

Investment Performance Review
Period Ending December 31, 2019

Austin Police



First and foremost, “Thank you” for giving AndCo the opportunity to serve you. On behalf of our entire organization, we are extremely grateful and appreciative of our client partnerships and will continue working hard to maintain your trust and confidence. Our mission statement reads “To represent the sole interest of our clients by redefining independence.” We’re happy to report that we remain steadfast in this core belief and continue to build an organization with a service model that is independent, singularly focused, customized and passionately delivered.

2020 is a big year for AndCo. We are celebrating our 20-year anniversary of serving our valuable clients. As we start 2020, we are 89 people strong advising approximately \$92 billion in client assets – a record high. In 2019 we hired 9 new team members. All departments within AndCo have grown over the years as we thoughtfully invest in our firm to provide the services you expect. We have included our organizational chart in this report which your consultant will review to provide you a visualization of our continued commitment to service and quality.


2020 will also represent another year of significant investment in the organization. As a result, your feedback is invaluable as we continue to focus our reinvestment in areas that will enhance our services to clients. We would like to thank everyone for their participation in our client survey last year. Your honesty and candor allowed us to accurately assess where we are strong and where there are opportunities for improvement. The areas where our clients indicate potential room for improvement drive much of our investment and focus. This is a primary reason why we hired 7 new team members in our research group last year to help promote investment ideas and support our consultants. Today, we have 19 dedicated research analysts. As 2020 progresses, we are targeting additional investments within our finance, compliance, human resources, information technology, marketing and research departments.

Moreover, each January we have our annual firmwide retreat. This retreat is a great time for all of our employees to spend time together and for us to reinforce everyone’s understanding of AndCo’s primary purpose, share results highlighted by our strategic goals, and review areas of focus for the upcoming year. Since the inception of AndCo, the idea has been to make the firm a multigenerational organization owned and operated by its employees. As a result, since 2015, along with the strategic elements of our annual retreat, we also announce new partners of the firm to support our succession plan and the long-term sustainability of the organization. Today we have a total of 10 partners controlling 100% of the company. This year we added two new partners Kim Spurlin and Evan Scussel. Kim has been on our Executive Leadership team for the past 7 years and currently serves as our CFO. Evan has been on our research team for 7 years and was recently promoted to a Research Director. We couldn’t be happier for both Kim and Evan.

The evolution of our firm would not be possible without great client partners like you. Our name reminds us who we work for every day “Our Client” &Co. You will always be our first priority. As we continue to discuss strategic decisions regarding our firm, please know every decision is filtered through the following question “How does this benefit our clients?” and if it doesn’t benefit you, we don’t do it, it’s that simple. We said this last year and we’ll say it again next year. If this commitment ever falters, you need to find a new consultant.

We know each of our clients is facing many challenges and we want to be there to help support you through all environments. We are honored and humbled that you have chosen AndCo as your partner. We do not take that relationship and responsibility for granted and will continue to work tirelessly to exceed your expectations.

On behalf of AndCo, thank you for your valued partnership and the opportunity to serve you.


Mike Welker, CFA®
CEO



Organizational Chart

PARTNERSHIP

Mike Welker, CFA **Evan Scussel, CFA, CAIA**
Bryan Bakardjiev, CFA **Jason Purdy**
Dan Johnson **Kim Spurlin, CPA**
David Ray **Steve Gordon**
Donna Sullivan **Troy Brown, CFA**

LEADERSHIP & MANAGEMENT

Mike Welker, CFA **Dan Johnson**
CEO Consulting Director

Bryan Bakardjiev, CFA **Derek Tangeman, CFP, CIMA**
COO Marketing Director

Kim Spurlin, CPA **Evan Scussel, CFA, CAIA**
CFO Research Director

Sara Searle **Jack Evatt**
CCO Consulting Director

Rachel Brignoni, MHR **Jacob Peacock**
CHRO Consulting Director

Steve Gordon **Jason Purdy**
Partner I.T. Director

Troy Brown, CFA **Philip Schmitt, CIMA**
Executive Director Research Director

David Ray
Executive Director

OPERATIONS

FINANCE **I.T.**
Brandie Rivera **Jamie Utt**

OPERATIONS **MARKETING**
Dan Osika, CFA **Bonnie Burgess**
Jerry Camel **Kim Goodearl**
 Tala Chin

INVESTMENT POLICY COMMITTEE

Mike Welker, CFA **David Ray** **Troy Brown, CFA**
Bryan Bakardjiev, CFA **Sara Searle**

CONSULTING

Annette Bidart **James Ross** **Mary Nye**
Brad Hess, CFA **Jeff Kuchta, CFA** **Michael Fleiner**
Brendon Vavrica, CFP **Jennifer Brozstek** **Michael Holycross, CIMA**
Brian Green **Jennifer Gainfort, CFA** **Mike Bostler**
Brian King **Joe Carter, CPFA** **Paul Murray, CPFA**
Chris Kuhn, CFA, CAIA **John McCann, CIMA** **Peter Brown**
Christiaan Brokaw, CFA **John Mellinger** **Tim Nash**
Dave West, CFA **John Thinner, CFA, CAIA** **Tim Walters**
Doug Anderson **Jon Breth, CFP** **Tony Kay**
Gwelda Swilley **Justin Lauver, Esq.** **Trevor Jackson**
Ian Jones **Kerry Richardville, CFA** **Tyler Grumbles, CFA, CIPM**

CLIENT SOLUTIONS

Donna Sullivan **Donnell Lehrer** **Mary Ann Johnson**
Albert Sauerland **Grace Niebrzydowski** **Meghan Haines**
Amy Foster **Jeff Pruniski** **Misha Bell**
Annie Lopez **John Rodak, CIPM** **Rosemarie Kieskowski**
Brooke Wilson, CIPM **Junyan Peng** **Yoon Lee-Choi**
David Gough, CPFA **Kim Hummel**

RESEARCH

Austin Brewer, CFA
Public Fixed Income

Ben Baldridge, CFA, CAIA
Private & Hedged Fixed Income

David Julier
Real Estate & Real Assets

Elizabeth Wolfe
Capital Markets & Asset Allocation

Evan Scussel, CFA, CAIA
Private & Public Equity

Jeffrey Karansky
Public Equity

Jeremy Fisch
Public Multi Assets & Fixed Income

Joseph Ivaszuk
Operational Due Diligence

Josue Christiansen, CIPM
Public Equity

Julie Baker, CFA
Private & Hedged Equity

Justin Ellsesser, CFA, CAIA
Private Equity

Kadmiel Onodje, CAIA
Hedged & Public Multi Assets

Kai Petersen, CFA
Asset Liability & Capital Markets

Kevin Laake, CFA
Private Equity

Matthew Ogren
Public Fixed Income

Philip Schmitt, CIMA
Fixed Income & Capital Markets

Rob Mills, CAIA
Real Estate & Real Assets

Tim Kominarek, CAIA
Private Equity & Infrastructure

Zac Chichinski, CFA, CIPM
Public Equity

Updated as of 01/13/20



89
EMPLOYEES

33 ADVANCED
DEGREES

21 CFA

8 CAIA

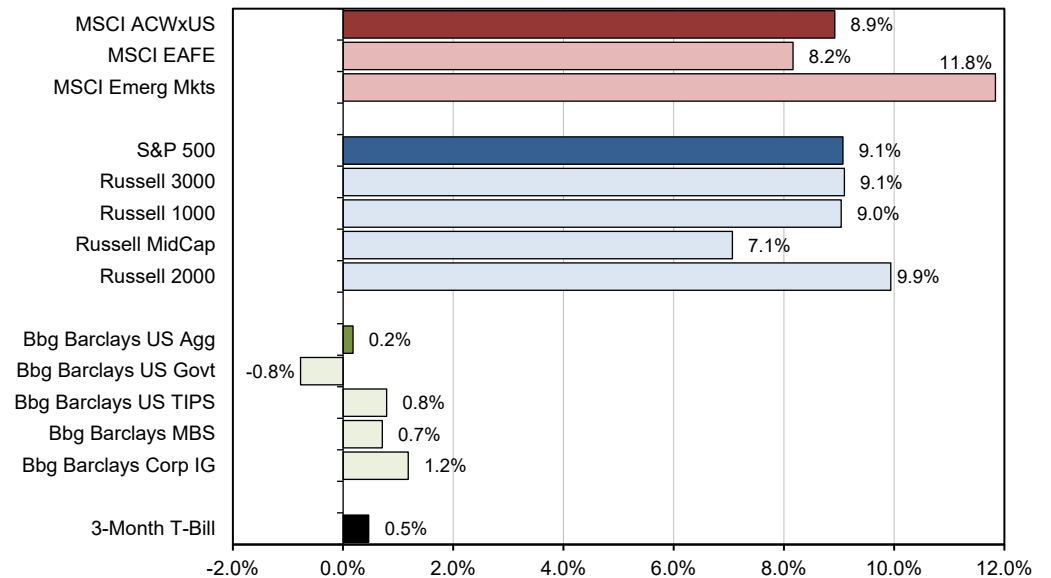
5 CIPM



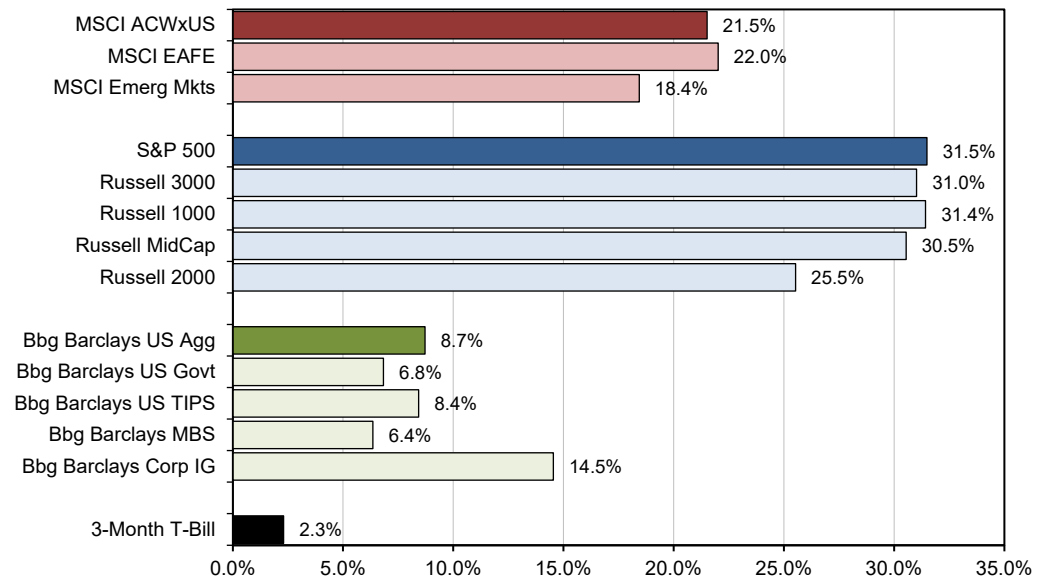
4th Quarter 2019 Market Environment

- Broad asset class returns were positive during the 4th quarter of 2019 with the exception of the US Gov't bond index. Both US and international equity markets benefited from positive developments concerning trade disruptions. Generally, the dispersion between US and international developed equities was muted during the quarter. Emerging markets significantly outperformed as previously noted trade tensions between the US and China eased. Monetary policy remained supportive with the Federal Reserve (Fed) cutting rates once during the period in addition to providing liquidity to the market through security purchases which acted as a catalyst to risk assets. Within domestic equity markets, the performance dispersion between large cap and small cap stocks reversed during the quarter with the S&P 500 Index returning 9.1% versus a return of 9.9% for the small cap Russell 2000 Index. 2019 performance of US equity markets was the highest since 2013 with large and mid-cap stocks returning 31.5% and 30.5%, respectively, while small cap stocks posted a return of 25.5%.
- International equity market returns were strong during the 4th quarter. Similar to US markets, international performance was impacted by continued monetary policy relief from the Bank of Japan and the European Central Bank, positive developments around global trade, and likely resolution on Brexit. International returns were also buoyed by a weakening US dollar (USD) which declined against most major currencies during the period. Emerging markets outperformed relative to developed markets during the period with the MSCI Emerging Markets Index posting a gain of 11.8% compared to a return of 8.2% for the MSCI EAFE Index. Both developed and emerging markets posted strong returns over the 1-year period, returning 22.0% and 18.4% respectively.
- Fixed income index performance was muted during the 4th quarter. The broad market Bloomberg Barclays Aggregate Index managed to gain 0.2% as investors favored equities and interest rates were generally flat during the quarter as concerns over an imminent US recession eased. Investment grade corporate bonds delivered solid performance for the 4th quarter returning 1.2%, which outperformed Treasury and securitized issues. Corporate bonds benefitted from the same increased investor risk appetite that fueled equity returns during the quarter. Overall, the bond market delivered strong trailing 1-year returns with the Bloomberg Barclays Aggregate posting a return of 8.7%.

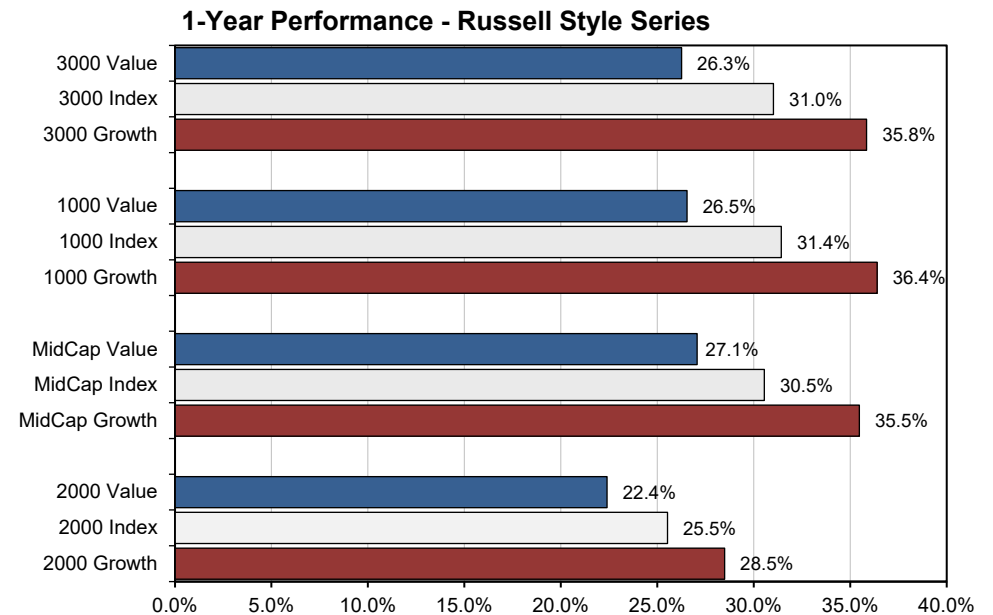
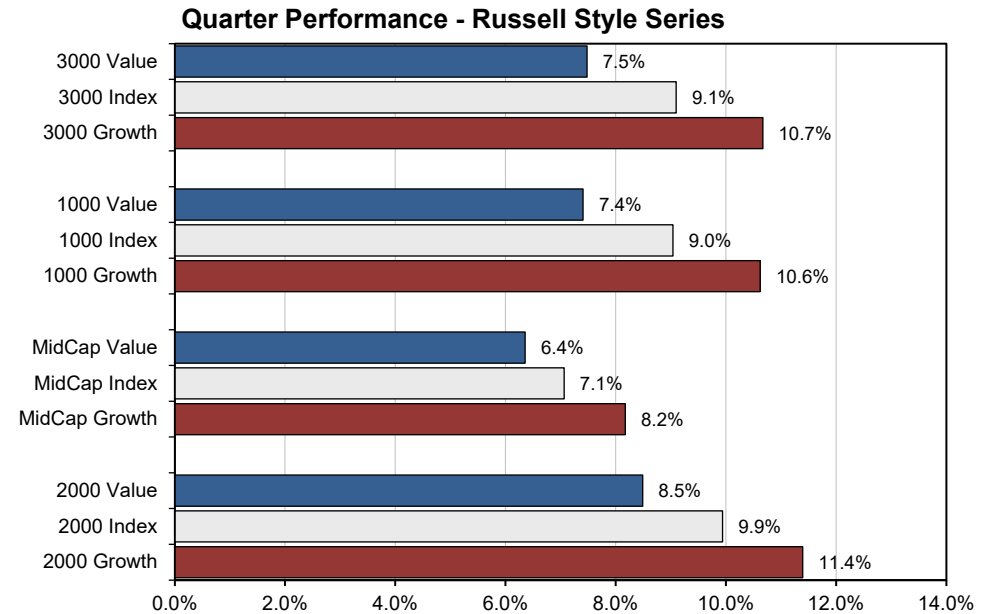
Quarter Performance



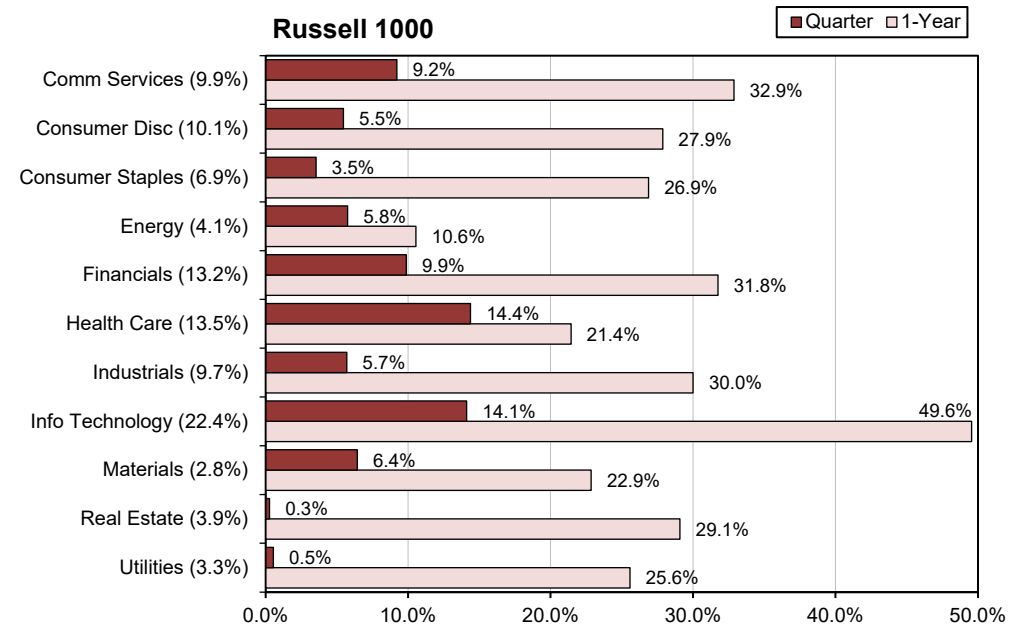
1-Year Performance



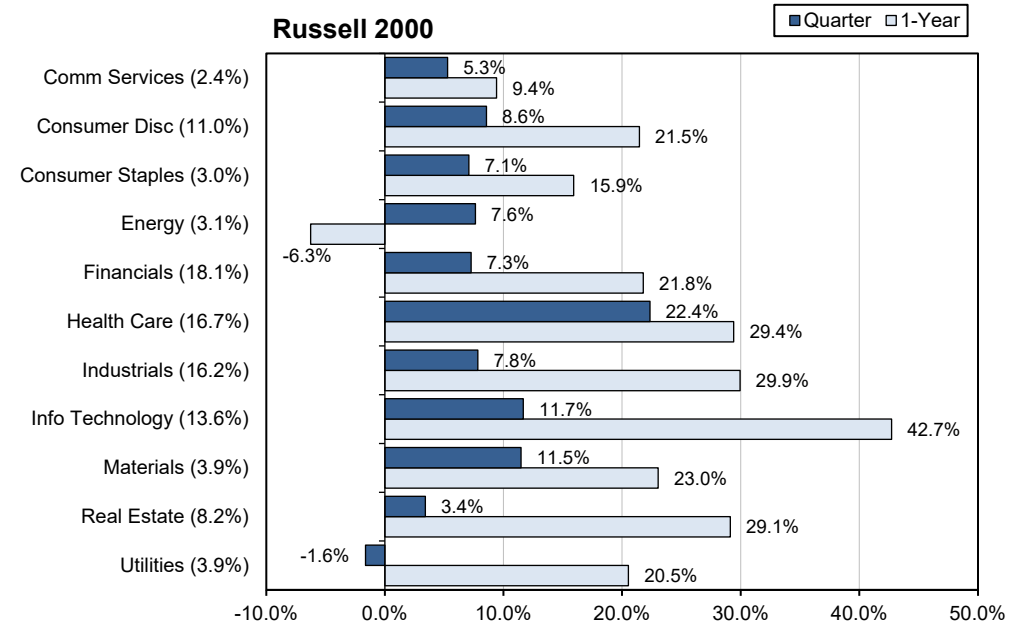
- Against the largely positive global economic backdrop detailed on the previous page, the US equity market delivered strong gains across the capitalization and style spectrum for the 4th quarter of 2019. Growth stocks outperformed value stocks for the full capitalization range during the period. Further, as is often the case during periods of strong “risk-on” performance, small cap growth stocks outpaced large cap growth stocks due primarily to an expectation that smaller companies have accelerated earnings growth relative to large companies.
- The Russell 2000 Growth Index was the best performing style index for the period, returning 11.4%, while large cap and mid-cap growth returned a solid 10.6% and 8.2% respectively. The outperformance of small cap stocks across the style spectrum for the period represented a reversal from previous quarters. The small cap Russell 2000 Index gained 9.9% during the period versus a 9.0% return for the large cap Russell 1000 Index.
- When viewed over the most recent 1-year period, large cap stocks significantly outperformed small cap stocks with the Russell 1000 posting a strong 31.4% gain while the Russell 2000 delivered a solid 25.5% return. Unsurprisingly, given the recent strong market environment, value stocks also trailed their growth counterparts over the trailing 1-year period. The technology-heavy Russell 1000 Growth Index was the best performing index over the 1-year period delivering a stellar 36.5% return compared to a return of 26.5% for the Russell 1000 Value Index



- Performance was positive across all eleven large cap economic sectors for the 4th quarter but four outpaced the return of the broader Russell 1000 Index. The more economically sensitive sectors, such as technology, financials and communication services posted returns of 14.1%, 9.9% and 9.2%, respectively, as investors' expectations of future economic growth improved. Health care stocks rallied as the cost and drug pricing rhetoric from Democratic Presidential candidates softened. Technology was also a leader with stocks such as Apple experiencing strong holiday sales and Microsoft making a strong earnings announcement. Not surprisingly, defensive sectors such as consumer staples, industrials and energy underperformed the broader market during the period. All eleven economic sectors were also positive over the 1-year trailing period with each sector posting a return in excess of 20% for the year. Similar to the quarter's results, economically sensitive sectors outpaced defensive ones by a considerable margin. The technology sector was 2019's standout performer, posting an impressive 49.6% for the year. The sector was buoyed by Apple's 89.0% return and Microsoft's 57.6% return for the year. The financial sector, which returned 31.8% for the year, also experienced strong earnings as recessionary fears subsided and the US yield curve moved toward a more normal, positively slope. The only other economic sector to outperform the broader Russell 1000 index return of 31.4% for the 1-year period was the communication services sector, which posted a return of 32.9% for the year.



- Quarterly results for small cap sectors were mixed compared to their large cap counterparts with seven of the eleven economic sectors outpacing their corresponding large cap equivalents. Ten of the eleven small cap sectors produced positive absolute returns during the quarter, but similar to large cap performance, only three sectors managed to outpace the broad Russell 2000 Index. Economically sensitive sectors were also the strongest performers in the small cap space as investors expressed an appetite for risk. The health care sector was the quarter's standout, posting a return of 22.4% for the quarter. The technology and materials sectors also posted double-digit performance for the period with returns of 11.7% and 11.5% respectively. While not a significant weight in the index, the utilities, which are considered defensive, was the only negative sector, posting a loss of -1.6%. Over the trailing 1-year period, returns were broadly positive with only the highly cyclical energy sector, largely tied to oil prices, producing negative performance with a return of -6.3%. Similar to large cap performance, technology led the way with the sector returning a stellar 42.7% for the year. Returns were also impressive in the industrials, health care and real estate sectors, which posted gains of 29.9%, 29.4% and 29.1%, respectively, and finished ahead of the Russell 2000 index return of 25.5% for the year.



The Market Environment
Top 10 Index Weights & Quarterly Performance for the Russell 1000 & 2000
As of December 31, 2019

Top 10 Weighted Stocks				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Apple Inc	4.40%	31.5%	89.0%	Information Technology
Microsoft Corp	4.02%	13.8%	57.6%	Information Technology
Amazon.com Inc	2.57%	6.4%	23.0%	Consumer Discretionary
Facebook Inc A	1.65%	15.3%	56.6%	Communication Services
Berkshire Hathaway Inc B	1.49%	8.9%	10.9%	Financials
JPMorgan Chase & Co	1.46%	19.4%	47.3%	Financials
Alphabet Inc A	1.35%	9.7%	28.2%	Communication Services
Alphabet Inc Class C	1.35%	9.7%	29.1%	Communication Services
Johnson & Johnson	1.31%	13.5%	16.2%	Health Care
Visa Inc Class A	1.08%	9.4%	43.3%	Information Technology

Top 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Tesla Inc	0.20%	73.7%	25.7%	Consumer Discretionary
Sarepta Therapeutics Inc	0.03%	71.3%	18.2%	Health Care
Ubiquiti Inc	0.01%	60.1%	91.6%	Information Technology
Advanced Micro Devices Inc	0.16%	58.2%	148.4%	Information Technology
Qorvo Inc	0.05%	56.8%	91.4%	Information Technology
Zillow Group Inc A	0.01%	54.8%	45.5%	Communication Services
Align Technology Inc	0.07%	54.2%	33.2%	Health Care
Zillow Group Inc C	0.02%	54.1%	45.5%	Communication Services
Transocean Ltd	0.01%	53.9%	-0.9%	Energy
Skyworks Solutions Inc	0.07%	53.2%	84.1%	Information Technology

Bottom 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Beyond Meat Inc	0.01%	-49.1%	N/A	Consumer Staples
Sage Therapeutics Inc	0.01%	-48.5%	-24.6%	Health Care
Chesapeake Energy Corp	0.00%	-41.4%	-60.7%	Energy
ServiceMaster Global Holdings Inc	0.02%	-30.8%	5.2%	Consumer Discretionary
Twitter Inc	0.08%	-22.2%	11.5%	Communication Services
Taubman Centers Inc	0.01%	-22.1%	-27.0%	Real Estate
Elastic NV	0.01%	-21.9%	-10.0%	Information Technology
Etsy Inc	0.02%	-21.6%	-6.9%	Consumer Discretionary
Sinclair Broadcast Group Inc	0.01%	-21.5%	29.0%	Communication Services
Ventas Inc	0.07%	-19.9%	3.4%	Real Estate

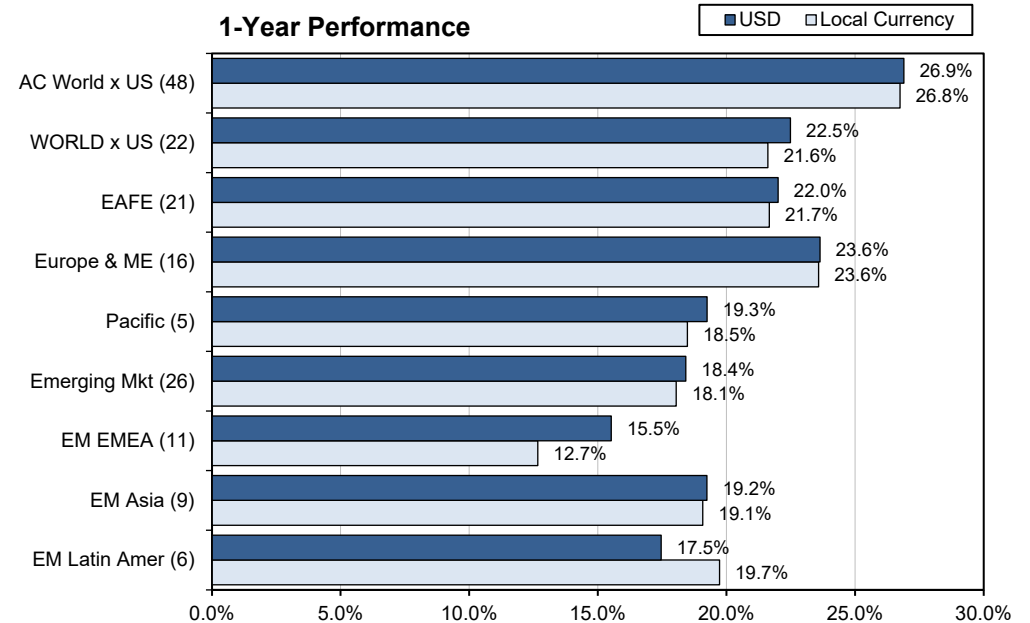
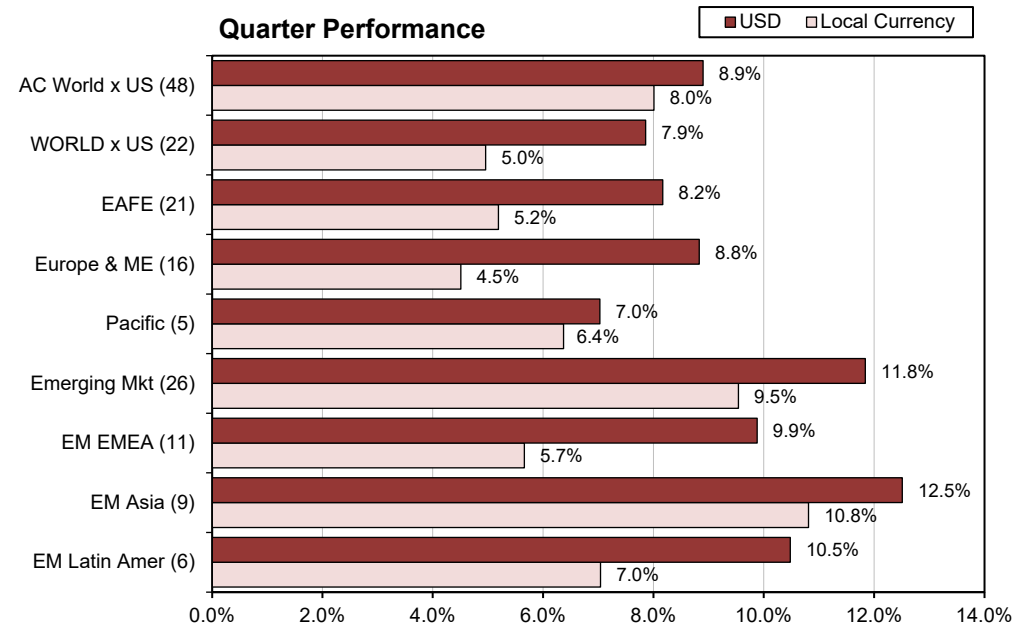
Top 10 Weighted Stocks				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
NovoCure Ltd	0.35%	12.7%	151.7%	Health Care
The Medicines Co	0.30%	69.9%	343.8%	Health Care
Generac Holdings Inc	0.29%	28.4%	102.4%	Industrials
Lumentum Holdings Inc	0.29%	48.1%	88.8%	Information Technology
Teladoc Health Inc	0.29%	23.6%	68.9%	Health Care
Arrowhead Pharmaceuticals Inc	0.28%	125.1%	410.7%	Health Care
Haemonetics Corp	0.28%	-8.9%	14.8%	Health Care
Marriott Vacations Worldwide Corp	0.25%	24.8%	85.9%	Consumer Discretionary
Performance Food Group Co	0.25%	11.9%	59.5%	Consumer Staples
Trex Co Inc	0.25%	-1.2%	51.4%	Industrials

Top 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Constellation Pharmaceuticals Inc	0.03%	629.3%	1074.8%	Health Care
Forty Seven Inc	0.04%	513.2%	150.4%	Health Care
ChemoCentryx Inc	0.08%	483.3%	262.5%	Health Care
Axsome Therapeutics Inc	0.12%	410.7%	3565.2%	Health Care
Kodiak Sciences Inc	0.08%	400.3%	913.4%	Health Care
Karuna Therapeutics Inc	0.02%	361.6%	N/A	Health Care
Intra-Cellular Therapies Inc	0.07%	359.3%	201.2%	Health Care
Synthorx Inc	0.03%	329.6%	302.1%	Health Care
Mersana Therapeutics Inc	0.01%	262.7%	40.4%	Health Care
VBI Vaccines Inc	0.01%	192.9%	-13.8%	Health Care

Bottom 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
resTORbio Inc	0.00%	-83.1%	-82.7%	Health Care
TransEnterix Inc	0.00%	-81.8%	-95.0%	Health Care
Unit Corp	0.00%	-79.4%	-95.1%	Energy
Cyclerion Therapeutics Inc Ord Shrs	0.00%	-77.6%	N/A	Health Care
Waitr Holdings Inc Class A	0.00%	-74.9%	-97.1%	Consumer Discretionary
Intelsat SA	0.02%	-69.2%	-67.1%	Communication Services
Contura Energy Inc	0.01%	-67.6%	-86.2%	Energy
McDermott International Inc	0.01%	-66.5%	-89.7%	Energy
Pareteum Corp	0.00%	-66.1%	-74.1%	Communication Services
Exela Technologies Inc	0.00%	-65.4%	-89.5%	Information Technology



- Broad international equity returns were positive in both local currency and USD terms for the 4th quarter as investors benefited from a broad “risk-on” environment. US investors also benefited as the USD weakened relative to most major developed and emerging market currencies during the period. Within the broader currency moves that boosted USD return, the British pound and the Euro appreciated relative to the USD during the quarter which acted as a headwind to holdings in those sub-markets. However, the macro impact of the USD weakness for the period was positive for US investors for the broad market international indexes. The MSCI EAFE and ACWI ex US Indexes returned 8.2% and 7.9% respectively for the quarter. Similar to US markets, international equity markets were buoyed by loose central bank monetary policies which supplied the markets with liquidity. Christine Lagarde assumed the presidency of the European Central Bank (ECB) and announced that interest rates would remain negative at -0.5% while the Bank of Japan’s key rate also remains in negative territory at -0.1%. The People’s Bank of China announced during the quarter that it would continue with its prudent monetary policy with the goal of providing stimulus measures as needed.
- As previously noted, results for developed market indexes were strongly positive for the 4th quarter. European stocks moved higher on expectations of a trade resolution between China and the US. In the UK, Prime Minister Boris Johnson received a resounding mandate in recent elections resulting in a large majority in Parliament. The results make it highly likely that the UK will leave the European Union. The decrease in Brexit uncertainty led the British pound to rally against most major currencies. In contrast, the economy in Hong Kong fell into recession as continued political protests and the Chinese government’s response detracted from growth. While not as strong as US equity market returns, each of the broad, developed market benchmarks posted returns in excess of 20% for the trailing 1-year period.
- For the 4th quarter, emerging markets reversed the recent trend and managed to outperform developed international markets. The MSCI Emerging Markets Index returned a strong USD return of 11.8%. As previously noted, the prospect of reduced trade tensions between the US and China stoked returns in emerging markets. As a result, countries with greater sensitivities to commodity prices and global trade activity performed well during the period. As evidence, Russia and Brazil, both large energy exporters, returned 16.6% and 15.6%, respectively, during the quarter. For the full year, emerging markets delivered strong returns in both local currency and USD terms. The MSCI Emerging Markets Index climbed 18.4% in local currency and 18.1% in USD terms. The narrow performance differential between local currency and USD emerging market returns is also observable across each of the international benchmarks for the 1-year period as the year’s currency volatility largely balanced out.



The Market Environment
US Dollar International Index Attribution & Country Detail
As of December 31, 2019

MSCI - EAFE	Sector Weight	Quarter Return	1-Year Return
Communication Services	5.2%	4.8%	12.7%
Consumer Discretionary	11.6%	9.4%	24.8%
Consumer Staples	11.3%	1.9%	18.9%
Energy	4.9%	3.8%	7.6%
Financials	18.6%	8.4%	17.7%
Health Care	12.2%	12.4%	30.7%
Industrials	15.0%	10.0%	26.2%
Information Technology	7.1%	12.6%	37.7%
Materials	7.1%	10.5%	22.9%
Real Estate	3.5%	4.2%	14.8%
Utilities	3.7%	5.3%	19.2%
Total	100.0%	8.2%	22.0%

MSCI - ACWIXUS	Sector Weight	Quarter Return	1-Year Return
Communication Services	6.7%	7.0%	12.1%
Consumer Discretionary	11.8%	11.4%	27.7%
Consumer Staples	9.4%	1.9%	17.5%
Energy	6.5%	6.5%	14.8%
Financials	21.4%	8.1%	17.2%
Health Care	8.9%	12.5%	27.7%
Industrials	11.9%	9.6%	24.0%
Information Technology	9.4%	15.5%	40.7%
Materials	7.4%	10.8%	18.6%
Real Estate	3.2%	7.3%	17.1%
Utilities	3.4%	4.8%	17.4%
Total	100.0%	8.9%	26.9%

MSCI - Emerging Mkt	Sector Weight	Quarter Return	1-Year Return
Communication Services	11.0%	9.8%	11.2%
Consumer Discretionary	14.2%	16.7%	35.1%
Consumer Staples	6.3%	2.6%	10.7%
Energy	7.4%	9.8%	19.8%
Financials	24.2%	9.8%	12.6%
Health Care	2.8%	14.7%	3.7%
Industrials	5.3%	7.8%	7.1%
Information Technology	15.7%	18.9%	41.6%
Materials	7.4%	12.3%	5.9%
Real Estate	3.0%	17.6%	23.9%
Utilities	2.6%	4.3%	7.9%
Total	100.0%	11.8%	18.4%

Country	MSCI-EAFE Weight	MSCI-ACWIXUS Weight	Quarter Return	1-Year Return
Japan	24.5%	16.1%	7.6%	19.6%
United Kingdom	16.5%	10.8%	10.0%	21.1%
France	11.4%	7.5%	8.5%	25.7%
Switzerland	9.3%	6.1%	7.6%	32.3%
Germany	8.7%	5.7%	9.9%	20.8%
Australia	6.8%	4.5%	4.3%	22.9%
Netherlands	4.0%	2.6%	7.4%	32.1%
Hong Kong	3.5%	2.3%	7.3%	10.3%
Spain	2.8%	1.9%	6.0%	12.0%
Sweden	2.7%	1.8%	13.1%	21.2%
Italy	2.3%	1.5%	8.1%	27.3%
Denmark	1.8%	1.2%	13.1%	28.2%
Singapore	1.3%	0.8%	7.4%	15.0%
Belgium	1.0%	0.7%	-1.1%	20.3%
Finland	0.9%	0.6%	3.0%	9.5%
Norway	0.6%	0.4%	4.3%	10.4%
Ireland	0.6%	0.4%	18.5%	37.5%
Israel	0.6%	0.4%	7.2%	9.6%
New Zealand	0.3%	0.2%	17.4%	38.2%
Austria	0.2%	0.2%	8.0%	14.5%
Portugal	0.2%	0.1%	8.7%	23.7%
Total EAFE Countries	100.0%	65.8%	8.2%	22.0%
Canada		6.7%	4.9%	27.5%
Total Developed Countries		72.5%	7.9%	22.5%
China		9.4%	14.7%	23.5%
Korea		3.2%	13.4%	12.5%
Taiwan		3.2%	17.9%	36.4%
India		2.4%	5.3%	7.6%
Brazil		2.1%	14.2%	26.3%
South Africa		1.3%	13.1%	10.0%
Russia		1.1%	16.8%	50.9%
Saudi Arabia		0.7%	2.7%	7.2%
Thailand		0.7%	-0.9%	9.5%
Mexico		0.6%	6.2%	11.4%
Indonesia		0.5%	7.0%	9.1%
Malaysia		0.5%	3.1%	-2.0%
Philippines		0.3%	2.9%	10.5%
Qatar		0.3%	2.2%	-1.0%
Poland		0.2%	4.1%	-5.9%
Chile		0.2%	-8.8%	-16.9%
United Arab Emirates		0.2%	-1.5%	4.0%
Turkey		0.1%	-0.1%	11.1%
Colombia		0.1%	14.4%	30.8%
Peru		0.1%	6.0%	4.8%
Greece		0.1%	12.7%	43.2%
Hungary		0.1%	22.2%	19.4%
Argentina		0.0%	15.4%	-20.8%
Czech Republic		0.0%	8.9%	4.2%
Egypt		0.0%	5.6%	41.8%
Pakistan		0.0%	26.5%	9.7%
Total Emerging Countries		27.5%	11.8%	18.4%
Total ACWIXUS Countries		100.0%	8.9%	26.9%

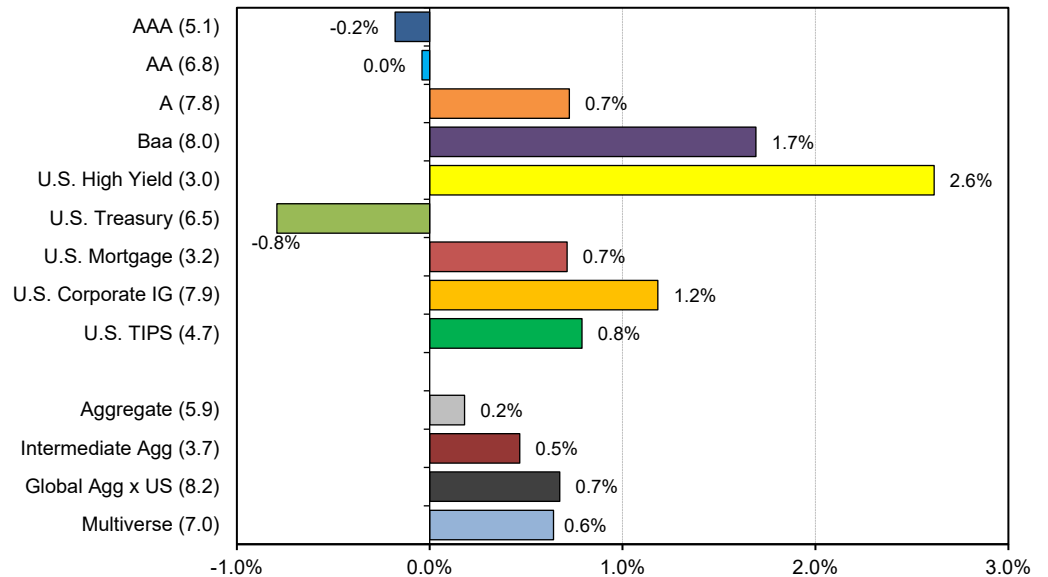
Source: Morningstar Direct, MSCI Global Index Monitor (Returns are Net in USD)

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

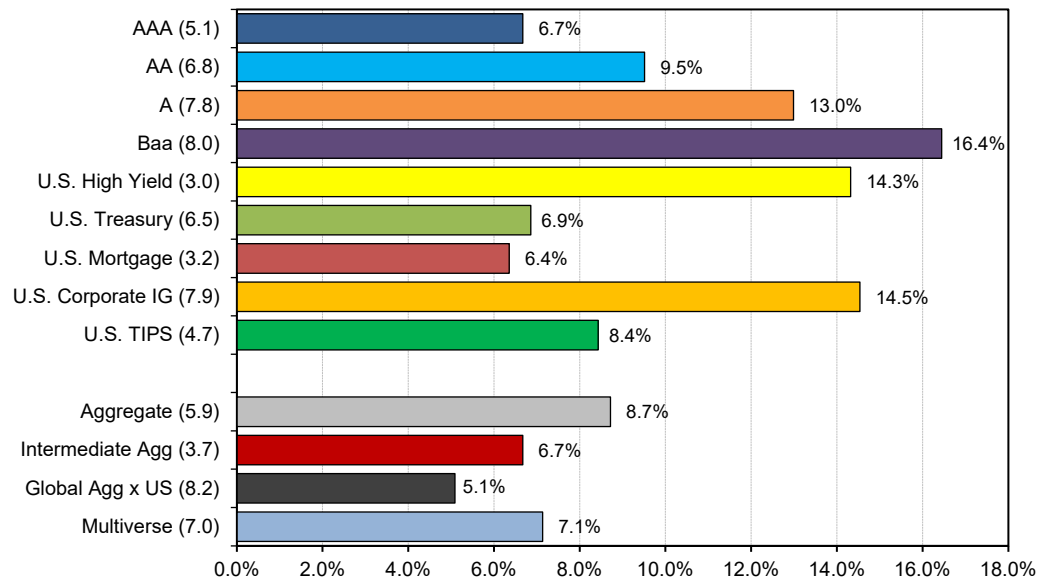


- Fixed income markets extended their gains in the 4th quarter, except for US Treasury bonds which declined during the period. Interest rates rose modestly across the US Treasury Yield Curve through the quarter as investors' confidence generally improved which resulted in bond prices falling. The Fed continued to provide liquidity by cutting short-term interest rates by 25 basis points to between 1.50% and 1.75% in October. The Fed began expanding its balance sheet by purchasing securities to provide the market with liquidity which is another form of monetary easing. The Fed made no changes to monetary policy at their December meeting and signaled that they would remain on hold but would continue to monitor the economy closely for any further deterioration. Importantly, the US Treasury Yield Curve normalized between the 2-year and 10-year issues which suggests that the threat of an imminent recession has been reduced. An inverted yield curve has historically preceded a recession within the next 6-24 months. The bellwether Bloomberg Barclays US Aggregate Index added 0.2% during the 4th quarter while returning 8.7% for the 1-year period ending in December.
- Within investment grade credit, lower quality issues resumed their outperformance over higher quality issues as investors' appetites for risk increased during the quarter. Bonds rated Baa were the best performing investment grade credit quality segment returning 1.7% for the quarter, while AAA was the worst performing, returning -0.2%. High yield corporate bonds outpaced all other credit sectors during the quarter returning 2.6%. For the full year both investment grade and high yield bonds delivered strong performance returning 14.5% and 14.3% respectively.
- Performance across defensive sectors such as US Treasury bonds, mortgage backed securities and TIPS were mixed during the quarter mostly due to their duration profiles. Rising interest rates during the quarter acted as a headwind to performance. As a result, US Treasury bonds, mortgage bonds and TIPS returned -0.8%, 0.7% and 0.8% respectively. Overall, fears of rising inflation remain relatively low while expectations for a positive economic environment remain strong. As a result, for the full 1-year period, US Treasury, mortgages and TIPS returned 6.9%, 6.4% and 8.4% respectively, trailing all corporate credit sectors significantly over the full year.

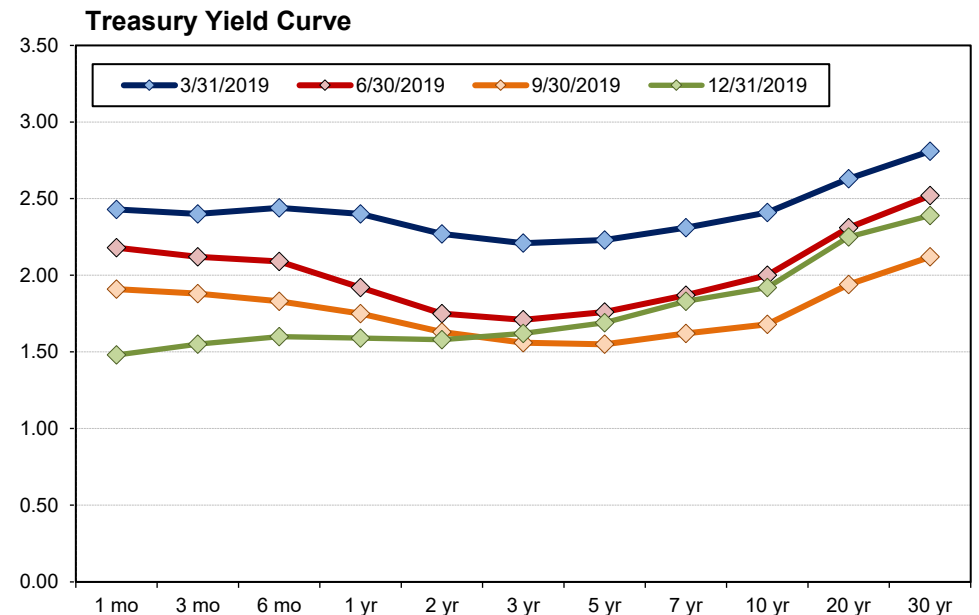
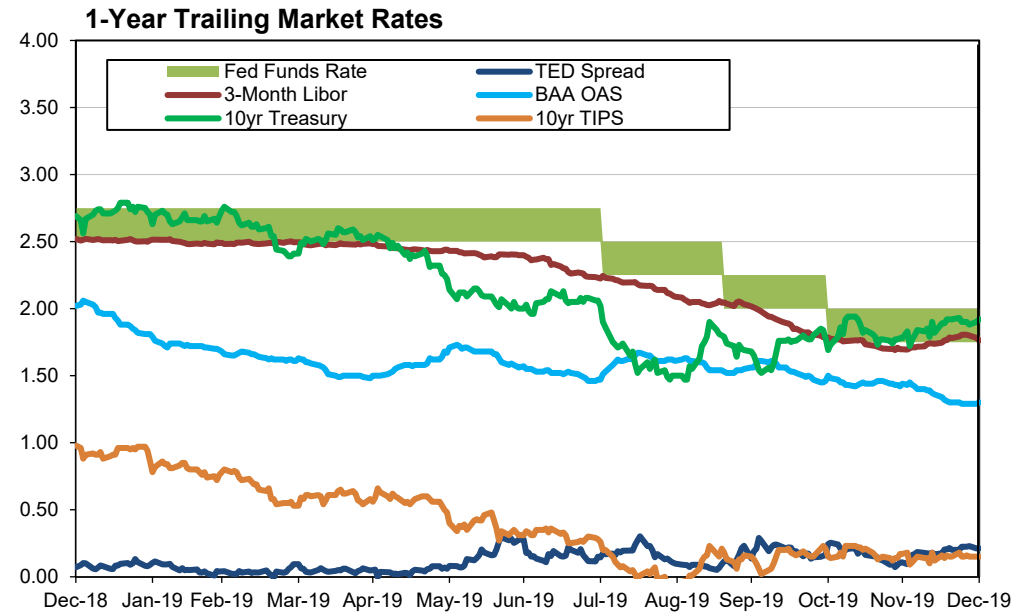
Quarter Performance



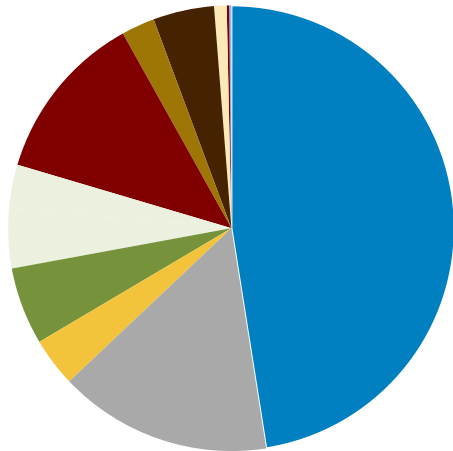
1-Year Performance



- Global fixed income returns were positive during the 4th quarter. Generally, global central bank monetary policy remains supportive as low economic growth persists in much of the world outside of the US. As a result, negative interest rates persist in much of Europe and Japan. However, the number of bonds with negative yields declined in recent months as future expectations for economic growth improved. As mentioned previously, we saw currency volatility increase during the quarter with the USD moving lower against most major developed and emerging market currencies. The depreciation of the USD acted as a catalyst for US investors compared to local investors. Global bonds, as represented by the Bloomberg Barclays Global Aggregate ex US Index, returned was 0.7% during the quarter which outperformed US bonds represented by the Bloomberg Barclays Aggregate Index. For the full 1-year period, global bonds underperformed domestic bonds 5.1% versus 8.7% respectively.
- 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 over the last year, the 10-year Treasury yield (green line) fell from highs near 2.8%, to yields below 1.5% before ending the quarter at 1.92%. 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 the continued decline from nearly 2.5% in the 1st quarter of 2019 to less than 1.6% in 4th quarter as investors sought out higher yielding assets and concerns regarding trade and the potential for a recession in the US declined. Spreads tightened by about 24 basis points during the quarter. Spread tightening is equivalent to an interest rate decrease on corporate bonds, which produces an additional tailwind for corporate bond index returns. The green band across the graph illustrates the decrease in the Federal Funds Rate due to the recent easing in US monetary policy. The Fed cut the Fed Funds Rate three times during the year on fears that economic growth was decelerating.
- The lower graph provides a snapshot of the US Treasury Yield Curve at the end of each of the last four calendar quarters. Interest rates were broadly lower over the full year as the Fed cut interest rates and expectations of future economic growth declined. During the year, the US Treasury curve was inverted between 2-year and 10-year rates. After multiple rate cuts, the curve finished the year with a more normalized shape with the long end of the curve higher than the short end.



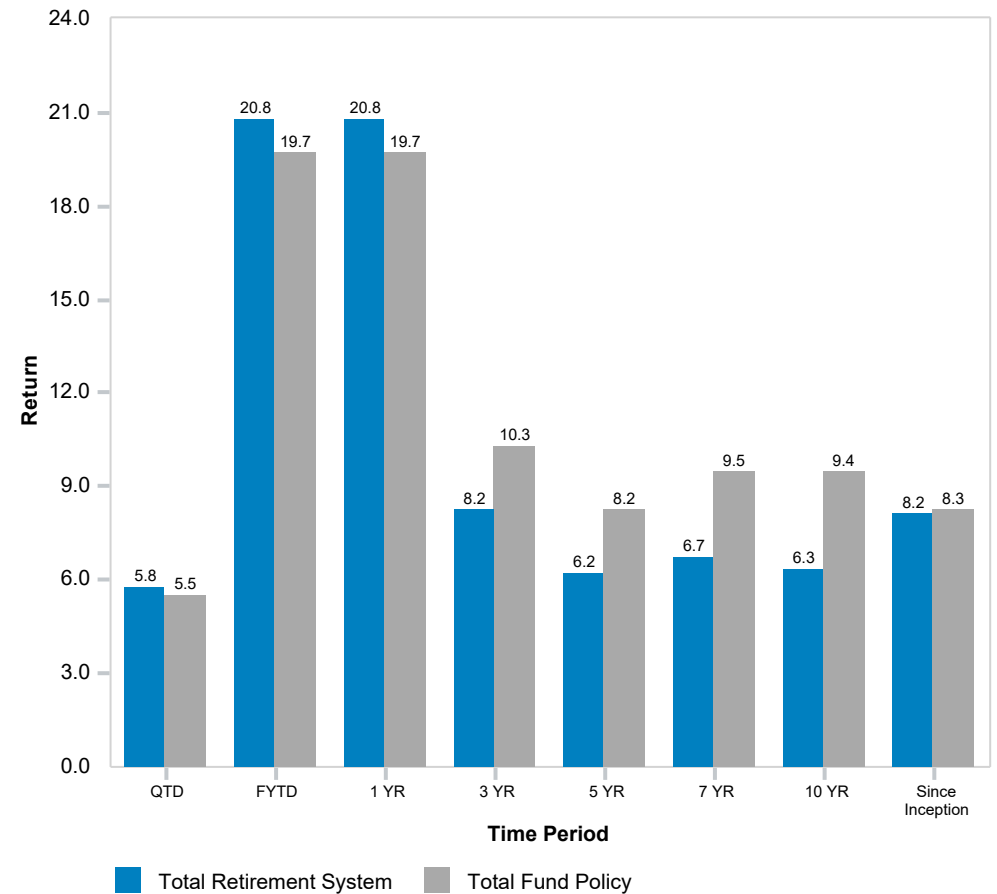
Asset Allocation by Segment
December 31, 2019 : \$856,120,134



Gain/Loss Summary

	QTD	FYTD	1 YR
Total Retirement System			
Beginning Market Value	812,680,664	716,447,174	716,447,174
Net Contributions	-3,322,788	-8,953,295	-8,953,295
Return on Investment	47,463,874	150,970,039	150,970,039
Ending Market Value	856,120,134	856,120,134	856,120,134

Comparative Performance



Allocation

	Market Value	Allocation
Total Domestic Equity	406,776,520	47.5
Total International Equity	132,025,394	15.4
Total Other Equity	30,422,324	3.6
Total Core Fixed Income	48,046,861	5.6
Total Non Core Fixed Income	37,640,614	4.4
Total Other Fixed Income	26,568,219	3.1
Total Real Estate	105,448,837	12.3
Total Timber Funds	20,716,501	2.4
Total Multi Asset Funds	37,782,947	4.4
Cash Account	7,733,488	0.9
Cash Account PE	-	0.0
Retiree Death Benefit Account	1,520,391	0.2
APRS Building	1,438,036	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.

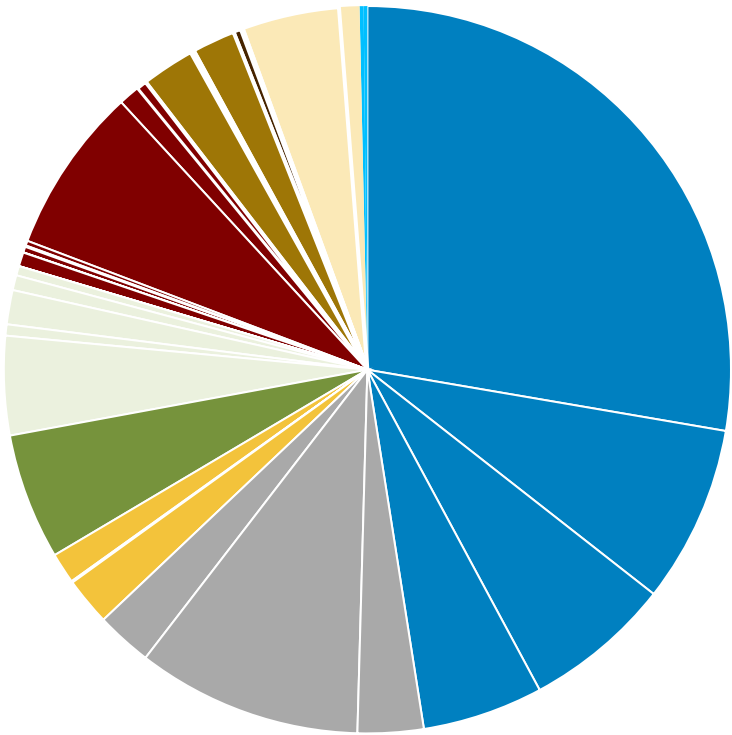


**Asset Allocation by Manager
Total Fund**

As of December 31, 2019

December 31, 2019 : \$856,120,134

Allocation

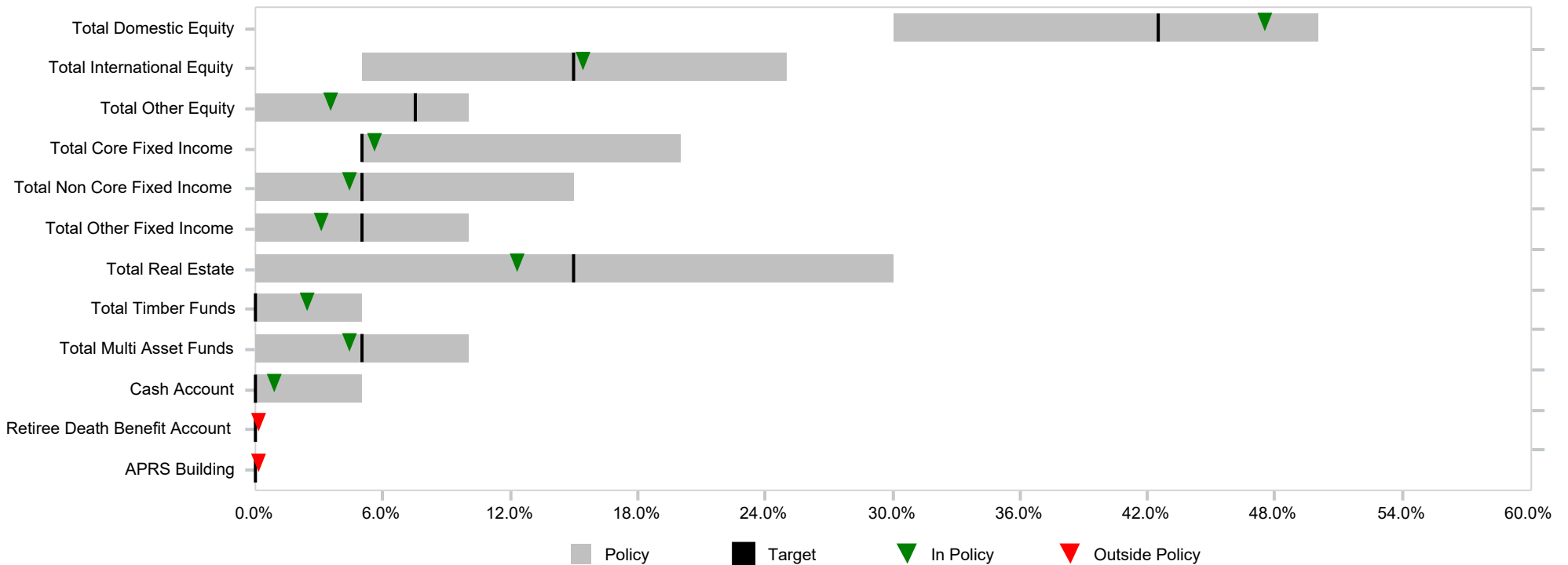


	Market Value	Allocation
NT Collective Russell 3000 Index	237,098,285	27.7
Baird Mid Cap Growth	67,449,226	7.9
Nuance Mid Cap Value	56,252,130	6.6
Kennedy Small Cap Value	45,976,879	5.4
Driehaus International Small Cap Growth	25,027,327	2.9
Thompson Siegel & Walmsley	85,734,641	10.0
LMSG Emerging Markets Fund	21,263,426	2.5
Huff Energy Fund	18,167,082	2.1
Sail Venture Fund I	1	0.0
Sail Venture Fund II	1	0.0
Sail Pre-Exit Acceleration Fund	1	0.0
Excelsior Investors, Ltd.	570,592	0.1
Franklin Park Private Equity	11,684,647	1.4
Orleans Capital	48,046,861	5.6
Templeton Global Multisector Plus	37,640,614	4.4
LBC Credit Partners III	4,281,133	0.5
LBC Credit Partners IV	12,996,872	1.5
Providence Debt Fund III	5,701,394	0.7
Capital Point Partners	3,541,303	0.4
Franchise Equity Capital Partners II	47,517	0.0
Rockspring Capital Land Funds (I - VI)	5,333,370	0.6
ARES Advisors (V & VI)	76,239	0.0
Edison Investments	2,191,836	0.3
India Property Fund	554,007	0.1
Gainesville Property	1,818,400	0.2
Morgan Stanley	63,269,574	7.4
AEW Partners Fund VIII	7,880,083	0.9
GreenOak US III	4,011,985	0.5
Brookfield Premier RE Partners	20,313,343	2.4
BTG Pactual 1	1,269,812	0.1
Capitol Timberland Investments	16,478,505	1.9
Domain Environmental Investments II	2,968,184	0.3
Double Eagle Capital Ace Fund, Ltd.	683,894	0.1
BlackRock Multi Asset Fund	37,099,053	4.3
Cash Account	7,733,488	0.9
Cash Account PE	-	0.0
Retiree Death Benefit Account	1,520,391	0.2
APRS Building	1,438,036	0.2

Market values subject to availability from Northern Trust and individual managers. Please refer to the end of the report for Investment Pricing Summary and Additional Notes.



Executive Summary



Asset Allocation Compliance

	Asset Allocation \$	Current Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)	Target Allocation (%)
Total Retirement System	856,120,134	100.0	N/A	N/A	100.0
Total Domestic Equity	406,776,520	47.5	30.0	50.0	42.5
Total International Equity	132,025,394	15.4	5.0	25.0	15.0
Total Other Equity	30,422,324	3.6	0.0	10.0	7.5
Total Core Fixed Income	48,046,861	5.6	5.0	20.0	5.0
Total Non Core Fixed Income	37,640,614	4.4	0.0	15.0	5.0
Total Other Fixed Income	26,568,219	3.1	0.0	10.0	5.0
Total Real Estate	105,448,837	12.3	0.0	30.0	15.0
Total Timber Funds	20,716,501	2.4	0.0	5.0	0.0
Total Multi Asset Funds	37,782,947	4.4	0.0	10.0	5.0
Cash Account	7,733,488	0.9	0.0	5.0	0.0
Retiree Death Benefit Account	1,520,391	0.2	0.0	0.0	0.0
APRS Building	1,438,036	0.2	0.0	0.0	0.0



Financial Reconciliation Quarter to Date

	Market Value 10/01/2019	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Return On Investment	Market Value 12/31/2019
Total Retirement System	812,680,664	-	13,730,174	-17,052,961	-662,725	-38,891	2,863,293	44,600,582	47,463,874	856,120,134
Total Equity	537,565,464	-12,729,174	-	-	-328,172	-	1,020,461	43,695,660	44,716,121	569,224,239
Total Domestic Equity	397,157,250	-23,094,068	-	-	-265,672	-	827,855	32,151,155	32,979,010	406,776,520
NT Collective Russell 3000 Index	239,260,172	-23,347,777	-	-	-11,963	-	-	21,197,853	21,197,853	237,098,285
Baird Mid Cap Growth	63,648,284	107,952	-	-	-107,952	-	138,779	3,662,164	3,800,942	67,449,226
Nuance Mid Cap Value	52,231,094	44,594	-	-	-44,594	-	498,009	3,523,026	4,021,036	56,252,130
Kennedy Small Cap Value	42,017,700	101,163	-	-	-101,163	-	191,067	3,768,112	3,959,179	45,976,879
Total International Equity	110,468,972	9,807,394	-	-	-	-	192,606	11,556,422	11,749,028	132,025,394
Driehaus International Small Cap Growth	13,282,667	9,807,394	-	-	-	-	192,606	1,744,660	1,937,266	25,027,327
Thompson Siegel & Walmsley	78,138,667	-	-	-	-	-	-	7,595,975	7,595,975	85,734,641
LMCG Emerging Markets Fund	19,047,639	-	-	-	-	-	-	2,215,787	2,215,787	21,263,426
Total Other Equity	29,939,241	557,500	-	-	-62,500	-	-	-11,917	-11,917	30,422,324
Huff Energy Fund	18,167,082	-	-	-	-	-	-	-	-	18,167,082
Sail Venture Fund I	1	-	-	-	-	-	-	-	-	1
Sail Venture Fund II	1	-	-	-	-	-	-	-	-	1
Sail Pre-Exit Acceleration Fund	1	-	-	-	-	-	-	-	-	1
Excelsior Investors, Ltd.	582,509	-	-	-	-	-	-	-11,917	-11,917	570,592
Franklin Park Private Equity	11,189,647	557,500	-	-	-62,500	-	-	-	-	11,684,647
Total Fixed Income	111,226,591	201,397	-	-	-62,089	-	713,315	176,481	889,796	112,255,694
Orleans Capital	47,790,374	17,921	-	-	-17,921	-	411,056	-154,569	256,486	48,046,861
Templeton Global Mulisector Plus Trust	37,007,305	44,168	-	-	-44,168	-	-	633,310	633,310	37,640,614
Total Other Fixed Income	26,428,912	139,307	-	-	-	-	302,259	-302,259	-	26,568,219
Capital Point Partners	3,541,303	-	-	-	-	-	-	-	-	3,541,303
Franchise Equity Capital Partners II	47,517	-	-	-	-	-	-	-	-	47,517
LBC Credit Partners III	4,607,347	-326,214	-	-	-	-	42,442	-42,442	-	4,281,133
LBC Credit Partners IV	12,367,209	629,663	-	-	-	-	95,676	-95,676	-	12,996,872
Providence Debt Fund III	5,865,536	-164,142	-	-	-	-	164,142	-164,142	-	5,701,394

Please refer to the end of the report for additional notes.



Financial Reconciliation

Total Fund

1 Quarter Ending December 31, 2019

	Market Value 10/01/2019	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Return On Investment	Market Value 12/31/2019
Total Real Estate & Timber	97,346,709	28,233,893	-	-	-272,464	-1,081	573,707	284,574	858,281	126,165,338
Total Real Estate	75,762,355	28,370,416	-	-	-227,404	-1,081	573,707	970,844	1,544,551	105,448,837
Rockspring Capital Land Funds (I - VI)	6,877,318	-1,764,390	-	-	-	-	-	220,442	220,442	5,333,370
Rockspring Capital Land Fund I	462,897	-	-	-	-	-	-	-95,290	-95,290	367,607
Rockspring Capital Land Fund II	1,313,026	-	-	-	-	-	-	145,212	145,212	1,458,238
Rockspring Capital Land Fund III	1,060,183	-	-	-	-	-	-	39,720	39,720	1,099,903
Rockspring Capital Land Fund V	2,745,086	-1,098,181	-	-	-	-	-	128,536	128,536	1,775,441
Rockspring Capital Land Fund VI	1,296,127	-666,209	-	-	-	-	-	2,264	2,264	632,181
ARES Advisors (V & VI)	831,705	-805,464	-	-	-	-	-	49,998	49,998	76,239
ARES Value Enhancement Fund V	74,744	-	-	-	-	-	-	1,496	1,496	76,239
ARES Value Enhancement Fund VI	756,961	-805,464	-	-	-	-	-	48,502	48,502	-
Edison Investments	2,183,102	-7,114	-	-	-	-	7,114	8,734	15,848	2,191,836
India Property Fund	554,007	-	-	-	-	-	-	-	-	554,007
Gainesville Property	1,818,400	-	-	-	-	-	-	-	-	1,818,400
Morgan Stanley	52,392,772	10,000,000	-	-	-	-	566,593	310,208	876,801	63,269,574
AEW Partners Fund VIII	7,666,930	261,945	-	-	-48,792	-	-	-	-	7,880,083
GreenOak US III	3,438,121	685,439	-	-	-110,494	-1,081	-	-	-	4,011,985
Brookfield Premier Real Estate Partners	-	20,000,000	-	-	-68,118	-	-	381,461	381,461	20,313,343
Total Timber Funds	21,584,354	-136,523	-	-	-45,060	-	-	-686,270	-686,270	20,716,501
BTG Pactual (1, 2 & 3)	1,269,812	2,887	-	-	-2,887	-	-	-	-	1,269,812
BTG Pactual 1	1,269,812	2,887	-	-	-2,887	-	-	-	-	1,269,812
Capitol Timberland Investments	17,164,775	42,173	-	-	-42,173	-	-	-686,270	-686,270	16,478,505
Domain Environmental Investments II	3,149,767	-181,583	-	-	-	-	-	-	-	2,968,184

Please refer to the end of the report for additional notes.



Financial Reconciliation

Total Fund

1 Quarter Ending December 31, 2019

	Market Value 10/01/2019	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Return On Investment	Market Value 12/31/2019
Total Multi Asset Funds	41,836,645	-5,000,000	-	-	-	-	502,435	443,867	946,302	37,782,947
Double Eagle Capital Ace Fund, Ltd.	683,894	-	-	-	-	-	-	-	-	683,894
BlackRock Multi Asset Fund	41,152,751	-5,000,000	-	-	-	-	502,435	443,867	946,302	37,099,053
Cash Account	21,780,525	-10,706,116	13,682,822	-17,032,961	-	-37,810	47,029	-	47,029	7,733,488
Cash Account PE	-	-	-	-	-	-	-	-	-	-
Retiree Death Benefit Account	1,486,694	-	47,351	-20,000	-	-	6,346	-	6,346	1,520,391
APRS Building	1,438,036	-	-	-	-	-	-	-	-	1,438,036

Please refer to the end of the report for additional notes.



Financial Reconciliation Year to Date										
	Market Value 01/01/2019	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Return On Investment	Market Value 12/31/2019
Total Retirement System	716,447,174	-	57,419,487	-66,372,782	-2,086,806	-256,979	11,789,672	139,180,367	150,970,039	856,120,134
Total Equity	447,486,822	-11,603,268	-	-	-1,306,120	-12,376	2,864,581	131,794,599	134,659,180	569,224,239
Total Domestic Equity	331,905,829	-27,476,402	-	-	-1,012,795	-	2,640,515	100,719,373	103,359,888	406,776,520
NT Collective Russell 3000 Index	203,581,085	-28,443,620	-	-	-45,577	-	957	62,005,440	62,006,397	237,098,285
Baird Mid Cap Growth	49,174,534	399,995	-	-	-399,995	-	501,701	17,772,991	18,274,692	67,449,226
Nuance Mid Cap Value	-	48,014,431	-	-	-100,780	-	1,203,275	7,135,204	8,338,479	56,252,130
Seizert Mid Cap Value	42,823,370	-47,847,055	-	-	-66,596	-	127,895	4,962,386	5,090,281	-
Kennedy Small Cap Value	36,326,840	399,847	-	-	-399,847	-	806,687	8,843,352	9,650,039	45,976,879
Total International Equity	100,707,860	9,806,773	-	-	-	-	193,227	21,317,534	21,510,761	132,025,394
Driehaus International Small Cap Growth	11,355,213	9,806,773	-	-	-	-	193,227	3,672,114	3,865,340	25,027,327
Thompson Siegel & Walmsley	70,752,231	-	-	-	-	-	-	14,982,410	14,982,410	85,734,641
LMCG Emerging Markets Fund	18,600,416	-	-	-	-	-	-	2,663,010	2,663,010	21,263,426
Total Other Equity	14,873,133	6,066,361	-	-	-293,325	-12,376	30,840	9,757,691	9,788,531	30,422,324
Huff Energy Fund	9,063,469	-	-	-	-	-	-	9,103,613	9,103,613	18,167,082
Sail Venture Fund I	1	-	-	-	-	-	-	-	-	1
Sail Venture Fund II	1	-	-	-	-	-	-	-	-	1
Sail Pre-Exit Acceleration Fund	1	-	-	-	-	-	-	-	-	1
Excelsior Investors, Ltd.	626,646	-30,840	-	-	-	-	30,840	-56,054	-25,214	570,592
Franklin Park Private Equity	5,183,015	6,097,201	-	-	-293,325	-12,376	-	710,132	710,132	11,684,647
Total Fixed Income	112,553,086	-4,578,919	-	-	-236,731	-	4,138,584	379,675	4,518,258	112,255,694
Orleans Capital	44,093,031	68,825	-	-	-68,825	-	1,671,015	2,282,815	3,953,829	48,046,861
Templeton Global Multisector Plus	37,805,826	180,385	-	-	-180,385	-	-	-165,211	-165,211	37,640,614
Total Other Fixed Income	30,654,229	-4,828,129	-	-	12,479	-	2,467,569	-1,737,929	729,640	26,568,219
Capital Point Partners	3,998,502	-282,371	-	-	-	-	282,371	-457,199	-174,828	3,541,303
Franchise Equity Capital Partners II	243,804	-263,377	-	-	-	-	207,822	-140,732	67,090	47,517
LBC Credit Partners III	7,058,663	-2,786,695	-	-	12,479	-	432,740	-436,053	-3,313	4,281,133
LBC Credit Partners IV	11,239,261	1,278,446	-	-	-	-	740,019	-260,853	479,166	12,996,872
Providence Debt Fund III	8,114,000	-2,774,132	-	-	-	-	804,618	-443,092	361,526	5,701,394

Financial Reconciliation

Total Fund

Year To Date Ending December 31, 2019

	Market Value 01/01/2019	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Return On Investment	Market Value 12/31/2019
Total Real Estate & Timber	91,371,553	30,860,544	-	-	-543,955	-46,106	2,098,080	2,425,222	4,523,302	126,165,338
Total Real Estate	70,397,552	31,136,266	-	-	-368,094	-46,106	2,098,080	2,231,139	4,329,219	105,448,837
Rockspring Capital Land Funds (I - VI)	8,809,174	-3,463,838	-	-	-	-	-	-11,966	-11,966	5,333,370
Rockspring Capital Land Fund I	477,809	-	-	-	-	-	-	-110,202	-110,202	367,607
Rockspring Capital Land Fund II	2,808,727	-1,176,966	-	-	-	-	-	-173,523	-173,523	1,458,238
Rockspring Capital Land Fund III	1,065,602	-	-	-	-	-	-	34,301	34,301	1,099,903
Rockspring Capital Land Fund V	3,139,057	-1,594,110	-	-	-	-	-	230,494	230,494	1,775,441
Rockspring Capital Land Fund VI	1,317,979	-692,762	-	-	-	-	-	6,964	6,964	632,181
ARES Advisors (V & VI)	762,583	-805,464	-	-	-	-	-	119,120	119,120	76,239
ARES Value Enhancement Fund V	73,998	-	-	-	-	-	-	2,241	2,241	76,239
ARES Value Enhancement Fund VI	688,585	-805,464	-	-	-	-	-	116,879	116,879	-
INVESCO Real Estate Funds (I & II)	26,898	-25,696	-	-	-	-	-	-1,202	-1,202	-
INVESCO Real Estate Fund II	26,898	-25,696	-	-	-	-	-	-1,202	-1,202	-
Edison Investments	2,157,705	-28,456	-	-	-	-	28,456	34,131	62,587	2,191,836
India Property Fund	676,548	-	-	-	-	-	-	-122,541	-122,541	554,007
Gainesville Property	1,818,400	16,195	-	-	-	-16,195	-	-	-	1,818,400
Morgan Stanley	50,104,031	10,000,000	-	-	-	-	2,069,624	1,095,919	3,165,543	63,269,574
AEW Partners Fund VIII	4,323,989	2,830,573	-	-	-48,792	-	-	774,313	774,313	7,880,083
GreenOak US III	1,718,224	2,612,952	-	-	-251,184	-29,911	-	-38,096	-38,096	4,011,985
Brookfield Premier Real Estate Partners	-	20,000,000	-	-	-68,118	-	-	381,461	381,461	20,313,343
Total Timber Funds	20,974,001	-275,722	-	-	-175,861	-	-	194,083	194,083	20,716,501
BTG Pactual 1	1,250,984	11,709	-	-	-11,709	-	-	18,828	18,828	1,269,812
Capitol Timberland Investments	16,326,965	124,206	-	-	-124,206	-	-	151,540	151,540	16,478,505
Domain Environmental Investments II	3,396,052	-411,637	-	-	-39,946	-	-	23,715	23,715	2,968,184

Please refer to the end of the report for additional notes.



Financial Reconciliation

Total Fund

Year To Date Ending December 31, 2019

	Market Value 01/01/2019	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Return On Investment	Market Value 12/31/2019
Total Multi Asset Funds	62,087,711	-31,371,423	-	-	-	-	2,485,786	4,580,872	7,066,659	37,782,947
Double Eagle Capital Ace Fund, Ltd.	11,802,108	-11,782,737	-	-	-	-	-	664,523	664,523	683,894
BlackRock Multi Asset Fund	50,285,603	-19,588,686	-	-	-	-	2,485,786	3,916,350	6,402,136	37,099,053
Cash Account	110,402	16,693,066	57,213,527	-66,257,165	-	-198,497	172,156	-1	172,155	7,733,488
Cash Account PE	-	-	-	-	-	-	-	-	-	-
Retiree Death Benefit Account	1,399,563	-	205,960	-115,616	-	-	30,485	-	30,485	1,520,391
APRS Building	1,438,036	-	-	-	-	-	-	-	-	1,438,036

Please refer to the end of the report for additional notes.



Comparative Performance Trailing Returns

	Performance (%)								Inception Date
	QTR	YTD	1 YR	3 YR	5 YR	7 YR	10 YR	Inception	
Total Retirement System (Net)	5.75	20.79	20.79	8.24	6.20	6.74	6.32	8.16	10/01/1992
Total Retirement System (Gross)	5.83 (22)	21.10 (14)	21.10 (14)	8.51 (76)	6.45 (75)	7.04 (81)	6.75 (89)	8.47 (21)	10/01/1992
Total Fund Policy	5.53	19.70	19.70	10.32	8.24	9.50	9.45	8.26	
Variance	0.30	1.40	1.40	-1.81	-1.79	-2.46	-2.70	0.21	
All Public Plans-Total Fund Median	5.19	18.49	18.49	9.36	7.03	7.97	8.16	7.89	
Total Equity	8.29	29.81	29.81	11.52	8.46	10.78	9.25	8.94	01/01/1994
Total Equity Policy	8.81	29.04	29.04	13.43	9.74	11.96	11.03	8.61	
Variance	-0.52	0.77	0.77	-1.91	-1.28	-1.18	-1.78	0.33	
Domestic Equity	8.36 (44)	31.15 (30)	31.15 (30)	12.64 (43)	9.90 (40)	N/A	N/A	11.38 (47)	05/01/2013
Russell 3000 Index	9.10	31.02	31.02	14.57	11.24	14.38	13.42	13.07	
Variance	-0.74	0.13	0.13	-1.93	-1.34	N/A	N/A	-1.69	
IM U.S. Equity (SA+CF+MF) Median	8.00	27.66	27.66	11.24	9.00	12.44	12.13	11.08	
NT Collective Russell 3000 Index	9.08 (24)	31.02 (34)	31.02 (34)	14.58 (44)	11.26 (38)	N/A	N/A	11.48 (39)	01/01/2014
Russell 3000 Index	9.10	31.02	31.02	14.57	11.24	14.38	13.42	11.46	
Variance	-0.02	0.00	0.00	0.01	0.02	N/A	N/A	0.02	
IM U.S. All Cap Core Equity (SA+CF) Median	8.12	29.67	29.67	14.46	10.80	14.05	13.22	10.68	
Baird Mid Cap Growth	5.79 (89)	36.27 (45)	36.27 (45)	19.41 (36)	11.71 (53)	N/A	N/A	10.93 (66)	07/01/2014
Russell Midcap Growth Index	8.17	35.47	35.47	17.36	11.60	14.81	14.24	11.49	
Variance	-2.38	0.80	0.80	2.05	0.11	N/A	N/A	-0.56	
IM U.S. Mid Cap Growth Equity (SA+CF) Median	7.57	35.72	35.72	17.60	11.80	14.80	14.28	11.88	
Nuance Mid Cap Value	7.70 (40)	N/A	N/A	N/A	N/A	N/A	N/A	17.87 (7)	04/01/2019
Russell Midcap Value Index	6.36	27.06	27.06	8.10	7.62	12.00	12.41	11.10	
Variance	1.34	N/A	N/A	N/A	N/A	N/A	N/A	6.77	
IM U.S. Mid Cap Value Equity (SA+CF) Median	7.06	28.71	28.71	8.69	8.35	12.79	12.42	12.61	
Kennedy Small Cap Value	9.17 (26)	25.37 (48)	25.37 (48)	4.18 (78)	N/A	N/A	N/A	10.71 (81)	03/01/2016
Russell 2000 Value Index	8.49	22.39	22.39	4.77	6.99	10.13	10.56	13.29	
Variance	0.68	2.98	2.98	-0.59	N/A	N/A	N/A	-2.58	
IM U.S. Small Cap Value Equity (SA+CF) Median	7.96	25.07	25.07	5.48	7.66	11.49	12.08	12.62	

Returns for periods greater than one year are annualized. Returns are expressed as percentages. All performance data is Net of Fees. Please refer to the end of the report for additional notes.



Comparative Performance

Total Fund

As of December 31, 2019

	Performance (%)								Inception Date
	QTR	YTD	1 YR	3 YR	5 YR	7 YR	10 YR	Inception	
International Equity	10.23 (42)	20.92 (61)	20.92 (61)	8.84 (67)	4.85 (70)	N/A	N/A	6.12 (31)	05/01/2013
MSCI AC World ex USA	8.99	22.13	22.13	10.40	6.01	5.93	5.45	5.14	
Variance	1.24	-1.21	-1.21	-1.56	-1.16	N/A	N/A	0.98	
IM International Equity (SA+CF+MF) Median	9.67	22.10	22.10	10.05	5.79	5.89	5.67	5.06	
Driehaus International Small Cap Growth	11.62 (39)	30.57 (13)	30.57 (13)	15.27 (8)	10.09 (14)	10.40 (15)	N/A	11.15 (16)	09/01/2012
MSCI AC World ex USA Small Growth	11.23	24.96	24.96	11.11	7.91	7.70	7.53	8.49	
Variance	0.39	5.61	5.61	4.16	2.18	2.70	N/A	2.66	
IM International SMID Cap Growth Equity (MF) Median	10.97	24.57	24.57	11.49	7.76	7.96	8.30	8.83	
Thompson Siegel & Walmsley	9.72 (27)	21.18 (71)	21.18 (71)	7.72 (87)	4.95 (91)	N/A	N/A	4.12 (92)	10/01/2014
MSCI EAFE (Net) Index	8.17	22.01	22.01	9.56	5.67	6.35	5.50	4.67	
Variance	1.55	-0.83	-0.83	-1.84	-0.72	N/A	N/A	-0.55	
IM International Large Cap Core Equity (SA+CF) Median	9.06	23.73	23.73	9.88	6.16	7.13	6.70	5.34	
LMCG Emerging Markets Fund	11.63 (45)	14.32 (81)	14.32 (81)	8.90 (79)	2.37 (94)	N/A	N/A	2.41 (94)	04/01/2014
MSCI Emerging Markets Index	11.93	18.90	18.90	11.99	6.01	3.64	4.04	4.94	
Variance	-0.30	-4.58	-4.58	-3.09	-3.64	N/A	N/A	-2.53	
IM Emerging Markets Equity (SA+CF) Median	11.36	19.49	19.49	11.39	6.22	4.82	5.32	5.37	
Total Other Equity	-0.25	63.44	63.44	1.48	N/A	N/A	N/A	1.48	01/01/2017
Huff Energy Fund									
Excelsior Investors, Ltd.									
Franklin Park Private Equity									
Sail Venture Fund I									
Sail Venture Fund II									
Sail Pre-Exit Acceleration Fund									

Returns for periods greater than one year are annualized. Returns are expressed as percentages. All performance data is Net of Fees. Please refer to the end of the report for additional notes.



Comparative Performance
Total Fund
As of December 31, 2019

	Performance (%)								Inception	Inception Date
	QTR	YTD	1 YR	3 YR	5 YR	7 YR	10 YR			
Total Fixed Income	0.74	3.83	3.83	2.24	2.01	1.17	3.43	6.58	12/01/1993	
Total Fixed Income Policy	0.41	7.93	7.93	4.22	2.79	2.14	3.23	5.01		
Variance	0.33	-4.10	-4.10	-1.98	-0.78	-0.97	0.20	1.57		
Orleans Capital	0.50 (14)	8.80 (70)	8.80 (70)	4.19 (70)	3.37 (56)	N/A	N/A	3.66 (73)	01/01/2014	
Blmbg. Barc. U.S. Aggregate Index	0.18	8.72	8.72	4.03	3.05	2.72	3.75	3.53		
Variance	0.32	0.08	0.08	0.16	0.32	N/A	N/A	0.13		
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	0.22	9.20	9.20	4.40	3.46	3.07	4.27	3.89		
Templeton Global Multisector Plus Trust	1.59 (15)	-0.91 (100)	-0.91 (100)	0.92 (100)	1.10 (98)	N/A	N/A	1.22 (90)	03/01/2014	
Blmbg. Barc. Global Multiverse	0.64	7.13	7.13	4.40	2.51	1.53	2.68	1.80		
Variance	0.95	-8.04	-8.04	-3.48	-1.41	N/A	N/A	-0.58		
IM Global Fixed Income (MF) Median	0.68	8.12	8.12	4.04	2.46	1.70	3.04	2.13		
Total Other Fixed Income	0.00	2.64	2.64	1.13	N/A	N/A	N/A	1.13	01/01/2017	
Capital Point Partners										
Franchise Equity Capital Partners II										
LBC Credit Partners III										
LBC Credit Partners IV										
Providence Debt Fund III										

Returns for periods greater than one year are annualized. Returns are expressed as percentages. All performance data is Net of Fees. Please refer to the end of the report for additional notes.



Comparative Performance

Total Fund

As of December 31, 2019

	Performance (%)								Inception Date
	QTR	YTD	1 YR	3 YR	5 YR	7 YR	10 YR	Inception	
Alternative Investments									
Multi Asset Funds	2.50	13.23	13.23	3.54	1.84	2.08	3.23	5.83	12/01/2008
HFRI Fund of Funds Composite Index	3.03	8.33	8.33	3.87	2.35	3.42	2.82	3.41	
Variance	-0.53	4.90	4.90	-0.33	-0.51	-1.34	0.41	2.42	
Double Eagle Capital Ace Fund, Ltd.	0.00	5.63	5.63	1.74	0.89	2.83	N/A	3.23	09/01/2010
HFRI Fund of Funds Composite Index	3.03	8.33	8.33	3.87	2.35	3.42	2.82	3.07	
Variance	-3.03	-2.70	-2.70	-2.13	-1.46	-0.59	N/A	0.16	
BlackRock Multi Asset Fund	2.54	14.21	14.21	N/A	N/A	N/A	N/A	4.30	02/01/2018
BlackRock Multi Hybrid	4.31	18.11	18.11	N/A	N/A	N/A	N/A	5.53	
Variance	-1.77	-3.90	-3.90	N/A	N/A	N/A	N/A	-1.23	
Other Assets									
Cash Account	0.42	2.11	2.11	1.53	0.97	0.71	0.57	4.46	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	0.42	2.12	2.12	1.53	0.98	0.70	0.63	1.43	12/01/2004
Other Alternative Assets									
Total Real Estate	1.39	5.11	5.11	4.38	3.85	8.29	7.36	3.99	08/01/2005
NCREIF Property Index	1.55	6.42	6.42	6.70	8.25	9.14	10.18	7.99	
Variance	-0.16	-1.31	-1.31	-2.32	-4.40	-0.85	-2.82	-4.00	
Total Timber Funds	-3.39	0.07	0.07	-1.26	-1.80	-0.44	-0.07	1.55	08/01/2005
NCREIF Timberland Index	-0.04	1.30	1.30	2.71	3.13	5.07	4.45	6.39	
Variance	-3.35	-1.23	-1.23	-3.97	-4.93	-5.51	-4.52	-4.84	

Returns for periods greater than one year are annualized. Returns are expressed as percentages. All performance data is Net of Fees. Please refer to the end of the report for additional notes.



Comparative Performance Fiscal Year Returns

	Performance (%)									
	YTD	2018	2017	2016	2015	2014	2013	2012	2011	
Total Retirement System (Net)	20.79	-6.18	11.89	7.67	-1.05	5.61	10.66	8.79	-3.16	
Total Retirement System (Gross)	21.10 (14)	-5.95 (87)	12.17 (84)	7.87 (40)	-0.83 (67)	5.94 (65)	11.16 (83)	9.31 (90)	-2.68 (97)	
Total Fund Policy	19.70	-3.12	15.79	8.04	2.43	8.08	17.56	11.31	4.69	
Variance	1.40	-2.83	-3.62	-0.17	-3.26	-2.14	-6.40	-2.00	-7.37	
All Public Plans-Total Fund Median	18.49	-4.15	15.21	7.45	-0.15	6.62	15.89	12.59	0.48	
Total Equity	29.81	-9.83	18.49	11.41	-2.87	5.30	29.57	10.82	-8.56	
Total Equity Policy	29.04	-7.34	22.07	9.61	-0.51	6.91	29.57	16.70	-3.34	
Variance	0.77	-2.49	-3.58	1.80	-2.36	-1.61	0.00	-5.88	-5.22	
Domestic Equity	31.15 (30)	-7.18 (49)	17.39 (54)	15.76 (32)	-3.09 (63)	8.03 (58)	N/A	N/A	N/A	
Russell 3000 Index	31.02	-5.24	21.13	12.74	0.48	12.56	33.55	16.42	1.03	
Variance	0.13	-1.94	-3.74	3.02	-3.57	-4.53	N/A	N/A	N/A	
IM U.S. Equity (SA+CF+MF) Median	27.66	-7.42	18.19	11.73	-1.48	9.18	33.88	15.25	-1.66	
NT Collective Russell 3000 Index	31.02 (34)	-5.23 (50)	21.15 (48)	12.79 (47)	0.49 (50)	12.55 (32)	N/A	N/A	N/A	
Russell 3000 Index	31.02	-5.24	21.13	12.74	0.48	12.56	33.55	16.42	1.03	
Variance	0.00	0.01	0.02	0.05	0.01	-0.01	N/A	N/A	N/A	
IM U.S. All Cap Core Equity (SA+CF) Median	29.67	-5.28	20.91	12.17	0.45	10.80	35.95	15.97	0.32	
Baird Mid Cap Growth	36.27 (45)	-1.60 (32)	26.98 (30)	5.35 (54)	-3.03 (81)	N/A	N/A	N/A	N/A	
Russell Midcap Growth Index	35.47	-4.75	25.27	7.33	-0.20	11.90	35.74	15.81	-1.65	
Variance	0.80	3.15	1.71	-1.98	-2.83	N/A	N/A	N/A	N/A	
IM U.S. Mid Cap Growth Equity (SA+CF) Median	35.72	-4.30	25.42	5.64	1.04	8.69	36.42	15.13	-0.95	
Nuance Mid Cap Value	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Russell Midcap Value Index	27.06	-12.29	13.34	20.00	-4.78	14.75	33.46	18.51	-1.38	
Variance	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
IM U.S. Mid Cap Value Equity (SA+CF) Median	28.71	-12.55	15.61	18.21	-3.23	11.90	36.48	17.26	-0.88	
Kennedy Small Cap Value	25.37 (48)	-19.83 (93)	12.51 (42)	N/A	N/A	N/A	N/A	N/A	N/A	
Russell 2000 Value Index	22.39	-12.86	7.84	31.74	-7.47	4.22	34.52	18.05	-5.50	
Variance	2.98	-6.97	4.67	N/A	N/A	N/A	N/A	N/A	N/A	
IM U.S. Small Cap Value Equity (SA+CF) Median	25.07	-14.30	11.58	26.11	-4.30	5.71	38.09	17.56	-3.17	

Returns for periods greater than one year are annualized. Returns are expressed as percentages. All performance data is Net of Fees. Please refer to the end of the report for additional notes.



Comparative Performance

Total Fund

As of December 31, 2019

	Performance (%)									
	YTD	2018	2017	2016	2015	2014	2013	2012	2011	
International Equity	20.92 (61)	-16.28 (57)	27.37 (61)	0.67 (64)	-2.40 (52)	-0.27 (24)	N/A	N/A	N/A	
MSCI AC World ex USA	22.13	-13.78	27.77	5.01	-5.25	-3.44	15.78	17.39	-13.33	
Variance	-1.21	-2.50	-0.40	-4.34	2.85	3.17	N/A	N/A	N/A	
IM International Equity (SA+CF+MF) Median	22.10	-15.74	29.31	2.39	-2.11	-3.96	18.14	18.89	-14.29	
Driehaus International Small Cap Growth	30.57 (13)	-16.92 (30)	41.19 (7)	-6.24 (87)	12.59 (12)	-4.32 (41)	29.24 (32)	N/A	N/A	
MSCI AC World ex USA Small Growth	24.96	-18.07	33.99	-0.04	6.74	-3.35	18.80	17.17	-17.67	
Variance	5.61	1.15	7.20	-6.20	5.85	-0.97	10.44	N/A	N/A	
IM International SMID Cap Growth Equity (MF) Median	24.57	-19.39	34.36	-0.81	6.87	-4.87	26.50	21.70	-15.17	
Thompson Siegel & Walmsley	21.18 (71)	-15.93 (70)	22.70 (92)	0.47 (65)	1.38 (36)	N/A	N/A	N/A	N/A	
MSCI EAFE (Net) Index	22.01	-13.79	25.03	1.00	-0.81	-4.90	22.78	17.32	-12.14	
Variance	-0.83	-2.14	-2.33	-0.53	2.19	N/A	N/A	N/A	N/A	
IM International Large Cap Core Equity (SA+CF) Median	23.73	-14.58	26.49	1.60	0.25	-3.69	23.21	19.46	-12.31	
LMCG Emerging Markets Fund	14.32 (81)	-16.89 (69)	35.93 (56)	7.14 (72)	-18.73 (95)	N/A	N/A	N/A	N/A	
MSCI Emerging Markets Index	18.90	-14.25	37.75	11.60	-14.60	-1.82	-2.27	18.64	-18.17	
Variance	-4.58	-2.64	-1.82	-4.46	-4.13	N/A	N/A	N/A	N/A	
IM Emerging Markets Equity (SA+CF) Median	19.49	-15.23	36.81	10.36	-12.66	-0.09	0.97	20.50	-18.09	
Total Other Equity	63.44	-22.42	-17.60	N/A	N/A	N/A	N/A	N/A	N/A	
Huff Energy Fund										
Excelsior Investors, Ltd.										
Franklin Park Private Equity										
Sail Venture Fund I										
Sail Venture Fund II										
Sail Pre-Exit Acceleration Fund										


Returns for periods greater than one year are annualized. Returns are expressed as percentages. All performance data is Net of Fees. Please refer to the end of the report for additional notes.



Comparative Performance

Total Fund

As of December 31, 2019

	Performance (%)								
	YTD	2018	2017	2016	2015	2014	2013	2012	2011
Total Fixed Income	3.83	0.06	2.86	4.36	-0.97	1.69	-3.42	13.45	-1.20
Total Fixed Income Policy	7.93	-0.66	5.60	2.77	-1.37	3.20	-2.10	4.54	6.72
Variance	-4.10	0.72	-2.74	1.59	0.40	-1.51	-1.32	8.91	-7.92
Orleans Capital	8.80 (70)	0.07 (48)	3.87 (59)	3.79 (28)	0.57 (74)	5.08 (94)	N/A	N/A	N/A
Blmbg. Barc. U.S. Aggregate Index	8.72	0.01	3.54	2.65	0.55	5.97	-2.02	4.21	7.84
Variance	0.08	0.06	0.33	1.14	0.02	-0.89	N/A	N/A	N/A
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	9.20	0.07	4.04	3.10	0.82	6.16	-1.58	5.84	7.84
Templeton Global Multisector Plus Trust	-0.91 (100)	-0.11 (19)	3.84 (82)	7.33 (8)	-4.27 (62)	N/A	N/A	N/A	N/A
Blmbg. Barc. Global Multiverse	7.13	-1.36	7.69	2.84	-3.29	0.48	-2.19	4.84	5.55
Variance	-8.04	1.25	-3.85	4.49	-0.98	N/A	N/A	N/A	N/A
IM Global Fixed Income (MF) Median	8.12	-1.75	6.81	2.92	-3.83	1.91	-2.52	7.33	4.01
Total Other Fixed Income	2.64	1.27	-0.49	N/A	N/A	N/A	N/A	N/A	N/A
Capital Point Partners									
Franchise Equity Capital Partners II									
LBC Credit Partners III									
LBC Credit Partners IV									
Providence Debt Fund III									

Returns for periods greater than one year are annualized. Returns are expressed as percentages. All performance data is Net of Fees. Please refer to the end of the report for additional notes.



Comparative Performance

Total Fund

As of December 31, 2019

	Performance (%)								
	YTD	2018	2017	2016	2015	2014	2013	2012	2011
Alternative Investments									
Multi Asset Funds	13.23	-2.74	0.81	0.37	-1.70	-6.00	12.18	9.71	-4.32
HFRI Fund of Funds Composite Index	8.33	-4.02	7.77	0.51	-0.27	3.37	8.96	4.79	-5.72
Variance	4.90	1.28	-6.96	-0.14	-1.43	-9.37	3.22	4.92	1.40
Double Eagle Capital Ace Fund, Ltd.	5.63	-1.09	0.81	-1.53	0.78	0.17	16.13	8.92	-6.81
HFRI Fund of Funds Composite Index	8.33	-4.02	7.77	0.51	-0.27	3.37	8.96	4.79	-5.72
Variance	-2.70	2.93	-6.96	-2.04	1.05	-3.20	7.17	4.13	-1.09
BlackRock Multi Asset Fund	14.21	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BlackRock Multi Hybrid	18.11	-4.19	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Variance	-3.90	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Other Assets									
Cash Account	2.11	1.72	0.76	0.27	0.01	0.06	0.02	0.59	-0.21
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	2.12	1.72	0.77	0.27	0.02	0.01	0.01	0.15	1.24
Other Alternative Assets									
Total Real Estate	5.11	5.14	2.90	0.76	5.40	31.16	10.25	7.49	6.25
NCREIF Property Index	6.42	6.72	6.96	7.97	13.33	11.82	10.98	10.54	14.26
Variance	-1.31	-1.58	-4.06	-7.21	-7.93	19.34	-0.73	-3.05	-8.01
Total Timber Funds	0.07	0.13	-3.94	-6.92	1.93	10.81	-4.18	0.02	-1.33
NCREIF Timberland Index	1.30	3.21	3.63	2.59	4.97	10.48	9.69	7.75	1.57
Variance	-1.23	-3.08	-7.57	-9.51	-3.04	0.33	-13.87	-7.73	-2.90

Returns for periods greater than one year are annualized. Returns are expressed as percentages. All performance data is Net of Fees. Please refer to the end of the report for additional notes.



Comparative Performance - IRR
Other Alternative Investments
As of December 31, 2019

Comparative Performance - IRR								
	Market Value (\$)	QTR	YTD	1 YR	3 YR	5 YR	Inception IRR	Inception Date
Total Real Estate Investments	105,448,837	1.39	5.09	5.09	4.24	3.82	6.77	07/31/2005
Edison Investments	2,191,836	0.73	2.92	2.92	10.66	8.88	12.05	09/30/1996
ARES Advisors (V & VI)	76,239	13.87	18.35	18.35	17.07	12.16	4.05	05/31/2002
Rockspring Capital Land Funds (I - VI)	5,333,370	3.21	-0.15	-0.15	-3.39	-4.33	1.28	11/30/2003
India Property Fund	554,007	0.00	-18.11	-18.11	-24.92	-13.64	-5.99	05/24/2007
Gainesville Property	1,818,400	0.00	-0.89	-0.89	-4.38	-2.66	-7.56	01/31/2008
Morgan Stanley	63,269,574	1.53	6.17	6.17	7.60	N/A	7.93	12/31/2015
AEW Partners Fund VIII	7,880,083	-0.59	11.96	11.96	N/A	N/A	8.27	06/26/2017
GreenOak US III	4,011,985	-2.98	-10.51	-10.51	N/A	N/A	-18.08	06/22/2018
Brookfield Premier Real Estate Partners	20,313,343	2.30	N/A	N/A	N/A	N/A	2.30	10/01/2019
Total Timber Funds	20,716,501	-3.39	0.09	0.09	-1.33	-1.73	-0.05	07/31/2005
BTG Pactual 1	1,269,812	-0.23	0.57	0.57	5.13	-2.91	3.95	11/30/1996
Capitol Timberland Investments	16,478,505	-4.24	0.17	0.17	-1.18	0.39	3.27	09/30/2004
Domain Environmental Investments II	2,968,184	0.00	-0.50	-0.50	-4.39	-5.04	-1.43	04/30/2008
Total Other Equity	30,422,324	-0.25	53.07	53.07	N/A	N/A	0.00	01/01/2017
Huff Energy Fund	18,167,082	0.00	100.44	100.44	11.02	9.38	6.74	12/31/2006
Excelsior Investors, Ltd.	570,592	-2.05	-4.17	-4.17	12.53	-1.92	-6.45	12/31/2014
Franklin Park Private Equity	11,684,647	-0.56	4.80	4.80	N/A	N/A	0.26	01/31/2018
Sail Venture Fund I	1	0.00	0.00	0.00	-98.94	-93.46	-65.20	12/31/2008
Sail Venture Fund II	1	0.00	0.00	0.00	-98.54	-92.08	-85.18	02/28/2009
Sail Pre-Exit Acceleration Fund	1	0.00	0.00	0.00	-98.54	-92.07	-89.35	01/31/2013
Total Other Fixed Income	26,568,219	0.00	2.66	2.66	N/A	N/A	0.00	01/03/2017
Capital Point Partners	3,541,303	0.00	-4.59	-4.59	-16.94	-11.92	-0.41	03/31/2007
Franchise Equity Capital Partners II	47,517	0.00	41.87	41.87	36.97	-10.67	0.77	04/28/2008
LBC Credit Partners III	4,281,133	0.00	0.17	0.17	1.37	7.25	8.13	03/07/2014
LBC Credit Partners IV	12,996,872	0.00	4.12	4.12	8.06	N/A	8.17	09/19/2016
Providence Debt Fund III	5,701,394	0.00	5.38	5.38	4.66	6.29	6.90	04/21/2014



**Summary of Partnerships
Other Alternative Investments
As of December 31, 2019**

Private Equity Summary of Partnership

Partnerships	Drawn Down \$	Market Value \$	Distributed \$	IRR (%)	TVPI Multiple
Total Real Estate Investments					
Edison Investments	8,146,177	2,191,836	19,885,601	12.1	2.7
ARES Value Enhancement Fund V	5,000,000	76,239	5,893,900	5.9	1.2
ARES Value Enhancement Fund VI	5,000,000	-	6,642,661	3.3	1.3
Rockspring Capital Land Fund I	3,618,330	367,607	4,738,306	9.9	1.4
Rockspring Capital Land Fund II	7,870,282	1,458,238	8,961,066	2.8	1.3
Rockspring Capital Land Fund III	5,125,000	1,099,903	5,898,227	3.4	1.4
Rockspring Capital Land Fund IV	7,615,498	-	9,438,696	3.0	1.2
Rockspring Capital Land Fund V	5,165,128	1,775,441	4,517,141	1.8	1.2
Rockspring Capital Land Fund VI	3,502,221	632,181	2,445,231	-1.3	0.9
India Property Fund	4,354,162	554,007	2,339,421	-6.0	0.7
Gainesville Property	5,449,145	1,818,400	570,711	-7.6	0.4
Morgan Stanley	50,000,000	63,269,574	-	7.9	1.3
AEW Partners Fund VIII	10,014,097	7,880,083	2,944,464	8.3	1.1
GreenOak US III	4,803,461	4,011,985	-	-18.1	0.8
Brookfield Premier Real Estate Partners	20,000,000	20,313,343	-	2.3	1.0
Total Timber Investments					
BTG Pactual 1	8,808,074	1,269,812	14,412,803	3.5	1.8
Capitol Timberland Investments	14,390,640	16,478,505	3,918,545	3.3	1.4
Domain Environmental Investments II	7,580,288	2,968,184	3,908,231	-1.4	0.9



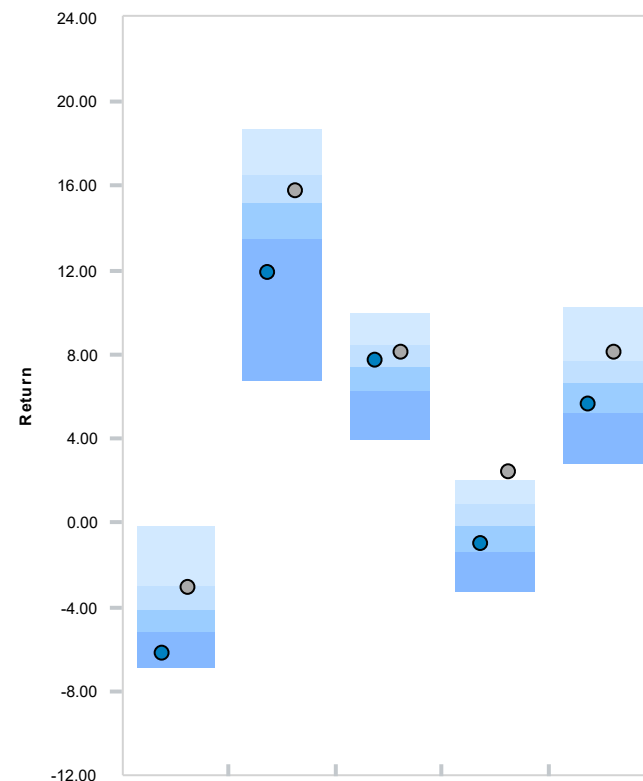
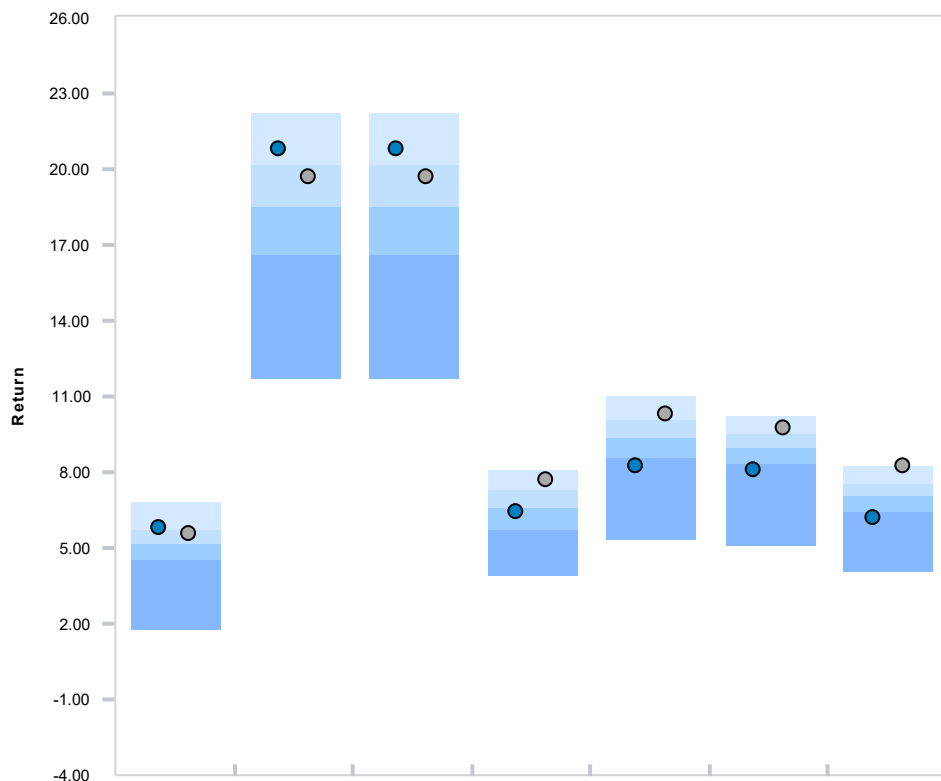
**Summary of Partnerships
Other Alternative Investments**

As of December 31, 2019

Partnerships	Drawn Down \$	Market Value \$	Distributed \$	IRR (%)	TVPI Multiple
Total Other Equity					
Huff Energy Fund	11,095,509	18,167,082	1,786,358	6.7	1.8
Excelsior Investors, Ltd.	1,018,466	570,592	177,395	-6.5	0.7
Franklin Park Private Equity	11,677,021	11,684,647	18,581	0.3	1.0
Sail Venture Fund I	5,000,000	1	343,503	-65.2	0.1
Sail Venture Fund II	5,366,749	1	688,247	-85.2	0.1
Sail Pre-Exit Acceleration Fund	4,947,894	1	-	-89.4	0.0
Total Other Fixed Income					
Capital Point Partners	12,058,210	3,541,303	8,286,461	-0.4	1.0
Franchise Equity Capital Partners II	14,663,847	47,517	15,028,739	0.8	1.0
LBC Credit Partners III	18,837,140	4,281,133	18,417,041	8.1	1.2
LBC Credit Partners IV	18,000,000	12,996,872	6,955,107	8.2	1.1
Providence Debt Fund III	10,017,001	5,701,394	6,997,500	6.9	1.3



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



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Total Retirement System	5.75 (25)	20.79 (18)	20.79 (18)	6.45 (55)	8.24 (82)	8.09 (82)	6.20 (81)
● Total Fund Policy	5.53 (36)	19.70 (33)	19.70 (33)	7.69 (13)	10.32 (17)	9.75 (15)	8.24 (5)
Median	5.19	18.49	18.49	6.57	9.36	8.93	7.03

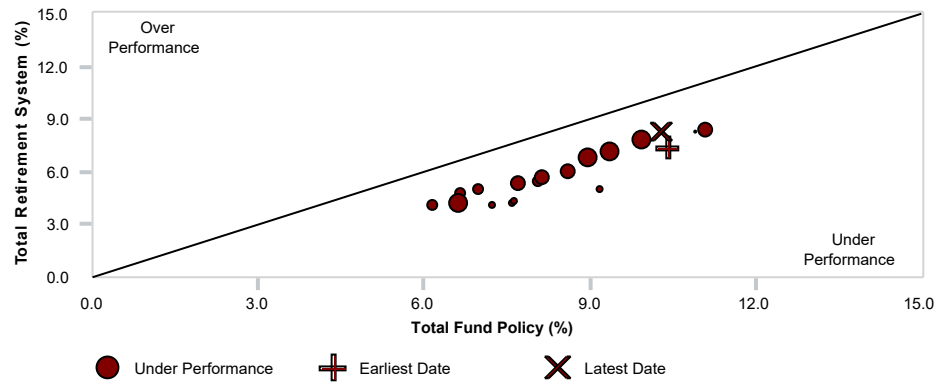
	2018	2017	2016	2015	2014
● Total Retirement System	-6.18 (90)	11.89 (85)	7.67 (44)	-1.05 (71)	5.61 (70)
● Total Fund Policy	-3.12 (28)	15.79 (40)	8.04 (36)	2.43 (4)	8.08 (20)
Median	-4.15	15.21	7.45	-0.15	6.62

Comparative Performance

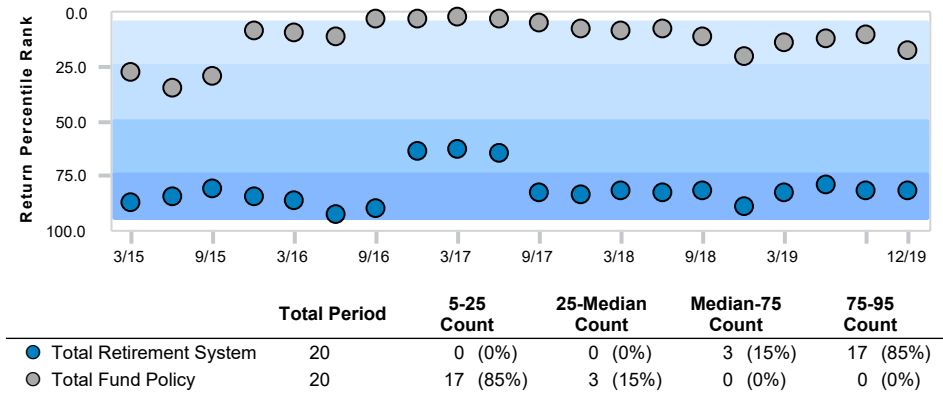
	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019	1 Qtr Ending Mar-2019	1 Qtr Ending Dec-2018	1 Qtr Ending Sep-2018	1 Qtr Ending Jun-2018
Total Retirement System	0.55 (70)	3.08 (68)	10.20 (6)	-9.73 (93)	2.81 (40)	1.14 (46)
Total Fund Policy	0.89 (46)	3.39 (34)	8.74 (41)	-8.11 (65)	3.64 (10)	1.90 (15)
All Public Plans-Total Fund Median	0.83	3.26	8.41	-7.54	2.59	1.03



3 Yr Rolling Under/Over Performance - 5 Years



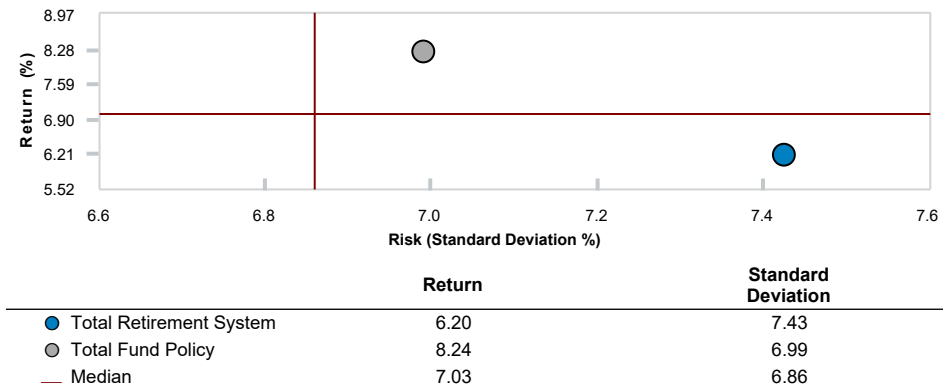
3 Yr Rolling Percentile Ranking - 5 Years



Peer Group Scattergram - 3 Years



Peer Group Scattergram - 5 Years



Historical Statistics - 3 Years

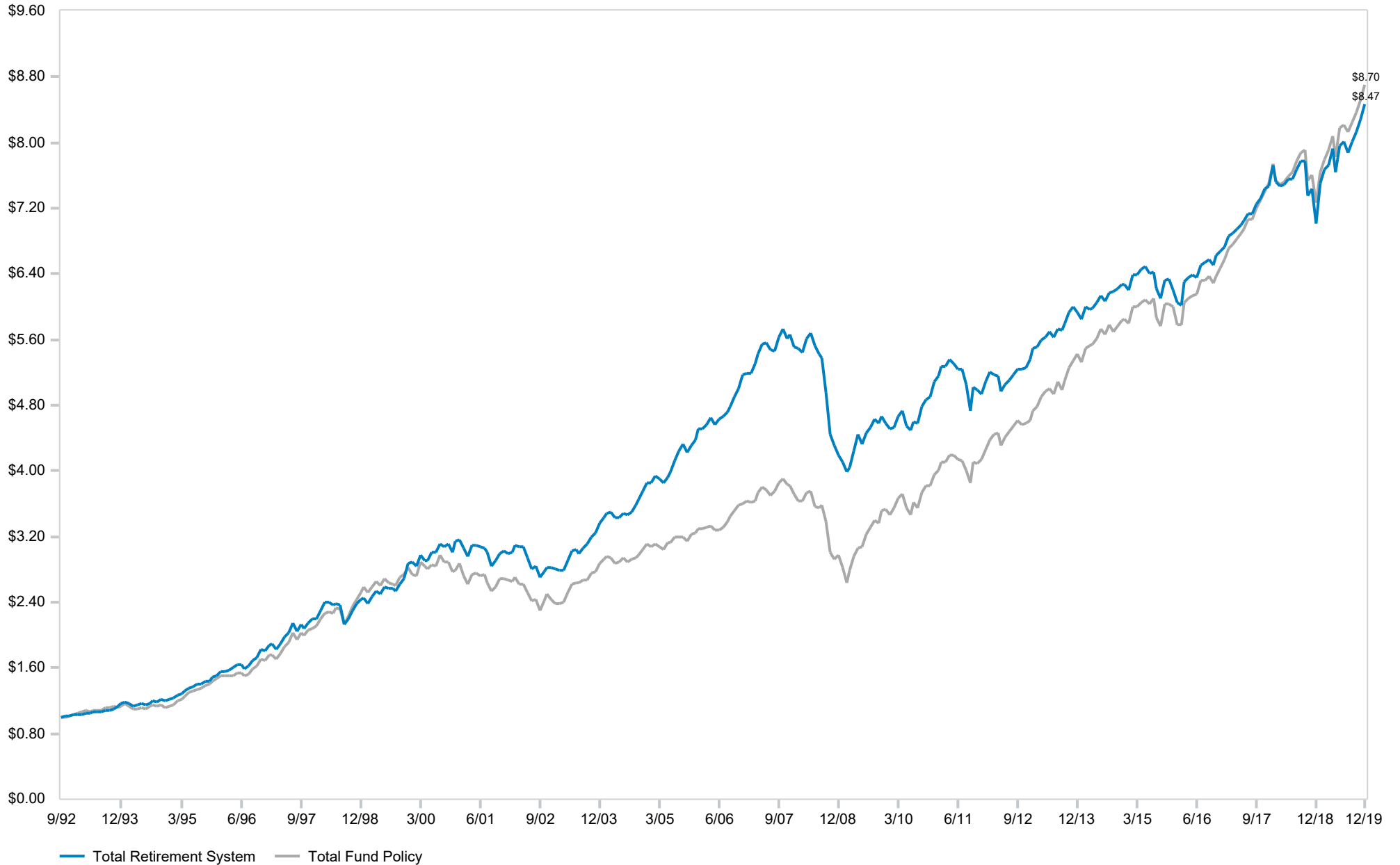
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Retirement System	1.66	94.89	119.02	-3.28	-1.10	0.83	1.15	5.26
Total Fund Policy	0.00	100.00	100.00	0.00	N/A	1.23	1.00	4.45

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Retirement System	1.75	91.22	110.98	-2.13	-1.08	0.71	1.03	4.72
Total Fund Policy	0.00	100.00	100.00	0.00	N/A	1.02	1.00	4.32



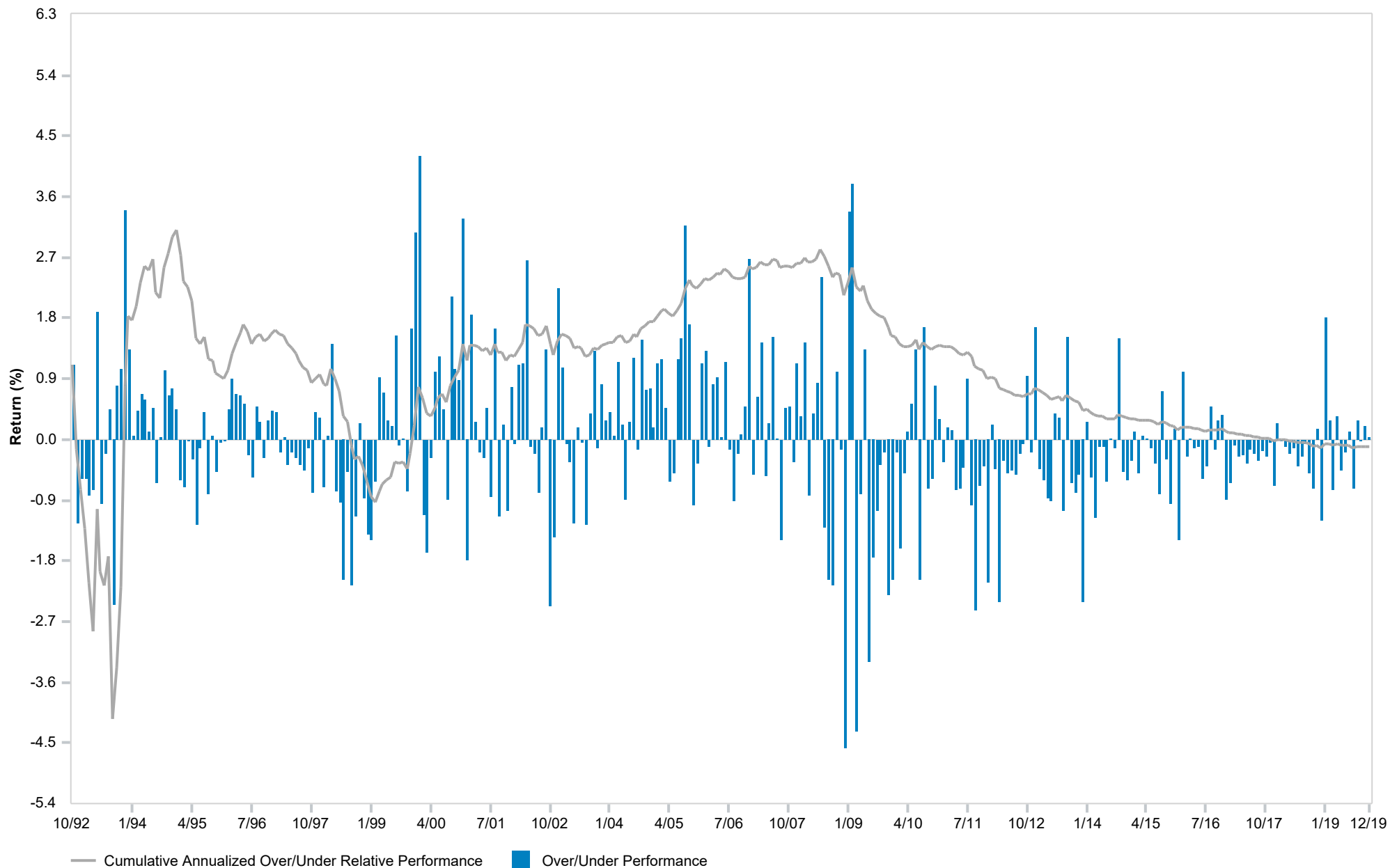
Growth of \$1



Calculation based on monthly periodicity.



Relative Performance



Calculation based on monthly periodicity.



Total Fund Compliance:	Yes	No	N/A
The total plan return equaled or exceeded the total plan benchmark over the trailing three and five year periods.		•	
The total plan return ranked within the top 50th percentile of its peer group over the trailing three and five year periods.		•	
The total plan return equaled or exceeded the actuarial earnings assumption of 7.25% over the three and five year periods.		•	
Equity Compliance:	Yes	No	N/A
Total domestic equity return equaled or exceeded the benchmark over the trailing three and five year periods.		•	
Total domestic equity return ranked within the top 50th percentile of its peer group over the trailing three and five year periods.	•		
Total international equity return equaled or exceeded the benchmark over the trailing three and five year periods.		•	
Total international equity return ranked within the top 50th percentile of its peer group over the trailing three and five year periods.		•	
The total equity allocation was less than or equal to 85% but greater than or equal to 35% of the total fund value at market.	•		
The total domestic equity allocation was less than or equal to 50% but greater than or equal to 30% of the total fund value at market.	•		
The total international equity allocation was less than or equal to 25% but greater than or equal to 5% of the total fund value at market.	•		
Fixed Income Compliance:	Yes	No	N/A
Total core fixed income return equaled or exceed the benchmark over the trailing three and five year periods.	•		
Total core fixed income return ranked within the top 50th percentile of its peer group over the trailing three and five year periods.		•	
Total non-US fixed income return equaled or exceed the benchmark over the trailing three and five year periods.		•	
Total non-US fixed income return ranked within the top 50th percentile of its peer group over the trailing three and five year periods.		•	
The total fixed income allocation was less than or equal to 45% but greater than or equal to 5% of the total fund value at market.	•		
The core fixed income allocation was less than or equal to 20% but greater than or equal to 5% of the total fund value at market.	•		
The total non-US fixed income allocation was less than or equal to 15% of the total fund value at market.	•		



	Baird Mid Cap			Nuance MC			Kennedy SC			Driehaus			TS&W		
	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A
	Manager outperformed the index over the trailing three and five year periods.	•					•	•			•				•
Manager ranked within the top 50%-tile over trailing three and five year periods.	•					•		•		•				•	
Less than four consecutive quarters of under performance relative to the benchmark.	•			•			•			•			•		
Three and five-year downside capture ratios less than 100%	•					•	•			•				•	
Manager maintained style consistency for the mandate	•			•			•			•			•		
Manager maintained low turnover in portfolio team or senior management.	•			•			•			•			•		
Benchmark and index remained the same for the portfolio.	•			•			•			•			•		
Manager sustained compliance with IPS.	•			•			•			•			•		
No investigation by SEC was conducted on the manager.	•			•			•			•			•		
Manager did not experience significant asset flows into or out of the company.	•			•			•			•			•		
Manager is charging the same fee.	•			•			•			•			•		
No reported servicing issues with manager.	•			•			•			•			•		

	LMCG			Orleans			Templeton								
	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A
	Manager outperformed the index over the trailing three and five year periods.		•		•				•						
Manager ranked within the top 50%-tile over trailing three and five year periods.		•			•			•							
Less than four consecutive quarters of under performance relative to the benchmark.		•		•			•								
Three and five-year downside capture ratios less than 100%		•		•			•								
Manager maintained style consistency for the mandate	•			•			•								
Manager maintained low turnover in portfolio team or senior management.	•			•			•								
Benchmark and index remained the same for the portfolio.	•			•			•								
Manager sustained compliance with IPS.	•			•			•								
No investigation by SEC was conducted on the manager.	•			•			•								
Manager did not experience significant asset flows into or out of the company.	•			•			•								
Manager is charging the same fee.	•			•			•								
No reported servicing issues with manager.	•			•			•								

*The 3 & 5 year periods used for evaluation represent the historical performance of composite portfolios. As such, this data represents a combination of current managers, strategies and allocations as well as the realized performance of terminated portfolios and prior allocation strategies. The peer universes used are gross of fees therefore the manager returns used for the purpose of measuring compliance are also gross.



Austin Police Retirement System
Investment Pricing Summary
as of 12/31/2019

Plan	Most Recent Statement Date	Statement Frequency	Statement Source
Total Retirement System			
Total Equity			
Total Domestic Equity			
NT Collective Russell 3000 Fund	12/31/2019	Monthly	Custodian
Baird Mid Cap Growth	12/31/2019	Monthly	Custodian
Nuance Mid Cap Value	12/31/2019	Monthly	Custodian
Kennedy Small Cap Value	12/31/2019	Monthly	Custodian
Total International Equity			
Thompson Siegel & Walmsley	12/31/2019	Monthly	Custodian
Driehaus International Small Cap Growth	12/31/2019	Monthly	Custodian
LMCG Emerging Markets	12/31/2019	Monthly	Custodian
Total Other Equity			
Huff Energy Fund	12/31/2018	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.	11/30/2019	Monthly	Manager
Franklin Park	9/30/2019	Quarterly	Manager
Total Fixed Income			
Total Fixed Income Funds			
Orleans Capital	12/31/2019	Monthly	Custodian
Templeton Global Multisector Plus	12/31/2019	Monthly	Custodian

Austin Police Retirement System
Investment Pricing Summary
as of 12/31/2019

Plan	Most Recent Statement Date	Statement Frequency	Statement Source
Total Other Fixed Income Funds			
Capital Point Partners	9/30/2019	Quarterly	Manager
Franchise Equity Capital Partners II	9/30/2019	Quarterly	Manager
LBC Credit Partners III	9/30/2019	Quarterly	Manager
LBC Credit Partners IV	9/30/2019	Quarterly	Manager
Providence Debt Fund III	9/30/2019	Quarterly	Manager
Total Alternatives			
Total Real Estate (Composite)(6091100)			
Rockspring Capital Land Funds (I - VI)	12/31/2019	Quarterly	Manager
Rockspring Capital Land Fund I	12/31/2019	Quarterly	Manager
Rockspring Capital Land Fund II	12/31/2019	Quarterly	Manager
Rockspring Capital Land Fund III	12/31/2019	Quarterly	Manager
Rockspring Capital Land Fund V	12/31/2019	Quarterly	Manager
Rockspring Capital Land Fund VI	12/31/2019	Quarterly	Manager
Ares Value Enhancement Fund V	12/31/2019	Quarterly	Manager
Edison Investments	12/31/2019	Quarterly	Manager
India Property Fund	9/30/2019	Quarterly	Manager
Gainesville Property	12/31/2017	Quarterly	Manager
Morgan Stanley	12/31/2019	Quarterly	Manager
AEW Parters VIII	9/30/2019	Quarterly	Manager
GreenOak US III	9/30/2019	Quarterly	Manager
Brookfield	9/30/2019	Quarterly	Manager

Austin Police Retirement System
Investment Pricing Summary
as of 12/31/2019

Plan	Most Recent Statement Date	Statement Frequency	Statement Source
Total Timber Funds			
BTG Pactual 1	9/30/2019	Quarterly	Manager
Capitol Timberland Investments	12/31/2019	Quarterly	Manager
Domain Environmental	9/30/2019	Quarterly	Manager
Total Multi Asset Funds			
Double Eagle Capital Ace Fund, Ltd.	6/30/2019	Monthly	Manager
BlackRock Multi Asset	12/31/2019	Monthly	Manager
Cash Account	12/31/2019	Monthly	Custodian
PE Cash Account	12/31/2019	Monthly	Custodian
Retiree Death Benefit Account	12/31/2019	Monthly	Custodian
APRS Building			

	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
Total Domestic Equity	0.33	406,776,520	1,340,023	
NT Collective Russell 3000 Index	0.02	237,098,285	47,420	0.02 % of Assets
Baird Mid Cap Growth	0.67	67,449,226	454,695	0.70 % of First \$50 M 0.60 % Thereafter
Nuance Mid Cap Value	0.67	56,252,130	378,139	0.70 % of First \$25 M 0.65 % Thereafter
Kennedy Small Cap Value	1.00	45,976,879	459,769	1.00 % of Assets
Total International Equity	0.71	132,025,394	943,634	
Thompson Siegel & Walmsley	0.65	85,734,641	557,275	0.65 % of Assets
Driehaus International Small Cap Growth	1.00	25,027,327	250,273	1.00 % of Assets
LMCG Emerging Markets Fund	0.64	21,263,426	136,086	0.64 % of Assets
Total Other Equity	0.62	30,422,324	189,212	
Huff Energy Fund	0.83	18,167,082	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.	1.75	570,592	10,000	
*Franklin Park Private Equity	0.25	11,684,647	29,212	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	0.52	112,255,694	579,383	
Orleans Capital	0.15	48,046,861	72,070	0.15 % of Assets
Templeton Global Mulisector Plus Trust	0.62	37,640,614	233,372	0.62 % of First \$50 M 0.51 % of Next \$50 M 0.45 % Thereafter
Total Other Fixed Income	1.03	26,568,219	273,941	
Capital Point Partners	0.00	3,541,303	2	
Franchise Equity Capital Partners II	2.00	47,517	950	
LBC Credit Partners III	1.25	4,281,133	53,514	
LBC Credit Partners IV	1.25	12,996,872	162,461	
Providence Debt Fund III	1.00	5,701,394	57,014	



	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
Total Real Estate	0.98	105,448,837	1,031,554	
Rockspring Capital Land Fund I	1.25	367,607	4,595	1.25 % of Assets
Rockspring Capital Land Fund II	1.25	1,458,238	18,228	1.25 % of Assets
Rockspring Capital Land Fund III	1.25	1,099,903	13,749	1.25 % of Assets
Rockspring Capital Land Fund V	1.25	1,775,441	22,193	1.25 % of Assets
Rockspring Capital Land Fund VI	1.25	632,181	7,902	1.25 % of Assets
ARES Value Enhancement Fund V	0.85	76,239	648	0.85 % of Assets
Edison Investments	1.00	2,191,836	21,918	1.00 % of Assets
India Property Fund	2.00	554,007	11,080	2.00 % of Assets
Gainesville Property	0.00	1,818,400	-	0.00 % of Assets
Morgan Stanley	0.90	63,269,574	569,426	0.90 % of Assets
AEW Partners Fund VIII	1.25	7,880,083	98,501	1.25 % of Assets
GreenOak US III	1.50	4,011,985	60,180	1.50 % of Assets
Brookfield Premier Real Estate Partners	1.00	20,313,343	203,133	1.00 % of Assets
Total Timber Funds	1.04	20,716,501	214,585	
BTG Pactual 1	1.00	1,269,812	12,698	1.00 % of Assets
Capitol Timberland Investments	1.00	16,478,505	164,785	1.00 % of Assets
Domain Environmental Investments II	1.25	2,968,184	37,102	1.25 % of Assets
Total Multi Asset Funds	0.58	37,782,947	218,304	
Double Eagle Capital Ace Fund, Ltd. (1% Mgt Fee & 10% of profit after a 7% retn)	1.00	683,894	6,839	1.00 % of Assets
BlackRock Multi Asset Fund	0.57	37,099,053	211,465	0.57 % of Assets
Cash Account	0.00	7,733,488	-	0.00 % of Assets
Cash Account PE	0.00	-	-	0.00 % of Assets
Retiree Death Benefit Account	0.00	1,520,391	-	0.00 % of Assets
APRS Building	0.00	1,438,036	-	0.00 % of Assets
Total Retirement System	0.53	856,120,134	4,516,695	



**Austin Police Retirement System
Historical Hybrid Compositions
As of December 31, 2019**

Total Fund Policy		Total Equity Policy		Total Fixed Income Policy	
Allocation Mandate	Weight (%)	Allocation Mandate	Weight (%)	Allocation Mandate	Weight (%)
Jan-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-2014		Jan-2017		Jan-1999	
Russell 3000 Index	30.00	Russell 3000 Index	75.00	Blmbg. Barc. U.S. Aggregate Index	50.00
MSCI World ex U.S.	15.00	MSCI World ex U.S.	25.00	Blmbg. Barc. Global Multiverse	50.00
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				
Jan-2017		Total Private Equity Policy		Wellington Energy Hybrid	
Russell 3000 Index	45.00	Allocation Mandate		Allocation Mandate	
MSCI World ex U.S.	15.00	Weight (%)		Weight (%)	
Blmbg. Barc. U.S. Aggregate Index	5.00	May-2013		Jan-1999	
Blmbg. Barc. Global Multiverse	5.00	Russell 3000 Index	100.00	Russell 3000 Energy SP	100.00
NCREIF Property Index	15.00	Jan-2017		Oct-2015	
NCREIF Timberland Index (Monthly)	2.50	Credit Suisse Leveraged Loan Index	67.00	S&P 500 Energy	100.00
HFRI Fund of Funds Composite Index	5.00	Cambridge Associates Private Equity Index	33.00		
Credit Suisse Leveraged Loan Index	5.00				
Cambridge Associates Private Equity Index	2.50				
Jan-2018		Total Hedge Fund Policy		Total Timber Policy	
Russell 3000 Index	42.50	Allocation Mandate		Allocation Mandate	
MSCI World ex U.S.	15.00	Weight (%)		Weight (%)	
Blmbg. Barc. U.S. Aggregate Index	10.00	Jan-1990		Apr-1987	
Blmbg. Barc. Global Multiverse	5.00	HFRI Fund of Funds Composite Index	100.00	NCREIF Timberland Index	100.00
NCREIF Property Index	15.00				
HFRI Fund of Funds Composite Index	5.00	Total Real Estate Policy		Jan-1978	
Credit Suisse Leveraged Loan Index	5.00	Allocation Mandate		Allocation Mandate	
Cambridge Associates Private Equity Index	2.50	Weight (%)		Weight (%)	
		Jan-1978		Jan-1978	
		NCREIF Property Index		NCREIF Property Index	
		100.00		100.00	



- 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 of 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.

Active Return	- Arithmetic difference between the manager's performance and the designated benchmark return over a specified time period.
Alpha	- A measure of the difference between a portfolio's actual performance and its expected return based on its level of risk as determined by beta. It determines the portfolio's non-systemic return, or its historical performance not explained by movements of the market.
Beta	- A measure of the sensitivity of a portfolio to the movements in the market. It is a measure of the portfolio's systematic risk.
Consistency	- The percentage of quarters that a product achieved a rate of return higher than that of its benchmark. Higher consistency indicates the manager has contributed more to the product's performance.
Distributed to Paid In (DPI)	- The ratio of money distributed to Limited Partners by the fund, relative to contributions. It is calculated by dividing cumulative distributions by paid in capital. This multiple shows the investor how much money they got back. It is a good measure for evaluating a fund later in its life because there are more distributions to measure against.
Down Market Capture	- The ratio of average portfolio performance over the designated benchmark during periods of negative returns. A lower value indicates better product performance
Downside Risk	- A measure similar to standard deviation that utilizes only the negative movements of the return series. It is calculated by taking the standard deviation of the negative quarterly set of returns. A higher factor is indicative of a riskier product.
Excess Return	- Arithmetic difference between the manager's performance and the risk-free return over a specified time period.
Excess Risk	- A measure of the standard deviation of a portfolio's performance relative to the risk free return.
Information Ratio	- This calculates the value-added contribution of the manager and is derived by dividing the active rate of return of the portfolio by the tracking error. The higher the Information Ratio, the more the manager has added value to the portfolio.
Public Market Equivalent (PME)	- Designs a set of analyses used in the Private Equity Industry to evaluate the performance of a Private Equity Fund against a public benchmark or index.
R-Squared	- The percentage of a portfolio's performance that can be explained by the behavior of the appropriate benchmark. A high R-Squared means the portfolio's performance has historically moved in the same direction as the appropriate benchmark.
Return	- Compounded rate of return for the period.
Sharpe Ratio	- Represents the excess rate of return over the risk free return divided by the standard deviation of the excess return. The result is an absolute rate of return per unit of risk. A higher value demonstrates better historical risk-adjusted performance.
Standard Deviation	- A statistical measure of the range of a portfolio's performance. It represents the variability of returns around the average return over a specified time period.
Total Value to Paid In (TVPI)	- The ratio of the current value of remaining investments within a fund, plus the total value of all distributions to date, relative to the total amount of capital paid into the fund to date. It is a good measure of performance before the end of a fund's life
Tracking Error	- This is a measure of the standard deviation of a portfolio's returns in relation to the performance of its designated market benchmark.
Treynor Ratio	- Similar to Sharpe ratio but utilizes beta rather than excess risk as determined by standard deviation. It is calculated by taking the excess rate of return above the risk free rate divided by beta to derive the absolute rate of return per unit of risk. A higher value indicates a product has achieved better historical risk-adjusted performance.
Up Market Capture	- The ratio of average portfolio performance over the designated benchmark during periods of positive returns. A higher value indicates better product performance.



AndCo compiled this report for the sole use of the client for which it was prepared. AndCo is responsible for evaluating the performance results of the Total Fund along with the investment advisors by comparing their performance with indices and other related peer universe data that is deemed appropriate. AndCo uses the results from this evaluation to make observations and recommendations to the client.

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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