Investment Performance Review Period Ending June 30, 2018

# **Austin Police**

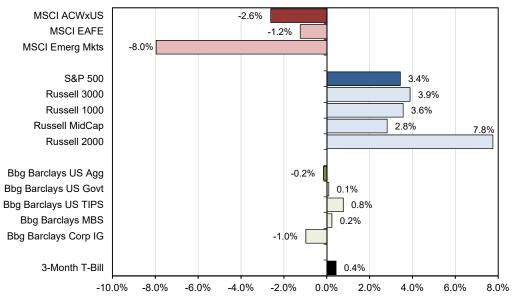


**2nd Quarter 2018 Market Environment** 

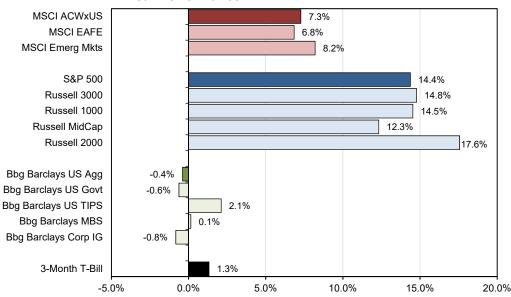


- Market returns were mixed across major equity and fixed income indices for the 2nd quarter of 2018. Broad domestic equity indices had healthy gains as supportive economic and corporate earnings data, helped by a fiscal stimulus tailwind resulting from the Republican Party led tax reform passed in late 2017, continued to push domestic stocks higher. International indices did not fare as well during the period, posting negative returns in US dollar (USD) terms, as markets were hurt by relatively soft economic data, geopolitical concerns and a strengthening USD. Fixed income returns were somewhat flat for the quarter with the various sector segments producing minor gains or losses. Despite the Federal Reserve's (Fed) ongoing tightening of monetary policy and the potential for global trade disruptions resulting from Trump administration protectionist trade policies, economic momentum in the US continued to fuel investor demand for domestic equities. The US stock market represented by the Russell 3000 Index returned 3.9% and 14.8% for the quarter and 1-year period respectively.
- International equity posted negative returns for the quarter with emerging markets stocks falling the greatest degree. The developed market MSCI EAFE Index lost -1.2% as macroeconomic data abroad, while still signaling a continuation in global growth, appeared to slow throughout the quarter. International markets were also affected by investor concerns surrounding ongoing political developments in various countries and continued uncertainty around the outlook for global trade relations. International market returns also faced a currency effect headwind as the USD appreciated against most other currencies during the period. This combination of factors had the greatest influence on emerging market equities with the MSCI Emerging Markets Index posting a sharp decline of -8.0%. One-year returns remain broadly positive with the MSCI EAFE and MSCI Emerging Markets indices returning 6.8% and 8.2% respectively.
- Interest rates on the US Treasury Yield Curve rose across all maturities during the 2nd quarter. The increase in interest rates was most pronounced in short-term maturities resulting in further flattening of the yield curve. The relatively large increase at the short-end of the curve was partially due to the Feds decision to tighten monetary policy by increasing short-term interest rates for the second time this year during their June meeting. Also significant was the change in the Fed's forecasted schedule for interest rate increases, which now projects two potential additional rate increases in 2018, where it had previously forecast just one. The broad market Bloomberg Barclays US Aggregate Index was modestly negative for both the 2nd quarter and the 1-year time period, returning -0.2% and -0.4% respectively. Corporate issues were the worst performing investment grade sector during the quarter, returning -1.0% as credit spreads continued to widen through 2018.

# **Quarter Performance**

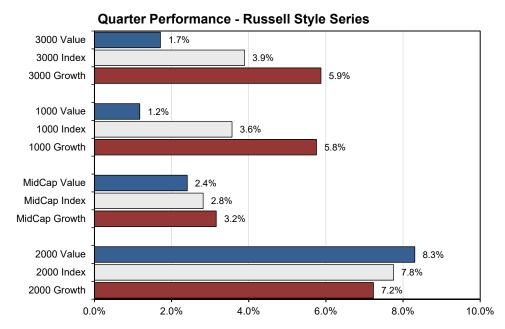


# 1-Year Performance

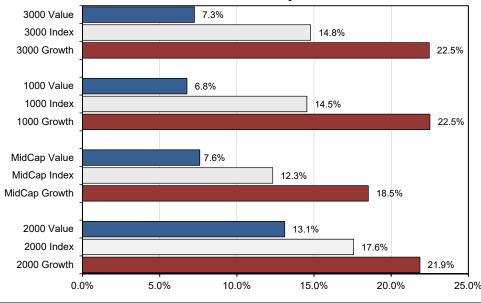




- US equity index returns were positive across the style and capitalization spectrum during the 2nd quarter of 2018. Markets were encouraged by the ongoing strength in US economic data and corporate earnings. Positive data releases in unemployment, retail sales, consumer consumption, GDP and investor sentiment highlighted the continued health of the US economy. Additionally, Q1 2018 corporate earnings announced throughout the period grew at an impressive rate as corporate profits were beneficiaries of the late 2017 Republican Party tax reforms. Returns for the period were tempered by global trade uncertainty as tariffs on steel and aluminum imported from Canada, Mexico and the European Union took effect with the possibility of additional tariffs aimed at China and foreign auto producers being considered. The Trump administration also announced the US withdrawal from the Iran nuclear accord, proposing new sanctions, which could disrupt oil markets in the future, and made progress toward a denuclearization deal with North Korea.
- During the quarter, small cap stocks outperformed mid and large cap equities for style and core indices. This is partially due to the increased tax reform benefit small cap companies will receive relative to large caps. Small cap stocks have historically paid higher taxes relative to large cap companies since they typically generate more of their revenue in the US. More globally oriented large caps also faced a considerable headwind from the recent USD strength. Large cap companies generate more revenue outside of the US and an appreciating USD makes US exports more expensive to foreign consumers. The small cap Russell 2000 Index returned 7.8% during the period, while the large cap Russell 1000 Index returned 3.6%. Small caps also outperformed over the 1-year period with the Russell 2000 returning 17.6% over the trailing year while the Russell 1000 posted a return of 14.5%.
- Style index performance was mixed during the quarter with growth companies outperforming in large- and mid-cap, but value stocks outperforming in the small-cap space. The Russell 2000 Value Index was the best performing style index for the period returning a notable 8.3% for the quarter. Returns over the trailing year continue to show significant outperformance of growth indices relative to their value counterparts with the return of the Russell 1000 Growth Index more than tripling the return of the Russell 1000 Value Index. Growth benchmarks benefitted from larger exposures to more cyclical names within the information technology, consumer discretionary, health care and industrials sectors. They also benefitted from underweights to more defensive sectors such as REITs, utilities and telecom.

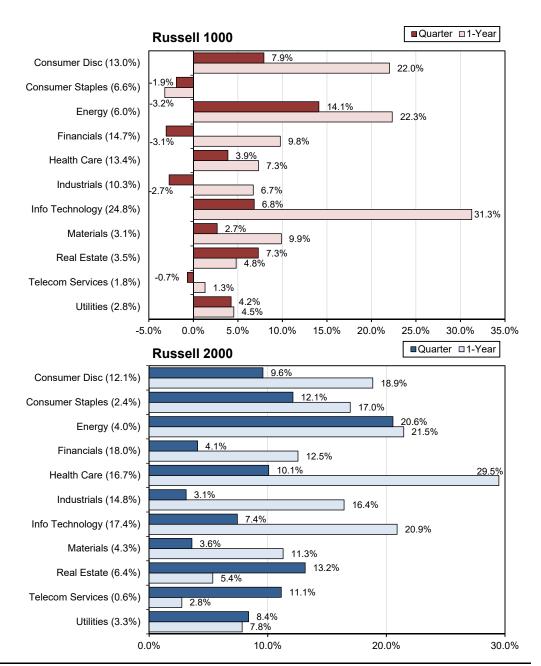


# 1-Year Performance - Russell Style Series





- Sector performance was mixed across large cap sectors for the 2nd quarter of 2018. Seven of eleven sectors had positive returns for the guarter and six of eleven economic sectors outpaced the Russell 1000 Index return. Energy was the best performing sector during the guarter, returning 14.1%, as an OPEC announced increase in crude oil production was overshadowed by supply concerns in Iran, Venezuela and Libya, resulting in considerably higher oil prices. The consumer discretionary sector also performed well on the back of strong retail sales and increased consumer spending, gaining 7.9% for the period. Technology stocks continued their climb, returning 6.8% over the quarter. Technology names now account for nearly 25% of the market cap of the Russell 1000 Index. The largest detractors for the quarter were the financials, industrials and consumer staples sectors which returned -3.1%, -2.7% and -1.9% respectively. Over the trailing 1-year period, technology was the best performing sector by a relatively wide margin returning an impressive 31.3% and the consumer discretionary and energy sectors also posted returns greater than 20%. Ten of eleven large cap economic sectors posted positive returns for the 1-year period with consumer staples being the only sector to post negative performance, returning -3.2%.
- Quarterly results for small cap sectors were higher relative to their large capitalization counterparts. All sectors had positive returns during the period with seven of eleven economic sectors outpacing the Russell 2000 Index return for the guarter. Like the large cap index sector performance, industrials and financials were relative underperformers for the 2nd quarter. Financials were hurt by a flattening yield curve and concerns over global trade weighed on industrials. Quarterly performance on industrials and financials was 3.1% and 4.1% respectively. Energy was the best performing sector in the Russell 2000 as well, returning a notable 20.6%. However, there were several differences, particularly in consumer staples and telecom where there was significant outperformance relative to their large cap counterparts. Small cap sectors beat large cap sectors in those two categorizations by over 10.0% during the quarter. Over the trailing 1-year period, all eleven sectors posted gains. Health care stocks were the best performers within the Russell 2000 for the trailing year returning a solid 29.5%. Energy and technology also posted returns over 20% for the 1-year period.
- Using S&P 500 sector valuations as a proxy for the market, forward P/E ratios for six of the eleven GICS sectors were higher than their long-term averages at quarter-end. Using these historical P/E measures, the utilities, consumer discretionary and real estate sectors appear the most extended. In contrast the telecommunications, technology and health care sectors were trading at a discount to their long-term average P/E ratios.





| Top 10 Weighted Stocks   |  |       |       |                        |  |  |
|--------------------------|--|-------|-------|------------------------|--|--|
| Russell 1000             | 1000 Weight 1-Qtr Return Return Sector |       |       |                        |  |  |
| Apple Inc                | 3.53%                                  | 10.8% | 30.5% | Information Technology |  |  |
| Microsoft Corp           | 2.89%                                  | 8.5%  | 45.8% | Information Technology |  |  |
| Amazon.com Inc           | 2.68%                                  | 17.4% | 75.6% | Consumer Discretionary |  |  |
| Facebook Inc A           | 1.79%                                  | 21.6% | 28.7% | Information Technology |  |  |
| Berkshire Hathaway Inc B | 1.40%                                  | -6.4% | 10.2% | Financials             |  |  |
| JPMorgan Chase & Co      | 1.37%                                  | -4.8% | 16.5% | Financials             |  |  |
| Exxon Mobil Corp         | 1.36%                                  | 12.0% | 6.6%  | Energy                 |  |  |
| Alphabet Inc C           | 1.32%                                  | 8.1%  | 22.8% | Information Technology |  |  |
| Alphabet Inc A           | 1.31%                                  | 8.9%  | 21.5% | Information Technology |  |  |
| Johnson & Johnson        | 1.26%                                  | -4.6% | -5.8% | Health Care            |  |  |

| Top 10 Weighted Stocks |        |                 |                  |                        |
|------------------------|--------|-----------------|------------------|------------------------|
| Russell 2000           | Weight | 1-Qtr<br>Return | 1-Year<br>Return | Sector                 |
| Five Below Inc         | 0.24%  | 33.2%           | 97.9%            | Consumer Discretionary |
| Etsy Inc               | 0.23%  | 50.4%           | 181.3%           | Information Technology |
| Blackbaud Inc          | 0.22%  | 0.8%            | 20.1%            | Information Technology |
| LivaNova PLC           | 0.22%  | 12.8%           | 63.1%            | Health Care            |
| Haemonetics Corp       | 0.22%  | 22.6%           | 127.1%           | Health Care            |
| Entegris Inc           | 0.22%  | -2.4%           | 55.4%            | Information Technology |
| FibroGen Inc           | 0.21%  | 35.5%           | 93.8%            | Health Care            |
| Idacorp Inc            | 0.21%  | 5.2%            | 10.9%            | Utilities              |
| Medidata Solutions Inc | 0.21%  | 28.3%           | 3.0%             | Health Care            |
| Loxo Oncology Inc      | 0.21%  | 50.4%           | 116.3%           | Health Care            |

| Top 10 Performing Stocks (by Quarter) |        |                 |                  |                        |
|---------------------------------------|--------|-----------------|------------------|------------------------|
| Russell 1000                          | Weight | 1-Qtr<br>Return | 1-Year<br>Return | Sector                 |
| Sarepta Therapeutics Inc              | 0.03%  | 78.4%           | 292.1%           | Health Care            |
| Wayfair Inc Class A                   | 0.03%  | 75.9%           | 54.5%            | Consumer Discretionary |
| Chesapeake Energy Corp                | 0.02%  | 73.5%           | 5.4%             | Energy                 |
| Whiting Petroleum Corp                | 0.02%  | 55.8%           | 139.2%           | Energy                 |
| Twitter Inc                           | 0.12%  | 50.5%           | 144.4%           | Information Technology |
| Advanced Micro Devices Inc            | 0.05%  | 49.2%           | 20.1%            | Information Technology |
| Exact Sciences Corp                   | 0.03%  | 48.3%           | 69.0%            | Health Care            |
| Under Armour Inc C                    | 0.02%  | 46.9%           | 4.6%             | Consumer Discretionary |
| Twilio Inc A                          | 0.02%  | 46.7%           | 92.4%            | Information Technology |
| Weatherford International PLC         | 0.01%  | 43.7%           | -15.0%           | Energy                 |
|                                       |        |                 |                  |                        |

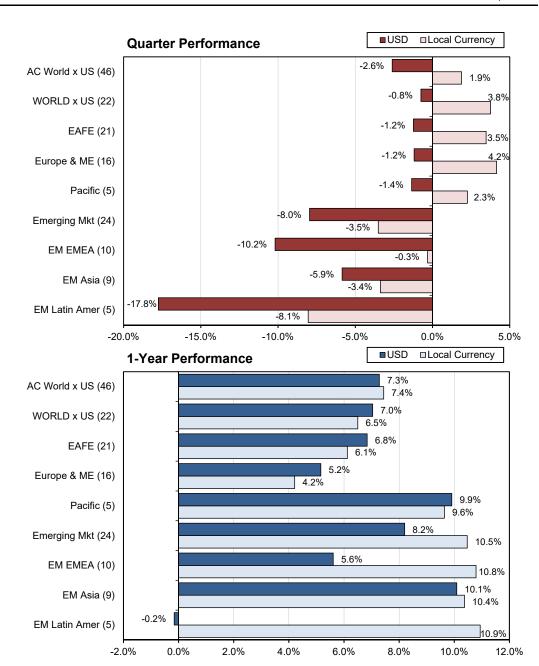
| Top 10 Performing Stocks (by Quarter) |        |                 |                  |                            |
|---------------------------------------|--------|-----------------|------------------|----------------------------|
| Russell 2000                          | Weight | 1-Qtr<br>Return | 1-Year<br>Return | Sector                     |
| Turtle Beach Corp                     | 0.01%  | 746.8%          | 625.7%           | Consumer Discretionary     |
| Solid Biosciences Inc                 | 0.01%  | 375.1%          | N/A              | Health Care                |
| Tandem Diabetes Care Inc              | 0.04%  | 344.0%          | 175.2%           | Health Care                |
| Intelsat SA                           | 0.03%  | 343.1%          | 444.4%           | Telecommunication Services |
| Evolus Inc                            | 0.01%  | 210.0%          | N/A              | Health Care                |
| California Resources Corp             | 0.09%  | 165.0%          | 431.5%           | Energy                     |
| TransEnterix Inc                      | 0.03%  | 156.5%          | 514.1%           | Health Care                |
| Penn Virginia Corp                    | 0.05%  | 142.3%          | 131.0%           | Energy                     |
| Regenxbio Inc                         | 0.09%  | 140.4%          | 263.3%           | Health Care                |
| Madrigal Pharmaceuticals Inc          | 0.07%  | 139.5%          | 1620.1%          | Health Care                |

| Bottom 10 Performing Stocks (by Quarter) |        |                 |                  |                        |  |
|--|--------|-----------------|------------------|------------------------|--|
| Russell 1000                             | Weight | 1-Qtr<br>Return | 1-Year<br>Return | Sector                 |  |
| Nektar Therapeutics Inc                  | 0.03%  | -54.0%          | 149.8%           | Health Care            |  |
| Alkermes PLC                             | 0.02%  | -29.0%          | -29.0%           | Health Care            |  |
| CommScope Holding Co Inc                 | 0.02%  | -26.9%          | -23.2%           | Information Technology |  |
| American Airlines Group Inc              | 0.06%  | -26.8%          | -23.9%           | Industrials            |  |
| Arconic Inc                              | 0.03%  | -25.9%          | -24.1%           | Industrials            |  |
| Copa Holdings SA Class A                 | 0.01%  | -25.9%          | -17.0%           | Industrials            |  |
| First Solar Inc                          | 0.02%  | -25.8%          | 32.0%            | Information Technology |  |
| ManpowerGroup Inc                        | 0.02%  | -24.4%          | -21.5%           | Industrials            |  |
| Switch Inc Class A                       | 0.00%  | -23.3%          | N/A              | Information Technology |  |
| Skechers USA Inc                         | 0.02%  | -22.8%          | 1.7%             | Consumer Discretionary |  |

| Bottom 10 Performing Stocks (by Quarter) |        |                 |                  |                        |
|--|--------|-----------------|------------------|------------------------|
| Russell 2000                             | Weight | 1-Qtr<br>Return | 1-Year<br>Return | Sector                 |
| Arsanis Inc                              | 0.00%  | -84.1%          | N/A              | Health Care            |
| Menlo Therapeutics Inc                   | 0.00%  | -78.4%          | N/A              | Health Care            |
| Jounce Therapeutics Inc                  | 0.01%  | -65.7%          | -45.4%           | Health Care            |
| Prothena Corp PLC                        | 0.03%  | -60.3%          | -73.1%           | Health Care            |
| Biglari Holdings Inc                     | 0.01%  | -55.1%          | -54.1%           | Consumer Discretionary |
| Catalyst Biosciences Inc                 | 0.01%  | -54.8%          | 151.0%           | Health Care            |
| Recro Pharma Inc                         | 0.00%  | -54.4%          | -28.6%           | Health Care            |
| scPharmaceuticals Inc                    | 0.00%  | -54.4%          | N/A              | Health Care            |
| Agenus Inc                               | 0.01%  | -51.8%          | -41.9%           | Health Care            |
| Syndax Pharmaceuticals Inc               | 0.00%  | -50.7%          | -49.7%           | Health Care            |



- Broad international equity returns were mixed for the quarter. Many developed markets were positive in local currency terms, but negative in USD terms whereas emerging markets posted negative returns in both local currency and USD. Performance was largely driven by the same catalysts as the US equity markets with global macroeconomic data remaining generally positive, but returns being tempered by global trade tensions and ongoing political uncertainty. A strengthening USD caused by relatively strong US economic fundamentals and the continued divergence in global monetary policy hurt US investors in international markets. The MSCI ACWI ex US Index gained 1.9% in local currency terms, but lost -2.6% in USD terms during the second quarter. Returns over the 1-year period remain positive in both local currency and USD terms with the MSCI ACWI ex US returning 7.4% and 7.3% respectively.
- Second quarter results for developed market international indices were generally positive in local currency terms with the MSCI EAFE Index returning 3.5%. However, an appreciating USD pushed returns for US investors into negative territory, with the index returning -1.2% in USD terms. Developed markets were pushed higher by broadly positive, but slowing, global economic and earnings data despite several significant political events in Europe during the quarter. There was considerable volatility surrounding the formation of a coalition government in Italy which called into question Italy's future as part of the European Union. Spain also had a change in leadership after a political fundraising scandal led to a vote of no-confidence in Prime Minister Rajoy, forcing him to step down. World markets also reacted to the implementation of new tariffs on US imports of steel and aluminum and the possibility of new tariffs in the future, including tariffs on auto imports, which would negatively affect producers in Europe and Japan. The MSCI EAFE Index returned 6.1% and 6.8% for the last twelve months in local currency and USD terms respectively.
- Emerging markets trailed developed markets for the 2nd quarter, posting losses in local currency terms that were then intensified by the strengthening USD. The MSCI Emerging Markets Index returned -3.5% and -8.0% in local currency and USD terms respectively. The main factors affecting emerging markets were the threat of continued protectionist trade policies from the US creating uncertainty for export focused economies and rising US interest rates coupled with an appreciating USD. Many emerging market countries and companies issue debt denominated in USD and the combination of higher interest rates and a relatively weaker local currency can put stress on the balance sheets of these borrowers, especially those heavily dependent on external capital. One year returns for the MSCI Emerging Market Index were 10.5% in local currency terms and 8.2% in USD terms.





| MSCI - EAFE                | Sector Weight | Quarter Return | 1-Year Return |
|----------------------------|---------------|----------------|---------------|
| Consumer Discretionary     | 12.4%         | -2.6%          | 10.9%         |
| Consumer Staples           | 11.3%         | 0.4%           | 3.1%          |
| Energy                     | 6.1%          | 11.2%          | 35.8%         |
| Financials                 | 19.8%         | -6.2%          | -0.5%         |
| Health Care                | 10.7%         | 1.9%           | 1.7%          |
| Industrials                | 14.3%         | -2.2%          | 7.3%          |
| Information Technology     | 6.8%          | -0.2%          | 15.0%         |
| Materials                  | 8.2%          | 0.7%           | 16.7%         |
| Real Estate                | 3.5%          | -0.4%          | 7.8%          |
| Telecommunication Services | 3.6%          | -4.8%          | -6.3%         |
| Utilities                  | 3.3%          | 0.5%           | 5.2%          |
| Total                      | 100.0%        | -1.2%          | 6.8%          |

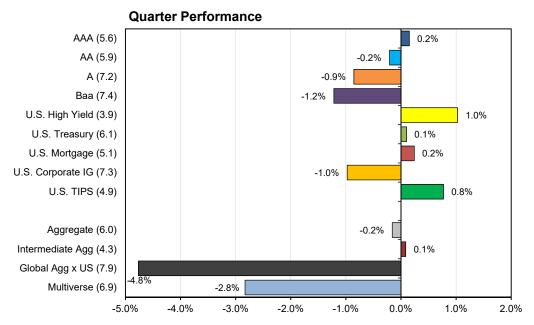
| MSCI - ACWIXUS             | Sector Weight | Quarter Return | 1-Year Return |
|----------------------------|---------------|----------------|---------------|
| Consumer Discretionary     | 11.2%         | -3.5%          | 8.4%          |
| Consumer Staples           | 9.7%          | -0.7%          | 2.9%          |
| Energy                     | 7.4%          | 7.3%           | 27.5%         |
| Financials                 | 21.9%         | -7.3%          | 1.7%          |
| Health Care                | 8.1%          | 1.4%           | 3.2%          |
| Industrials                | 11.7%         | -2.7%          | 5.9%          |
| Information Technology     | 11.9%         | -2.9%          | 15.5%         |
| Materials                  | 8.2%          | -0.4%          | 16.1%         |
| Real Estate                | 3.2%          | -3.0%          | 6.9%          |
| Telecommunication Services | 3.7%          | -6.0%          | -6.3%         |
| Utilities                  | 3.0%          | -1.5%          | 3.8%          |
| Total                      | 100.0%        | -2.6%          | 7.3%          |

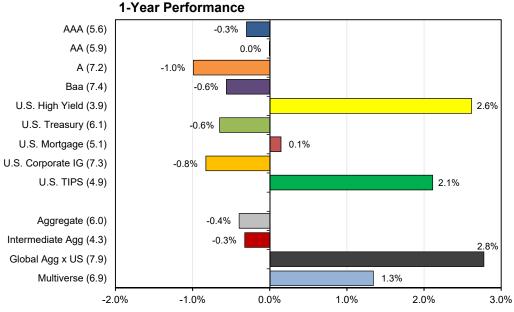
| MSCI - Emerging Mkt        | Sector Weight | Quarter Return | 1-Year Return |
|----------------------------|---------------|----------------|---------------|
| Consumer Discretionary     | 9.8%          | -7.1%          | -0.2%         |
| Consumer Staples           | 6.7%          | -6.2%          | 3.3%          |
| Energy                     | 7.2%          | -4.7%          | 24.9%         |
| Financials                 | 22.8%         | -12.7%         | 5.5%          |
| Health Care                | 3.2%          | -5.0%          | 22.4%         |
| Industrials                | 5.2%          | -11.2%         | -5.9%         |
| Information Technology     | 27.9%         | -5.1%          | 15.2%         |
| Materials                  | 7.6%          | -5.5%          | 14.0%         |
| Real Estate                | 3.0%          | -11.2%         | 5.6%          |
| Telecommunication Services | 4.3%          | -9.7%          | -7.5%         |
| Utilities                  | 2.4%          | -8.1%          | 2.2%          |
| Total                      | 100.0%        | -8.0%          | 8.2%          |

| Country                   | MSCI-EAFE<br>Weight | MSCI-ACWIxUS<br>Weight | Quarter<br>Return | 1- Year<br>Return |
|---------------------------|---------------------|------------------------|-------------------|-------------------|
| Japan                     | 24.0%               | 16.4%                  | -2.8%             | 10.5%             |
| United Kingdom            | 18.0%               | 12.3%                  | 3.0%              | 10.0%             |
| France                    | 11.0%               | 7.5%                   | -0.5%             | 9.9%              |
| Germany                   | 9.5%                | 6.5%                   | -4.0%             | 2.6%              |
| Switzerland               | 7.8%                | 5.3%                   | -4.0%             | -3.4%             |
| Australia                 | 7.0%                | 4.8%                   | 5.2%              | 8.7%              |
| Hong Kong                 | 3.6%                | 2.5%                   | -1.2%             | 9.2%              |
| Netherlands               | 3.6%                | 2.5%                   | -1.2%             | 9.2%              |
|                           | 3.6%                | 2.5%                   | -1.8%             | -3.6%             |
| Spain                     | 2.6%                | 1.8%                   | -3.7%             |                   |
| Sweden                    |                     |                        | -3.7%<br>-7.3%    | -4.6%             |
| Italy                     | 2.4%                | 1.7%                   |                   | 8.4%              |
| Denmark                   | 1.7%                | 1.1%                   | -7.0%             | 0.9%              |
| Singapore                 | 1.3%                | 0.9%                   | -7.5%             | 7.9%              |
| Belgium                   | 1.1%                | 0.7%                   | -6.0%             | 1.7%              |
| Finland                   | 1.0%                | 0.7%                   | 1.3%              | 10.4%             |
| Norway                    | 0.7%                | 0.5%                   | 2.3%              | 27.1%             |
| Ireland                   | 0.6%                | 0.4%                   | 2.0%              | 5.3%              |
| Israel                    | 0.5%                | 0.4%                   | 10.9%             | -4.6%             |
| Austria                   | 0.2%                | 0.2%                   | -10.6%            | 8.9%              |
| New Zealand               | 0.2%                | 0.2%                   | 5.8%              | 1.7%              |
| Portugal                  | 0.2%                | 0.1%                   | 1.2%              | 15.8%             |
| Total EAFE Countries      | 100.0%              | 68.4%                  | -1.2%             | 6.8%              |
| Canada                    |                     | 6.6%                   | 4.7%              | 9.1%              |
| Total Developed Countries |                     | 75.0%                  | -0.8%             | 7.0%              |
| China                     |                     | 8.2%                   | -3.5%             | 21.2%             |
| Korea                     |                     | 3.7%                   | -9.2%             | 3.4%              |
| Taiwan                    |                     | 2.9%                   | -6.3%             | 3.9%              |
| India                     |                     | 2.2%                   | -0.6%             | 6.5%              |
| South Africa              |                     | 1.6%                   | -11.9%            | 6.4%              |
| Brazil                    |                     | 1.5%                   | -26.4%            | -0.3%             |
| Russia                    |                     | 0.9%                   | -6.0%             | 26.0%             |
| Mexico                    |                     | 0.7%                   | -3.6%             | -9.3%             |
| Malaysia                  |                     | 0.6%                   | -11.4%            | 5.6%              |
| Thailand                  |                     | 0.5%                   | -15.0%            | 12.0%             |
| Indonesia                 |                     | 0.5%                   | -12.5%            | -13.1%            |
| Chile                     |                     | 0.3%                   | -11.5%            | 12.5%             |
| Poland                    |                     | 0.3%                   | -11.6%            | -6.2%             |
| Philippines               |                     | 0.2%                   | -11.2%            | -13.9%            |
| Qatar                     |                     | 0.2%                   | 3.5%              | 3.5%              |
| Turkey                    |                     | 0.2%                   | -25.9%            | -26.3%            |
| United Arab Emirates      |                     | 0.2%                   | -4.4%             | -6.0%             |
| Colombia                  |                     | 0.1%                   | 6.7%              | 20.1%             |
| Peru                      |                     | 0.1%                   | -3.2%             | 30.7%             |
| Greece                    |                     | 0.1%                   | -2.2%             | -9.2%             |
| Hungary                   |                     | 0.1%                   | -14.4%            | -0.6%             |
| Czech Republic            |                     | 0.0%                   | -5.4%             | 19.4%             |
| Egypt                     |                     | 0.0%                   | -8.1%             | 1.9%              |
| Pakistan                  |                     | 0.0%                   | -20.8%            | -30.3%            |
| Total Emerging Countries  |                     | 25.0%                  | -8.0%             | 8.2%              |
|                           |                     |                        |                   |                   |



- Broad fixed income benchmarks had mixed results during the 2nd quarter. Interest rates rose across all maturities on the US Treasury Yield Curve. Early in the guarter, rates rose as positive economic data and signs of higher inflation increased investor expectations for another Fed interest rate hike. However, volatility caused by ongoing geopolitical developments later in the quarter led to an increase in risk aversion and demand for relatively safe assets, driving rates lower through the rest of the quarter. Interest rates on the 10-year Treasury reached a near-term high of 3.11% in mid-May before falling to end the guarter at 2.87%. As expected, the Federal Open Market Committee (FOMC), decided to increase short-term interest rates by 25 basis points at their June meeting. This is the second rate hike of 2018. The current Fed Funds Rate target range sits at 1.75%-2.00%. The FOMC also updated their forecast for future rate increases, now expecting two potential additional hikes in 2018 and three in 2019. The yield curve continued to flatten through the quarter as short-term yields rose at a greater rate than longer-term yields. The difference in yields between the 2-year and 10-year Treasury now sits at just 0.3%. The Fed is also continuing to reduce the size of its balance sheet by slowing its pace of reinvestment as the securities it holds mature. The Bloomberg Barclays US Aggregate Index was relatively flat during the quarter, falling -0.2%. It was also negative for the 1-year period returning -0.4%.
- Within investment grade credit, higher quality corporate issues outperformed lower quality issues for the quarter as credit spreads widened and investors looked for safety amid increased financial market volatility. On an absolute basis, without negating the duration differences in the sub-indices, AAA rated credit was the best performing investment grade credit quality segment returning 0.2% for the quarter. High yield debt outperformed relative to investment grade credit, returning 1.0%, as spreads widened to a lesser degree for these issues and the index benefitted from its lower duration. Part of the reason for the increased spread widening for investment grade issues relative to high yield issues was continued selling pressure from companies repatriating foreign cash reserves in response to the new tax code and lower demand from foreign investors due to increased hedging costs and a stronger USD.
- Of the Bloomberg Barclays US Aggregate Index's three broad sectors, US mortgage backed securities (MBS) were the best performing investment grade sector through the quarter, narrowly outperforming US Treasuries. Corporate credit underperformed as credit spreads widened and investors reacted to market volatility by moving into higher quality issues. Higher durations relative to other index sectors also acted as a headwind to these issues. The Bloomberg Barclays US Corporate IG Index returned -1.0%. While TIPS were also positive, it is important to note these Treasury issues are not part of the Bloomberg Barclays US Aggregate Index.

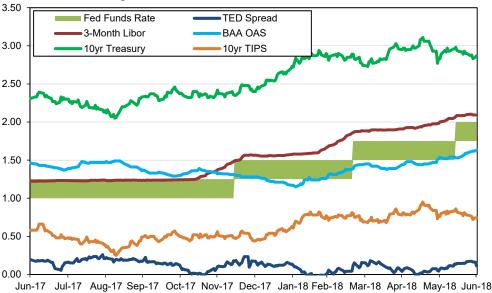




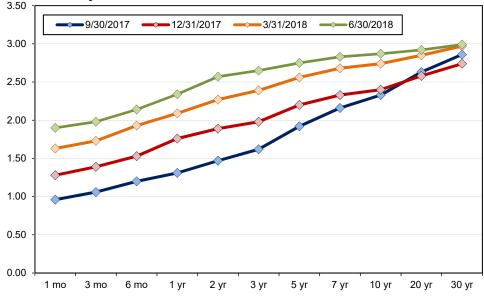


- Relative to their domestic counterparts, global fixed income indices underperformed during the guarter. The relatively high duration of these indices acted as a headwind to performance in the current guarter as interest rates increased. The returns of these indices are also significantly influenced by fluctuations in their currency denomination relative to the USD. During the 2nd quarter the USD strengthened against most other currencies, negatively impacting the returns on global bond indices. The return on global bonds, as represented by the Bloomberg Barclays Global Aggregate ex US Index, was -4.8% for the guarter. However, when viewed over the trailing year, global issues have outperformed domestic securities, returning 2.8%. As the global economy continues to recover, several international central banks have started to move toward less accommodative postures. Notably, the ECB, is planning to slow its monthly bond purchase program in September, reducing new purchases to 15 billion euro per month from 30 billion euro per month, as well as forecasting an end to the program by the end of the year assuming the eurozone recovery continues to flourish. However, they have indicated a continuation of reinvestment in maturing securities and would likely not raise interest rates from current levels until summer 2019. In contrast, the Bank of Japan will continue current stimulus programs and the Bank of England backed away from a telegraphed interest rate hike after disappointing economic data led them to lower their forecasts for future growth.
- Much of the index performance detailed in the bar graphs on the previous page is visible on a time series basis by reviewing the line graphs to the right. The '1-Year Trailing Market Rates' chart illustrates that the 10-year Treasury yield (green line) rose significantly during the first half of the 2nd quarter, rising to a near-term high of 3.11% before falling to 2.87% to end the period. The blue line illustrates changes in the BAA OAS (Option Adjusted Spread). This measure quantifies the additional yield premium that investors require to purchase and hold non-Treasury issues. This line illustrates a steady increase in credit spreads through the first two quarters of 2018. This increase is equivalent to an interest rate increase on corporate bonds, which produces an additional headwind for corporate bond index returns. These credit spreads have widened by about 17 basis points over the last 3-months. The green band across the graph illustrates the gradual increase in the Federal Funds Rate (three in the last twelve months) due to the continued unwinding of accommodative US monetary policy.
- The lower graph provides a snapshot of the US Treasury yield curve at the end of each of the last four calendar quarters. As mentioned, the yield curve continues to flatten as yields on shorter-term maturities have risen more than interest rates on the long end of the curve. The upward momentum of interest rates as well as a general flattening of the yield curve are clearly visible over both the 2nd quarter and the last twelve months.

# 1-Year Trailing Market Rates



# **Treasury Yield Curve**

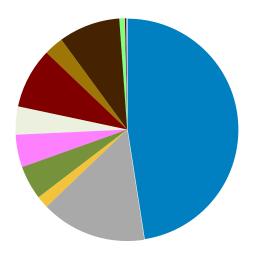




778,125,905

778,125,905

| Asset Al | location b   | by Segment  |
|----------|--------------|-------------|
| June 30  | , 2018 : \$7 | 778,125,905 |

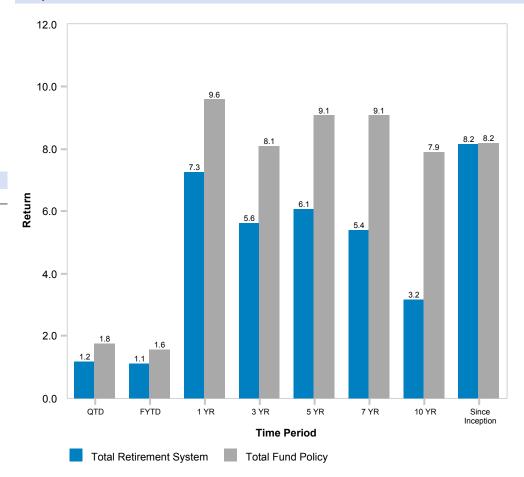


#### **Gain/Loss Summary** QTD **FYTD** 1 YR Total Retirement System Beginning Market Value 769,963,925 769,894,927 724,756,516 **Net Contributions** -724,078 -284,784 670,262 9,532,561 Return on Investment 9,574,442 54,690,141

778,125,905

# **Comparative Performance**

**Ending Market Value** 



| Allocation                      |              |            |
|---------------------------------|--------------|------------|
|                                 | Market Value | Allocation |
| ■ Total Domestic Equity         | 369,964,836  | 47.5       |
| ■ Total International Equity    | 118,981,568  | 15.3       |
| Total Other Equity              | 13,779,335   | 1.8        |
| ■ Total Core Fixed Income       | 38,329,449   | 4.9        |
| Total Non Core Fixed Income     | 36,842,094   | 4.7        |
| Total Other Fixed Income        | 31,696,355   | 4.1        |
| ■ Total Real Estate             | 68,418,580   | 8.8        |
| ■ Total Timber Funds            | 21,961,652   | 2.8        |
| ■ Total Multi Asset Funds       | 69,297,636   | 8.9        |
| Cash Account                    | 6,209,289    | 0.8        |
| Cash Account PE                 | -            | 0.0        |
| ■ Retiree Death Benefit Account | 1,306,342    | 0.2        |
| APRS Building                   | 1,338,769    | 0.2        |

Market values subject to availability from Northern Trust and individual managers.

All performance data is Net of Fees. Please refer to the end of the report for Investment Pricing Summary and Additional Notes.



# June 30, 2018: \$778,125,905

#### **Market Value** Allocation ■ NT Collective Russell 3000 Index 222,743,276 28.6 Baird Mid Cap Growth 53,196,236 6.8 Seizert Mid Cap Value 48,301,564 6.2 Kennedy Small Cap Value 45,723,760 5.9 ■ Driehaus International Small Cap Growth 16,257,649 2.1 ■ Thompson Siegel & Walmsley 10.5 81,704,433 LMCG Emerging Markets Fund 21,019,486 2.7 Huff Energy Fund 11,940,332 1.5 Sail Venture Fund I 0.0 Sail Venture Fund II 0.0 Sail Pre-Exit Acceleration Fund 0.0 Excelsior Investors, Ltd. 623,103 0.1 Franklin Park Private Equity 1,215,897 0.2 Orleans Capital 38,329,449 4.9 Templeton Global Multisector Plus 4.7 36,842,094 LBC Credit Partners III 7,581,033 1.0 LBC Credit Partners IV 9,432,203 1.2 Providence Debt Fund III 10,028,655 1.3 Capital Point Partners 4,320,448 0.6 Franchise Equity Capital Partners II 308,338 0.0 Franchise Equity Capital Partners III 25,679 0.0 ■ Rockspring Capital Land Funds (I - VI) 9,836,612 1.3 ■ ARES Advisors (V & VI) 1,336,621 0.2 ■ INVESCO Real Estate Funds (I & II) 27.883 0.0 ■ Edison Investments 2,141,209 0.3 ■ JPM India Property Fund 1,144,518 0.1 ■ Vision Capital Partners 1,818,400 0.2 ■ FWAR Investments 11,855 0.0 ■ Morgan Stanley 48,195,676 6.2 ■ AEW Partners Fund VIII 0.3 2,370,861 ■ GreenOak US III 1,534,944 0.2 ■ BTG Pactual 1 1,749,331 0.2 Capitol Timberland Investments 16,541,840 2.1 ■ Domain Environmental Investments II 0.5 3,670,481 ■ Double Eagle Capital Ace Fund, Ltd. 4.2 32,554,119

18,427,169

18,316,348

6,209,289

1,306,342

1,338,769

Allocation

■ BlackRock Multi Asset Fund

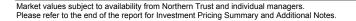
Retiree Death Benefit Account

Cash Account

APRS Building

Cash Account PE

■ Westwood Income Opportunity Fund





2.4

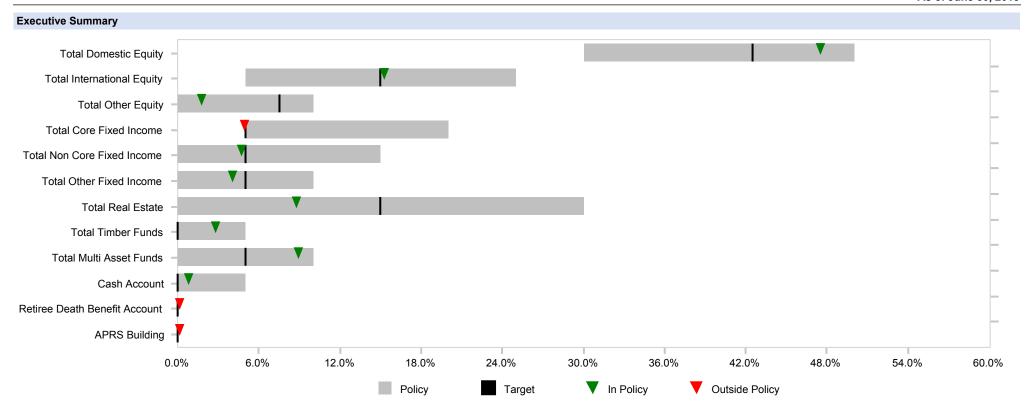
2.4

0.8

0.0

0.2

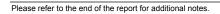
0.2



| Asset Allocation Compliance   |                           |                           |                           |                           |                          |
|-------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|--------------------------|
|                               | Asset<br>Allocation<br>\$ | Current<br>Allocation (%) | Minimum<br>Allocation (%) | Maximum<br>Allocation (%) | Target<br>Allocation (%) |
| Total Retirement System       | 778,125,905               | 100.0                     | N/A                       | N/A                       | 100.0                    |
| Total Domestic Equity         | 369,964,836               | 47.5                      | 30.0                      | 50.0                      | 42.5                     |
| Total International Equity    | 118,981,568               | 15.3                      | 5.0                       | 25.0                      | 15.0                     |
| Total Other Equity            | 13,779,335                | 1.8                       | 0.0                       | 10.0                      | 7.5                      |
| Total Core Fixed Income       | 38,329,449                | 4.9                       | 5.0                       | 20.0                      | 5.0                      |
| Total Non Core Fixed Income   | 36,842,094                | 4.7                       | 0.0                       | 15.0                      | 5.0                      |
| Total Other Fixed Income      | 31,696,355                | 4.1                       | 0.0                       | 10.0                      | 5.0                      |
| Total Real Estate             | 68,418,580                | 8.8                       | 0.0                       | 30.0                      | 15.0                     |
| Total Timber Funds            | 21,961,652                | 2.8                       | 0.0                       | 5.0                       | 0.0                      |
| Total Multi Asset Funds       | 69,297,636                | 8.9                       | 0.0                       | 10.0                      | 5.0                      |
| Cash Account                  | 6,209,289                 | 0.8                       | 0.0                       | 5.0                       | 0.0                      |
| Retiree Death Benefit Account | 1,306,342                 | 0.2                       | 0.0                       | 0.0                       | 0.0                      |
| APRS Building                 | 1,338,769                 | 0.2                       | 0.0                       | 0.0                       | 0.0                      |



| inancial Reconciliation Quarter to Date |                            |                  |               |               |                    |                   |           |                     |                         |                            |
|---|----------------------------|------------------|---------------|---------------|--------------------|-------------------|-----------|---------------------|-------------------------|----------------------------|
|   | Market Value<br>04/01/2018 | Net<br>Transfers | Contributions | Distributions | Management<br>Fees | Other<br>Expenses | Income    | Apprec./<br>Deprec. | Return On<br>Investment | Market Value<br>06/30/2018 |
| Total Retirement System                 | 769,963,925                | -                | 14,907,336    | -15,631,414   | -490,800           | -155,704          | 2,167,854 | 7,364,707           | 9,532,561               | 778,125,905                |
| ·                                       |                            |                  | , ,           | , ,           | ,                  | ,                 |           | , ,                 | , ,                     | , ,                        |
| Total Equity                            | 493,666,751                | 795,685          | -             | -             | -323,382           | -                 | 443,943   | 8,142,742           | 8,586,685               | 502,725,739                |
| Total Domestic Equity                   | 357,822,561                | 243,135          | -             | -             | -260,882           | -                 | 443,943   | 11,716,079          | 12,160,022              | 369,964,83                 |
| NT Collective Russell 3000 Index        | 214,401,669                | 3,262            | -             | -             | -21,008            | -                 | 7,209     | 8,352,146           | 8,359,354               | 222,743,270                |
| Baird Mid Cap Growth                    | 51,855,275                 | 90,258           | -             | -             | -90,258            | -                 | 88,773    | 1,252,188           | 1,340,961               | 53,196,23                  |
| Seizert Mid Cap Value                   | 48,076,554                 | 42,899           | -             | -             | -42,899            | -                 | 189,810   | 35,199              | 225,009                 | 48,301,56                  |
| Kennedy Small Cap Value                 | 43,489,062                 | 106,717          | -             | -             | -106,717           | -                 | 158,151   | 2,076,546           | 2,234,698               | 45,723,76                  |
| Total International Equity              | 122,554,905                | -                | -             | -             | -                  | -                 | -         | -3,573,338          | -3,573,338              | 118,981,56                 |
| Driehaus International Small Cap Growth | 16,536,990                 | -                | -             | -             | -                  | -                 | -         | -279,341            | -279,341                | 16,257,64                  |
| Thompson Siegel & Walmsley              | 83,189,209                 | -                | -             | -             | -                  | -                 | -         | -1,484,776          | -1,484,776              | 81,704,43                  |
| LMCG Emerging Markets Fund              | 22,828,707                 | -                | -             | -             | -                  | -                 | -         | -1,809,221          | -1,809,221              | 21,019,48                  |
| Total Other Equity                      | 13,289,285                 | 552,550          | -             | -             | -62,500            | -                 | -         | -                   | -                       | 13,779,33                  |
| Huff Energy Fund                        | 11,940,332                 | -                | -             | -             | -                  | -                 | -         | -                   | -                       | 11,940,33                  |
| Sail Venture Fund I                     | 1                          | -                | -             | -             | -                  | -                 | -         | -                   | -                       |                            |
| Sail Venture Fund II                    | 1                          | -                | -             | -             | -                  | -                 | -         | -                   | -                       |                            |
| Sail Pre-Exit Acceleration Fund         | 1                          | -                | -             | -             | -                  | -                 | -         | -                   | -                       |                            |
| Excelsior Investors, Ltd.               | 623,103                    | -                | -             | -             | -                  | -                 | -         | -                   | -                       | 623,10                     |
| Franklin Park Private Equity            | 725,847                    | 552,550          | -             | -             | -62,500            | -                 | -         | -                   | -                       | 1,215,89                   |
| Total Fixed Income                      | 107,263,871                | 783,494          | -             | -             | -7,776             | -                 | 839,412   | -2,011,103          | -1,171,691              | 106,867,89                 |
| Orleans Capital                         | 38,370,000                 | 17,356           | -             | -             | -17,356            | -                 | 345,976   | -386,526            | -40,551                 | 38,329,44                  |
| Templeton Global Mulisector Plus Trust  | 38,466,670                 | -                | -             | -             | -                  | -                 | -         | -1,624,577          | -1,624,577              | 36,842,09                  |
| Total Other Fixed Income                | 30,427,201                 | 766,138          | -             | -             | 9,580              | -                 | 493,437   | -                   | 493,437                 | 31,696,35                  |
| Capital Point Partners                  | 4,320,448                  | -                | -             | -             | -                  | -                 | -         | -                   | -                       | 4,320,44                   |
| Franchise Equity Capital Partners II    | 367,738                    | -59,400          | -             | -             | -                  | -                 | -         | -                   | -                       | 308,33                     |
| Franchise Equity Capital Partners III   | 25,679                     | -                | -             | -             | -                  | -                 | -         | -                   | -                       | 25,67                      |
| LBC Credit Partners III                 | 7,695,831                  | -253,013         | -             | -             | 9,580              | -                 | 128,634   | _                   | 128,634                 | 7,581,03                   |
| LBC Credit Partners IV                  | 7,988,851                  | 1,313,279        | -             | -             | · -                | -                 | 130,073   | -                   | 130,073                 | 9,432,20                   |
| Providence Debt Fund III                | 10,028,655                 | -234,729         | _             | -             | -                  | _                 | 234,729   | _                   | 234,729                 | 10,028,65                  |

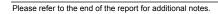




# Financial Reconciliation Total Fund

1 Quarter Ending June 30, 2018

|  | Market Value<br>04/01/2018 | Net<br>Transfers | Contributions | Distributions | Management<br>Fees | Other<br>Expenses | Income  | Apprec./<br>Deprec. | Return On<br>Investment | Market Value<br>06/30/2018 |
|--|----------------------------|------------------|---------------|---------------|--------------------|-------------------|---------|---------------------|-------------------------|----------------------------|
| Total Real Estate & Timber             | 92,137,899                 | -2,812,297       | -             | -             | -159,642           | -114,326          | 501,021 | 827,576             | 1,328,597               | 90,380,232                 |
| Total Real Estate                      | 69,870,257                 | -2,605,856       | -             | -             | -116,107           | -114,326          | 501,021 | 883,591             | 1,384,612               | 68,418,580                 |
| Rockspring Capital Land Funds (I - VI) | 12,003,414                 | -2,151,319       | -             | -             | -                  | -                 | -       | -15,483             | -15,483                 | 9,836,612                  |
| Rockspring Capital Land Fund I         | 499,425                    | -                | -             | -             | -                  | -                 | -       | -2,601              | -2,601                  | 496,824                    |
| Rockspring Capital Land Fund II        | 4,440,608                  | -1,106,587       | -             | -             | -                  | -                 | -       | -2,665              | -2,665                  | 3,331,357                  |
| Rockspring Capital Land Fund III       | 2,103,475                  | -1,044,732       | -             | -             | -                  | -                 | -       | -1,360              | -1,360                  | 1,057,383                  |
| Rockspring Capital Land Fund IV        | 107,905                    | -                | -             | -             | -                  | -                 | -       | -1,090              | -1,090                  | 106,81                     |
| Rockspring Capital Land Fund V         | 3,331,786                  | -                | -             | -             | -                  | -                 | -       | -9,975              | -9,975                  | 3,321,812                  |
| Rockspring Capital Land Fund VI        | 1,520,215                  | -                | -             | -             | -                  | -                 | -       | 2,207               | 2,207                   | 1,522,42                   |
| ARES Advisors (V & VI)                 | 1,467,231                  | -184,920         | -             | -             | -845               | -                 | -       | 55,155              | 55,155                  | 1,336,62                   |
| ARES Value Enhancement Fund V          | 579,592                    | -56,204          | -             | -             | -                  | -                 | -       | 9,206               | 9,206                   | 532,594                    |
| ARES Value Enhancement Fund VI         | 887,639                    | -128,715         | -             | -             | -845               | -                 | -       | 45,949              | 45,949                  | 804,028                    |
| INVESCO Real Estate Funds (I & II)     | 28,554                     | -                | -             | -             | -                  | -                 | -       | -671                | -671                    | 27,883                     |
| INVESCO Real Estate Fund II            | 28,554                     | -                | -             | -             | -                  | -                 | -       | -671                | -671                    | 27,883                     |
| Edison Investments                     | 4,082,347                  | -2,422,129       | -             | -             | -                  | -                 | 28,852  | 452,139             | 480,991                 | 2,141,209                  |
| JPM India Property Fund                | 1,144,518                  | -                | -             | -             | -                  | -                 | -       | -                   | _                       | 1,144,518                  |
| Vision Capital Partners                | 1,818,400                  | 2,114            | -             | -             | -2,114             | -                 | -       | -                   | _                       | 1,818,400                  |
| FWAR Investments                       | 11,855                     | -                | -             | -             | -                  | -                 | -       | -                   | _                       | 11,855                     |
| Morgan Stanley                         | 47,335,999                 | -                | -             | -             | -                  | -                 | 467,226 | 392,451             | 859,678                 | 48,195,676                 |
| AEW Partners Fund VIII                 | 1,977,939                  | 387,979          | -             | -             | -                  | -                 | 4,943   | -                   | 4,943                   | 2,370,861                  |
| GreenOak US III                        | -                          | 1,762,418        | -             | -             | -113,148           | -114,326          | -       | -                   | -                       | 1,534,944                  |
| Total Timber Funds                     | 22,267,642                 | -206,440         | -             | -             | -43,535            | -                 | -       | -56,015             | -56,015                 | 21,961,652                 |
| BTG Pactual (1, 2 & 3)                 | 1,749,331                  | 3,193            | -             | -             | -3,193             | -                 | -       | -                   | -                       | 1,749,33°                  |
| BTG Pactual 1                          | 1,749,331                  | 3,193            | -             | -             | -3,193             | -                 | -       | -                   | -                       | 1,749,33                   |
| BTG Pactual 2                          | -                          | -                | -             | -             | -                  | -                 | -       | -                   | -                       |                            |
| Capitol Timberland Investments         | 16,847,830                 | -249,975         | -             | -             | -                  | -                 | -       | -56,015             | -56,015                 | 16,541,84                  |
| Domain Environmental Investments II    | 3,670,481                  | 40,342           | -             | -             | -40,342            | -                 | -       | -                   | -                       | 3,670,48                   |

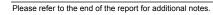




# Financial Reconciliation Total Fund

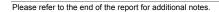
1 Quarter Ending June 30, 2018

|                                     | Market Value 04/01/2018 | Net<br>Transfers | Contributions | Distributions | Management<br>Fees | Other<br>Expenses | Income  | Apprec./<br>Deprec. | Return On<br>Investment | Market Value<br>06/30/2018 |
|-------------------------------------|-------------------------|------------------|---------------|---------------|--------------------|-------------------|---------|---------------------|-------------------------|----------------------------|
| Total Multi Asset Funds             | 68,556,748              | -5,760           | -             |               | -                  | -                 | 345,280 | 401,368             | 746,648                 | 69,297,636                 |
| Double Eagle Capital Ace Fund, Ltd. | 31,958,806              | -                | -             | -             | -                  | -                 | -       | 595,313             | 595,313                 | 32,554,119                 |
| BlackRock Multi Asset Fund          | 18,407,489              | -1,870           | -             | -             | -                  | -                 | 262,857 | -241,306            | 21,551                  | 18,427,169                 |
| Westwood Income Opportunity Fund    | 18,190,454              | -3,889           | -             | -             | -                  | -                 | 82,423  | 47,360              | 129,783                 | 18,316,348                 |
| Cash Account                        | 5,753,176               | 1,238,878        | 14,842,786    | -15,621,414   | -                  | -41,378           | 33,116  | 4,124               | 37,240                  | 6,209,289                  |
| Cash Account PE                     | -                       | -                | -             | -             | -                  | -                 | -       | -                   | -                       | -                          |
| Retiree Death Benefit Account       | 1,246,711               | -                | 64,549        | -10,000       | -                  | -                 | 5,082   | -                   | 5,082                   | 1,306,342                  |
| APRS Building                       | 1,338,769               | -                | -             | -             | -                  | -                 | -       | -                   | -                       | 1,338,769                  |





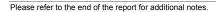
|   | Market Value | Net         | Contributions | Distributions | Management | Other    | Income    | Apprec./   | Return On  | Market Valu |
|---|--------------|-------------|---------------|---------------|------------|----------|-----------|------------|------------|-------------|
|   | 01/01/2018   | Transfers   | Continuations | Diotributions | Fees       | Expenses | moome     | Deprec.    | Investment | 06/30/2018  |
| otal Retirement System                  | 769,894,927  | -           | 31,194,774    | -31,479,559   | -867,976   | -190,704 | 4,199,975 | 5,374,467  | 9,574,442  | 778,125,90  |
| Total Equity                            | 487,658,319  | 6,918,886   | -             | -             | -592,044   | -        | 856,353   | 7,884,225  | 8,740,578  | 502,725,739 |
| Total Domestic Equity                   | 352,647,228  | 5,488,911   | -             | -             | -496,119   | -        | 856,353   | 11,468,464 | 12,324,817 | 369,964,830 |
| NT Collective Russell 3000 Index        | 210,766,922  | 5,013,800   | -             | -             | -21,008    | -        | 7,209     | 6,976,355  | 6,983,563  | 222,743,27  |
| Baird Mid Cap Growth                    | 49,625,774   | 177,058     | -             | -             | -177,058   | -        | 169,198   | 3,401,265  | 3,570,463  | 53,196,23   |
| Seizert Mid Cap Value                   | 47,389,979   | 83,725      | -             | -             | -83,725    | -        | 344,464   | 567,120    | 911,585    | 48,301,56   |
| Kennedy Small Cap Value                 | 44,864,553   | 214,328     | -             | -             | -214,328   | -        | 335,482   | 523,724    | 859,206    | 45,723,76   |
| Total International Equity              | 122,447,653  | -           | -             | -             | -          | -        | -         | -3,466,086 | -3,466,086 | 118,981,56  |
| Driehaus International Small Cap Growth | 15,908,472   | -           | -             | -             | -          | -        | -         | 349,176    | 349,176    | 16,257,64   |
| Thompson Siegel & Walmsley              | 84,157,697   | -           | -             | _             | -          | -        | -         | -2,453,264 | -2,453,264 | 81,704,43   |
| LMCG Emerging Markets Fund              | 22,381,484   | -           | -             | _             | -          | -        | -         | -1,361,998 | -1,361,998 | 21,019,48   |
| Total Other Equity                      | 12,563,438   | 1,429,975   | -             | -             | -95,925    | -        | -         | -118,153   | -118,153   | 13,779,33   |
| Huff Energy Fund                        | 11,940,332   | -           | -             | -             | -          | -        | -         | -          | -          | 11,940,33   |
| Sail Venture Fund I                     | 1            | -           | -             | -             | -          | -        | -         | -          | -          |             |
| Sail Venture Fund II                    | 1            | -           | -             | -             | -          | -        | -         | -          | -          |             |
| Sail Pre-Exit Acceleration Fund         | 1            | -           | -             | -             | -          | -        | -         | -          | -          |             |
| Excelsior Investors, Ltd.               | 623,103      | -           | -             | -             | -          | -        | -         | -          | -          | 623,10      |
| Franklin Park Private Equity            | -            | 1,429,975   | -             | -             | -95,925    | -        | -         | -118,153   | -118,153   | 1,215,89    |
| Total Fixed Income                      | 146,253,245  | -38,010,655 | -             |               | -72,046    | -        | 1,717,603 | -3,020,248 | -1,302,645 | 106,867,898 |
| Orleans Capital                         | 77,291,906   | -37,953,662 | -             | -             | -46,338    | -        | 735,303   | -1,697,760 | -962,457   | 38,329,44   |
| Templeton Global Multisector Plus       | 37,668,150   | 45,065      | _             | _             | -45,065    | _        | ,<br>-    | -826,056   | -826,056   | 36,842,09   |
| Total Other Fixed Income                | 31,293,189   | -102,058    | _             | _             | 19,356     | _        | 982,301   | -496,433   | 485,868    | 31,696,35   |
| Capital Point Partners                  | 4,501,369    | -           | _             | _             | -          | -        | -         | -180,921   | -180,921   | 4,320,44    |
| Franchise Equity Capital Partners II    | 383,876      | -59,400     | _             | _             | _          | -        | 30,931    | -47,069    | -16,138    | 308,33      |
| Franchise Equity Capital Partners III   | 50,429       | -24,750     | _             | _             | _          | -        | -         | -          | -,         | 25,67       |
| LBC Credit Partners III                 | 8,135,414    | -620,344    | _             | _             | 19,356     | -        | 227,149   | -180,542   | 46,607     | 7,581,03    |
| LBC Credit Partners IV                  | 8,062,084    | 1,070,333   | _             | _             | -          | -        | 256,325   | 43,462     | 299,786    | 9,432,20    |
| Providence Debt Fund III                | 10,160,018   | -467,897    | _             | _             | _          | _        | 467,897   | -131,363   | 336,534    | 10,028,65   |





# Year To Date Ending June 30, 2018

|  | Market Value<br>01/01/2018 | Net<br>Transfers | Contributions | Distributions | Management<br>Fees | Other<br>Expenses | Income  | Apprec./<br>Deprec. | Return On<br>Investment | Market Value<br>06/30/2018 |
|--|----------------------------|------------------|---------------|---------------|--------------------|-------------------|---------|---------------------|-------------------------|----------------------------|
| Total Real Estate & Timber             | 91,921,760                 | -3,414,619       | -             | -             | -203,885           | -114,326          | 995,710 | 1,195,593           | 2,191,302               | 90,380,232                 |
|  | == 4                       | 0.404.540        |               |               | 440.000            | 444.000           | 00==40  | 4 040 000           | 0 000 540               | 00 440 =00                 |
| Total Real Estate                      | 69,571,925                 | -3,131,543       | -             | -             | -116,986           | -114,326          | 995,710 | 1,213,800           | 2,209,510               | 68,418,580                 |
| Rockspring Capital Land Funds (I - VI) | 12,924,594                 | -3,031,479       | -             | -             | -                  | -                 | -       | -56,502             | -56,502                 | 9,836,612                  |
| Rockspring Capital Land Fund I         | 504,054                    | -                | -             | -             | -                  | -                 | -       | -7,230              | -7,230                  | 496,824                    |
| Rockspring Capital Land Fund II        | 4,752,538                  | -1,407,188       | -             | -             | -                  | -                 | -       | -13,993             | -13,993                 | 3,331,357                  |
| Rockspring Capital Land Fund III       | 2,658,720                  | -1,595,583       | -             | -             | -                  | -                 | -       | -5,754              | -5,754                  | 1,057,383                  |
| Rockspring Capital Land Fund IV        | 139,998                    | -28,708          | -             | -             | -                  | -                 | -       | -4,475              | -4,475                  | 106,815                    |
| Rockspring Capital Land Fund V         | 3,343,242                  | -                | -             | -             | -                  | -                 | -       | -21,430             | -21,430                 | 3,321,812                  |
| Rockspring Capital Land Fund VI        | 1,526,042                  | -                | -             | -             | -                  | -                 | -       | -3,620              | -3,620                  | 1,522,421                  |
| ARES Advisors (V & VI)                 | 1,437,746                  | -184,920         | -             | -             | -1,724             | -                 | -       | 85,519              | 85,519                  | 1,336,621                  |
| ARES Value Enhancement Fund V          | 578,974                    | -56,204          | -             | -             | -                  | -                 | -       | 9,824               | 9,824                   | 532,594                    |
| ARES Value Enhancement Fund VI         | 858,772                    | -128,715         | -             | -             | -1,724             | -                 | -       | 75,695              | 75,695                  | 804,028                    |
| INVESCO Real Estate Funds (I & II)     | 28,601                     | -                | -             | -             | -                  | -                 | -       | -718                | -718                    | 27,883                     |
| INVESCO Real Estate Fund II            | 28,601                     | -                | -             | -             | -                  | -                 | -       | -718                | -718                    | 27,883                     |
| Edison Investments                     | 4,044,680                  | -2,450,981       | _             | -             | -                  | -                 | 57,704  | 489,806             | 547,510                 | 2,141,209                  |
| JPM India Property Fund                | 1,294,532                  | _                | _             | -             | -                  | _                 | -       | -150,014            | -150,014                | 1,144,518                  |
| Vision Capital Partners                | 1,818,400                  | 2,114            | _             | -             | -2,114             | _                 | -       | -                   | -                       | 1,818,400                  |
| FWAR Investments                       | 11,855                     | -                | _             | _             | -                  | _                 | -       | _                   | -                       | 11,855                     |
| Morgan Stanley                         | 46,408,049                 | _                | _             | _             | _                  | _                 | 924,823 | 862,805             | 1,787,628               | 48,195,676                 |
| AEW Partners Fund VIII                 | 1,603,468                  | 771,305          | _             | _             | _                  | _                 | 13,183  | -17,095             | -3,912                  | 2,370,861                  |
| GreenOak US III                        | -                          | 1,762,418        | -             | -             | -113,148           | -114,326          | -       | -                   | -                       | 1,534,944                  |
| Total Timber Funds                     | 22,349,835                 | -283,077         | -             | -             | -86,899            | -                 |         | -18,208             | -18,208                 | 21,961,652                 |
| BTG Pactual (1, 2 & 3)                 | 1,642,490                  | 6,733            | -             | -             | -6,733             | -                 | -       | 106,841             | 106,841                 | 1,749,331                  |
| BTG Pactual 1                          | 1,642,490                  | 6,591            | _             | -             | -6,591             | _                 | -       | 106,841             | 106,841                 | 1,749,331                  |
| BTG Pactual 2                          | -                          | 142              | -             | -             | -142               | _                 | -       | , <u> </u>          | -                       | -                          |
| Capitol Timberland Investments         | 16,476,687                 | -210,151         | -             | -             | -39,824            | _                 | -       | 315,128             | 315,128                 | 16,541,840                 |
| Domain Environmental Investments II    | 4,230,658                  | -79,658          | -             | -             | -40,342            | -                 | -       | -440,177            | -440,177                | 3,670,481                  |

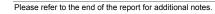




# Financial Reconciliation Total Fund

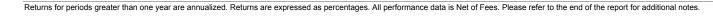
Year To Date Ending June 30, 2018

|                                     | Market Value<br>01/01/2018 | Net<br>Transfers | Contributions | Distributions | Management<br>Fees | Other<br>Expenses | Income  | Apprec./<br>Deprec. | Return On<br>Investment | Market Value<br>06/30/2018 |
|-------------------------------------|----------------------------|------------------|---------------|---------------|--------------------|-------------------|---------|---------------------|-------------------------|----------------------------|
| Total Multi Asset Funds             | 31,444,001                 | 37,994,240       | -             | -             | -                  | -                 | 544,924 | -685,529            | -140,605                | 69,297,636                 |
| Double Eagle Capital Ace Fund, Ltd. | 31,444,001                 | -                | -             | -             | -                  | -                 | -       | 1,110,118           | 1,110,118               | 32,554,119                 |
| BlackRock Multi Asset Fund          | -                          | 18,998,130       | -             | _             | -                  | -                 | 366,854 | -937,815            | -570,960                | 18,427,169                 |
| Westwood Income Opportunity Fund    | -                          | 18,996,111       | -             | -             | -                  | -                 | 178,070 | -857,833            | -679,763                | 18,316,348                 |
| Cash Account                        | 10,051,278                 | -3,487,851       | 31,064,948    | -31,419,559   | -                  | -76,378           | 76,425  | 426                 | 76,851                  | 6,209,289                  |
| Cash Account PE                     | -                          | -                | -             | -             | -                  | -                 | -       | -                   | -                       | -                          |
| Retiree Death Benefit Account       | 1,227,556                  | -                | 129,827       | -60,000       | -                  | -                 | 8,960   | -                   | 8,960                   | 1,306,342                  |
| APRS Building                       | 1,338,769                  | -                | -             | -             | -                  | -                 | -       | -                   | -                       | 1,338,769                  |





|   |       | Performance (%) |         |       |            |            |            |       |       |            |                  |  |  |
|---|-------|-----------------|---------|-------|------------|------------|------------|-------|-------|------------|------------------|--|--|
|   | QT    | R               | YTD     |       | 1 YR       | 3 YR       | 5 YR       | 7 YR  | 10 YR | Inception  | Inceptio<br>Date |  |  |
| Total Retirement System (Net)                 | 1.17  |                 | 1.13    |       | 7.28       | 5.65       | 6.09       | 5.40  | 3.18  | 8.17       | 10/01/1992       |  |  |
| Total Retirement System (Gross)               | 1.24  |                 | 1.24    |       | 7.51       | 5.88       | 6.37       | 5.74  | 3.65  | 8.49       | 10/01/1992       |  |  |
| Total Fund Policy                             | 1.76  |                 | 1.58    |       | 9.59       | 8.09       | 9.07       | 9.10  | 7.89  | 8.21       |                  |  |  |
| Variance                                      | -0.52 |                 | -0.34   |       | -2.08      | -2.21      | -2.70      | -3.36 | -4.24 | 0.28       |                  |  |  |
| Total Equity                                  | 1.67  |                 | 1.65    | 1     | 10.66      | 8.18       | 10.20      | 8.11  | 5.44  | 8.88       | 01/01/1994       |  |  |
| Total Equity Policy                           | 2.81  |                 | 1.82    |       | 12.98      | 9.63       | 11.19      | 10.40 | 7.94  | 8.45       |                  |  |  |
| Variance                                      | -1.14 |                 | -0.17   |       | -2.32      | -1.45      | -0.99      | -2.29 | -2.50 | 0.43       |                  |  |  |
| Domestic Equity                               | 3.32  | (55)            | 3.31 (4 | 43) 1 | 12.78 (52) | 9.98 (46)  | 11.70 (51) | N/A   | N/A   | 11.33 (56) | 05/01/2013       |  |  |
| Russell 3000 Index                            | 3.89  | . ,             | 3.22    | 1     | 14.78      | 11.58      | 13.29      | 13.01 | 10.23 | 13.06      |                  |  |  |
| Variance                                      | -0.57 |                 | 0.09    |       | -2.00      | -1.60      | -1.59      | N/A   | N/A   | -1.73      |                  |  |  |
| M U.S. Equity (SA+CF+MF) Median               | 3.57  |                 | 2.53    | 1     | 13.10      | 9.64       | 11.72      | 11.51 | 9.67  | 11.79      |                  |  |  |
| NT Collective Russell 3000 Index              | 3.89  | (43)            | 3.21 (4 | 43) 1 | 14.77(56)  | 11.61 (40) | N/A        | N/A   | N/A   | 10.94 (37) | 01/01/2014       |  |  |
| Russell 3000 Index                            | 3.89  |                 | 3.22    | 1     | 14.78      | 11.58      | 13.29      | 13.01 | 10.23 | 10.92      |                  |  |  |
| Variance                                      | 0.00  |                 | -0.01   |       | -0.01      | 0.03       | N/A        | N/A   | N/A   | 0.02       |                  |  |  |
| IM U.S. All Cap Core Equity (SA+CF) Median    | 3.74  |                 | 2.74    | 1     | 14.93      | 10.94      | 12.73      | 12.77 | 10.30 | 10.21      |                  |  |  |
| Baird Mid Cap Growth                          | 2.41  | (76)            | 6.83 (4 | 49) 1 | 16.78 (58) | 10.08 (59) | N/A        | N/A   | N/A   | 8.96 (79)  | 07/01/2014       |  |  |
| Russell Midcap Growth Index                   | 3.16  |                 | 5.40    | 1     | 18.52      | 10.73      | 13.37      | 12.16 | 10.45 | 10.41      |                  |  |  |
| Variance                                      | -0.75 |                 | 1.43    |       | -1.74      | -0.65      | N/A        | N/A   | N/A   | -1.45      |                  |  |  |
| M U.S. Mid Cap Growth Equity (SA+CF) Median   | 3.80  |                 | 6.64    | 1     | 17.89      | 10.63      | 13.40      | 12.18 | 10.91 | 10.74      |                  |  |  |
| Seizert Mid Cap Value                         | 0.38  | (93)            | 1.75 (6 | 68)   | 2.18(100)  | 6.20 (92)  | N/A        | N/A   | N/A   | 5.05 (97)  | 07/01/2014       |  |  |
| Russell Midcap Index                          | 2.82  |                 | 2.35    | 1     | 12.33      | 9.58       | 12.22      | 11.89 | 10.23 | 8.83       |                  |  |  |
| Variance                                      | -2.44 |                 | -0.60   | -1    | 10.15      | -3.38      | N/A        | N/A   | N/A   | -3.78      |                  |  |  |
| Russell Midcap Value Index                    | 2.41  |                 | -0.16   |       | 7.60       | 8.80       | 11.27      | 11.70 | 10.06 | 7.49       |                  |  |  |
| Variance                                      | -2.03 |                 | 1.91    |       | -5.42      | -2.60      | N/A        | N/A   | N/A   | -2.44      |                  |  |  |
| IM U.S. Mid Cap Equity (SA+CF) Median         | 3.19  |                 | 3.45    | 1     | 13.97      | 10.14      | 12.80      | 12.17 | 10.84 | 9.41       |                  |  |  |
| Kennedy Small Cap Value                       | 4.88  | (66)            | 1.42 (8 | 84) 1 | 11.60(67)  | N/A        | N/A        | N/A   | N/A   | 18.65 (73) | 03/01/2016       |  |  |
| Russell 2000 Value Index                      | 8.30  |                 | 5.44    | 1     | 13.10      | 11.22      | 11.18      | 11.10 | 9.88  | 22.15      |                  |  |  |
| Variance                                      | -3.42 |                 | -4.02   |       | -1.50      | N/A        | N/A        | N/A   | N/A   | -3.50      |                  |  |  |
| IM U.S. Small Cap Value Equity (SA+CF) Median | 5.62  |                 | 3.99    | 1     | 13.30      | 10.67      | 12.21      | 12.18 | 11.60 | 20.50      |                  |  |  |



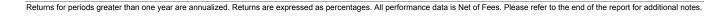


|  | Performance (%)       |                        |           |            |            |        |       |            |                  |  |  |
|--|-----------------------|------------------------|-----------|------------|------------|--------|-------|------------|------------------|--|--|
|  | QTR                   | YTD                    | 1 YR      | 3 YR       | 5 YR       | 7 YR   | 10 YR | Inception  | Inceptio<br>Date |  |  |
| nternational Equity                                  | <b>-2.92</b> (47)     | <b>-2.83</b> (38)      | 7.15(50)  | 5.14 (54)  | 7.66 (32)  | N/A    | N/A   | 7.12 (24)  | 05/01/2013       |  |  |
| MSCI AC World ex USA                                 | -2.39                 | -3.44                  | 7.79      | 5.56       | 6.48       | 4.28   | 3.01  | 4.90       |                  |  |  |
| Variance   | -0.53                 | 0.61                   | -0.64     | -0.42      | 1.18       | N/A    | N/A   | 2.22       |                  |  |  |
| M International Equity (SA+CF+MF) Median             | -3.19                 | -3.66                  | 7.11      | 5.39       | 6.46       | 4.69   | 3.51  | 5.16       |                  |  |  |
| Oriehaus International Small Cap Growth              | -1.69 (43)            | 2.19 (10)              | 17.99(17) | 10.42 (21) | 11.52 (19) | N/A    | N/A   | 13.05 (14) | 09/01/2012       |  |  |
| MSCI AC World ex USA Small Growth                    | -1.56                 | -0.69                  | 13.94     | 8.84       | 10.00      | 6.48   | 5.66  | 10.21      |                  |  |  |
| Variance   | -0.13                 | 2.88                   | 4.05      | 1.58       | 1.52       | N/A    | N/A   | 2.84       |                  |  |  |
| M International SMID Cap Growth Equity (MF) Median   | -2.21                 | -1.10                  | 11.99     | 8.39       | 9.26       | 7.68   | 6.26  | 10.89      |                  |  |  |
| Thompson Siegel & Walmsley                           | -1.78 (50)            | <b>-2.92</b> (52)      | 5.12(82)  | 4.44 (78)  | N/A        | N/A    | N/A   | 4.46 (74)  | 10/01/2014       |  |  |
| MSCI EAFE Index                                      | -0.97                 | -2.37                  | 7.37      | 5.41       | 6.93       | 5.37   | 3.33  | 4.90       |                  |  |  |
| Variance   | -0.81                 | -0.55                  | -2.25     | -0.97      | N/A        | N/A    | N/A   | -0.44      |                  |  |  |
| M International Large Cap Core Equity (SA+CF) Median | -1.83                 | -2.75                  | 7.26      | 5.55       | 7.40       | 5.87   | 4.08  | 5.37       |                  |  |  |
| MCG Emerging Markets Fund                            | <del>-7.93</del> (43) | <del>-6</del> .09 (38) | 7.04(52)  | 4.08 (80)  | N/A        | N/A    | N/A   | 2.99 (81)  | 04/01/2014       |  |  |
| MSCI Emerging Markets Index                          | -7.86                 | -6.51                  | 8.59      | 5.98       | 5.39       | 1.78   | 2.60  | 4.58       |                  |  |  |
| Variance   | -0.07                 | 0.42                   | -1.55     | -1.90      | N/A        | N/A    | N/A   | -1.59      |                  |  |  |
| M Emerging Markets Equity (SA+CF) Median             | -8.40                 | -6.72                  | 7.07      | 6.18       | 5.88       | 3.16   | 3.56  | 5.10       |                  |  |  |
| Total Other Equity                                   | 0.00                  | -0.92                  | -10.98    | N/A        | N/A        | N/A    | N/A   | -12.64     | 01/01/2017       |  |  |
| Huff Energy Fund                                     | 0.00                  | 0.00                   | -0.03     | 2.85       | -9.80      | -5.23  | N/A   | 0.65       | 07/01/2010       |  |  |
| Russell 3000 Energy SP                               | N/A                   | N/A                    | N/A       | N/A        | N/A        | N/A    | N/A   | N/A        |                  |  |  |
| Variance   | N/A                   | N/A                    | N/A       | N/A        | N/A        | N/A    | N/A   | N/A        |                  |  |  |
| Excelsior Investors, Ltd.                            | 0.00                  | 0.00                   | 12.12     | -4.15      | -11.29     | -8.70  | N/A   | -4.09      | 12/01/2008       |  |  |
| ranklin Park Private Equity                          | 0.00                  | N/A                    | N/A       | N/A        | N/A        | N/A    | N/A   | -34.17     | 02/01/2018       |  |  |
| Cambridge Associates Private Equity Index (Proxy)    | 0.00                  | 2.71                   | 12.20     | 10.62      | 12.50      | 12.09  | N/A   | 2.71       |                  |  |  |
| Variance   | 0.00                  | N/A                    | N/A       | N/A        | N/A        | N/A    | N/A   | -36.88     |                  |  |  |
| Sail Venture Fund I                                  | 0.00                  | 0.00                   | -100.00   | -99.00     | -94.96     | -89.09 | N/A   | -85.35     | 06/01/2010       |  |  |
| Sail Venture Fund II                                 | 0.00                  | 0.00                   | -100.00   | -98.56     | -95.34     | -89.24 | N/A   | -85.30     | 07/01/2010       |  |  |
| Sail Pre-Exit Acceleration Fund                      | 0.00                  | 0.00                   | -100.00   | -98.56     | -95.53     | N/A    | N/A   | -93.97     | 01/01/2013       |  |  |



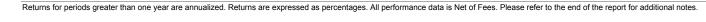
|   |                       |                   |                        |           | Performance | e (%) |       |           |                  |
|---|-----------------------|-------------------|------------------------|-----------|-------------|-------|-------|-----------|------------------|
|   | QTR                   | YTD               | 1 YR                   | 3 YR      | 5 YR        | 7 YR  | 10 YR | Inception | Inceptio<br>Date |
| Total Fixed Income                                    | -1.10                 | -1.27             | 0.02                   | 1.49      | 1.25        | 1.58  | 3.06  | 6.77      | 12/01/1993       |
| Total Fixed Income Policy                             | -1.50                 | -1.58             | 0.49                   | 2.26      | 1.99        | 1.97  | 3.27  | 4.96      |                  |
| Variance  | 0.40                  | 0.31              | -0.47                  | -0.77     | -0.74       | -0.39 | -0.21 | 1.81      |                  |
| Orleans Capital                                       | <del>-0.15</del> (70) | -1.49 (59)        | <del>-0.02</del> (52)  | 2.25 (37) | N/A         | N/A   | N/A   | 2.60 (68) | 01/01/2014       |
| Blmbg. Barc. U.S. Aggregate Index                     | -0.16                 | -1.62             | -0.40                  | 1.72      | 2.27        | 2.57  | 3.72  | 2.43      |                  |
| Variance  | 0.01                  | 0.13              | 0.38                   | 0.53      | N/A         | N/A   | N/A   | 0.17      |                  |
| IM U.S. Broad Market Core Fixed Income (SA+CF) Median | -0.09                 | -1.44             | 0.00                   | 2.09      | 2.67        | 3.07  | 4.39  | 2.78      |                  |
| Templeton Global Mulisector Plus Trust                | <b>-4.22</b> (90)     | <b>-2.31</b> (77) | <del>-2.45</del> (100) | 1.42 (86) | N/A         | N/A   | N/A   | 1.34 (45) | 03/01/2014       |
| Blmbg. Barc. Global Multiverse                        | -2.83                 | -1.57             | 1.35                   | 2.78      | 1.67        | 1.34  | 2.78  | 0.77      |                  |
| Variance  | -1.39                 | -0.74             | -3.80                  | -1.36     | N/A         | N/A   | N/A   | 0.57      |                  |
| M Global Fixed Income (MF) Median                     | -2.21                 | -1.52             | 0.44                   | 2.27      | 1.76        | 1.88  | 3.13  | 1.08      |                  |
| Total Other Fixed Income                              | 1.64                  | 1.60              | 4.22                   | N/A       | N/A         | N/A   | N/A   | 0.63      | 01/01/2017       |
| Capital Point Partners                                | 0.00                  | -4.02             | -7.81                  | -13.24    | -10.96      | -5.16 | N/A   | -2.46     | 07/01/2010       |
| Franchise Equity Capital Partners II                  | 0.00                  | -4.20             | 30.28                  | -24.93    | -11.76      | -8.51 | -3.99 | -3.47     | 04/01/2008       |
| Franchise Equity Capital Partners III                 | 0.00                  | 0.00              | -7.60                  | 4.08      | 0.11        | 3.96  | N/A   | 12.28     | 12/01/2009       |
| LBC Credit Partners III                               | 1.70                  | 0.60              | 2.95                   | 6.87      | N/A         | N/A   | N/A   | 9.70      | 03/01/2014       |
| Credit Suisse Leveraged Loan Index                    | 0.78                  | 2.37              | 4.67                   | 4.32      | 4.26        | 4.60  | 5.01  | 3.94      |                  |
| Variance  | 0.92                  | -1.77             | -1.72                  | 2.55      | N/A         | N/A   | N/A   | 5.76      |                  |
| LBC Credit Partners IV                                | 1.65                  | 3.83              | 10.46                  | N/A       | N/A         | N/A   | N/A   | 12.04     | 09/01/2016       |
| Credit Suisse Leveraged Loan Index                    | 0.78                  | 2.37              | 4.67                   | 4.32      | 4.26        | 4.60  | 5.01  | 5.38      |                  |
| Variance  | 0.87                  | 1.46              | 5.79                   | N/A       | N/A         | N/A   | N/A   | 6.66      |                  |
| Providence Debt Fund III                              | 2.38                  | 3.43              | 6.31                   | 7.77      | N/A         | N/A   | N/A   | 9.86      | 04/01/2014       |
| Credit Suisse Leveraged Loan Index                    | 0.78                  | 2.37              | 4.67                   | 4.32      | 4.26        | 4.60  | 5.01  | 3.93      |                  |
| Variance  | 1.60                  | 1.06              | 1.64                   | 3.45      | N/A         | N/A   | N/A   | 5.93      |                  |

|                                     |       |       |       |       | Performance | e (%) |       |           |                  |
|-------------------------------------|-------|-------|-------|-------|-------------|-------|-------|-----------|------------------|
|                                     | QTR   | YTD   | 1 YR  | 3 YR  | 5 YR        | 7 YR  | 10 YR | Inception | Inceptio<br>Date |
| Alternative Investments             |       |       |       |       |             |       |       |           |                  |
| Multi Asset Funds                   | 1.09  | 0.87  | 3.64  | -0.51 | -0.06       | 1.33  | N/A   | 5.80      | 12/01/2008       |
| HFRI Fund of Funds Composite Index  | 0.40  | 0.67  | 5.12  | 1.93  | 3.45        | 2.81  | 1.40  | 3.61      |                  |
| Variance                            | 0.69  | 0.20  | -1.48 | -2.44 | -3.51       | -1.48 | N/A   | 2.19      |                  |
| Double Eagle Capital Ace Fund, Ltd. | 1.86  | 3.53  | 6.38  | 0.25  | 2.07        | 3.04  | N/A   | 3.74      | 09/01/2010       |
| HFRI Fund of Funds Composite Index  | 0.40  | 0.67  | 5.12  | 1.93  | 3.45        | 2.81  | 1.40  | 3.24      |                  |
| Variance                            | 1.46  | 2.86  | 1.26  | -1.68 | -1.38       | 0.23  | N/A   | 0.50      |                  |
| BlackRock Multi Asset Fund          | 0.12  | N/A   | N/A   | N/A   | N/A         | N/A   | N/A   | -2.66     | 02/01/2018       |
| BlackRock Multi Hybrid              | 0.79  | -0.52 | N/A   | N/A   | N/A         | N/A   | N/A   | -2.53     |                  |
| Variance                            | -0.67 | N/A   | N/A   | N/A   | N/A         | N/A   | N/A   | -0.13     |                  |
| Westwood Income Opportunity Fund    | 0.71  | N/A   | N/A   | N/A   | N/A         | N/A   | N/A   | -3.88     | 02/01/2018       |
| WW Income Fund Index                | 2.98  | 0.75  | 4.61  | 5.26  | 6.06        | 6.59  | 6.36  | -1.49     |                  |
| Variance                            | -2.27 | N/A   | N/A   | N/A   | N/A         | N/A   | N/A   | -2.39     |                  |
| Other Assets                        |       |       |       |       |             |       |       |           |                  |
| Cash Account                        | 0.42  | 0.73  | 1.22  | 0.59  | 0.37        | 0.36  | 0.49  | 4.58      | 06/01/1988       |
| Cash Account PE                     | N/A   | N/A   | N/A   | N/A   | N/A         | N/A   | N/A   | N/A       | 03/01/2014       |
| Retiree Death Benefit Account       | 0.40  | 0.71  | 1.20  | 0.59  | 0.36        | 0.45  | 0.44  | 1.36      | 12/01/2004       |
| Other Alternative Assets            |       |       |       |       |             |       |       |           |                  |
| Total Real Estate                   | 1.93  | 3.14  | 4.47  | 2.79  | 9.49        | 8.76  | 0.88  | 3.90      | 08/01/2005       |
| NCREIF Property Index               | 1.81  | 3.54  | 7.19  | 8.25  | 9.77        | 10.23 | 6.22  | 8.18      |                  |
| Variance                            | 0.12  | -0.40 | -2.72 | -5.46 | -0.28       | -1.47 | -5.34 | -4.28     |                  |
| Total Timber Funds                  | -0.45 | -0.48 | 0.22  | -2.95 | -1.18       | -0.19 | -1.26 | 1.68      | 08/01/2005       |
| NCREIF Timberland Index             | 0.48  | 1.41  | 3.57  | 3.43  | 6.00        | 5.76  | 4.01  | 6.90      |                  |
| Variance                            | -0.93 | -1.89 | -3.35 | -6.38 | -7.18       | -5.95 | -5.27 | -5.22     |                  |





|   |                   |                    |              | F                 | Performance (% | )            |              |              |                     |
|---|-------------------|--------------------|--------------|-------------------|----------------|--------------|--------------|--------------|---------------------|
|   | YTD               | 2017               | 2016         | 2015              | 2014           | 2013         | 2012         | 2011         | 20 <sup>-</sup>     |
| Total Retirement System (Net)                               | 1.13              | 11.89              | 7.67         | -1.05             | 5.61           | 10.66        | 8.79         | -3.16        | 10.99               |
| Total Retirement System (Gross)                             | 1.24              | 12.17              | 7.87         | -0.83             | 5.94           | 11.16        | 9.31         | -2.68        | 12.25               |
| Total Fund Policy Variance                                  | 1.58              | 15.77              | 8.04         | 2.43              | 8.08           | 17.56        | 11.31        | 4.69         | 12.13               |
|   | -0.34             | -3.60              | -0.17        | -3.26             | -2.14          | -6.40        | -2.00        | -7.37        | 0.12                |
| Fotal Equity  | 1.65              | 18.49              | 11.41        | -2.87             | 5.30           | 29.57        | 10.82        | -8.56        | 16.73               |
| Total Equity Policy Variance                                | 1.82              | 22.07              | 9.61         | -0.51             | 6.91           | 29.57        | 16.70        | -3.34        | 14.51               |
|   | -0.17             | -3.58              | 1.80         | -2.36             | -1.61          | 0.00         | -5.88        | -5.22        | 2.22                |
| Domestic Equity   | 3.31 (43)         | 17.39 (54)         | 15.76 (31)   | <b>-3.09</b> (62) | 8.03 (58)      | N/A          | N/A          | N/A          | N/A                 |
| Russell 3000 Index Variance M U.S. Equity (SA+CF+MF) Median | 3.22              | 21.13              | 12.74        | 0.48              | 12.56          | 33.55        | 16.42        | 1.03         | 16.93               |
|   | 0.09              | -3.74              | 3.02         | -3.57             | -4.53          | N/A          | N/A          | N/A          | N/A                 |
|   | 2.53              | 18.11              | 11.57        | -1.68             | 9.18           | 33.88        | 15.25        | -1.67        | 17.88               |
| NT Collective Russell 3000 Index                            | 3.21 (43)         | 21.15 (45)         | 12.79 (48)   | 0.49 (49)         | 12.55 (31)     | N/A          | N/A          | N/A          | N/A                 |
| Russell 3000 Index  | 3.22              | 21.13              | 12.74        | 0.48              | 12.56          | 33.55        | 16.42        | 1.03         | 16.93               |
| Variance  | -0.01             | 0.02               | 0.05         | 0.01              | -0.01          | N/A          | N/A          | N/A          | N/A                 |
| M U.S. All Cap Core Equity (SA+CF) Median                   | 2.74              | 20.51              | 12.22        | 0.36              | 10.79          | 35.95        | 15.97        | 0.32         | 16.99               |
| Baird Mid Cap Growth Russell Midcap Growth Index Variance   | 6.83 (49)         | 26.98 (31)         | 5.35 (54)    | -3.03 (81)        | N/A            | N/A          | N/A          | N/A          | N/A                 |
|   | 5.40              | 25.27              | 7.33         | -0.20             | 11.90          | 35.74        | 15.81        | -1.65        | 26.38               |
|   | 1.43              | 1.71               | -1.98        | -2.83             | N/A            | N/A          | N/A          | N/A          | N/A                 |
| M U.S. Mid Cap Growth Equity (SA+CF) Median                 | 6.64              | 25.43              | 5.59         | 0.79              | 8.63           | 36.40        | 15.13        | -0.95        | 26.75               |
| Seizert Mid Cap Value                                       | 1.75 (68)         | 7.38 (99)          | 24.86 (6)    | -10.83 (98)       | N/A            | N/A          | N/A          | N/A          | N/A                 |
| Russell Midcap Index  | 2.35              | 18.52              | 13.80        | -2.44             | 13.22          | 34.76        | 17.28        | -1.55        | 25.47               |
| Variance  | -0.60             | -11.14             | 11.06        | -8.39             | N/A            | N/A          | N/A          | N/A          | N/A                 |
| Russell Midcap Value Index                                  | -0.16             | 13.34              | 20.00        | -4.78             | 14.75          | 33.46        | 18.51        | -1.38        | 24.75               |
| Variance  | 1.91              | <b>-5.96</b> 20.00 | 4.86         | -6.05             | N/A            | N/A          | N/A          | N/A          | N/A                 |
| M U.S. Mid Cap Equity (SA+CF) Median                        | 3.45              |                    | 12.71        | -1.19             | 9.78           | 36.41        | 16.56        | -1.05        | 24.95               |
| Kennedy Small Cap Value Russell 2000 Value Index            | 1.42 (84)<br>5.44 | 12.51 (42)<br>7.84 | N/A<br>31.74 | N/A<br>-7.47      | N/A<br>4.22    | N/A<br>34.52 | N/A<br>18.05 | N/A<br>-5.50 | N/A<br>24.50<br>N/A |
| Variance M U.S. Small Cap Value Equity (SA+CF) Median       | -4.02             | 4.67               | N/A          | N/A               | N/A            | N/A          | N/A          | N/A          | N/A                 |
|   | 3.99              | 11.59              | 26.17        | -4.29             | 5.71           | 38.07        | 17.55        | -3.15        | 27.51               |

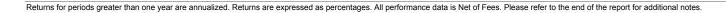




|   |       |      |            |                       |                   | Performance (% | <b>6</b> ) |        |        |       |
|---|-------|------|------------|-----------------------|-------------------|----------------|------------|--------|--------|-------|
|   | Y1    | ΓD   | 2017       | 2016                  | 2015              | 2014           | 2013       | 2012   | 2011   | 201   |
| International Equity                                  | -2.83 | (38) | 27.37 (61) | 0.67 (63)             | <b>-2.40</b> (50) | -0.27 (24)     | N/A        | N/A    | N/A    | N/A   |
| MSCI AC World ex USA                                  | -3.44 | , ,  | 27.77      | 5.01                  | -5.25             | -3.44          | 15.78      | 17.39  | -13.33 | 11.60 |
| Variance  | 0.61  |      | -0.40      | -4.34                 | 2.85              | 3.17           | N/A        | N/A    | N/A    | N/A   |
| IM International Equity (SA+CF+MF) Median             | -3.66 |      | 29.25      | 2.26                  | -2.44             | -3.99          | 18.08      | 18.89  | -14.29 | 13.68 |
| Driehaus International Small Cap Growth               | 2.19  | (10) | 41.19 (7)  | <del>-6.24</del> (86) | 12.59 (11)        | -4.32 (41)     | 29.24 (34) | N/A    | N/A    | N/A   |
| MSCI AC World ex USA Small Growth                     | -0.69 |      | 33.99      | -0.04                 | 6.74              | -3.35          | 18.80      | 17.17  | -17.67 | 27.55 |
| Variance  | 2.88  |      | 7.20       | -6.20                 | 5.85              | -0.97          | 10.44      | N/A    | N/A    | N/A   |
| IM International SMID Cap Growth Equity (MF) Median   | -1.10 |      | 34.48      | -1.78                 | 6.71              | -5.02          | 26.68      | 21.71  | -15.21 | 22.22 |
| Thompson Siegel & Walmsley                            | -2.92 | (52) | 22.70 (92) | 0.47 (63)             | 1.38 (37)         | N/A            | N/A        | N/A    | N/A    | N/A   |
| MSCI EAFE Index                                       | -2.37 |      | 25.62      | 1.51                  | -0.39             | -4.48          | 23.29      | 17.90  | -11.73 | 8.21  |
| Variance  | -0.55 |      | -2.92      | -1.04                 | 1.77              | N/A            | N/A        | N/A    | N/A    | N/A   |
| IM International Large Cap Core Equity (SA+CF) Median | -2.75 |      | 26.48      | 1.26                  | 0.33              | -3.93          | 23.39      | 19.44  | -12.27 | 11.22 |
| MCG Emerging Markets Fund                             | -6.09 | (38) | 35.93 (57) | 7.14 (72)             | -18.73 (95)       | N/A            | N/A        | N/A    | N/A    | N/A   |
| MSCI Emerging Markets Index                           | -6.51 |      | 37.75      | 11.60                 | -14.60            | -1.82          | -2.27      | 18.64  | -18.17 | 19.20 |
| Variance  | 0.42  |      | -1.82      | -4.46                 | -4.13             | N/A            | N/A        | N/A    | N/A    | N/A   |
| M Emerging Markets Equity (SA+CF) Median              | -6.72 |      | 36.88      | 10.08                 | -12.65            | -0.11          | 0.95       | 20.50  | -18.06 | 21.86 |
| Total Other Equity                                    | -0.92 |      | -17.60     | N/A                   | N/A               | N/A            | N/A        | N/A    | N/A    | N/A   |
| Huff Energy Fund                                      | 0.00  |      | -10.08     | 44.55                 | -20.83            | -18.64         | -29.83     | 43.24  | -5.31  | N/A   |
| Russell 3000 Energy SP                                | N/A   |      | N/A        | N/A                   | N/A               | -10.01         | 25.86      | 3.87   | 3.42   | 21.85 |
| Variance  | N/A   |      | N/A        | N/A                   | N/A               | -8.63          | -55.69     | 39.37  | -8.73  | N/A   |
| Excelsior Investors, Ltd.                             | 0.00  |      | 26.42      | 13.49                 | -40.49            | -13.16         | -23.59     | -2.73  | 2.92   | 15.69 |
| Franklin Park Private Equity                          | N/A   |      | N/A        | N/A                   | N/A               | N/A            | N/A        | N/A    | N/A    | N/A   |
| Cambridge Associates Private Equity Index (Proxy)     | 2.71  |      | 17.52      | 13.11                 | 5.65              | 11.22          | 21.08      | 13.36  | 11.16  | N/A   |
| Variance  | N/A   |      | N/A        | N/A                   | N/A               | N/A            | N/A        | N/A    | N/A    | N/A   |
| Sail Venture Fund I                                   | 0.00  |      | -100.00    | 0.00                  | 0.00              | -51.72         | -37.04     | -32.91 | -13.87 | N/A   |
| Sail Venture Fund II                                  | 0.00  |      | -100.00    | 0.00                  | 0.00              | -90.44         | -22.84     | -24.33 | 10.90  | N/A   |
| Sail Pre-Exit Acceleration Fund                       | 0.00  |      | -100.00    | 0.00                  | 0.00              | -93.68         | 3.26       | N/A    | N/A    | N/A   |

|   |                       |           |           | F                 | Performance (% | )     |        |       |       |
|---|-----------------------|-----------|-----------|-------------------|----------------|-------|--------|-------|-------|
|   | YTD                   | 2017      | 2016      | 2015              | 2014           | 2013  | 2012   | 2011  | 2010  |
| Total Fixed Income                                    | -1.27                 | 2.86      | 4.36      | -0.97             | 1.69           | -3.42 | 13.45  | -1.20 | 15.23 |
| Total Fixed Income Policy                             | -1.58                 | 5.60      | 2.77      | -1.37             | 3.20           | -2.10 | 4.54   | 6.72  | 6.24  |
| Variance  | 0.31                  | -2.74     | 1.59      | 0.40              | -1.51          | -1.32 | 8.91   | -7.92 | 8.99  |
| Orleans Capital                                       | -1.49 (59)            | 3.87 (60) | 3.79 (28) | 0.57 (72)         | 5.08 (94)      | N/A   | N/A    | N/A   | N/A   |
| Blmbg. Barc. U.S. Aggregate Index                     | -1.62                 | 3.54      | 2.65      | 0.55              | 5.97           | -2.02 | 4.21   | 7.84  | 6.54  |
| Variance  | 0.13                  | 0.33      | 1.14      | 0.02              | -0.89          | N/A   | N/A    | N/A   | N/A   |
| IM U.S. Broad Market Core Fixed Income (SA+CF) Median | -1.44                 | 4.05      | 3.10      | 0.82              | 6.17           | -1.56 | 5.93   | 7.84  | 7.25  |
| Templeton Global Mulisector Plus Trust                | <del>-2.31</del> (77) | 3.84 (83) | 7.33 (7)  | <b>-4.27</b> (61) | N/A            | N/A   | N/A    | N/A   | N/A   |
| Blmbg. Barc. Global Multiverse                        | -1.57                 | 7.69      | 2.84      | -3.29             | 0.48           | -2.19 | 4.84   | 5.55  | 5.84  |
| Variance  | -0.74                 | -3.85     | 4.49      | -0.98             | N/A            | N/A   | N/A    | N/A   | N/A   |
| IM Global Fixed Income (MF) Median                    | -1.52                 | 6.82      | 3.27      | -3.88             | 1.91           | -2.52 | 7.33   | 4.01  | 5.97  |
| Total Other Fixed Income                              | 1.60                  | -0.65     | N/A       | N/A               | N/A            | N/A   | N/A    | N/A   | N/A   |
| Capital Point Partners                                | -4.02                 | -31.96    | 0.00      | 1.14              | -7.09          | -6.18 | 15.06  | 7.40  | N/A   |
| Franchise Equity Capital Partners II                  | -4.20                 | 74.16     | -70.03    | -13.41            | 21.33          | 21.10 | -16.06 | -7.72 | 7.86  |
| Franchise Equity Capital Partners III                 | 0.00                  | -1.08     | 7.95      | 9.06              | -19.72         | 22.20 | 3.61   | 18.41 | 2.08  |
| LBC Credit Partners III                               | 0.60                  | 2.05      | 11.13     | 16.17             | N/A            | N/A   | N/A    | N/A   | N/A   |
| Credit Suisse Leveraged Loan Index                    | 2.37                  | 4.25      | 9.87      | -0.41             | 2.18           | 6.16  | 9.43   | 1.82  | 9.98  |
| Variance  | -1.77                 | -2.20     | 1.26      | 16.58             | N/A            | N/A   | N/A    | N/A   | N/A   |
| LBC Credit Partners IV                                | 3.83                  | 15.20     | N/A       | N/A               | N/A            | N/A   | N/A    | N/A   | N/A   |
| Credit Suisse Leveraged Loan Index                    | 2.37                  | 4.25      | 9.87      | -0.41             | 2.18           | 6.16  | 9.43   | 1.82  | 9.98  |
| Variance  | 1.46                  | 10.95     | N/A       | N/A               | N/A            | N/A   | N/A    | N/A   | N/A   |
| Providence Debt Fund III                              | 3.43                  | 7.95      | 13.97     | 2.91              | N/A            | N/A   | N/A    | N/A   | N/A   |
| Credit Suisse Leveraged Loan Index                    | 2.37                  | 4.25      | 9.87      | -0.41             | 2.18           | 6.16  | 9.43   | 1.82  | 9.98  |
| Variance  | 1.06                  | 3.70      | 4.10      | 3.32              | N/A            | N/A   | N/A    | N/A   | N/A   |

|                                     |       |       |       |       | Performance ( | %)     |       |       |        |
|-------------------------------------|-------|-------|-------|-------|---------------|--------|-------|-------|--------|
|                                     | YTD   | 2017  | 2016  | 2015  | 2014          | 2013   | 2012  | 2011  | 2010   |
| ternative Investments               |       |       |       |       |               |        |       |       |        |
| Multi Asset Funds                   | 0.87  | 0.81  | 0.37  | -1.70 | -6.00         | 12.18  | 9.71  | -4.32 | 13.31  |
| HFRI Fund of Funds Composite Index  | 0.67  | 7.77  | 0.51  | -0.27 | 3.37          | 8.96   | 4.79  | -5.72 | 5.70   |
| Variance                            | 0.20  | -6.96 | -0.14 | -1.43 | -9.37         | 3.22   | 4.92  | 1.40  | 7.61   |
| Double Eagle Capital Ace Fund, Ltd. | 3.53  | 0.81  | -1.53 | 0.78  | 0.17          | 16.13  | 8.92  | -6.81 | N/A    |
| HFRI Fund of Funds Composite Index  | 0.67  | 7.77  | 0.51  | -0.27 | 3.37          | 8.96   | 4.79  | -5.72 | 5.70   |
| Variance                            | 2.86  | -6.96 | -2.04 | 1.05  | -3.20         | 7.17   | 4.13  | -1.09 | N/A    |
| BlackRock Multi Asset Fund          | N/A   | N/A   | N/A   | N/A   | N/A           | N/A    | N/A   | N/A   | N/A    |
| BlackRock Multi Hybrid              | -0.52 | N/A   | N/A   | N/A   | N/A           | N/A    | N/A   | N/A   | N/A    |
| Variance                            | N/A   | N/A   | N/A   | N/A   | N/A           | N/A    | N/A   | N/A   | N/A    |
| Westwood Income Opportunity Fund    | N/A   | N/A   | N/A   | N/A   | N/A           | N/A    | N/A   | N/A   | N/A    |
| WW Income Fund Index                | 0.75  | 8.12  | 5.36  | 0.54  | 13.51         | 6.16   | 9.96  | 7.30  | 13.10  |
| Variance                            | N/A   | N/A   | N/A   | N/A   | N/A           | N/A    | N/A   | N/A   | N/A    |
| ther Assets                         |       |       |       |       |               |        |       |       |        |
| Cash Account                        | 0.73  | 0.76  | 0.27  | 0.01  | 0.06          | 0.02   | 0.59  | -0.21 | 0.36   |
| Cash Account PE                     | N/A   | N/A   | N/A   | N/A   | N/A           | N/A    | N/A   | N/A   | N/A    |
| Retiree Death Benefit Account       | 0.71  | 0.77  | 0.27  | 0.02  | 0.01          | 0.01   | 0.15  | 1.24  | 0.06   |
| ther Alternative Assets             |       |       |       |       |               |        |       |       |        |
| Total Real Estate                   | 3.14  | 2.90  | 0.76  | 5.40  | 31.16         | 10.25  | 7.49  | 6.25  | 2.00   |
| NCREIF Property Index               | 3.54  | 6.96  | 7.97  | 13.33 | 11.82         | 10.25  | 10.54 | 14.26 | 13.11  |
| Variance Variance                   | -0.40 | -4.06 | -7.21 | -7.93 | 19.34         | -0.73  | -3.05 | -8.01 | -11.11 |
| Total Timber Funds                  | -0.48 | -3.94 | -6.92 | 1.93  | 10.81         | -4.18  | 0.02  | -1.33 | 3.80   |
| NCREIF Timberland Index             | 1.41  | 3.63  | 2.59  | 4.97  | 10.48         | 9.69   | 7.75  | 1.57  | -0.15  |
| Variance                            | -1.89 | -7.57 | -9.51 | -3.04 | 0.33          | -13.87 | -7.73 | -2.90 | 3.95   |





| Comparative Performance - IRR          |                   |       |        |         |        |        |               |                   |
|--|-------------------|-------|--------|---------|--------|--------|---------------|-------------------|
|  | Market Value (\$) | QTR   | YTD    | 1 YR    | 3 YR   | 5 YR   | Inception IRR | Inception<br>Date |
| Total Real Estate Investments          | 68,418,580        | 1.70  | 2.89   | 4.16    | 2.72   | 10.74  | 6.91          | 07/31/200         |
| Edison Investments                     | 2,141,209         | 15.64 | 15.54  | 17.59   | 9.59   | 21.62  | 12.09         | 09/30/1996        |
| ARES Advisors (V & VI)                 | 1,336,621         | 3.93  | 6.01   | 19.96   | 12.68  | 17.04  | 3.91          | 05/31/2002        |
| Rockspring Capital Land Funds (I - VI) | 9,836,612         | -0.14 | -0.47  | -1.72   | -5.52  | 3.75   | 1.46          | 11/30/2003        |
| INVESCO Real Estate Funds (I & II)     | 27,883            | -2.35 | -2.51  | -5.71   | 6.48   | 9.02   | 4.31          | 03/31/2005        |
| JPM India Property Fund                | 1,144,518         | 0.00  | -11.59 | -21.09  | -7.85  | -5.42  | -3.28         | 05/24/2007        |
| Vision Capital Partners                | 1,818,400         | -0.12 | -0.12  | -11.13  | -3.85  | -9.52  | -8.37         | 01/31/2008        |
| FWAR Investments                       | 11,855            | 0.00  | 0.00   | -96.68  | -23.43 | -7.51  | -25.82        | 07/18/2012        |
| Morgan Stanley                         | 48,195,676        | 1.82  | 3.85   | 8.39    | N/A    | N/A    | 8.73          | 12/31/2015        |
| AEW Partners Fund VIII                 | 2,370,861         | 0.26  | -0.22  | -2.01   | N/A    | N/A    | -15.76        | 06/26/2017        |
| GreenOak US III                        | 1,534,944         | N/A   | N/A    | N/A     | N/A    | N/A    | -12.91        | 06/22/2018        |
| Total Timber Funds                     | 21,961,652        | -0.45 | -0.47  | 0.23    | -2.70  | -0.48  | -0.08         | 07/31/2005        |
| BTG Pactual 1                          | 1,749,331         | -0.18 | 6.08   | 13.52   | -6.46  | -5.97  | 3.95          | 11/30/1996        |
| Capitol Timberland Investments         | 16,541,840        | -0.34 | 1.68   | 2.27    | -0.37  | 2.33   | 3.62          | 09/30/2004        |
| Domain Environmental Investments II    | 3,670,481         | -1.09 | -11.50 | -12.46  | -6.62  | -3.27  | -1.63         | 04/30/2008        |
| Total Other Equity                     | 13,779,335        | -0.46 | -1.62  | -11.41  | N/A    | N/A    | 0.00          | 01/01/2017        |
| Huff Energy Fund                       | 11,940,332        | 0.00  | 0.00   | -0.03   | 2.85   | -9.96  | 2.92          | 12/31/2006        |
| Excelsior Investors, Ltd.              | 623,103           | 0.00  | 0.00   | 12.33   | -4.67  | N/A    | -10.79        | 12/31/2014        |
| Franklin Park Private Equity           | 1,215,897         | -6.68 | -26.15 | N/A     | N/A    | N/A    | -26.15        | 01/31/2018        |
| Sail Venture Fund I                    | 1                 | 0.00  | 0.00   | -100.00 | -98.94 | -94.79 | -65.43        | 12/31/2008        |
| Sail Venture Fund II                   | 1                 | 0.00  | 0.00   | -100.00 | -98.54 | -95.32 | -91.17        | 02/28/2009        |
| Sail Pre-Exit Acceleration Fund        | 1                 | 0.00  | 0.00   | -100.00 | -98.53 | -95.49 | -94.31        | 01/31/2013        |
| Total Other Fixed Income               | 31,696,355        | 1.67  | 1.65   | 4.38    | N/A    | N/A    | 0.00          | 01/03/2017        |
| Capital Point Partners                 | 4,320,448         | 0.00  | -4.02  | -7.81   | -15.76 | -12.82 | 0.50          | 03/31/2007        |
| Franchise Equity Capital Partners II   | 308,338           | 0.00  | -4.41  | 31.30   | -24.19 | 1.65   | 0.63          | 04/28/2008        |
| Franchise Equity Capital Partners III  | 25,679            | 0.00  | 0.00   | 1.00    | 9.10   | 0.81   | 7.19          | 12/21/2009        |
| LBC Credit Partners III                | 7,581,033         | 1.83  | 0.85   | 3.86    | 7.83   | N/A    | 9.66          | 03/07/2014        |
| LBC Credit Partners IV                 | 9,432,203         | 1.63  | 3.81   | 9.94    | N/A    | N/A    | 11.74         | 09/19/2016        |
| Providence Debt Fund III               | 10,028,655        | 2.35  | 3.37   | 6.27    | 8.37   | N/A    | 9.10          | 04/21/2014        |



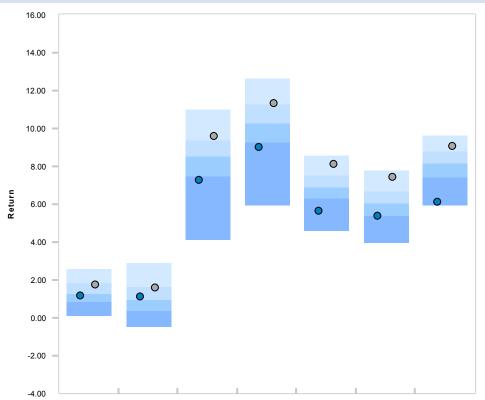
| Private Equity Summary of Partnership |                     |                       |                   |            |                  |
|---------------------------------------|---------------------|-----------------------|-------------------|------------|------------------|
| Partnerships                          | Drawn<br>Down<br>\$ | Market<br>Value<br>\$ | Distributed<br>\$ | IRR<br>(%) | TVPI<br>Multiple |
| Total Real Estate Investments         |                     |                       |                   |            |                  |
| Edison Investments                    | 8,146,177           | 2,141,209             | 19,742,296        | 12.1       | 2.7              |
| ARES Value Enhancement Fund V         | 5,000,000           | 532,594               | 5,430,214         | 5.9        | 1.2              |
| ARES Value Enhancement Fund VI        | 5,000,000           | 804,028               | 5,677,217         | 3.1        | 1.3              |
| Rockspring Capital Land Fund I        | 3,618,330           | 496,824               | 4,738,306         | 10.3       | 1.4              |
| Rockspring Capital Land Fund II       | 7,870,282           | 3,331,357             | 7,784,100         | 3.6        | 1.4              |
| Rockspring Capital Land Fund III      | 5,125,000           | 1,057,383             | 5,898,227         | 3.5        | 1.4              |
| Rockspring Capital Land Fund IV       | 7,615,498           | 106,815               | 9,395,290         | 3.1        | 1.2              |
| Rockspring Capital Land Fund V        | 5,093,604           | 3,321,812             | 2,360,948         | 1.0        | 1.1              |
| Rockspring Capital Land Fund VI       | 3,500,000           | 1,522,421             | 1,729,201         | -0.8       | 0.9              |
| INVESCO Real Estate Fund II           | 7,027,609           | 27,883                | 9,105,937         | 6.8        | 1.3              |
| JPM India Property Fund               | 4,354,162           | 1,144,518             | 2,339,421         | -3.3       | 0.8              |
| Vision Capital Partners               | 5,418,050           | 1,818,400             | 570,711           | -8.4       | 0.4              |
| FWAR Investments                      | 4,467,760           | 11,855                | 1,183,552         | -25.8      | 0.3              |
| Morgan Stanley                        | 40,000,000          | 48,195,676            | -                 | 8.7        | 1.2              |
| AEW Partners Fund VIII                | 3,671,085           | 2,370,861             | 1,017,778         | -15.8      | 0.9              |
| GreenOak US III                       | 1,762,418           | 1,534,944             | -                 | -12.9      | 0.9              |
| Total Timber Investments              |                     |                       |                   |            |                  |
| BTG Pactual 1                         | 8,790,774           | 1,749,331             | 13,862,803        | 3.6        | 1.8              |
| Capitol Timberland Investments        | 14,187,646          | 16,541,840            | 3,568,580         | 3.6        | 1.4              |
| Domain Environmental Investments II   | 7,540,342           | 3,670,481             | 3,156,648         | -1.6       | 0.9              |

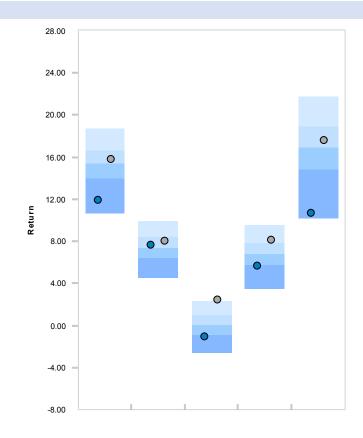


| Partnerships                          | Drawn<br>Down<br>\$ | Market<br>Value<br>\$ | Distributed<br>\$ | IRR<br>(%) | TVPI<br>Multiple |
|---------------------------------------|---------------------|-----------------------|-------------------|------------|------------------|
|                                       |                     |                       |                   |            |                  |
| Total Other Equity                    |                     |                       | . =               |            |                  |
| Huff Energy Fund                      | 11,095,509          | 11,940,332            | 1,786,358         | 2.9        | 1.2              |
| Excelsior Investors, Ltd.             | 1,018,466           | 623,103               | 67,043            | -10.8      | 0.7              |
| Franklin Park Private Equity          | 1,429,975           | 1,215,897             | -                 | -26.1      | 0.9              |
| Sail Venture Fund I                   | 5,000,000           | 1                     | 343,503           | -65.4      | 0.1              |
| Sail Venture Fund II                  | 5,366,749           | 1                     | 688,247           | -91.2      | 0.1              |
| Sail Pre-Exit Acceleration Fund       | 4,947,894           | 1                     | -                 | -94.3      | 0.0              |
| Total Other Fixed Income              |                     |                       |                   |            |                  |
| Capital Point Partners                | 12,058,210          | 4,320,448             | 8,004,090         | 0.5        | 1.0              |
| Franchise Equity Capital Partners II  | 14,663,847          | 308,338               | 14,686,162        | 0.6        | 1.0              |
| Franchise Equity Capital Partners III | 4,943,551           | 25,679                | 6,251,544         | 7.2        | 1.3              |
| LBC Credit Partners III               | 18,837,140          | 7,581,033             | 15,133,819        | 9.7        | 1.2              |
| LBC Credit Partners IV                | 9,500,000           | 9,432,203             | 1,042,058         | 11.7       | 1.1              |
| Providence Debt Fund III              | 10,017,001          | 10,028,655            | 2,601,748         | 9.1        | 1.3              |



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





|   | QTR       | FYTD      | 1 YR      | 2 YR       | 3 YR      | 4 YR      | 5 YR      |   | 2017       | 2016      | 2015       | 2014      | 2013       |
|---|-----------|-----------|-----------|------------|-----------|-----------|-----------|---|------------|-----------|------------|-----------|------------|
| <ul> <li>Total Retirement System</li> </ul> | 1.17 (57) | 1.13 (43) | 7.28 (78) | 9.02 (78)  | 5.65 (90) | 5.36 (76) | 6.09 (95) | <ul> <li>Total Retirement System</li> </ul> | 11.89 (93) | 7.67 (42) | -1.05 (79) | 5.61 (78) | 10.66 (95) |
| <ul><li>Total Fund Policy</li></ul>         | 1.76 (30) | 1.58 (29) | 9.59 (22) | 11.31 (24) | 8.09 (11) | 7.40 (8)  | 9.07 (16) | <ul><li>Total Fund Policy</li></ul>         | 15.77 (42) | 8.04 (34) | 2.43 (5)   | 8.08 (21) | 17.56 (43) |
| Median                                      | 1.28      | 0.97      | 8.50      | 10.27      | 6.91      | 6.04      | 8.16      | Median                                      | 15.41      | 7.32      | 0.07       | 6.76      | 16.90      |

|                                    | 1 Qtr<br>Ending<br>Mar-2018 | 1 Qtr<br>Ending<br>Dec-2017 | 1 Qtr<br>Ending<br>Sep-2017 | 1 Qtr<br>Ending<br>Jun-2017 | 1 Qtr<br>Ending<br>Mar-2017 | 1 Qtr<br>Ending<br>Dec-2016 |
|------------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| otal Retirement System             | -0.05 (33)                  | 3.13 (86)                   | 2.86 (88)                   | 2.13 (91)                   | 3.27 (93)                   | 1.53 (21)                   |
| Total Fund Policy                  | -0.18 (42)                  | 4.16 (21)                   | 3.58 (38)                   | 2.89 (56)                   | 4.29 (58)                   | 1.77 (15)                   |
| All Public Plans-Total Fund Median | -0.28                       | 3.74                        | 3.45                        | 2.97                        | 4.40                        | 0.85                        |



# 3 Yr Rolling Under/Over Performance - 5 Years Over Performance 12.0 Under Performance 0.0 Total Fund Policy (%) Under Performance Latest Date Latest Date

# 3 Yr Rolling Percentile Ranking - 5 Years 25.0 25.0 75.0 9/13 3/14 9/14 3/15 9/15 3/16 9/16 3/17 9/17 6/18

|   | Total Period | 5-25<br>Count | 25-Median<br>Count | Median-75<br>Count | 75-95<br>Count |
|---|--------------|---------------|--------------------|--------------------|----------------|
| <ul> <li>Total Retirement System</li> </ul> | 20           | 0 (0%)        | 0 (0%)             | 2 (10%)            | 18 (90%)       |
| <ul> <li>Total Fund Policy</li> </ul>       | 20           | 15 (75%)      | 5 (25%)            | 0 (0%)             | 0 (0%)         |

# Peer Group Scattergram - 3 Years 9.02 7.38 6.56 5.74 4.92 5.40 5.60 5.80 6.00 Risk (Standard Deviation %)

| 10          | .00   |     |     |           |                |         |     |     |     |
|-------------|-------|-----|-----|-----------|----------------|---------|-----|-----|-----|
| _           |       |     |     |           |                | $\circ$ |     |     |     |
|             | .00   |     |     |           |                |         |     |     |     |
| Return<br>9 | .00 – |     |     |           |                |         |     |     |     |
| 4           | .00   |     |     |           |                |         |     |     |     |
|             |       | 5.0 | 5.2 | 5.4       | 5.6            | 5.8     | 6.0 | 6.2 | 6.4 |
|             |       |     |     | Risk (Sta | andard Deviati | ion %)  |     |     |     |

|   | Return | Deviation Standard |
|---|--------|--------------------|
| <ul> <li>Total Retirement System</li> </ul> | 5.65   | 5.66               |
| <ul><li>Total Fund Policy</li></ul>         | 8.09   | 6.12               |
| Median                                      | 6.91   | 6.26               |
|   |        |                    |

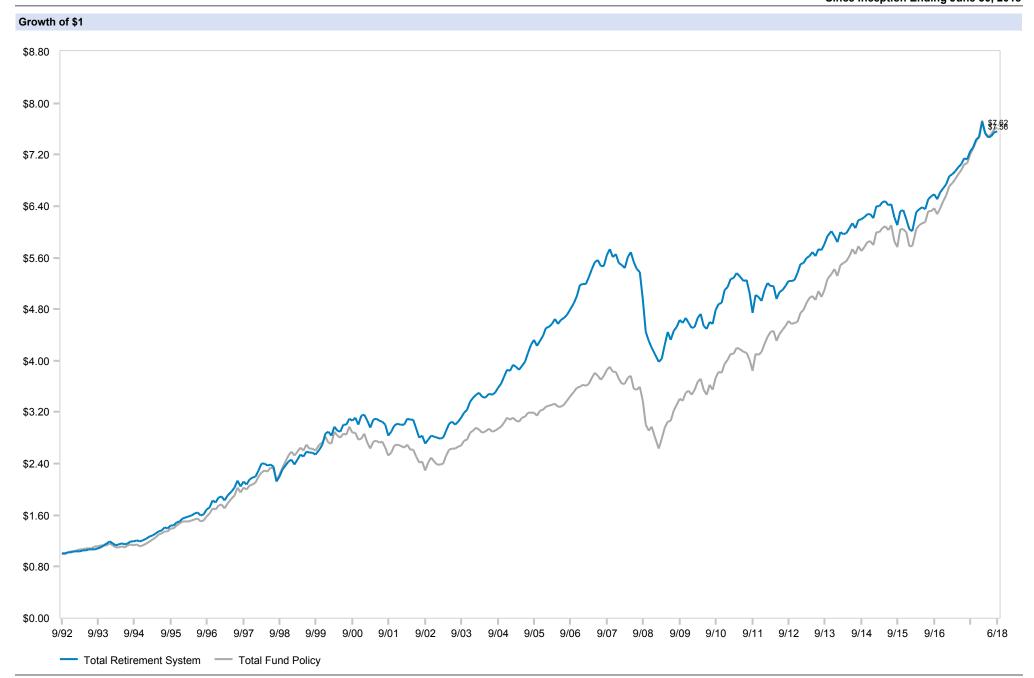
|   | Return | Standard<br>Deviation |
|---|--------|-----------------------|
| <ul> <li>Total Retirement System</li> </ul> | 6.09   | 5.18                  |
| <ul> <li>Total Fund Policy</li> </ul>       | 9.07   | 5.87                  |
| Median                                      | 8.13   | 6.20                  |

| Historical Statistics - 3 | Years             |                         |                           |       |                      |                 |      |                  |
|---------------------------|-------------------|-------------------------|---------------------------|-------|----------------------|-----------------|------|------------------|
|                           | Tracking<br>Error | Up<br>Market<br>Capture | Down<br>Market<br>Capture | Alpha | Information<br>Ratio | Sharpe<br>Ratio | Beta | Downside<br>Risk |
| Total Retirement System   | 1.58              | 81.76                   | 99.92                     | -1.47 | -1.47                | 0.89            | 0.89 | 3.30             |
| Total Fund Policy         | 0.00              | 100.00                  | 100.00                    | 0.00  | N/A                  | 1.20            | 1.00 | 3.60             |

Peer Group Scattergram - 5 Years

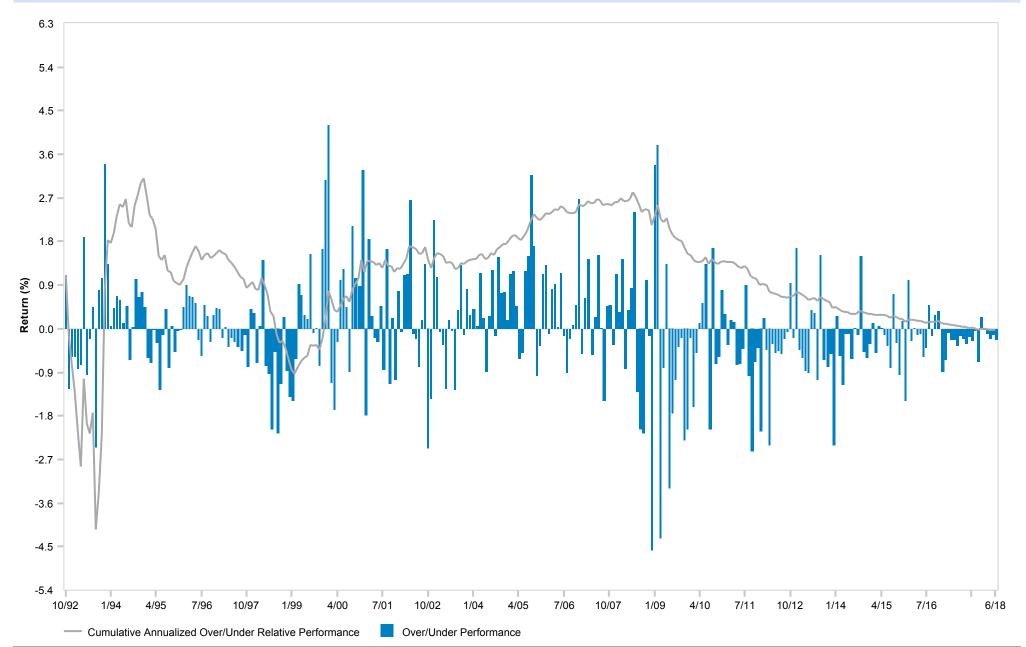
| Historical Statistics - 5 | Years             |                         |                           |       |                      |                 |      |                  |
|---------------------------|-------------------|-------------------------|---------------------------|-------|----------------------|-----------------|------|------------------|
|                           | Tracking<br>Error | Up<br>Market<br>Capture | Down<br>Market<br>Capture | Alpha | Information<br>Ratio | Sharpe<br>Ratio | Beta | Downside<br>Risk |
| Total Retirement System   | 2.08              | 74.27                   | 86.43                     | -1.28 | -1.36                | 1.09            | 0.83 | 2.85             |
| Total Fund Policy         | 0.00              | 100.00                  | 100.00                    | 0.00  | N/A                  | 1.45            | 1.00 | 3.18             |











Calculation based on monthly periodicity.



# Austin Police Retirement System Investment Pricing Summary as of 06/30/2018

| Plan                                    | Most Recent<br>Statement Date | Statement<br>Frequency | Statement<br>Source |
|---|-------------------------------|------------------------|---------------------|
| Total Retirement System                 |                               |                        |                     |
| Total Equity                            |                               |                        |                     |
| Total Domestic Equity                   |                               |                        |                     |
| NT Collective Russell 3000 Fund         | 6/30/2018                     | Monthly                | Custodian           |
| Baird Mid Cap Growth                    | 6/30/2018                     | Monthly                | Custodian           |
| Seizert Mid Cap Value                   | 6/30/2018                     | Monthly                | Custodian           |
| Kennedy Small Cap Value                 | 6/30/2018                     | Monthly                | Custodian           |
| Total International Equity              |                               |                        |                     |
| Thompson Siegel & Walmsley              | 6/30/2018                     | Monthly                | Custodian           |
| Driehaus International Small Cap Growth | 6/30/2018                     | Monthly                | Custodian           |
| LMCG Emerging Markets                   | 6/30/2018                     | Monthly                | Custodian           |
| Total Other Equity                      |                               |                        |                     |
| Huff Energy Fund                        | 12/31/2017                    | Quarterly              | Manager             |
| Sail Venture Fund I                     | 12/31/2014                    | Quarterly              | Manager             |
| Sail Venture Fund II                    | 12/31/2014                    | Quarterly              | Manager             |
| Sail Pre-Exit Acceleration Fund         | 12/31/2014                    | Quarterly              | Manager             |
| Excelsior Investors, Ltd.               | 12/31/2017                    | Monthly                | Manager             |
| Franklin Park                           | 3/31/2018                     | Quarterly              | Manager             |
| Total Fixed Income                      |                               |                        |                     |
| Total Fixed Income Funds                |                               |                        |                     |
| Orleans Capital                         | 6/30/2018                     | Monthly                | Custodian           |
| Templeton Global Multisector Plus       | 6/30/2018                     | Monthly                | Custodian           |

# Austin Police Retirement System Investment Pricing Summary as of 06/30/2018

| Plan                                   | Most Recent<br>Statement Date | Statement Frequency | Statement Source |
|--|-------------------------------|---------------------|------------------|
| Total Other Fixed Income Funds         |                               |                     |                  |
| Capital Point Partners                 | 3/31/2018                     | Quarterly           | Manager          |
| Franchise Equity Capital Partners II   | 3/31/2018                     | Quarterly           | Manager          |
| Franchise Equity Capital Partners III  | 12/31/2017                    | Quarterly           | Manager          |
| LBC Credit Partners III                | 3/31/2018                     | Quarterly           | Manager          |
| LBC Credit Partners IV                 | 3/31/2018                     | Quarterly           | Manager          |
| Providence Debt Fund III               | 3/31/2018                     | Quarterly           | Manager          |
| Total Alternatives                     |                               |                     |                  |
| Total Real Estate (Composite)(6091100) |                               |                     |                  |
| Rockspring Capital Land Funds (I - VI) | 6/30/2018                     | Quarterly           | Manager          |
| Rockspring Capital Land Fund I         | 6/30/2018                     | Quarterly           | Manager          |
| Rockspring Capital Land Fund II        | 6/30/2018                     | Quarterly           | Manager          |
| Rockspring Capital Land Fund III       | 6/30/2018                     | Quarterly           | Manager          |
| Rockspring Capital Land Fund IV        | 6/30/2018                     | Quarterly           | Manager          |
| Rockspring Capital Land Fund V         | 6/30/2018                     | Quarterly           | Manager          |
| Rockspring Capital Land Fund VI        | 6/30/2018                     | Quarterly           | Manager          |
| Ares Advisors (V & VI)                 | 6/30/2018                     | Quarterly           | Manager          |
| Ares Value Enhancement Fund V          | 6/30/2018                     | Quarterly           | Manager          |
| Ares Value Enhancement Fund VI         | 6/30/2018                     | Quarterly           | Manager          |
| INVESCO Real Estate Fund II            | 6/30/2018                     | Quarterly           | Manager          |
| Edison Investments                     | 6/30/2018                     | Quarterly           | Manager          |
| JPM India Property Fund                | 3/31/2018                     | Quarterly           | Manager          |

# Austin Police Retirement System Investment Pricing Summary as of 06/30/2018

| Plan                                | Most Recent<br>Statement Date   | Statement Frequency | Statement Source |
|-------------------------------------|---------------------------------|---------------------|------------------|
| Vision Capital Partners             | 12/31/2017                      | Quarterly           | Manager          |
| FWAR Investments                    | 12/31/2017                      | Quarterly           | Manager          |
| Morgan Stanley                      | 6/30/2018                       | Quarterly           | Manager          |
| AEW Parters VIII                    | 3/31/2018                       | Quarterly           | Manager          |
| GreenOak US III                     | Initial investment<br>6/30/2018 | Quarterly           | Manager          |
| Total Timber Funds                  |                                 |                     |                  |
| BTG Pactual 1                       | 3/31/2018                       | Quarterly           | Manager          |
| Capitol Timberland Investments      | 6/30/2018                       | Quarterly           | Manager          |
| Domain Environmental                | 3/31/2018                       | Quarterly           | Manager          |
| Total Multi Asset Funds             |                                 |                     |                  |
| Double Eagle Capital Ace Fund, Ltd. | 6/30/2018                       | Monthly             | Manager          |
| BlackRock Multi Asset               | 6/30/2018                       | Monthly             | Manager          |
| Westwood Income Opportunity         | 6/30/2018                       | Monthly             | Manager          |
| Cash Account                        | 6/30/2018                       | Monthly             | Custodian        |
| PE Cash Account                     | 6/30/2018                       | Monthly             | Custodian        |
| Retiree Death Benefit Account       | 6/30/2018                       | Monthly             | Custodian        |
| APRS Building                       |                                 |                     |                  |

|   | Estimated<br>Annual Fee<br>(%) | Market Value<br>(\$) | Estimated<br>Annual Fee<br>(\$) | Fee Schedule   |
|---|--------------------------------|----------------------|---------------------------------|--|
| Total Downsofts Fundto  | 0.00                           | 000 004 000          | 4 0 4 0 0 4 0                   |  |
| Total Domestic Equity  NT Collective Russell 3000 Index                       | <b>0.28</b><br>0.02            | 369,964,836          | 1,040,019                       | 0.02 % of Assets   |
|   |                                | 222,743,276          | 44,549                          | 0.02 % of Assets<br>0.70 % of First \$50 M                           |
| Baird Mid Cap Growth  | 0.69                           | 53,196,236           | 369,177                         | 0.60 % Thereafter  |
| Seizert Mid Cap Val (Perf Fee 150-300 .60% +300 .90%)                         | 0.35                           | 48,301,564           | 169,055                         | 0.35 % of Assets   |
| Kennedy Small Cap Value   | 1.00                           | 45,723,760           | 457,238                         | 1.00 % of Assets   |
| Total International Equity  | 0.81                           | 118,981,568          | 968,357                         |  |
| Thompson Siegel & Walmsley  | 0.65                           | 81,704,433           | 531,079                         | 0.65 % of Assets   |
| Driehaus International Small Cap Growth                                       | 1.72                           | 16,257,649           | 279,632                         | 1.72 % of Assets   |
| LMCG Emerging Markets Fund  | 0.75                           | 21,019,486           | 157,646                         | 0.75 % of Assets   |
| Total Other Equity  | 1.18                           | 13,779,335           | 163,040                         |  |
| Huff Energy Fund  | 1.26                           | 11,940,332           | 150,000                         |  |
| Sail Venture Fund I   | 0.00                           | 1                    | -                               |  |
| Sail Venture Fund II  | 0.00                           | 1                    | -                               |  |
| Sail Pre-Exit Acceleration Fund   | 0.00                           | 1                    | -                               |  |
| Excelsior Investors, Ltd.   | 1.60                           | 623,103              | 10,000                          |  |
| *Franklin Park Private Equity   | 0.25                           | 1,215,897            | 3,040                           | 0.25 % of Assets   |
| *In addition to the 25 bps management fee, a 1% commitment fee for the first  |                                |                      |                                 |  |
| year of that commitment and can potentially earn an incentive fee of 5% after |                                |                      |                                 |  |
| APRS receives an 8% IRR preferred return on its investment.                   |                                |                      |                                 |  |
| Total Fixed Income  | 0.57                           | 106,867,898          | 605,549                         |  |
| Orleans Capital   | 0.15                           | 38,329,449           | 57,494                          | 0.15 % of Assets   |
| Templeton Global Mulisector Plus Trust  | 0.62                           | 36,842,094           | 228,421                         | 0.62 % of First \$50 M<br>0.51 % of Next \$50 M<br>0.45 % Thereafter |
| Total Other Fixed Income  | 1.01                           | 31,696,355           | 319,634                         |  |
| Capital Point Partners  | 0.00                           | 4,320,448            | 2                               |  |
| Franchise Equity Capital Partners II  | 2.00                           | 308,338              | 6,167                           |  |
| Franchise Equity Capital Partners III   | 2.00                           | 25,679               | 514                             |  |
| LBC Credit Partners III   | 1.25                           | 7,581,033            | 94,763                          |  |
| LBC Credit Partners IV  | 1.25                           | 9,432,203            | 117,903                         |  |
| Providence Debt Fund III  | 1.00                           | 10,028,655           | 100,287                         |  |



|  | Estimated<br>Annual Fee<br>(%) | Market Value<br>(\$) | Estimated<br>Annual Fee<br>(\$) | Fee Schedule     |
|--|--------------------------------|----------------------|---------------------------------|------------------|
| Total Real Estate  | 0.97                           | 68,418,580           | 665,461                         |                  |
| Rockspring Capital Land Fund I   | 1.25                           | 496,824              | 6,210                           | 1.25 % of Assets |
| Rockspring Capital Land Fund II  | 1.25                           | 3,331,357            | 41,642                          | 1.25 % of Assets |
| Rockspring Capital Land Fund III   | 1.25                           | 1,057,383            | 13,217                          | 1.25 % of Assets |
| Rockspring Capital Land Fund IV  | 1.25                           | 106,815              | 1,335                           | 1.25 % of Assets |
| Rockspring Capital Land Fund V   | 1.25                           | 3,321,812            | 41,523                          | 1.25 % of Assets |
| Rockspring Capital Land Fund VI  | 1.25                           | 1,522,421            | 19,030                          | 1.25 % of Assets |
| ARES Value Enhancement Fund V  | 0.85                           | 532,594              | 4,527                           | 0.85 % of Assets |
| ARES Value Enhancement Fund VI   | 0.85                           | 804,028              | 6,834                           | 0.85 % of Assets |
| INVESCO Real Estate Fund II  | 1.50                           | 27,883               | 418                             | 1.50 % of Assets |
| Edison Investments   | 1.00                           | 2,141,209            | 21,412                          | 1.00 % of Assets |
| JPM India Property Fund  | 2.00                           | 1,144,518            | 22,890                          | 2.00 % of Assets |
| Vision Capital Partners  | 0.00                           | 1,818,400            | -                               | 0.00 % of Assets |
| FWAR Investments   | 0.00                           | 11,855               | -                               | 0.00 % of Assets |
| Morgan Stanley   | 0.90                           | 48,195,676           | 433,761                         | 0.90 % of Assets |
| AEW Partners Fund VIII   | 1.25                           | 2,370,861            | 29,636                          | 1.25 % of Assets |
| GreenOak US III  | 1.50                           | 1,534,944            | 23,024                          | 1.50 % of Assets |
| Total Timber Funds   | 1.04                           | 21,961,652           | 228,793                         |                  |
| BTG Pactual 1  | 1.00                           | 1,749,331            | 17,493                          | 1.00 % of Assets |
| Capitol Timberland Investments   | 1.00                           | 16,541,840           | 165,418                         | 1.00 % of Assets |
| Domain Environmental Investments II  | 1.25                           | 3,670,481            | 45,881                          | 1.25 % of Assets |
| Total Multi Asset Funds  | 0.84                           | 69,297,636           | 584,433                         |                  |
| Double Eagle Capital Ace Fund, Ltd. (1% Mgt Fee & 10% of profit after a 7% retn) | 1.00                           | 32,554,119           | 325,541                         | 1.00 % of Assets |
| BlackRock Multi Asset Fund   | 0.57                           | 18,427,169           | 105,035                         | 0.57 % of Assets |
| Westwood Income Opportunity Fund   | 0.84                           | 18,316,348           | 153,857                         | 0.84 % of Assets |
| Cash Account   | 0.00                           | 6,209,289            | -                               | 0.00 % of Assets |
| Cash Account PE  |                                | -                    | -                               | 0.00 % of Assets |
| Retiree Death Benefit Account  | 0.00                           | 1,306,342            | -                               | 0.00 % of Assets |
| APRS Building  | 0.00                           | 1,338,769            | -                               | 0.00 % of Assets |
| Total Retirement System  | 0.55                           | 778,125,905          | 4,255,651                       |                  |



| Total Fund Policy                                 |            | Total Equity Policy                    |                   | Total Fixed Income Policy         |            |
|---|------------|--|-------------------|-----------------------------------|------------|
| Allocation Mandate                                | Weight (%) | Allocation Mandate                     | Weight (%)        | Allocation Mandate                | Weight (%) |
| an-1976   |            | Jan-1979                               |                   | Dec-1993                          |            |
| S&P 500 Index                                     | 60.00      | Russell 3000 Index                     | 67.00             | Blmbg. Barc. U.S. Aggregate Index | 100.00     |
| Blmbg. Barc. U.S. Aggregate Index                 | 40.00      | MSCI World ex U.S.                     | 33.00             |                                   |            |
|   |            |  |                   | Jan-1999                          |            |
| Jan-2014  |            | Jan-2017                               | 00                | Blmbg. Barc. U.S. Aggregate Index | 50.00      |
| Russell 3000 Index                                | 30.00      | Russell 3000 Index                     | 75.00             | Blmbg. Barc. Global Multiverse    | 50.00      |
| MSCI World ex U.S.                                | 15.00      | MSCI World ex U.S.                     | 25.00             |                                   |            |
| Blmbg. Barc. U.S. Aggregate Index                 | 5.00       |  |                   |                                   |            |
| Blmbg. Barc. Global Multiverse                    | 5.00       |  |                   |                                   |            |
| NCREIF Property Index                             | 15.00      |  |                   |                                   |            |
| NCREIF Timberland Index (Monthly)                 | 5.00       |  |                   |                                   |            |
| Russell 3000 + 300 bps                            | 12.50      |  |                   |                                   |            |
| HFRI Fund of Funds Composite Index                | 10.00      |  |                   |                                   |            |
| FTSE 3 Month T-Bill                               | 2.50       |  |                   |                                   |            |
| an-2017   |            |  |                   |                                   |            |
| Russell 3000 Index                                | 45.00      |  |                   |                                   |            |
| MSCI World ex U.S.                                | 15.00      | Total Private Equity Policy            |                   | Wellington Energy Hybrid          |            |
| Blmbg. Barc. U.S. Aggregate Index                 | 5.00       | Allocation Mandate                     | Weight (%         | Allocation Mandate                | Weight (%) |
| Blmbg. Barc. Global Multiverse                    | 5.00       | May-2013                               |                   | Jan-1999                          |            |
| NCREIF Property Index                             | 15.00      | Russell 3000 Index                     | 100.00            | Russell 3000 Energy SP            | 100.00     |
| NCREIF Timberland Index (Monthly)                 | 2.50       |  |                   | <b>.</b>                          |            |
| HFRI Fund of Funds Composite Index                | 5.00       | Jan-2017                               |                   | Oct-2015                          |            |
| Credit Suisse Leveraged Loan Index                | 5.00       | Credit Suisse Leveraged Loan Index     | 67.00             | S&P 500 Energy                    | 100.00     |
| Cambridge Associates Private Equity Index (Proxy) | 2.50       | Cambridge Associates Private Equity In | dex (Proxy) 33.00 |                                   |            |
| lan-2018  |            |  |                   |                                   |            |
| Russell 3000 Index                                | 42.50      |  |                   |                                   |            |
| MSCI World ex U.S.                                | 15.00      |  |                   |                                   |            |
| Blmbg. Barc. U.S. Aggregate Index                 | 10.00      |  |                   |                                   |            |
| Blmbg. Barc. Global Multiverse                    | 5.00       |  |                   |                                   |            |
| NCREIF Property Index                             | 15.00      |  |                   |                                   |            |
| HFRI Fund of Funds Composite Index                | 5.00       |  |                   |                                   |            |
| Credit Suisse Leveraged Loan Index                | 5.00       |  |                   |                                   |            |
| Cambridge Associates Private Equity Index (Proxy) | 2.50       |  |                   |                                   |            |
|   |            |  |                   | Total Real Estate Policy          |            |
| Total Hedge Fund Policy                           |            | Total Timber Policy                    |                   | Total Real Estate Policy          |            |

100.00

NCREIF Property Index

NCREIF Timberland Index

100.00



100.00

HFRI Fund of Funds Composite Index

- All market value and performance information through April 30, 2013 is provided by the previous consultant, CSG.
- All historical return data is presented Net of Fees.
- Best efforts have been made to acquire the most accurate data but due to reporting lag times Private Fixed Income, Real Estate, Timber, Private Equity and Hedge Fund information may not be current. Market values for these investments are subject to revision in future reports as more current information becomes available.
- NCREIF Property Index is updated quarterly. One month return information is shown as 0.00%.
- Effective May 1, 2013 the Sail Xtreme APRS Fund, LP and Xtreme Power, Inc. investments have been reclassified as Private Fixed Income under the Alternative Investments category. Prior to that they were listed as Fixed Income by the prior consultant.
- Returns for all Real Estate, Timber and Private Equity managers are Internal Rates or Return. All other managers are Time Weighted Rates of Return.
- Actuarial Assumption is currently 8.0%
- Prior to 1/1/2009 Capital Point and Clinton Magnolia performance is included in the Total Fixed Income performance.
- The information contained in this report is obtained from third party sources and is not warranted to be accurate, complete or timely. All returns and market values are
  preliminary and subject to revision in future reports upon final reconciliation.
- Pricing may differ between the custodian and manager for reasons beyond the control of AndCo Consulting. Every effort will be made to use the most accurate and timely information available when the report is generated.
- \* Xtreme Power declared bankruptcy in January 2014. After discussions with the Fund's Accountant, Auditor and Legal Counsel the investments in this company have been marked down to \$0.00 as of December 31st.

  If any proceeds are recovered in the bankruptcy process they will be credited to the Fund at that time.
- As of 12/31/14 the Excelsior Investors, LTD position was reclassified to from the Hedge Fund composite to the Private Equity composite.
- Capital Point Partners market value sourced from the March 2015 Capital Point Partners Quarterly Portfolio Review.



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|---|-----|----|---|-----|-----|
|   |     |    |   |     |     |

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

### Alpha

- A measure of the difference between a portfolio's actual performance and its expected return based on its level of risk as determined by beta. It determines the portfolio's non-systemic return, or its historical performance not explained by movements of the market.

#### Beta

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

# Consistency

- The percentage of quarters that a product achieved a rate of return higher than that of its benchmark. Higher consistency indicates the manager has contributed more to the product's performance.

# Distributed to Paid In (DPI)

- The ratio of money distributed to Limited Partners by the fund, relative to contributions. It is calculated by dividing cumulative distributions by paid in capital. This multiple shows the investor how much money they got back. It is a good measure for evaluating a fund later in its life because there are more distributions to measure against.

# **Down Market Capture**

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

# **Downside Risk**

- A measure similar to standard deviation that utilizes only the negative movements of the return series. It is calculated by taking the standard deviation of the negative quarterly set of returns. A higher factor is indicative of a riskier product.

#### **Excess Return**

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

# **Excess Risk**

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

# Information Ratio

- This calculates the value-added contribution of the manager and is derived by dividing the active rate of return of the portfolio by the tracking error. The higher the Information Ratio, the more the manager has added value to the portfolio.

#### **Public Market Equivalent (PME)**

- Designs a set of analyses used in the Private Equity Industry to evaluate the performance of a Private Equity Fund against a public benchmark or index.

# R-Squared

- The percentage of a portfolio's performance that can be explained by the behavior of the appropriate benchmark. A high R-Squared means the portfolio's performance has historically moved in the same direction as the appropriate benchmark.

#### Return

- Compounded rate of return for the period.

#### Sharpe Ratio

- Represents the excess rate of return over the risk free return divided by the standard deviation of the excess return. The result is an absolute rate of return per unit of risk. A higher value demonstrates better historical risk-adjusted performance.

#### Standard Deviation

- A statistical measure of the range of a portfolio's performance. It represents the variability of returns around the average return over a specified time period.

# Total Value to Paid In (TVPI)

- The ratio of the current value of remaining investments within a fund, plus the total value of all distributions to date, relative to the total amount of capital paid into the fund to date. It is a good measure of performance before the end of a fund's life

# **Tracking Error**

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

#### **Treynor Ratio**

- Similar to Sharpe ratio but utilizes beta rather than excess risk as determined by standard deviation. It is calculated by taking the excess rate of return above the risk free rate divided by beta to derive the absolute rate of return per unit of risk. A higher value indicates a product has achieved better historical risk-adjusted performance.

# **Up Market Capture**

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



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

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