



## **Spokane Employees' Retirement System**

December 31, 2017 Performance Report

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# Section 1



## CRYPTOCURRENCIES

Monero, Ether, Ripple... and of course Bitcoin are gaining household recognition and prompting many to consider investing in cryptocurrencies. Bitcoin, in particular, has emerged as a leader in the controversial cryptocurrency market. Proponents of cryptocurrency cite this emergence as the natural evolution of currency in a global consumer market dominated by e-commerce. Critics will cite the trend as little more than the next speculative bubble, a slightly more creative high-tech Ponzi scheme. While we will not attempt to divine the crypto future in this commentary, we will seek to educate investors on the risks and attributes of these unique assets.

Contrary to popular opinion, cryptocurrencies are not new. Cryptocurrencies and the blockchain technology behind them have been around for nearly a decade. However, they remained largely in the realm of digital enthusiasts and darknet markets looking for alternative solutions to today's fiat (government sponsored) currencies. Unlike traditional money, no physical notes or coins are circulated and the money exists exclusively in the form of unique code made and stored digitally. It is also important to note that no central bank, regulator or nation stands behind the currency.

New currencies are brought to market in initial coin offerings (ICOs). ICOs are largely unregulated and bypass traditional listing and capital-raising processes faced by newly issued public companies. Herein lies one of the primary challenges to maintaining value in cryptocurrencies - new issues are largely uncontrolled. One of the key qualities of value for any asset and/or currency is scarcity of supply. While each cryptocurrency may limit its own issuance and thereby control supply, there are few restrictions on the issuance of new ICOs. The first ICO was held in 2013 with limited additional fundraising occurring in 2014. However, as these new currencies became embraced by the broader public, values and new issuance skyrocketed. By the end of 2017, issuance was averaging around 50 new ICOs per month.

The aggregate cryptocurrency market capitalization increased by a stunning 3,300% in 2017. Growth of this nature garners a lot of attention, not only from speculators, but from global governmental regulators as well. At present, around a half-dozen countries have fully banned cryptocurrencies. Many others are scrambling to regulate and/or restrict markets. The impact of future regulation provides for extreme uncertainty in the marketplace. This uncertainty and the subsequent price volatility is a major obstacle to mainstream adoption as a valid currency. At present, cryptocurrencies should be considered speculative assets, not currencies.

So how do we value these non-traditional assets? What makes traditional asset classes valuable is their claim on future income produced by the assets themselves. Unlike traditional investments in stocks, bonds or real estate, cryptocurrencies or fiat currencies for that matter, do not represent claims on specific future income streams. One could argue that fiat currencies are indirectly supported by future income streams from the sponsor's ability to tax citizens and

industry. This is not the case for today's cryptocurrencies. Hence, in the current form, cryptocurrencies derive their value purely from speculative demand. Beyond this early speculative stage, investors should ask themselves what would drive long-term appreciation if a cryptocurrency were able to make the transition to a universally accepted form of currency. Currencies have historically been designed to store and transfer wealth, not create it.

The ultimate question is what place, if any, should cryptocurrencies play in an investor's portfolio? The underlying blockchain and distributed ledger technology utilized to create and track cryptocurrencies has potentially significant implications for the future of banking and e-commerce. However, transitioning a new technology into a viable long-term investable asset is fraught with challenges. At the present time, cryptocurrencies neither meet the definition of a currency nor represent any claim to future streams of cashflow, the primary value proposition of traditional assets. They have no discernable fundamental value and are dependent on capital flows from new investors to drive any price appreciation. As with any speculative investment, risks and potential gains/losses are high. For those investors set on "not missing out" we have one very important caveat: invest only what you are prepared and can afford to lose should the investment not work out.

## GLOBAL ECONOMIC LANDSCAPE

- Political concerns dominated global headlines of late. This included the US tax reform bill, Germany's efforts to form a coalition government and Saudi Arabia's crackdown on internal corruption.
- The US tax reform bill passed Congress in the late hours of 2017 and was signed into law.
- Current baseline expectations are for the US Federal Reserve to raise fed fund rates three times in 2018, placing rates in the 2%-2.25% range by the end of 2018.
- The European Central bank is widely expected to end bond purchases by the end of 2018 signaling a first rise in short-term rates in 2019.
- Shifts away from accommodative global central bank policies pose significant risks to markets and economies that have become accustomed to easy money policies.
- US fiscal expansion and increasingly synchronized global economic expansion would indicate rising risks of cyclical inflation.

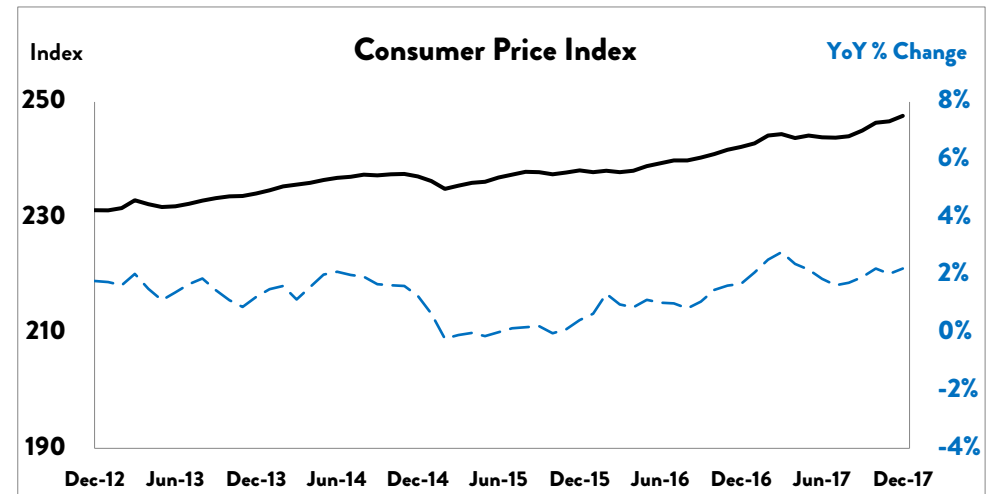
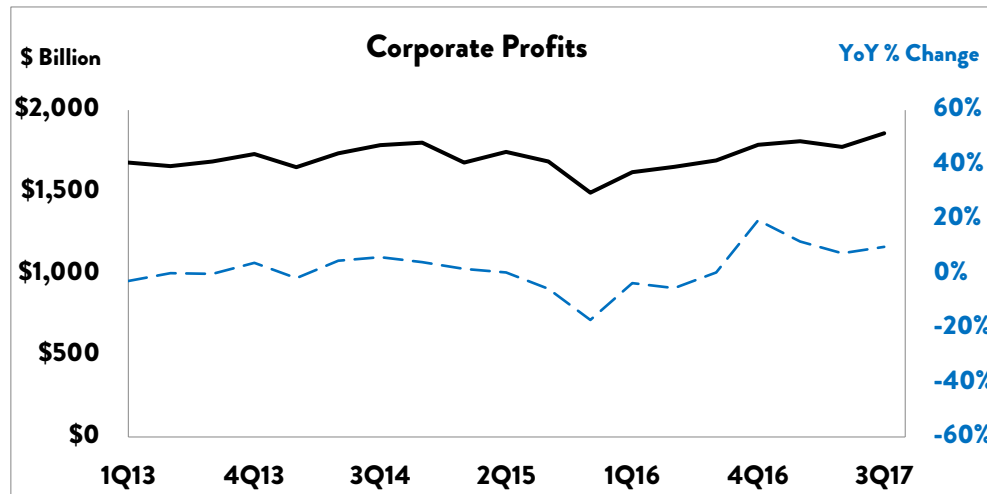
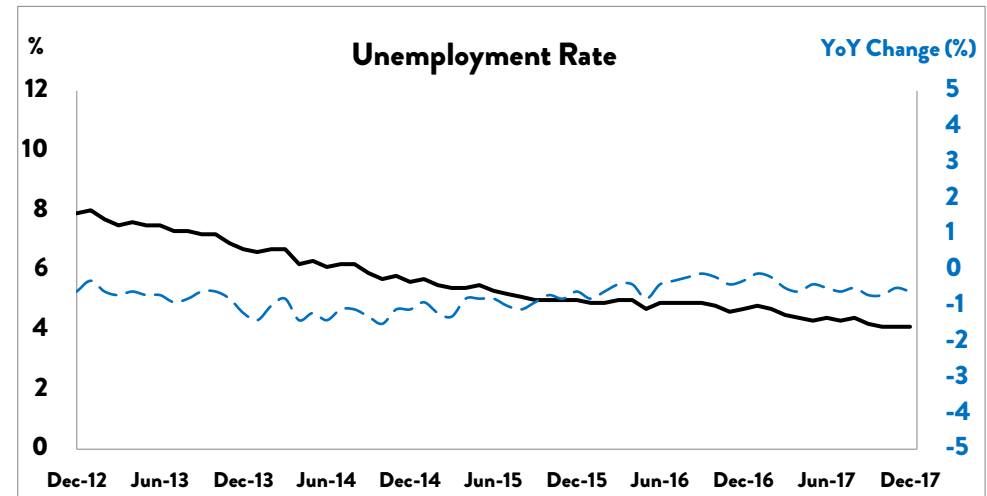
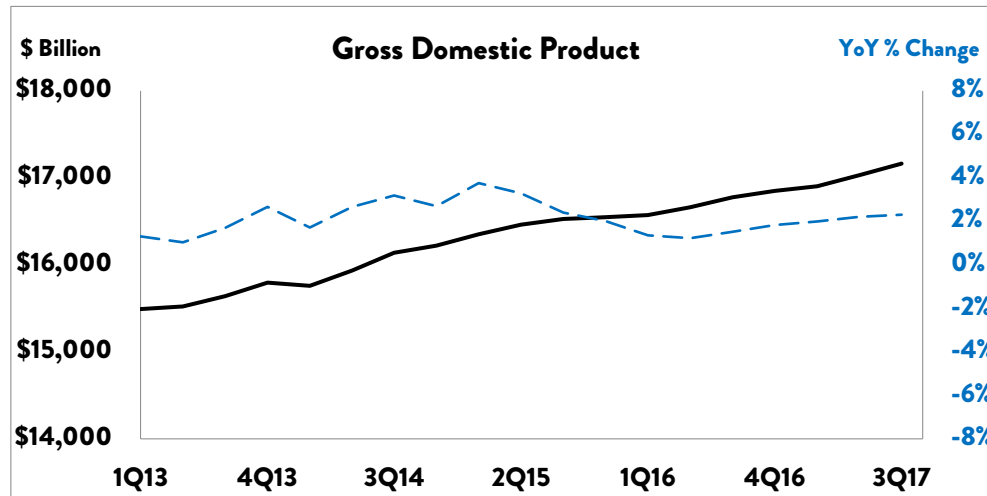
## GLOBAL FINANCIAL MARKETS

- US equity market volatility reached all-time lows in 2017. The S&P 500 Index posted gains in each month of 2017, a first in the nearly 40-year history of the Index. In addition, the largest intra-year decline was a mere 3% versus a historical average of 14%.
- The US equity market became increasingly narrow in 2017. Large cap stocks dominated small cap stocks for the year, outperforming by over 7.0%. Even more striking was the narrow leadership by large cap technology stocks. Technology stocks within the S&P 500 Index rose nearly 40.0% for the year. Materials was the next best performing sector within the Index rising 23.8% while the broad Index returned 21.8%.
- Both emerging and developed market equities outside of the US outperformed the S&P 500 Index in dollar terms for the first time since 2012. This generally reflects investor expectations for improved economic growth prospects on a global basis.

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# 4Q2017 Economic Data



Labor Market Statistics (Monthly)					
Category	Recent	5-Yr High	5-Yr Low	5-Yr Avg.	Date
Jobs Added/Lost Monthly	148,000	344,000	38,000	205,133	Dec-17
Unemployment Rate	4.1%	8.0%	4.1%	5.6%	Dec-17
Median Unemployment Length (Weeks)	8.8	20.0	7.6	12.7	Dec-17
Average Hourly Earnings	\$26.63	\$26.63	\$23.76	\$25.09	Dec-17

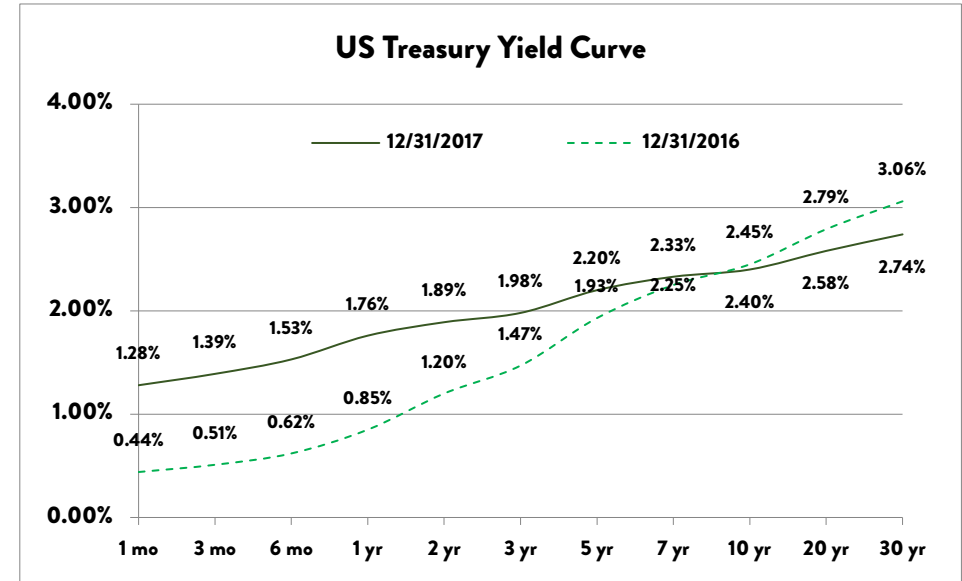
Other Prices and Indexes (Monthly)					
Category	Recent	5-Yr High	5-Yr Low	% Off Peak	Date
Gas: Price per Gallon	\$2.51	\$3.71	\$1.79	-32.5%	Dec-17
Spot Oil	\$57.88	\$106.57	\$30.32	-45.7%	Dec-17
Case-Shiller Home Price Index	203.1	203.1	145.8	39.4%*	Oct-17
Medical Care CPI	479.7	479.7	421.1	13.9%*	Dec-17

Source: Federal Reserve Bank of St. Louis and Bureau of Labor Statistics

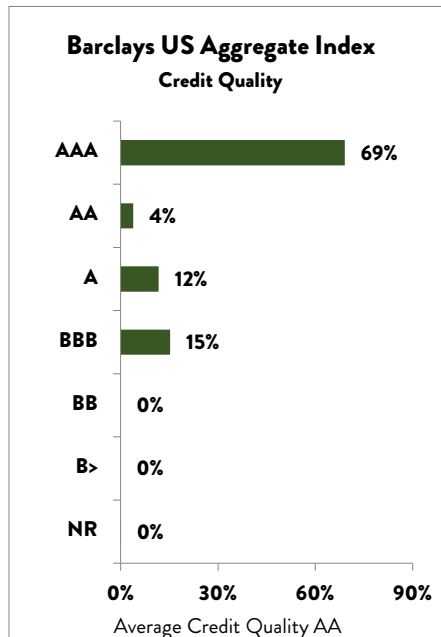
\*% Off Low

# 4Q2017 Bond Market Data

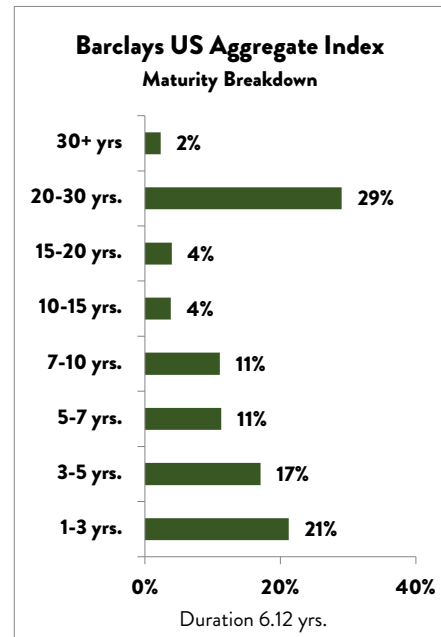
Index	QTR	YTD	1 yr.	3 yrs.	5 yrs.	10 yrs.
90-Day T-Bill	0.21%	0.71%	0.71%	0.33%	0.22%	0.38%
Barclays US Aggregate	0.39%	3.54%	3.54%	2.24%	2.10%	4.01%
Barclays Short US Treasury	0.23%	0.81%	0.81%	0.49%	0.34%	0.55%
Barclays Int. US Treasury	-0.41%	1.14%	1.14%	1.13%	0.91%	2.75%
Barclays Long US Treasury	2.37%	8.53%	8.53%	2.80%	3.48%	6.55%
Barclays US TIPS	1.26%	3.01%	3.01%	2.05%	0.13%	3.53%
Barclays US Credit	1.05%	6.18%	6.18%	3.63%	3.24%	5.42%
Barclays US Mortgage-Backed	0.15%	2.47%	2.47%	1.88%	2.04%	3.84%
Barclays US Asset-Backed	-0.01%	1.55%	1.55%	1.61%	1.28%	2.96%
Barclays US 20-Yr Municipal	1.78%	7.47%	7.47%	3.92%	3.93%	5.36%
Barclays US High Yield	0.47%	7.50%	7.50%	6.35%	5.78%	8.03%
Barclays Global	1.08%	7.39%	7.39%	2.02%	0.79%	3.09%
Barclays International	1.63%	10.51%	10.51%	1.77%	-0.20%	2.40%
Barclays Emerging Market	0.62%	8.17%	8.17%	6.38%	3.87%	7.01%



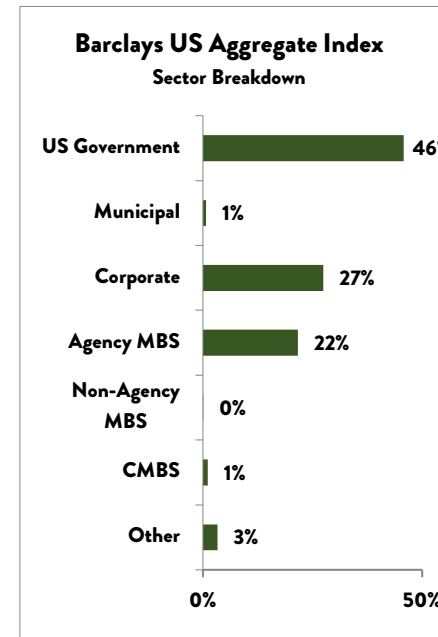
Source: Department of US Treasury



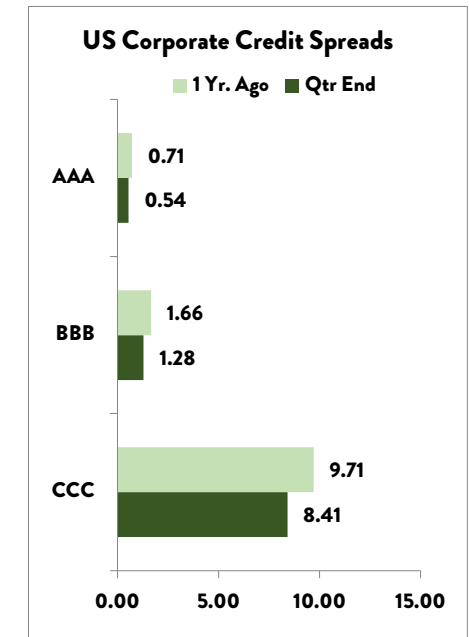
Source: Morningstar



Source: Morningstar



Source: Morningstar



Source: Federal Reserve / Bank of America

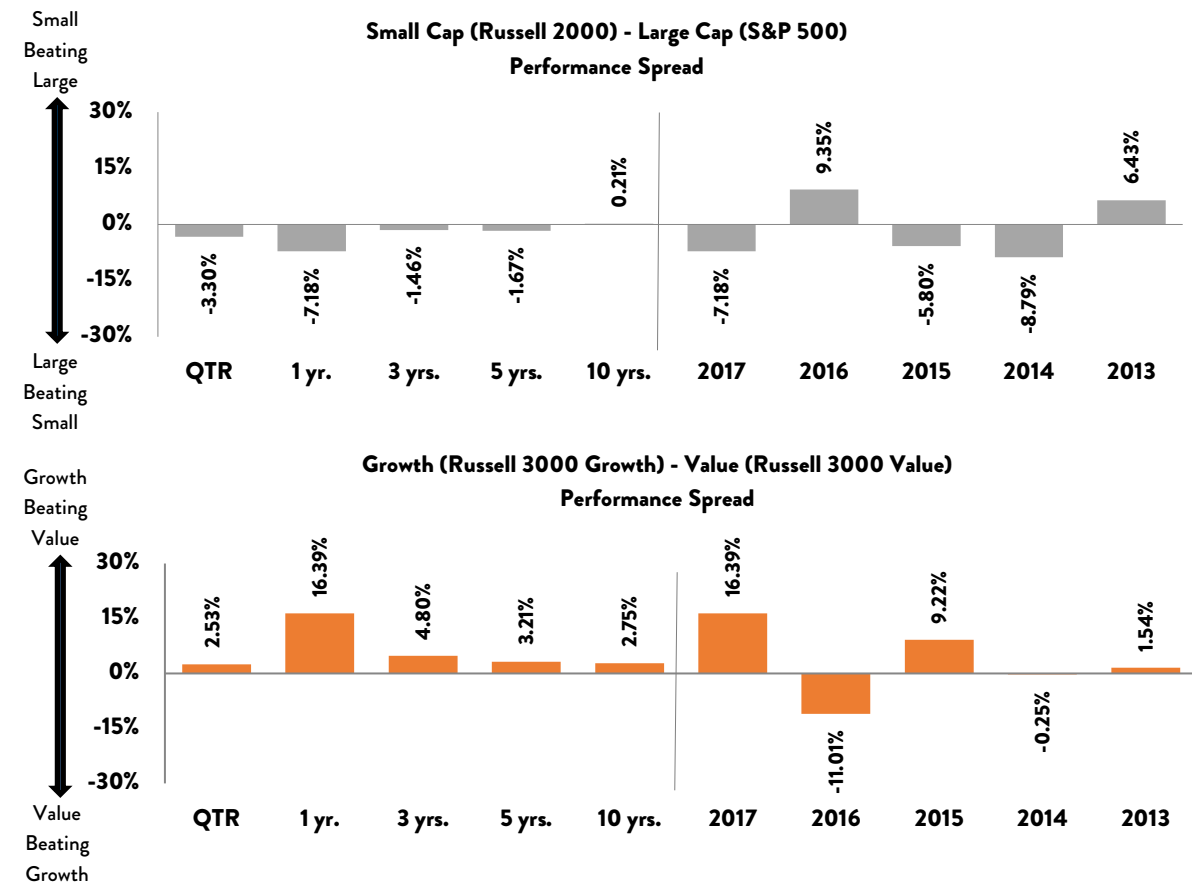
# 4Q2017 US Equity Market Data

## Sectors Weights/Returns (ranked by quarter performance)

	S&P 500 Index				
	Wgt.	Sector	QTR	YTD	1 Yr.
	12%	Consumer Discretionary	9.87%	22.98%	22.98%
	24%	Information Technology	9.01%	38.83%	38.83%
	15%	Financials	8.63%	22.18%	22.18%
	3%	Materials	6.93%	23.84%	23.84%
	8%	Consumer Staples	6.49%	13.49%	13.49%
	10%	Industrials	6.05%	21.03%	21.03%
	6%	Energy	6.02%	-1.01%	-1.01%
	2%	Telecom Services	3.61%	-1.25%	-1.25%
	3%	Real Estate	3.22%	10.85%	10.85%
	14%	Health Care	1.47%	22.08%	22.08%
	3%	Utilities	0.21%	12.11%	12.11%
	S&P Midcap 400 Index				
	Wgt.	Sector	QTR	YTD	1 Yr.
	12%	Consumer Discretionary	10.00%	19.50%	19.50%
	4%	Energy	9.91%	-15.84%	-15.84%
	16%	Industrials	8.60%	23.54%	23.54%
	17%	Information Technology	6.50%	25.08%	25.08%
	17%	Financials	6.26%	13.96%	13.96%
	7%	Materials	6.12%	21.55%	21.55%
	4%	Consumer Staples	5.34%	3.28%	3.28%
	5%	Utilities	2.55%	11.09%	11.09%
	9%	Real Estate	2.30%	3.81%	3.81%
	8%	Health Care	1.95%	22.71%	22.71%
	0%	Telecom Services	-5.72%	-41.17%	-41.17%
	S&P Smallcap 600 Index				
	Wgt.	Sector	QTR	YTD	1 Yr.
	16%	Consumer Discretionary	8.13%	17.13%	17.13%
	13%	Health Care	6.17%	34.71%	34.71%
	19%	Industrials	6.08%	17.21%	17.21%
	5%	Materials	5.21%	9.92%	9.92%
	3%	Consumer Staples	4.77%	9.30%	9.30%
	3%	Energy	4.31%	-26.42%	-26.42%
	17%	Financials	3.94%	6.74%	6.74%
	3%	Utilities	1.24%	19.04%	19.04%
	6%	Real Estate	-0.25%	6.08%	6.08%
	1%	Telecom Services	-1.12%	0.79%	0.79%
	14%	Information Technology	-2.91%	10.28%	10.28%

## Index Performance Data

Index	QTR	YTD	1 yr.	Annualized		
				3 yrs.	5 yrs.	10 yrs.
<b>S&amp;P 500</b>	6.64%	21.83%	21.83%	11.41%	15.79%	8.50%
<b>Russell 1000 Value</b>	5.33%	13.66%	13.66%	8.65%	14.04%	7.10%
<b>Russell 1000 Growth</b>	7.86%	30.21%	30.21%	13.79%	17.33%	10.00%
<b>Russell Mid Cap</b>	6.07%	18.52%	18.52%	9.58%	14.96%	9.11%
<b>Russell Mid Cap Value</b>	5.50%	13.34%	13.34%	9.00%	14.68%	9.10%
<b>Russell Mid Cap Growth</b>	6.81%	25.27%	25.27%	10.30%	15.30%	9.10%
<b>Russell 2000</b>	3.34%	14.65%	14.65%	9.96%	14.12%	8.71%
<b>Russell 2000 Value</b>	2.05%	7.84%	7.84%	9.55%	13.01%	8.17%
<b>Russell 2000 Growth</b>	4.59%	22.17%	22.17%	10.28%	15.21%	9.19%
<b>Russell 3000</b>	6.34%	21.13%	21.13%	11.12%	15.58%	8.60%
<b>DJ US Select REIT</b>	1.98%	3.76%	3.76%	4.97%	9.09%	7.07%





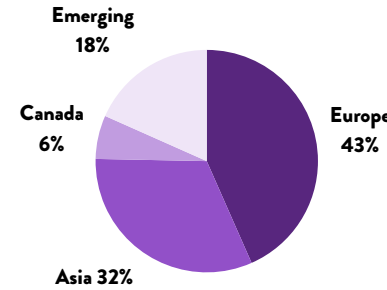
# 4Q2017 International Market Data

## Index Performance Data (net)

Index (US\$)	QTR	YTD	1 yr.	3 yrs.	5 yrs.	10 yrs.
<b>MSCI ACWI ex-US</b>	<b>5.00%</b>	<b>27.19%</b>	<b>27.19%</b>	<b>7.83%</b>	<b>6.80%</b>	<b>1.84%</b>
<b>MSCI EAFE</b>	<b>4.23%</b>	<b>25.03%</b>	<b>25.03%</b>	<b>7.80%</b>	<b>7.90%</b>	<b>1.94%</b>
<b>Europe</b>	<b>2.21%</b>	<b>25.51%</b>	<b>25.51%</b>	<b>6.69%</b>	<b>7.37%</b>	<b>1.34%</b>
United Kingdom	5.72%	22.30%	22.30%	4.14%	5.21%	1.55%
Germany	2.78%	27.70%	27.70%	8.78%	8.68%	1.79%
France	1.50%	28.75%	28.75%	10.49%	8.95%	1.05%
<b>Pacific</b>	<b>7.99%</b>	<b>24.64%</b>	<b>24.64%</b>	<b>10.16%</b>	<b>9.00%</b>	<b>3.35%</b>
Japan	8.49%	23.99%	23.99%	11.62%	11.16%	3.17%
Hong Kong	6.58%	36.17%	36.17%	11.47%	10.08%	5.31%
Australia	6.79%	19.93%	19.93%	6.37%	3.90%	2.75%
<b>Canada</b>	<b>4.26%</b>	<b>16.07%</b>	<b>16.07%</b>	<b>3.12%</b>	<b>3.29%</b>	<b>1.39%</b>
<b>MSCI EM</b>	<b>7.44%</b>	<b>37.28%</b>	<b>37.28%</b>	<b>9.10%</b>	<b>4.35%</b>	<b>1.68%</b>
<b>MSCI EM Latin America</b>	<b>-2.34%</b>	<b>23.74%</b>	<b>23.74%</b>	<b>3.80%</b>	<b>-3.20%</b>	<b>-1.67%</b>
<b>MSCI EM Asia</b>	<b>8.36%</b>	<b>42.83%</b>	<b>42.83%</b>	<b>11.00%</b>	<b>7.91%</b>	<b>3.56%</b>
<b>MSCI EM Eur/Mid East</b>	<b>4.26%</b>	<b>15.86%</b>	<b>15.86%</b>	<b>6.31%</b>	<b>-3.96%</b>	<b>-5.02%</b>
<b>MSCI ACWI Value ex-US</b>	<b>4.23%</b>	<b>22.66%</b>	<b>22.66%</b>	<b>6.31%</b>	<b>5.58%</b>	<b>1.23%</b>
<b>MSCI ACWI Growth ex-US</b>	<b>5.77%</b>	<b>32.01%</b>	<b>32.01%</b>	<b>9.29%</b>	<b>7.97%</b>	<b>2.40%</b>
<b>MSCI ACWI Sm Cap ex-US</b>	<b>6.56%</b>	<b>31.65%</b>	<b>31.65%</b>	<b>11.96%</b>	<b>10.03%</b>	<b>4.69%</b>

## Regional Exposure

MSCI ACWI ex-USA

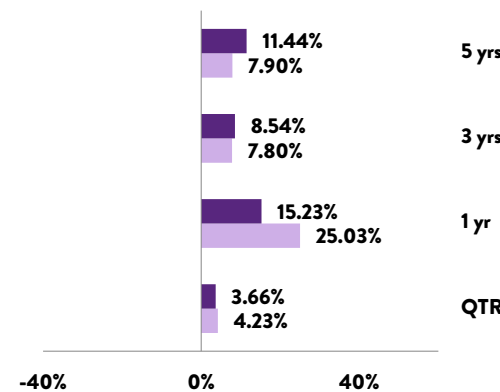


## Top 10 Countries (MSCI AC World ex-USA)

Japan	17%
UK	11%
China	8%
France	7%
Canada	7%
Germany	7%
Switzerland	6%
Australia	5%
South Korea	4%
Hong Kong	3%

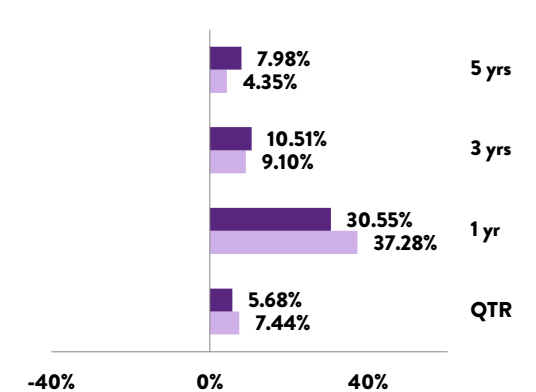
## MSCI EAFE Index Return

Local US\$



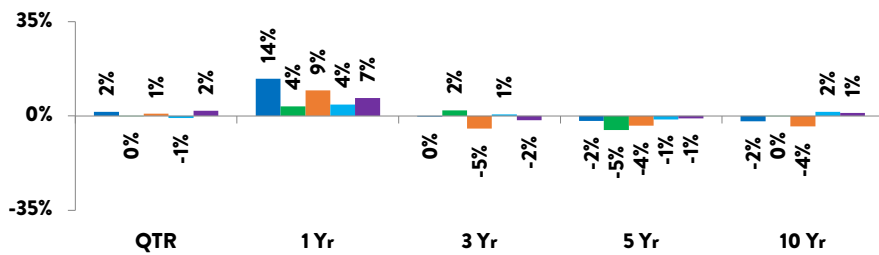
## MSCI Emerging Index Return

Local US\$



## Foreign Currency v. US\$ Returns

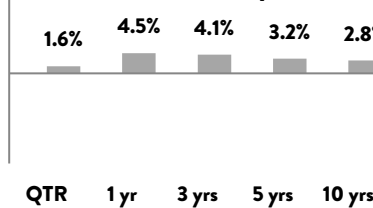
Euro Japanese Yen Pound Sterling Swiss Franc Chinese Yuan



Exchange Rates	4Q17	3Q17	2Q17	1Q17	4Q16	3Q16
Japanese Yen	112.69	112.64	112.40	111.41	116.80	101.21
Euro	0.83	0.85	0.88	0.93	0.95	0.89
British Pound	0.74	0.75	0.77	0.80	0.81	0.77
Swiss Franc	0.97	0.97	0.96	1.00	1.02	0.97
Chinese Yuan	6.51	6.65	6.78	6.88	6.94	6.67

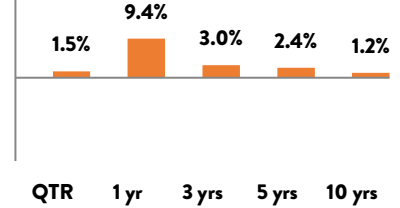
## MSCI ACWI Ex US Large v. Small Cap Performance Spread

Small Beating Large  
Large Beating Small



## MSCI ACWI Ex US Value v. Growth Performance Spread

Growth Beating Value  
Value Beating Growth



# Historical Market Returns

Ranked by Performance

2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	4Q17
Emerging Markets 55.82%	Emerging Markets 25.55%	Emerging Markets 34.00%	Emerging Markets 32.14%	Emerging Markets 39.42%	US Bonds 5.24%	Emerging Markets 78.51%	Small Cap 26.85%	Core Real Estate 14.96%	Emerging Markets 18.22%	Small Cap 38.82%	Large Cap 13.68%	Core Real Estate 13.95%	Small Cap 21.30%	Emerging Markets 37.28%	Emerging Markets 7.44%
Small Cap 47.25%	Intl 20.91%	Commod. 21.36%	Intl 26.65%	Intl 16.65%	Global Bonds 4.79%	High Yield 58.21%	Mid Cap 25.48%	TIPS 13.56%	Mid Cap 17.28%	Mid Cap 34.76%	Mid Cap 13.21%	Large Cap 1.38%	High Yield 17.12%	Intl 27.19%	Large Cap 6.64%
Intl 40.83%	Mid Cap 20.22%	Core Real Estate 20.15%	Small Cap 18.37%	Commod. 16.23%	Cash 1.39%	Intl 41.45%	Emerging Markets 18.88%	US Bonds 7.84%	Intl 16.83%	Large Cap 32.39%	Core Real Estate 11.44%	US Bonds 0.55%	Mid Cap 13.79%	Large Cap 21.83%	Mid Cap 6.07%
Mid Cap 40.06%	Small Cap 18.33%	Intl 16.62%	Large Cap 15.79%	Core Real Estate 14.84%	TIPS -2.35%	Mid Cap 40.48%	Commod. 16.83%	Global Bonds 5.64%	Small Cap 16.35%	Intl 15.29%	US Bonds 5.97%	Cash 0.03%	Large Cap 11.95%	Mid Cap 18.52%	Intl 5.00%
High Yield 28.97%	Global Balanced 12.18%	Mid Cap 12.65%	Core Real Estate 15.27%	TIPS 11.64%	Core Real Estate -10.70%	Small Cap 27.17%	Core Real Estate 15.26%	High Yield 4.98%	Large Cap 16.00%	Global Balanced 14.46%	Small Cap 4.89%	TIPS -1.43%	Commod. 11.76	Global Balanced 15.87%	Commod. 4.71%
Large Cap 28.68%	Core Real Estate 12.00%	Large Cap 4.91%	Mid Cap 15.26%	Global Bonds 9.48%	Global Balanced -24.51%	Large Cap 26.46%	High Yield 15.12%	Large Cap 2.11%	High Yield 15.81%	Core Real Estate 12.95%	TIPS 3.64%	Global Balanced -1.45%	Emerging Markets 11.18%	Small Cap 14.65%	Global Balanced 3.69%
Global Balanced 24.27%	High Yield 11.13%	Small Cap 4.55%	Global Balanced 14.53%	Global Balanced 9.07%	High Yield -26.16%	Global Balanced 20.49%	Large Cap 15.06%	Cash 0.06%	Global Balanced 11.06%	High Yield 7.44%	Global Balanced 3.17%	Mid Cap -2.43%	Core Real Estate 7.76%	High Yield 7.50%	Small Cap 3.34%
Commod. 23.93%	Large Cap 10.88%	Global Balanced 4.16%	High Yield 11.85%	US Bonds 6.97%	Small Cap -33.79%	Commod. 18.91%	Intl 11.15%	Global Balanced -0.97%	Core Real Estate 9.76%	Cash 0.07%	High Yield 2.45%	Global Bonds -3.15%	Global Balanced 5.38%	Global Bonds 7.39%	Core Real Estate 1.64%
Global Bonds 12.51%	Global Bonds 9.27%	Cash 3.25%	Global Bonds 6.64%	Mid Cap 5.60%	Commod. -35.65%	TIPS 11.41%	Global Balanced 9.40%	Mid Cap -1.55%	TIPS 6.98%	US Bonds -2.02%	Global Bonds 0.59%	Small Cap -4.41%	TIPS 4.68%	Core Real Estate 4.72%	TIPS 1.26%
TIPS 8.40%	Commod. 9.15%	TIPS 2.84%	Cash 4.85%	Large Cap 5.49%	Large Cap -37.00%	Global Bonds 6.93%	US Bonds 6.54%	Small Cap -4.18%	Global Bonds 4.32%	Global Bonds -2.60%	Cash 0.04%	High Yield -4.46%	Intl 4.50%	US Bonds 3.54%	Global Bonds 1.08%
Core Real Estate 8.28%	TIPS 8.46%	High Yield 2.74%	US Bonds 4.33%	Cash 4.44%	Mid Cap -41.46%	US Bonds 5.93%	TIPS 6.31%	Commod. -13.32%	US Bonds 4.21%	Emerging Markets -2.60%	Emerging Markets -2.18%	Intl -5.66%	US Bonds 2.65%	TIPS 3.01%	High Yield 0.47%
US Bonds 4.10%	US Bonds 4.34%	US Bonds 2.43%	Commod. 2.07%	High Yield 1.87%	Intl -45.53%	Cash 0.16%	Global Bonds 5.54%	Intl -13.71%	Cash 0.08%	TIPS -8.61%	Intl -3.86%	Emerging Markets -14.90%	Global Bonds 2.09%	Commod. 1.70%	US Bonds 0.39%
Cash 1.03%	Cash 1.44%	Global Bonds -4.49%	TIPS 0.41%	Small Cap -1.57%	Emerging Markets -53.33%	Core Real Estate -30.40%	Cash 0.15%	Emerging Markets -18.42%	Commod. -1.06%	Commod. -9.52%	Commod. -17.00%	Commod. -24.60%	Cash 0.25%	Cash 0.71%	Cash 0.21%

Global Balanced is composed of 60% MSCI World Stock Index, 35% Barclays Global Aggregate Bond Index, and 5% US 90-Day T-Bills.

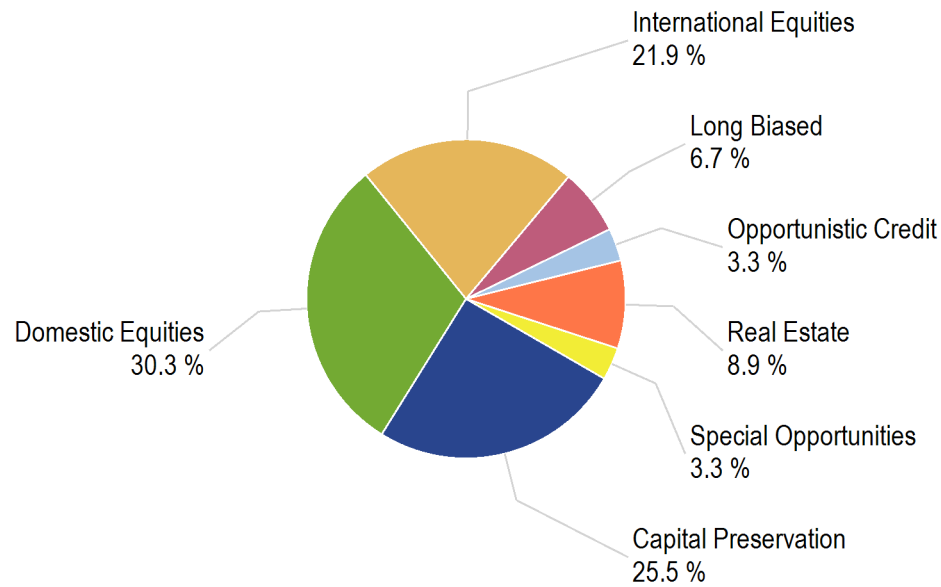
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# Section 2

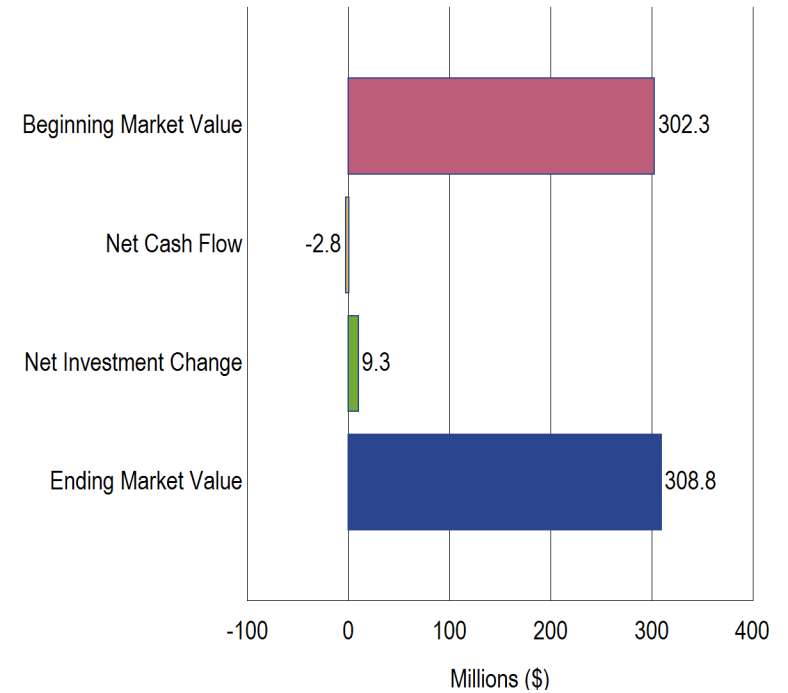
# Spokane Employees' Retirement System

As of December 31, 2017

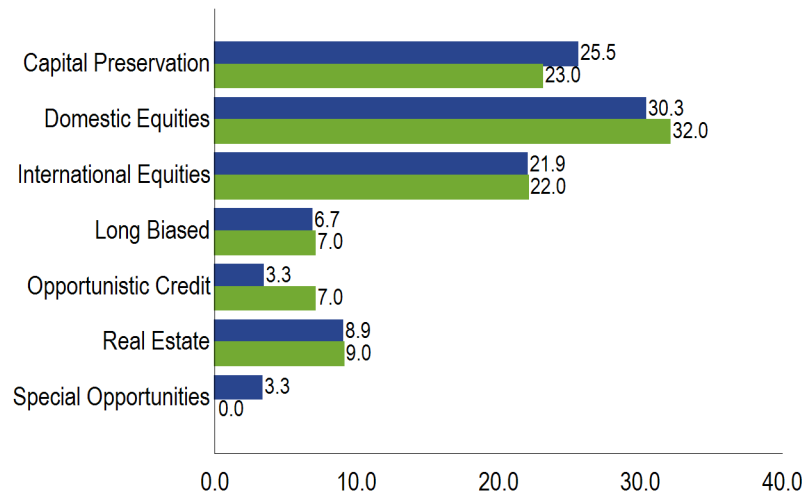
### Current Allocation



### Current Quarter



### Actual vs Target Allocation (%)



Actual Policy

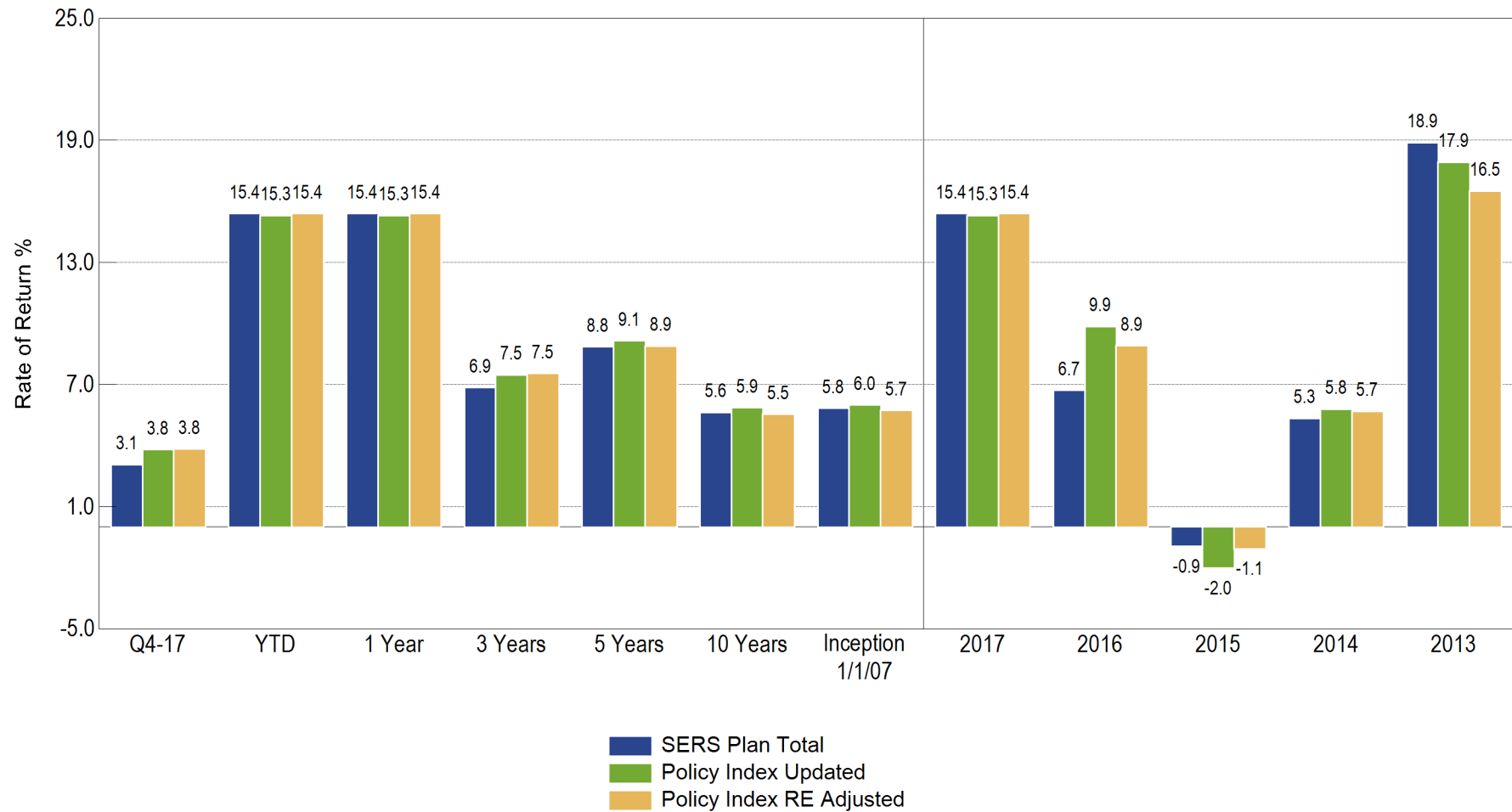
## Current Market Value:

# \$308,823,998

### Policy Index

Index	Weight
US 90 Day T-Bill	0%
Barclays US Aggregate Bond Index	10%
Barclays Corporate High Yield Index	5%
HFRI FOF Conservative Index	8%
S&P 500 Index	21%
Russell 2500 Index	11%
MSCI ACWI ex-US Index	15%
MSCI ACWI ex-US Small Cap Index	4%
MSCI Emerging Markets Free Index	3%
HFRI FOF Composite Index	7%
HFRI Distressed Restructuring Index	7%
NCREIF - ODCE Index	9%

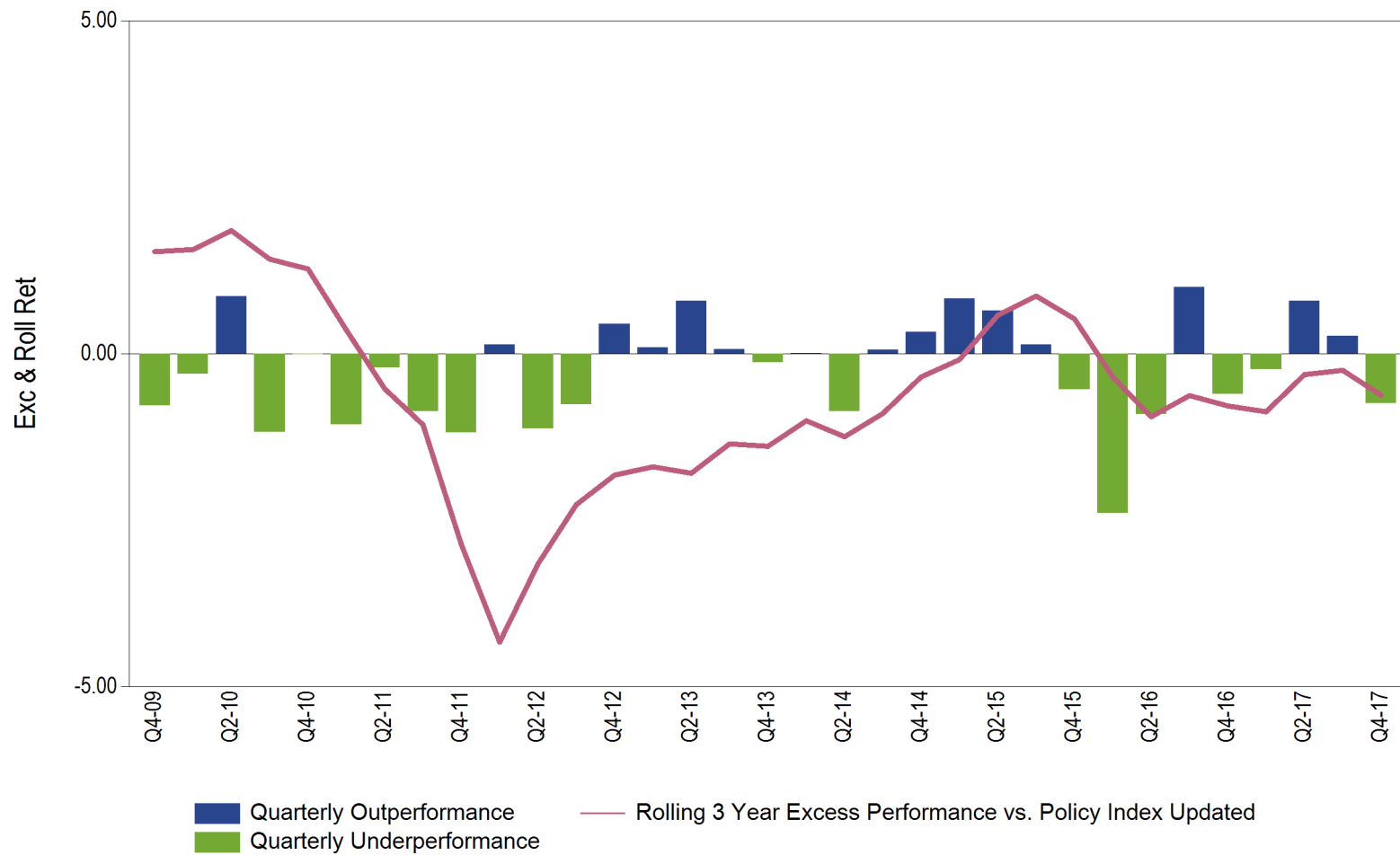
### Return Summary



Performance Net of Fees

Performance greater than 1 year is annualized

Rolling Annualized Excess Performance



# Spokane Employees' Retirement System

As of December 31, 2017

## RISK RETURN STATISTICS

January 01, 2007 Through December 31, 2017

	SERS Plan Total	Policy Index Updated
<b>RETURN SUMMARY STATISTICS</b>		
Number of Periods	44	44
Maximum Return	12.42	16.64
Minimum Return	-14.46	-17.38
Annualized Return	5.83	6.00
Total Return	86.51	89.83
Annualized Excess Return Over Risk Free	5.16	5.32
Annualized Excess Return	-0.17	0.00
<b>RISK SUMMARY STATISTICS</b>		
Beta	0.86	1.00
Upside Deviation	6.00	7.42
Downside Deviation	8.95	10.38
<b>RISK/RETURN SUMMARY STATISTICS</b>		
Annualized Standard Deviation	11.07	12.70
Alpha	0.15	0.00
Sharpe Ratio	0.47	0.42
Excess Return Over Market / Risk	-0.02	0.00
Tracking Error	2.68	0.00
Information Ratio	-0.06	--
<b>CORRELATION STATISTICS</b>		
R-Squared	0.97	1.00
Correlation	0.98	1.00

Market Proxy: Policy Index Updated

Risk-Free Proxy: 91 Day T-Bills



# Spokane Employees' Retirement System

As of December 31, 2017

## Total Account Performance Summary

	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	Return (%)	Since
<b>SERS Plan Total</b>	<b>3.06</b>	<b>15.40</b>	<b>15.40</b>	<b>6.85</b>	<b>8.85</b>	<b>5.63</b>	<b>15.40</b>	<b>6.71</b>	<b>-0.94</b>	<b>5.34</b>	<b>18.89</b>	<b>11.70</b>	<b>5.83</b>	<b>Jan-07</b>
Policy Index Updated	<u>3.81</u>	<u>15.31</u>	<u>15.31</u>	<u>7.47</u>	<u>9.14</u>	<u>5.86</u>	<u>15.31</u>	<u>9.86</u>	<u>-2.00</u>	<u>5.79</u>	<u>17.92</u>	<u>13.18</u>	<u>6.00</u>	Jan-07
Over/Under	-0.75	0.09	0.09	-0.62	-0.29	-0.23	0.09	-3.15	1.06	-0.45	0.97	-1.48	-0.17	
70/30 ACWI/Barclays Aggregate Bond	4.11	17.50	17.50	7.27	8.24	4.77	17.50	6.42	-1.30	4.77	14.87	12.66	5.27	Jan-07
InvestorForce All DB \$250mm-\$1B Net Rank	78	42	42	57	34	46	42	74	47	63	8	61	48	Jan-07
<b>Capital Preservation</b>	<b>1.02</b>	<b>5.85</b>	<b>5.85</b>	<b>3.99</b>	<b>3.26</b>	<b>--</b>	<b>5.85</b>	<b>8.12</b>	<b>-1.74</b>	<b>1.65</b>	<b>2.70</b>	<b>--</b>	<b>3.68</b>	<b>Jul-12</b>
Capital Preservation Index	<u>0.64</u>	<u>4.56</u>	<u>4.56</u>	<u>3.10</u>	<u>3.37</u>	<u>3.88</u>	<u>4.56</u>	<u>5.43</u>	<u>-0.58</u>	<u>4.23</u>	<u>3.33</u>	<u>6.66</u>	<u>3.74</u>	Jul-12
Over/Under	0.38	1.29	1.29	0.89	-0.11		1.29	2.69	-1.16	-2.58	-0.63		-0.06	
<b>Domestic Equity</b>	<b>5.26</b>	<b>19.86</b>	<b>19.86</b>	<b>9.83</b>	<b>14.96</b>	<b>--</b>	<b>19.86</b>	<b>10.91</b>	<b>-0.32</b>	<b>11.10</b>	<b>36.38</b>	<b>--</b>	<b>14.76</b>	<b>Jul-12</b>
Domestic Equity Index	<u>6.16</u>	<u>20.11</u>	<u>20.11</u>	<u>11.00</u>	<u>15.33</u>	<u>8.80</u>	<u>20.11</u>	<u>13.92</u>	<u>-0.06</u>	<u>11.44</u>	<u>33.91</u>	<u>16.67</u>	<u>15.25</u>	Jul-12
Over/Under	-0.90	-0.25	-0.25	-1.17	-0.37		-0.25	-3.01	-0.26	-0.34	2.47		-0.49	
All Cap Blend MStar MF Rank	58	37	37	51	36	--	37	70	33	38	35	--	48	Jul-12
<b>International Equity Total</b>	<b>3.98</b>	<b>28.45</b>	<b>28.45</b>	<b>9.62</b>	<b>8.96</b>	<b>4.40</b>	<b>28.45</b>	<b>3.91</b>	<b>-1.32</b>	<b>-3.58</b>	<b>20.93</b>	<b>18.48</b>	<b>5.36</b>	<b>Apr-07</b>
International Equity Index	<u>5.62</u>	<u>29.35</u>	<u>29.35</u>	<u>8.79</u>	<u>7.09</u>	<u>2.38</u>	<u>29.35</u>	<u>5.34</u>	<u>-5.49</u>	<u>-3.63</u>	<u>13.48</u>	<u>17.36</u>	<u>3.45</u>	Apr-07
Over/Under	-1.64	-0.90	-0.90	0.83	1.87	2.02	-0.90	-1.43	4.17	0.05	7.45	1.12	1.91	
Foreign MStar MF Rank	57	42	42	34	32	22	42	24	67	32	56	55	13	Apr-07
<b>Long Biased</b>	<b>2.22</b>	<b>1.19</b>	<b>1.19</b>	<b>0.70</b>	<b>3.00</b>	<b>--</b>	<b>1.19</b>	<b>-2.99</b>	<b>4.04</b>	<b>3.62</b>	<b>9.56</b>	<b>--</b>	<b>3.53</b>	<b>Jul-12</b>
HFRI Fund of Funds Composite Index	<u>1.99</u>	<u>7.69</u>	<u>7.69</u>	<u>2.58</u>	<u>3.98</u>	<u>1.07</u>	<u>7.69</u>	<u>0.51</u>	<u>-0.27</u>	<u>3.36</u>	<u>8.96</u>	<u>4.79</u>	<u>4.32</u>	Jul-12
Over/Under	0.23	-6.50	-6.50	-1.88	-0.98		-6.50	-3.50	4.31	0.26	0.60		-0.79	
S&P 500	6.64	21.83	21.83	11.41	15.79	8.50	21.83	11.96	1.38	13.69	32.39	16.00	15.46	Jul-12
<b>Opportunistic Credit</b>	<b>1.46</b>	<b>7.08</b>	<b>7.08</b>	<b>7.87</b>	<b>--</b>	<b>--</b>	<b>7.08</b>	<b>14.52</b>	<b>2.35</b>	<b>2.32</b>	<b>--</b>	<b>--</b>	<b>7.09</b>	<b>Oct-13</b>
HFRI ED: Distressed/Restructuring Index	<u>1.98</u>	<u>6.66</u>	<u>6.66</u>	<u>4.13</u>	<u>4.90</u>	<u>3.97</u>	<u>6.66</u>	<u>15.15</u>	<u>-8.06</u>	<u>-1.39</u>	<u>14.05</u>	<u>10.12</u>	<u>3.59</u>	Oct-13
Over/Under	-0.52	0.42	0.42	3.74			0.42	-0.63	10.41	3.71			3.50	

Capital Preservation Index: Barclays Aggregate: 43.5%; HFRI Conservative: 34.8%; Barclays High Yield: 21.8%

Domestic Equity Index: S&P 500: 65.63%; Russell 2500: 34.37%

International Index: MSCI ACWI ex US: 68.2%; MSCI ACWI ex US Small Cap: 18.2%; MSCI Emerging Mkts: 13.6%

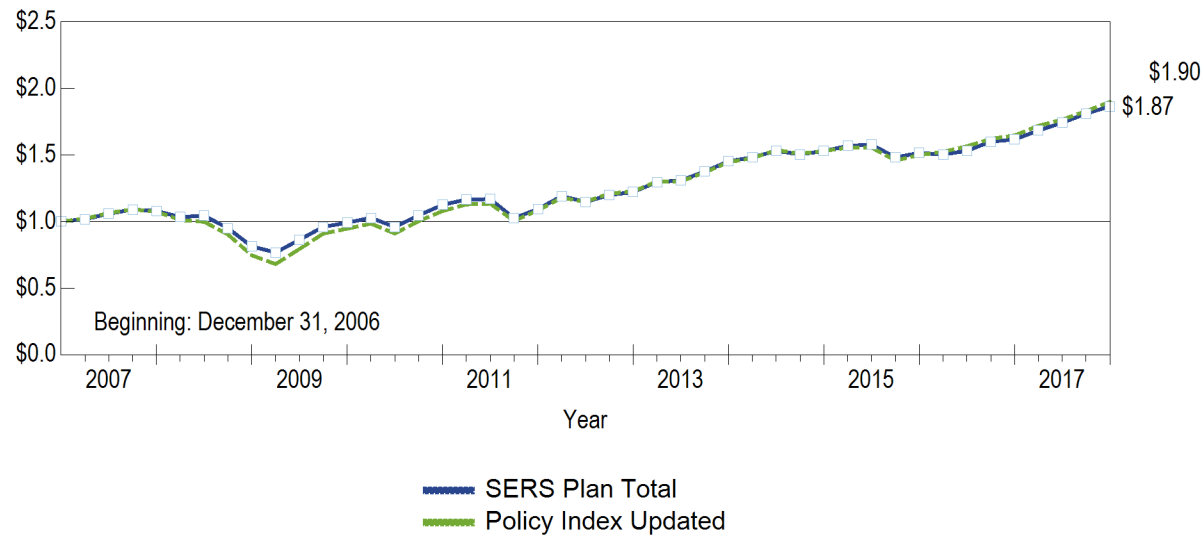
# Spokane Employees' Retirement System

As of December 31, 2017

## Total Account Performance Summary

	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	Return (%)	Since
<b>Real Estate Total</b>	<b>3.05</b>	<b>10.01</b>	<b>10.01</b>	<b>8.24</b>	<b>11.50</b>	<b>7.87</b>	<b>10.01</b>	<b>8.09</b>	<b>6.66</b>	<b>25.00</b>	<b>8.71</b>	<b>15.17</b>	<b>5.27</b>	<b>Apr-07</b>
NCREIF-ODCE	2.07	7.62	7.62	10.42	11.53	5.03	7.62	8.76	15.02	12.48	13.94	10.94	5.74	Apr-07
Over/Under	0.98	2.39	2.39	-2.18	-0.03	2.84	2.39	-0.67	-8.36	12.52	-5.23	4.23	-0.47	
FTSE NAREIT All REIT	2.37	9.27	9.27	6.90	9.90	7.73	9.27	9.28	2.29	27.15	3.21	20.14	5.03	Apr-07
US Real Estate Equity Rank	38	11	11	9	11	65	11	32	7	94	7	98	68	Apr-07
<b>Special Opportunities</b>	<b>-3.31</b>	<b>25.32</b>	<b>25.32</b>	<b>-0.01</b>	<b>10.61</b>	<b>--</b>	<b>25.32</b>	<b>-21.90</b>	<b>2.13</b>	<b>25.88</b>	<b>31.60</b>	<b>--</b>	<b>9.48</b>	<b>Jul-12</b>
Russell 3000	6.34	21.13	21.13	11.12	15.58	8.60	21.13	12.73	0.48	12.56	33.55	16.42	15.38	Jul-12
Over/Under	-9.65	4.19	4.19	-11.13	-4.97		4.19	-34.63	1.65	13.32	-1.95		-5.90	

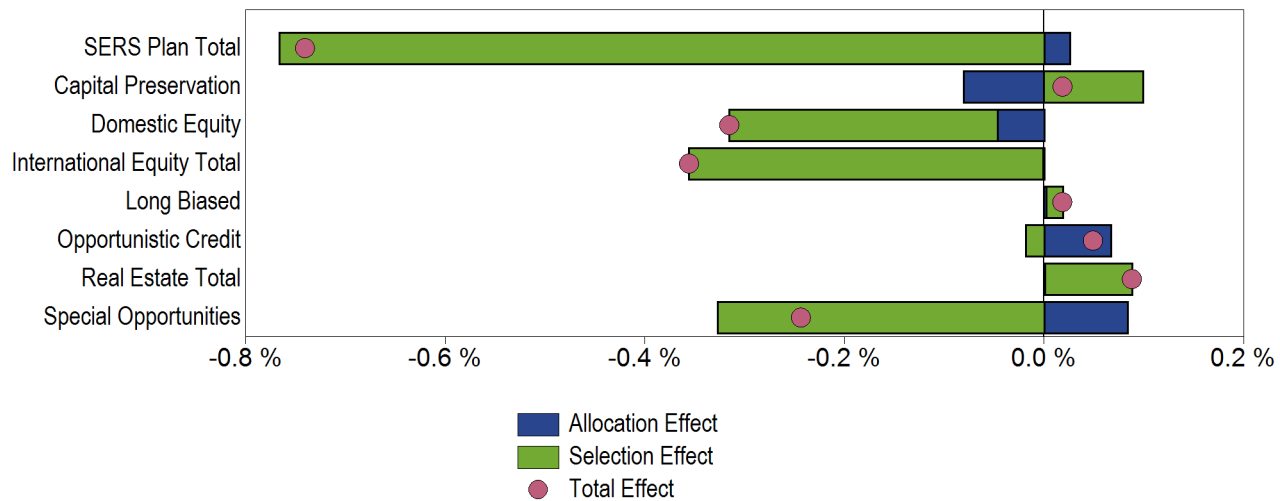
## GROWTH OF A DOLLAR



**Attribution Summary**  
**3 Months Ending December 31, 2017**

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
Capital Preservation	1.0%	0.6%	0.4%	0.1%	-0.1%	0.0%
Domestic Equity	5.3%	6.2%	-0.9%	-0.3%	0.0%	-0.3%
International Equity Total	4.0%	5.6%	-1.6%	-0.4%	0.0%	-0.4%
Long Biased	2.2%	2.0%	0.2%	0.0%	0.0%	0.0%
Opportunistic Credit	1.5%	2.0%	-0.5%	0.0%	0.1%	0.0%
Real Estate Total	3.1%	2.1%	1.0%	0.1%	0.0%	0.1%
Special Opportunities	-3.3%	6.3%	-9.6%	-0.3%	0.1%	-0.2%
<b>Total</b>	<b>3.1%</b>	<b>3.8%</b>	<b>-0.7%</b>	<b>-0.8%</b>	<b>0.0%</b>	<b>-0.7%</b>

**Attribution Effects**  
**3 Months Ending December 31, 2017**

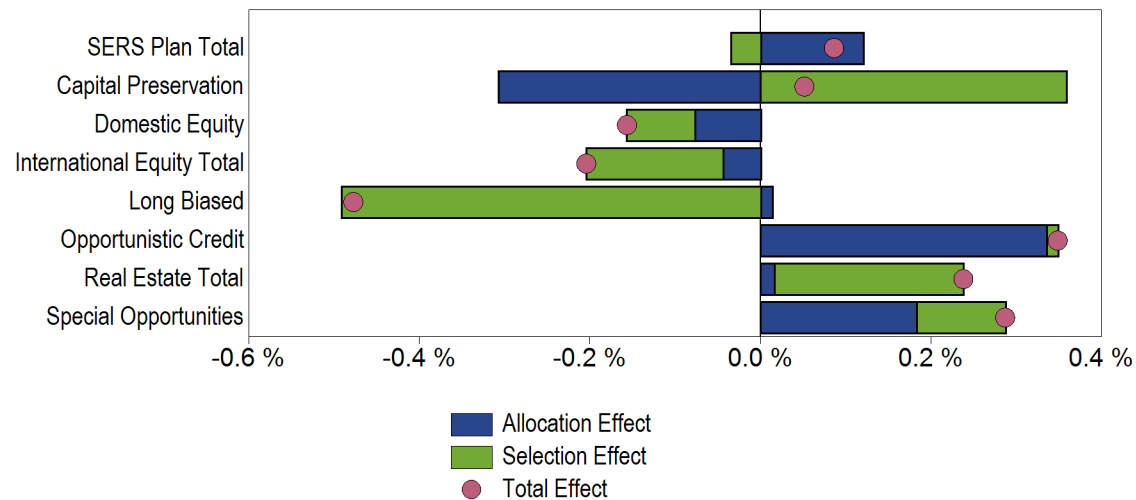


Attributions reflect new policy index

**Attribution Summary**  
**1 Year Ending December 31, 2017**

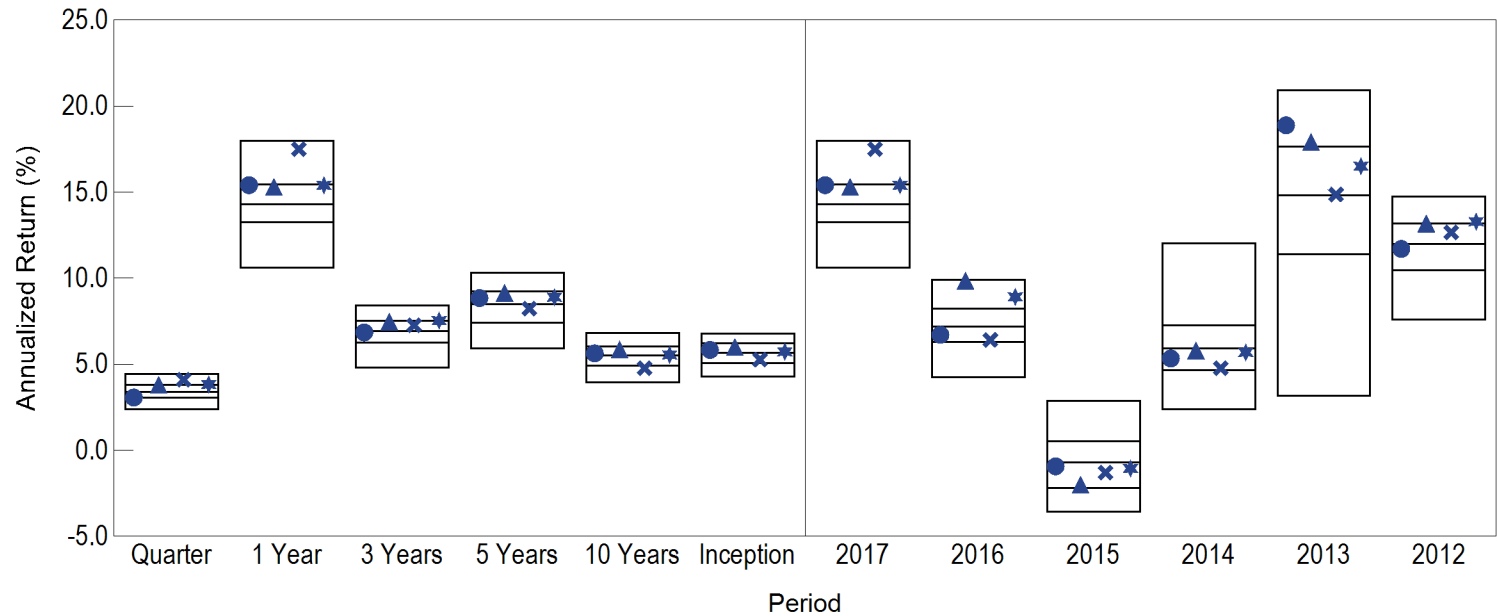
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
Capital Preservation	5.8%	4.6%	1.3%	0.4%	-0.3%	0.1%
Domestic Equity	19.9%	20.1%	-0.3%	-0.1%	-0.1%	-0.2%
International Equity Total	28.5%	29.4%	-0.9%	-0.2%	0.0%	-0.2%
Long Biased	1.2%	7.7%	-6.5%	-0.5%	0.0%	-0.5%
Opportunistic Credit	7.1%	6.7%	0.4%	0.0%	0.3%	0.3%
Real Estate Total	10.0%	7.6%	2.4%	0.2%	0.0%	0.2%
Special Opportunities	25.3%	21.1%	4.2%	0.1%	0.2%	0.3%
<b>Total</b>	<b>15.4%</b>	<b>15.3%</b>	<b>0.1%</b>	<b>0.0%</b>	<b>0.1%</b>	<b>0.1%</b>

**Attribution Effects**  
**1 Year Ending December 31, 2017**



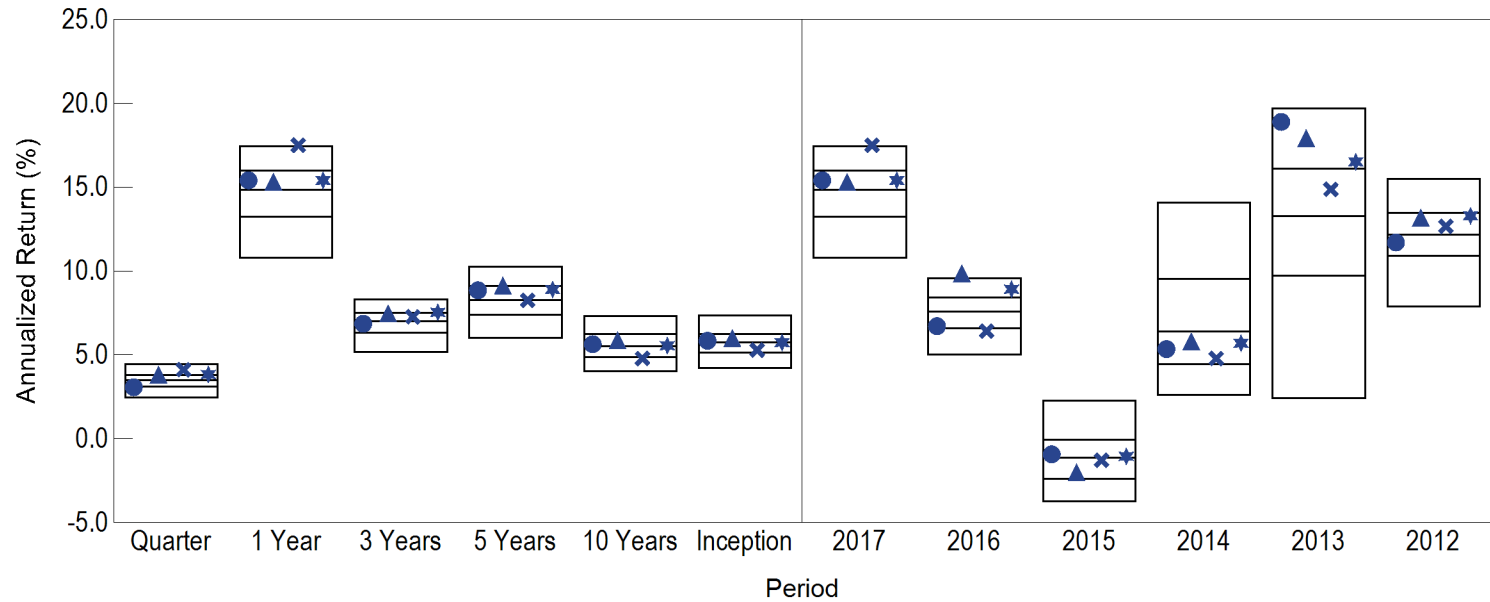
Attributions reflect new policy index

InvestorForce All DB \$50mm-\$250mm Net Return Comparison  
Ending December 31, 2017



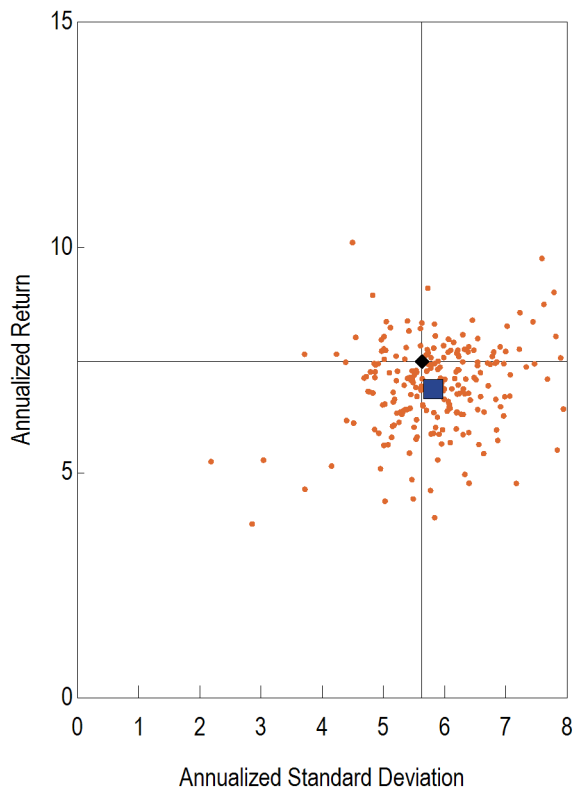
	Quarter	1 Year	3 Years	5 Years	10 Years	Inception	2017	2016	2015	2014	2013	2012
<b>Return (Rank)</b>												
5th Percentile	4.4	18.0	8.4	10.3	6.8	6.8	18.0	9.9	2.9	12.0	20.9	14.8
25th Percentile	3.8	15.5	7.6	9.3	6.1	6.3	15.5	8.3	0.6	7.3	17.7	13.2
Median	3.4	14.3	7.0	8.5	5.5	5.7	14.3	7.2	-0.7	6.0	14.9	12.0
75th Percentile	3.1	13.3	6.3	7.4	5.0	5.1	13.3	6.3	-2.1	4.7	11.4	10.5
95th Percentile	2.4	10.7	4.8	6.0	4.0	4.3	10.7	4.3	-3.5	2.4	3.2	7.6
# of Portfolios	330	326	315	298	250	240	326	321	330	285	268	261
● SERS Plan Total	3.1 (78)	15.4 (27)	6.9 (56)	8.8 (38)	5.6 (46)	5.8 (42)	15.4 (27)	6.7 (66)	-0.9 (55)	5.3 (66)	18.9 (17)	11.7 (55)
▲ Policy Index Updated	3.8 (27)	15.3 (29)	7.5 (30)	9.1 (30)	5.9 (37)	6.0 (35)	15.3 (29)	9.9 (6)	-2.0 (72)	5.8 (54)	17.9 (24)	13.2 (26)
× 70/30 ACWI/Barclays Aggregate Bon	4.1 (13)	17.5 (8)	7.3 (36)	8.2 (58)	4.8 (80)	5.3 (69)	17.5 (8)	6.4 (73)	-1.3 (60)	4.8 (74)	14.9 (50)	12.7 (36)
* Policy Index RE Adjusted	3.8 (26)	15.4 (27)	7.5 (28)	8.9 (36)	5.5 (51)	5.7 (48)	15.4 (27)	8.9 (14)	-1.1 (57)	5.7 (56)	16.5 (36)	13.3 (23)

InvestorForce All DB \$250mm-\$1B Net Return Comparison  
Ending December 31, 2017

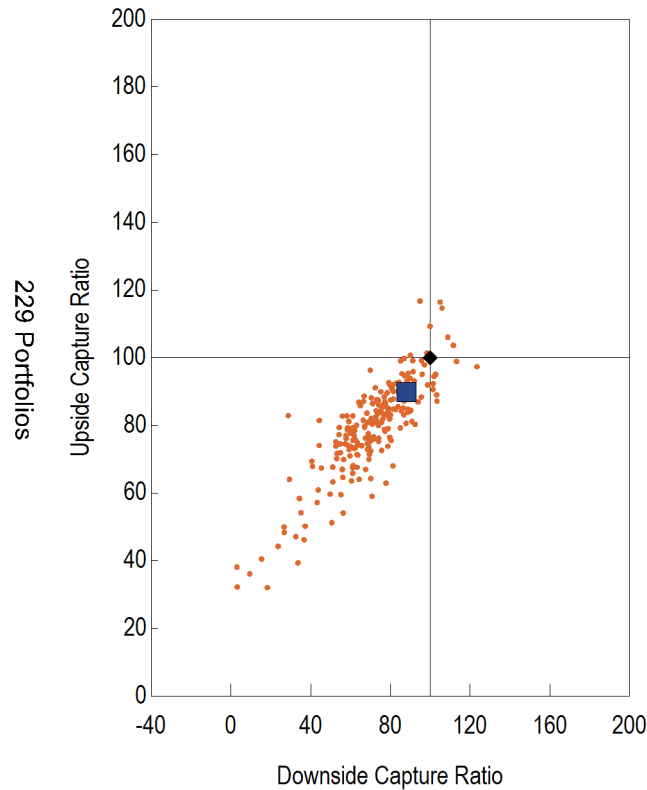


	Quarter	1 Year	3 Years	5 Years	10 Years	Inception	2017	2016	2015	2014	2013	2012
<b>Return (Rank)</b>												
<b>5th Percentile</b>	4.5	17.4	8.3	10.3	7.3	7.4	17.4	9.6	2.2	14.1	19.7	15.5
<b>25th Percentile</b>	3.8	16.0	7.6	9.1	6.3	6.3	16.0	8.5	0.0	9.6	16.1	13.5
<b>Median</b>	3.5	14.9	7.0	8.3	5.5	5.8	14.9	7.6	-1.1	6.4	13.3	12.2
<b>75th Percentile</b>	3.1	13.3	6.4	7.4	4.9	5.2	13.3	6.6	-2.4	4.5	9.8	10.9
<b>95th Percentile</b>	2.5	10.8	5.2	6.0	4.0	4.3	10.8	5.1	-3.7	2.6	2.5	7.9
<b># of Portfolios</b>	239	237	229	218	173	165	237	248	231	212	190	178
<b>● SERS Plan Total</b>	3.1 (78)	15.4 (42)	6.9 (57)	8.8 (34)	5.6 (46)	5.8 (48)	15.4 (42)	6.7 (74)	-0.9 (47)	5.3 (63)	18.9 (8)	11.7 (61)
<b>▲ Policy Index Updated</b>	3.8 (28)	15.3 (42)	7.5 (27)	9.1 (26)	5.9 (37)	6.0 (40)	15.3 (42)	9.9 (4)	-2.0 (69)	5.8 (61)	17.9 (14)	13.2 (32)
<b>× 70/30 ACWI/Barclays Aggregate Bon</b>	4.1 (15)	17.5 (4)	7.3 (38)	8.2 (53)	4.8 (78)	5.3 (72)	17.5 (4)	6.4 (78)	-1.3 (56)	4.8 (73)	14.9 (37)	12.7 (43)
<b>* Policy Index RE Adjusted</b>	3.8 (27)	15.4 (42)	7.5 (26)	8.9 (33)	5.5 (50)	5.7 (53)	15.4 (42)	8.9 (15)	-1.1 (50)	5.7 (61)	16.5 (23)	13.3 (29)

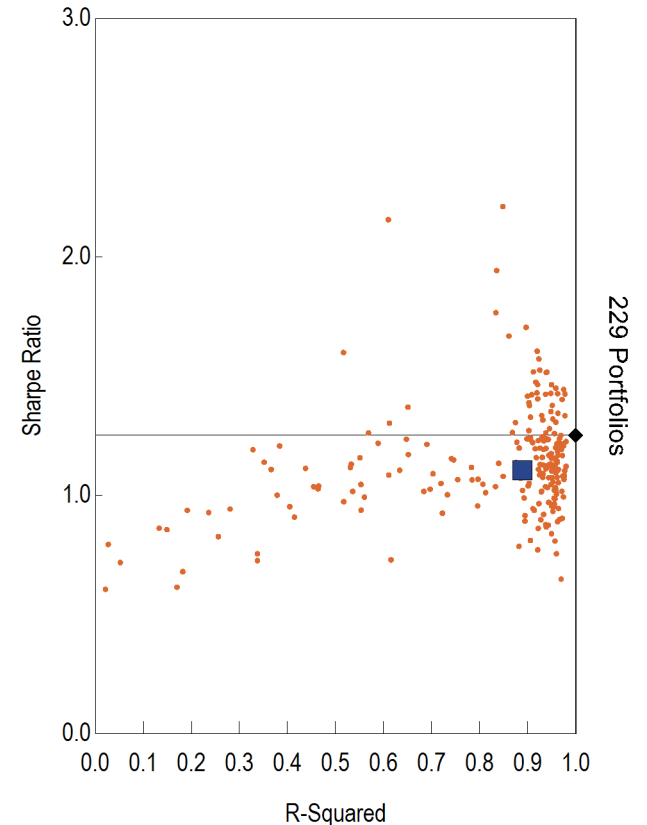
Annualized Return vs. Annualized Standard Deviation  
3 Years Ending December 31, 2017



Upside Capture Ratio vs. Downside Capture Ratio  
3 Years Ending December 31, 2017



Sharpe Ratio vs. R-Squared  
3 Years Ending December 31, 2017

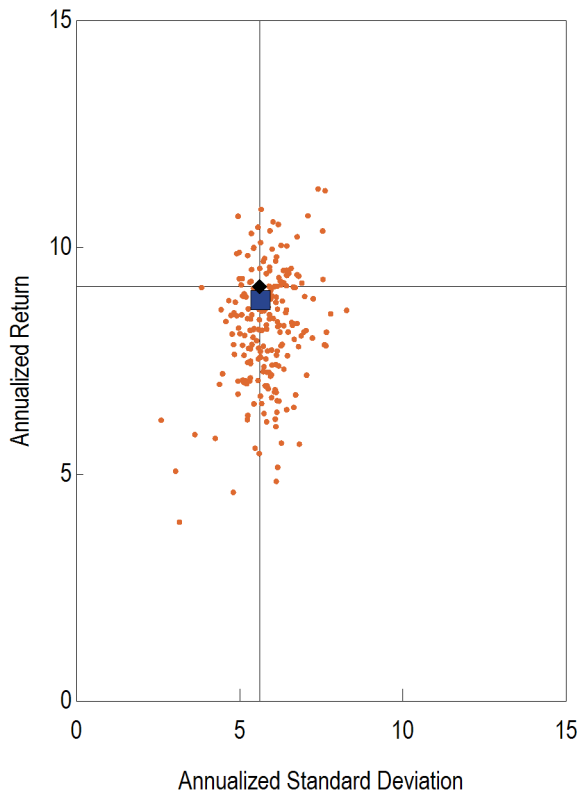


- SERS Plan Total
- ◆ Policy Index Updated
- InvestorForce All DB \$250mm-\$1B Net

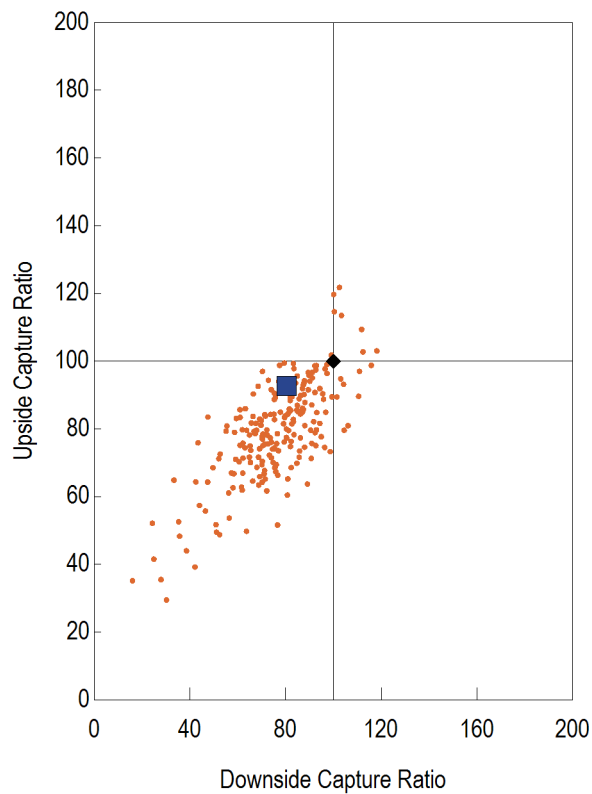
- SERS Plan Total
- ◆ Policy Index Updated
- InvestorForce All DB \$250mm-\$1B Net

- SERS Plan Total
- ◆ Policy Index Updated
- InvestorForce All DB \$250mm-\$1B Net

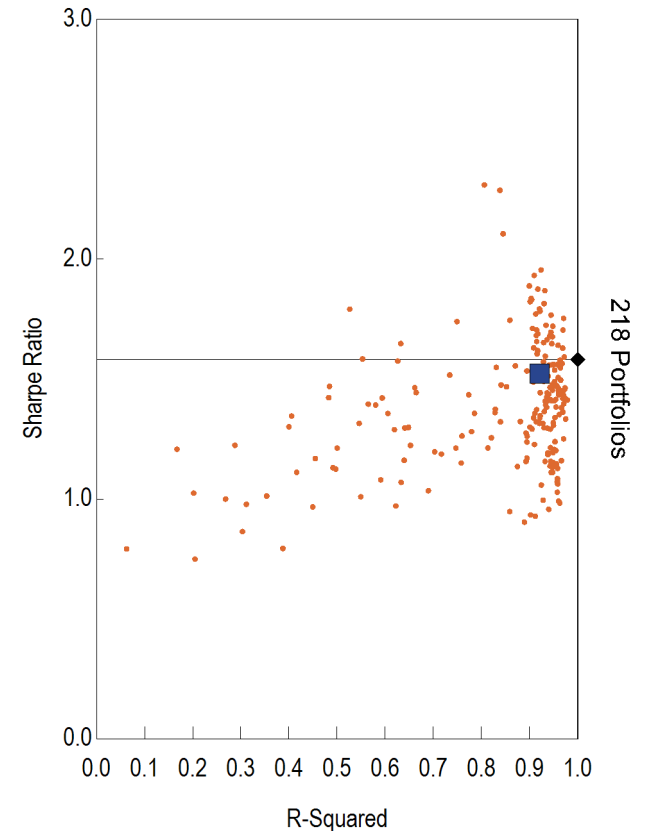
Annualized Return vs. Annualized Standard Deviation  
5 Years Ending December 31, 2017



Upside Capture Ratio vs. Downside Capture Ratio  
5 Years Ending December 31, 2017



Sharpe Ratio vs. R-Squared  
5 Years Ending December 31, 2017



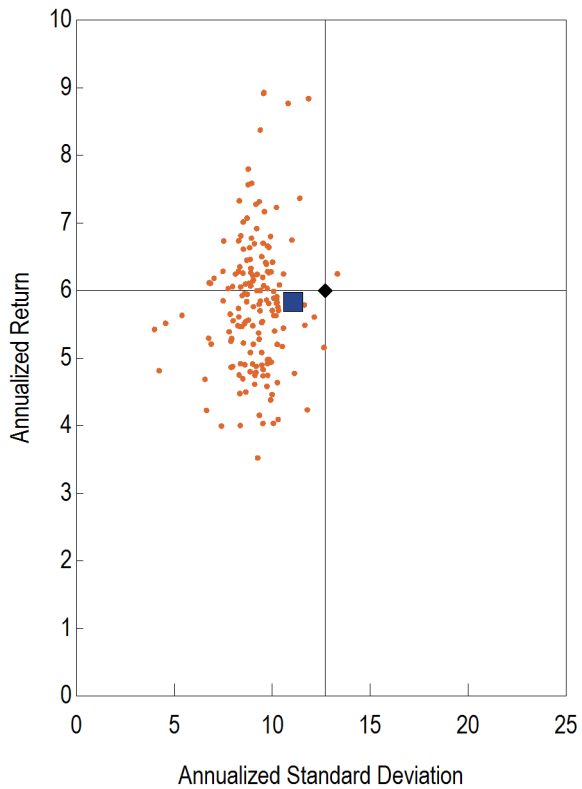
- SERS Plan Total
- ◆ Policy Index Updated
- InvestorForce All DB \$250mm-\$1B Net

- SERS Plan Total
- ◆ Policy Index Updated
- InvestorForce All DB \$250mm-\$1B Net

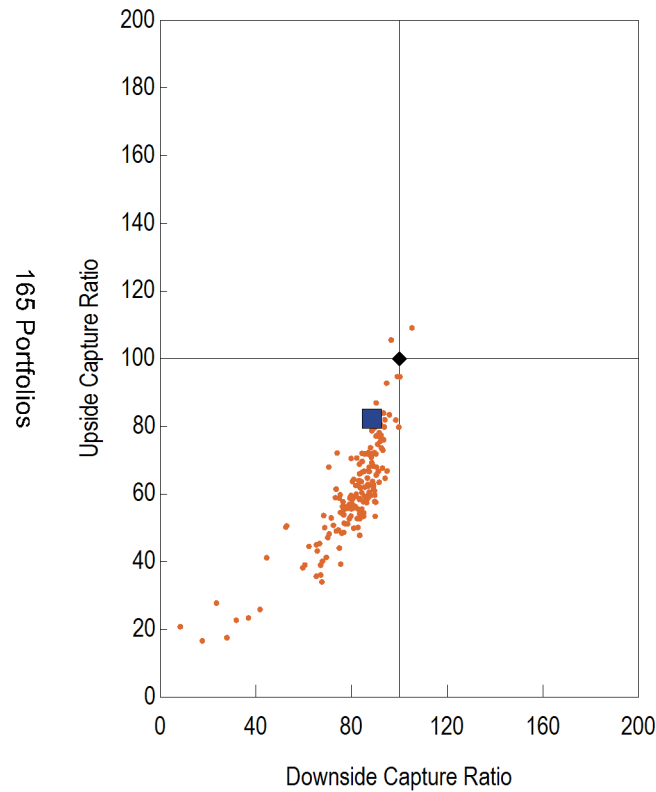
- SERS Plan Total
- ◆ Policy Index Updated
- InvestorForce All DB \$250mm-\$1B Net



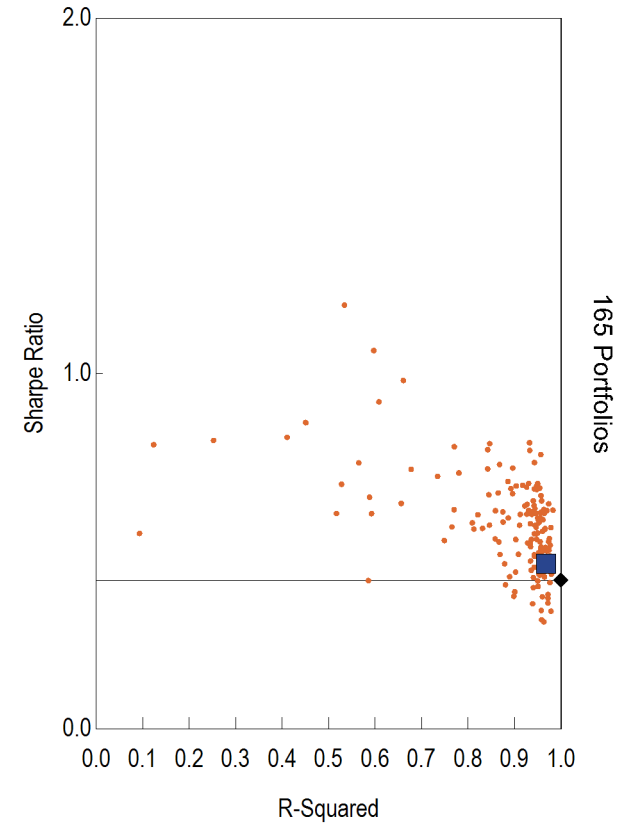
Annualized Return vs. Annualized Standard Deviation  
11 Years Ending December 31, 2017



Upside Capture Ratio vs. Downside Capture Ratio  
11 Years Ending December 31, 2017



Sharpe Ratio vs. R-Squared  
11 Years Ending December 31, 2017



- SERS Plan Total
- ◆ Policy Index Updated
- InvestorForce All DB \$250mm-\$1B Net

- SERS Plan Total
- ◆ Policy Index Updated
- InvestorForce All DB \$250mm-\$1B Net

- SERS Plan Total
- ◆ Policy Index Updated
- InvestorForce All DB \$250mm-\$1B Net

# Spokane Employees' Retirement System

As of December 31, 2017

## Asset Class Performance

	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	Return (%)	Since
<b>Capital Preservation</b>	1.02	5.85	5.85	3.99	3.26	5.85	8.12	-1.74	1.65	2.70	--	3.68	Jul-12
Capital Preservation Index	0.64	4.56	4.56	3.10	3.37	4.56	5.43	-0.58	4.23	3.33	6.66	3.74	Jul-12
Over/Under	0.38	1.29	1.29	0.89	-0.11	1.29	2.69	-1.16	-2.58	-0.63		-0.06	
<b>Total Return Bond</b>	0.68	4.20	4.20	--	--	4.20	--	--	--	--	--	1.30	Sep-16
BBgBarc US Aggregate TR	0.39	3.54	3.54	2.24	2.10	3.54	2.65	0.55	5.97	-2.02	4.21	0.37	Sep-16
Over/Under	0.29	0.66	0.66			0.66						0.93	
Intermediate-Term Bond MStar MF Rank	13	38	38	--	--	38	--	--	--	--	--	42	Sep-16
<b>High Yield</b>	0.99	8.22	8.22	5.48	4.80	8.22	16.67	-7.05	0.68	7.00	14.35	5.91	Jul-12
BBgBarc US High Yield TR	0.47	7.50	7.50	6.35	5.78	7.50	17.13	-4.47	2.45	7.44	15.81	6.72	Jul-12
Over/Under	0.52	0.72	0.72	-0.87	-0.98	0.72	-0.46	-2.58	-1.77	-0.44	-1.46	-0.81	
High Yield Bond MStar MF Rank	20	18	18	46	64	18	13	92	70	51	69	57	Jul-12
<b>Absolute Return</b>	1.29	5.33	5.33	4.41	4.20	5.33	7.75	0.29	3.15	4.65	6.68	4.33	Jul-12
HFRI FOF: Conservative Index	1.05	4.01	4.01	2.08	3.39	4.01	1.89	0.37	3.14	7.70	4.22	3.72	Jul-12
Over/Under	0.24	1.32	1.32	2.33	0.81	1.32	5.86	-0.08	0.01	-3.05	2.46	0.61	
BBgBarc US Aggregate TR	0.39	3.54	3.54	2.24	2.10	3.54	2.65	0.55	5.97	-2.02	4.21	2.24	Jul-12
<b>Domestic Equity</b>	5.26	19.86	19.86	9.83	14.96	19.86	10.91	-0.32	11.10	36.38	--	14.76	Jul-12
Domestic Equity Index	6.16	20.11	20.11	11.00	15.33	20.11	13.92	-0.06	11.44	33.91	16.67	15.25	Jul-12
Over/Under	-0.90	-0.25	-0.25	-1.17	-0.37	-0.25	-3.01	-0.26	-0.34	2.47		-0.49	
All Cap Blend MStar MF Rank	58	37	37	51	36	37	70	33	38	35	--	48	Jul-12
<b>Domestic Large Cap Equity</b>	5.63	22.54	22.54	9.76	15.00	22.54	8.24	-0.32	12.85	34.81	15.42	8.29	Apr-07
S&P 500	6.64	21.83	21.83	11.41	15.79	21.83	11.96	1.38	13.69	32.39	16.00	8.35	Apr-07
Over/Under	-1.01	0.71	0.71	-1.65	-0.79	0.71	-3.72	-1.70	-0.84	2.42	-0.58	-0.06	
Large Blend MStar MF Rank	78	24	24	63	51	24	83	53	39	26	56	33	Apr-07
<b>Domestic Small/Mid Equity</b>	4.54	14.91	14.91	9.71	14.75	14.91	15.37	-0.39	8.69	38.60	--	14.57	Jul-12
Russell 2500	5.24	16.81	16.81	10.07	14.33	16.81	17.59	-2.90	7.07	36.80	17.88	14.70	Jul-12
Over/Under	-0.70	-1.90	-1.90	-0.36	0.42	-1.90	-2.22	2.51	1.62	1.80		-0.13	
SMID Blend MStar MF Rank	42	39	39	43	25	39	75	10	24	34	--	41	Jul-12

# Spokane Employees' Retirement System

As of December 31, 2017

## Asset Class Performance

	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	Return (%)	Since
<b>International Equity Total</b>	3.98	28.45	28.45	9.62	8.96	28.45	3.91	-1.32	-3.58	20.93	18.48	5.36	Apr-07
International Equity Index	5.62	29.35	29.35	8.79	7.09	29.35	5.34	-5.49	-3.63	13.48	17.36	3.45	Apr-07
Over/Under	-1.64	-0.90	-0.90	0.83	1.87	-0.90	-1.43	4.17	0.05	7.45	1.12	1.91	
Foreign MStar MF Rank	57	42	42	34	32	42	24	67	32	56	55	13	Apr-07
<b>International Large Cap Equity</b>	3.45	27.50	27.50	9.45	9.98	27.50	4.02	-1.13	-1.38	24.43	--	11.82	Jul-12
MSCI ACWI ex USA	5.00	27.19	27.19	7.83	6.80	27.19	4.50	-5.66	-3.87	15.29	16.83	8.67	Jul-12
Over/Under	-1.55	0.31	0.31	1.62	3.18	0.31	-0.48	4.53	2.49	9.14		3.15	
Foreign Large Blend MStar MF Rank	74	31	31	17	6	31	23	56	12	14	--	6	Jul-12
<b>International Small/Mid Cap Equity</b>	6.89	37.08	37.08	13.56	10.64	37.08	-0.68	7.56	-12.10	28.79	--	12.34	Jul-12
MSCI ACWI xUS Small (net)	6.56	31.65	31.65	11.96	10.03	31.65	3.91	2.60	-4.03	19.73	18.52	11.68	Jul-12
Over/Under	0.33	5.43	5.43	1.60	0.61	5.43	-4.59	4.96	-8.07	9.06		0.66	
<b>Emerging Markets Equity</b>	3.01	23.58	23.58	6.48	4.63	23.58	7.03	-8.73	-2.07	6.06	--	6.17	Jul-12
MSCI Emerging Markets	7.44	37.28	37.28	9.10	4.35	37.28	11.19	-14.92	-2.19	-2.60	18.22	6.41	Jul-12
Over/Under	-4.43	-13.70	-13.70	-2.62	0.28	-13.70	-4.16	6.19	0.12	8.66		-0.24	
Diversified Emerging Mkts MStar MF Rank	97	94	94	79	52	94	56	16	49	14	--	65	Jul-12
<b>Long Biased</b>	2.22	1.19	1.19	0.70	3.00	1.19	-2.99	4.04	3.62	9.56	--	3.53	Jul-12
HFRI Fund of Funds Composite Index	1.99	7.69	7.69	2.58	3.98	7.69	0.51	-0.27	3.36	8.96	4.79	4.32	Jul-12
Over/Under	0.23	-6.50	-6.50	-1.88	-0.98	-6.50	-3.50	4.31	0.26	0.60		-0.79	
S&P 500	6.64	21.83	21.83	11.41	15.79	21.83	11.96	1.38	13.69	32.39	16.00	15.46	Jul-12
<b>Opportunistic Credit</b>	1.46	7.08	7.08	7.87	--	7.08	14.52	2.35	2.32	--	--	7.09	Oct-13
HFRI ED: Distressed/Restructuring Index	1.98	6.66	6.66	4.13	4.90	6.66	15.15	-8.06	-1.39	14.05	10.12	3.59	Oct-13
Over/Under	-0.52	0.42	0.42	3.74		0.42	-0.63	10.41	3.71			3.50	
<b>Real Estate Total</b>	3.05	10.01	10.01	8.24	11.50	10.01	8.09	6.66	25.00	8.71	15.17	5.27	Apr-07
NCREIF-ODCE	2.07	7.62	7.62	10.42	11.53	7.62	8.76	15.02	12.48	13.94	10.94	5.74	Apr-07
Over/Under	0.98	2.39	2.39	-2.18	-0.03	2.39	-0.67	-8.36	12.52	-5.23	4.23	-0.47	
FTSE NAREIT All REIT	2.37	9.27	9.27	6.90	9.90	9.27	9.28	2.29	27.15	3.21	20.14	5.03	Apr-07
US Real Estate Equity Rank	38	11	11	9	11	11	32	7	94	7	98	68	Apr-07
<b>Special Opportunities</b>	-3.31	25.32	25.32	-0.01	10.61	25.32	-21.90	2.13	25.88	31.60	--	9.48	Jul-12
Russell 3000	6.34	21.13	21.13	11.12	15.58	21.13	12.73	0.48	12.56	33.55	16.42	15.38	Jul-12
Over/Under	-9.65	4.19	4.19	-11.13	-4.97	4.19	-34.63	1.65	13.32	-1.95		-5.90	

# Spokane Employees' Retirement System

As of December 31, 2017

## Manager Performance

	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	Return (%)	Since
<b>Capital Preservation</b>															
Sterling Core Bond	0.64	4.33	4.33	2.86	2.70	4.81	4.33	3.75	0.54	5.99	-0.97	6.14	6.73	1.19	Aug-16
BBgBarc US Aggregate TR	<u>0.39</u>	<u>3.54</u>	<u>3.54</u>	<u>2.24</u>	<u>2.10</u>	<u>4.01</u>	<u>3.54</u>	<u>2.65</u>	<u>0.55</u>	<u>5.97</u>	<u>-2.02</u>	<u>4.21</u>	<u>7.84</u>	<u>0.20</u>	Aug-16
Excess Return	0.25	0.79	0.79	0.62	0.60	0.80	0.79	1.10	-0.01	0.02	1.05	1.93	-1.11	0.99	
Intermediate-Term Bond MStar MF Rank	14	34	34	26	27	29	34	40	29	35	35	66	51	43	Aug-16
Hotchkis & Wiley High Yield	0.99	8.24	8.24	6.32	5.72	--	8.24	16.02	-4.30	1.09	8.71	17.96	2.28	5.31	Jun-15
BBgBarc US High Yield TR	<u>0.47</u>	<u>7.50</u>	<u>7.50</u>	<u>6.35</u>	<u>5.78</u>	<u>8.03</u>	<u>7.50</u>	<u>17.13</u>	<u>-4.47</u>	<u>2.45</u>	<u>7.44</u>	<u>15.81</u>	<u>4.98</u>	<u>5.77</u>	Jun-15
Excess Return	0.52	0.74	0.74	-0.03	-0.06		0.74	-1.11	0.17	-1.36	1.27	2.15	-2.70	-0.46	
High Yield Bond MStar MF Rank	19	17	17	20	24	--	17	20	61	65	20	11	72	27	Jun-15
<b>Absolute Return</b>															
Post Lmtd Term High Yield	-0.07	3.19	3.19	3.21	4.00	5.99	3.19	5.66	0.84	2.96	7.49	9.61	6.16	5.68	Jun-10
HFRI FOF: Conservative Index	<u>1.05</u>	<u>4.01</u>	<u>4.01</u>	<u>2.08</u>	<u>3.39</u>	<u>0.92</u>	<u>4.01</u>	<u>1.89</u>	<u>0.37</u>	<u>3.14</u>	<u>7.70</u>	<u>4.22</u>	<u>-3.55</u>	<u>2.97</u>	Jun-10
Excess Return	-1.12	-0.82	-0.82	1.13	0.61	5.07	-0.82	3.77	0.47	-0.18	-0.21	5.39	9.71	2.71	
BBgBarc US Aggregate TR	0.39	3.54	3.54	2.24	2.10	4.01	3.54	2.65	0.55	5.97	-2.02	4.21	7.84	3.14	Jun-10
Rimrock Low Volatility Offshore	0.20	4.40	4.40	2.42	3.46	7.90	4.40	4.90	-1.90	2.31	7.82	11.33	2.29	5.19	Jun-10
HFRI FOF: Conservative Index	<u>1.05</u>	<u>4.01</u>	<u>4.01</u>	<u>2.08</u>	<u>3.39</u>	<u>0.92</u>	<u>4.01</u>	<u>1.89</u>	<u>0.37</u>	<u>3.14</u>	<u>7.70</u>	<u>4.22</u>	<u>-3.55</u>	<u>2.97</u>	Jun-10
Excess Return	-0.85	0.39	0.39	0.34	0.07	6.98	0.39	3.01	-2.27	-0.83	0.12	7.11	5.84	2.22	
BBgBarc US Aggregate TR	0.39	3.54	3.54	2.24	2.10	4.01	3.54	2.65	0.55	5.97	-2.02	4.21	7.84	3.14	Jun-10
Castine Partners	3.14	9.34	9.34	10.43	8.97	6.36	9.34	15.57	6.57	7.48	6.16	2.53	2.14	6.91	Jun-11
HFRI FOF: Conservative Index	<u>1.05</u>	<u>4.01</u>	<u>4.01</u>	<u>2.08</u>	<u>3.39</u>	<u>0.92</u>	<u>4.01</u>	<u>1.89</u>	<u>0.37</u>	<u>3.14</u>	<u>7.70</u>	<u>4.22</u>	<u>-3.55</u>	<u>2.63</u>	Jun-11
Excess Return	2.09	5.33	5.33	8.35	5.58	5.44	5.33	13.68	6.20	4.34	-1.54	-1.69	5.69	4.28	
BBgBarc US Aggregate TR	0.39	3.54	3.54	2.24	2.10	4.01	3.54	2.65	0.55	5.97	-2.02	4.21	7.84	3.03	Jun-11
Polar Altairis Offshore	2.37	4.20	4.20	4.16	4.31	4.93	4.20	6.60	1.73	3.46	5.60	4.42	2.02	4.59	Sep-11
HFRI FOF: Conservative Index	<u>1.05</u>	<u>4.01</u>	<u>4.01</u>	<u>2.08</u>	<u>3.39</u>	<u>0.92</u>	<u>4.01</u>	<u>1.89</u>	<u>0.37</u>	<u>3.14</u>	<u>7.70</u>	<u>4.22</u>	<u>-3.55</u>	<u>3.39</u>	Sep-11
Excess Return	1.32	0.19	0.19	2.08	0.92	4.01	0.19	4.71	1.36	0.32	-2.10	0.20	5.57	1.20	
BBgBarc US Aggregate TR	0.39	3.54	3.54	2.24	2.10	4.01	3.54	2.65	0.55	5.97	-2.02	4.21	7.84	2.53	Sep-11
American Beacon Flexible Bond Inst	-0.50	5.03	5.03	1.99	1.21	--	5.03	3.83	-2.73	1.32	-1.19	9.01	--	2.64	Apr-17
BBgBarc US Aggregate TR	<u>0.39</u>	<u>3.54</u>	<u>3.54</u>	<u>2.24</u>	<u>2.10</u>	<u>4.01</u>	<u>3.54</u>	<u>2.65</u>	<u>0.55</u>	<u>5.97</u>	<u>-2.02</u>	<u>4.21</u>	<u>7.84</u>	<u>2.70</u>	Apr-17
Excess Return	-0.89	1.49	1.49	-0.25	-0.89		1.49	1.18	-3.28	-4.65	0.83	4.80		-0.06	

# Spokane Employees' Retirement System

As of December 31, 2017

## Manager Performance

	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	Return (%)	Since
<b>Domestic Equity</b>															
<b>Large Cap Equity</b>															
Hotchkis & Wiley Diversified Value I	6.09	18.39	18.39	9.36	15.02	7.28	18.39	19.94	-7.90	12.74	36.54	19.78	-5.67	12.18	Sep-08
Russell 1000 Value	<u>5.33</u>	<u>13.66</u>	<u>13.66</u>	<u>8.65</u>	<u>14.04</u>	<u>7.10</u>	<u>13.66</u>	<u>17.34</u>	<u>-3.83</u>	<u>13.45</u>	<u>32.53</u>	<u>17.51</u>	<u>0.39</u>	<u>10.16</u>	Sep-08
Excess Return	0.76	4.73	4.73	0.71	0.98	0.18	4.73	2.60	-4.07	-0.71	4.01	2.27	-6.06	2.02	
S&P 500	6.64	21.83	21.83	11.41	15.79	8.50	21.83	11.96	1.38	13.69	32.39	16.00	2.11	11.78	Sep-08
Large Value MStar MF Rank	42	23	23	36	14	46	23	9	90	20	14	8	87	5	Sep-08
Vanguard Institutional Index	6.63	21.79	21.79	11.38	15.76	8.50	21.79	11.93	1.37	13.65	32.35	15.98	2.09	10.43	Jun-08
S&P 500	<u>6.64</u>	<u>21.83</u>	<u>21.83</u>	<u>11.41</u>	<u>15.79</u>	<u>8.50</u>	<u>21.83</u>	<u>11.96</u>	<u>1.38</u>	<u>13.69</u>	<u>32.39</u>	<u>16.00</u>	<u>2.11</u>	<u>10.43</u>	Jun-08
Excess Return	-0.01	-0.04	-0.04	-0.03	-0.03	0.00	-0.04	-0.03	-0.01	-0.04	-0.04	-0.02	-0.02	0.00	
Large Blend MStar MF Rank	41	32	32	14	20	27	32	28	24	21	45	41	23	22	Jun-08
MFS Blended Research Core	6.82	20.83	20.83	9.96	15.31	8.69	20.83	8.57	1.34	12.44	36.37	15.68	2.21	15.37	Dec-11
S&P 500	<u>6.64</u>	<u>21.83</u>	<u>21.83</u>	<u>11.41</u>	<u>15.79</u>	<u>8.50</u>	<u>21.83</u>	<u>11.96</u>	<u>1.38</u>	<u>13.69</u>	<u>32.39</u>	<u>16.00</u>	<u>2.11</u>	<u>15.83</u>	Dec-11
Excess Return	0.18	-1.00	-1.00	-1.45	-0.48	0.19	-1.00	-3.39	-0.04	-1.25	3.98	-0.32	0.10	-0.46	
Large Blend MStar MF Rank	35	58	58	57	42	19	58	81	25	44	16	51	22	44	Dec-11
Jackson Square Large Cap Growth Eq	3.19	28.42	28.42	8.66	14.29	8.58	28.42	-5.03	5.19	12.76	34.81	16.51	8.04	13.77	Sep-12
Russell 1000 Growth	<u>7.86</u>	<u>30.21</u>	<u>30.21</u>	<u>13.79</u>	<u>17.33</u>	<u>10.00</u>	<u>30.21</u>	<u>7.08</u>	<u>5.67</u>	<u>13.05</u>	<u>33.48</u>	<u>15.26</u>	<u>2.64</u>	<u>16.29</u>	Sep-12
Excess Return	-4.67	-1.79	-1.79	-5.13	-3.04	-1.42	-1.79	-12.11	-0.48	-0.29	1.33	1.25	5.40	-2.52	
S&P 500	6.64	21.83	21.83	11.41	15.79	8.50	21.83	11.96	1.38	13.69	32.39	16.00	2.11	15.20	Sep-12
Large Growth MStar MF Rank	99	52	52	91	78	52	52	96	44	29	43	38	1	76	Sep-12

# Spokane Employees' Retirement System

As of December 31, 2017

## Manager Performance

	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	Return (%)	Since
<b>Small/Mid Cap Equity</b>															
Sterling Mid Cap Value	5.51	14.27	14.27	9.52	15.26	9.63	14.27	16.97	-1.71	5.85	46.25	12.50	-3.37	12.17	Sep-08
Russell MidCap Value	5.50	13.34	13.34	9.00	14.68	9.10	13.34	20.00	-4.78	14.75	33.46	18.51	-1.38	11.88	Sep-08
Excess Return	0.01	0.93	0.93	0.52	0.58	0.53	0.93	-3.03	3.07	-8.90	12.79	-6.01	-1.99	0.29	
Russell MidCap	6.07	18.52	18.52	9.58	14.96	9.11	18.52	13.80	-2.44	13.22	34.76	17.28	-1.55	12.49	Sep-08
Mid-Cap Value MStar MF Rank	41	37	37	38	16	32	37	69	19	87	2	85	49	43	Sep-08
Vanguard Mid Cap Index	5.64	19.25	19.25	9.38	15.01	8.94	19.25	11.22	-1.34	13.76	35.17	16.01	-1.95	14.54	Sep-09
Russell MidCap	6.07	18.52	18.52	9.58	14.96	9.11	18.52	13.80	-2.44	13.22	34.76	17.28	-1.55	14.61	Sep-09
Excess Return	-0.43	0.73	0.73	-0.20	0.05	-0.17	0.73	-2.58	1.10	0.54	0.41	-1.27	-0.40	-0.07	
Custom Vanguard Mid Cap Index	5.65	19.30	19.30	9.42	15.07	8.71	19.30	11.25	-1.28	13.83	35.27	15.47	-2.32	14.40	Sep-09
Mid-Cap Blend MStar MF Rank	51	16	16	45	16	43	16	74	19	7	47	62	35	13	Sep-09
Vanguard Mid Cap Growth	5.97	22.01	22.01	7.09	12.80	8.19	22.01	0.44	0.21	10.86	34.15	14.84	1.17	8.73	Jun-14
Russell MidCap Growth	6.81	25.27	25.27	10.30	15.30	9.10	25.27	7.33	-0.20	11.90	35.74	15.81	-1.65	11.01	Jun-14
Excess Return	-0.84	-3.26	-3.26	-3.21	-2.50	-0.91	-3.26	-6.89	0.41	-1.04	-1.59	-0.97	2.82	-2.28	
Mid-Cap Growth MStar MF Rank	51	72	72	92	78	48	72	93	41	21	61	47	22	87	Jun-14
Frontier Phocas Small Cap Value I	2.67	8.17	8.17	8.45	14.77	9.59	8.17	23.31	-4.35	7.19	45.63	9.75	-5.99	13.74	Dec-11
Russell 2000 Value	2.05	7.84	7.84	9.55	13.01	8.17	7.84	31.74	-7.47	4.22	34.52	18.05	-5.50	13.92	Dec-11
Excess Return	0.62	0.33	0.33	-1.10	1.76	1.42	0.33	-8.43	3.12	2.97	11.11	-8.30	-0.49	-0.18	
Russell 2000	3.34	14.65	14.65	9.96	14.12	8.71	14.65	21.31	-4.41	4.89	38.82	16.35	-4.18	14.40	Dec-11
Small Value MStar MF Rank	75	60	60	59	14	25	60	71	36	23	3	95	75	48	Dec-11
Vanguard Small Cap Index	5.10	16.25	16.25	9.85	14.45	9.71	16.25	18.32	-3.63	7.53	37.80	18.26	-2.65	14.30	Sep-09
Russell 2000	3.34	14.65	14.65	9.96	14.12	8.71	14.65	21.31	-4.41	4.89	38.82	16.35	-4.18	13.51	Sep-09
Excess Return	1.76	1.60	1.60	-0.11	0.33	1.00	1.60	-2.99	0.78	2.64	-1.02	1.91	1.53	0.79	
Custom Vanguard Small Cap Index	5.10	16.24	16.24	9.81	14.43	9.36	16.24	18.26	-3.68	7.54	37.77	17.48	-3.15	14.04	Sep-09
Small Blend MStar MF Rank	17	15	15	44	31	19	15	68	42	15	56	22	49	25	Sep-09

## Spokane Employees' Retirement System

As of December 31, 2017

### Manager Performance

	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	Return (%)	Since
Champlain Small Cap	1.91	10.90	10.90	12.13	15.00	10.57	10.90	27.93	-0.65	4.43	36.61	11.06	4.01	11.53	Sep-08
Russell 2000	3.34	14.65	14.65	9.96	14.12	8.71	14.65	21.31	-4.41	4.89	38.82	16.35	-4.18	10.75	Sep-08
Excess Return	-1.43	-3.75	-3.75	2.17	0.88	1.86	-3.75	6.62	3.76	-0.46	-2.21	-5.29	8.19	0.78	
Russell 2000 Growth	4.59	22.17	22.17	10.28	15.21	9.19	22.17	11.32	-1.38	5.60	43.30	14.59	-2.91	11.96	Sep-08
Small Blend MStar MF Rank	84	65	65	8	20	4	65	8	11	60	68	88	5	32	Sep-08
Bridge City Small Growth	5.50	15.82	15.82	15.61	18.42	--	15.82	24.90	6.81	7.06	40.81	10.99	3.16	17.15	Dec-11
Russell 2000 Growth	4.59	22.17	22.17	10.28	15.21	9.19	22.17	11.32	-1.38	5.60	43.30	14.59	-2.91	15.10	Dec-11
Excess Return	0.91	-6.35	-6.35	5.33	3.21		-6.35	13.58	8.19	1.46	-2.49	-3.60	6.07	2.05	
Russell 2000	3.34	14.65	14.65	9.96	14.12	8.71	14.65	21.31	-4.41	4.89	38.82	16.35	-4.18	14.49	Dec-11
Small Growth MStar MF Rank	33	77	77	4	4	--	77	5	4	15	61	79	10	10	Dec-11

# Spokane Employees' Retirement System

As of December 31, 2017

## Manager Performance

	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	Return (%)	Since
<b>International Equity</b>															
Artisan International Value	2.74	24.06	24.06	8.92	10.97	7.91	24.06	5.74	-1.49	-0.39	30.72	22.48	-6.98	10.75	Sep-08
MSCI ACWI ex USA Value	4.23	22.66	22.66	6.31	5.58	1.23	22.66	8.92	-10.06	-5.10	15.04	16.97	-13.20	5.29	Sep-08
Excess Return	-1.49	1.40	1.40	2.61	5.39	6.68	1.40	-3.18	8.57	4.71	15.68	5.51	6.22	5.46	
MSCI ACWI ex USA	5.00	27.19	27.19	7.83	6.80	1.84	27.19	4.50	-5.66	-3.87	15.29	16.83	-13.71	5.97	Sep-08
Foreign Large Value MStar MF Rank	66	41	41	19	3	1	41	29	45	2	1	8	7	1	Sep-08
EuroPacific Growth R6	4.23	31.17	31.17	9.66	9.21	3.90	31.17	1.01	-0.48	-2.29	20.58	19.64	-13.31	5.28	Jun-08
MSCI ACWI ex USA	5.00	27.19	27.19	7.83	6.80	1.84	27.19	4.50	-5.66	-3.87	15.29	16.83	-13.71	3.09	Jun-08
Excess Return	-0.77	3.98	3.98	1.83	2.41	2.06	3.98	-3.49	5.18	1.58	5.29	2.81	0.40	2.19	
Foreign Large Blend MStar MF Rank	36	6	6	14	14	12	6	53	42	18	50	28	43	11	Jun-08
Victory Trivalent International Small Cap	6.89	37.13	37.13	13.79	14.35	5.61	37.13	-0.70	8.20	-0.20	32.98	24.32	-11.55	14.82	Aug-15
MSCI ACWI xUS Small (net)	6.56	31.65	31.65	11.96	10.03	4.69	31.65	3.91	2.60	-4.03	19.73	18.52	-18.50	15.48	Aug-15
Excess Return	0.33	5.48	5.48	1.83	4.32	0.92	5.48	-4.61	5.60	3.83	13.25	5.80	6.95	-0.66	
MSCI ACWI ex USA	5.00	27.19	27.19	7.83	6.80	1.84	27.19	4.50	-5.66	-3.87	15.29	16.83	-13.71	12.22	Aug-15
Foreign Small/Mid Growth MStar MF Rank	32	43	43	33	10	56	43	36	60	26	24	22	25	33	Aug-15
Berens Global Value Ltd	3.02	23.81	23.81	6.57	4.82	2.19	23.81	7.23	-8.84	-1.50	6.16	10.77	-14.07	2.19	Dec-07
MSCI Emerging Markets	7.44	37.28	37.28	9.10	4.35	1.68	37.28	11.19	-14.92	-2.19	-2.60	18.22	-18.42	1.68	Dec-07
Excess Return	-4.42	-13.47	-13.47	-2.53	0.47	0.51	-13.47	-3.96	6.08	0.69	8.76	-7.45	4.35	0.51	
MSCI ACWI ex USA	5.00	27.19	27.19	7.83	6.80	1.84	27.19	4.50	-5.66	-3.87	15.29	16.83	-13.71	1.84	Dec-07



# Spokane Employees' Retirement System

As of December 31, 2017

## Manager Performance

	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	Return (%)	Since
<b>Long Biased</b>															
Weatherlow Offshore	2.52	5.67	5.67	2.69	5.23	3.19	5.67	0.99	1.49	4.91	13.56	8.47	-5.89	3.62	Mar-08
HFRI Fund of Funds Composite Index	1.99	7.69	7.69	2.58	3.98	1.07	7.69	0.51	-0.27	3.36	8.96	4.79	-5.72	1.55	Mar-08
Excess Return	0.53	-2.02	-2.02	0.11	1.25	2.12	-2.02	0.48	1.76	1.55	4.60	3.68	-0.17	2.07	
S&P 500	6.64	21.83	21.83	11.41	15.79	8.50	21.83	11.96	1.38	13.69	32.39	16.00	2.11	9.84	Mar-08
<b>Opportunistic Credit</b>															
Beach Point Select Fund	1.46	7.08	7.08	7.95	8.34	--	7.08	14.52	2.58	2.35	15.93	17.58	--	7.18	Oct-13
HFRI ED: Distressed/Restructuring Index	1.98	6.66	6.66	4.13	4.90	3.97	6.66	15.15	-8.06	-1.39	14.05	10.12	-1.79	3.59	Oct-13
Excess Return	-0.52	0.42	0.42	3.82	3.44		0.42	-0.63	10.64	3.74	1.88	7.46		3.59	
HFRX Distressed Securities Index	0.69	3.14	3.14	3.14	3.03	-2.66	3.14	19.72	-11.14	0.42	5.37	0.94	-8.04	2.47	Oct-13
<b>Real Estate</b>															
SERS Principal Global Investors REIT	3.55	8.89	8.89	6.48	10.65	8.57	8.89	6.40	4.19	32.23	3.91	16.99	9.03	5.90	Dec-06
FTSE NAREIT All REIT	2.37	9.27	9.27	6.90	9.90	7.73	9.27	9.28	2.29	27.15	3.21	20.14	7.28	5.11	Dec-06
Excess Return	1.18	-0.38	-0.38	-0.42	0.75	0.84	-0.38	-2.88	1.90	5.08	0.70	-3.15	1.75	0.79	
US Real Estate Equity Rank	24	24	24	45	24	48	24	70	54	37	26	87	72	54	Dec-06
Prime Property LLC	2.10	8.67	8.67	10.80	12.51	5.52	8.67	9.31	14.53	14.08	16.17	11.68	16.18	2.10	Oct-17
NCREIF - ODCE NET	1.86	6.67	6.67	9.41	10.51	4.07	6.67	7.79	13.91	11.46	12.90	9.79	14.96	1.86	Oct-17
Excess Return	0.24	2.00	2.00	1.39	2.00	1.45	2.00	1.52	0.62	2.62	3.27	1.89	1.22	0.24	
US Real Estate Equity Rank	67	25	25	3	4	98	25	20	1	99	1	99	2	67	Oct-17
<b>Special Opportunities</b>															
OrbiMed Partners II	-3.31	25.30	25.30	-0.02	10.71	9.92	25.30	-21.91	2.14	25.88	32.19	16.19	8.28	11.12	Dec-10
MSCI World Healthcare Index	0.87	19.80	19.80	5.97	13.88	8.94	19.80	-6.81	6.60	18.10	36.27	17.54	9.46	13.75	Dec-10
Excess Return	-4.18	5.50	5.50	-5.99	-3.17	0.98	5.50	-15.10	-4.46	7.78	-4.08	-1.35	-1.18	-2.63	
S&P Composite 1500 Health Care	1.62	22.47	22.47	8.82	17.98	11.36	22.47	-2.05	7.41	24.79	42.19	18.35	11.88	17.15	Dec-10

**Non-Marketable Securities Overview**

As of December 31, 2017

Account Type	Account	Vintage Year	Commitment	Cumulative Takedown	Cumulative Distributions	Value (RV)	Total Value (RV + Dist)	Unfunded Commitment	Takedown (takedowns / commit)	IRR
Real Estate	Metropolitan Real Estate Partners V	2007	\$2,000,000	\$1,885,000	\$2,044,149	\$223,118	\$2,267,267	\$115,000	94.25%	3.55

**Time and Dollar Weighted Returns**

	Q4-17	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs
Metropolitan Real Estate Partners V							
Time Weighted	-0.43%	-7.81%	-7.81%	-1.68%	1.99%	6.38%	7.91%
Money Weighted	-0.41%	-7.45%	-7.45%	-0.16%	6.07%	12.21%	12.74%
NCREIF Property Index	1.80%	6.98%	6.98%	7.47%	9.39%	9.99%	10.19%

	2017	2016	2015	2014	2013	2012	Inception 11/30/07
Metropolitan Real Estate Partners V							
Time Weighted	-7.81%	4.86%	9.75%	20.70%	14.26%	13.32%	-4.83%
Money Weighted	-7.45%	3.86%	11.04%	19.67%	13.59%	13.15%	3.55%
NCREIF Property Index	6.98%	7.97%	13.33%	11.81%	10.99%	10.54%	6.36%

**Time-Weighted Return** - The current reporting system utilizes the Modified Dietz methodology for calculating time-weighted returns. This methodology accounts for inter-period cash flows by comparing the net gain in value with the average market value over the time interval. Average capital allows for the timing of each external flow.

**Internal Rate of Return** - The IRR (also referred to as the dollar-weighted return) differs from the TWR in that it calculates the return rate at which the present value of cash outflows equals the present value of cash inflows. Its distinguishing characteristic is that this methodology is generally viewed to better accommodate the extreme cash flows and changes in market values that often accompany private equity or private real estate investments.

**Non-Marketable Securities Overview**  
As of December 31, 2017

Account Type	Account	Vintage Year	Commitment	Cumulative Takedown	Cumulative Distributions	Value (RV)	Total Value (RV + Dist)	Unfunded Commitment	Takedown (takedowns / commit)	IRR
Real Estate	Morrison Street Fund IV Q, LP	2012	\$5,200,000	\$5,038,214	\$6,644,663	\$812,244	\$7,456,907	\$161,786	96.89%	16.27

**Time and Dollar Weighted Returns**

	Q4-17	YTD	1 Yr	2 Yrs	3 Yrs
Morrison Street Fund IV Q, LP					
Time Weighted	1.02%	5.19%	5.19%	12.91%	14.59%
Money Weighted	1.00%	5.79%	5.79%	17.58%	17.50%
NCREIF Property Index	1.80%	6.98%	6.98%	7.47%	9.39%

	2017	2016	2015	2014	Inception 7/1/12
Morrison Street Fund IV Q, LP					
Time Weighted	5.19%	21.19%	18.03%	18.77%	17.19%
Money Weighted	5.79%	23.73%	17.41%	18.88%	16.27%
NCREIF Property Index	6.98%	7.97%	13.33%	11.81%	10.18%

Contributions paid into Morrison Street Fund IV Q, LP are higher than what is reflected on the Manager statement. This is due to the interest charge of \$122,762.15 paid at the time of initial investment. Therefore the Unfunded Commitment also varies from the Manager statement.

**Time-Weighted Return** - The current reporting system utilizes the Modified Dietz methodology for calculating time-weighted returns. This methodology accounts for inter-period cash flows by comparing the net gain in value with the average market value over the time interval. Average capital allows for the timing of each external flow.

**Internal Rate of Return** - The IRR (also referred to as the dollar-weighted return) differs from the TWR in that it calculates the return rate at which the present value of cash outflows equals the present value of cash inflows. Its distinguishing characteristic is that this methodology is generally viewed to better accommodate the extreme cash flows and changes in market values that often accompany private equity or private real estate investments.

**Non-Marketable Securities Overview**

As of December 31, 2017

Account Type	Account	Vintage Year	Commitment	Cumulative Takedown	Cumulative Distributions	Value (RV)	Total Value (RV + Dist)	Unfunded Commitment	Takedown (takedowns / commit)	IRR
Real Estate	Morrison Street Fund V, LP	2014	\$6,080,000	\$5,960,493	\$2,566,925	\$5,261,746	\$7,828,671	\$119,507	98.03%	12.86

**Time and Dollar Weighted Returns**

Morrison Street Fund V, LP	Q4-17	YTD	1 Yr	2 Yrs	3 Yrs
Time Weighted	3.45%	18.03%	18.03%	14.52%	13.63%
Money Weighted	3.45%	17.74%	17.74%	14.54%	14.16%
NCREIF Property Index	1.80%	6.98%	6.98%	7.47%	9.39%
Morrison Street Fund V, LP	2017	2016	2015	2014	Inception 6/30/14
Time Weighted	18.03%	11.10%	11.89%		11.64%
Money Weighted	17.74%	11.31%	13.31%		12.86%
NCREIF Property Index	6.98%	7.97%	13.33%	11.81%	9.73%

**Time-Weighted Return** - The current reporting system utilizes the Modified Dietz methodology for calculating time-weighted returns. This methodology accounts for inter-period cash flows by comparing the net gain in value with the average market value over the time interval. Average capital allows for the timing of each external flow.

**Internal Rate of Return** - The IRR (also referred to as the dollar-weighted return) differs from the TWR in that it calculates the return rate at which the present value of cash outflows equals the present value of cash inflows. Its distinguishing characteristic is that this methodology is generally viewed to better accommodate the extreme cash flows and changes in market values that often accompany private equity or private real estate investments.

**Non-Marketable Securities Overview**

As of December 31, 2017

Account Type	Account	Vintage Year	Commitment	Cumulative Takedown	Cumulative Distributions	Value (RV)	Total Value (RV + Dist)	Unfunded Commitment	Takedown (takedowns / commit)	IRR
Special Situations	Orbimed Royalty Opportunities	2011	\$5,000,000	\$5,000,000	\$2,785,890	\$2,686,206	\$5,472,096	\$0	100.00%	3.09

**Time and Dollar Weighted Returns**

	Q4-17	YTD	1 Yr	2 Yrs	3 Yrs
Orbimed Royalty Opportunities					
Time Weighted	-0.74%	4.47%	4.47%	-9.08%	-3.13%
Money Weighted	-0.74%	4.57%	4.57%	-7.97%	-1.07%
HFRI Fund of Funds Composite Index	1.99%	7.69%	7.69%	4.04%	2.58%
S&P 500	6.64%	21.83%	21.83%	16.79%	11.41%

	2017	2016	2015	2014	Inception 9/1/11
Orbimed Royalty Opportunities					
Time Weighted	4.47%	-20.87%	9.95%	9.99%	4.56%
Money Weighted	4.57%	-17.15%	9.99%	10.00%	3.09%
HFRI Fund of Funds Composite Index	7.69%	0.51%	-0.27%	3.36%	3.36%
S&P 500	21.83%	11.96%	1.38%	13.69%	15.64%

**Time-Weighted Return** - The current reporting system utilizes the Modified Dietz methodology for calculating time-weighted returns. This methodology accounts for inter-period cash flows by comparing the net gain in value with the average market value over the time interval. Average capital allows for the timing of each external flow.

**Internal Rate of Return** - The IRR (also referred to as the dollar-weighted return) differs from the TWR in that it calculates the return rate at which the present value of cash outflows equals the present value of cash inflows. Its distinguishing characteristic is that this methodology is generally viewed to better accommodate the extreme cash flows and changes in market values that often accompany private equity or private real estate investments.

**Non-Marketable Securities Overview**  
As of December 31, 2017

Account Type	Account	Vintage Year	Commitment	Cumulative Takedown	Cumulative Distributions	Value (RV)	Total Value (RV + Dist)	Unfunded Commitment	Takedown (takedowns / commit)	IRR
Absolute Return	Orbimed Royalty Opportunities II	2015	\$5,000,000	\$3,142,500	\$729,853	\$2,699,555	\$3,429,408	\$1,857,500	62.85%	9.49

**Time and Dollar Weighted Returns**

	Q4-17	YTD	1 Yr	2 Yrs	3 Yrs
Orbimed Royalty Opportunities II					
Time Weighted	3.33%	12.28%	12.28%	6.28%	
Money Weighted	3.28%	12.85%	12.85%	8.53%	
HFRI Fund of Funds Composite Index	1.99%	7.69%	7.69%	4.04%	2.58%
S&P 500	6.64%	21.83%	21.83%	16.79%	11.41%

	2017	2016	2015	2014	Inception 4/1/15
Orbimed Royalty Opportunities II					
Time Weighted	12.28%	0.60%			10.50%
Money Weighted	12.85%	-0.05%			9.49%
HFRI Fund of Funds Composite Index	7.69%	0.51%	-0.27%	3.36%	1.90%
S&P 500	21.83%	11.96%	1.38%	13.69%	12.12%

**Time-Weighted Return** - The current reporting system utilizes the Modified Dietz methodology for calculating time-weighted returns. This methodology accounts for inter-period cash flows by comparing the net gain in value with the average market value over the time interval. Average capital allows for the timing of each external flow.

**Internal Rate of Return** - The IRR (also referred to as the dollar-weighted return) differs from the TWR in that it calculates the return rate at which the present value of cash outflows equals the present value of cash inflows. Its distinguishing characteristic is that this methodology is generally viewed to better accommodate the extreme cash flows and changes in market values that often accompany private equity or private real estate investments.

**Non-Marketable Securities Overview**

As of December 31, 2017

Account Type	Account	Vintage Year	Commitment	Cumulative Takedown	Cumulative Distributions	Value (RV)	Total Value (RV + Dist)	Unfunded Commitment	Takedown (takedowns / commit)	IRR
Real Estate	Morrison Street Debt Opportunities Fd LP	2017	\$5,000,000	\$3,872,903	\$290,746	\$3,751,854	\$4,042,600	\$1,127,097	77.46%	5.28

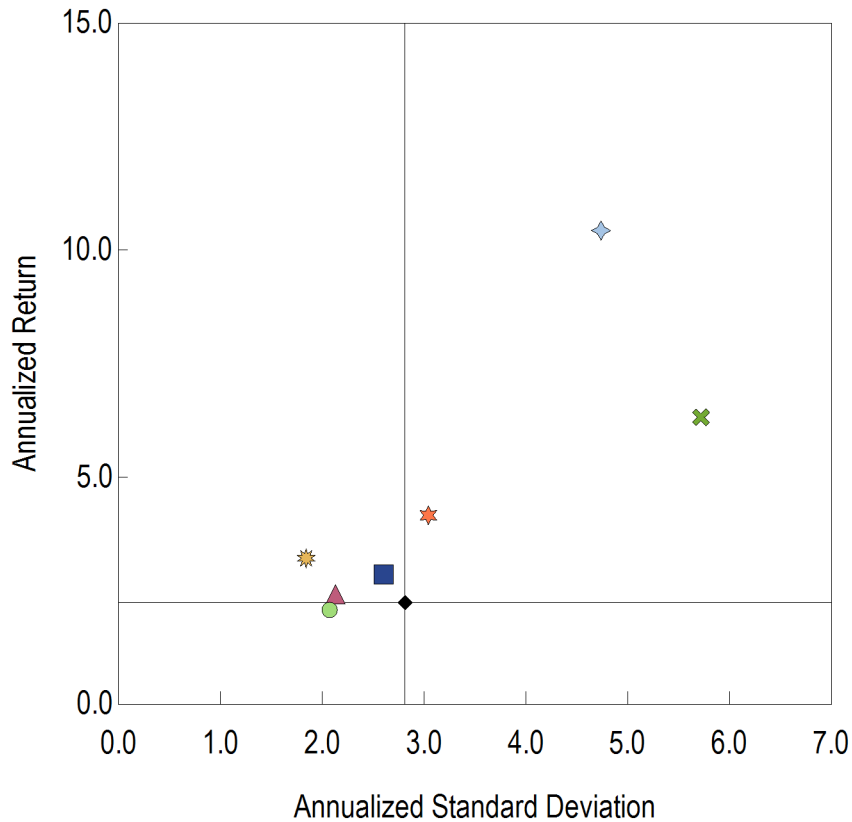
**Time and Dollar Weighted Returns**

Morrison Street Debt Opportunities Fd LP	Q4-17	YTD	1 Yr	2 Yrs	3 Yrs
Time Weighted	2.06%	4.47%	4.47%		
Money Weighted	2.06%	5.28%	5.28%		
NCREIF - ODCE NET	1.86%	6.67%	6.67%	7.23%	9.41%
Morrison Street Debt Opportunities Fd LP	2017	2016	2015	2014	Inception 12/31/16
Time Weighted	4.47%				4.47%
Money Weighted	5.28%				5.28%
NCREIF - ODCE NET	6.67%	7.79%	13.91%	11.46%	6.67%

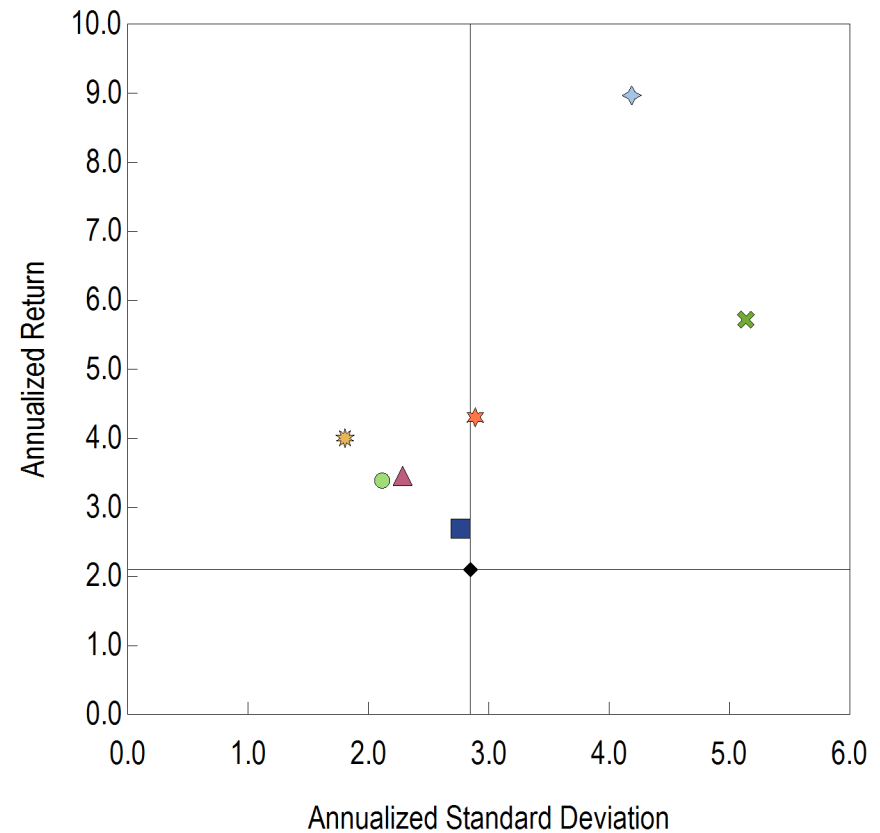
**Time-Weighted Return** - The current reporting system utilizes the Modified Dietz methodology for calculating time-weighted returns. This methodology accounts for inter-period cash flows by comparing the net gain in value with the average market value over the time interval. Average capital allows for the timing of each external flow.

**Internal Rate of Return** - The IRR (also referred to as the dollar-weighted return) differs from the TWR in that it calculates the return rate at which the present value of cash outflows equals the present value of cash inflows. Its distinguishing characteristic is that this methodology is generally viewed to better accommodate the extreme cash flows and changes in market values that often accompany private equity or private real estate investments.

Annualized Return vs. Annualized Standard Deviation  
3 Years Ending December 31, 2017



Annualized Return vs. Annualized Standard Deviation  
5 Years Ending December 31, 2017

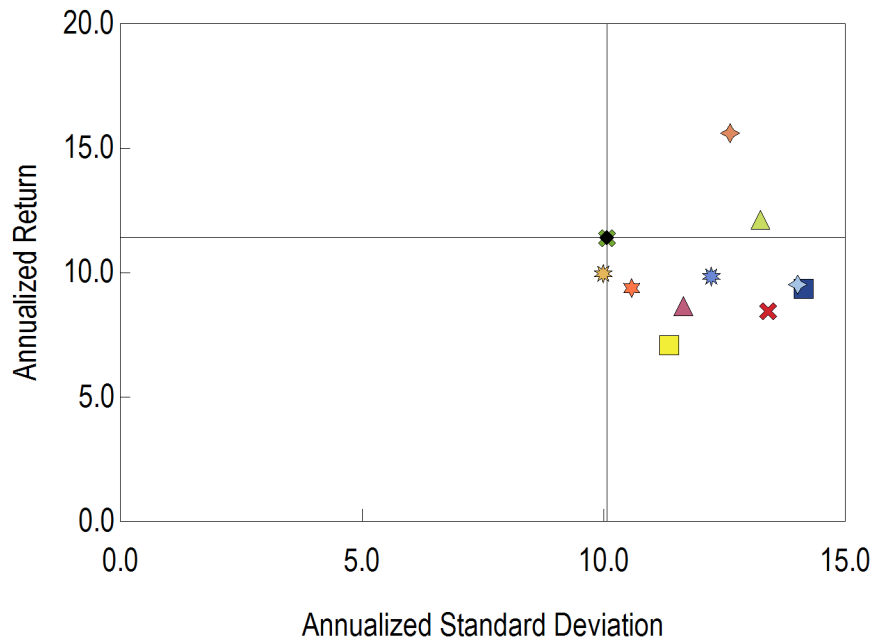


- Sterling Core Bond
- ✕ Hotchkis & Wiley High Yield
- ✱ Post Lmtd Term High Yield
- ▲ Rimrock Low Volatility Offshore
- ◆ Castine Partners
- ★ Polar Altairis Offshore
- ◆ BbgBarc US Aggregate TR
- HFRI FOF: Conservative Index

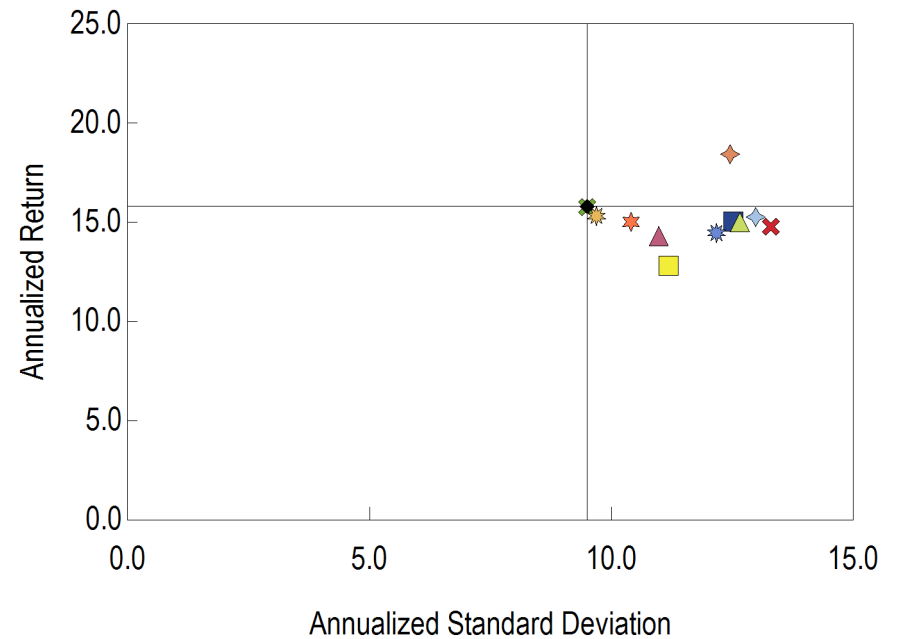
- Sterling Core Bond
- ✕ Hotchkis & Wiley High Yield
- ✱ Post Lmtd Term High Yield
- ▲ Rimrock Low Volatility Offshore
- ◆ Castine Partners
- ★ Polar Altairis Offshore
- ◆ BbgBarc US Aggregate TR
- HFRI FOF: Conservative Index



Annualized Return vs. Annualized Standard Deviation  
3 Years Ending December 31, 2017



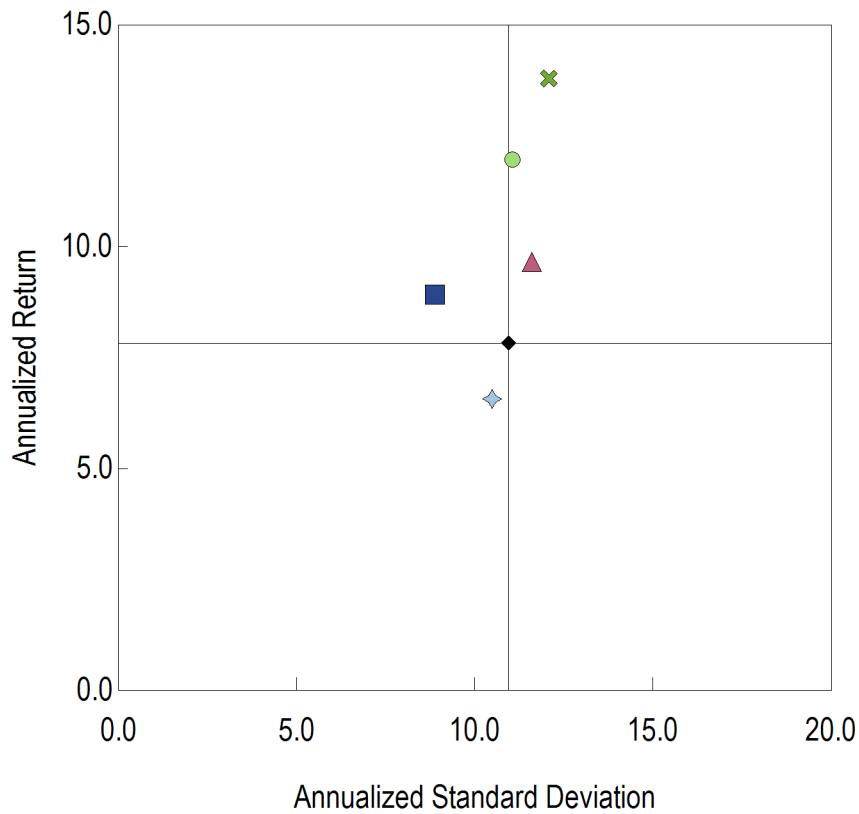
Annualized Return vs. Annualized Standard Deviation  
5 Years Ending December 31, 2017



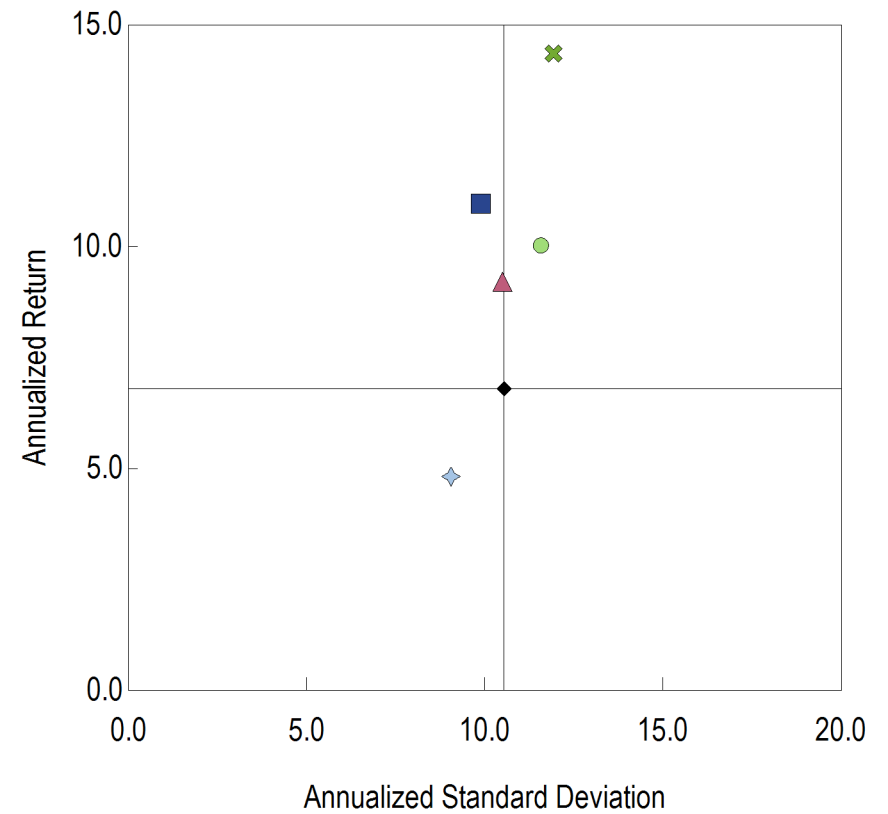
- Hotchkis & Wiley Diversified Value I
- ✕ Vanguard Institutional Index
- ⊛ MFS Blended Research Core
- ▲ Jackson Square Large Cap Growth Eq
- ◆ Sterling Mid Cap Value
- ★ Vanguard Mid Cap Index
- Vanguard Mid Cap Growth
- ✕ Frontier Phocas Small Cap Value I
- ⊛ Vanguard Small Cap Index
- ▲ Champlain Small Cap
- ◆ Bridge City Small Growth
- ◆ S&P 500

- Hotchkis & Wiley Diversified Value I
- ✕ Vanguard Institutional Index
- ⊛ MFS Blended Research Core
- ▲ Jackson Square Large Cap Growth Eq
- ◆ Sterling Mid Cap Value
- ★ Vanguard Mid Cap Index
- Vanguard Mid Cap Growth
- ✕ Frontier Phocas Small Cap Value I
- ⊛ Vanguard Small Cap Index
- ▲ Champlain Small Cap
- ◆ Bridge City Small Growth
- ◆ S&P 500

Annualized Return vs. Annualized Standard Deviation  
3 Years Ending December 31, 2017



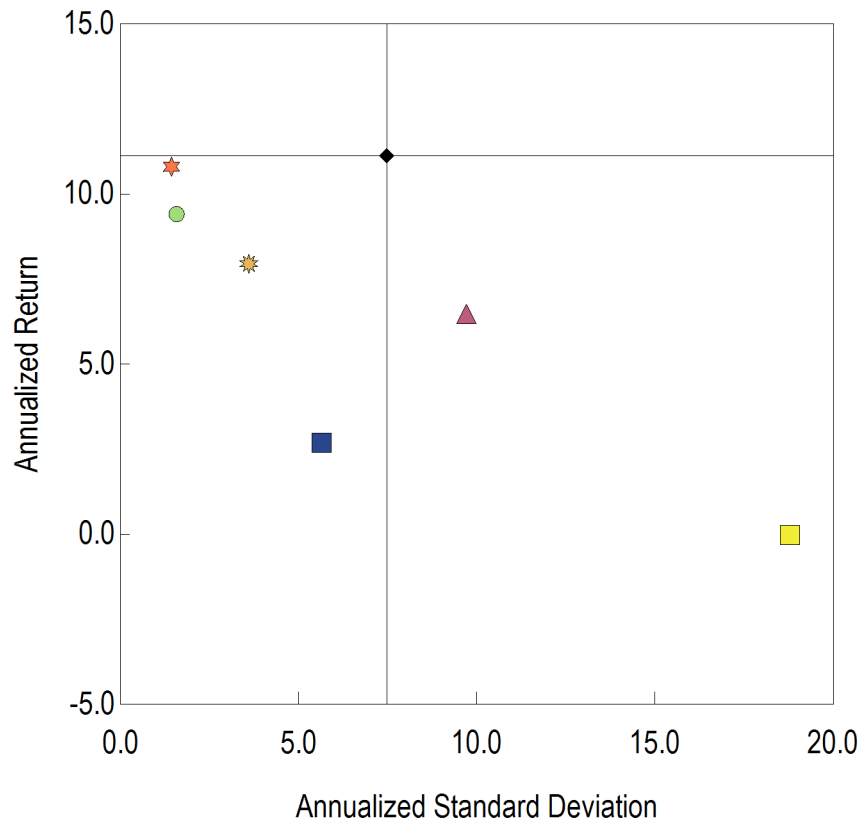
Annualized Return vs. Annualized Standard Deviation  
5 Years Ending December 31, 2017



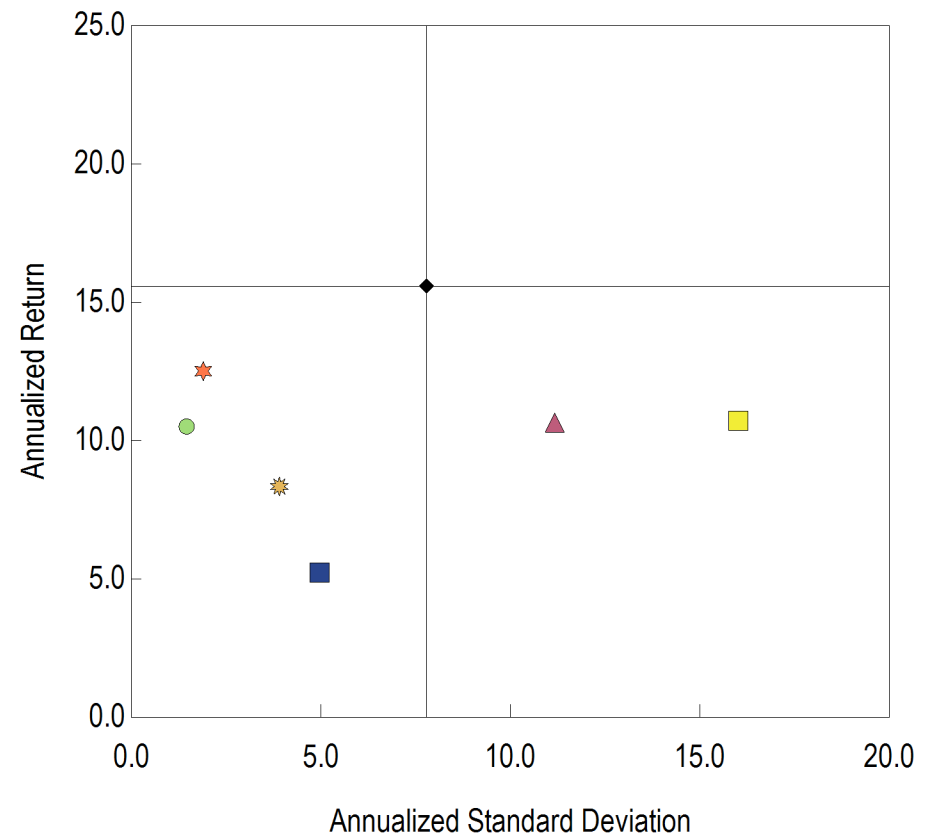
- Artisan International Value
- ✕ Victory Trivalent International Small Cap
- ▲ EuroPacific Growth R6
- ◆ Berens Global Value Ltd
- ◆ MSCI ACWI ex USA
- MSCI ACWI xUS Small (net)

- Artisan International Value
- ✕ Victory Trivalent International Small Cap
- ▲ EuroPacific Growth R6
- ◆ Berens Global Value Ltd
- ◆ MSCI ACWI ex USA
- MSCI ACWI xUS Small (net)

Annualized Return vs. Annualized Standard Deviation  
3 Years Ending December 31, 2017



Annualized Return vs. Annualized Standard Deviation  
5 Years Ending December 31, 2017



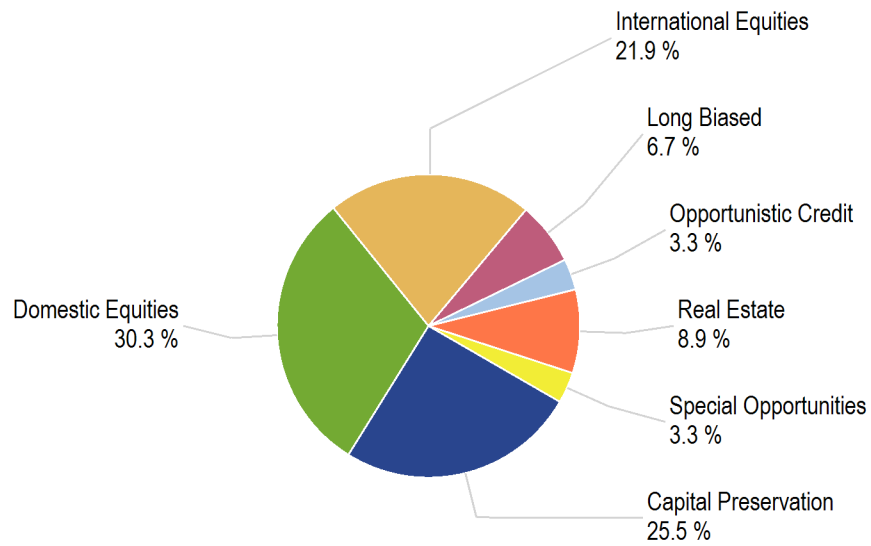
- Weatherlow Offshore
- ⚡ Beach Point Select Fund
- ▲ SERS Principal Global Investors REIT
- ★ Prime Property LLC
- OrbiMed Partners II
- ◆ Russell 3000
- NCREIF - ODCE NET

- Weatherlow Offshore
- ⚡ Beach Point Select Fund
- ▲ SERS Principal Global Investors REIT
- ★ Prime Property LLC
- OrbiMed Partners II
- ◆ Russell 3000
- NCREIF - ODCE NET

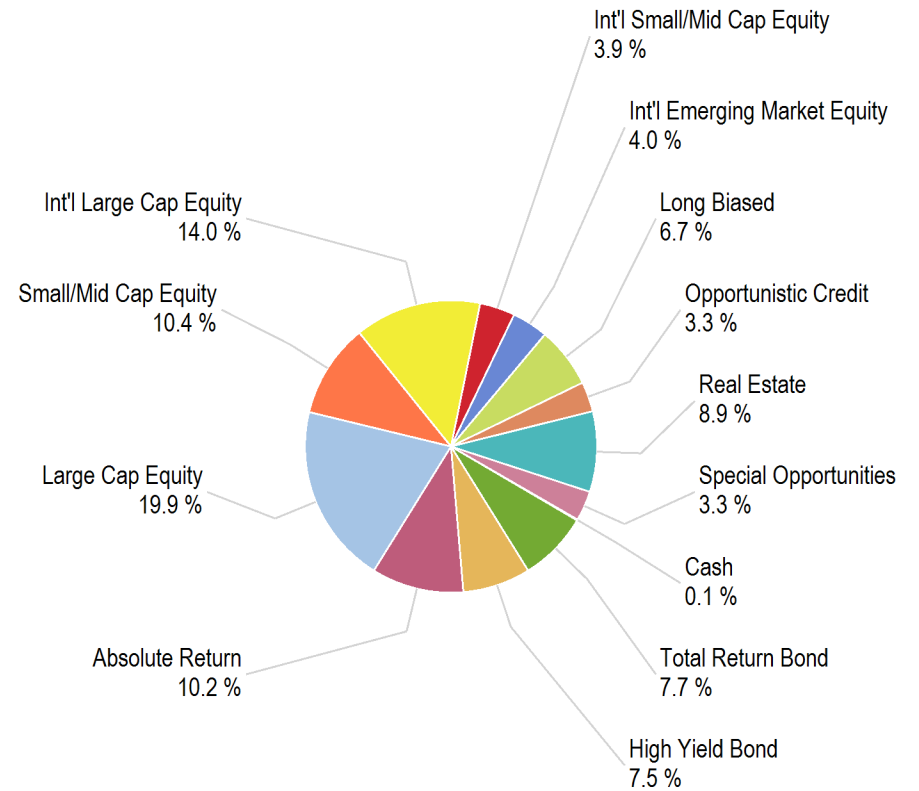
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# Section 3

Current Allocation



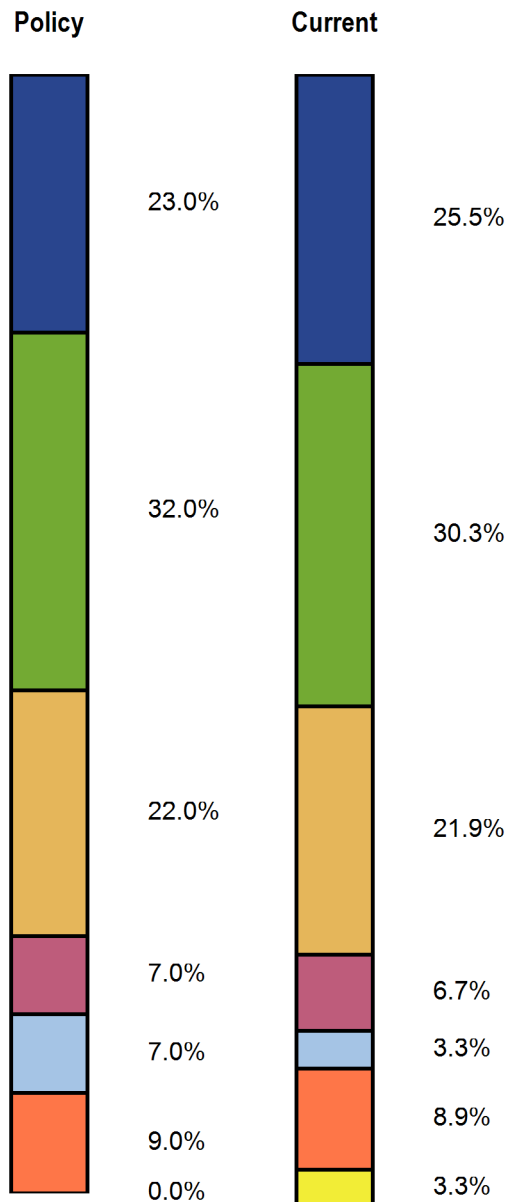
Current Implementation Allocation



# Spokane Employees' Retirement System

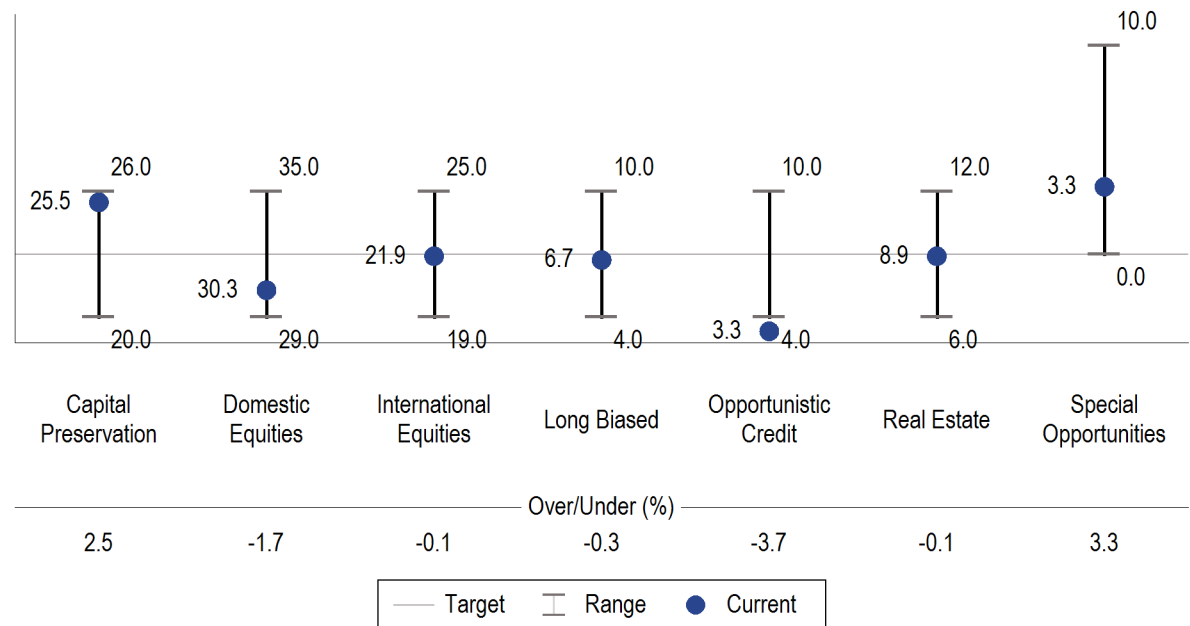
As of December 31, 2017

## Asset Allocation vs. Target



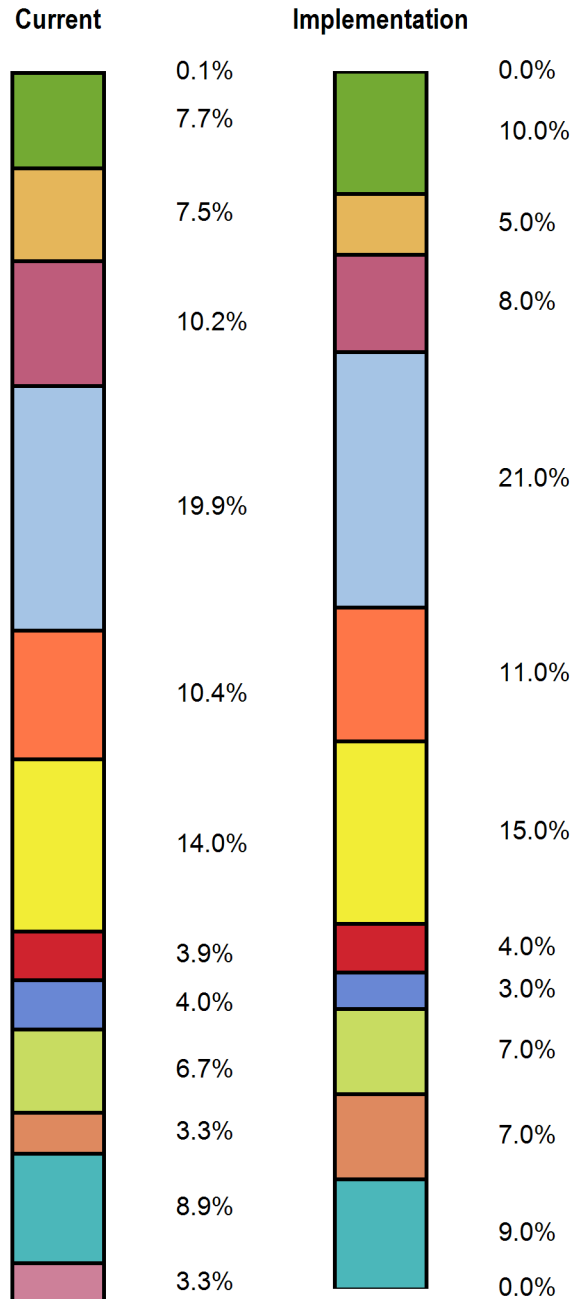
	Inv Pol Stmt	%	Inv Pol Stmt Range	Current	%	Difference	%
Capital Preservation	\$71,029,520	23.0%	20.0% - 26.0%	\$78,776,216	25.5%	\$7,746,696	2.5%
Domestic Equities	\$98,823,679	32.0%	29.0% - 35.0%	\$93,576,829	30.3%	-\$5,246,850	-1.7%
International Equities	\$67,941,280	22.0%	19.0% - 25.0%	\$67,721,838	21.9%	-\$219,441	-0.1%
Long Biased	\$21,617,680	7.0%	4.0% - 10.0%	\$20,840,915	6.7%	-\$776,765	-0.3%
Opportunistic Credit	\$21,617,680	7.0%	4.0% - 10.0%	\$10,294,191	3.3%	-\$11,323,489	-3.7%
Real Estate	\$27,794,160	9.0%	6.0% - 12.0%	\$27,572,346	8.9%	-\$221,814	-0.1%
Special Opportunities	\$0	0.0%	0.0% - 10.0%	\$10,041,663	3.3%	\$10,041,663	3.3%
<b>Total</b>	<b>\$308,823,998</b>	<b>100.0%</b>		<b>\$308,823,998</b>	<b>100.0%</b>		

## Actual vs. Target



# Spokane Employees' Retirement System

As of December 31, 2017



## Asset Allocation on December 31, 2017

	Actual	Actual	Target
Cash	\$229,165	0.1%	0.0%
Total Return Bond	\$23,798,158	7.7%	10.0%
High Yield Bond	\$23,296,834	7.5%	5.0%
Absolute Return	\$31,452,059	10.2%	8.0%
Large Cap Equity	\$61,315,869	19.9%	21.0%
Small/Mid Cap Equity	\$32,260,961	10.4%	11.0%
Int'l Large Cap Equity	\$43,253,201	14.0%	15.0%
Int'l Small/Mid Cap Equity	\$12,104,720	3.9%	4.0%
Int'l Emerging Market Equity	\$12,363,917	4.0%	3.0%
Long Biased	\$20,840,915	6.7%	7.0%
Opportunistic Credit	\$10,294,191	3.3%	7.0%
Real Estate	\$27,572,346	8.9%	9.0%
Special Opportunities	\$10,041,663	3.3%	0.0%
<b>Total</b>	<b>\$308,823,998</b>	<b>100.0%</b>	<b>100.0%</b>



# Spokane Employees' Retirement System

As of December 31, 2017

## Asset Allocation vs. Target

	Target Allocation	%	Target Allocation Range	Current	%	Difference	%	Within Range
<b>Capital Preservation</b>	<b>\$71,029,520</b>	<b>23.0%</b>	<b>20.0% - 26.0%</b>	<b>\$78,776,216</b>	<b>25.5%</b>	<b>\$7,746,696</b>	<b>2.5%</b>	<b>Yes</b>
Cash	\$0	0.0%	0.0% - 2.0%	\$229,165	0.1%	\$229,165	0.1%	Yes
Fidelity Instl Govt Money Market				\$229,165	0.1%			
<b>Total Return Bond</b>	<b>\$30,882,400</b>	<b>10.0%</b>	<b>8.0% - 12.0%</b>	<b>\$23,798,158</b>	<b>7.7%</b>	<b>-\$7,084,242</b>	<b>-2.3%</b>	<b>No</b>
Sterling Core Bond				\$23,798,158	7.7%			
<b>High Yield Bond</b>	<b>\$15,441,200</b>	<b>5.0%</b>	<b>3.0% - 7.0%</b>	<b>\$23,296,834</b>	<b>7.5%</b>	<b>\$7,855,634</b>	<b>2.5%</b>	<b>No</b>
Hotchkis & Wiley High Yield				\$23,296,834	7.5%			
<b>Absolute Return</b>	<b>\$24,705,920</b>	<b>8.0%</b>	<b>6.0% - 10.0%</b>	<b>\$31,452,059</b>	<b>10.2%</b>	<b>\$6,746,139</b>	<b>2.2%</b>	<b>No</b>
Polar Long/Short Fund				\$6,634,594	2.1%			
Post Lmted Term High Yield				\$6,003,233	1.9%			
Rimrock Low Volatility Offshore				\$9,671,706	3.1%			
Castine Partners				\$7,752,590	2.5%			
American Beacon Flexible Bond				\$1,389,936	0.5%			
<b>Domestic Equities</b>	<b>\$98,823,679</b>	<b>32.0%</b>	<b>29.0% - 35.0%</b>	<b>\$93,576,829</b>	<b>30.3%</b>	<b>-\$5,246,850</b>	<b>-1.7%</b>	<b>Yes</b>
Large Cap Equity	\$64,853,040	21.0%	19.0% - 23.0%	\$61,315,869	19.9%	-\$3,537,171	-1.1%	Yes
Hotchkis & Wiley Div Value I				\$16,510,608	5.3%			
Vanguard Institutional Index				\$10,612,535	3.4%			
MFS Blended Research Core				\$18,144,669	5.9%			
Jackson Square Large-Cap Growth Equity				\$16,048,057	5.2%			

## Spokane Employees' Retirement System

As of December 31, 2017

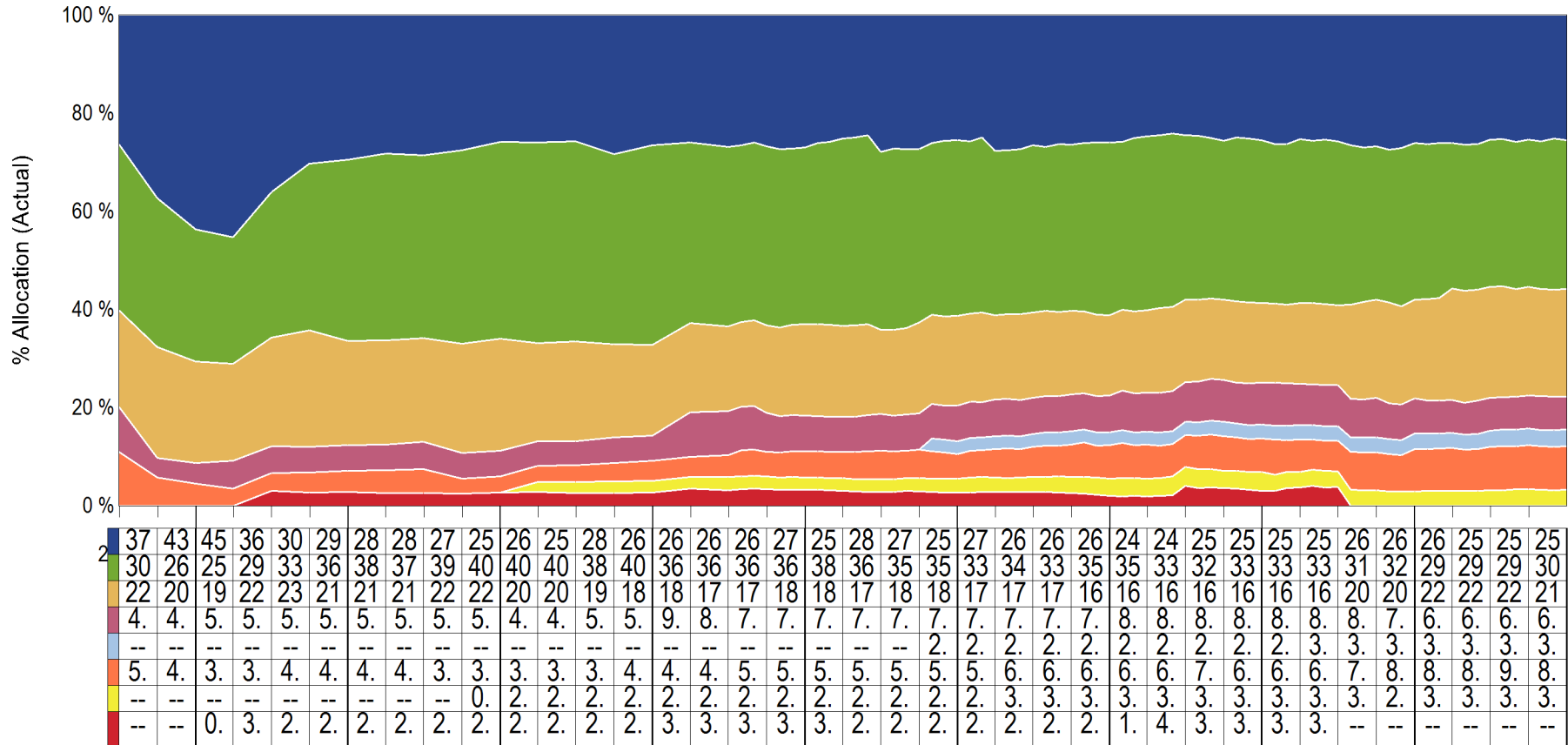
	Target Allocation	%	Target Allocation Range	Current	%	Difference	%	Within Range
<b>Small/Mid Cap Equity</b>	<b>\$33,970,640</b>	<b>11.0%</b>	<b>9.0% - 13.0%</b>	<b>\$32,260,961</b>	<b>10.4%</b>	<b>-\$1,709,679</b>	<b>-0.6%</b>	<b>Yes</b>
Sterling Mid Cap Value				\$6,152,998	2.0%			
Vanguard Mid Cap Index				\$3,932,311	1.3%			
Vanguard Mid Cap Growth				\$4,832,653	1.6%			
Frontier Sm Cap Value I				\$4,423,145	1.4%			
Vanguard Small Cap Index				\$1,054,555	0.3%			
Bridge City Small Growth				\$6,204,281	2.0%			
Champlain Small Cap				\$5,661,018	1.8%			
<b>International Equities</b>	<b>\$67,941,280</b>	<b>22.0%</b>	<b>19.0% - 25.0%</b>	<b>\$67,721,838</b>	<b>21.9%</b>	<b>-\$219,441</b>	<b>-0.1%</b>	<b>Yes</b>
Int'l Large Cap Equity	\$46,323,600	15.0%	13.0% - 17.0%	\$43,253,201	14.0%	-\$3,070,399	-1.0%	Yes
EuroPacific Growth R6				\$21,608,849	7.0%			
Artisan Int'l Value				\$21,644,352	7.0%			
Int'l Small/Mid Cap Equity	\$12,352,960	4.0%	2.0% - 6.0%	\$12,104,720	3.9%	-\$248,240	-0.1%	Yes
Victory Trivalent International Small Cap				\$12,104,720	3.9%			
Int'l Emerging Market Equity	\$9,264,720	3.0%	1.0% - 5.0%	\$12,363,917	4.0%	\$3,099,197	1.0%	Yes
Berens Global Value				\$12,363,917	4.0%			
<b>Long Biased</b>	<b>\$21,617,680</b>	<b>7.0%</b>	<b>4.0% - 10.0%</b>	<b>\$20,840,915</b>	<b>6.7%</b>	<b>-\$776,765</b>	<b>-0.3%</b>	<b>Yes</b>
Long Biased	\$21,617,680	7.0%	4.0% - 10.0%	\$20,840,915	6.7%	-\$776,765	-0.3%	Yes
Weatherlow Offshore				\$15,455,154	5.0%			
OrbiMed Royalty Opps II				\$2,699,555	0.9%			
OrbiMed Royalty Opportunities				\$2,686,206	0.9%			
<b>Opportunistic Credit</b>	<b>\$21,617,680</b>	<b>7.0%</b>	<b>4.0% - 10.0%</b>	<b>\$10,294,191</b>	<b>3.3%</b>	<b>-\$11,323,489</b>	<b>-3.7%</b>	<b>No</b>
Opportunistic Credit	\$21,617,680	7.0%	4.0% - 10.0%	\$10,294,191	3.3%	-\$11,323,489	-3.7%	No
Beach Point Select Fund LP				\$10,294,191	3.3%			

## Spokane Employees' Retirement System

As of December 31, 2017

	Target Allocation	%	Target Allocation Range	Current	%	Difference	%	Within Range
<b>Real Estate</b>	<b>\$27,794,160</b>	<b>9.0%</b>	<b>6.0% - 12.0%</b>	<b>\$27,572,346</b>	<b>8.9%</b>	<b>-\$221,814</b>	<b>-0.1%</b>	<b>Yes</b>
Real Estate	\$27,794,160	9.0%	6.0% - 12.0%	\$27,572,346	8.9%	-\$221,814	-0.1%	Yes
Principal Global Investors REIT				\$10,135,757	3.3%			
Morrison Street Fund IV				\$821,700	0.3%			
Metropolitan Realty V				\$223,118	0.1%			
Morrison Street Fund V				\$5,501,583	1.8%			
Morrison Street Debt Opportunities Fund LP				\$3,839,028	1.2%			
Morgan Stanley Prime Property Fund				\$7,051,160	2.3%			
<b>Special Opportunities</b>	<b>\$0</b>	<b>0.0%</b>	<b>0.0% - 10.0%</b>	<b>\$10,041,663</b>	<b>3.3%</b>	<b>\$10,041,663</b>	<b>3.3%</b>	<b>Yes</b>
Special Opportunities	\$0	0.0%	0.0% - 10.0%	\$10,041,663	3.3%	\$10,041,663	3.3%	Yes
Orbimed Partners II				\$10,041,663	3.3%			
<b>Total</b>	<b>\$308,823,998</b>	<b>100.0%</b>		<b>\$308,823,998</b>	<b>100.0%</b>			

Asset Allocation History  
9 Years 6 Months Ending December 31, 2017

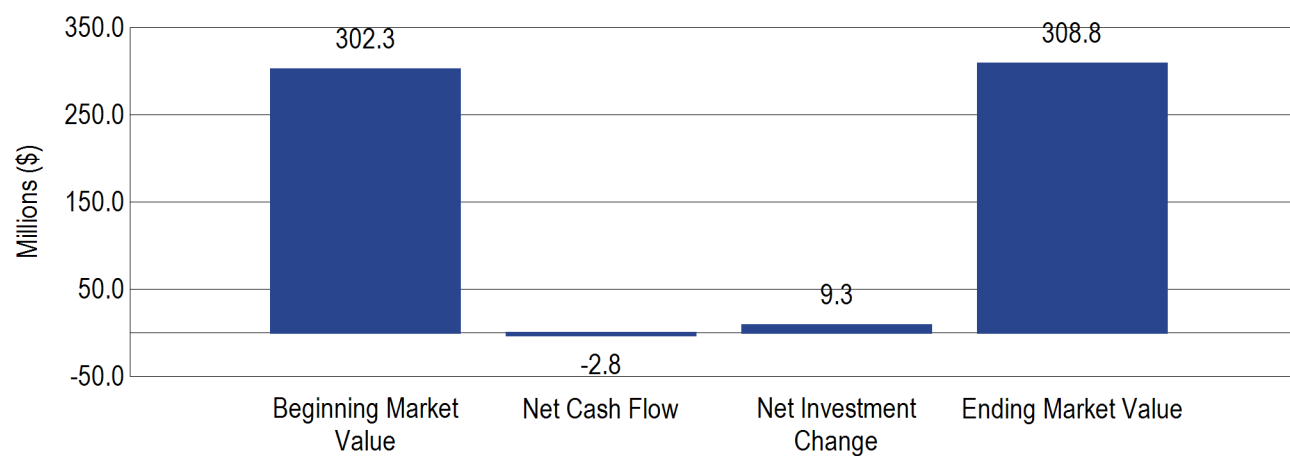


■ Capital Preservation   
 ■ International Equities   
 ■ Opportunistic Credit   
 ■ Special Opportunities   
 ■ Commodities  
■ Domestic Equities   
 ■ Long Biased   
 ■ Real Estate

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# Section 4

**Change in Market Value**  
From October 01, 2017 To December 31, 2017



**Cash Flow Summary**

	Beginning Market Value (\$)	Contributions (\$)	Withdrawals (\$)	Net Cash Flow (\$)	Net Investment Change (\$)	Ending Market Value (\$)
American Beacon Flexible Bond	2,501,005.60	0.00	-1,100,000.00	-1,100,000.00	-11,069.50	1,389,936.10
Artisan Int'l Value	21,932,268.77	0.00	-875,000.00	-875,000.00	587,083.13	21,644,351.90
Beach Point Select Fund LP	10,146,312.00	0.00	0.00	0.00	147,879.00	10,294,191.00
Berens Global Value	12,002,789.49	0.00	0.00	0.00	361,127.52	12,363,917.01
Bridge City Small Growth	5,877,981.59	0.00	0.00	0.00	326,299.56	6,204,281.15
Castine Partners	7,512,482.14	0.00	0.00	0.00	240,107.43	7,752,589.57
Champlain Small Cap	5,556,490.60	0.00	0.00	0.00	104,527.63	5,661,018.23
EuroPacific Growth R6	21,586,112.02	0.00	-875,000.00	-875,000.00	897,737.06	21,608,849.08
Fidelity Instl Govt Money Market	68,687.66	11,883,482.10	-11,724,207.70	159,274.40	1,202.70	229,164.76
Frontier Sm Cap Value I	4,308,079.51	0.00	0.00	0.00	115,065.12	4,423,144.63
Hotchkis & Wiley Div Value I	16,312,661.28	0.00	-800,000.00	-800,000.00	997,946.26	16,510,607.54
Hotchkis & Wiley High Yield	22,173,811.92	900,000.00	0.00	900,000.00	223,021.98	23,296,833.90
Jackson Square Large-Cap Growth Equity	16,130,878.94	0.00	-600,000.00	-600,000.00	517,178.10	16,048,057.04

# Spokane Employees' Retirement System

As of December 31, 2017

	Beginning Market Value (\$)	Contributions (\$)	Withdrawals (\$)	Net Cash Flow (\$)	Net Investment Change (\$)	Ending Market Value (\$)
Metropolitan Realty V	248,046.58	0.00	-23,934.93	-23,934.93	-994.09	223,117.56
MFS Blended Research Core	16,985,078.27	0.00	0.00	0.00	1,159,590.31	18,144,668.58
Morgan Stanley Prime Property Fund	4,666,674.85	2,333,333.00	-45,999.29	2,287,333.71	97,151.79	7,051,160.35
Morrison Street Debt Opportunities Fund LP	3,823,627.00	0.00	-62,000.90	-62,000.90	77,401.95	3,839,028.05
Morrison Street Fund IV	917,423.40	0.00	-104,632.42	-104,632.42	8,909.02	821,700.00
Morrison Street Fund V	5,396,914.81	0.00	-132,085.68	-132,085.68	236,753.57	5,501,582.70
Orbimed Partners II	10,385,689.00	0.00	0.00	0.00	-344,026.00	10,041,663.00
OrbiMed Royalty Opportunities	2,714,472.00	0.00	-8,310.17	-8,310.17	-19,955.83	2,686,206.00
OrbiMed Royalty Opps II	2,528,494.00	350,000.00	-267,857.14	82,142.86	88,918.14	2,699,555.00
Polar Long/Short Fund	6,470,112.24	0.00	0.00	0.00	164,481.89	6,634,594.13
Post Lmtd Term High Yield	6,010,148.59	0.00	0.00	0.00	-6,915.82	6,003,232.77
Principal Global Investors REIT	12,035,256.24	0.00	-2,300,000.00	-2,300,000.00	400,500.96	10,135,757.20
Rimrock Low Volatility Offshore	9,648,901.28	0.00	0.00	0.00	22,805.09	9,671,706.37
Sterling Core Bond	22,639,719.61	1,000,000.00	0.00	1,000,000.00	158,438.42	23,798,158.03
Sterling Mid Cap Value	5,830,426.11	0.00	0.00	0.00	322,572.02	6,152,998.13
Vanguard Institutional Index	10,232,223.50	0.00	-300,000.00	-300,000.00	680,311.84	10,612,535.34
Vanguard Mid Cap Growth	4,560,306.25	0.00	0.00	0.00	272,346.91	4,832,653.16
Vanguard Mid Cap Index	3,722,258.89	0.00	0.00	0.00	210,052.10	3,932,310.99
Vanguard Small Cap Index	1,003,355.16	0.00	0.00	0.00	51,199.39	1,054,554.55
Victory Trivalent International Small Cap	11,324,654.69	0.00	0.00	0.00	780,065.65	12,104,720.34
Weatherlow Offshore	15,070,383.38	0.00	0.00	0.00	384,770.34	15,455,153.72
<b>Total</b>	<b>302,323,727.37</b>	<b>16,466,815.10</b>	<b>-19,219,028.23</b>	<b>-2,752,213.13</b>	<b>9,252,483.64</b>	<b>308,823,997.88</b>



# Section 5

## Statistic Definitions

<b>Annualized Standard Deviation</b>	A statistic used to measure the portfolio's volatility. A statistical measure of the dispersion of returns for a given security or market index. Volatility can either be measured by using the standard deviation or variance between returns from that same security or market index. Commonly, the higher the volatility, the riskier the security.
<b>Downside / Upside Deviation</b>	Standard deviation makes no distinction between the "good" or upside deviations, and the "bad" or downside deviations. Both upside and downside deviations have an equal influence on the calculation of standard deviation. Downside deviation seeks to remedy this by ignoring all of the "good" observations and by instead focusing on the "bad" returns. Conversely, Upside deviation ignores all of the "bad" observations and instead focuses on the "good" returns.
<b>Alpha</b>	Measures the relationship between the portfolio performance and the performance of another or benchmark index and equals the excess return while the other portfolio or benchmark index is zero.
<b>Beta</b>	Measures the systematic market risk and is equal to the change in portfolio performance in relation to the change in portfolio performance/index performance.
<b>R-Squared</b>	The "goodness of fit" to a benchmark. The percentage of a manager's return that is "explained" by the benchmark.
<b>Tracking Error</b>	Tracking Error, also known as residual risk, is a measure of the degree to which a portfolio tracks its benchmark. It is also a measure of consistency of excess returns. Tracking Error is computed as the annualized standard deviation of the difference between a portfolio's return and that of its benchmark.
<b>Information Ratio</b>	The Information Ratio is a measure of the risk-adjusted return of a financial security (or asset or portfolio). It is defined as expected active return divided by tracking error, where active return is the excess return and tracking error is the annualized standard deviation of the excess returns.
<b>Sharpe Ratio</b>	Sharpe Ratio is a measure of the excess return per unit of risk in an investment asset or a trading strategy. A higher Sharpe ratio indicates you are receiving more return for the level of risk taken.
<b>Downside Capture Ratio</b>	Measures manager's performance in down markets relative to a particular benchmark. A down-market is defined as those periods (months or quarters) in which market return is < 0.
<b>Upside Capture Ratio</b>	Measures manager's performance in up markets relative to a particular benchmark. An up-market is defined as those periods (months or quarters) in which market return is > 0.
<b>Annualized Excess Return over Risk Free</b>	Difference between the portfolio and the risk-free benchmark's return, annualized.
<b>Annualized Excess Return</b>	Difference between the portfolio and the benchmark's return, annualized.
<b>Correlation</b>	A statistic that measures the degree to which two data series move in relation to each other. The higher the correlation the more the data series move in tandem. Correlation ranges from +1 (perfect correlation), to -1 (perfect negative correlation), with zero indicating no correlation at all.