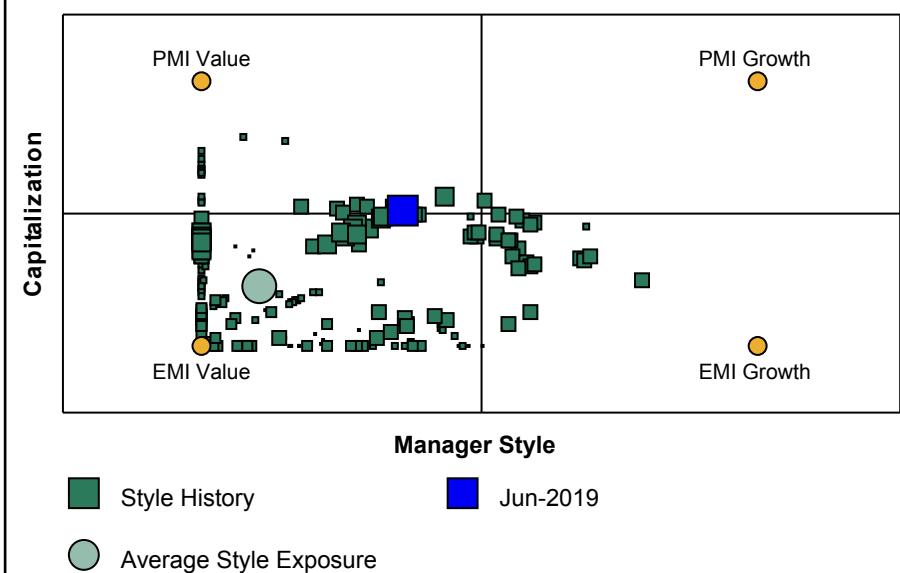
Freedom Capital International

Ending June 30, 2019

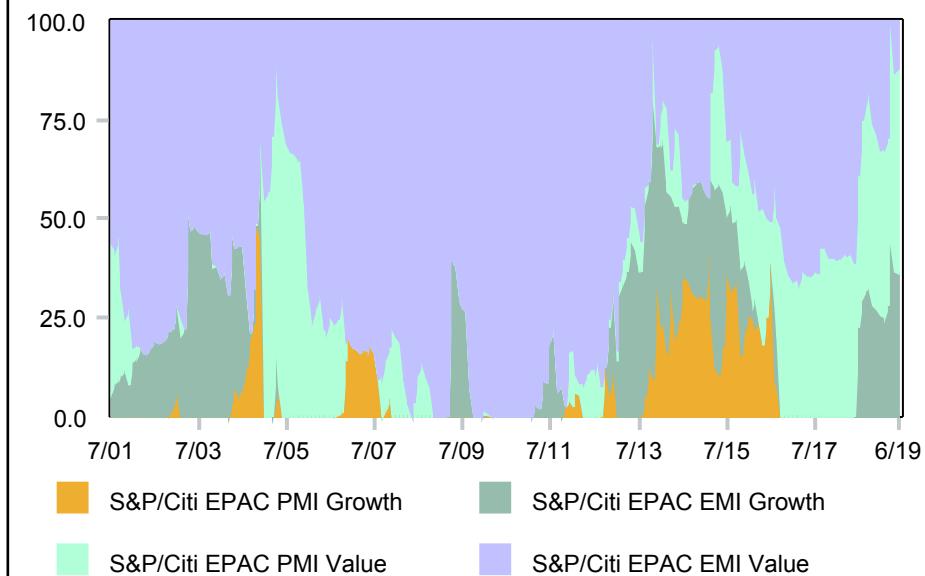
Investment Style Exposure



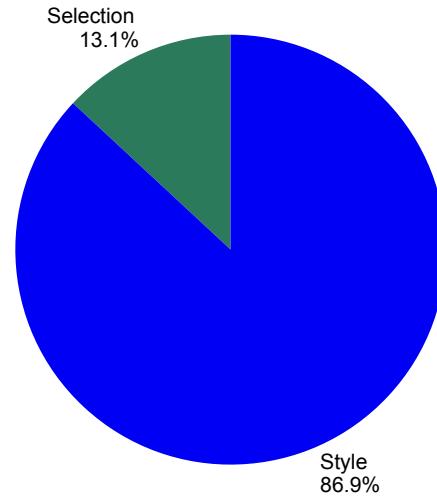
Style Map(ppp)



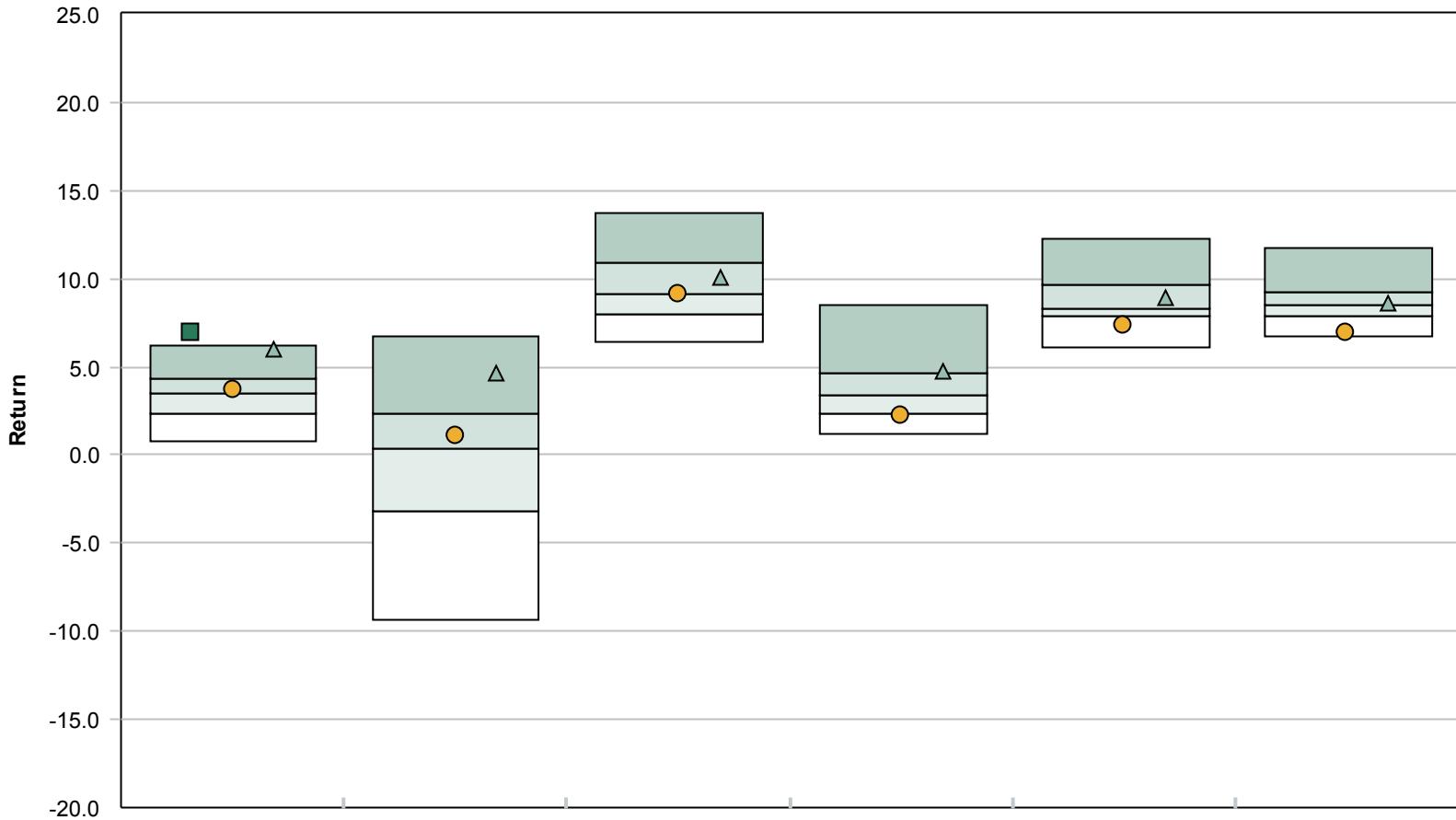
Style History(ppp)



Return Variance



As of June 30, 2019



■ Fiera International Equity
 ● MSCI EAFE (Net)
 ▲ MSCI EAFE Growth Index

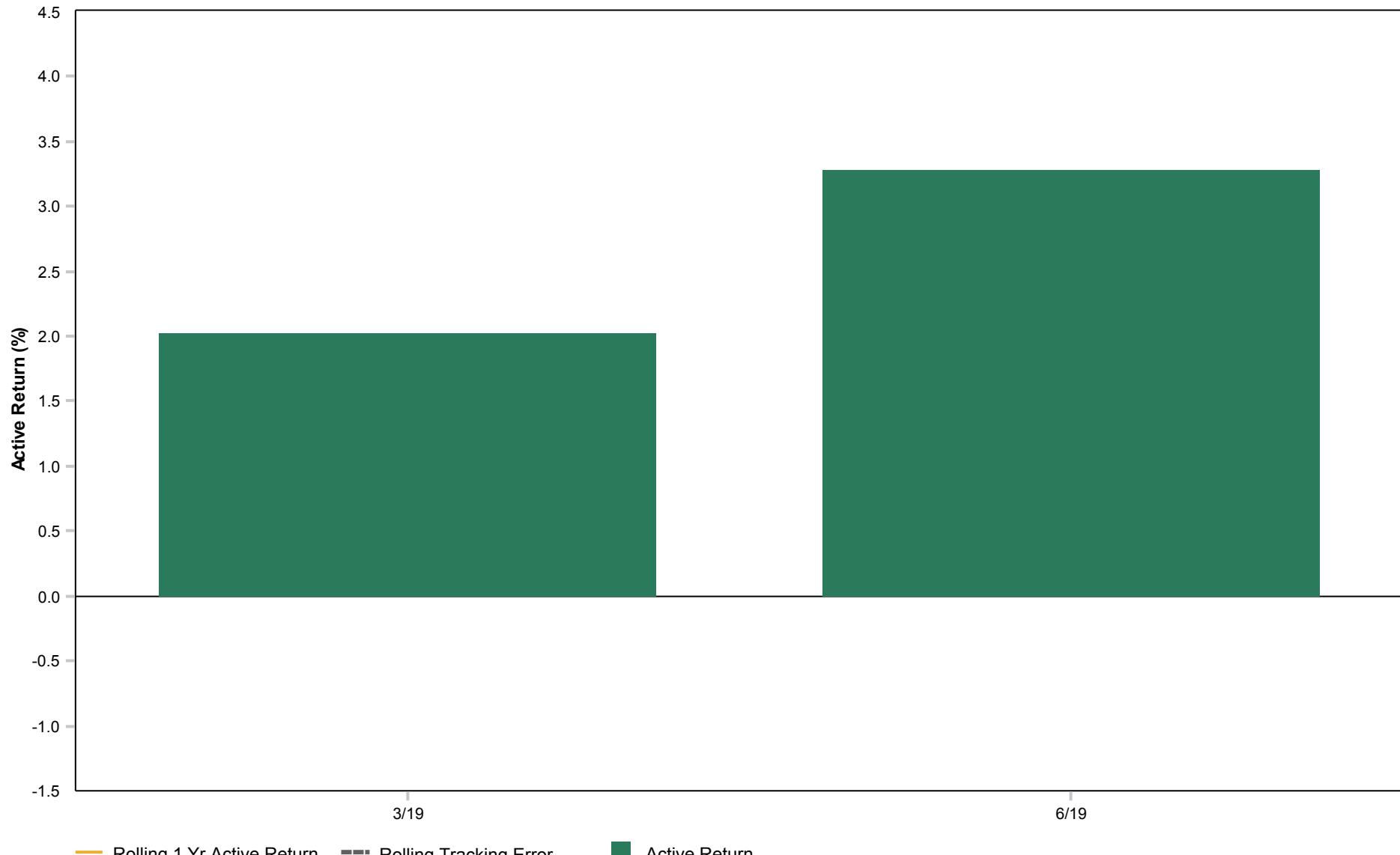
	1 Qtr	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs
5th Percentile	6.15	6.69	13.67	8.51	12.24	11.79
1st Quartile	4.29	2.39	10.90	4.61	9.63	9.21
Median	3.46	0.34	9.12	3.43	8.31	8.47
3rd Quartile	2.35	-3.15	8.02	2.35	7.84	7.83
95th Percentile	0.73	-9.33	6.37	1.18	6.09	6.73

Parentheses contain percentile rankings.
 Calculation based on monthly periodicity.

Bristol County Retirement System

Comparative Performance & Rolling Return

	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	2018	2017	2016	2015
Fiera International Equity	6.96	19.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MSCI EAFE (Net)	3.68	14.03	1.08	9.11	2.25	7.31	6.90	-13.79	25.03	1.00	-0.81
Difference	3.28	5.76	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A



Bristol County Retirement System

Fiera International Equity

As of June 30, 2019

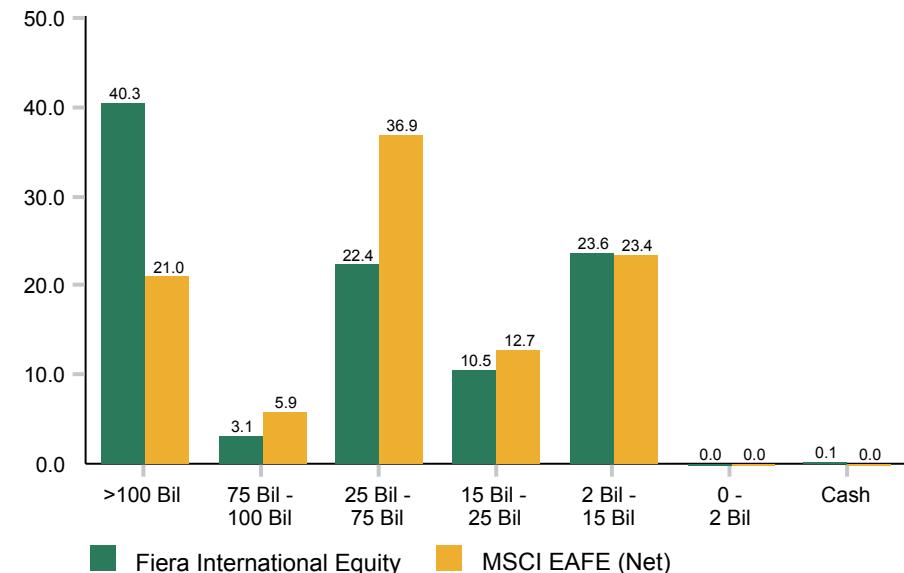
Top Ten Equity Holdings

	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Keyence Corp	6.32	0.40	5.92	-1.43
Nestle SA, Cham Und Vevey	5.21	2.27	2.94	11.44
Unilever NV	4.78	0.64	4.14	5.69
L'Oreal S.A., Paris	4.39	0.51	3.88	7.60
Diageo PLC	4.36	0.74	3.62	5.23
Roche Holding AG	4.09	1.42	2.67	2.14
Intercontinental Hotels Group PLC	4.00	0.08	3.92	9.36
SAP AG Systeme Anwendungen	3.73	0.97	2.76	20.41
IHS Markit Ltd	3.72	0.00	3.72	17.18
Taiwan Semiconductor	3.65	0.00	3.65	-1.32
% of Portfolio	44.25	7.03	37.22	

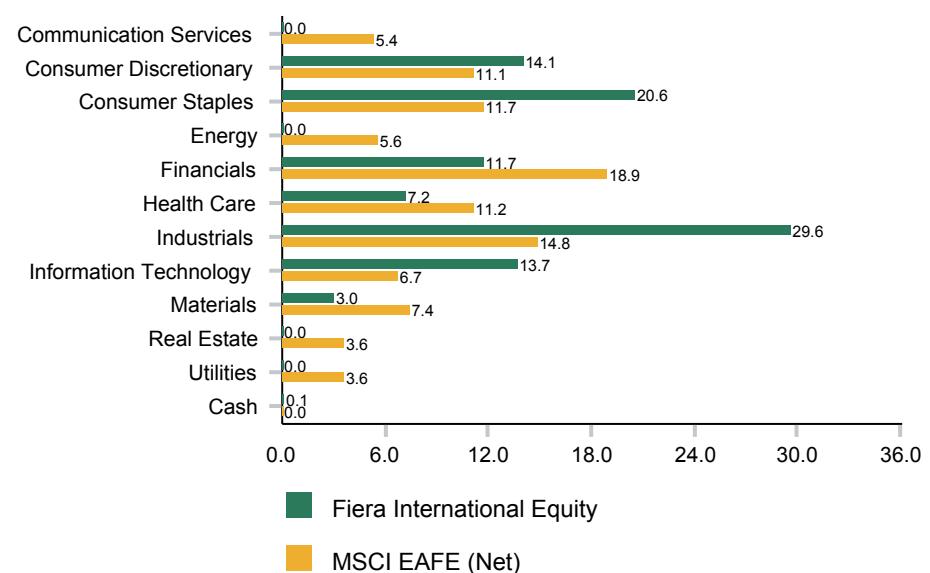
Portfolio Characteristics

	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$)	61,697,325,531	64,588,189,732
Median Mkt. Cap (\$)	25,555,160,880	10,228,173,176
Price/Earnings ratio	25.84	14.84
Price/Book ratio	3.97	2.26
5 Yr. EPS Growth Rate (%)	8.06	8.06
Current Yield (%)	2.19	3.58
Beta	N/A	1.00
Number of Stocks	33	923

Distribution of Market Capitalization (%)



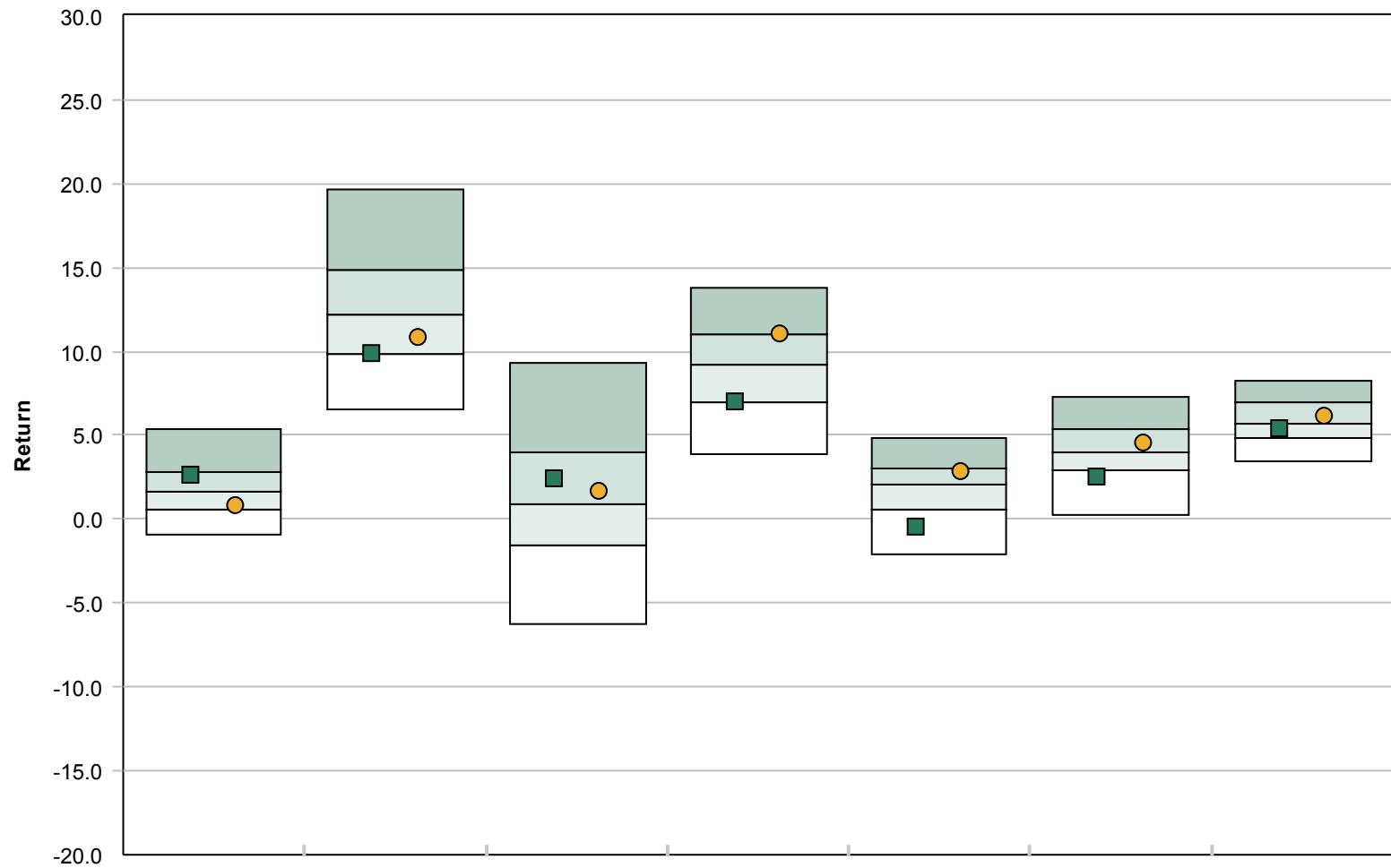
Sector Weights (%)



Bristol County Retirement System

IM Emerging Markets Equity (MF)

As of June 30, 2019



■ Lazard Emerging Markets

● MSCI Emerging Markets Index

1 Qtr YTD 1 Yr 3 Yrs 5 Yrs 7 Yrs 10 Yrs

5th Percentile	5.39	19.70	9.31	13.77	4.79	7.27	8.24
1st Quartile	2.85	14.85	3.97	11.00	3.02	5.35	6.94
Median	1.59	12.23	0.93	9.17	2.10	3.95	5.71
3rd Quartile	0.61	9.82	-1.54	7.02	0.59	2.91	4.84
95th Percentile	-0.91	6.51	-6.22	3.88	-2.05	0.24	3.40

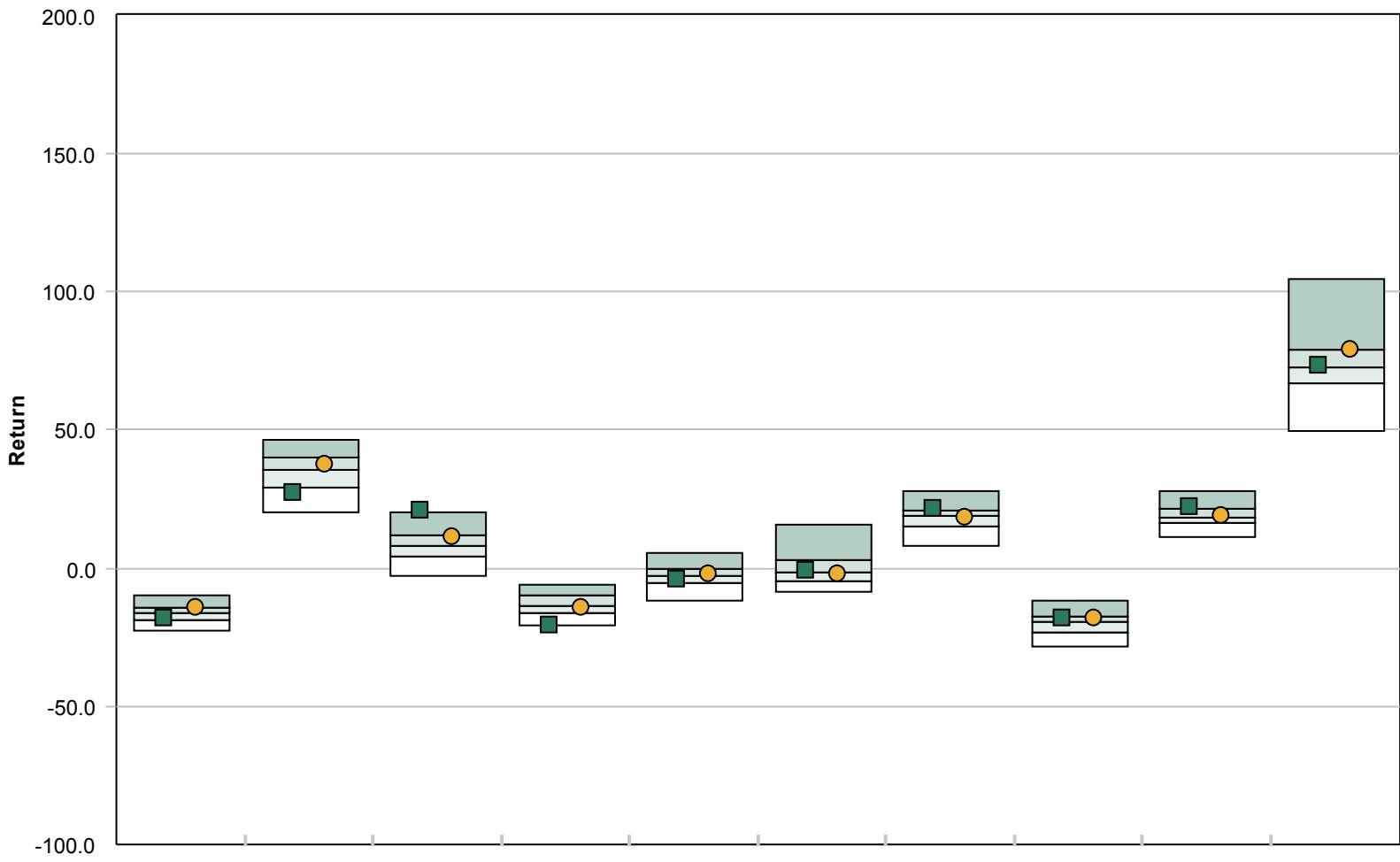
Parentheses contain percentile rankings.

Calculation based on monthly periodicity.

Bristol County Retirement System

IM Emerging Markets Equity (MF)

As of June 30, 2019



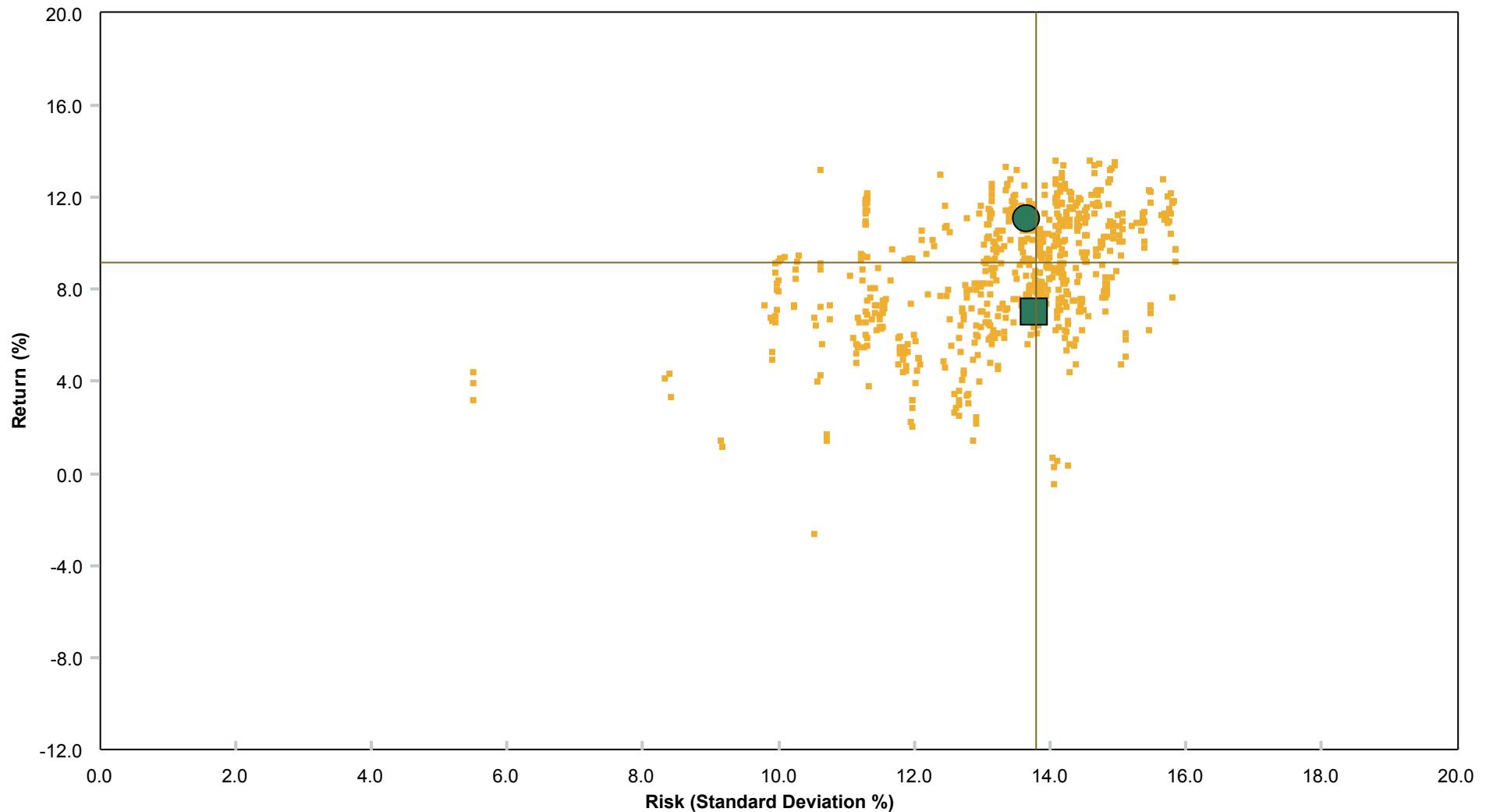
Lazard Emerging Markets	-18.05 (65)	27.55 (82)	20.92 (5)	-20.42 (94)	-4.04 (64)	-0.77 (45)	21.83 (19)	-18.11 (33)	22.37 (22)	73.53 (48)
MSCI Emerging Markets Index	-14.25 (28)	37.75 (37)	11.60 (27)	-14.60 (61)	-1.82 (40)	-2.27 (56)	18.64 (53)	-18.17 (33)	19.20 (42)	79.02 (25)
5th Percentile	-9.64	46.64	20.18	-5.77	5.49	15.49	28.18	-11.88	28.16	104.42
1st Quartile	-14.02	40.40	11.80	-9.95	-0.22	2.73	20.70	-17.42	21.85	78.94
Median	-16.41	35.37	8.35	-13.66	-2.92	-1.42	18.78	-19.51	18.32	72.67
3rd Quartile	-19.04	29.42	4.00	-16.19	-5.04	-4.73	15.35	-23.06	16.42	66.89
95th Percentile	-22.62	20.51	-2.69	-20.93	-11.68	-8.28	8.26	-28.12	11.42	49.83

Parentheses contain percentile rankings.
Calculation based on monthly periodicity.

Bristol County Retirement System**Peer Group Scattergram**

3 Years Ending June 30, 2019

IM Emerging Markets Equity (MF)

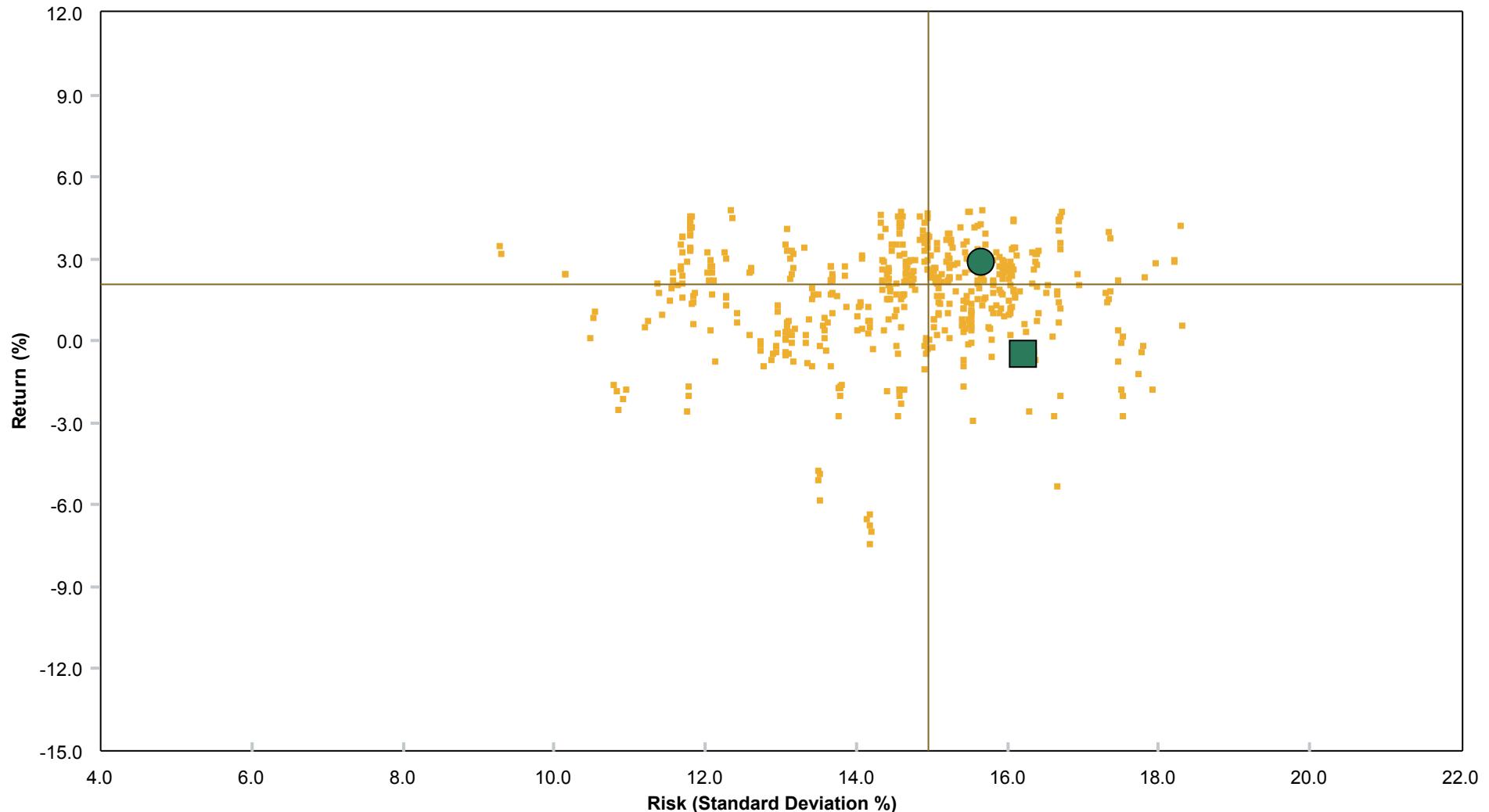


Calculation based on monthly periodicity.

Bristol County Retirement System**Peer Group Scattergram**

5 Years Ending June 30, 2019

IM Emerging Markets Equity (MF)



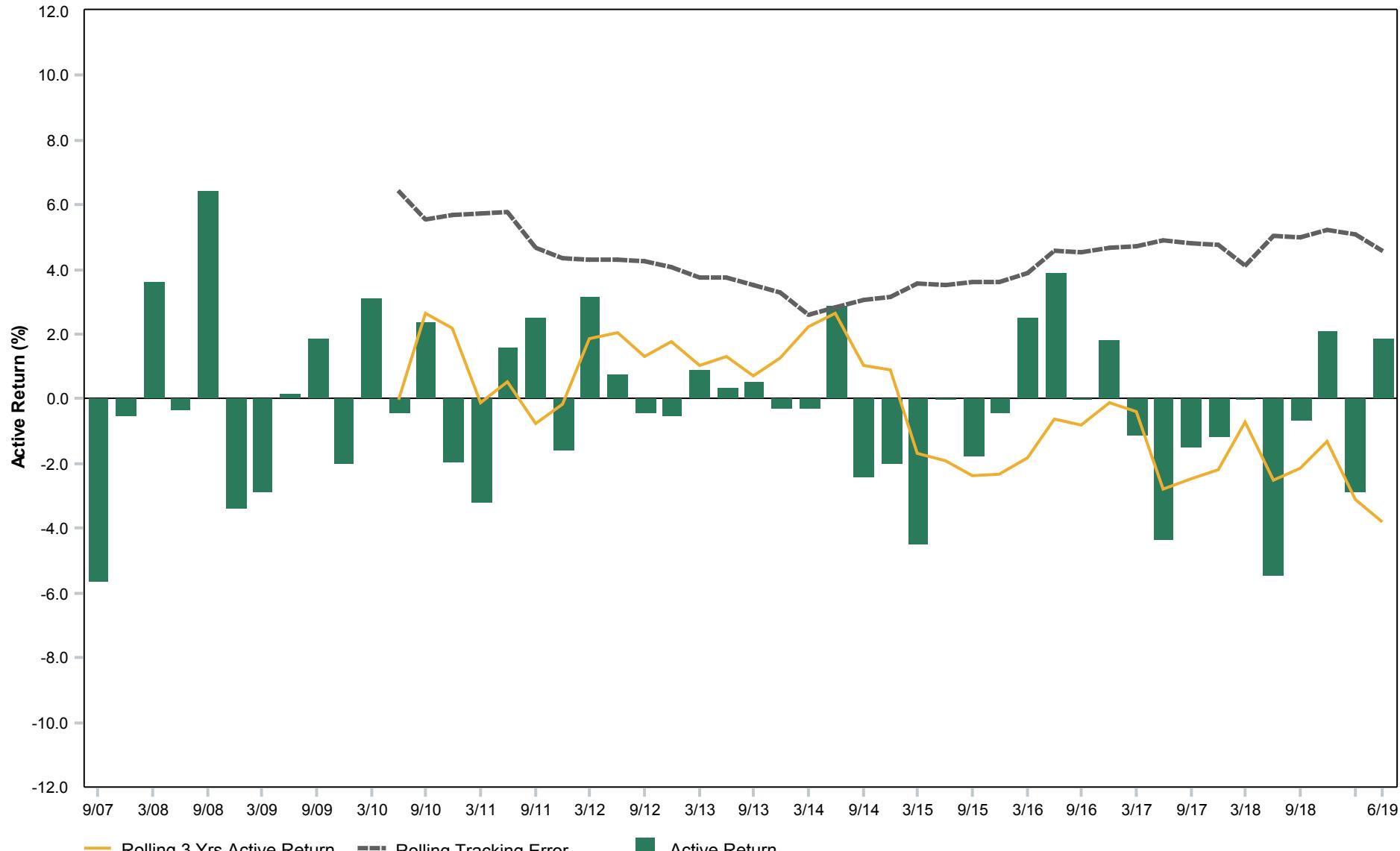
Calculation based on monthly periodicity.

Bristol County Retirement System

Comparative Performance & Rolling Return

As of June 30, 2019

	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	2018	2017	2016	2015
Lazard Emerging Markets	2.59	9.84	2.35	7.01	-0.53	2.49	5.34	-18.05	27.55	20.92	-20.42
MSCI Emerging Markets Index	0.74	10.78	1.61	11.06	2.87	4.53	6.17	-14.25	37.75	11.60	-14.60
Difference	1.85	-0.94	0.74	-4.05	-3.40	-2.04	-0.83	-3.80	-10.20	9.32	-5.82



Bristol County Retirement System

Lazard Emerging Markets

As of June 30, 2019

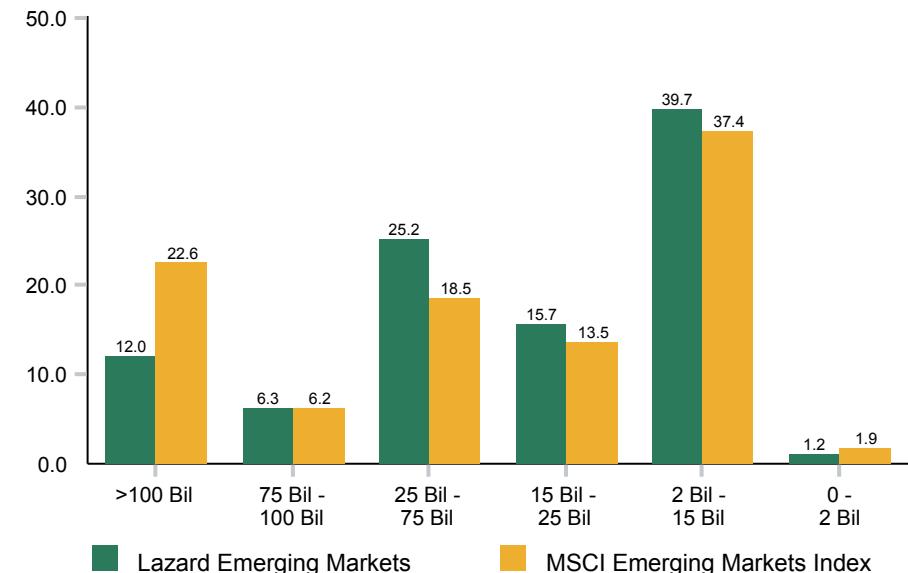
Top Ten Equity Holdings

	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
China Construction Bank Corp	5.32	1.50	3.82	0.50
Banco Do Brasil SA Bb Brasil	4.23	0.22	4.01	13.98
Sberbank of Russia OJSC	3.38	0.74	2.64	23.48
Netease Inc	3.12	0.33	2.79	6.22
SK Hynix Inc	2.97	0.59	2.38	-7.94
Taiwan Semiconductor Manuf	2.77	3.44	-0.67	0.12
PT Bank Mandiri (Persero) TBK	2.28	0.19	2.09	12.13
Tata Consultancy Services Ltd	2.13	0.53	1.60	12.77
Weichai Power Co Ltd	2.10	0.06	2.04	5.79
Ypf Sociedad Anonima Yacimientos Petroliferos Fiscales	2.06	0.06	2.00	29.98
% of Portfolio	30.36	7.66	22.70	

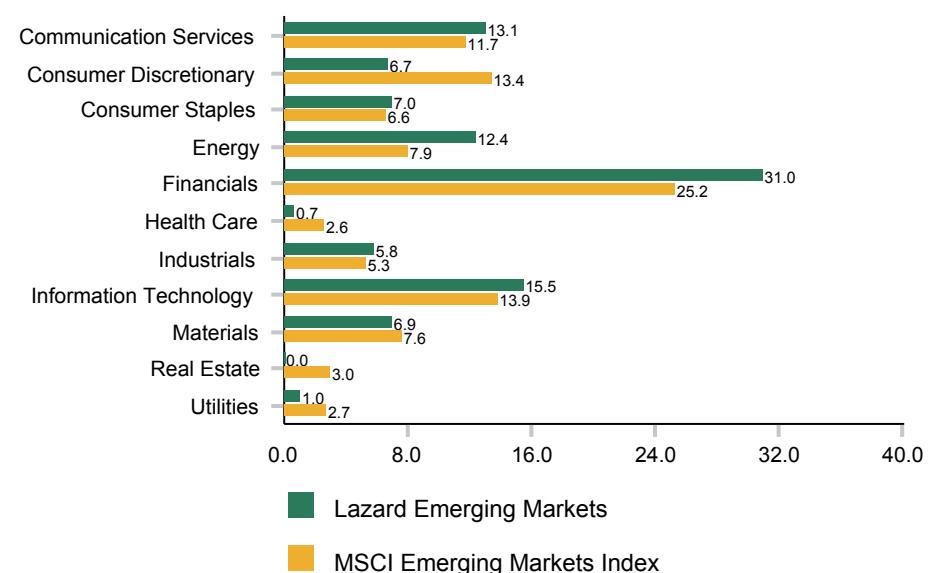
Portfolio Characteristics

	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$)	43,290,591,834	81,469,438,809
Median Mkt. Cap (\$)	11,645,574,872	5,439,747,780
Price/Earnings ratio	9.75	12.00
Price/Book ratio	2.32	2.28
5 Yr. EPS Growth Rate (%)	6.42	14.02
Current Yield (%)	4.25	3.01
Beta (5 Years, Monthly)	0.98	1.00
Number of Stocks	75	1,194

Distribution of Market Capitalization (%)



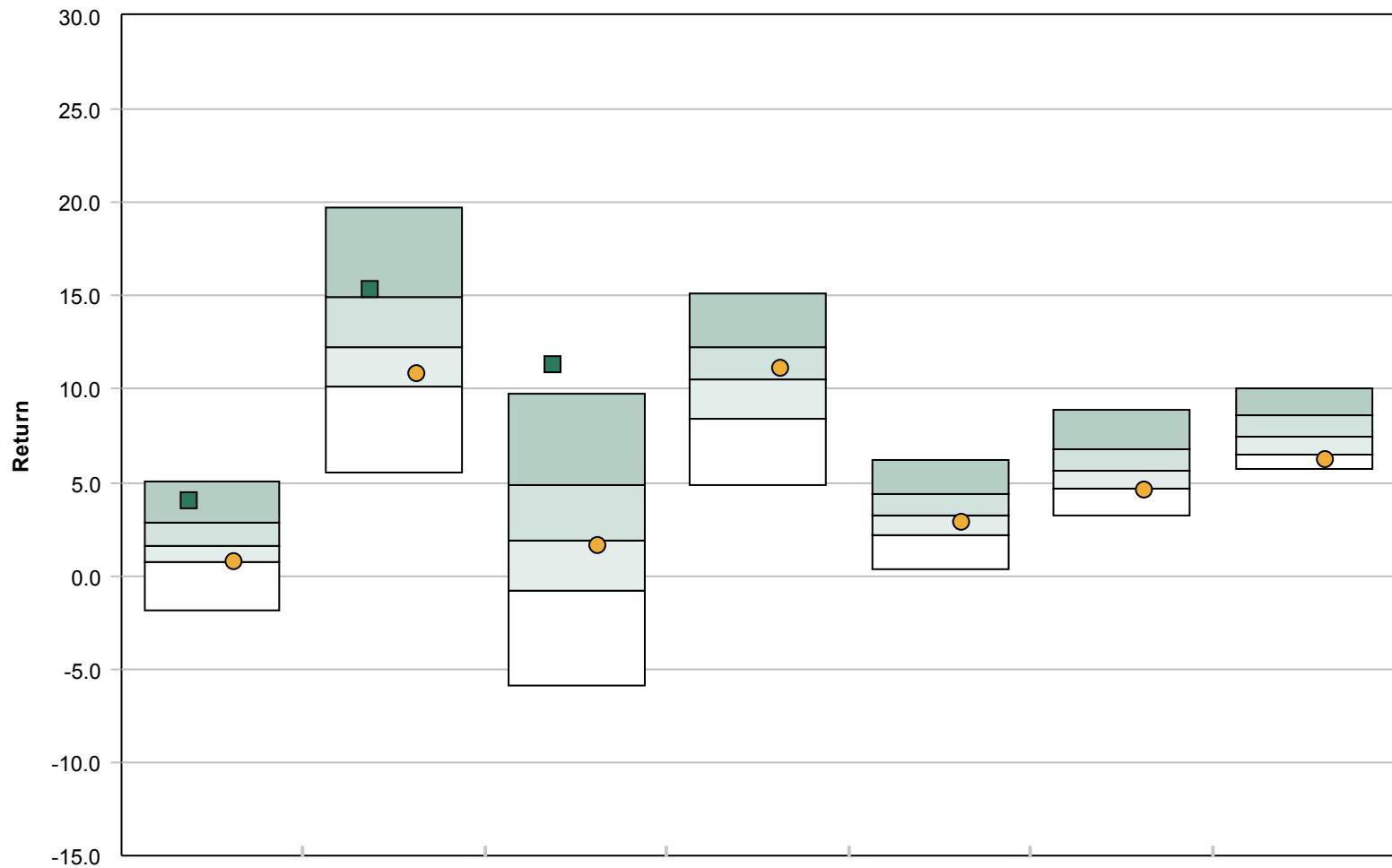
Sector Weights (%)



Bristol County Retirement System

IM Emerging Markets Equity (SA+CF)

As of June 30, 2019



■ Aberdeen Emerging Markets

● MSCI Emerging Markets Index

1 Qtr **YTD** **1 Yr** **3 Yrs** **5 Yrs** **7 Yrs** **10 Yrs**

3.99 (12) 15.28 (22) 11.27 (2) N/A N/A N/A N/A

0.74 (76) 10.78 (63) 1.61 (52) 11.06 (41) 2.87 (58) 4.53 (77) 6.17 (85)

5th Percentile

5.06 19.75 9.75 15.13 6.25 8.86 10.09

1st Quartile

2.89 14.92 4.83 12.22 4.41 6.82 8.60

Median

1.57 12.29 1.89 10.54 3.26 5.61 7.42

3rd Quartile

0.75 10.09 -0.80 8.40 2.19 4.63 6.50

95th Percentile

-1.81 5.53 -5.88 4.82 0.31 3.26 5.68

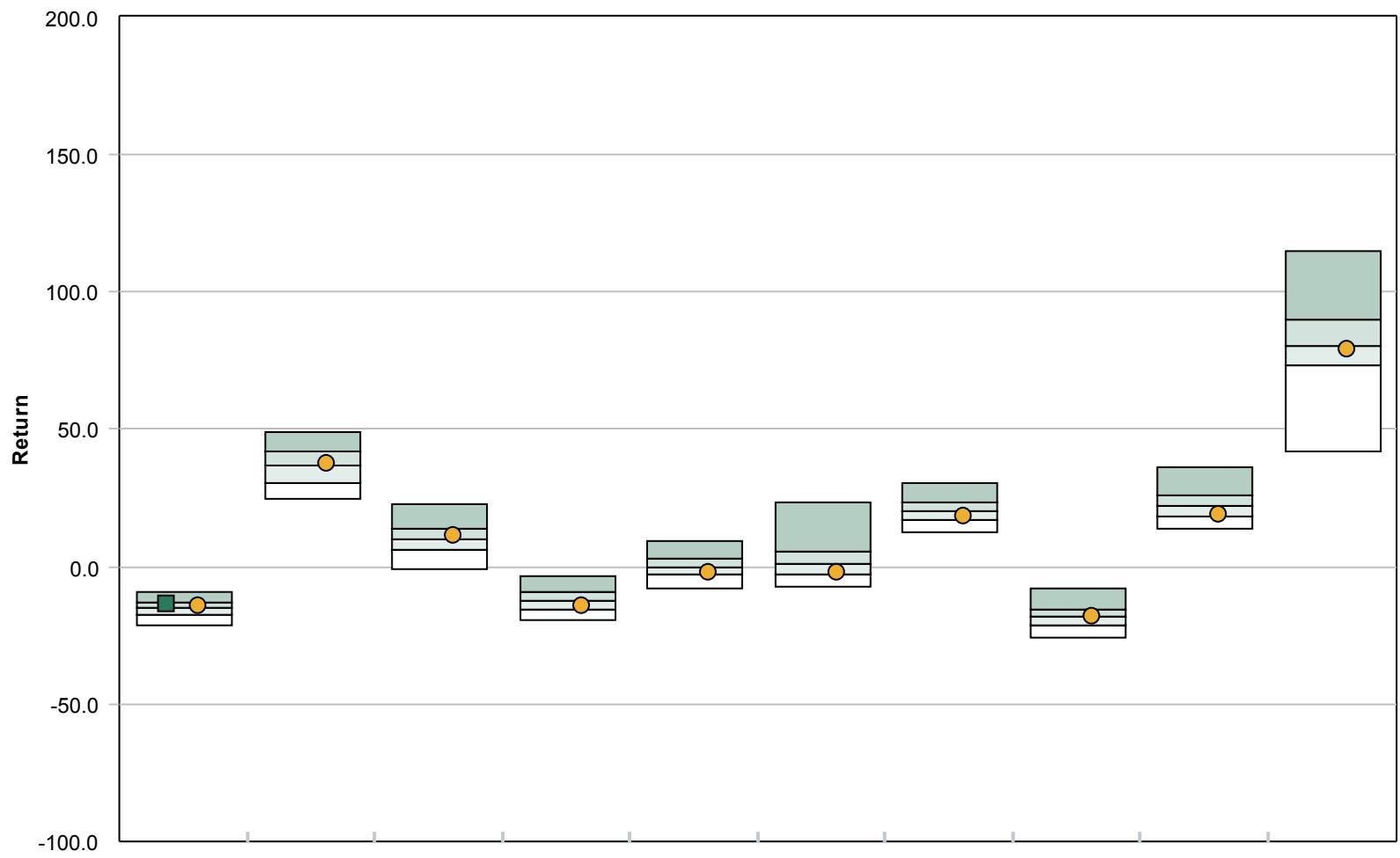
Parentheses contain percentile rankings.

Calculation based on quarterly periodicity.

Bristol County Retirement System

IM Emerging Markets Equity (SA+CF)

As of June 30, 2019



■ Aberdeen Emerging Markets

● MSCI Emerging Markets Index

2018 2017 2016 2015 2014 2013 2012 2011 2010 2009

5th Percentile	-9.00	49.19	22.50	-3.14	9.20	23.67	30.69	-8.18	36.52	114.71
1st Quartile	-13.29	41.85	13.57	-9.28	3.11	5.81	23.15	-15.65	25.82	90.14
Median	-15.24	36.81	10.27	-12.61	-0.10	1.00	20.52	-18.06	21.86	80.18
3rd Quartile	-17.52	30.43	6.32	-15.32	-2.47	-2.58	17.27	-21.45	18.32	73.12
95th Percentile	-21.48	24.61	-0.95	-19.08	-7.92	-7.35	12.83	-26.01	13.74	42.21

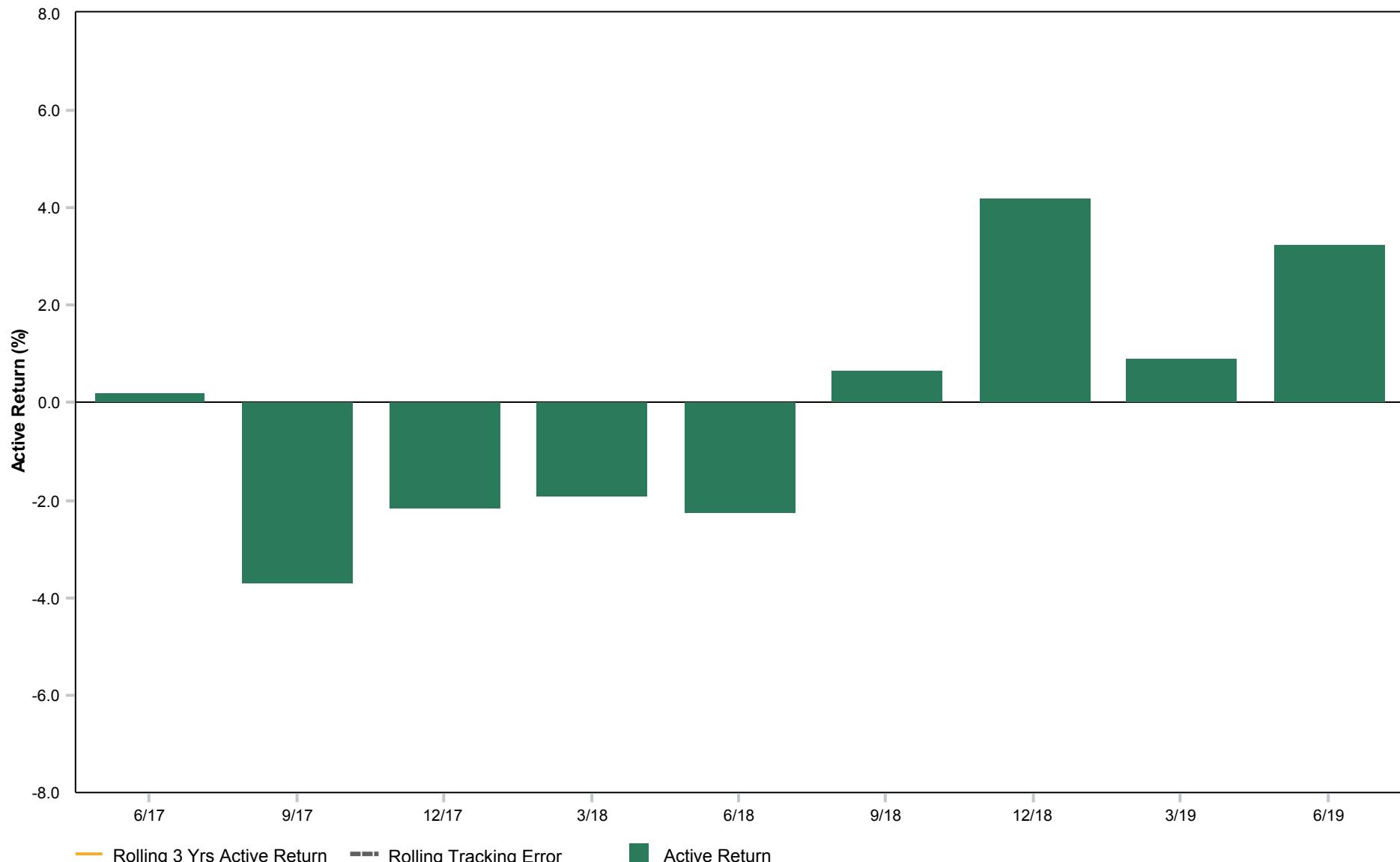
Parentheses contain percentile rankings.

Calculation based on monthly periodicity.

Bristol County Retirement System

Comparative Performance & Rolling Return

	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	2018	2017	2016	2015
Aberdeen Emerging Markets	3.99	15.28	11.27	N/A	N/A	N/A	N/A	-13.65	N/A	N/A	N/A
MSCI Emerging Markets Index	0.74	10.78	1.61	11.06	2.87	4.53	6.17	-14.25	37.75	11.60	-14.60
Difference	3.25	4.50	9.66	N/A	N/A	N/A	N/A	0.60	N/A	N/A	N/A



Bristol County Retirement System

Aberdeen Emerging Markets

As of June 30, 2019

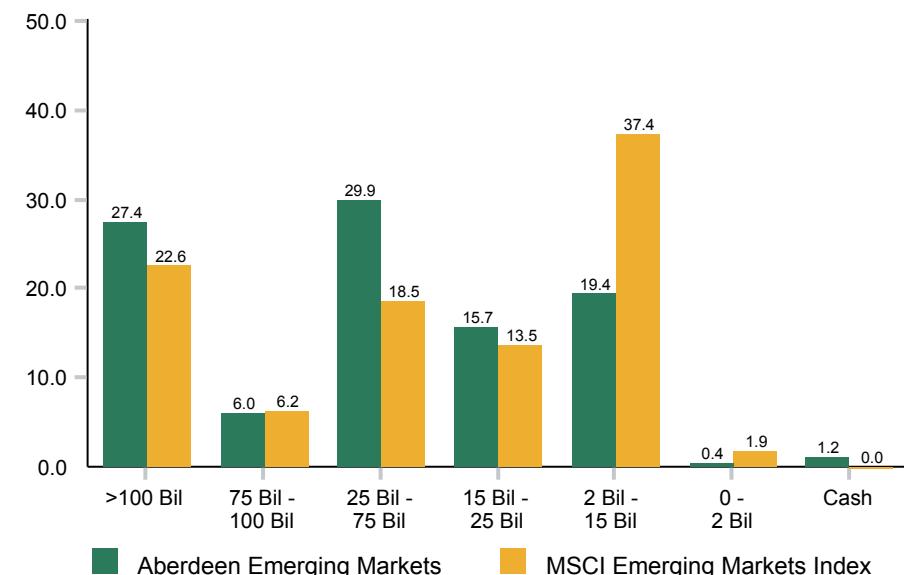
Top Ten Equity Holdings

	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Tencent Holdings LTD	5.80	4.67	1.13	-1.56
Samsung Electronics Co Ltd	5.37	0.49	4.88	4.67
Taiwan Semiconductor Manuf	5.02	3.44	1.58	0.12
Housing Development Finance Corp Ltd	4.30	0.94	3.36	11.96
Ping An Insurance Group	3.93	1.21	2.72	8.90
Banco Bradesco Sa Brad	3.66	0.19	3.47	8.18
AIA Group Ltd	2.89	0.00	2.89	9.71
Naspers Ltd	2.70	1.92	0.78	4.73
Kweichow Moutai Co Ltd	2.38	0.10	2.28	14.27
Vale SA	2.27	0.78	1.49	2.91
% of Portfolio	38.32	13.74	24.58	

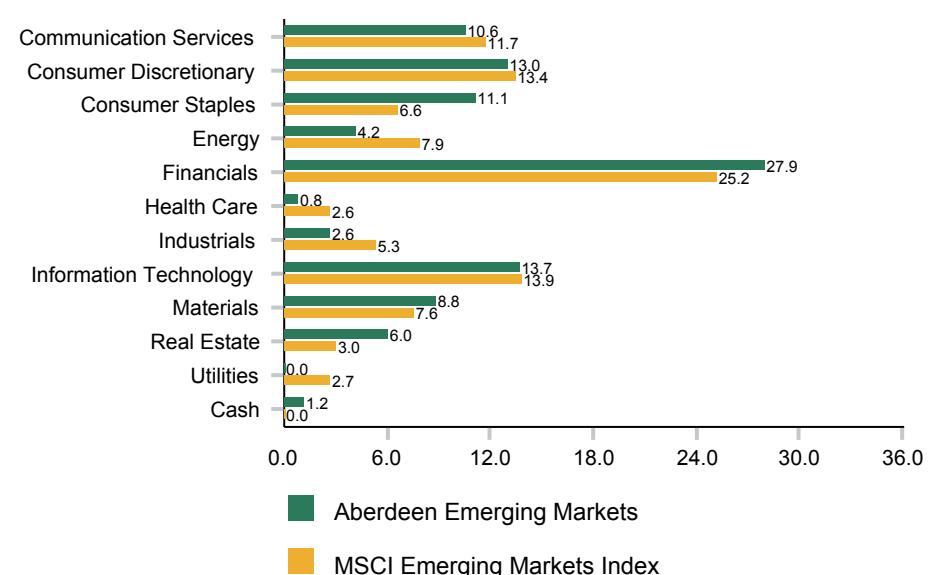
Portfolio Characteristics

	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$)	69,236,738,903	81,469,438,809
Median Mkt. Cap (\$)	19,531,970,626	5,439,747,780
Price/Earnings ratio	18.51	12.00
Price/Book ratio	2.79	2.28
5 Yr. EPS Growth Rate (%)	15.17	14.02
Current Yield (%)	2.17	3.01
Beta	N/A	1.00
Number of Stocks	64	1,194

Distribution of Market Capitalization (%)



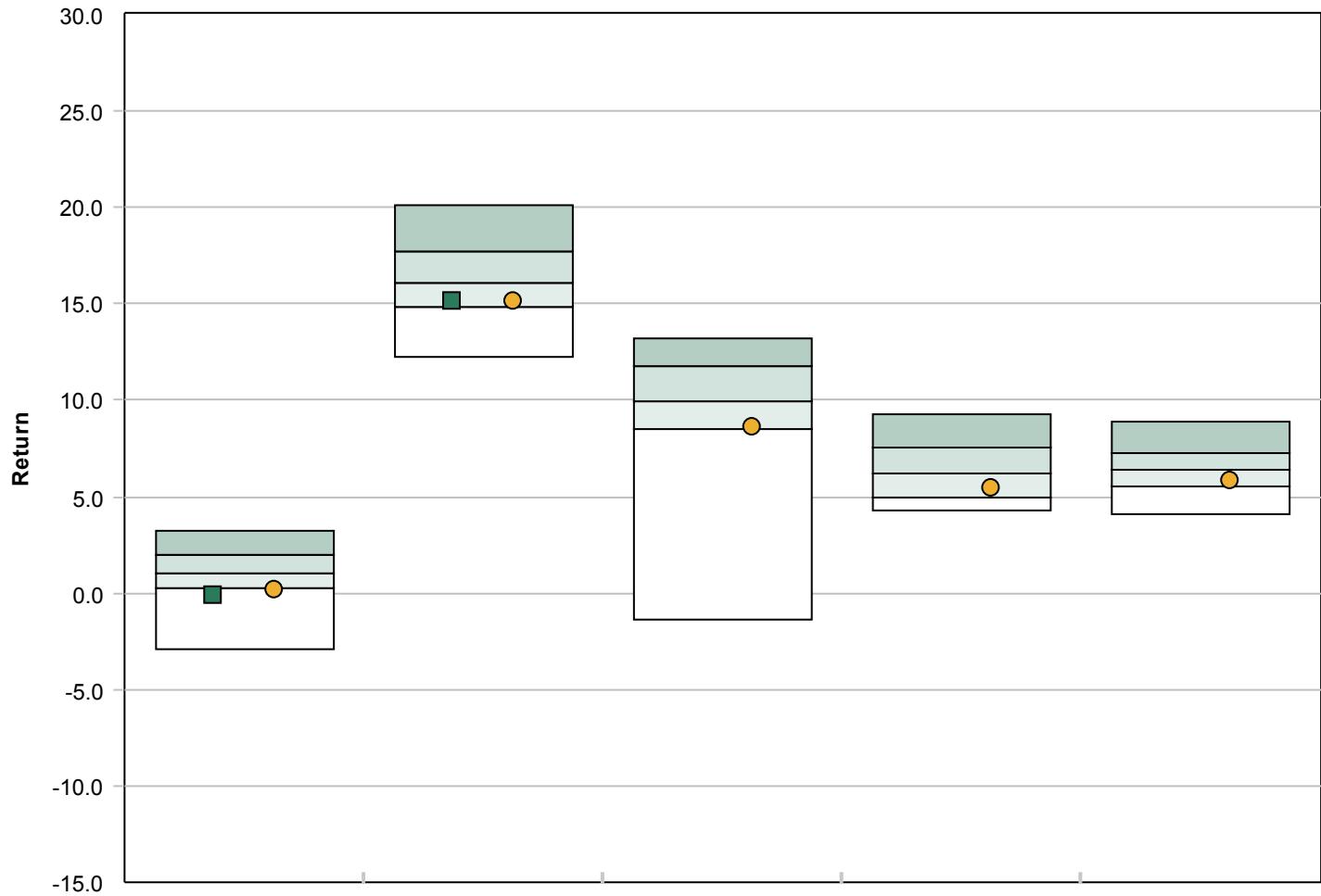
Sector Weights (%)



Bristol County Retirement System

IM Global REIT (SA+CF)

As of June 30, 2019



■ Brookfield Global Real Estate	-0.12 (84)	15.08 (73)	N/A	N/A
● FTSE EPRA/NAREIT Developed Index	0.20 (76)	15.09 (73)	8.64 (75)	5.45 (72)
5th Percentile	3.21	20.14	13.25	9.26
1st Quartile	1.99	17.73	11.81	7.59
Median	0.98	16.06	9.91	6.24
3rd Quartile	0.24	14.82	8.52	5.00
95th Percentile	-2.89	12.27	-1.41	4.32

Parentheses contain percentile rankings.

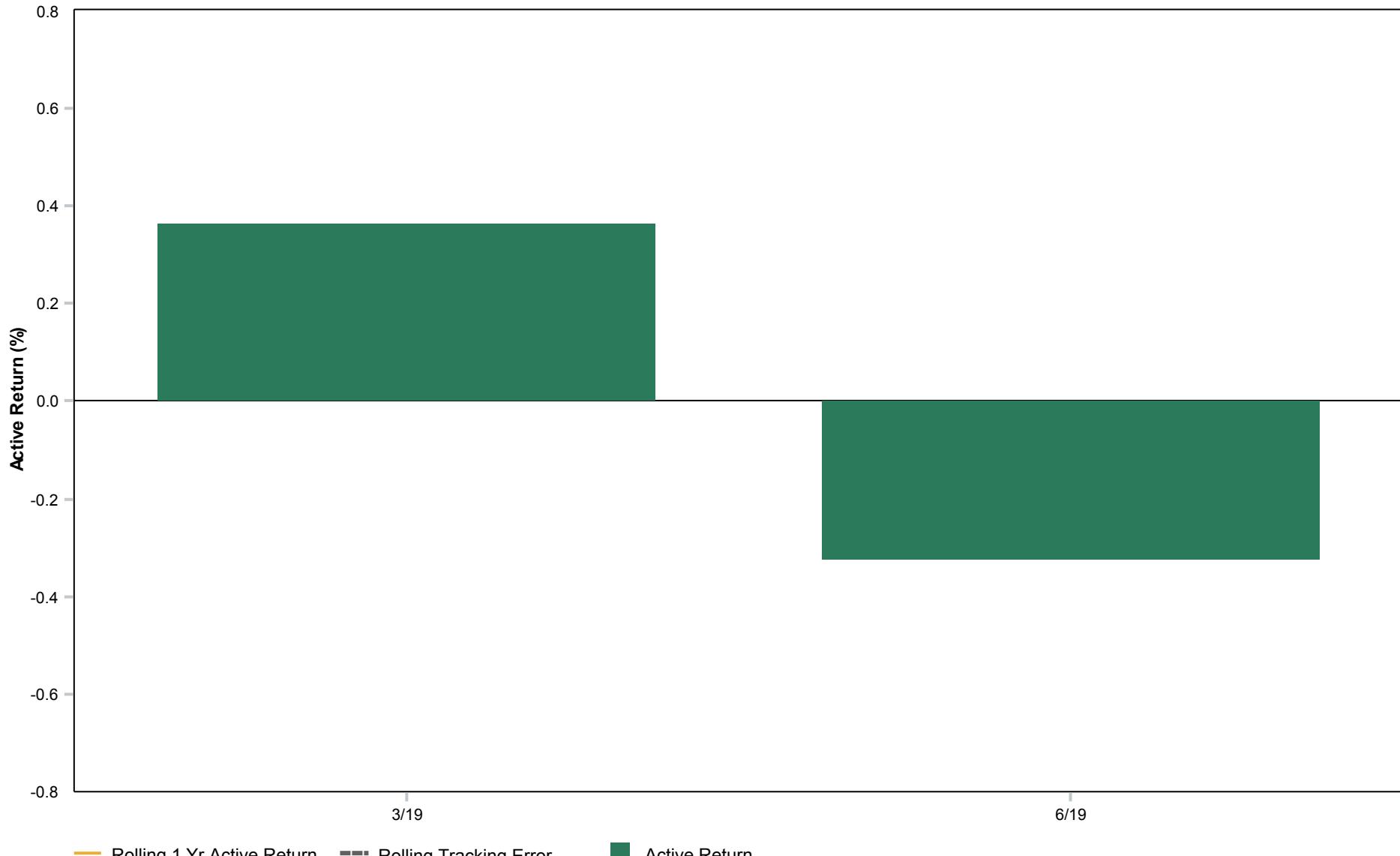
Calculation based on monthly periodicity.

Bristol County Retirement System

Comparative Performance & Rolling Return

As of June 30, 2019

	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	2018	2017	2016	2015
Brookfield Global Real Estate	-0.12	15.08	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FTSE EPRA/NAREIT Developed Index	0.20	15.09	8.64	5.45	5.79	8.16	11.45	-4.74	11.42	4.99	0.05
Difference	-0.32	-0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

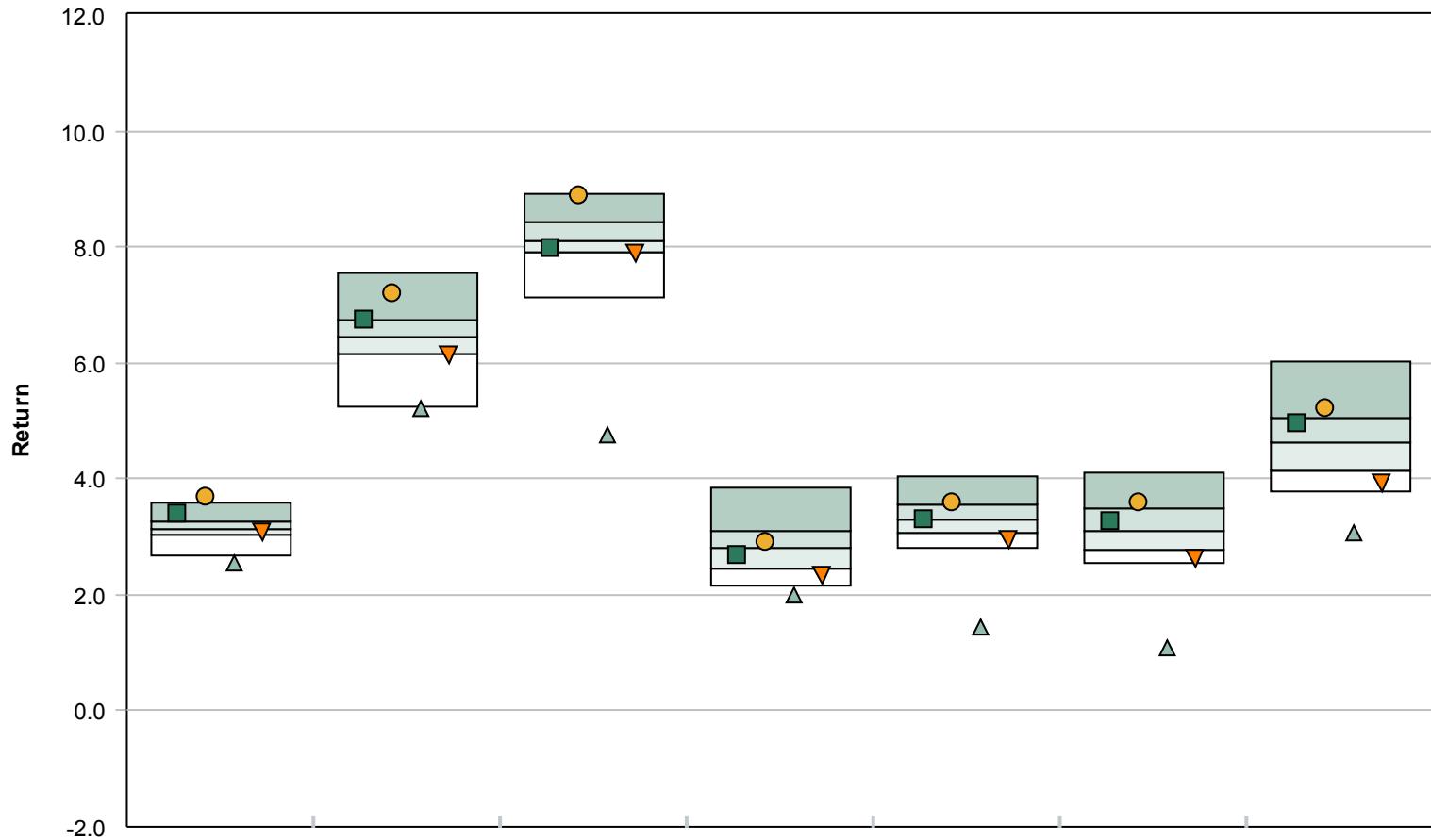


Domestic Fixed Income

Bristol County Retirement System

IM U.S. Broad Market Core Fixed Income (SA+CF)

As of June 30, 2019



	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs
Total Domestic Fixed	3.41 (10)	6.73 (28)	7.99 (62)	2.66 (58)	3.30 (48)	3.26 (39)	4.96 (30)
Income Research & Management	3.68 (3)	7.21 (10)	8.89 (6)	2.91 (44)	3.60 (21)	3.58 (17)	5.21 (21)
IRM-TIPS	2.54 (97)	5.22 (96)	4.74 (99)	2.01 (100)	1.45 (100)	1.10 (100)	3.07 (100)
Barclays Aggregate	3.08 (69)	6.11 (79)	7.87 (79)	2.31 (88)	2.95 (89)	2.62 (92)	3.90 (93)
5th Percentile	3.60	7.55	8.91	3.84	4.04	4.12	6.03
1st Quartile	3.25	6.74	8.43	3.11	3.57	3.48	5.05
Median	3.14	6.43	8.11	2.80	3.29	3.10	4.61
3rd Quartile	3.03	6.15	7.90	2.44	3.07	2.78	4.16
95th Percentile	2.68	5.24	7.11	2.15	2.81	2.55	3.79

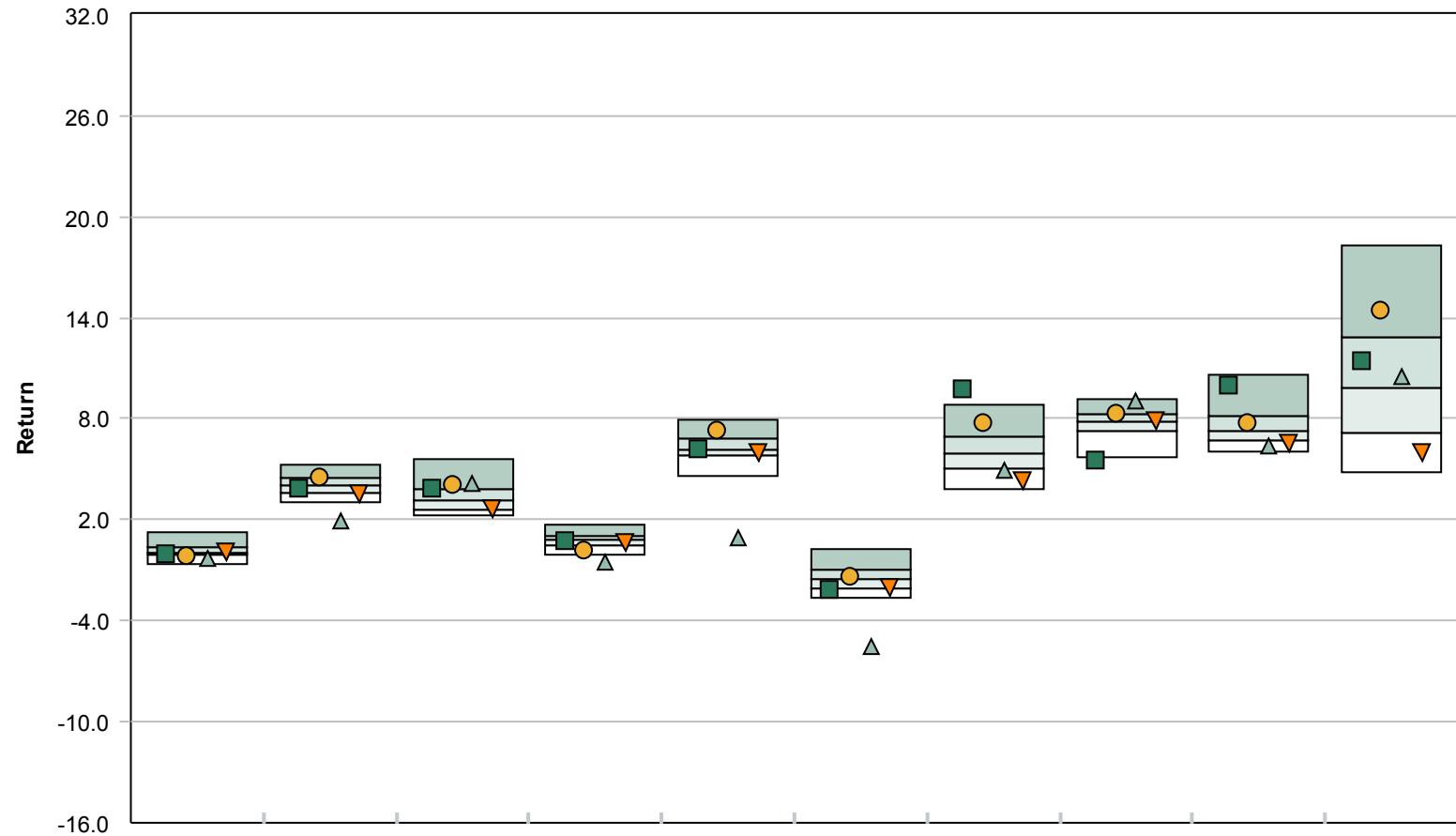
Parentheses contain percentile rankings.

Calculation based on monthly periodicity.

Bristol County Retirement System

IM U.S. Broad Market Core Fixed Income (SA+CF)

As of June 30, 2019



	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
Total Domestic Fixed	-0.08 (71)	3.82 (63)	3.86 (25)	0.66 (64)	6.15 (51)	-2.14 (82)	9.73 (5)	5.49 (97)	9.95 (8)	11.40 (36)
Income Research & Management	-0.19 (81)	4.49 (27)	4.00 (22)	0.20 (86)	7.23 (10)	-1.39 (41)	7.70 (12)	8.31 (24)	7.71 (39)	14.40 (18)
IRM-TIPS	-0.26 (83)	1.97 (100)	4.11 (17)	-0.53 (98)	0.88 (100)	-5.54 (100)	4.96 (77)	9.08 (6)	6.41 (85)	10.49 (42)
Barclays Aggregate	0.01 (61)	3.54 (85)	2.65 (77)	0.55 (74)	5.97 (67)	-2.02 (74)	4.21 (91)	7.84 (51)	6.54 (83)	5.93 (89)
5th Percentile	1.23	5.29	5.62	1.68	7.91	0.21	8.85	9.13	10.61	18.28
1st Quartile	0.39	4.52	3.83	1.09	6.79	-1.01	6.96	8.26	8.18	12.85
Median	0.07	4.06	3.11	0.82	6.16	-1.56	5.92	7.84	7.24	9.88
3rd Quartile	-0.12	3.64	2.65	0.54	5.79	-2.04	5.09	7.25	6.75	7.19
95th Percentile	-0.68	3.06	2.23	-0.07	4.65	-2.62	3.85	5.74	6.03	4.86

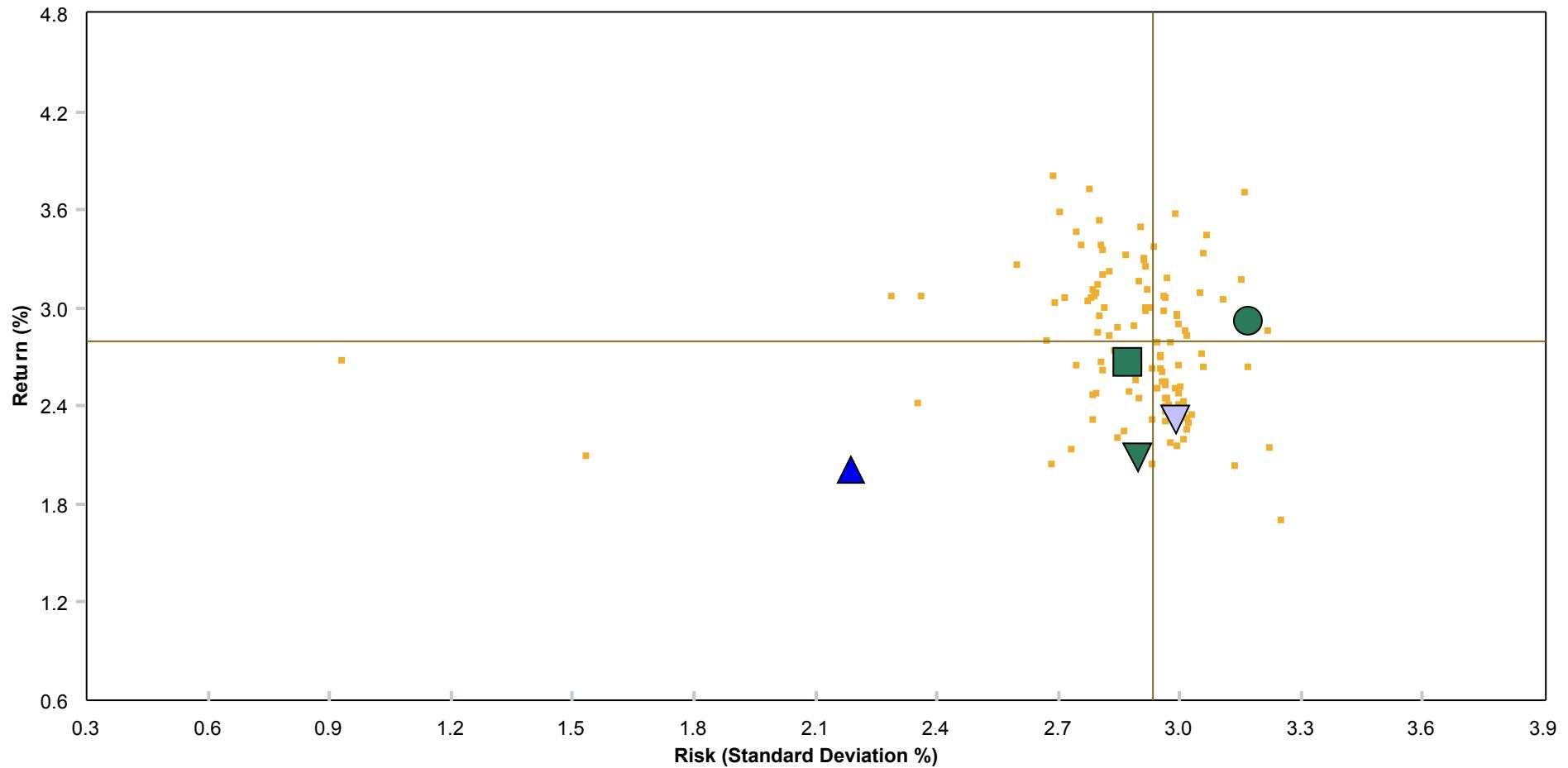
Parentheses contain percentile rankings.
Calculation based on monthly periodicity.

Bristol County Retirement System

Peer Group Scattergram

3 Years Ending June 30, 2019

IM U.S. Broad Market Core Fixed Income (SA+CF)



	Return	Standard Deviation
Total Domestic Fixed	2.66	2.87
Income Research & Management	2.91	3.17
Barclays Aggregate	2.31	2.99
IRM-TIPS	2.01	2.19
Blmbg. Barc. U.S. TIPS	2.08	2.90
Median	2.80	2.93

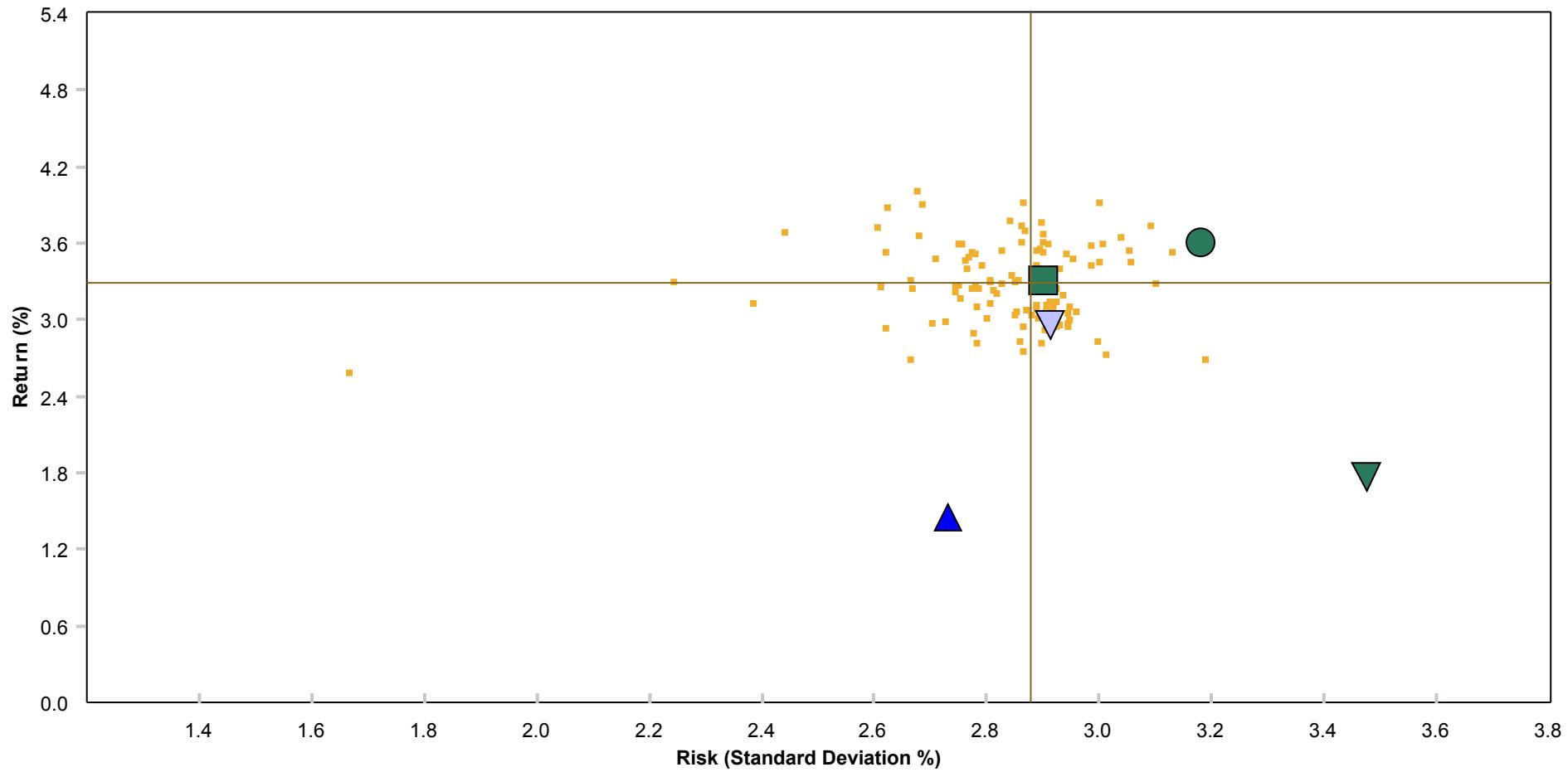
Calculation based on monthly periodicity.

Bristol County Retirement System

Peer Group Scattergram

5 Years Ending June 30, 2019

IM U.S. Broad Market Core Fixed Income (SA+CF)



	Return	Standard Deviation
Total Domestic Fixed	3.30	2.90
Income Research & Management	3.60	3.18
Barclays Aggregate	2.95	2.91
IRM-TIPS	1.45	2.73
Blmbg. Barc. U.S. TIPS	1.76	3.48
Median	3.29	2.88

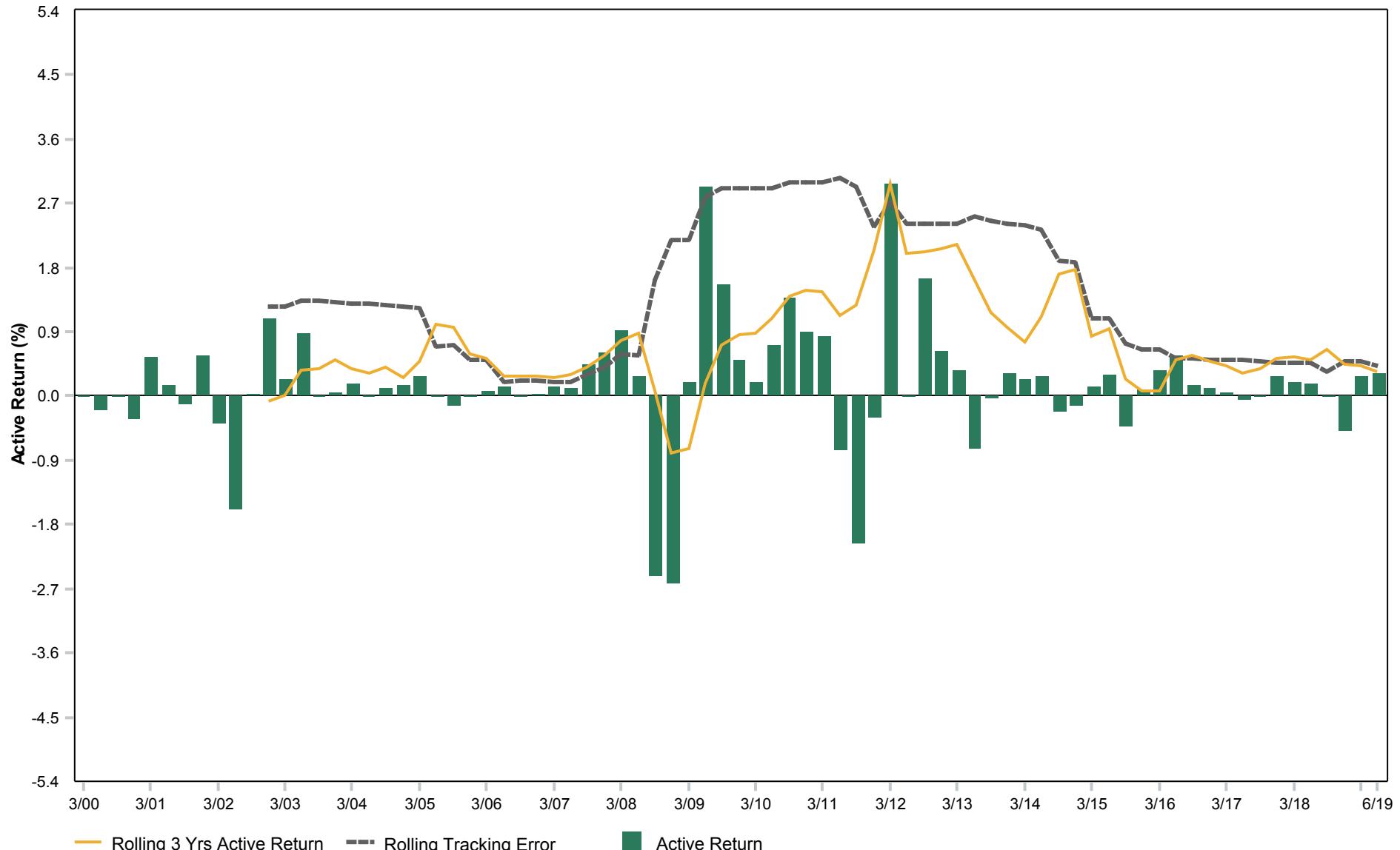
Calculation based on monthly periodicity.

Bristol County Retirement System

Comparative Performance & Rolling Return

As of June 30, 2019

	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	2018	2017	2016	2015
Total Domestic Fixed	3.41	6.73	7.99	2.66	3.30	3.26	4.96	-0.08	3.82	3.86	0.66
Barclays Aggregate	3.08	6.11	7.87	2.31	2.95	2.62	3.90	0.01	3.54	2.65	0.55
Difference	0.33	0.62	0.12	0.35	0.35	0.64	1.06	-0.09	0.28	1.21	0.11

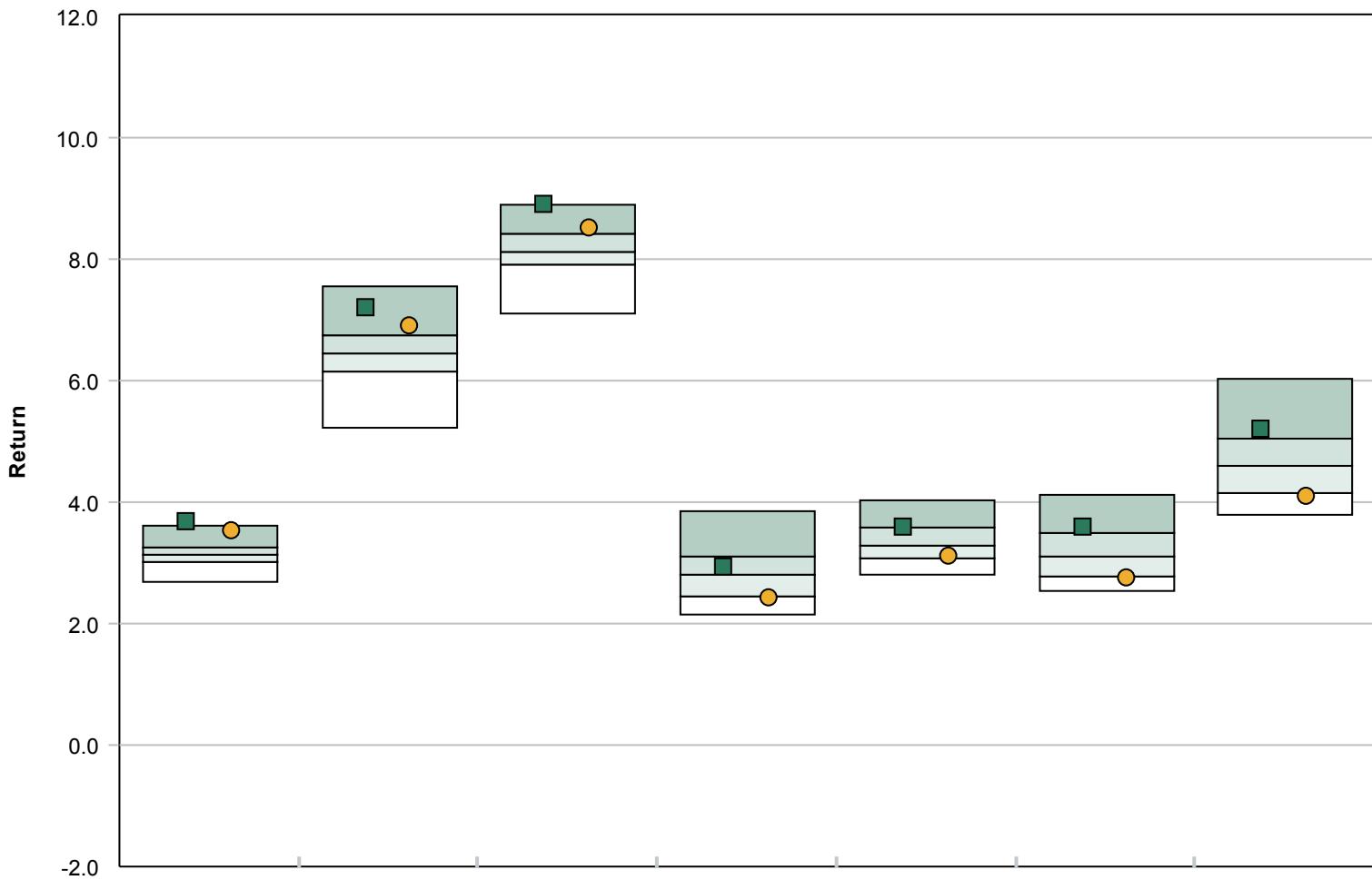


Gross of Fees

Bristol County Retirement System

IM U.S. Broad Market Core Fixed Income (SA+CF)

As of June 30, 2019



■ Income Research & Management

● Blmbg. Barc. U.S. Gov't/Credit

5th Percentile

1st Quartile

Median

3rd Quartile

95th Percentile

1 Qtr

YTD

1 Yr

3 Yrs

5 Yrs

7 Yrs

10 Yrs

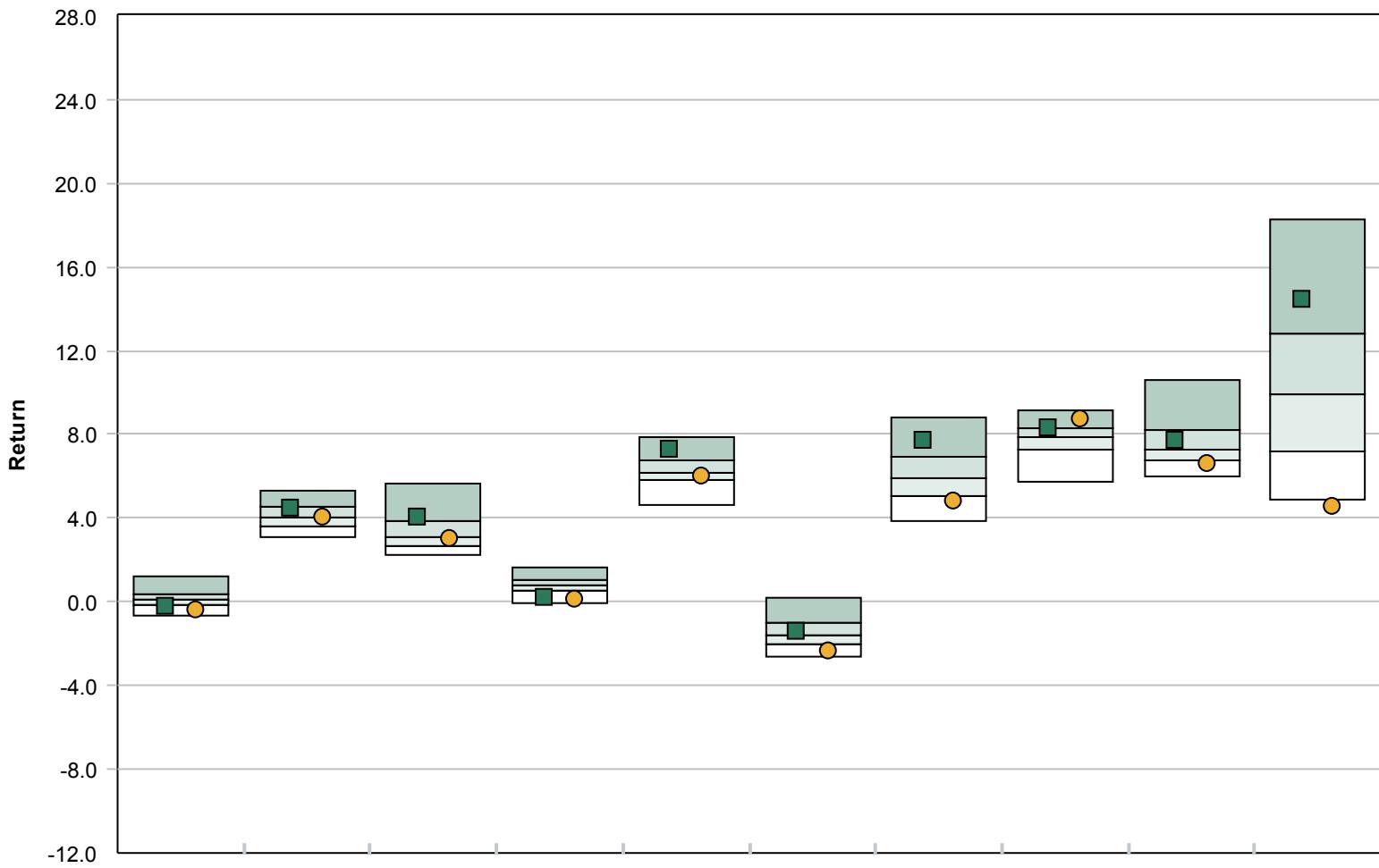
Parentheses contain percentile rankings.

Calculation based on monthly periodicity.

Bristol County Retirement System

IM U.S. Broad Market Core Fixed Income (SA+CF)

As of June 30, 2019



■ Income Research & Management

● Blmbg. Barc. U.S. Gov't/Credit

5th Percentile

1.23 5.29 5.62 1.68 7.91 0.21 8.85 9.13 10.61 18.28

1st Quartile

0.39 4.52 3.83 1.09 6.79 -1.01 6.96 8.26 8.18 12.85

Median

0.07 4.06 3.11 0.82 6.16 -1.56 5.92 7.84 7.24 9.88

3rd Quartile

-0.12 3.64 2.65 0.54 5.79 -2.04 5.09 7.25 6.75 7.19

95th Percentile

-0.68 3.06 2.23 -0.07 4.65 -2.62 3.85 5.74 6.03 4.86

Parentheses contain percentile rankings.

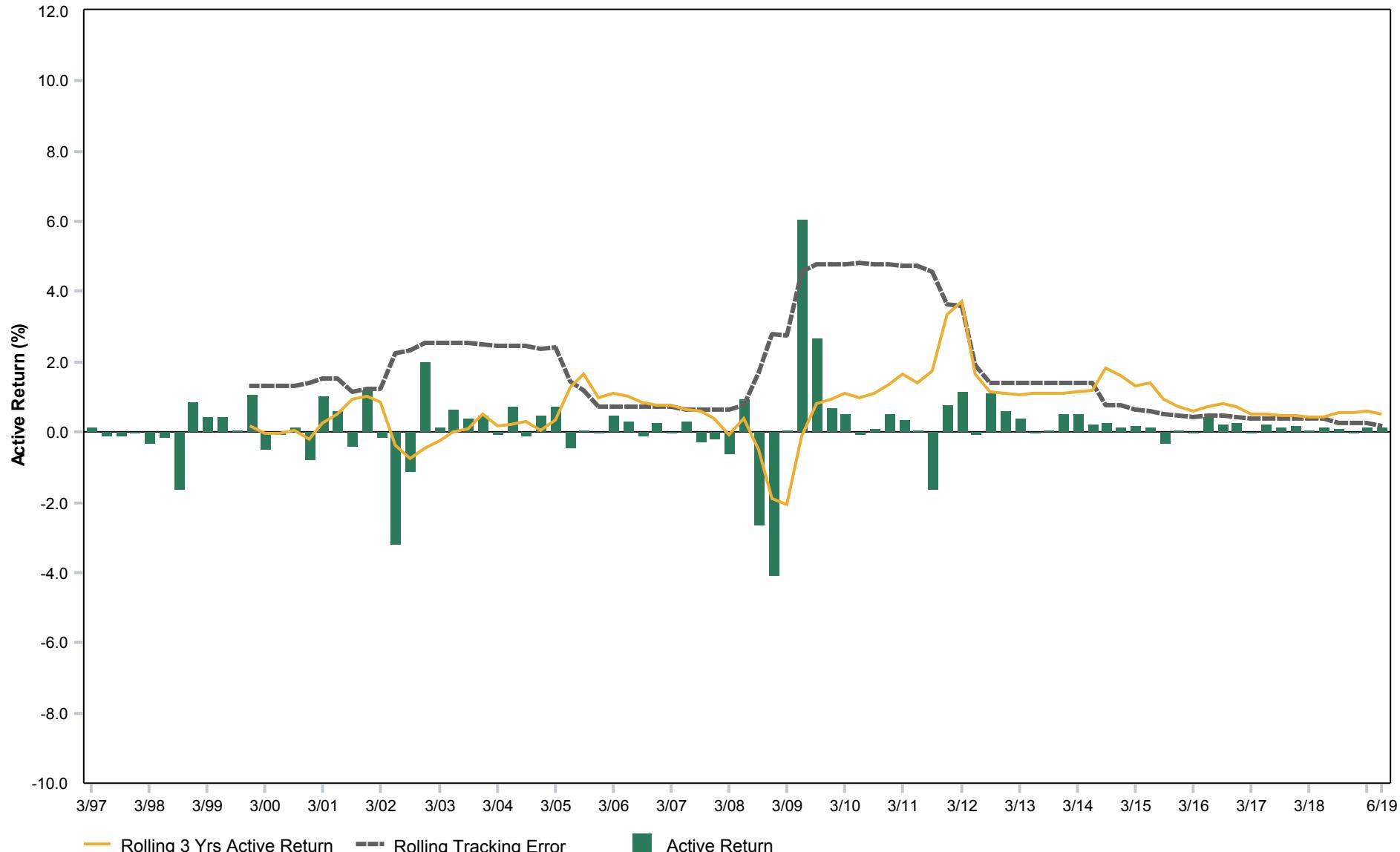
Calculation based on monthly periodicity.

Bristol County Retirement System

Comparative Performance & Rolling Return

As of June 30, 2019

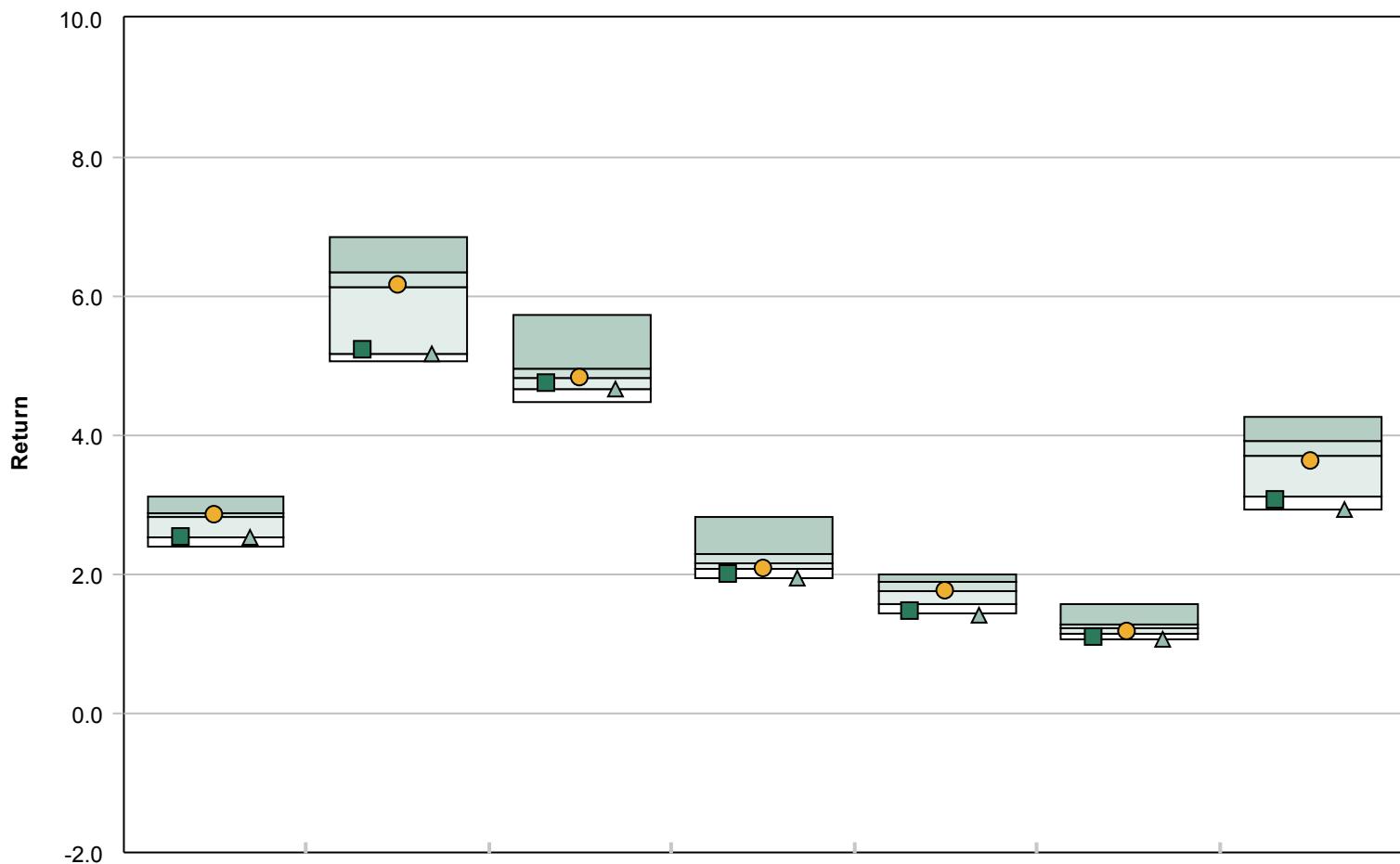
	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	2018	2017	2016	2015
Income Research & Management	3.68	7.21	8.89	2.91	3.60	3.58	5.21	-0.19	4.49	4.00	0.20
Blmbg. Barc. U.S. Gov't/Credit	3.53	6.90	8.52	2.41	3.11	2.73	4.09	-0.42	4.00	3.05	0.15
Difference	0.15	0.31	0.37	0.50	0.49	0.85	1.12	0.23	0.49	0.95	0.05



Bristol County Retirement System

IM U.S. TIPS (SA+CF)

As of June 30, 2019



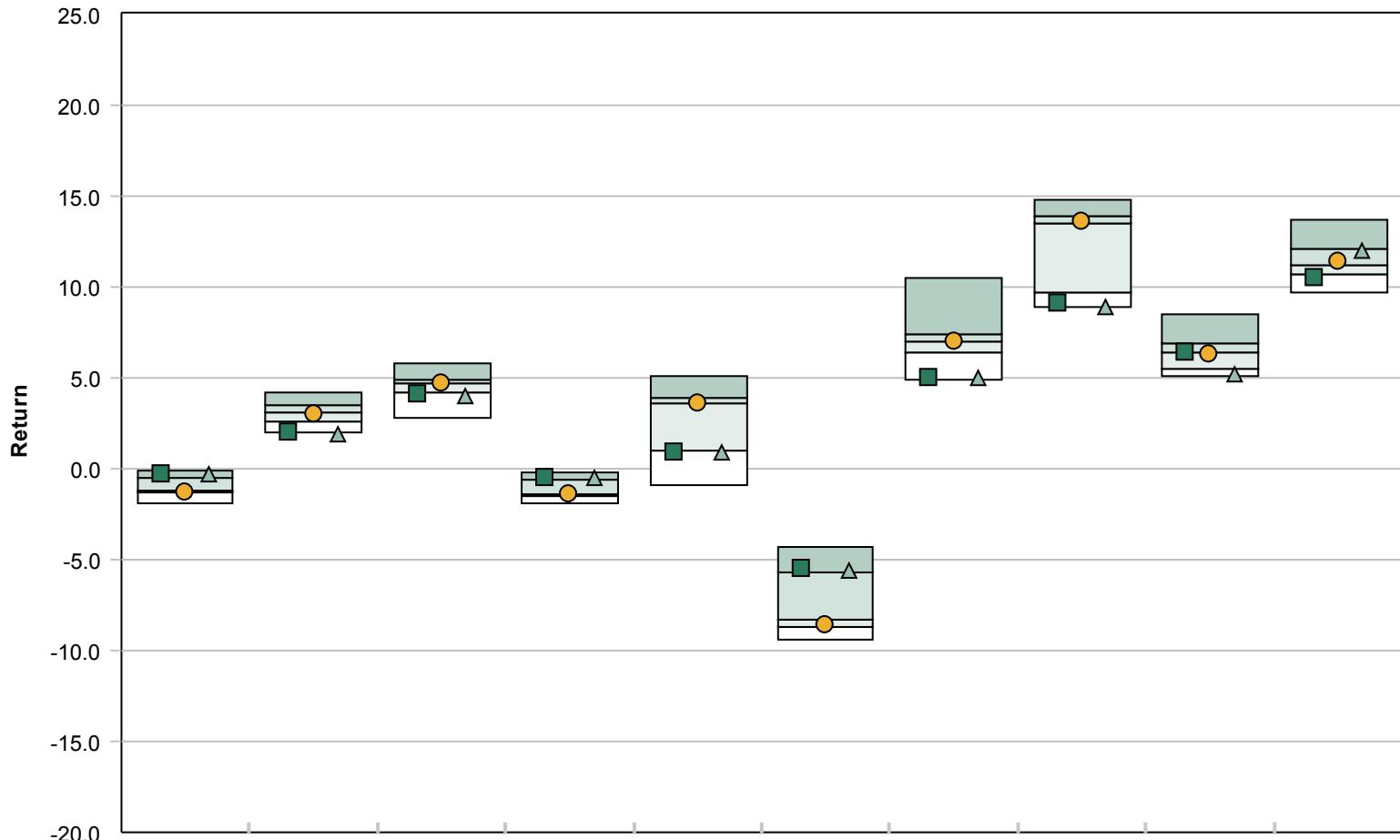
	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs
IRM-TIPS	2.54 (70)	5.22 (73)	4.74 (59)	2.01 (78)	1.45 (91)	1.10 (88)	3.07 (81)
Blmbg. Barc. U.S. TIPS	2.86 (37)	6.15 (48)	4.84 (39)	2.08 (75)	1.76 (54)	1.17 (73)	3.64 (69)
Blmbg. Barc. U.S. TIPS 1-10 Year	2.53 (73)	5.17 (80)	4.67 (66)	1.93 (97)	1.42 (96)	1.06 (98)	2.93 (100)
5th Percentile	3.11	6.85	5.74	2.83	2.01	1.58	4.25
1st Quartile	2.88	6.36	4.97	2.29	1.90	1.29	3.92
Median	2.83	6.13	4.82	2.16	1.77	1.23	3.69
3rd Quartile	2.53	5.18	4.65	2.07	1.58	1.15	3.11
95th Percentile	2.41	5.06	4.47	1.95	1.43	1.08	2.95

Parentheses contain percentile rankings.
Calculation based on monthly periodicity.

Bristol County Retirement System

IM U.S. TIPS (SA+CF)

As of June 30, 2019



■ IRM-TIPS

○ Blmbg. Barc. U.S. TIPS

△ Blmbg. Barc. U.S. TIPS 1-10 Year

2018 2017 2016 2015 2014 2013 2012 2011 2010 2009

5th Percentile	-0.09	4.18	5.77	-0.16	5.05	-4.34	10.53	14.80	8.50	13.67
1st Quartile	-0.46	3.51	4.94	-0.65	3.91	-5.68	7.44	13.87	6.89	12.08
Median	-1.22	3.10	4.66	-1.40	3.60	-8.33	6.99	13.52	6.40	11.24
3rd Quartile	-1.30	2.65	4.23	-1.52	1.04	-8.67	6.37	9.66	5.46	10.71
95th Percentile	-1.89	1.97	2.85	-1.91	-0.93	-9.43	4.92	8.87	5.08	9.75

Parentheses contain percentile rankings.

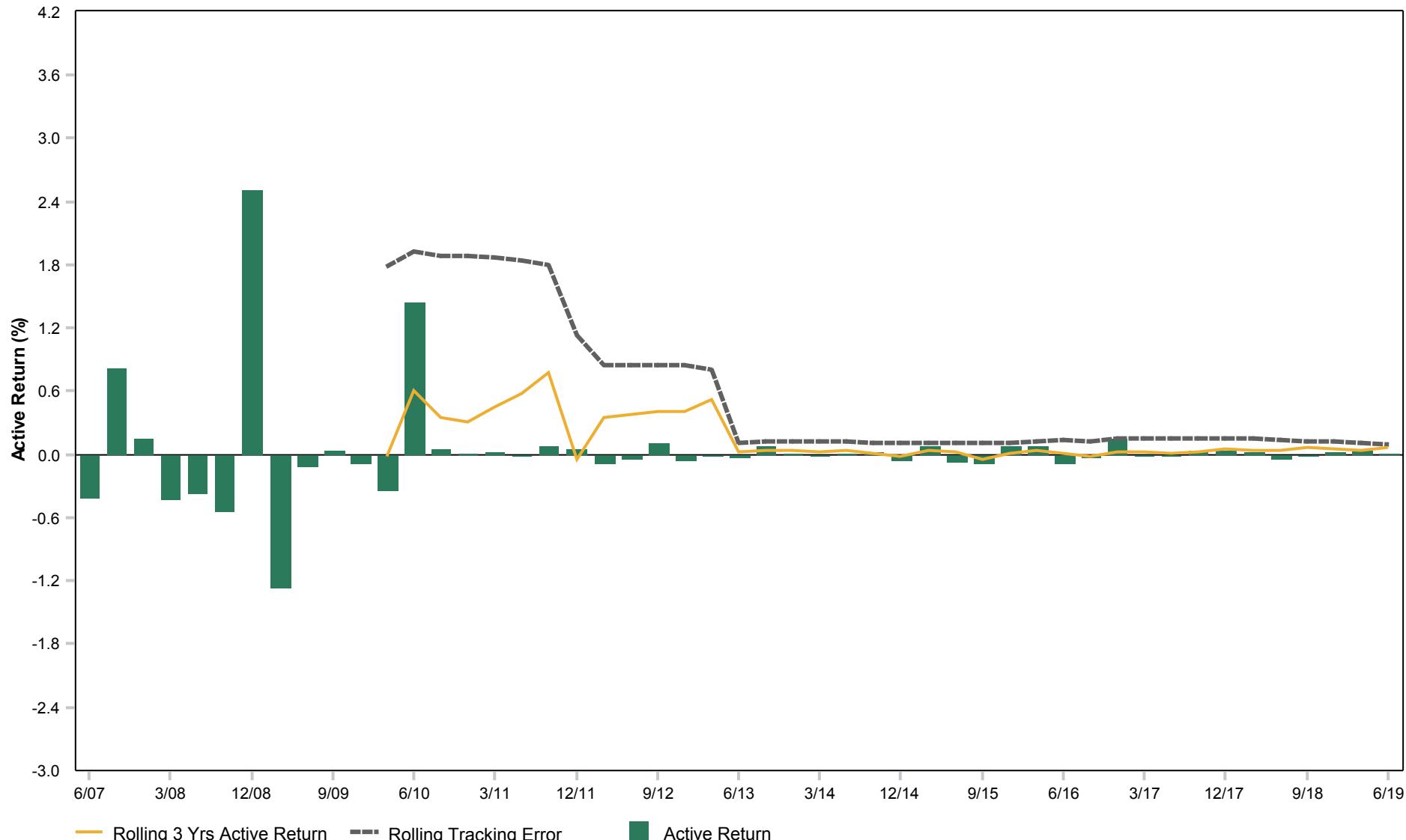
Calculation based on monthly periodicity.

Bristol County Retirement System

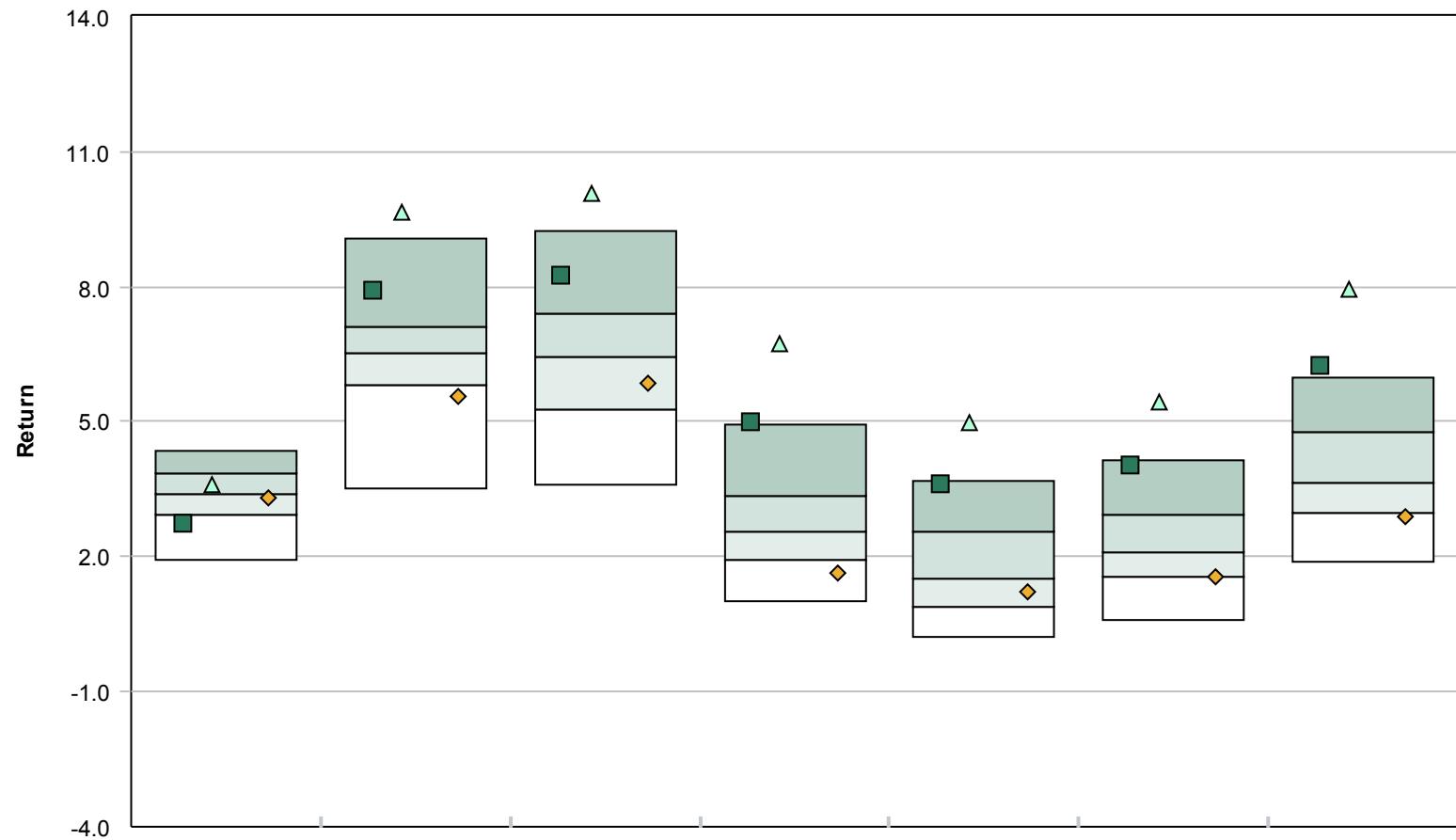
Comparative Performance & Rolling Return

As of June 30, 2019

	YTD	1 Yr	3 Yrs	5 Yrs	2018	2017	2016	Since Inception	Inception Date
IRM-TIPS	5.22	4.74	2.01	1.45	-0.26	1.97	4.11	3.68	02/01/2007
Blmbg. Barc. U.S. TIPS 1-10 Year	5.17	4.67	1.93	1.42	-0.25	1.90	4.01	3.55	
Difference	0.05	0.07	0.08	0.03	-0.01	0.07	0.10	0.13	



Global Fixed Income



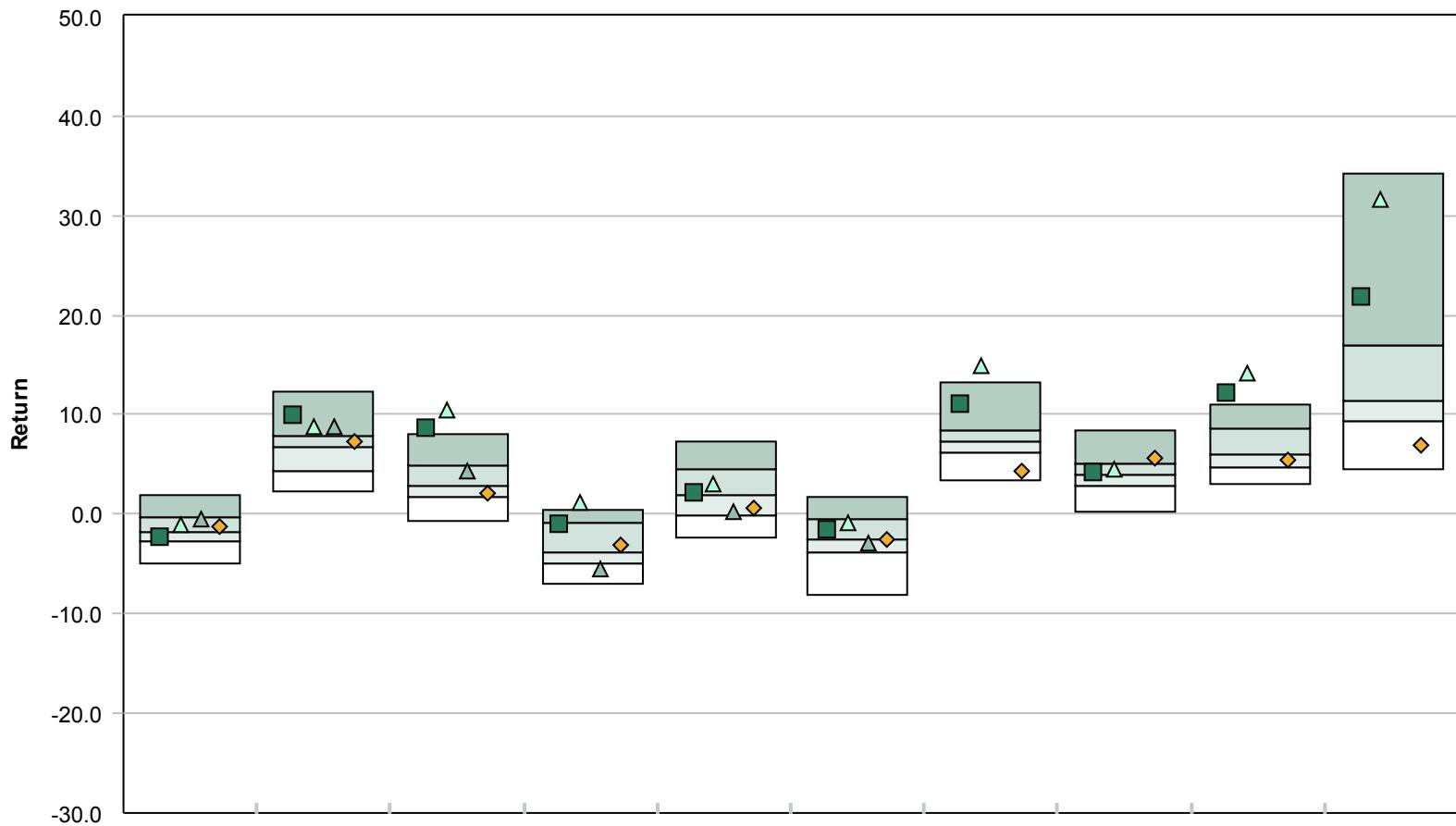
	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs
Total Global Fixed	2.72 (82)	7.92 (13)	8.23 (14)	4.98 (5)	3.60 (8)	4.01 (6)	6.21 (4)
PIMCO Diversified Income	3.62 (35)	9.64 (1)	10.09 (2)	6.72 (1)	5.00 (1)	5.44 (1)	7.93 (1)
Colchester Global Bond	N/A						
Blmbg. Barc. Global Aggregate	3.29 (55)	5.57 (80)	5.85 (63)	1.63 (84)	1.20 (63)	1.57 (75)	2.89 (76)
5th Percentile	4.35	9.07	9.23	4.92	3.69	4.13	5.99
1st Quartile	3.84	7.09	7.40	3.34	2.55	2.94	4.79
Median	3.37	6.54	6.42	2.56	1.51	2.09	3.66
3rd Quartile	2.93	5.81	5.25	1.93	0.90	1.54	2.96
95th Percentile	1.94	3.53	3.60	1.00	0.23	0.58	1.88

Parentheses contain percentile rankings.
Calculation based on monthly periodicity.

Bristol County Retirement System

IM Global Fixed Income (MF)

As of June 30, 2019



	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
Total Global Fixed	-2.43 (70)	10.00 (9)	8.55 (3)	-1.05 (27)	2.13 (47)	-1.54 (38)	11.04 (14)	4.23 (46)	12.13 (4)	21.87 (17)
PIMCO Diversified Income	-0.96 (36)	8.85 (16)	10.56 (2)	1.24 (1)	2.98 (38)	-0.91 (29)	14.97 (4)	4.44 (38)	14.27 (1)	31.57 (6)
Colchester Global Bond	-0.47 (27)	8.74 (17)	4.28 (36)	-5.53 (85)	0.27 (70)	-2.88 (56)	N/A	N/A	N/A	N/A
Blmbg. Barc. Global Aggregate	-1.19 (40)	7.39 (38)	2.09 (69)	-3.15 (41)	0.59 (62)	-2.60 (52)	4.32 (94)	5.64 (21)	5.54 (59)	6.93 (80)
5th Percentile	1.84	12.27	7.96	0.40	7.36	1.66	13.22	8.48	11.05	34.25
1st Quartile	-0.37	7.86	4.95	-0.86	4.52	-0.49	8.43	5.14	8.64	16.98
Median	-1.75	6.81	2.92	-3.83	1.91	-2.52	7.33	4.01	5.97	11.42
3rd Quartile	-2.78	4.42	1.70	-4.94	-0.14	-3.90	6.27	2.81	4.72	9.32
95th Percentile	-4.98	2.21	-0.62	-7.00	-2.35	-8.15	3.48	0.26	3.08	4.45

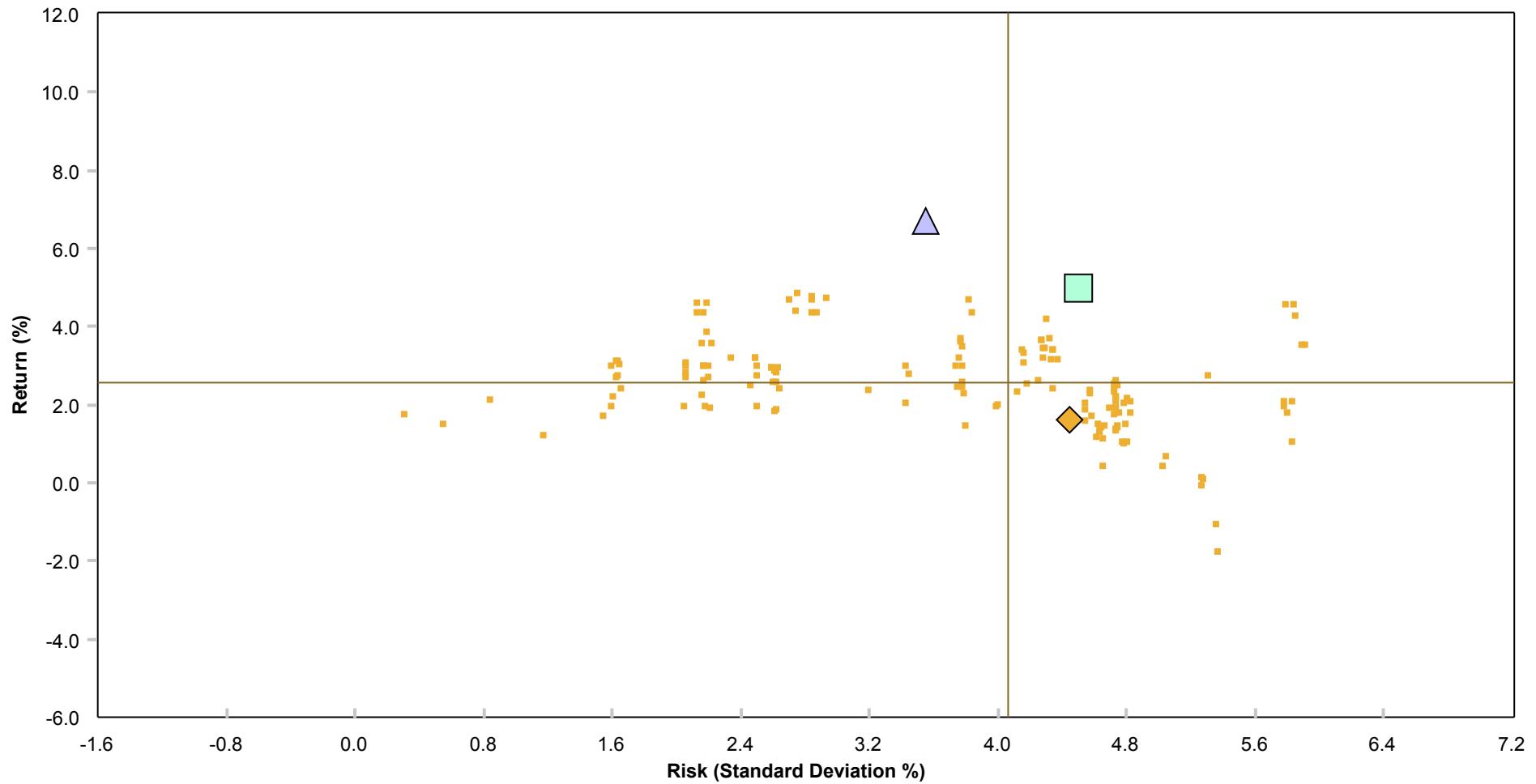
(Parentheses contain percentile rankings.
Calculation based on monthly periodicity.)

Bristol County Retirement System

Peer Group Scattergram

3 Years Ending June 30, 2019

IM Global Fixed Income (MF)



	Return	Standard Deviation
Total Global Fixed	4.98	4.50
PIMCO Diversified Income	6.72	3.55
Colchester Global Bond	N/A	N/A
Blmbg. Barc. Global Aggregate	1.63	4.45
Median	2.56	4.06

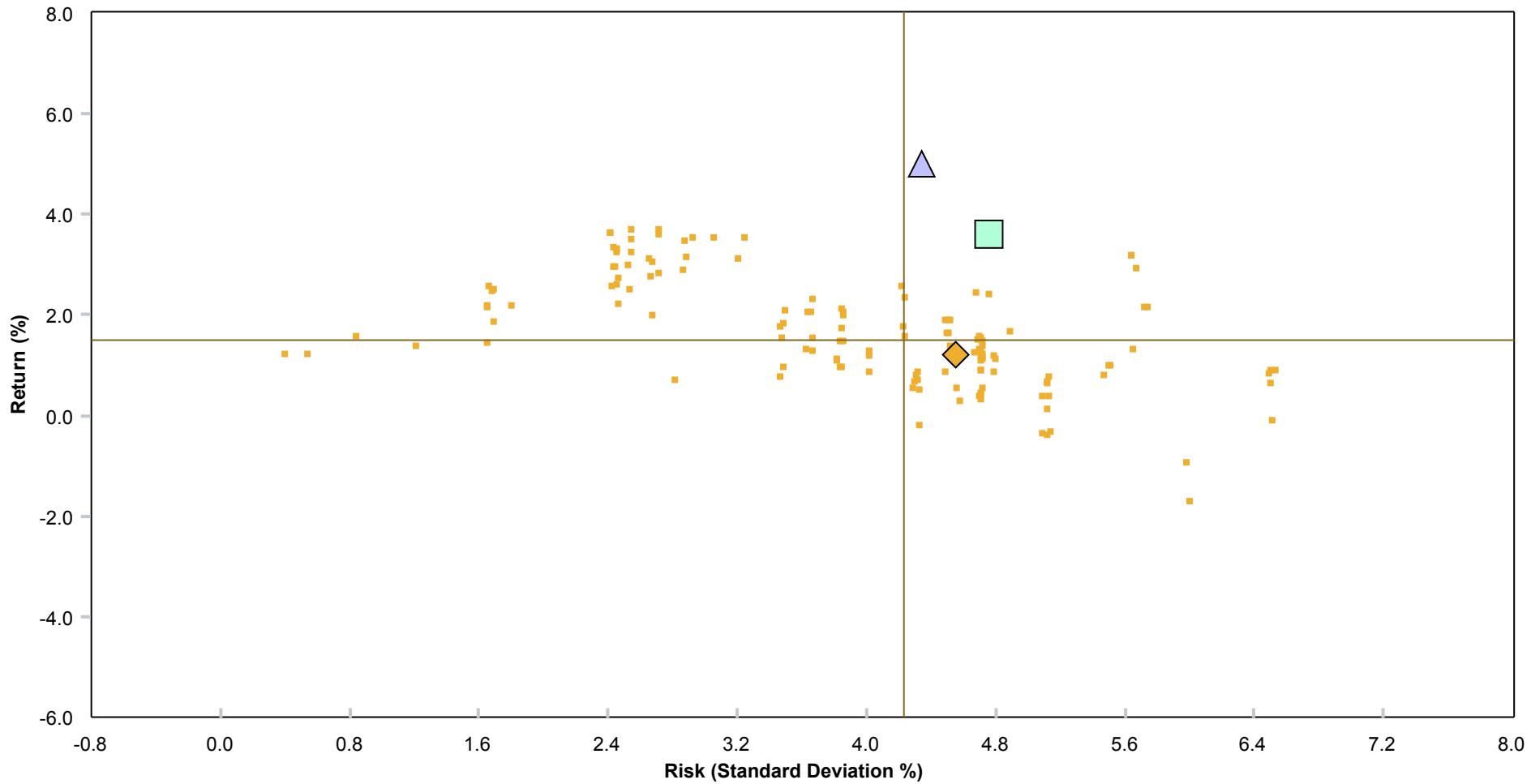
Calculation based on monthly periodicity.

Bristol County Retirement System

Peer Group Scattergram

5 Years Ending June 30, 2019

IM Global Fixed Income (MF)



	Standard Return	Standard Deviation
Total Global Fixed	3.60	4.77
PIMCO Diversified Income	5.00	4.34
Colchester Global Bond	N/A	N/A
Blmbg. Barc. Global Aggregate	1.20	4.55
Median	1.51	4.23

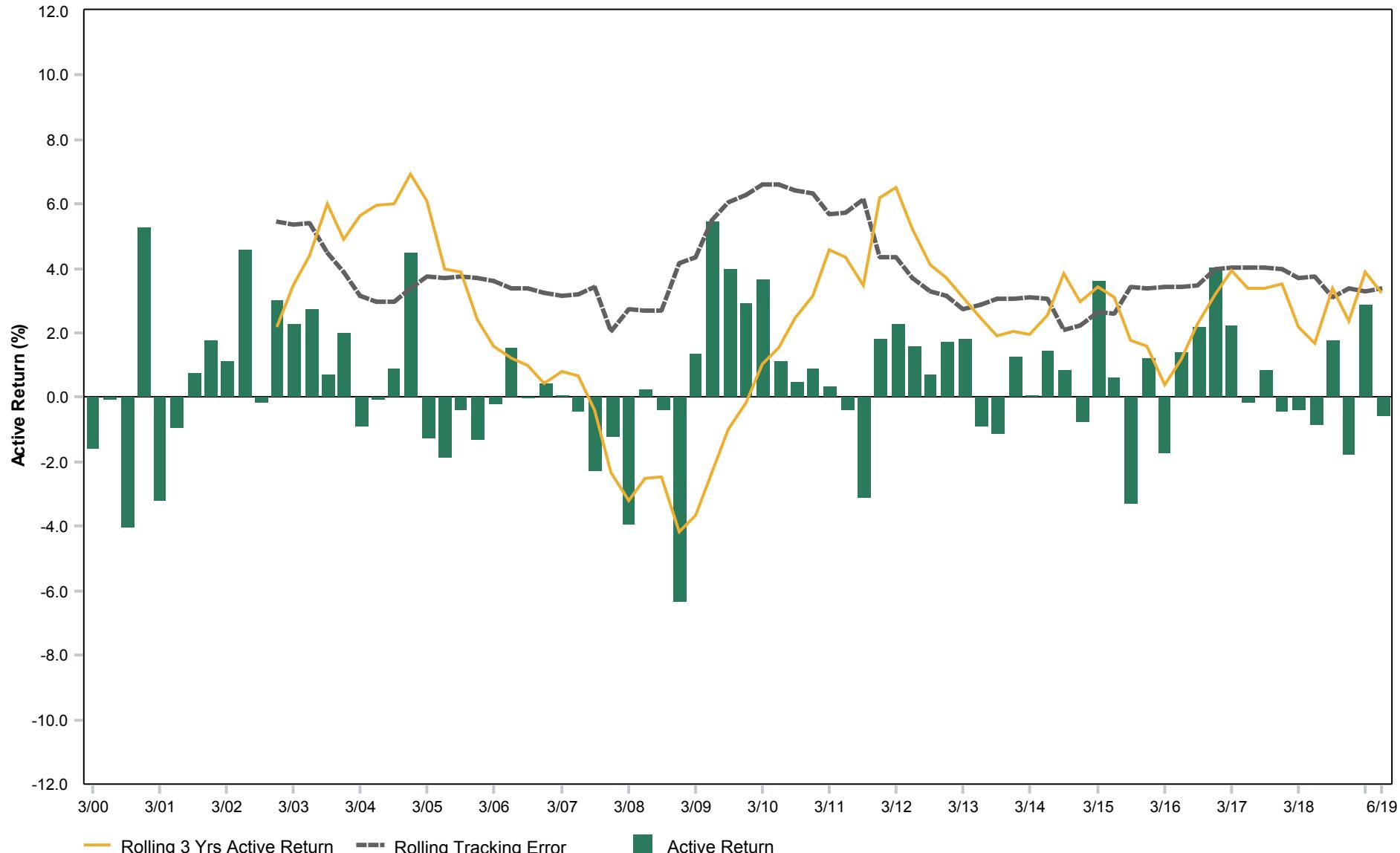
Calculation based on monthly periodicity.

Bristol County Retirement System

Comparative Performance & Rolling Return

As of June 30, 2019

	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	2018	2017	2016	2015
Total Global Fixed	2.72	7.92	8.23	4.98	3.60	4.01	6.21	-2.43	10.00	8.55	-1.05
Blmbg. Barc. Global Aggregate	3.29	5.57	5.85	1.63	1.20	1.57	2.89	-1.19	7.39	2.09	-3.15
Difference	-0.57	2.35	2.38	3.35	2.40	2.44	3.32	-1.24	2.61	6.46	2.10

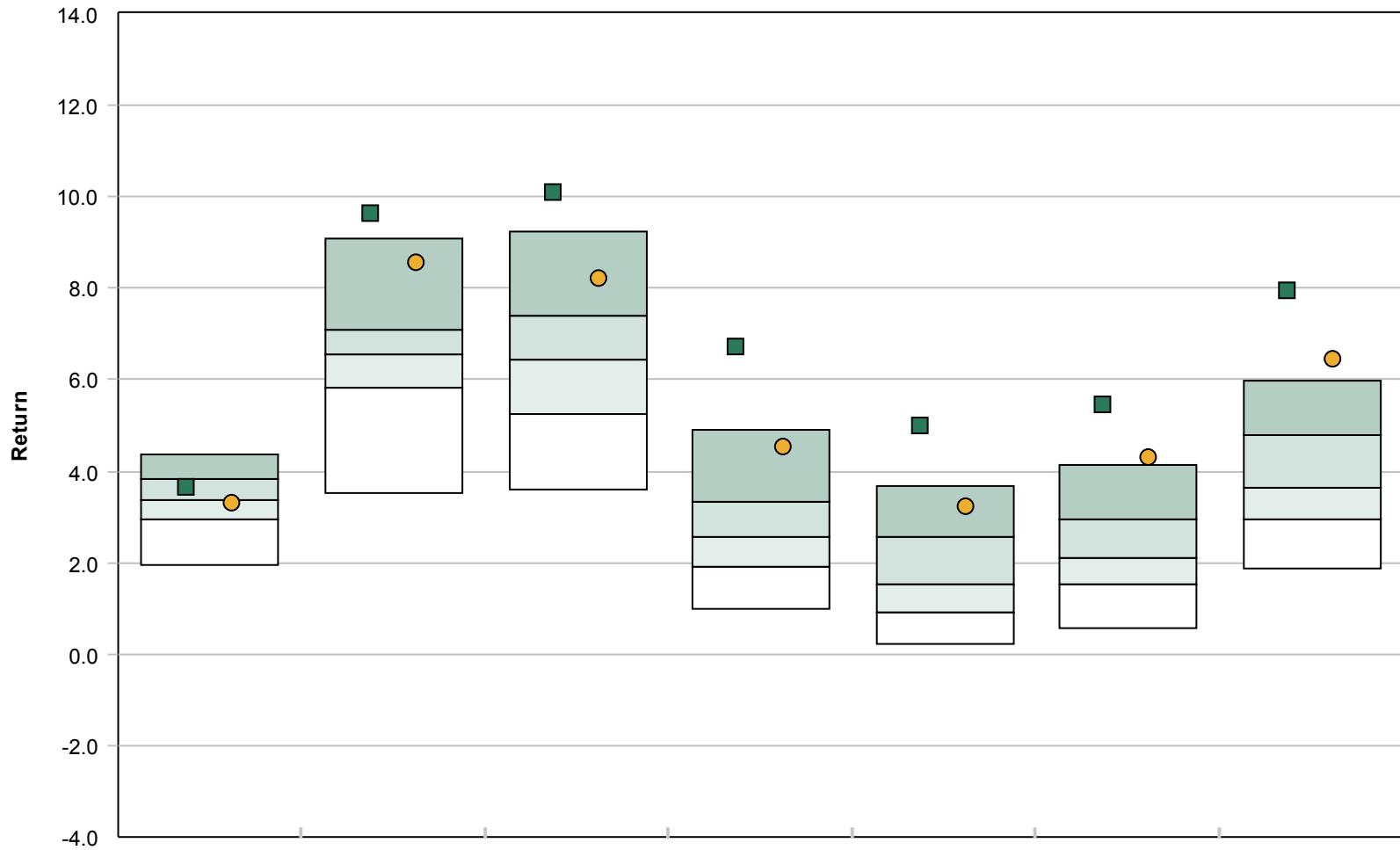


Net of fees.

Bristol County Retirement System

IM Global Fixed Income (MF)

As of June 30, 2019



■ PIMCO Diversified Income

● PIMCO Diversified Index*

1 Qtr

YTD

1 Yr

3 Yrs

5 Yrs

7 Yrs

10 Yrs

3.62 (35)

9.64 (1)

10.09 (2)

6.72 (1)

5.00 (1)

5.44 (1)

7.93 (1)

3.31 (55)

8.55 (10)

8.22 (14)

4.52 (11)

3.23 (15)

4.28 (4)

6.46 (2)

5th Percentile

4.35 9.07

9.23

4.92

3.69

4.13

5.99

1st Quartile

3.84 7.09

7.40

3.34

2.55

2.94

4.79

Median

3.37 6.54

6.42

2.56

1.51

2.09

3.66

3rd Quartile

2.93 5.81

5.25

1.93

0.90

1.54

2.96

95th Percentile

1.94 3.53

3.60

1.00

0.23

0.58

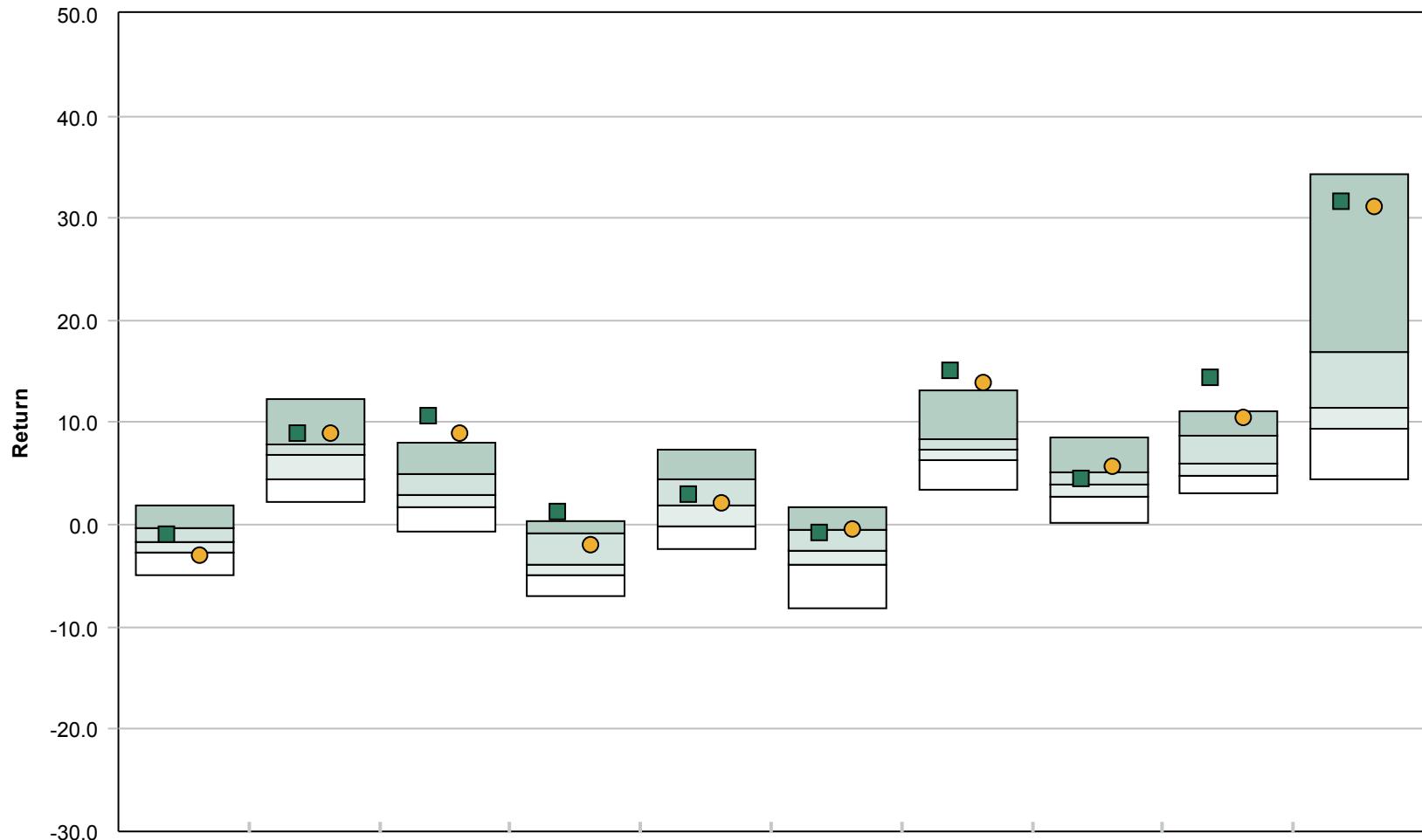
1.88

*33.3% ML Global HY/33.3% JPM EMBI Global/33.3% LB Global Agg

Bristol County Retirement System

IM Global Fixed Income (MF)

As of June 30, 2019



■ PIMCO Diversified Income

● PIMCO Diversified Index*

2018 2017 2016 2015 2014 2013 2012 2011 2010 2009

5th Percentile	1.84	12.27	7.96	0.40	7.36	1.66	13.22	8.48	11.05	34.25
1st Quartile	-0.37	7.86	4.95	-0.86	4.52	-0.49	8.43	5.14	8.64	16.98
Median	-1.75	6.81	2.92	-3.83	1.91	-2.52	7.33	4.01	5.97	11.42
3rd Quartile	-2.78	4.42	1.70	-4.94	-0.14	-3.90	6.27	2.81	4.72	9.32
95th Percentile	-4.98	2.21	-0.62	-7.00	-2.35	-8.15	3.48	0.26	3.08	4.45

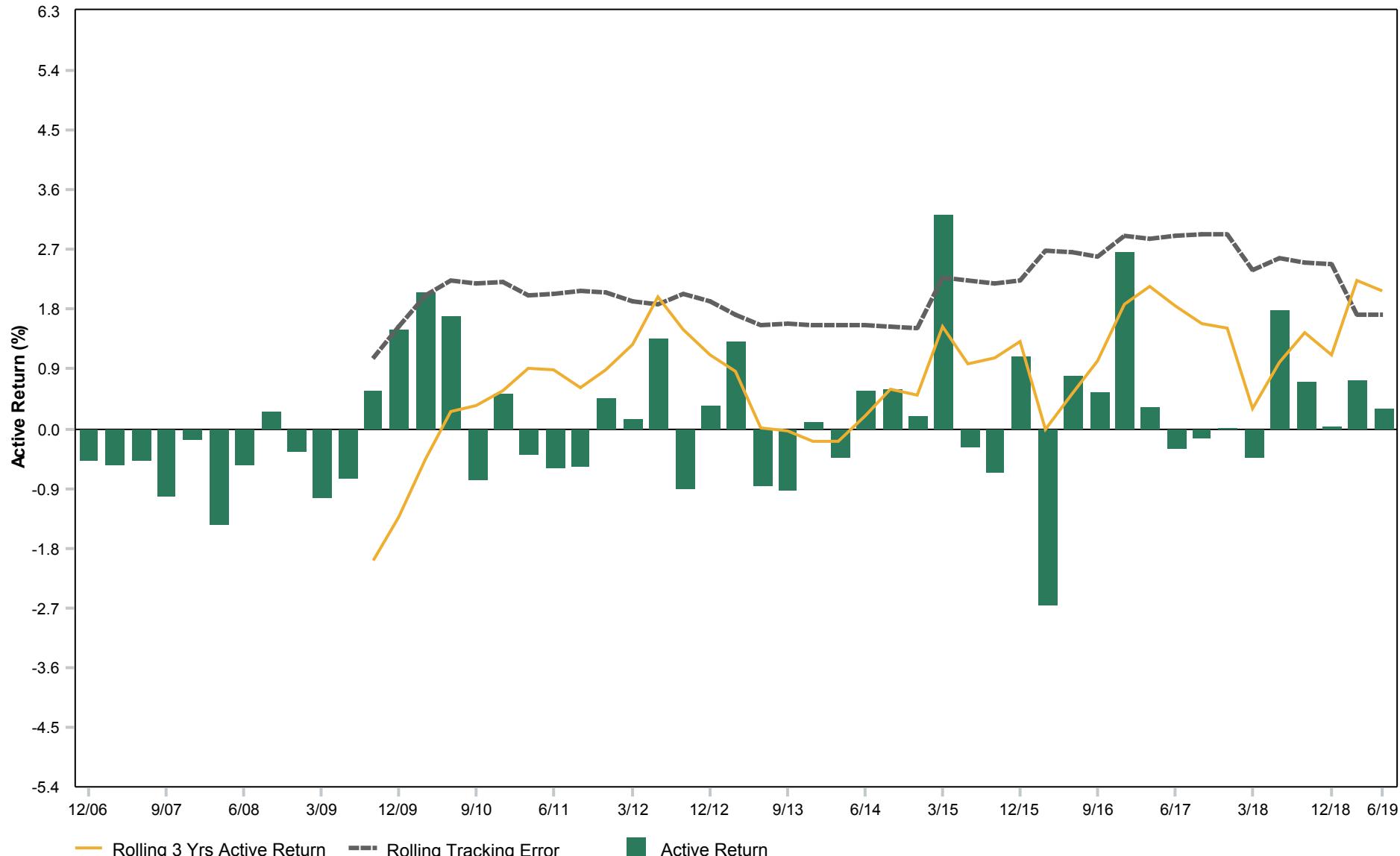
*33.3% ML Global HY/33.3% JPM EMBI Global/33.3% LB Global Agg

Bristol County Retirement System

Comparative Performance & Rolling Return

As of June 30, 2019

	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	2018	2017	2016	2015
PIMCO Diversified Income	3.62	9.64	10.09	6.72	5.00	5.44	7.93	-0.96	8.85	10.56	1.24
PIMCO Diversified Index*	3.31	8.59	8.22	4.52	3.23	4.28	6.46	-3.03	8.97	8.97	-2.02
Difference	0.31	1.05	1.87	2.20	1.77	1.16	1.47	2.07	-0.12	1.59	3.26

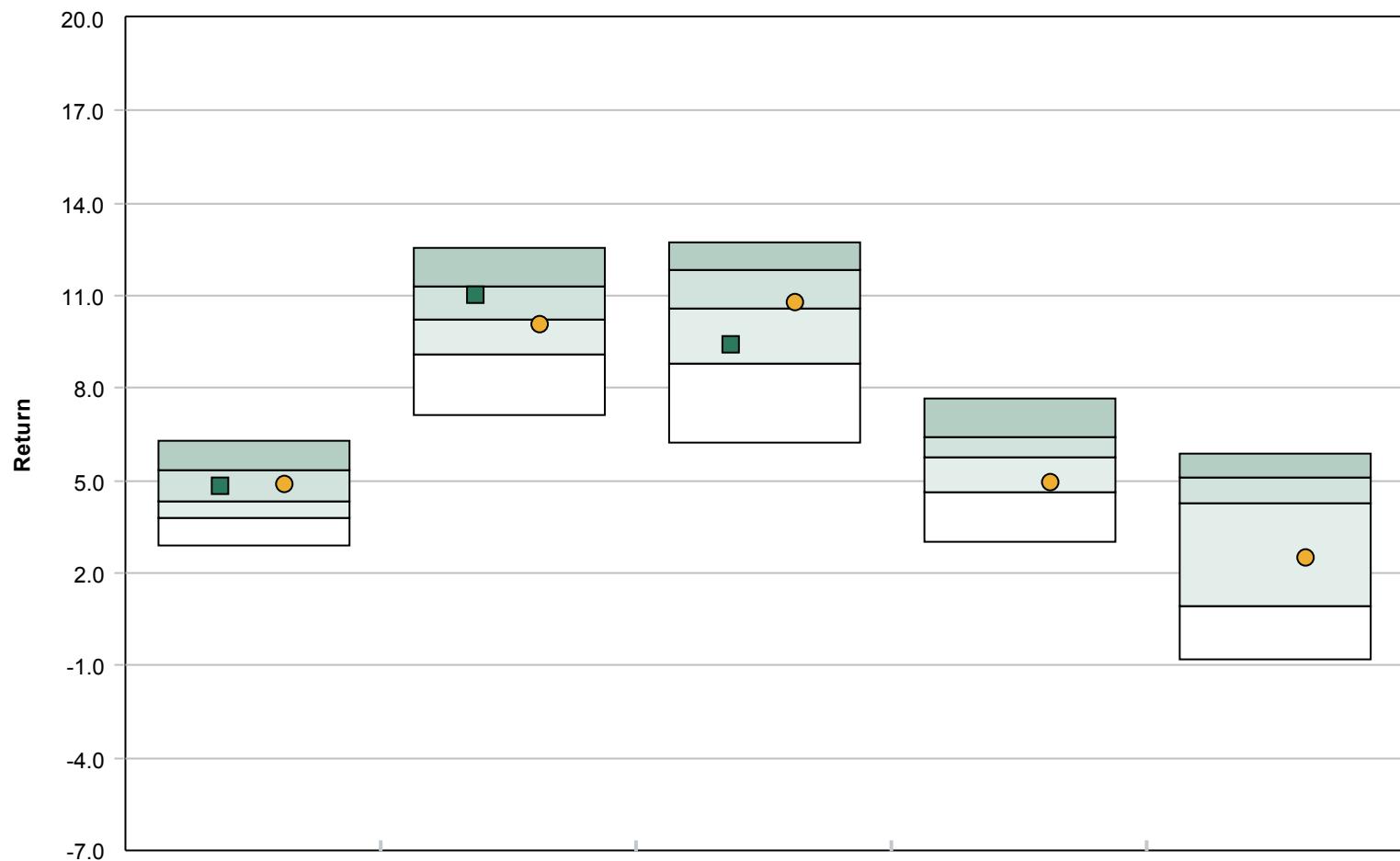


*PIMCO Index: 33% BC Global Agg/33% ML Global HY/33% JPM EMBI Global.

Bristol County Retirement System

IM Emerging Market Debt Blend (SA+CF)

As of June 30, 2019



■ Stone Harbor EMD

● 50% JPM EMBI Global Div./
50% JPM GBI-EM Global Div.

5th Percentile

1 Qtr

4.78 (40)

4.86 (36)

YTD

11.03 (34)

10.03 (54)

1 Yr

9.42 (68)

10.77 (47)

3 Yrs

N/A

4.91 (71)

5 Yrs

N/A

2.46 (62)

1st Quartile

6.29

12.53

12.72

7.64

5.85

Median

5.33

11.33

11.83

6.41

5.10

3rd Quartile

4.33

10.23

10.61

5.76

4.28

95th Percentile

3.77

9.11

8.79

4.64

0.93

95th Percentile

2.87

7.14

6.22

2.99

-0.80

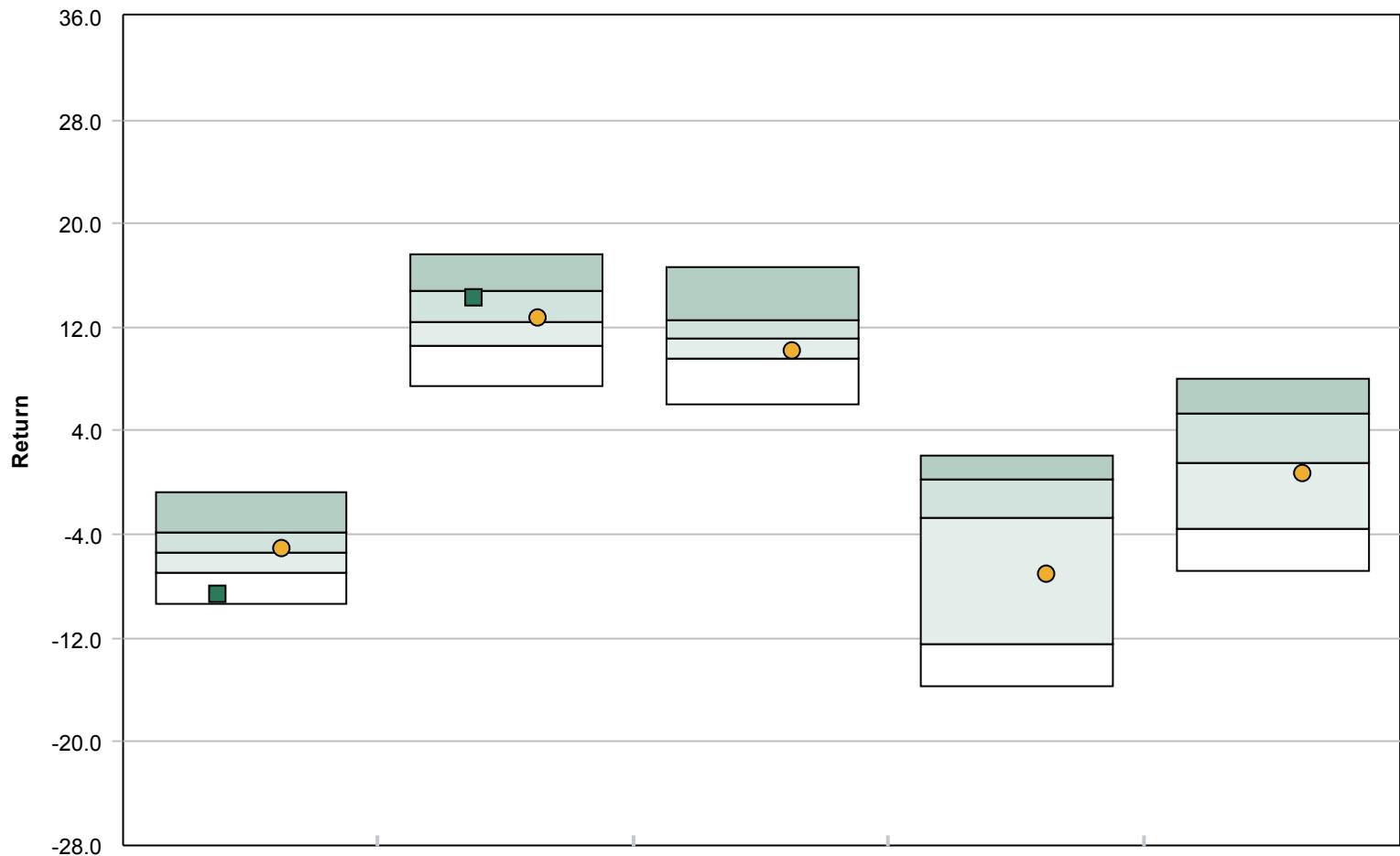
Parentheses contain percentile rankings.

Calculation based on monthly periodicity.

Bristol County Retirement System

IM Emerging Market Debt Blend (SA+CF)

As of June 30, 2019



■ Stone Harbor EMD

● 50% JPM EMBI Global Div./
50% JPM GBI-EM Global Div.

2018

-8.65 (92)
-5.15 (45)

2017

14.30 (32)
12.74 (47)

2016

N/A
10.16 (67)

2015

N/A
-7.14 (66)

2014

N/A
0.71 (59)

5th Percentile

-0.70

17.69

16.62

2.04

8.07

1st Quartile

-3.83

14.76

12.59

0.26

5.41

Median

-5.35

12.43

11.09

-2.67

1.52

3rd Quartile

-6.98

10.53

9.53

-12.49

-3.61

95th Percentile

-9.36

7.45

6.04

-15.77

-6.82

Parentheses contain percentile rankings.

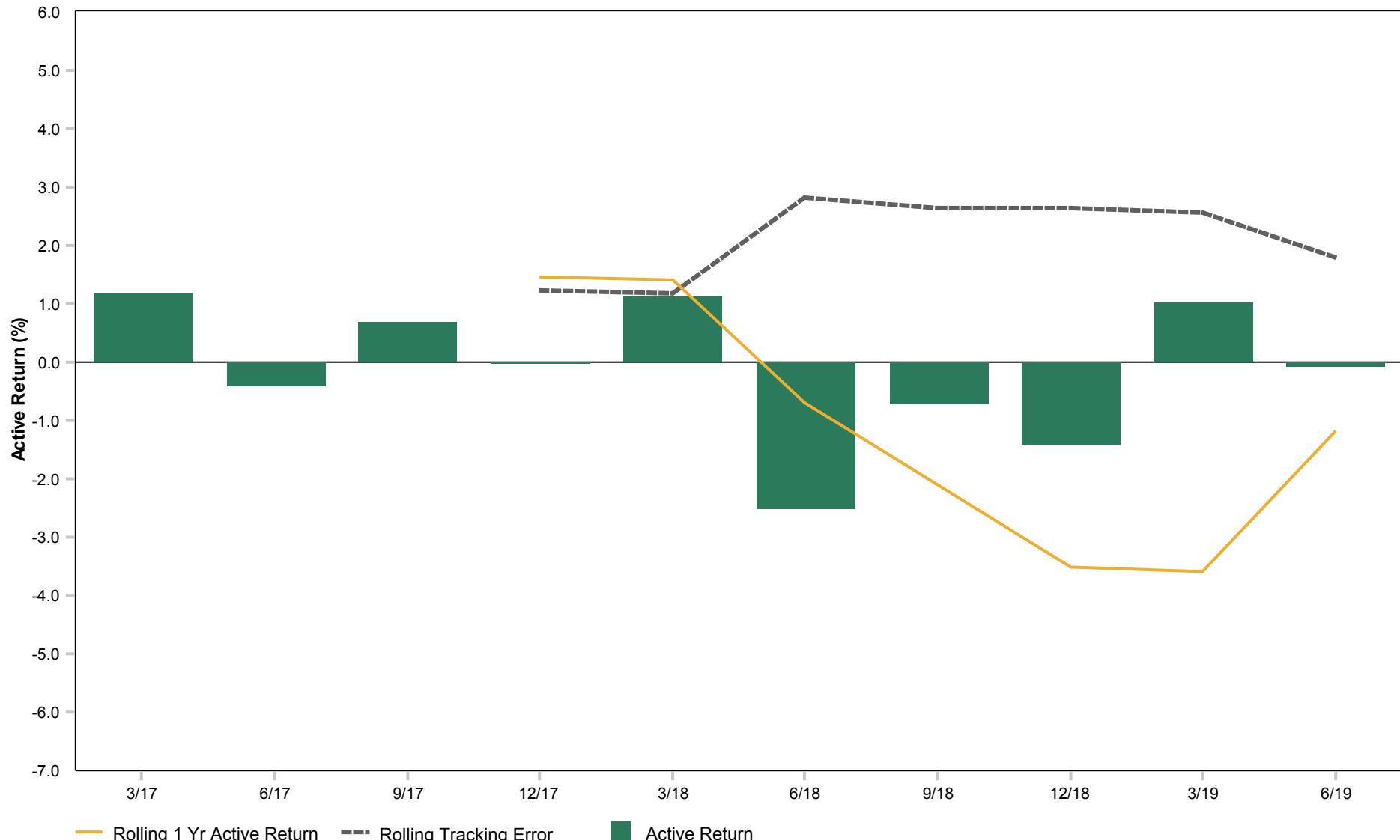
Calculation based on monthly periodicity.

Bristol County Retirement System

Comparative Performance & Rolling Return

As of June 30, 2019

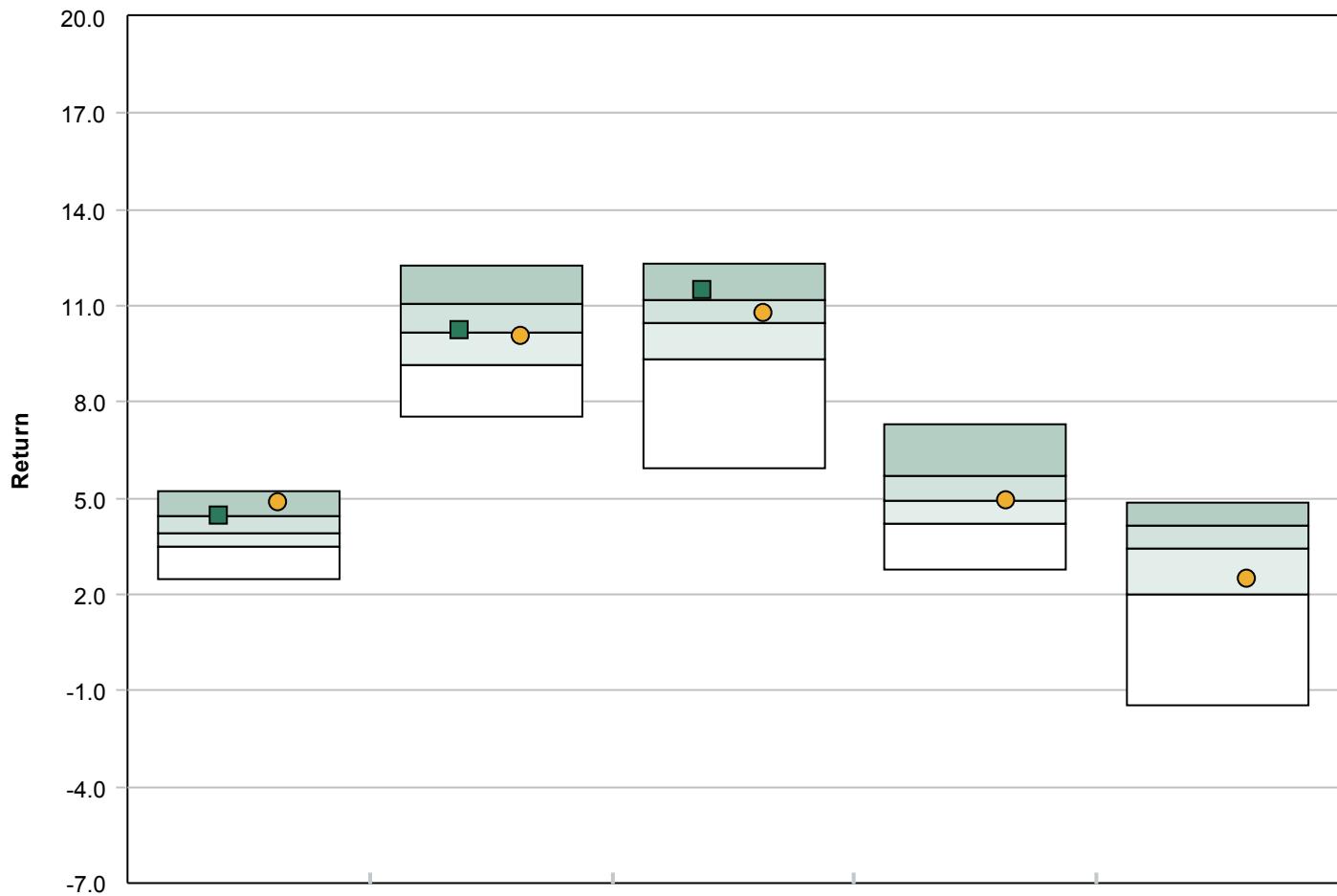
	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	2018	2017	2016	2015
Stone Harbor EMD	4.78	11.03	9.42	N/A	N/A	N/A	N/A	-8.65	14.30	N/A	N/A
50% JPM EMBI Global Diversified/ 50% JPM GBI-EM Global Diversified US	4.86	10.03	10.77	4.91	2.46	3.02	5.65	-5.15	12.74	10.16	-7.14
Difference	-0.08	1.00	-1.35	N/A	N/A	N/A	N/A	-3.50	1.56	N/A	N/A



Bristol County Retirement System

IM Emerging Markets Debt (MF)

As of June 30, 2019



■ Ashmore Emerging Markets Total Return

● 50% JPM EMBI Global Div./
50% JPM GBI-EM Global Div.

5th Percentile

1 Qtr 4.44 (25) YTD 10.23 (50) 1 Yr 11.49 (18) 3 Yrs N/A 5 Yrs N/A

1st Quartile

4.86 (10) 10.03 (56) 10.77 (42) 4.91 (52) 2.46 (72)

Median

3.92 10.20 10.47 4.94 3.45

3rd Quartile

3.51 9.17 9.35 4.22 2.02

95th Percentile

2.49 7.53 5.96 2.77 -1.48

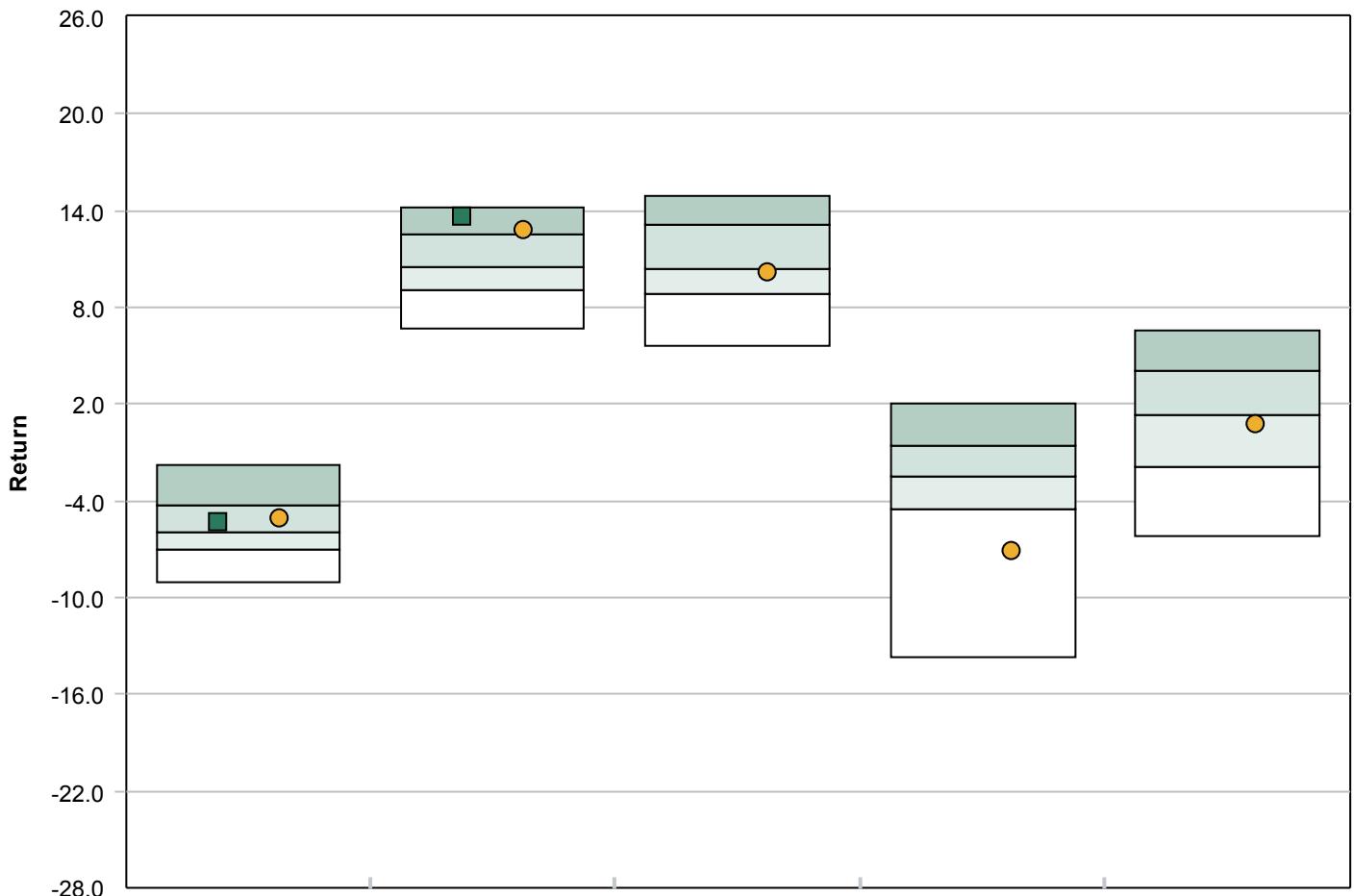
Parentheses contain percentile rankings.

Calculation based on monthly periodicity.

Bristol County Retirement System

IM Emerging Markets Debt (MF)

As of June 30, 2019



■ Ashmore Emerging Markets Total Return

● 50% JPM EMBI Global Div./
50% JPM GBI-EM Global Div.

	2018	2017	2016	2015	2014
Ashmore Emerging Markets Total Return	-5.33 (42)	13.66 (10)	N/A	N/A	N/A
50% JPM EMBI Global Div./ 50% JPM GBI-EM Global Div.	-5.15 (39)	12.74 (22)	10.16 (55)	-7.14 (84)	0.71 (57)

5th Percentile

-1.82 14.25 14.96 1.98 6.51

1st Quartile

-4.27 12.52 13.09 -0.59 4.05

Median

-5.91 10.49 10.42 -2.53 1.31

3rd Quartile

-7.08 9.02 8.88 -4.49 -1.88

95th Percentile

-8.99 6.67 5.57 -13.69 -6.22

Parentheses contain percentile rankings.

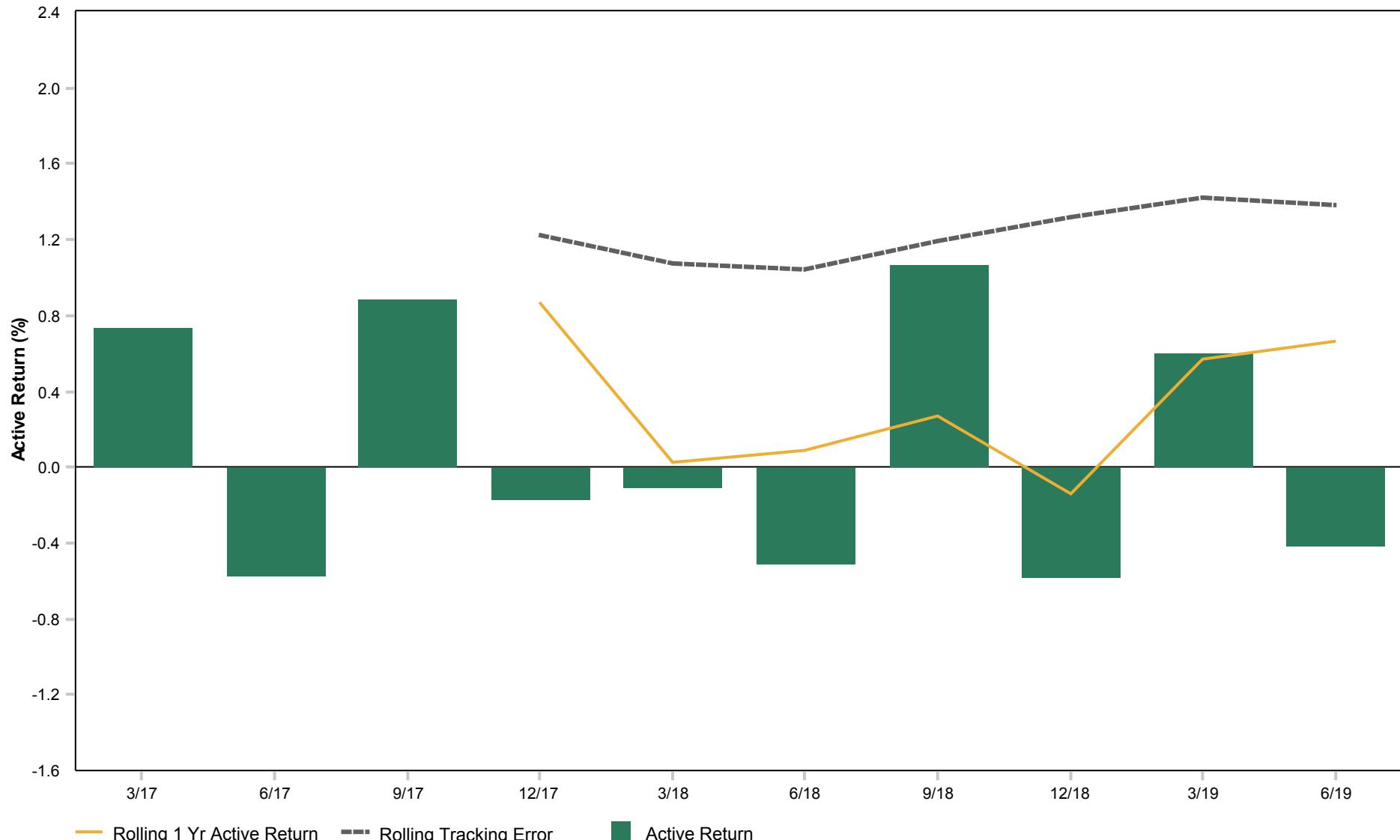
Calculation based on monthly periodicity.

Bristol County Retirement System

Comparative Performance & Rolling Return

As of June 30, 2019

	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	2018	2017	2016	2015
Ashmore Emerging Markets Total Return	4.44	10.23	11.49	N/A	N/A	N/A	N/A	-5.33	13.66	N/A	N/A
50% JPM EMBI Global Diversified/ 50% JPM GBI-EM Global Diversified US	4.86	10.03	10.77	4.91	2.46	3.02	5.65	-5.15	12.74	10.16	-7.14
Difference	-0.42	0.20	0.72	N/A	N/A	N/A	N/A	-0.18	0.92	N/A	N/A



Other Fixed Income

Bristol County Retirement System**Comparative Performance - IRR**

As of June 30, 2019

	Market Value (\$)	%	1	Year To Date	1	3	Since Inception	Inception Date
			Quarter		Year	Years		
Invesco Mortgage Recovery Fund	252,222	0.04	0.00	1.62	11.79	-2.40	13.96	03/31/2010

Bristol County Retirement System

Schedule of Investable Assets

Invesco Mortgage Recovery Fund

Since Inception Ending June 30, 2019

Periods Ending	Beginning Market Value (\$)	Net Cash Flow (\$)	Contributions (\$)	Withdrawals (\$)	Gain/Loss (\$)	Ending Market Value (\$)	%Return	Unit Value	Income (\$)	Income % of Beginning Market Value
Jun-2010	-	2,047,799	2,089,844	42,045	-	2,151,396	5.74	105.74	27,307	0.00
Sep-2010	2,151,396	739,731	921,104	181,373	142,577	3,033,704	5.94	112.02	75,028	3.49
Dec-2010	3,033,704	-448,204	33,362	481,566	96,495	2,681,995	3.67	116.13	209,106	6.89
Mar-2011	2,681,995	-265,432	215,509	480,941	114,718	2,531,281	4.31	121.13	206,684	7.71
Jun-2011	2,531,281	-248,483	200,172	448,655	-37,226	2,245,572	-1.67	119.11	33,871	1.34
Sep-2011	2,245,572	1,186,159	1,302,619	116,460	-15,163	3,416,568	-0.67	118.31	8,310	0.37
Dec-2011	3,416,568	-974,627	-	974,627	7,383	2,449,324	0.24	118.60	38,619	1.13
Mar-2012	2,449,324	-880,764	-	880,764	106,038	1,674,598	4.64	124.10	18,649	0.76
Jun-2012	1,674,598	-3,746	159,003	162,749	44,872	1,715,724	2.45	127.14	75,013	4.48
Sep-2012	1,715,724	-10,305	-	10,305	37,498	1,742,917	2.19	129.92	-	0.00
Dec-2012	1,742,917	-510,562	-	510,562	85,492	1,317,847	5.91	137.60	-	0.00
Mar-2013	1,317,847	-65,326	-	65,326	22,847	1,275,368	1.74	140.00	-	0.00
Jun-2013	1,275,368	-59,917	20,152	80,069	26,281	1,241,732	2.19	143.07	-	0.00
Sep-2013	1,241,732	221,939	221,939	-	2,024	1,465,695	0.14	143.27	-	0.00
Dec-2013	1,465,695	132,967	329,829	196,862	124,547	1,723,209	8.11	154.89	-	0.00
Mar-2014	1,723,209	-97,979	-	97,979	39,216	1,664,446	2.35	158.54	-	0.00
Jun-2014	1,664,446	-64,464	70,551	135,015	53,465	1,653,447	3.34	163.84	-	0.00
Sep-2014	1,653,447	-38,489	40,092	78,581	82,363	1,697,321	5.10	172.19	-	0.00
Dec-2014	1,697,321	53,602	88,065	34,463	315,116	2,066,039	18.00	203.18	-	0.00
Mar-2015	2,066,039	-338,868	42,571	381,439	49,102	1,776,273	2.88	209.03	-	0.00
Jun-2015	1,776,273	28,704	28,704	-	67,010	1,871,987	3.91	217.20	-	0.00
Sep-2015	1,871,987	-239,366	44,631	283,997	184,643	1,817,264	11.31	241.76	-	0.00
Dec-2015	1,817,264	-255,351	-	255,351	107,519	1,669,432	6.88	258.40	-	0.00
Mar-2016	1,669,432	9,080	57,199	48,119	-204	1,678,308	-0.01	258.37	-	0.00
Jun-2016	1,678,308	-423,449	-	423,449	62,718	1,317,577	5.00	271.28	-	0.00
Sep-2016	1,317,577	-175,341	-	175,341	1,890	1,144,126	0.17	271.73	-	0.00
Dec-2016	1,144,126	-1,965	-	1,965	-85,161	1,057,000	-7.44	251.51	-	0.00
Mar-2017	1,057,000	-	-	-	-25,343	1,031,657	-2.40	245.48	-	0.00
Jun-2017	1,031,657	-559,332	-	559,332	-399	471,926	-0.08	245.27	-	0.00
Sep-2017	471,926	-80,808	-	80,808	-25,848	365,270	-6.61	229.06	-	0.00
Dec-2017	365,270	-	-	-	18,088	383,358	4.95	240.40	-	0.00
Mar-2018	383,358	840	840	-	12,252	396,450	3.36	248.49	-	0.00
Jun-2018	396,450	-76,638	-	76,638	22,664	342,476	5.75	262.78	-	0.00
Sep-2018	342,476	-	-	-	13,122	355,598	3.83	272.85	-	0.00

*% return represents a time weighted return.

 Segal Marco Advisors

Bristol County Retirement System
Schedule of Investable Assets

Invesco Mortgage Recovery Fund

Since Inception Ending June 30, 2019

Periods Ending	Beginning Market Value (\$)	Net Cash Flow (\$)	Contributions (\$)	Withdrawals (\$)	Gain/Loss (\$)	Ending Market Value (\$)	%Return	Unit Value	Income (\$)	Income % of Beginning Market Value
Dec-2018	355,598	-	-	-	18,584	374,182	5.23	287.11	-	0.00
Mar-2019	374,182	-126,979	-	126,979	5,019	252,222	1.37	291.05	-	0.00
Jun-2019	252,222	-	-	-	-	252,222	0.00	291.05	-	0.00
	-	-1,525,574	5,866,186	7,391,760	1,674,199	252,222	12.24	291.05	692,587	0.00

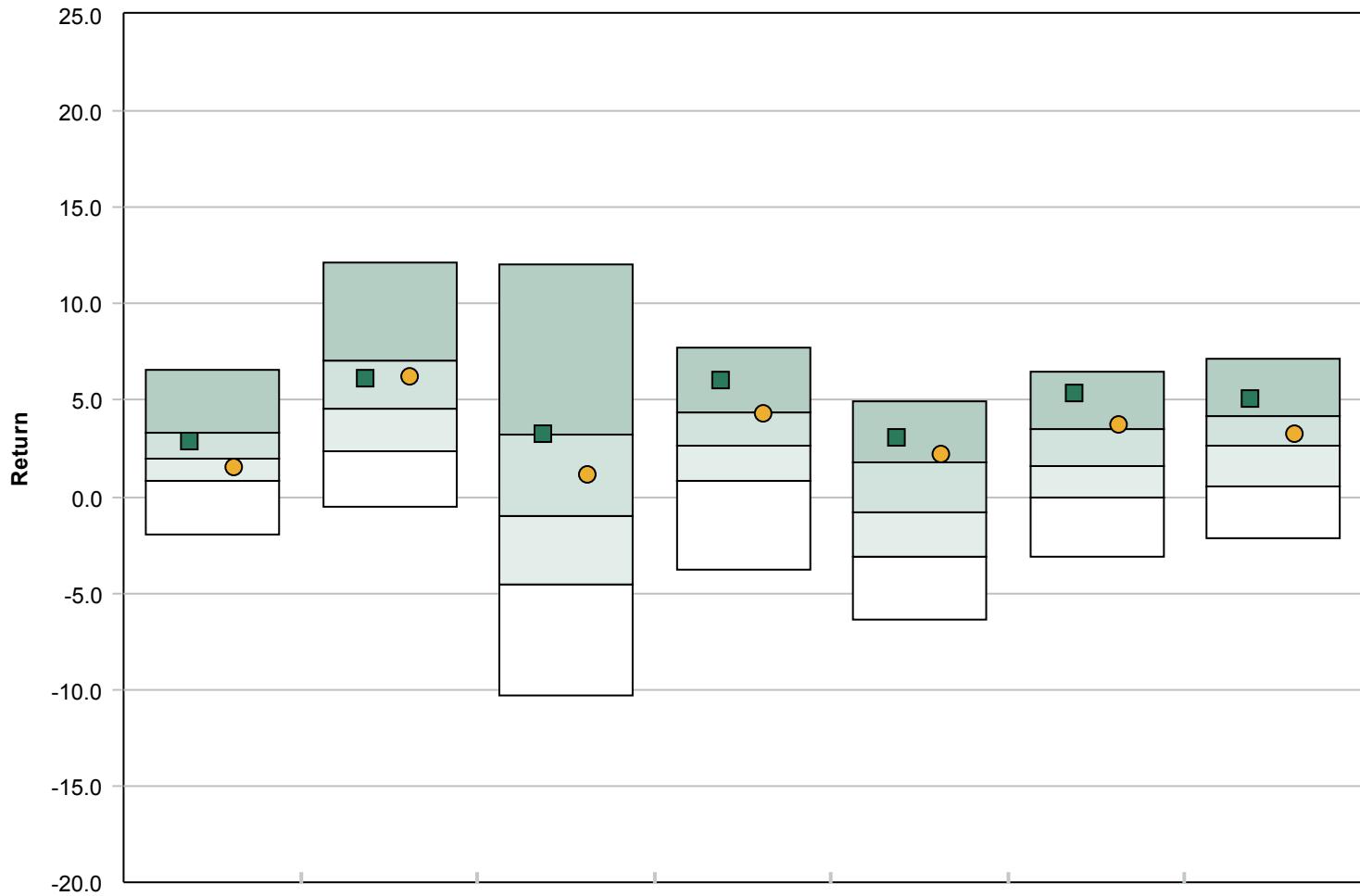
*% return represents a time weighted return.

Alternatives

Bristol County Retirement System

Fund of Funds Hedge Funds-[TASS]

As of June 30, 2019



■ PRIT Absolute Return

○ HFRI Fund of Funds Composite Index

1 Qtr **YTD** **1 Yr** **3 Yrs** **5 Yrs** **7 Yrs** **10 Yrs**

5th Percentile

6.53 12.16 12.01 7.77 4.95 6.48 7.18

1st Quartile

3.32 7.07 3.17 4.36 1.76 3.46 4.21

Median

1.99 4.57 -1.04 2.67 -0.77 1.59 2.66

3rd Quartile

0.84 2.33 -4.52 0.80 -3.08 -0.06 0.52

95th Percentile

-1.94 -0.51 -10.28 -3.76 -6.41 -3.12 -2.15

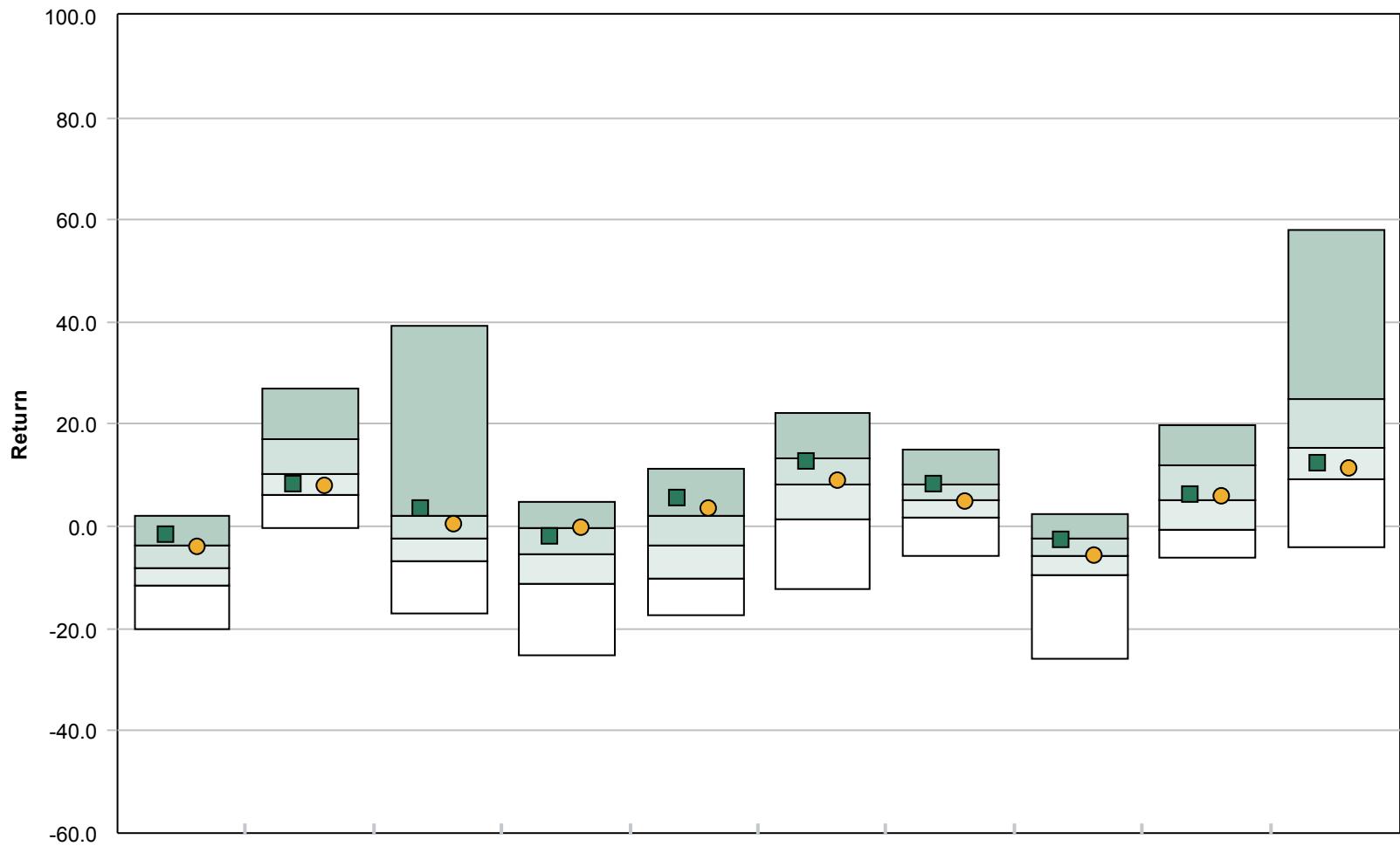
Parentheses contain percentile rankings.

Calculation based on monthly periodicity.

Bristol County Retirement System

Fund of Funds Hedge Funds-[TASS]

As of June 30, 2019



	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
PRIT Absolute Return	-1.56 (15)	8.16 (64)	3.57 (20)	-1.86 (34)	5.53 (10)	12.61 (29)	8.36 (24)	-2.77 (28)	6.29 (44)	12.33 (64)
HFRI F of F Composite Index	-4.02 (27)	7.77 (66)	0.51 (33)	-0.27 (26)	3.37 (19)	8.96 (48)	4.79 (54)	-5.72 (50)	5.70 (47)	11.47 (68)
5th Percentile	2.14	27.09	39.31	4.97	11.26	22.23	15.00	2.31	19.71	58.06
1st Quartile	-3.77	17.15	2.11	-0.26	1.92	13.43	8.24	-2.39	11.90	24.97
Median	-8.04	10.20	-2.34	-5.48	-3.84	8.35	5.21	-5.78	5.03	15.31
3rd Quartile	-11.46	6.06	-6.65	-11.15	-10.15	1.34	1.66	-9.56	-0.58	9.24
95th Percentile	-20.12	-0.41	-17.05	-25.21	-17.36	-12.18	-5.86	-25.96	-6.07	-4.17

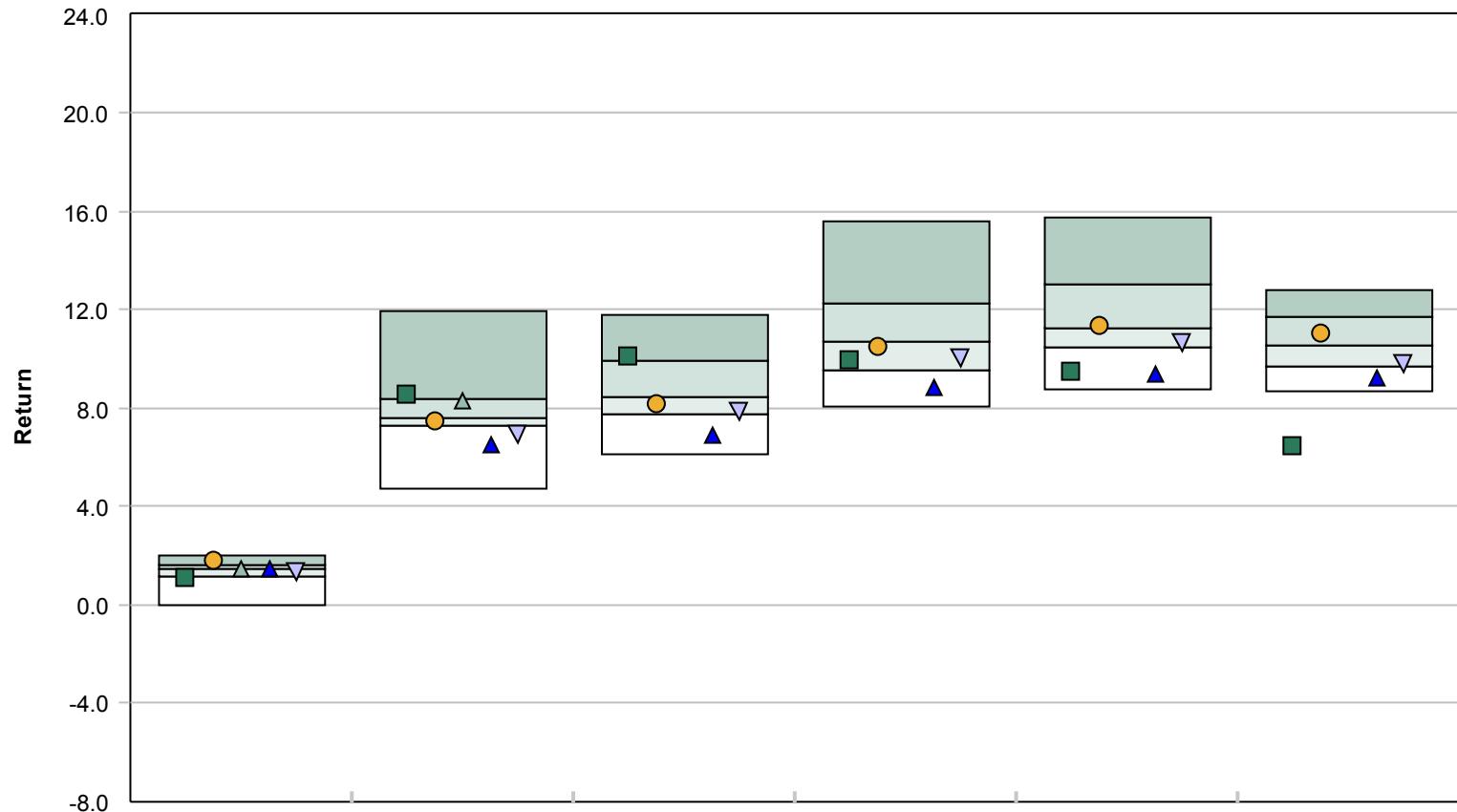
Parentheses contain percentile rankings.

Calculation based on monthly periodicity.

Bristol County Retirement System

IM U.S. Open End Private Real Estate (SA+CF)

As of June 30, 2019



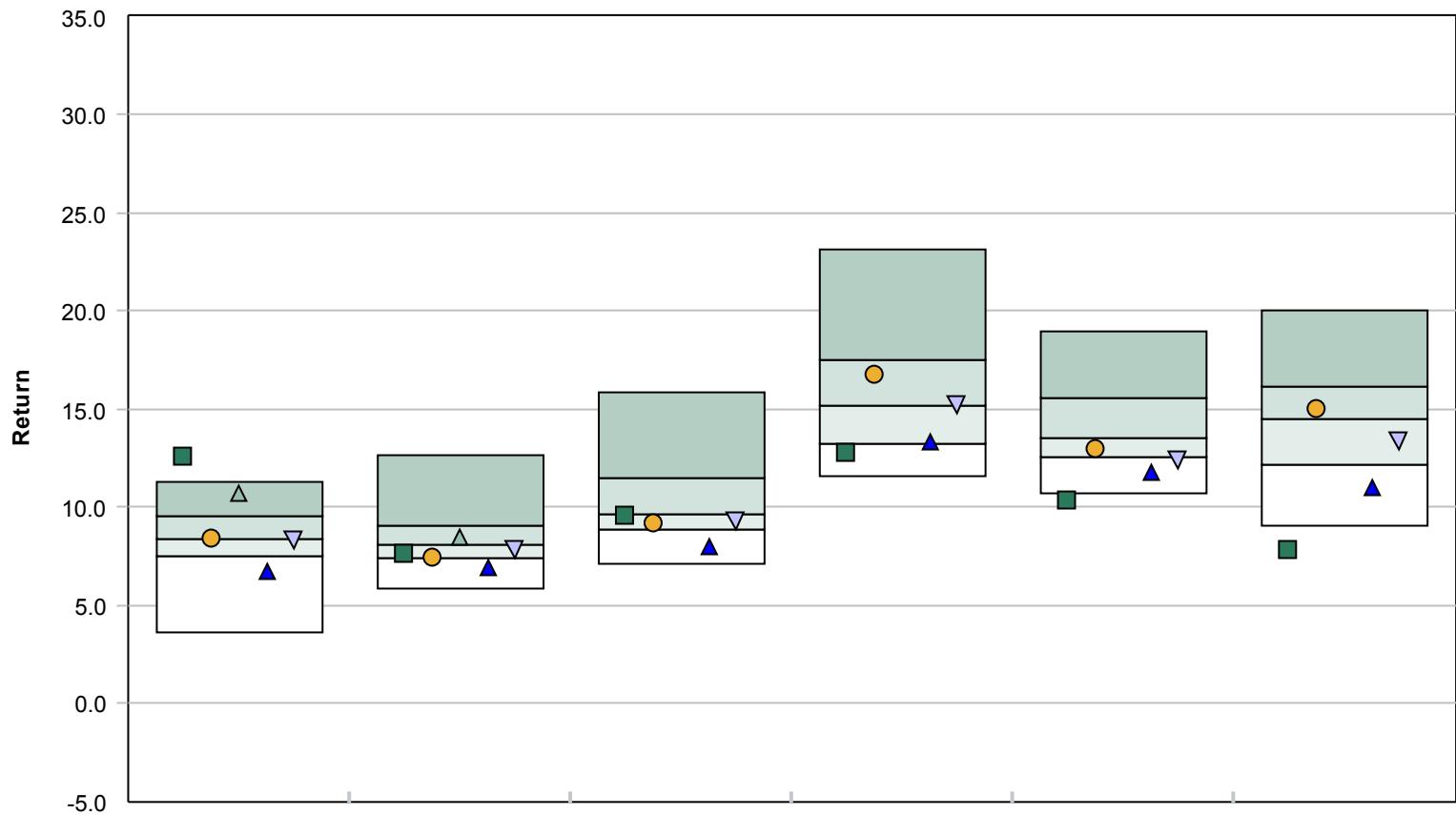
Total Real Estate	1.06 (88)	8.57 (20)	10.13 (25)	9.98 (61)	9.44 (91)	6.47 (100)
RREEF America REIT II	1.79 (17)	7.48 (62)	8.14 (59)	10.50 (54)	11.33 (48)	11.05 (33)
Intercontinental	1.45 (56)	8.33 (28)	N/A	N/A	N/A	N/A
NCREIF Property Index	1.51 (38)	6.51 (90)	6.89 (84)	8.83 (91)	9.43 (91)	9.25 (84)
NCREIF ODCE Equal Weighted	1.34 (68)	6.91 (84)	7.87 (74)	10.05 (61)	10.63 (65)	9.75 (75)
5th Percentile	2.05	11.96	11.80	15.61	15.76	12.79
1st Quartile	1.66	8.41	9.97	12.28	13.01	11.69
Median	1.47	7.59	8.43	10.69	11.23	10.60
3rd Quartile	1.20	7.32	7.80	9.57	10.47	9.73
95th Percentile	-0.01	4.74	6.12	8.10	8.82	8.67

Parentheses contain percentile rankings.
Calculation based on quarterly periodicity.

Bristol County Retirement System

IM U.S. Open End Private Real Estate (SA+CF)

As of June 30, 2019



	2018	2017	2016	2015	2014	2013
Total Real Estate	12.55 (4)	7.60 (63)	9.60 (51)	12.77 (86)	10.35 (97)	7.79 (99)
RREEF America REIT II	8.43 (50)	7.44 (70)	9.14 (62)	16.70 (35)	12.99 (68)	15.01 (37)
Intercontinental	10.74 (15)	8.53 (43)	N/A	N/A	N/A	N/A
NCREIF Property Index	6.72 (85)	6.96 (82)	7.97 (88)	13.33 (75)	11.82 (82)	10.98 (86)
NCREIF ODCE Equal Weighted	8.25 (55)	7.80 (57)	9.27 (55)	15.17 (51)	12.38 (78)	13.36 (60)
5th Percentile	11.32	12.62	15.83	23.17	18.98	20.08
1st Quartile	9.57	9.12	11.50	17.53	15.54	16.14
Median	8.42	8.08	9.63	15.23	13.59	14.47
3rd Quartile	7.51	7.42	8.90	13.23	12.57	12.23
95th Percentile	3.64	5.85	7.15	11.60	10.68	9.07

Parentheses contain percentile rankings.

Calculation based on quarterly periodicity.

Bristol County Retirement System

Total Active Hard Assets and Real Estate Composite Overview

As of June 30, 2019

Cash Flow Summary

Capital Committed: \$138,427,501

Total Contributions: \$130,892,122

Remaining Capital Commitment: \$16,213,382

Total Distributions: \$68,815,299

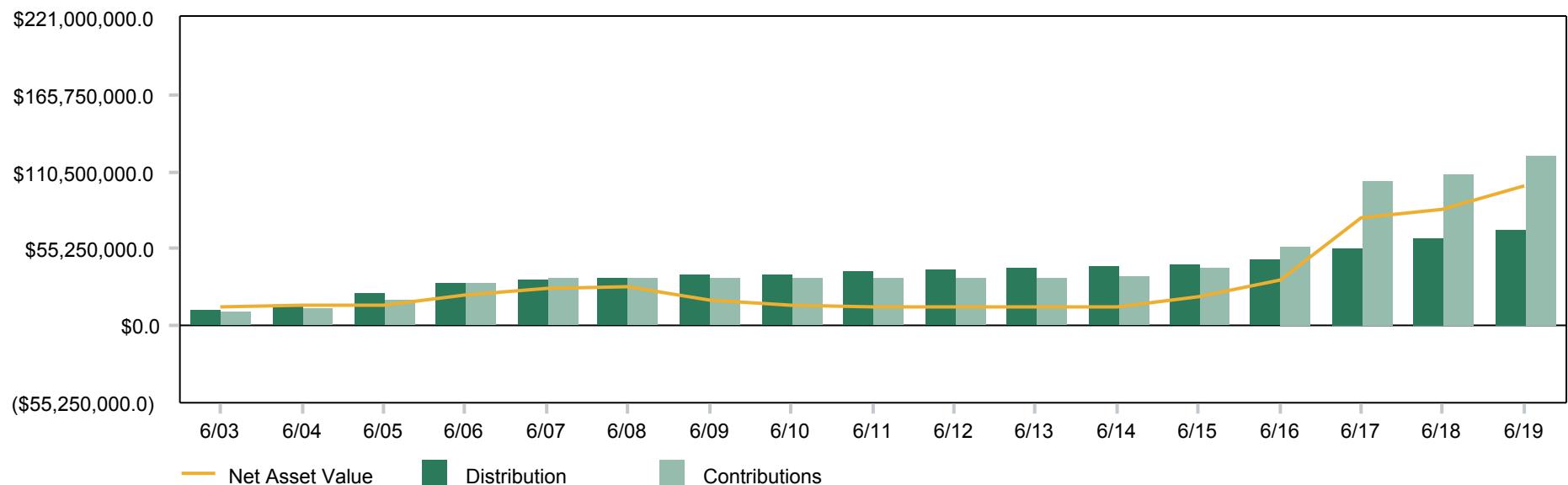
Market Value: \$99,995,460

Inception Date: 01/01/1995

Inception IRR: 16.00

TVPI: 1.30

Cash Flow Analysis



Bristol County Retirement System
Total Active Hard Assets and Real Estate

As of June 30, 2019

Partnerships	Vintage Year	Investment Strategy	Capital Commitment (\$)	Drawn Down (\$)	Distributed (\$)	Market Value (\$)	IRR (%)	TVPI Multiple
Brookfield Timberlands Fund V	2013	Timber	5,000,000	1,137,942	519,561	1,129,040	8.87	1.45
Eastern Timberland Opportunities II	2014	Timber	2,500,000	2,258,324	393,893	2,945,390	9.01	1.48
GCM Customized Infrastructures Strategies II, LP	2015	Infrastructure	13,000,000	10,156,330	3,941,262	7,840,764	10.57	1.16
Invesco Mortgage Recovery II	2016	Real Estate	15,000,000	13,845,087	11,554,737	5,477,121	12.69	1.28
TerraCap Partners IV			10,000,000	10,566,939	249,893	11,100,417	7.51	1.13
Total Hard Assets			138,427,501	130,892,122	68,815,299	99,995,460	16.00	1.30

Bristol County Retirement System
Active Closed End Real Estate and Hard Asset Funds

As of June 30, 2019

Internal Rates of Return

	Market Value (\$)	%	1 Quarter	Year								Since Inception	Inception Date
				To Date	1 Year	3 Years	5 Years	7 Years	10 Years				
Brookfield Timberlands Fund V	1,129,040	0.17	0.00	3.21	2.00	9.08	8.81	N/A	N/A	8.87	12/23/2013		
Eastern Timberland Opportunities II	2,945,390	0.43	0.91	5.35	6.43	8.11	9.01	N/A	N/A	9.01	07/03/2014		
GCM Customized Infrastructures Strategies II, LP	7,840,764	1.14	5.35	5.61	15.56	10.91	N/A	N/A	N/A	10.57	03/10/2016		
Invesco Mortgage Recovery II	5,477,121	0.80	0.00	0.73	12.64	15.34	N/A	N/A	N/A	12.69	05/20/2016		
TerraCap Partners IV	11,100,417	1.62	0.00	-0.33	7.51	N/A	N/A	N/A	N/A	7.51	07/31/2018		

Cash Flow Summary

Capital Committed: \$120,180,465

Total Contributions: \$74,350,125

Remaining Capital Commitment: \$48,066,468

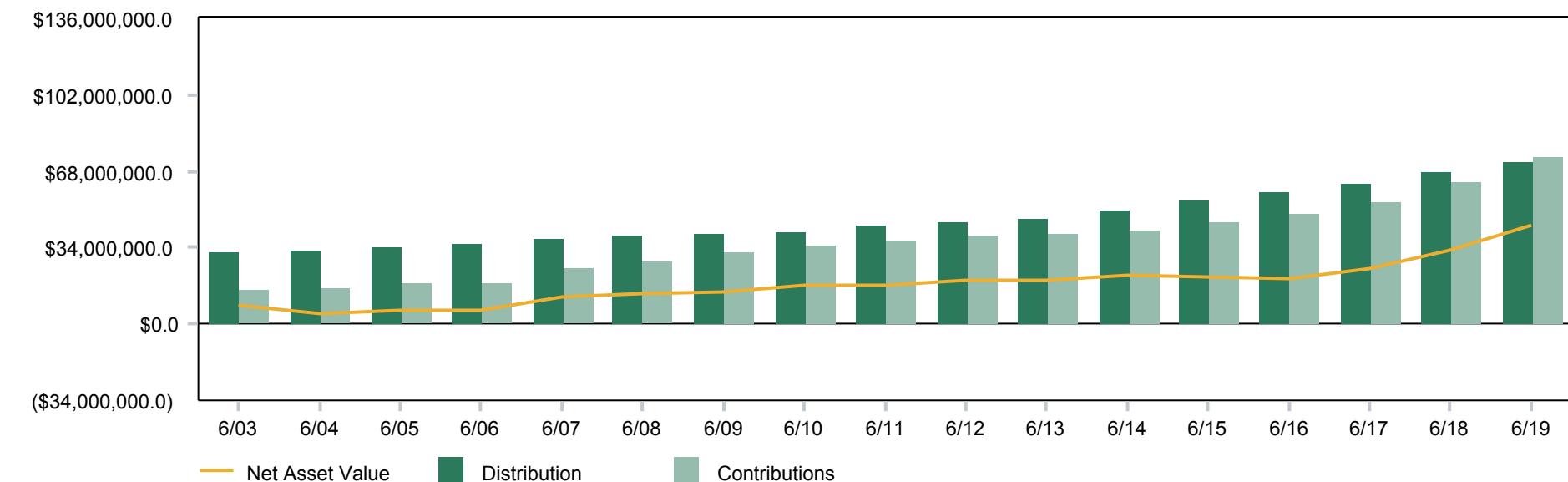
Total Distributions: \$71,917,225

Market Value: \$43,972,291

Inception Date: 01/05/1995

Inception IRR: 177.68

TVPI: 1.56

Cash Flow Analysis

Bristol County Retirement System

Private Equity Summary of Partnership

As of June 30, 2019

Partnerships	Vintage Year	Capital Commitment (\$)	Contributions (\$)	Distributions (\$)	Market Value (\$)	IRR (%)	DPI Multiple	TVPI Multiple	Remaining Commitment (\$)
DuPont Capital Management II	2005	5,000,000	3,657,046	3,194,499	657,729	0.69	0.88	1.06	1,586,923
BlackRock Vesey Street Fund III	2005	5,000,000	4,433,304	5,651,598	346,572	4.17	1.28	1.35	650,000
DN Partners II	2005	6,000,000	2,803,066	-	1,072,419	-11.17	-	0.38	3,196,934
BlackRock Vesey Street Fund IV	2007	10,000,000	9,243,986	10,403,443	4,330,209	8.05	1.13	1.60	2,329,560
Mesirow PE Fund V	2008	5,000,000	4,047,431	3,850,658	3,864,203	14.17	0.95	1.91	956,700
PRIT Vintage 2014	2014	9,090,291	7,108,673	2,435,278	8,669,457	19.24	0.34	1.56	1,992,253
PRIT Vintage 2015	2015	12,290,670	9,637,432	1,047,317	12,947,706	21.48	0.11	1.45	2,741,613
PRIT Vintage 2016	2016	8,302,928	5,263,570	81,872	5,387,715	3.00	0.02	1.04	3,048,517
PRIT Vintage 2017	2017	15,696,576	4,285,130	93,337	4,167,885	-0.70	0.02	0.99	11,419,178
PRIT Vintage 2018	2018	15,000,000	2,397,175	50	2,046,671	-28.50	0.00	0.85	12,608,594
PRIT Vintage 2019		10,000,000	339,717	1,869	336,669	-0.65	0.01	1.00	9,661,043
Total Private Equity		120,180,465	74,350,125	71,917,225	43,972,291	177.68	0.97	1.56	48,066,468

*Active Private Equity managers shown

Bristol County Retirement System
Active Private Equity Funds

As of June 30, 2019

Internal Rates of Return

	Market Value (\$)	%	1 Quarter	Year To Date	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
Total Private Equity	43,972,291	6.42	3.07	5.23	12.75	14.34	8.72	9.36	8.47	177.68	01/05/1995
BlackRock Vesey Street Fund III	346,572	0.05	0.00	0.24	-5.29	-4.81	3.24	8.77	11.75	4.17	07/17/2006
DuPont Capital Management II	657,729	0.10	0.00	0.00	-1.98	0.83	-3.50	1.90	4.42	0.69	08/14/2006
DN Partners II	1,072,419	0.16	0.00	0.00	0.00	16.02	-15.19	-12.52	-10.54	-11.17	01/11/2007
BlackRock Vesey Street Fund IV	4,330,209	0.63	0.00	0.00	5.97	7.54	5.35	10.29	10.02	8.05	02/24/2009
Mesirow PE Fund V	3,864,203	0.56	0.00	4.55	10.43	15.30	14.51	15.83	14.65	14.17	04/09/2009
PRIT Vintage 2014	8,669,457	1.27	7.71	6.56	21.73	24.25	19.99	N/A	N/A	19.24	05/01/2014
PRIT Vintage 2015	12,947,706	1.89	8.36	8.27	24.30	25.85	N/A	N/A	N/A	21.48	03/01/2015
PRIT Vintage 2016	5,387,715	0.79	3.58	-0.51	6.53	4.04	N/A	N/A	N/A	3.00	03/01/2016
PRIT Vintage 2017	4,167,885	0.61	-5.23	19.16	3.91	N/A	N/A	N/A	N/A	-0.70	04/30/2017
PRIT Vintage 2018	2,046,671	0.30	-16.17	-6.28	-28.62	N/A	N/A	N/A	N/A	-28.50	05/30/2018
PRIT Vintage 2019	336,669	0.05	-0.65	N/A	N/A	N/A	N/A	N/A	N/A	-0.65	03/31/2019