Investment Performance Review Period Ending March 31, 2020

# **Austin Police**

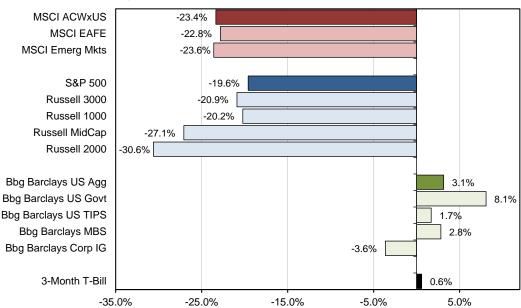


1st Quarter 2020 Market Environment

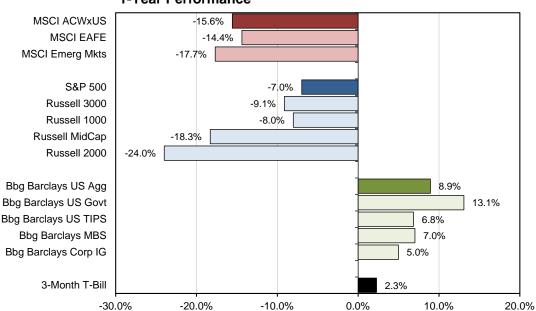


- Global risk asset class returns declined significantly during the 1st quarter of 2020 due primarily to the COVID-19 (Coronavirus) pandemic. Both domestic and international equities experienced significant drawdowns as investors moved into perceived haven assets such as US Treasury bonds. Equity market volatility, as measured by the VIX Index, reached its highest level since the Financial Crisis in 2008. Through the quarter, global economic growth turned negative as countries responded to the pandemic by shuttering their economies. In the US, as a result of the decision to institute social distancing and shelter-in-place orders, labor markets suffered significant losses as businesses closed or furloughed employees. Rising economic concerns resulted in swift action by the Federal Reserve (Fed) which cut its overnight lending rate to between 0% to 0.25%. Importantly, the US government responded with a stimulus package consisting of forgivable loans and other short-term benefits, that is designed to act as a bridge for the economy until businesses can reopen. Within domestic equity markets, large cap stocks outperformed small cap equities during the guarter with the S&P 500 Index returning -19.6% versus a -30.6% return for the small cap Russell 2000 Index. US equity returns over the 1-year period turned negative as a result of the drawdown with large and mid-cap stocks returning -7.0% and -18.3% respectively, while small cap stocks fell -24.0%.
- International markets also posted negative returns for the 1st quarter. Similar to US markets, international returns were impacted by the Coronavirus and deteriorating economic fundamentals. International returns also faced headwinds from a strengthening US dollar (USD) which appreciated against most major currencies during the period. Developed markets outpaced emerging markets during the period with the MSCI EAFE Index falling -22.8% versus a -23.6% decline for the MSCI Emerging Markets Index. Both developing and emerging markets posted losses over the 1-year period, returning -14.4% and -17.7% respectively.
- As expected during periods of rising volatility, high quality fixed income outperformed equities during the 1st quarter as investors looked for relative safety amid the equity market drawdown. The broad market Bloomberg Barclays Aggregate Index gained 3.1% as interest rates fell following rising concerns related to the Coronavirus and central bank stimulus from the Fed and other global central banks. US Government bonds were the best performing securities for the 1st quarter returning 8.1%. Investment grade corporate bonds suffered negative returns on concerns about economic growth prospects in the future. The bond market has meaningfully outperformed the equity market over the trailing 1-year period with the Bloomberg Barclays Aggregate posting a solid 8.9% return.

#### **Quarter Performance**



#### 1-Year Performance

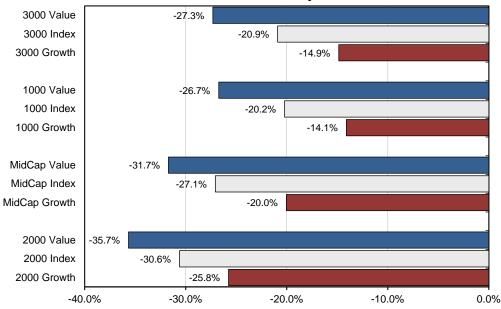


Source: Investment Metrics

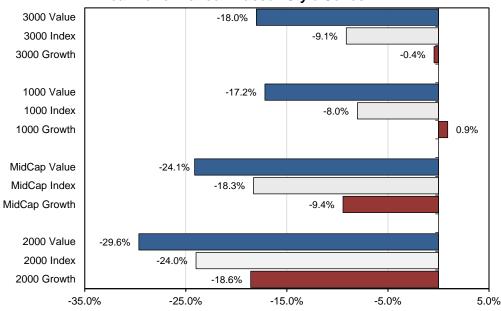


- US equity returns were significantly lower during the 1st quarter with varied results across both style and market capitalization. Concerns related to the Coronavirus, in combination with signs that the US economy could be entering into recession weighed on equities. Labor markets came under significant pressure during the quarter as companies began laying off employees in response to the government's decision to mandate a shelter-in-place approach to dealing with the pandemic. In response to the deteriorating economic conditions, the Fed took unprecedented action on March 15th and lowered the Fed Fund's rate to between 0% to 0.25%. The Fed also announced that it would be purchasing up to \$500 billion in US Treasury bonds and \$200 billion in mortgage-backed bonds. Subsequently, the Fed announced on March 23rd that it would begin purchasing unlimited amounts of US Treasury and mortgage-backed bonds. This announcement was well received by investors and marked the recent low in equity markets.
- During the quarter, higher market capitalization stocks were down less than lower market capitalization stocks across the style spectrum. The large cap Russell 1000 Index lost -20.2% during the period versus a -30.6% return for the small cap Russell 2000 Index. Investors preferred large cap stocks relative to small cap stocks as they are typically viewed as less risky during periods of rising market volatility given the size of their balance sheets and ability to generate cash flow. When viewed over the most recent 1-year period, large cap stocks significantly outpaced small cap stocks with the Russell 1000 posting a -8.0% loss compared to the -24.0% drawdown in the Russell 2000.
- In general, value stocks underperformed growth stocks across market capitalizations during the 1st quarter despite value stocks trading near all-time lows based on valuation metrics. Importantly, value indexes contain large exposures to such sectors as energy, consumer durables and financials, all of which came under pressure during the quarter. Large cap growth stocks held up better than large cap value stocks due to larger weightings in the technology and industrials sectors as well as a smaller exposure to the underperforming energy sector. The Russell 1000 Growth Index was the least negative style index for the period, returning -14.1%. The small cap value index posted the weakest relative return for the quarter with a loss of -35.7%. Results over the 1-year period were mixed with value stocks underperforming across market capitalizations while large cap stocks outpaced both mid and small cap stocks due in large part to the exposure to technology stocks and relative underweights to both energy and financial stocks.

#### **Quarter Performance - Russell Style Series**



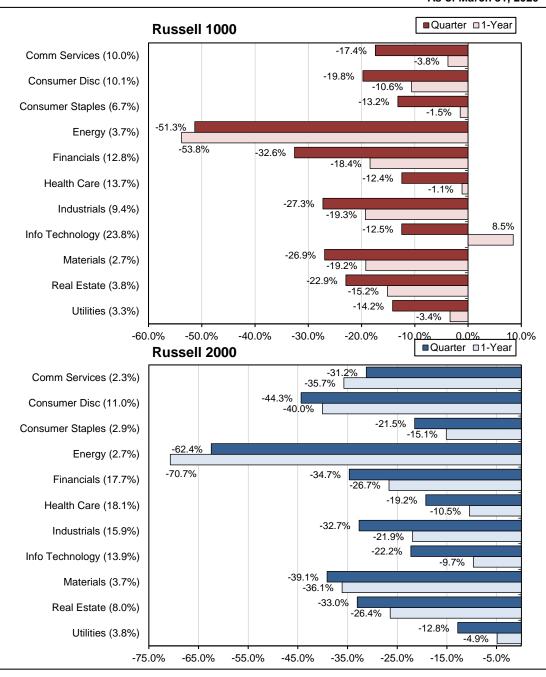
#### 1-Year Performance - Russell Style Series



Source: Investment Metrics



- Generally, sector performance was negative across large cap sectors for the 1st quarter. The outlier during the period was the energy sector which saw significant losses due primarily to the drop in oil prices as a result of demand destruction related to the Coronavirus and the inability of OPEC to agree on production cuts. Health care and technology were the two of the least negative during the quarter returning -12.4% and -12.5%. Energy stocks fell a staggering -51.3% during the quarter as crude oil prices fell as global economic growth receded during the period. Financial stocks also lagged, declining -32.6%, as interest rates fell and a flat yield curve, in combination with fewer borrowers, increased pressure on financial stocks. Returns over the 1-year period were also generally negative with only the technology sector showing a positive return (+8.5%). Similar to the quarter's results, energy stocks underperformed by a considerable margin relative to other sectors. Industrials, materials, and financials also lagged for the year returning -19.3%, -19.2% and -18.4% respectively.
- Quarterly results for small capitalization sectors were generally worse than their large capitalization counterparts with only utilities outperforming during the period. All eleven economic sectors saw substantial losses during the period with only three of eleven sectors outpacing the Russell 2000 Index return for the quarter. Similar to large capitalization sectors, defensive sectors were less negative as investors gravitated toward their relative safety and higher yields. Utilities was the least negative sector, returning -12.8%, while healthcare and consumer staples returned -19.2% and -21.5%, respectively. The cyclically oriented energy sector was the largest detractor for the period, posting a disconcerting loss of --62.4% as global energy prices collapsed. Consumer discretionary stocks also fell substantially during the quarter returning -44.3% as consumer activity fell sharply following the decision to impose shelter-in-place orders. Financial stocks, which were down -34.7% for the quarter, were negatively impacted by the Fed's decision to lower interest rates and the significant decline in lending activity. Similar to quarterly performance, the trailing 1-year period returns were broadly negative. Utilities, technology and health care sectors were the down the least, returning -4.9%, -9.7% and -10.5%, respectively.





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



Top 10 Weighted Stocks					
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector	
Microsoft Corp	5.09%	0.3%	35.5%	Information Technology	
Apple Inc	4.47%	-13.2%	35.6%	Information Technology	
Amazon.com Inc	3.48%	5.5%	9.5%	Consumer Discretionary	
Facebook Inc A	1.70%	-18.7%	0.1%	Communication Services	
Berkshire Hathaway Inc B	1.53%	-19.3%	-9.0%	Financials	
Alphabet Inc Class C	1.49%	-13.0%	-0.9%	Communication Services	
Johnson & Johnson	1.49%	-9.5%	-3.6%	Health Care	
Alphabet Inc A	1.48%	-13.2%	-1.3%	Communication Services	
JPMorgan Chase & Co	1.20%	-35.0%	-8.4%	Financials	
Visa Inc Class A	1.18%	-14.1%	3.8%	Information Technology	

Top 10 Weighted Stocks					
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector	
Teladoc Health Inc	0.77%	85.2%	178.8%	Health Care	
NovoCure Ltd	0.40%	-20.1%	39.8%	Health Care	
Amedisys Inc	0.40%	10.0%	48.9%	Health Care	
Generac Holdings Inc	0.39%	-7.4%	81.9%	Industrials	
Lumentum Holdings Inc	0.38%	-7.1%	30.4%	Information Technology	
Repligen Corp	0.35%	4.4%	63.4%	Health Care	
Haemonetics Corp	0.35%	-13.3%	13.9%	Health Care	
ACADIA Pharmaceuticals Inc	0.33%	-1.2%	57.4%	Health Care	
Trex Co Inc	0.32%	-10.8%	30.3%	Industrials	
Rexford Industrial Realty Inc	0.32%	-9.7%	16.6%	Real Estate	

Top 10 Performing Stocks (by Quarter)					
Russell 1000	Weight		1-Year Return	Sector	
Moderna Inc	0.03%	53.1%	47.2%	Health Care	
Legg Mason Inc	0.02%	37.2%	86.1%	Financials	
Taubman Centers Inc	0.01%	36.6%	-15.3%	Real Estate	
Virtu Financial Inc A	0.00%	31.9%	-7.8%	Financials	
Zscaler Inc	0.02%	30.9%	-14.2%	Information Technology	
Regeneron Pharmaceuticals Inc	0.17%	30.0%	18.9%	Health Care	
Citrix Systems Inc	0.07%	28.0%	44.0%	Information Technology	
RingCentral Inc Class A	0.07%	25.6%	96.6%	Information Technology	
NortonLifeLock Inc	0.04%	25.4%	40.9%	Information Technology	
Tesla Inc	0.32%	25.3%	87.2%	Consumer Discretionary	

Top 10 Performing Stocks (by Quarter)						
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector		
Waitr Holdings Inc Class A	0.00%	282.0%	-90.0%	Consumer Discretionary		
Novavax Inc	0.03%	241.2%	23.3%	Health Care		
Vir Biotechnology Inc	0.02%	172.5%	N/A	Health Care		
Athersys Inc	0.03%	143.9%	100.0%	Health Care		
Forty Seven Inc	0.17%	142.4%	490.5%	Health Care		
Kala Pharmaceuticals Inc	0.01%	138.2%	6.3%	Health Care		
Aduro Biotech Inc	0.01%	132.2%	-31.2%	Health Care		
Tocagen Inc	0.00%	128.8%	-88.8%	Health Care		
Inovio Pharmaceuticals Inc	0.05%	125.5%	99.5%	Health Care		
Neon Therapeutics Inc	0.00%	123.7%	-59.1%	Health Care		

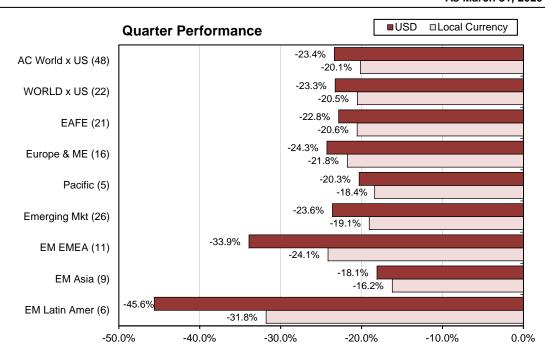
Bottom 10 Performing Stocks (by Quarter)					
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector	
Centennial Resource Dev. Inc A	0.00%	-94.3%	-97.0%	Energy	
Kosmos Energy Ltd	0.00%	-84.0%	-85.0%	Energy	
Apache Corp	0.01%	-83.5%	-87.5%	Energy	
Transocean Ltd	0.00%	-83.1%	-86.7%	Energy	
Apergy Corp	0.00%	-83.0%	-86.0%	Energy	
Targa Resources Corp	0.01%	-82.7%	-81.7%	Energy	
Norwegian Cruise Line Holdings Ltd	0.01%	-81.2%	-80.1%	Consumer Discretionary	
MFA Financial Inc	0.00%	-79.7%	-76.9%	Financials	
Chesapeake Energy Corp	0.00%	-79.1%	-94.4%	Energy	
Macerich Co	0.00%	-78.4%	-85.6%	Real Estate	

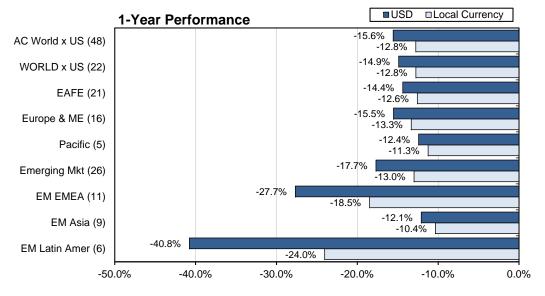
Bottom 10 Performing Stocks (by Quarter)					
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector	
Independence Contract Drilling Inc	0.00%	-93.0%	-97.5%	Energy	
QEP Resources Inc	0.01%	-92.5%	-95.6%	Energy	
Whiting Petroleum Corp	0.00%	-90.9%	-97.4%	Energy	
Amplify Energy Corp	0.00%	-90.4%	-93.0%	Energy	
Penn Virginia Corp	0.00%	-89.8%	-93.0%	Energy	
Pacific Drilling SA	0.00%	-89.8%	-97.1%	Energy	
Nine Energy Service Inc	0.00%	-89.7%	-96.4%	Energy	
Forum Energy Technologies Inc	0.00%	-89.4%	-96.5%	Energy	
Oasis Petroleum Inc	0.01%	-89.3%	-94.2%	Energy	
SM Energy Co	0.01%	-89.1%	-93.0%	Energy	

Source: Morningstar Direct



- International equity returns were negative in USD terms for the 1st quarter as markets were negatively impacted by the Coronavirus. In local currency terms, developed and emerging markets performed slightly better due to US dollar (USD) strength against most major currencies which created a significant headwind for US investors. The MSCI ACWI ex US Index lost -20.1% in local currency terms while a USD investor experienced a loss of -23.4% due to the aforementioned currency effect. Similar to US markets, international equity markets were severely impacted by concerns regarding headwinds from slowing economic data. Global central banks reacted by providing additional stimulus measures which are designed to provide the market with liquidity and restore confidence. The European Central Bank (ECB) and the Japanese Central Bank (JCB) announced new programs to purchase securities in an effort to boost markets while the Bank of England (BOE) cut its policy rate to 0.1% and announced additional quantitative easing in an effort to counteract a deterioration in the economy.
- Results for developed market international indices were negative in both local currency terms and USD terms for the 1st quarter. Prior to the onset of the Coronavirus, there were notable developments within the political sphere. The UK formally withdrew from the EU in January. While there remains much uncertainty surrounding what the relationship between the UK and the EU will look like, both sides are continuing to negotiate for a final withdrawal later this year. In Europe, Italy and Spain were hard hit by the Coronavirus. Already beset by relatively low GDP growth in historical terms, the region is expected to experience recession. In Japan, the economy was already under pressure as a result of declining trade with China prior to the onset of the Coronavirus. The Olympics were also rescheduled to 2021 in an effort to reduce the number of potential infections.
- Emerging markets continued their trend from 2019, underperforming relative to developed markets during the 1st quarter. The MSCI Emerging Markets Index fell -23.6% and -19.1% in USD and local currency terms, respectively. The US and China made headway in resolving their trade war by signing the Phase One trade deal in January. Countries with greater sensitivities to commodity prices or a strong USD tended to underperform during the period. Regionally, Asian countries outperformed both EMEA and Latin America, primarily due to their aggressive response to the Coronavirus. Within Latin America, Brazil and Mexico were hard hit as a result of the selloff in oil prices. Argentina underperformed as the country considered delaying the payment of interest on its sovereign debt.







MSCI - EAFE	Sector Weight	Quarter Return	1-Year Return
Communication Services	5.5%	-18.0%	-11.5%
Consumer Discretionary	11.1%	-26.8%	-15.0%
Consumer Staples	12.6%	-13.5%	-8.5%
Energy	4.0%	-36.2%	-37.9%
Financials	16.5%	-31.6%	-24.7%
Health Care	14.3%	-8.9%	7.1%
Industrials	14.2%	-26.4%	-16.0%
Information Technology	7.6%	-17.7%	-1.7%
Materials	6.7%	-26.8%	-20.5%
Real Estate	3.3%	-27.6%	-27.1%
Utilities	4.2%	-13.2%	-5.1%
Total	100.0%	-22.8%	-14.4%
MSCI - ACWIXUS	Sector Weight	Quarter Return	1-Year Return
Communication Services	7.5%	-14.1%	-9.9%
Consumer Discretionary	11.8%	-24.1%	-12.9%
Consumer Staples	10.5%	-14.7%	-9.9%
Energy	5.2%	-38.5%	-37.1%
Financials	19.2%	-31.0%	-24.9%
Health Care	10.5%	-9.2%	4.6%
Industrials	11.4%	-26.2%	-17.1%
Information Technology	10.2%	-17.5%	1.3%
Materials	7.0%	-27.5%	-22.8%
Real Estate	3.0%	-27.6%	-25.9%
Utilities	3.7%	-15.9%	-8.7%
Total	100.0%	-23.4%	-15.6%
MSCI - Emerging Mkt	Sector Weight	Quarter Return	1-Year Return
Communication Services	13.1%	-9.6%	-8.2%
Consumer Discretionary	15.4%	-18.1%	-8.3%
Consumer Staples	6.6%	-19.8%	-15.7%
Energy	5.9%	-39.9%	-35.8%
Financials	21.6%	-31.1%	-27.6%
Health Care	3.6%	-8.5%	-8.5%
Industrials	4.9%	-28.0%	-26.5%
Information Technology	16.9%	-17.8%	3.2%
Materials	6.7%	-30.7%	-31.3%
Real Estate	2.9%	-26.7%	-21.5%
Utilities	2.5%	-26.0%	-23.4%
Total	100.0%	-23.6%	-17.7%

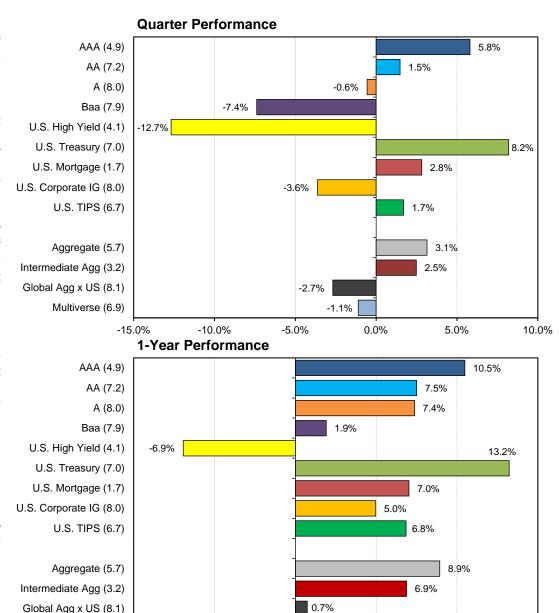
	MSCI-EAFE	MSCI-ACWIXUS	Quarter	1- Year
Country	Weight	Weight	Return	Return
Japan	26.3%	17.4%	-16.8%	-6.7%
United Kingdom	15.1%	10.0%	-28.8%	-23.0%
France	10.8%	7.1%	-27.6%	-17.7%
Switzerland	10.7%	7.1%	-11.5%	3.5%
Germany	8.3%	5.5%	-27.0%	-17.5%
Australia	5.9%	3.9%	-33.3%	-26.3%
Netherlands	4.2%	2.7%	-20.7%	-7.7%
Hong Kong	3.8%	2.5%	-17.3%	-21.1%
Sweden	2.8%	1.8%	-21.4%	-11.2%
Spain	2.6%	1.7%	-29.8%	-26.5%
Denmark	2.2%	1.4%	-8.0%	4.5%
Italy	2.2%	1.4%	-29.3%	-21.4%
Singapore	1.2%	0.8%	-28.2%	-22.3%
Finland	1.0%	0.7%	-19.1%	-18.0%
Belgium	0.9%	0.6%	-32.6%	-30.2%
Israel	0.6%	0.4%	-18.1%	-18.4%
Ireland	0.6%	0.4%	-25.7%	-8.3%
Norway	0.5%	0.4%	-33.4%	-31.3%
New Zealand	0.3%	0.2%	-16.4%	-1.0%
Portugal	0.2%	0.1%	-13.1%	-2.5%
Austria	0.2%	0.1%	-42.9%	-39.7%
Total EAFE Countries	100.0%	66.0%	-22.8%	-14.4%
Canada	100.070	6.3%	-27.5%	-19.9%
Total Developed Countries		72.3%	-23.3%	-14.9%
China		11.3%	-10.2%	-5.8%
Taiwan		3.4%	-19.1%	1.3%
Korea		3.3%	-22.5%	-16.8%
India		2.1%	-31.1%	-30.9%
Brazil		1.4%	-50.2%	-41.9%
South Africa		1.0%	-40.3%	-37.1%
Russia		0.9%	-36.4%	
		0.9%		-14.4%
Saudi Arabia Thailand		0.6%	-24.0% -33.8%	-28.9% -32.5%
Mexico				
		0.5%	-35.5%	-31.9%
Malaysia		0.5%	-19.2%	-21.1%
Indonesia		0.4%	-39.6%	-36.8%
Qatar		0.3%	-17.3%	-15.1%
Philippines		0.2%	-32.2%	-30.5%
Poland		0.2%	-36.5%	-39.9%
Chile		0.2%	-33.6%	-47.1%
United Arab Emirates		0.2%	-27.1%	-30.3%
Turkey		0.1%	-30.1%	-19.8%
Peru		0.1%	-35.8%	-39.4%
Colombia		0.1%	-49.7%	-47.3%
Hungary		0.1%	-39.0%	-31.3%
Greece		0.1%	-45.2%	-30.4%
Argentina		0.0%	-39.3%	-51.0%
Egypt		0.0%	-27.1%	-10.8%
Czech Republic		0.0%	-38.5%	-38.3%
Pakistan		0.0%	-39.7%	-39.0%
Total Emerging Countries		27.7%	-23.6%	-17.7%
Total ACWIxUS Countries		100.0%	-23.4%	-15.6%

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 market returns during the 1st quarter were bifurcated between high- and low-quality bonds. Interest rates fell across the US Treasury Yield Curve through the quarter as investors sought safety and lower volatility assets. As a result of the deterioration of the US economy, the Fed took unprecedented action and lowered interest rates to between 0% to 0.25%. As a result, short term interest rates fell dramatically. The benchmark US Treasury 10-Year bond yield fell by more than 120 basis points during the quarter ending the period at a yield of 0.70%. In addition to lowering interest rates, the Fed committed to purchasing near unlimited US Treasury bonds and Agency mortgage bonds while implementing additional programs that allow for the purchase of corporate bonds. The bellwether Bloomberg Barclays US Aggregate Index posted positive returns for both the 1st quarter and the 1-year period, returning 3.1% and 8.9%, respectively.
- Within investment grade credit, higher quality issues outperformed lower quality issues during the quarter. More specifically, investors rotated out of lower quality issues due to the expectation for deterioration in the economy as a result of shelter-in-place protection measures. On an absolute basis, without negating the duration differences in the sub-indices, high yield credit was the worst performing sector returning -12.7% for the quarter, while AAA was the best performing, returning 5.8%. High yield spreads relative to comparable US Treasury issues widened to their highest levels since the 2008 Financial Crisis at nearly 1,100 basis points. Within investment grade bonds, Baa also underperformed, returning -7.4%. Much has been made in recent years about the growth of Baa bond issues outstanding and the potential for downgrades should a recession ensue. Returns over the 1-year period show generally positive returns with only high yield bonds posting a negative result. Within investment grade bonds, AAA bonds outperformed returning 10.5% compared to 7.5%, 7.4% and 1.9%, respectively, for AA, A and Baa rated issues.
- Within the Bloomberg Barclays US Aggregate Bond Index, defensive US Treasury, government agency and mortgage backed sectors outperformed investment grade corporate issues over the 1-year period. The defensive sectors benefited from the flight to quality as investors preferred lower volatility issues despite their lower relative yields. Over the 1-year period, US Treasury bonds returned 13.2% while US mortgage backed and investment grade corporate issues returned 7.0% versus a 5.0%, respectively. High yield bonds were the only negative performer for the year in the chart primarily due to the quarter's dramatic spread widening and resulting weak performance. Additionally, commodity-related lower quality issues were negatively impacted with the significant decline in oil prices.



3.5%

0.0%

5.0%

Multiverse (6.9)

-10.0%

-5.0%

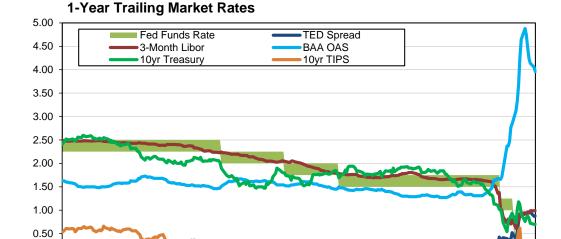




10.0%

15.0%

- Global fixed income returns continued their relative underperformance when compared to their domestic counterparts during the 1st quarter. Yields across developed markets fell in the first quarter following the onset of the Coronavirus. While the number of negative yielding bonds has recently subsided, countries such as Germany, Sweden and Switzerland continue to have lower, or in some cases negative yields. As mentioned, the USD appreciated against most developed currencies during the quarter, acting as a headwind to global bond index performance. The return on global bonds, as represented by the Bloomberg Barclays Global Aggregate ex US Index, was -2.7% for the period. Global bonds also trailed over the 1-year period with the Global Aggregate ex US Index returning 0.7% versus 8.9% return for the domestic Bloomberg Barclays Aggregate Index. Global growth is expected to slow considerably in the 1st and 2nd quarters as countries continue to manage through the Coronavirus pandemic. Importantly, global central banks are acting in coordination to provide sufficient liquidity in an effort to calm markets. As a result, interest rates, and bond returns, are expected to remain low until economic activity resumes.
- 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) has fallen from roughly 2.5% to roughly 0.7%. The blue line illustrates changes in the BAA OAS (Option Adjusted Spread). This measure quantifies the additional yield premium that investors require to purchase and hold non-Treasury issues. This line illustrates an abrupt increase in credit spreads during the 1st quarter of 2020 as investors moved to higher quality assets during the quarter's risk-off environment. Prior to that, spreads had remained relatively range bound over the previous three quarters as investors sought out higher relative yields in corporate bonds. The orange line illustrates US Treasury TIPS which reflect investor expectations of future inflation. Over the trailing year, TIPS yields had already been trending generally lower due to concerns about the sustainability of global economic growth. Following the drawdown in the 1st quarter, TIPS yields were negative as investors believed that the US economy would enter a recession.
- The lower graph provides a snapshot of the US Treasury yield curve at the end of each of the last four calendar quarters. The downward shift in US interest rates is clearly visible over the last quarter. The primary driver of this change in the curve was due to the supportive actions taken by the Fed, which reversed recent interest rate increases, and a broad flight to the perceived safety of US Treasury securities.

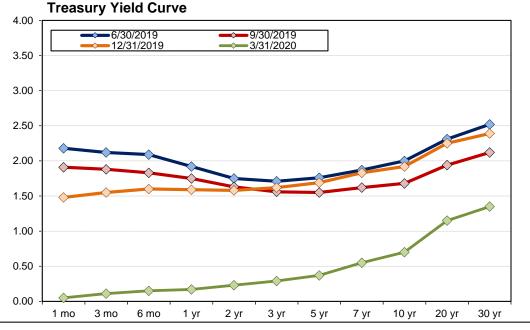


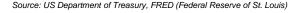
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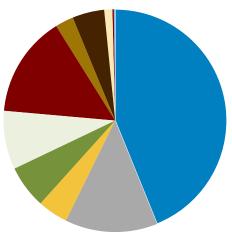
Mar-19 Apr-19 May-19 Jun-19 Jul-19 Aug-19 Sep-19 Oct-19 Nov-19 Dec-19 Jan-20 Feb-20 Mar-20







#### **Asset Allocation by Segment** March 31, 2020: \$721,517,220



#### **Allocation Market Value** Allocation ■ Total Domestic Equity 316,607,787 43.9 ■ Total International Equity 96,596,978 13.4 Total Other Equity 31.651.573 4.4 ■ Total Core Fixed Income 45,090,284 6.2 Total Non Core Fixed Income 35,327,658 4.9 Total Other Fixed Income 26,006,673 3.6 ■ Total Real Estate 106,184,314 14.7 ■ Total Timber Funds 2.7 19,154,960

33,432,033

8,488,522

1,538,403

1,438,036

4.6

1.2

0.0

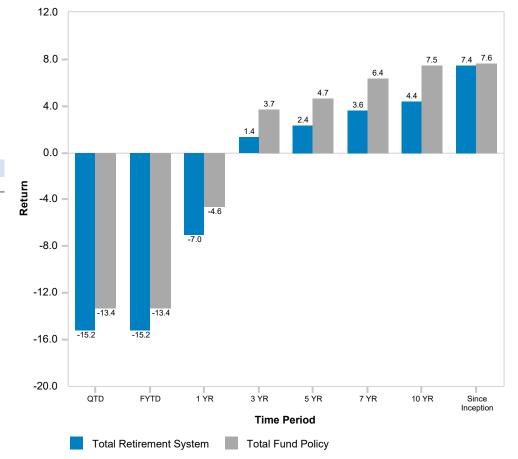
0.2

0.2

#### **Gain/Loss Summary**

QTD	FYTD	1 YR
857,026,080	857,026,080	788,762,852
-4,651,173	-4,651,173	-12,628,094
-130,432,153	-130,432,153	-52,363,264
721,517,220	721,517,220	721,517,220
	857,026,080 -4,651,173 -130,432,153	857,026,080 857,026,080 -4,651,173 -4,651,173 -130,432,153 -130,432,153

#### **Comparative Performance**









■ Total Multi Asset Funds

■ Retiree Death Benefit Account

Cash Account

APRS Building

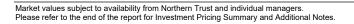
Cash Account PE

#### March 31, 2020 : \$721,517,220

cation		
	Market Value	Allocation
NT Collective Russell 3000 Index	186,815,317	25.9
Baird Mid Cap Growth	54,699,571	7.6
Nuance Mid Cap Value	45,369,834	6.3
<ul><li>Kennedy Small Cap Value</li></ul>	29,723,065	4.1
■ Driehaus International Small Cap Growth	18,675,334	2.6
■ Thompson Siegel & Walmsley	62,668,772	8.7
Wellington Emerging Markets Fund	15,252,872	2.1
Huff Energy Fund	18,167,082	2.5
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.	362,776	0.1
Franklin Park Private Equity	13,121,712	1.8
Orleans Capital	45,090,284	6.2
Templeton Global Multisector Plus	35,327,658	4.9
LBC Credit Partners III	4,263,688	0.6
LBC Credit Partners IV	12,806,892	1.8
Providence Debt Fund III	5,410,631	0.7
Capital Point Partners	3,477,946	0.5
Franchise Equity Capital Partners II	47,517	0.0
Rockspring Capital Land Funds (I - VI)	5,336,124	0.7
ARES Advisors (V & VI)	76,566	0.0
Edison Investments	2,184,722	0.3
■ India Property Fund	494,996	0.1
Gainesville Property	1,644,315	0.2
■ Morgan Stanley	63,652,613	8.8
■ AEW Partners Fund VIII	7,914,934	1.1
■ GreenOak US III	4,321,788	0.6
■ Brookfield Premier RE Partners	20,558,257	2.8
■ BTG Pactual 1	1,022,478	0.1
Capitol Timberland Investments	15,178,635	2.1
Domain Environmental Investments II	2,953,847	0.4
■ Double Eagle Capital Ace Fund, Ltd.	683,894	0.1
BlackRock Multi Asset Fund	32,748,140	4.5
Cash Account	8,488,522	1.2
Cash Account PE	-	0.0
Retiree Death Benefit Account	1,538,403	0.2

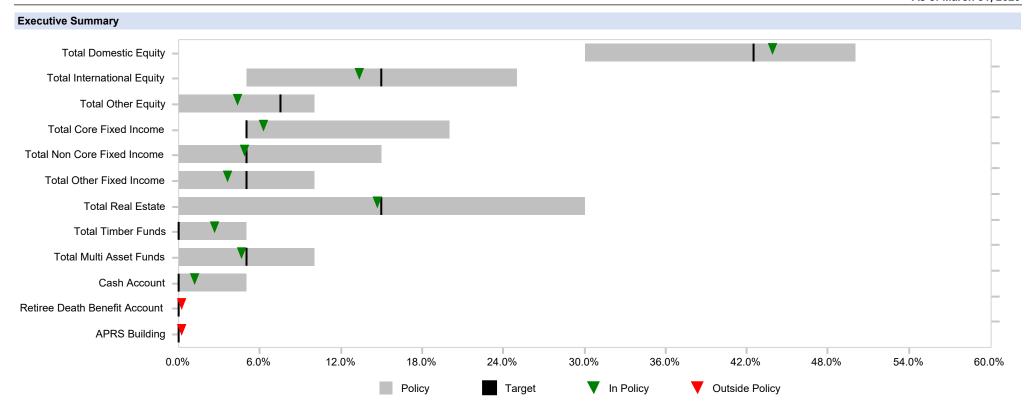
1,438,036

APRS Building





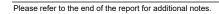
0.2



Asset Allocation Compliance					
	Asset Allocation \$	Current Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)	Target Allocation (%)
Total Retirement System	721,517,220	100.0	N/A	N/A	100.0
Total Domestic Equity	316,607,787	43.9	30.0	50.0	42.5
Total International Equity	96,596,978	13.4	5.0	25.0	15.0
Total Other Equity	31,651,573	4.4	0.0	10.0	7.5
Total Core Fixed Income	45,090,284	6.2	5.0	20.0	5.0
Total Non Core Fixed Income	35,327,658	4.9	0.0	15.0	5.0
Total Other Fixed Income	26,006,673	3.6	0.0	10.0	5.0
Total Real Estate	106,184,314	14.7	0.0	30.0	15.0
Total Timber Funds	19,154,960	2.7	0.0	5.0	0.0
Total Multi Asset Funds	33,432,033	4.6	0.0	10.0	5.0
Cash Account	8,488,522	1.2	0.0	5.0	0.0
Retiree Death Benefit Account	1,538,403	0.2	0.0	0.0	0.0
APRS Building	1,438,036	0.2	0.0	0.0	0.0

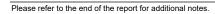


	Market Value 01/01/2020	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Return On Investment	Market Value 03/31/2020
Total Retirement System	857,026,080	-	15,745,101	-20,396,274	-386,173	-39,361	2,735,011	-133,167,165	-130,432,153	721,517,220
Total Equity	569,539,866	157,125	-	-	-272,460	-	600,572	-125,168,765	-124,568,194	444,856,337
Total Domestic Equity	406,776,520	-823,373	-	-	-166,627	-	547,095	-89,725,829	-89,178,733	316,607,787
NT Collective Russell 3000 Index	237,098,285	-978,145	-	_	-11,855	-	-	-49,292,968	-49,292,968	186,815,31
Baird Mid Cap Growth	67,449,226	-	_	_	-	-	100,329	-12,849,985	-12,749,655	54,699,57
Nuance Mid Cap Value	56,252,130	47,138	-	_	-47,138	-	234,464	-11,116,760	-10,882,296	45,369,83
Kennedy Small Cap Value	45,976,879	107,634	-	_	-107,634	-	212,302	-16,466,117	-16,253,815	29,723,06
Total International Equity	132,025,394	-	-	-	-	-	53,476	-35,481,893	-35,428,417	96,596,97
Driehaus International Small Cap Growth	25,027,327	-	-	_	-	-	-	-6,351,993	-6,351,993	18,675,33
Thompson Siegel & Walmsley	85,734,641	-	-	_	-	-	-	-23,065,870	-23,065,870	62,668,77
LMCG Emerging Markets Fund	21,263,426	-21,121,128	-	_	-	-	-	-142,298	-142,298	
Wellington Emerging Markets Fund	-	21,121,128	_	_	-	-	53,476	-5,921,733	-5,868,256	15,252,87
Total Other Equity	30,737,952	980,498	-	-	-105,833	-	-	38,956	38,956	31,651,57
Huff Energy Fund	18,167,082	-	-	_	-	-	-	-	-	18,167,08
Sail Venture Fund I	1	-	-	_	-	-	-	-	-	
Sail Venture Fund II	1	-	-	_	-	-	-	-	-	
Sail Pre-Exit Acceleration Fund	1	-	-	_	-	-	-	-	-	
Excelsior Investors, Ltd.	462,136	-115,335	-	_	-	-	-	15,975	15,975	362,77
Franklin Park Private Equity	12,108,731	1,095,833	-	-	-105,833	-	-	22,981	22,981	13,121,71
Total Fixed Income	112,520,093	-3,753,319		-	-72,626	-	915,490	-3,185,023	-2,269,533	106,424,61
Orleans Capital	48,046,861	-2,981,982	-	-	-18,018	-	405,269	-361,845	43,424	45,090,28
Templeton Global Mulisector Plus Trust	37,640,614	44,068	-	_	-44,068	-	-	-2,312,957	-2,312,957	35,327,65
Total Other Fixed Income	26,832,618	-815,404	-	-	-10,540	-	510,221	-510,221	-	26,006,67
Capital Point Partners	3,477,946	-	-	_	-	-	-	· -	-	3,477,94
Franchise Equity Capital Partners II	47,517	-	-	_	-	-	-	-	-	47,51
LBC Credit Partners III	4,370,307	-96,079	-	_	-10,540	-	82,636	-82,636	-	4,263,68
LBC Credit Partners IV	13,182,661	-375,769	-	_	· -	-	254,322	-254,322	-	12,806,89
Providence Debt Fund III	5,754,187	-343,556	_	_	-	-	173,263	-173,263	-	5,410,63





	Market Value 01/01/2020	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Return On Investment	Market Value 03/31/2020
Total Real Estate & Timber	126,491,259	-1,821,329	-	-	-41,087	-	780,212	-69,781	710,431	125,339,274
Total Real Estate	106,036,429	-560,438	-	-	-2,108	-	780,212	-69,781	710,431	106,184,314
Rockspring Capital Land Funds (I - VI)	5,333,370	-	-	-	-	-	-	2,754	2,754	5,336,124
Rockspring Capital Land Fund I	367,607	-	-	-	-	-	-	22,273	22,273	389,881
Rockspring Capital Land Fund II	1,458,238	-	-	-	-	-	-	-6,066	-6,066	1,452,172
Rockspring Capital Land Fund III	1,099,903	-	-	-	-	-	-	-4,314	-4,314	1,095,589
Rockspring Capital Land Fund V	1,775,441	-	-	-	-	-	-	-4,862	-4,862	1,770,579
Rockspring Capital Land Fund VI	632,181	-	-	-	-	-	-	-4,278	-4,278	627,903
ARES Advisors (V & VI)	76,239	-	-	-	-	-	-	326	326	76,566
ARES Value Enhancement Fund V	76,239	_	-	-	-	-	-	326	326	76,566
Edison Investments	2,191,836	-7,114	-	-	-	-	7,114	-7,114	-	2,184,722
India Property Fund	554,007	-	-	-	-	-	-	-59,012	-59,012	494,996
Gainesville Property	1,818,400	-171,977	-	-	-2,108	-	-	-	-	1,644,315
Morgan Stanley	63,269,574	-	-	-	-	-	624,539	-241,500	383,039	63,652,613
AEW Partners Fund VIII	8,296,281	-381,347	-	-	-	-	15,404	-15,404	-	7,914,934
GreenOak US III	4,321,788	-	-	-	-	-	-	-	-	4,321,788
Brookfield Premier Real Estate Partners	20,174,933	-	-	-	-	-	133,155	250,168	383,324	20,558,257
Total Timber Funds	20,454,830	-1,260,891	-	-	-38,979	-	-	-	-	19,154,960
BTG Pactual (1, 2 & 3)	1,022,478	2,273	-	-	-2,273	-	-	-	-	1,022,478
BTG Pactual 1	1,022,478	2,273	-	-	-2,273	-	-	-	-	1,022,478
Capitol Timberland Investments	16,478,505	-1,263,164	-	-	-36,706	-	-	-	-	15,178,635
Domain Environmental Investments II	2,953,847	-	-	_	-	_	_	_	-	2,953,847





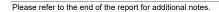
# Financial Reconciliation Total Fund

### 1 Quarter Ending March 31, 2020

	Market Value 01/01/2020	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Return On Investment	Market Value 03/31/2020
								4 = 40 = 0=	4.050.044	00 400 000
Total Multi Asset Funds	37,782,947	-	-	-	-	-	392,682	-4,743,595	-4,350,914	33,432,033
Double Eagle Capital Ace Fund, Ltd.	683,894	-	-	-	-	-	-	-	-	683,894
BlackRock Multi Asset Fund	37,099,053	-	-	-	-	-	392,682	-4,743,595	-4,350,914	32,748,140
Cash Account	7,733,488	5,417,523	15,689,671	-20,353,773	-	-39,361	40,973	_	40,973	8,488,522
Cash Account PE	-	-	-	-	-	-	-	-	-	-
Retiree Death Benefit Account	1,520,391	-	55,430	-42,501	-	-	5,082	-	5,082	1,538,403
APRS Building	1,438,036	-	-	-	-	-	-	-	-	1,438,036



Financial Reconciliation Year to Date								_		
	Market Value 01/01/2020	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Return On Investment	Market Value 03/31/2020
Total Retirement System	857,026,080	-	15,745,101	-20,396,274	-386,173	-39,361	2,735,011	-133,167,165	-130,432,153	721,517,220
Total Equity	569,539,866	157,125	-	-	-272,460	-	600,572	-125,168,765	-124,568,194	444,856,337
Total Domestic Equity	406,776,520	-823,373	-	-	-166,627	-	547,095	-89,725,829	-89,178,733	316,607,787
NT Collective Russell 3000 Index	237,098,285	-978,145	-	-	-11,855	-	-	-49,292,968	-49,292,968	186,815,317
Baird Mid Cap Growth	67,449,226	-	-	-	-	-	100,329	-12,849,985	-12,749,655	54,699,571
Nuance Mid Cap Value	56,252,130	47,138	-	-	-47,138	-	234,464	-11,116,760	-10,882,296	45,369,834
Kennedy Small Cap Value	45,976,879	107,634	-	-	-107,634	-	212,302	-16,466,117	-16,253,815	29,723,065
Total International Equity	132,025,394	-	-	-	-	-	53,476	-35,481,893	-35,428,417	96,596,978
Driehaus International Small Cap Growth	25,027,327	-	-	-	-	-	-	-6,351,993	-6,351,993	18,675,334
Thompson Siegel & Walmsley	85,734,641	-	-	-	-	-	-	-23,065,870	-23,065,870	62,668,772
LMCG Emerging Markets Fund	21,263,426	-21,121,128	-	-	-	-	-	-142,298	-142,298	
Wellington Emerging Markets Fund	-	21,121,128	_	-	-	-	53,476	-5,921,733	-5,868,256	15,252,872
Total Other Equity	30,737,952	980,498	-	-	-105,833	-	· <u>-</u>	38,956	38,956	31,651,573
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.	462,136	-115,335	_	-	-	-	_	15,975	15,975	362,776
Franklin Park Private Equity	12,108,731	1,095,833	-	-	-105,833	-	-	22,981	22,981	13,121,712
Total Fixed Income	112,520,093	-3,753,319			-72,626	-	915,490	-3,185,023	-2,269,533	106,424,615
Orleans Capital	48,046,861	-2,981,982	-	-	-18,018	-	405,269	-361,845	43,424	45,090,284
Templeton Global Multisector Plus	37,640,614	44,068	-	-	-44,068	-	-	-2,312,957	-2,312,957	35,327,658
Total Other Fixed Income	26,832,618	-815,404	-	-	-10,540	-	510,221	-510,221	-	26,006,673
Capital Point Partners	3,477,946	-	-	-	, <u>-</u>	-	, <u> </u>	· -	-	3,477,946
Franchise Equity Capital Partners II	47,517	_	_	-	_	_	_	_	-	47,517
LBC Credit Partners III	4,370,307	-96,079	_	-	-10,540	_	82,636	-82,636	-	4,263,688
LBC Credit Partners IV	13,182,661	-375,769	_	_	-	_	254,322	-254,322	_	12,806,892
Providence Debt Fund III	5,754,187	-343,556	_	_			173,263	-173,263	_	5,410,631





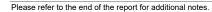
	Market Value 01/01/2020	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Return On Investment	Market Value 03/31/2020
Total Real Estate & Timber	126,491,259	-1,821,329		-	-41,087	-	780,212	-69,781	710,431	125,339,274
Total Real Estate	106,036,429	-560,438	-	-	-2,108	-	780,212	-69,781	710,431	106,184,314
Rockspring Capital Land Funds (I - VI)	5,333,370	-	-	-	-	-	-	2,754	2,754	5,336,124
Rockspring Capital Land Fund I	367,607	-	-	-	-	-	-	22,273	22,273	389,88
Rockspring Capital Land Fund II	1,458,238	-	-	-	-	-	-	-6,066	-6,066	1,452,172
Rockspring Capital Land Fund III	1,099,903	-	-	-	-	-	-	-4,314	-4,314	1,095,589
Rockspring Capital Land Fund V	1,775,441	-	-	-	-	-	-	-4,862	-4,862	1,770,57
Rockspring Capital Land Fund VI	632,181	-	-	-	-	-	-	-4,278	-4,278	627,90
ARES Advisors (V & VI)	76,239	-	-	-	-	-	-	326	326	76,56
ARES Value Enhancement Fund V	76,239	-	-	-	_	-	-	326	326	76,56
Edison Investments	2,191,836	-7,114	-	-	-	-	7,114	-7,114	-	2,184,72
India Property Fund	554,007	-	-	-	-	-	-	-59,012	-59,012	494,99
Gainesville Property	1,818,400	-171,977	-	-	-2,108	-	-	-	-	1,644,31
Morgan Stanley	63,269,574	-	-	-	-	-	624,539	-241,500	383,039	63,652,61
AEW Partners Fund VIII	8,296,281	-381,347	-	-	-	-	15,404	-15,404	-	7,914,93
GreenOak US III	4,321,788	-	-	-	-	-	-	-	-	4,321,78
Brookfield Premier Real Estate Partners	20,174,933	-	-	-	-	-	133,155	250,168	383,324	20,558,25
Total Timber Funds	20,454,830	-1,260,891	-	-	-38,979	-	-	-	-	19,154,96
BTG Pactual 1	1,022,478	2,273	-	-	-2,273	-	-	-	-	1,022,47
Capitol Timberland Investments	16,478,505	-1,263,164	-	-	-36,706	-	-	-	-	15,178,63
Domain Environmental Investments II	2,953,847	-	-	_	-	-	-	-	-	2,953,84



# Financial Reconciliation Total Fund

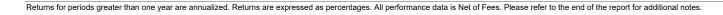
Year To Date Ending March 31, 2020

	Market Value 01/01/2020	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Return On Investment	Market Value 03/31/2020
Total Multi Asset Funds	37,782,947	-	-	-	-	-	392,682	-4,743,595	-4,350,914	33,432,033
Double Eagle Capital Ace Fund, Ltd.	683,894	-	-	-	-	-	-	-	-	683,894
BlackRock Multi Asset Fund	37,099,053	-	-	-	-	-	392,682	-4,743,595	-4,350,914	32,748,140
Cash Account	7,733,488	5,417,523	15,689,671	-20,353,773	-	-39,361	40,973	-	40,973	8,488,522
Cash Account PE	-	-	-	-	-	-	-	-	-	-
Retiree Death Benefit Account	1,520,391	-	55,430	-42,501	-	-	5,082	-	5,082	1,538,403
APRS Building	1,438,036	-	-	-	-	-	-	-	-	1,438,036





					Perform	nance	(%)			
	QTR	YTD	1 YR	3 YR	5 \	/R	7 YR	10 YR	Inception	Inceptio Date
Total Retirement System (Net)	-15.24	-15.24	-7.00	1.38	2.36		3.65	4.42	7.44	10/01/1992
Total Retirement System (Gross)	<b>-15.20</b> (81)	<b>-15.20</b> (81)	<b>-6.77</b> (82)	1.63 (89)	2.59	(87)	3.93 (88)	4.82 (90)	7.75 (24)	10/01/1992
Total Fund Policy	-13.37	-13.37	-4.63	3.71	4.69	, ,	6.36	7.47	7.62	
Variance	-1.83	-1.83	-2.14	-2.08	-2.10		-2.43	-2.65	0.13	
All Public Plans-Total Fund Median	-13.04	-13.04	-4.70	2.85	3.54		5.20	6.35	7.27	
Fotal Equity	-21.91	-21.91	-11.52	0.94	2.69		5.61	6.25	7.83	01/01/1994
Total Equity Policy	-21.46	-21.46	-10.46	2.62	4.05		6.84	7.91	7.53	
Variance	-0.45	-0.45	-1.06	-1.68	-1.36		-1.23	-1.66	0.30	
Domestic Equity	<b>-22.00</b> (45)	<b>-22.00</b> (45)	<b>-10.51</b> (39)	1.93 (42)	4.07	(39)	N/A	N/A	7.03 (42)	05/01/2013
Russell 3000 Index	-20.90	-20.90	-9.13	4.00	5.77		8.96	10.15	8.82	
Variance	-1.10	-1.10	-1.38	-2.07	-1.70		N/A	N/A	-1.79	
IM U.S. Equity (SA+CF+MF) Median	-23.36	-23.36	-14.27	0.13	2.48		6.14	8.23	6.01	
NT Collective Russell 3000 Index	<b>-20</b> .89 (40)	<b>-20.89</b> (40)	<b>-9.13</b> (39)	4.02 (39)	5.79	(40)	N/A	N/A	6.91 (35)	01/01/2014
Russell 3000 Index	-20.90	-20.90	-9.13	4.00	5.77		8.96	10.15	6.89	
Variance	0.01	0.01	0.00	0.02	0.02		N/A	N/A	0.02	
M U.S. All Cap Core Equity (SA+CF) Median	-21.75	-21.75	-11.69	3.41	5.12		8.48	9.95	6.38	
Baird Mid Cap Growth	<del>-18</del> .90 (48)	<b>-18.90</b> (48)	<b>-6.64</b> (43)	8.29 (42)	6.21	(50)	N/A	N/A	6.48 (68)	07/01/2014
Russell Midcap Growth Index	-20.04	-20.04	-9.45	6.53	5.61		9.49	10.89	6.73	
Variance	1.14	1.14	2.81	1.76	0.60		N/A	N/A	-0.25	
M U.S. Mid Cap Growth Equity (SA+CF) Median	-19.10	-19.10	-7.44	7.20	6.19		9.84	11.39	7.17	
Nuance Mid Cap Value	-19.35 (1)	-19.35 (1)	-4.93 (1)	N/A	N/A		N/A	N/A	<b>-4</b> .93 (1)	04/01/2019
Russell Midcap Value Index	-31.71	-31.71	-24.13	-5.97	-0.76		4.06	7.22	-24.13	
Variance	12.36	12.36	19.20	N/A	N/A		N/A	N/A	19.20	
M U.S. Mid Cap Value Equity (SA+CF) Median	-31.18	-31.18	-22.36	-5.23	-0.43		4.93	7.61	-22.36	
Kennedy Small Cap Value	<del>-35.51</del> (58)	-35.51 (58)	<b>-28.91</b> (56)	-10.84 (81)	N/A		N/A	N/A	-1.18 (77)	03/01/2016
Russell 2000 Value Index	-35.66	-35.66	-29.64	-9.51	-2.42		1.80	4.79	0.92	
Variance	0.15	0.15	0.73	-1.33	N/A		N/A	N/A	-2.10	
IM U.S. Small Cap Value Equity (SA+CF) Median	-34.99	-34.99	-28.18	-8.65	-2.01		2.94	6.50	0.74	





					Performa	nce (%	)			
	QTR	YTD	1 YR	3 YR	5 YR		7 YR	10 YR	Inception	Inceptior Date
International Equity	<b>-26.83</b> (74)	<b>-26.83</b> (74)	<b>-18.57</b> (67)	<b>-4.38</b> (71)	-2.13 (7	74)	N/A	N/A	1.22 (43)	05/01/2013
MSCI AC World ex USA	-23.26	-23.26	-15.14	-1.48	-0.17		1.53	2.52	1.01	
Variance	-3.57	-3.57	-3.43	-2.90	-1.96		N/A	N/A	0.21	
IM International Equity (SA+CF+MF) Median	-23.76	-23.76	-15.91	-2.36	-0.66		1.32	2.73	0.83	
Driehaus International Small Cap Growth	<b>-25.38</b> (42)	<b>-25.38</b> (42)	-13.81 (25)	1.76 (14)	2.60 (	18)	4.41 (21)	N/A	6.57 (18)	09/01/2012
MSCI AC World ex USA Small Growth	-25.92	-25.92	-17.07	-2.33	0.73		2.30	3.81	4.00	
Variance	0.54	0.54	3.26	4.09	1.87		2.11	N/A	2.57	
IM International SMID Cap Growth Equity (MF) Median	-26.01	-26.01	-17.09	-2.27	0.40		2.67	4.80	4.46	
Thompson Siegel & Walmsley	<b>-26</b> .90 (95)	<b>-26</b> .90 (95)	-18.10 (87)	<b>-5</b> .12 (93)	-2.34 (9	97)	N/A	N/A	-1.83 (97)	10/01/2014
MSCI EAFE (Net) Index	-22.83	-22.83	-14.38	-1.82	-0.62		1.75	2.72	-0.36	
Variance	-4.07	-4.07	-3.72	-3.30	-1.72		N/A	N/A	-1.47	
IM International Large Cap Core Equity (SA+CF) Median	-22.61	-22.61	-13.81	-1.50	-0.06		2.64	3.95	0.30	
Wellington Emerging Markets Fund	N/A	N/A	N/A	N/A	N/A		N/A	N/A	<b>-22.07</b> (50)	02/01/2020
MSCI Emerging Markets (Net) Index	-23.60	-23.60	-17.69	-1.62	-0.37		-0.40	0.69	-19.86	
Variance	N/A	N/A	N/A	N/A	N/A		N/A	N/A	-2.21	
IM Emerging Markets Equity (SA+CF) Median	-24.96	-24.96	-18.05	-2.50	-0.41		0.28	2.00	-22.07	
Total Other Equity	-0.22	-0.22	1.46	4.76	N/A		N/A	N/A	1.62	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



					Performance	(%)			
	QTR	YTD	1 YR	3 YR	5 YR	7 YR	10 YR	Inception	Inceptior Date
Total Fixed Income	-2.10	-2.10	-0.52	1.34	1.44	0.78	2.79	6.44	12/01/1993
Total Fixed Income Policy	1.01	1.01	6.18	4.10	3.03	2.44	3.25	5.00	
Variance	-3.11	-3.11	-6.70	-2.76	-1.59	-1.66	-0.46	1.44	
Orleans Capital	0.05 (84)	0.05 (84)	5.64 (90)	4.01 (92)	3.02 (95)	N/A	N/A	3.52 (97)	01/01/2014
Blmbg. Barc. U.S. Aggregate Index	3.15	3.15	8.93	4.82	3.36	3.19	3.88	3.90	
Variance	-3.10	-3.10	-3.29	-0.81	-0.34	N/A	N/A	-0.38	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	1.73	1.73	7.83	4.77	3.47	3.38	4.26	4.08	
Templeton Global Mulisector Plus Trust	<del>-6.26</del> (70)	<b>-6.26</b> (70)	<del>-8.54</del> (100)	<b>-2.94</b> (100)	-0.23 (96)	N/A	N/A	0.10 (94)	03/01/2014
Blmbg. Barc. Global Multiverse	-1.11	-1.11	3.47	3.37	2.67	1.66	2.58	1.54	
Variance	-5.15	-5.15	-12.01	-6.31	-2.90	N/A	N/A	-1.44	
IM Global Fixed Income (MF) Median	-3.20	-3.20	0.97	2.28	1.79	1.29	2.50	1.33	
Total Other Fixed Income	-0.04	-0.04	0.92	2.79	N/A	N/A	N/A	1.34	01/01/2017

Capital Point Partners

Franchise Equity Capital Partners II

LBC Credit Partners III

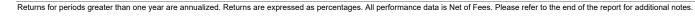
LBC Credit Partners IV

Providence Debt Fund III



					Performanc	e (%)			
	QTR	YTD	1 YR	3 YR	5 YR	7 YR	10 YR	Inception	Inceptior Date
Iternative Investments									
Multi Asset Funds	-11.52	-11.52	-5.88	-0.36	-1.25	-0.21	1.65	4.57	12/01/2008
HFRI Fund of Funds Composite Index	-8.51	-8.51	-5.19	0.06	0.06	1.64	1.78	2.53	
Variance	-3.01	-3.01	-0.69	-0.42	-1.31	-1.85	-0.13	2.04	
Double Eagle Capital Ace Fund, Ltd.	0.00	0.00	1.39	1.99	0.16	2.03	N/A	3.15	09/01/2010
HFRI Fund of Funds Composite Index	-8.51	-8.51	-5.19	0.06	0.06	1.64	1.78	2.04	
Variance	8.51	8.51	6.58	1.93	0.10	0.39	N/A	1.11	
BlackRock Multi Asset Fund	-11.73	-11.73	-5.77	N/A	N/A	N/A	N/A	-2.01	02/01/2018
BlackRock Multi Hybrid	-9.42	-9.42	-0.64	N/A	N/A	N/A	N/A	0.20	
Variance	-2.31	-2.31	-5.13	N/A	N/A	N/A	N/A	-2.21	
ther Assets									
Cash Account	0.32	0.32	1.88	1.61	1.04	0.75	0.60	4.44	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	0.33	0.33	1.89	1.61	1.04	0.75	0.67	1.43	12/01/2004
ther Alternative Assets									
Total Real Estate	0.67	0.67	5.27	4.41	3.72	8.29	7.87	4.01	08/01/2005
NCREIF Property Index	0.71	0.71	5.28	6.41	7.65	8.86	10.17	7.90	
Variance	-0.04	-0.04	-0.01	-2.00	-3.93	-0.57	-2.30	-3.89	
Total Timber Funds	-0.20	-0.20	-2.77	-0.29	-2.21	-0.73	-0.51	1.43	08/01/2005
NCREIF Timberland Index	0.11	0.11	1.30	2.48	2.80	4.86	4.49	6.28	
Variance	-0.31	-0.31	-4.07	-2.77	-5.01	-5.59	-5.00	-4.85	

					Performance (%)	<u> </u>			
	YTD	2019	2018	2017	2016	2015	2014	2013	2012
Total Retirement System (Net)	-15.24	20.92	-6.18	11.89	7.67	-1.05	5.61	10.66	8.79
Total Retirement System (Gross)	<b>-15.20</b> (81)	21.23 (13)	<b>-5.95</b> (87)	12.17 (84)	7.87 (40)	- <mark>0.83</mark> (67)	5.94 (64)	11.16 (83)	9.31 (90
Total Fund Policy	-13.37	19.70	-3.12	15.79	8.04	2.43	8.08	17.56	11.31
Variance	-1.83	1.53	-2.83	-3.62	-0.17	-3.26	-2.14	-6.40	-2.00
All Public Plans-Total Fund Median	-13.04	18.59	-4.15	15.21	7.46	-0.15	6.62	15.89	12.59
Total Equity	-21.91	29.88	-9.83	18.49	11.41	-2.87	5.30	29.57	10.82
Total Equity Policy	-21.46	29.04	-7.34	22.07	9.61	-0.51	6.91	29.57	16.70
Variance	-0.45	0.84	-2.49	-3.58	1.80	-2.36	-1.61	0.00	-5.88
Domestic Equity	<b>-22.00</b> (45)	31.15 (30)	<b>-7.18</b> (49)	17.39 (54)	15.76 (33)	-3.09 (63)	8.03 (58)	N/A	N/A
Russell 3000 Index	-20.90	31.02	-5.24	21.13	12.74	0.48	12.56	33.55	16.42
Variance	-1.10	0.13	-1.94	-3.74	3.02	-3.57	-4.53	N/A	N/A
IM U.S. Equity (SA+CF+MF) Median	-23.36	27.68	-7.41	18.19	11.73	-1.47	9.18	33.88	15.25
NT Collective Russell 3000 Index	-20.89 (40)	31.02 (33)	<b>-5.23</b> (52)	21.15 (47)	12.79 (49)	0.49 (50)	12.55 (34)	N/A	N/A
Russell 3000 Index	-20.90	31.02	-5.24	21.13	12.74	0.48	12.56	33.55	16.42
Variance	0.01	0.00	0.01	0.02	0.05	0.01	-0.01	N/A	N/A
IM U.S. All Cap Core Equity (SA+CF) Median	-21.75	29.45	-5.10	20.89	12.47	0.45	10.86	35.87	16.07
Baird Mid Cap Growth	-18.90 (48)	36.27 (47)	<b>-1.60</b> (32)	26.98 (30)	5.35 (54)	<b>-3.03</b> (81)	N/A	N/A	N/A
Russell Midcap Growth Index	-20.04	35.47	-4.75	25.27	7.33	-0.20	11.90	35.74	15.81
Variance	1.14	0.80	3.15	1.71	-1.98	-2.83	N/A	N/A	N/A
IM U.S. Mid Cap Growth Equity (SA+CF) Median	-19.10	35.79	-4.30	25.42	5.64	1.04	8.69	36.42	15.13
Nuance Mid Cap Value	-19.35 (1)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Russell Midcap Value Index	-31.71	27.06	-12.29	13.34	20.00	-4.78	14.75	33.46	18.51
Variance	12.36	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	-31.18	28.88	-12.58	15.63	18.22	-3.21	11.86	36.47	17.14
Kennedy Small Cap Value	<del>-35.51</del> (58)	25.37 (48)	-19.83 (93)	12.51 (43)	N/A	N/A	N/A	N/A	N/A
Russell 2000 Value Index	-35.66	22.39	-12.86	7.84	31.74	-7.47	4.22	34.52	18.05
Variance	0.15	2.98	-6.97	4.67	N/A	N/A	N/A	N/A	N/A
IM U.S. Small Cap Value Equity (SA+CF) Median	-34.99	25.17	-14.24	11.59	26.39	-4.29	5.71	38.07	17.61



				F	Performance (%	6)			
	YTD	2019	2018	2017	2016	2015	2014	2013	2012
International Equity	-26.83 (74)	20.92 (61)	<b>-16.28</b> (57)	27.37 (61)	0.67 (64)	- <mark>2.40</mark> (52)	- <mark>0.27</mark> (24)	N/A	N/A
MSCI AC World ex USA	-23.26	22.13	-13.78	27.77	5.01	-5.25	-3.44	15.78	17.39
Variance	-3.57	-1.21	-2.50	-0.40	-4.34	2.85	3.17	N/A	N/A
IM International Equity (SA+CF+MF) Median	-23.76	22.11	-15.74	29.30	2.40	-2.10	-3.95	18.20	18.89
Driehaus International Small Cap Growth	<b>-25</b> .38 (42)	30.57 (13)	<b>-16.92</b> (30)	41.19 (7)	<del>-6.24</del> (87)	12.59 (12)	<b>-4.32</b> (41)	29.24 (32)	N/A
MSCI AC World ex USA Small Growth	-25.92	24.96	-18.07	33.99	-0.04	6.74	-3.35	18.80	17.17
Variance	0.54	5.61	1.15	7.20	-6.20	5.85	-0.97	10.44	N/A
IM International SMID Cap Growth Equity (MF) Median	-26.01	24.57	-19.39	34.36	-0.81	6.87	-4.87	26.50	21.70
Thompson Siegel & Walmsley	<b>-26</b> .90 (95)	21.18 (72)	-15.93 (70)	22.70 (92)	0.47 (65)	1.38 (36)	N/A	N/A	N/A
MSCI EAFE (Net) Index	-22.83	22.01	-13.79	25.03	1.00	-0.81	-4.90	22.78	17.32
Variance	-4.07	-0.83	-2.14	-2.33	-0.53	2.19	N/A	N/A	N/A
IM International Large Cap Core Equity (SA+CF) Median	-22.61	23.88	-14.63	26.49	1.52	0.25	-3.67	23.31	19.45
Wellington Emerging Markets Fund	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MSCI Emerging Markets (Net) Index	-23.60	18.44	-14.58	37.28	11.19	-14.92	-2.19	-2.60	18.23
Variance	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
IM Emerging Markets Equity (SA+CF) Median	-24.96	19.53	-15.23	36.81	10.35	-12.64	-0.01	1.00	20.50
Total Other Equity	-0.22	65.17	-22.42	-17.60	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



	Performance (%)								
	YTD	2019	2018	2017	2016	2015	2014	2013	2012
Total Fixed Income	-2.10	4.08	0.06	2.86	4.36	-0.97	1.69	-3.42	13.45
Total Fixed Income Policy	1.01	7.93	-0.66	5.60	2.77	-1.37	3.20	-2.10	4.54
Variance	-3.11	-3.85	0.72	-2.74	1.59	0.40	-1.51	-1.32	8.91
Orleans Capital	0.05 (84)	8.80 (70)	0.07 (48)	3.87 (59)	3.79 (28)	0.57 (74)	5.08 (94)	N/A	N/A
Blmbg. Barc. U.S. Aggregate Index	3.15	8.72	0.01	3.54	2.65	0.55	5.97	-2.02	4.21
Variance	-3.10	0.08	0.06	0.33	1.14	0.02	-0.89	N/A	N/A
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	1.73	9.19	0.06	4.04	3.10	0.82	6.15	-1.59	5.83
Templeton Global Mulisector Plus Trust	<del>-6.26</del> (70)	- <mark>0.91</mark> (100)	<b>-0.11</b> (19)	3.84 (82)	7.33 (8)	<b>-4.27</b> (62)	N/A	N/A	N/A
Blmbg. Barc. Global Multiverse	-1.11	7.13	-1.36	7.69	2.84	-3.29	0.48	-2.19	4.84
Variance	-5.15	-8.04	1.25	-3.85	4.49	-0.98	N/A	N/A	N/A
IM Global Fixed Income (MF) Median	-3.20	8.12	-1.75	6.81	2.92	-3.83	1.91	-2.52	7.33
Total Other Fixed Income	-0.04	3.66	1.27	-0.49	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



	Performance (%)								
	YTD	2019	2018	2017	2016	2015	2014	2013	2012
Iternative Investments									
Multi Asset Funds	-11.52	13.23	-2.74	0.81	0.37	-1.70	-6.00	12.18	9.71
HFRI Fund of Funds Composite Index	-8.51	8.39	-4.02	7.77	0.51	-0.27	3.37	8.96	4.79
Variance	-3.01	4.84	1.28	-6.96	-0.14	-1.43	-9.37	3.22	4.92
Double Eagle Capital Ace Fund, Ltd.	0.00	5.63	-1.09	0.81	-1.53	0.78	0.17	16.13	8.92
HFRI Fund of Funds Composite Index	-8.51	8.39	-4.02	7.77	0.51	-0.27	3.37	8.96	4.79
Variance	8.51	-2.76	2.93	-6.96	-2.04	1.05	-3.20	7.17	4.13
BlackRock Multi Asset Fund	-11.73	14.21	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BlackRock Multi Hybrid	-9.42	18.11	-4.19	N/A	N/A	N/A	N/A	N/A	N/A
Variance	-2.31	-3.90	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ther Assets									
Cash Account	0.32	2.11	1.72	0.76	0.27	0.01	0.06	0.02	0.59
Cash Account PE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Retiree Death Benefit Account	0.33	2.12	1.72	0.77	0.27	0.02	0.01	0.01	0.15
Other Alternative Assets									
Total Real Estate	0.67	5.75	5.14	2.90	0.76	5.40	31.16	10.25	7.49
NCREIF Property Index	0.71	6.42	6.72	6.96	7.97	13.33	11.82	10.98	10.54
Variance	-0.04	-0.67	-1.58	-4.06	-7.21	-7.93	19.34	-0.73	-3.05
Total Timber Funds	-0.20	-1.12	0.13	-3.94	-6.92	1.93	10.81	-4.18	0.02
NCREIF Timberland Index	0.11	1.30	3.21	3.63	2.59	4.97	10.48	9.69	7.75
Variance	-0.31	-2.42	-3.08	-7.57	-9.51	-3.04	0.33	-13.87	-7.73

	Market Value (\$)	QTR	YTD	1 YR	3 YR	5 YR	Inception IRR	Inception Date
Total Real Estate Investments	106,184,314	0.67	0.67	5.16	4.27	3.64	6.74	07/31/2005
Edison Investments	2,184,722	0.00	0.00	2.18	10.91	12.66	12.04	09/30/1996
ARES Advisors (V & VI)	76,566	0.43	0.43	19.21	17.79	11.74	4.05	05/31/2002
Rockspring Capital Land Funds (I - VI)	5,336,124	0.05	0.05	0.45	-3.51	-4.72	1.28	11/30/2003
India Property Fund	494,996	-10.65	-10.65	-25.41	-30.26	-16.31	-6.30	05/24/2007
Gainesville Property	1,644,315	-0.12	-0.12	-0.92	-4.41	<b>-</b> 2.68	-7.43	01/31/2008
Morgan Stanley	63,652,613	0.61	0.61	5.34	7.07	N/A	7.52	12/31/2015
AEW Partners Fund VIII	7,914,934	0.00	0.00	12.99	N/A	N/A	10.38	06/26/2017
GreenOak US III	4,321,788	0.00	0.00	1.48	N/A	N/A	-8.66	06/22/2018
Brookfield Premier Real Estate Partners	20,558,257	1.90	1.90	N/A	N/A	N/A	3.33	10/01/2019
Total Timber Funds	19,154,960	-0.20	-0.20	-2.85	-0.29	-2.27	-0.11	07/31/2005
BTG Pactual 1	1,022,478	-0.22	-0.22	-19.01	0.22	-4.99	3.89	11/30/1996
Capitol Timberland Investments	15,178,635	-0.24	-0.24	-2.06	0.69	-0.16	3.20	09/30/2004
Domain Environmental Investments II	2,953,847	0.00	0.00	-0.54	-4.63	-4.43	-1.44	04/30/2008
Total Other Equity	31,651,573	-0.21	-0.21	1.46	8.71	N/A	0.00	01/01/2017
Huff Energy Fund	18,167,082	0.00	0.00	0.00	14.98	10.70	6.58	12/31/2006
Excelsior Investors, Ltd.	362,776	3.53	3.53	-18.41	3.18	-4.68	-8.83	12/31/2014
Franklin Park Private Equity	13,121,712	-0.65	-0.65	5.21	N/A	N/A	2.75	01/31/2018
Sail Venture Fund I	1	0.00	0.00	0.00	-98.94	-93.45	-65.11	12/31/2008
Sail Venture Fund II	1	0.00	0.00	0.00	-98.54	-92.07	-84.19	02/28/2009
Sail Pre-Exit Acceleration Fund	1	0.00	0.00	0.00	-98.53	-92.06	-88.48	01/31/2013
Total Other Fixed Income	26,006,673	-0.04	-0.04	0.79	2.40	N/A	0.00	01/03/2017
Capital Point Partners	3,477,946	0.00	0.00	-17.60	-7.88	-12.39	-0.51	03/31/2007
Franchise Equity Capital Partners II	47,517	0.00	0.00	59.45	33.60	-9.63	0.77	04/28/2008
LBC Credit Partners III	4,263,688	-0.24	-0.24	4.16	1.53	6.78	8.13	03/07/2014
LBC Credit Partners IV	12,806,892	0.00	0.00	4.94	7.71	N/A	7.94	09/19/2016
Providence Debt Fund III	5.410.631	0.00	0.00	1.57	3.53	6.03	6.81	04/21/2014



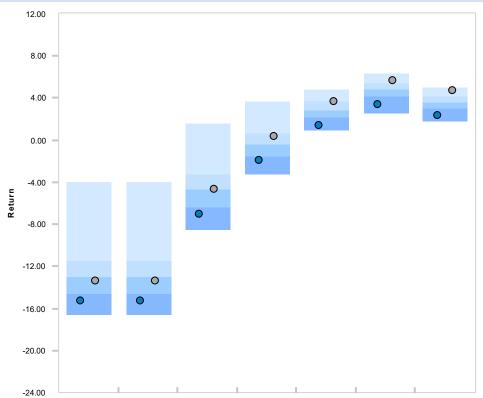
Private Equity Summary of Partnership					
Partnerships	Drawn Down \$	Market Value \$	Distributed \$	IRR (%)	TVPI Multiple
Total Real Estate Investments					
Edison Investments	8,146,177	2,184,722	19,892,715	12.0	2.7
ARES Value Enhancement Fund V	5,000,000	76,566	5,893,900	5.9	1.2
ARES Value Enhancement Fund VI	5,000,000	-	6,642,661	3.3	1.3
Rockspring Capital Land Fund I	3,618,330	389,881	4,738,306	9.9	1.4
Rockspring Capital Land Fund II	7,870,282	1,452,172	8,961,066	2.8	1.3
Rockspring Capital Land Fund III	5,125,000	1,095,589	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	1,770,579	4,517,141	1.8	1.2
Rockspring Capital Land Fund VI	3,502,221	627,903	2,445,231	-1.3	0.9
India Property Fund	4,354,162	494,996	2,339,421	-6.3	0.7
Gainesville Property	5,451,253	1,644,315	744,796	-7.4	0.4
Morgan Stanley	50,000,000	63,652,613	-	7.5	1.3
AEW Partners Fund VIII	11,477,869	7,914,934	4,789,583	10.4	1.1
GreenOak US III	4,803,461	4,321,788	-	-8.7	0.9
Brookfield Premier Real Estate Partners	20,000,000	20,558,257	-	3.3	1.0
Total Timber Investments					
BTG Pactual 1	8,810,346	1,022,478	14,412,803	3.5	1.8
Capitol Timberland Investments	14,427,346	15,178,635	5,218,415	3.2	1.4
Domain Environmental Investments II	7,580,288	2,953,847	3,908,231	-1.4	0.9

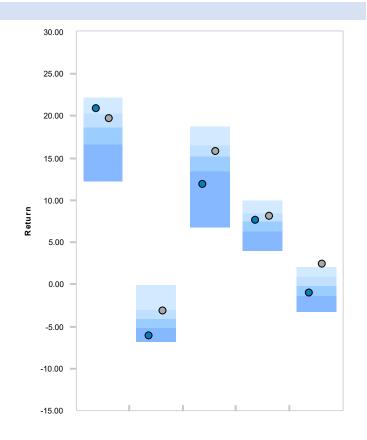


Partnerships	Drawn Down \$	Market Value \$	Distributed \$	IRR (%)	TVPI Multiple
Total Other Equity					
Huff Energy Fund	11,095,509	18,167,082	1,786,358	6.6	1.8
Excelsior Investors, Ltd.	1,018,466	362,776	292,731	-8.8	0.6
Franklin Park Private Equity	12,772,854	13,121,712	18,581	2.7	1.0
Sail Venture Fund I	5,000,000	1	343,503	-65.1	0.1
Sail Venture Fund II	5,366,749	1	688,247	-84.2	0.1
Sail Pre-Exit Acceleration Fund	4,947,894	1	-	-88.5	0.0
Total Other Fixed Income					
Capital Point Partners	12,058,210	3,477,946	8,286,461	-0.5	1.0
Franchise Equity Capital Partners II	14,663,847	47,517	15,028,739	0.8	1.0
LBC Credit Partners III	18,851,406	4,263,688	18,527,386	8.1	1.2
LBC Credit Partners IV	18,000,000	12,806,892	7,330,877	7.9	1.1
Providence Debt Fund III	10,017,001	5,410,631	7,341,056	6.8	1.3



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





	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR		2019	2018	2017	2016	2015
<ul> <li>Total Retirement System</li> </ul>	n -15.24 (81)	-15.24 (81)	-7.00 (83)	-1.92 (82)	1.38 (91)	3.35 (91)	2.36 (91)	<ul> <li>Total Retirement System</li> </ul>	20.92 (17)	-6.18 (90)	11.89 (85)	7.67 (44)	-1.05 (71)
<ul><li>Total Fund Policy</li></ul>	-13.37 (54)	-13.37 (54)	-4.63 (49)	0.32 (30)	3.71 (25)	5.68 (17)	4.69 (10)	<ul><li>Total Fund Policy</li></ul>	19.70 (34)	-3.12 (28)	15.79 (40)	8.04 (36)	2.43 (4)
Median	-13.04	-13.04	-4.70	-0.43	2.85	4.84	3.54	Median	18.59	-4.15	15.21	7.46	-0.15

Comparative Performance						
	1 Qtr	1 Qtr				
	Ending	Ending	Ending	Ending	Ending	Ending
	Dec-2019	Sep-2019	Jun-2019	Mar-2019	Dec-2018	Sep-2018
Total Retirement System	5.86 (22)	0.55 (71)	3.08 (68)	10.20 (6)	-9.73 (93)	2.81 (40)
Total Fund Policy All Public Plans-Total Fund Median	5.53 (37)	0.89 (46)	3.39 (34)	8.74 (41)	-8.11 (65)	3.64 (10)
	5.23	0.84	3.26	8.45	-7.55	2.58



# 3 Yr Rolling Under/Over Performance - 5 Years 15.0 Over Performance 5.0 Under Performance -5.0 Total Fund Policy (%)

X Latest Date

#### 3 Yr Rolling Percentile Ranking - 5 Years 000000000 Return Percentile Rank 25.0 50.0 75.0 100.0 6/17 6/19 3/20 12/15 6/16 12/16 12/17 6/18 12/18 6/15

	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
<ul> <li>Total Retirement System</li> </ul>	20	0 (0%)	0 (0%)	3 (15%)	17 (85%)
<ul><li>Total Fund Policy</li></ul>	20	18 (90%)	2 (10%)	0 (0%)	0 (0%)

# Peer Group Scattergram - 3 Years 5.00 4.00 5.00 2.00 1.00 8.70 8.99 9.28 9.57 9.86 10.15 10.44 10.73 Risk (Standard Deviation %)

Earliest Date

Under Performance

Pe	er Gro	oup Scattergram -	5 Years				
	5.53						
3	4.74		0				
<u>و</u> ۔	4.74 = 3.95 = 3.16 = 3.37						
etur	3.16 -						
2	2.37 -						
	1.58						
	8	.0 8.2	8.4	8.6	8.8	9.0	9.2
			Risk (S	tandard Deviation	%)		

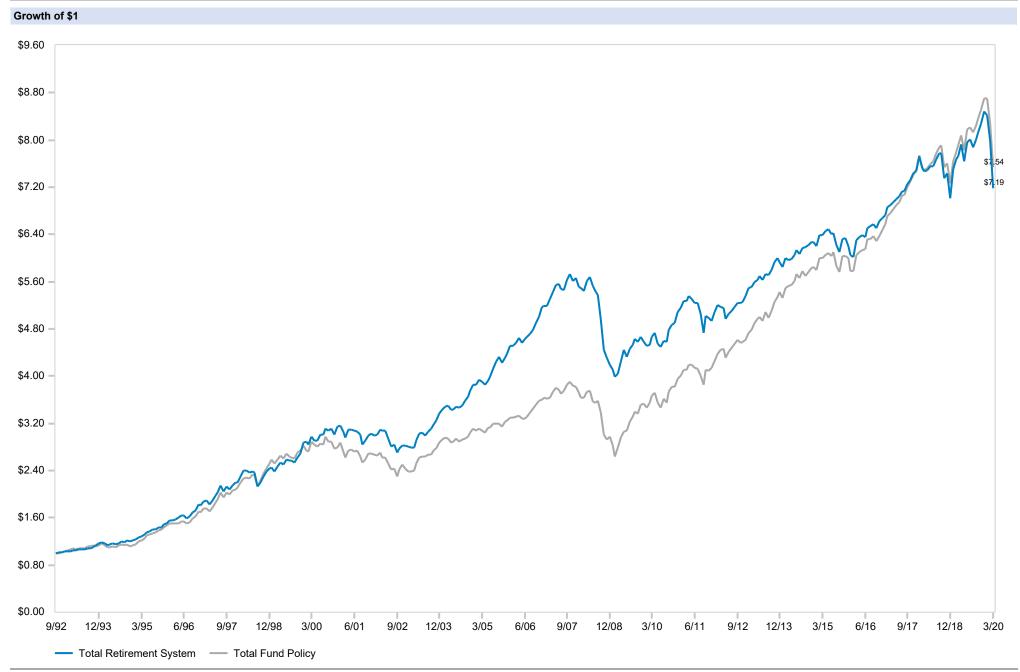
	Return	Standard Deviation
<ul> <li>Total Retirement System</li> </ul>	1.38	10.50
<ul> <li>Total Fund Policy</li> </ul>	3.71	9.31
Median	2.84	9.10

	Return	Standard Deviation
<ul> <li>Total Retirement System</li> </ul>	2.36	9.02
<ul> <li>Total Fund Policy</li> </ul>	4.69	8.40
Median	3.54	8.27

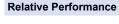
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Retirement System	1.76	96.97	117.16	-2.61	-1.23	0.01	1.12	8.37
Total Fund Policy	0.00	100.00	100.00	0.00	N/A	0.24	1.00	7.38

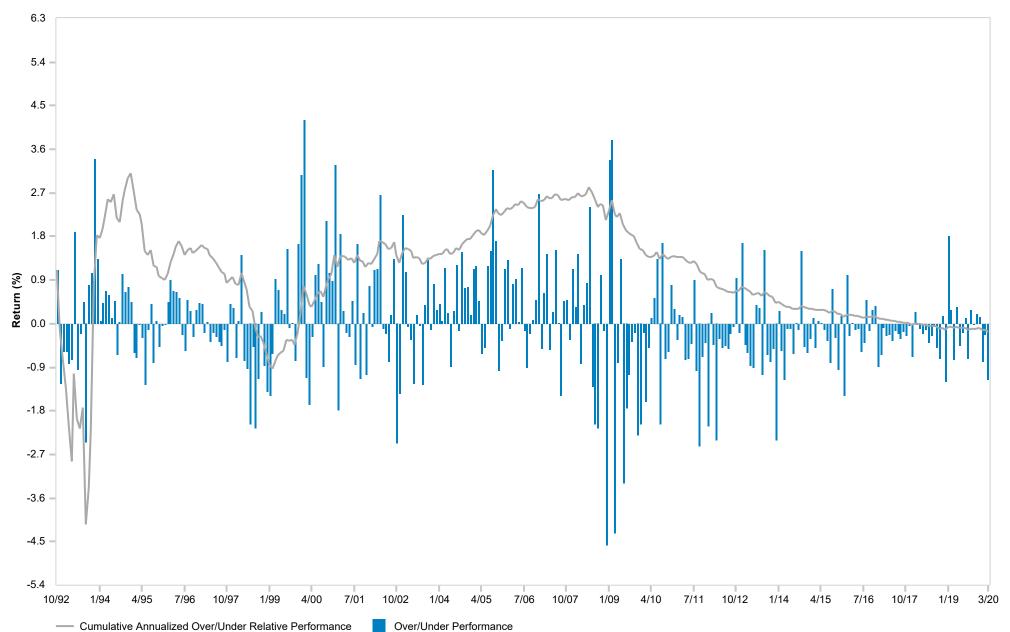
Historical Statistics - 5	rears							
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Retirement System	1.81	91.62	112.82	-2.44	-1.22	0.17	1.05	6.89
Total Fund Policy	0.00	100.00	100.00	0.00	N/A	0.45	1.00	6.26











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

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.	•		



	Bai	Baird Mid Cap Nuance MC		МС	Ke	ennedy SC			Driehaus		TS&W		1		
	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.	•			•			•			•			•		

	Wellington			Orleans Templeton		on									
	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.	•			•			•								

<sup>\*</sup>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 3/31/2020

Plan	Most Recent Statement Date	Statement Frequency	Statement Source
Total Retirement System			
Total Equity			
Total Domestic Equity			
NT Collective Russell 3000 Fund	3/31/2020	Monthly	Custodian
Baird Mid Cap Growth	3/31/2020	Monthly	Custodian
Nuance Mid Cap Value	3/31/2020	Monthly	Custodian
Kennedy Small Cap Value	3/31/2020	Monthly	Custodian
Total International Equity			
Thompson Siegel & Walmsley	3/31/2020	Monthly	Custodian
Driehaus International Small Cap Growth	3/31/2020	Monthly	Custodian
Wellington Emerging Markets	3/31/2020	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.	3/31/2020	Monthly	Manager
Franklin Park	12/31/2019	Quarterly	Manager
Total Fixed Income			
Total Fixed Income Funds			
Orleans Capital	3/31/2020	Monthly	Custodian
Templeton Global Multisector Plus	3/31/2020	Monthly	Custodian

# Austin Police Retirement System Investment Pricing Summary as of 3/31/2020

Plan	Most Recent Statement Date	Statement Frequency	Statement Source
Total Other Fixed Income Funds			
Capital Point Partners	12/31/2019	Quarterly	Manager
Franchise Equity Capital Partners II	12/31/2019	Quarterly	Manager
LBC Credit Partners III	12/31/2019	Quarterly	Manager
LBC Credit Partners IV	12/31/2019	Quarterly	Manager
Providence Debt Fund III	12/31/2019	Quarterly	Manager
Total Alternatives			
Total Real Estate (Composite)(6091100)			
Rockspring Capital Land Funds (I - VI)	3/31/2020	Quarterly	Manager
Rockspring Capital Land Fund I	3/31/2020	Quarterly	Manager
Rockspring Capital Land Fund II	3/31/2020	Quarterly	Manager
Rockspring Capital Land Fund III	3/31/2020	Quarterly	Manager
Rockspring Capital Land Fund V	3/31/2020	Quarterly	Manager
Rockspring Capital Land Fund VI	3/31/2020	Quarterly	Manager
Ares Value Enhancement Fund V	3/31/2020	Quarterly	Manager
Edison Investments	12/31/2019	Quarterly	Manager
India Property Fund	12/31/2019	Quarterly	Manager
Gainesville Property	12/31/2017	Quarterly	Manager
Morgan Stanley	3/31/2020	Quarterly	Manager
AEW Parters VIII	12/31/2019	Quarterly	Manager
GreenOak US III	12/31/2019	Quarterly	Manager
Brookfield	3/31/2020	Quarterly	Manager

# Austin Police Retirement System Investment Pricing Summary as of 3/31/2020

Plan	Most Recent Statement Date	Statement Frequency	Statement Source
Total Timber Funds			
BTG Pactual 1	12/31/2019	Quarterly	Manager
Capitol Timberland Investments	12/31/2019	Quarterly	Manager
Domain Environmental	12/31/2019	Quarterly	Manager
Total Multi Asset Funds			
Double Eagle Capital Ace Fund, Ltd.	6/30/2019	Monthly	Manager
BlackRock Multi Asset	3/31/2020	Monthly	Manager
Cash Account	3/31/2020	Monthly	Custodian
PE Cash Account	3/31/2020	Monthly	Custodian
Retiree Death Benefit Account	3/31/2020	Monthly	Custodian
APRS Building			

	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
Total Domestic Equity	0.32	316,607,787	1,020,195	
NT Collective Russell 3000 Index	0.02	186,815,317	37,363	0.02 % of Assets
Baird Mid Cap Growth	0.69	54,699,571	378,197	0.70 % of First \$50 M 0.60 % Thereafter
Nuance Mid Cap Value	0.68	45,369,834	307,404	0.70 % of First \$25 M 0.65 % Thereafter
Kennedy Small Cap Value	1.00	29,723,065	297,231	1.00 % of Assets
Total International Equity	0.73	96,596,978	708,497	
Thompson Siegel & Walmsley	0.65	62,668,772	407,347	0.65 % of Assets
Driehaus International Small Cap Growth	1.00	18,675,334	186,753	1.00 % of Assets
Wellington Emerging Markets Fund	0.75	15,252,872	114,397	0.75 % of Assets
Total Other Equity	0.61	31,651,573	192,804	
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.	2.76	362,776	10,000	
*Franklin Park Private Equity *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.	0.25	13,121,712	32,804	0.25 % of Assets
Total Fixed Income	0.58	106,424,615	612,492	
Orleans Capital	0.15	45,090,284	67,635	0.15 % of Assets
Templeton Global Mulisector Plus Trust	0.62	35,327,658	219,031	0.62 % of First \$50 M 0.51 % of Next \$50 M 0.45 % Thereafter
Total Other Fixed Income	1.25	26,006,673	325,825	
Capital Point Partners	1.65	3,477,946	57,386	
Franchise Equity Capital Partners II	2.00	47,517	950	
BC Credit Partners III	1.25	4,263,688	53,296	
LBC Credit Partners IV	1.25	12,806,892	160,086	
Providence Debt Fund III	1.00	5,410,631	54,106	



	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
Total Real Estate	0.98	106,184,314	1,041,319	
Rockspring Capital Land Fund I	1.25	389,881	4,874	1.25 % of Assets
Rockspring Capital Land Fund II	1.25	1.452.172	18,152	1.25 % of Assets
Rockspring Capital Land Fund III	1.25	1,095,589	13,695	1.25 % of Assets
Rockspring Capital Land Fund V	1.25	1,770,579	22,132	1.25 % of Assets
Rockspring Capital Land Fund VI	1.25	627,903	7,849	1.25 % of Assets
ARES Value Enhancement Fund V	0.85	76,566	651	0.85 % of Assets
Edison Investments	1.00	2,184,722	21,847	1.00 % of Assets
India Property Fund	2.00	494,996	9,900	2.00 % of Assets
Gainesville Property	0.00	1,644,315	-	0.00 % of Assets
Morgan Stanley	0.90	63,652,613	572,874	0.90 % of Assets
AEW Partners Fund VIII	1.25	7,914,934	98,937	1.25 % of Assets
GreenOak US III	1.50	4,321,788	64,827	1.50 % of Assets
Brookfield Premier Real Estate Partners	1.00	20,558,257	205,583	1.00 % of Assets
Fotal Timber Funds	1.04	19,154,960	198,934	
BTG Pactual 1	1.00	1,022,478	10,225	1.00 % of Assets
Capitol Timberland Investments	1.00	15,178,635	151,786	1.00 % of Assets
Domain Environmental Investments II	1.25	2,953,847	36,923	1.25 % of Assets
Total Multi Asset Funds	0.58	33,432,033	193,503	
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	32,748,140	186,664	0.57 % of Assets
Cash Account	0.00	8,488,522	-	0.00 % of Assets
Cash Account PE		-	-	0.00 % of Assets
Retiree Death Benefit Account	0.00	1,538,403	-	0.00 % of Assets
APRS Building	0.00	1,438,036	-	0.00 % of Assets
Total Retirement System	0.55	721,517,220	3,967,745	



otal Fund Policy		Total Equity Policy		Total Fixed Income Policy	
Allocation Mandate	Weight (%)	Allocation Mandate W	eight (%)	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-1999	
lan-2014		Jan-2017		Blmbg. Barc. U.S. Aggregate Index	50.00
Russell 3000 Index	30.00	Russell 3000 Index	75.00	Blmbg. Barc. Global Multiverse	50.00
MSCI World ex U.S.	15.00	MSCI World ex U.S.	25.00		
Blmbg. Barc. U.S. Aggregate Index	5.00				
Blmbg. Barc. Global Multiverse	5.00				
NCREIF Property Index	15.00				
NCREIF Timberland Index (Monthly)	5.00				
Russell 3000 + 300 bps	12.50				
HFRI Fund of Funds Composite Index	10.00				
FTSE 3 Month T-Bill	2.50				
an-2017					
Russell 3000 Index	45.00				
MSCI World ex U.S.	15.00	Total Private Equity Policy		Wellington Energy Hybrid	
Blmbg. Barc. U.S. Aggregate Index	5.00	Allocation Mandate	Weight (%)	Allocation Mandate	Weight (%)
Blmbg. Barc. Global Multiverse	5.00	May-2013	3 - (,	Jan-1999	- <b>3</b> - ()
NCREIF Property Index	15.00	Russell 3000 Index	100.00	Russell 3000 Energy SP	100.00
NCREIF Timberland Index (Monthly)	2.50	Russell 5000 lildex	100.00	Russell 3000 Ellergy Si	100.00
HFRI Fund of Funds Composite Index	5.00	Jan-2017		Oct-2015	
Credit Suisse Leveraged Loan Index	5.00	Credit Suisse Leveraged Loan Index	67.00	S&P 500 Energy	100.00
Cambridge Associates Private Equity Index	2.50	Cambridge Associates Private Equity Inde	ex 33.00	3,	
an-2018					
Russell 3000 Index	42.50				
MSCI World ex U.S.	15.00				
Blmbg. Barc. U.S. Aggregate Index	10.00				
Blmbg. Barc. Global Multiverse	5.00				
NCREIF Property Index	15.00				
HFRI Fund of Funds Composite Index	5.00				
Credit Suisse Leveraged Loan Index	5.00				
Cambridge Associates Private Equity Index	2.50				
otal Hedge Fund Policy		Total Timb on Dalissa		Total Deal Fatate Dellare	
OTAL HORRO FUND POLICY		Total Timber Policy		Total Real Estate Policy	
-	MAI - 1 - 1 - 4 (0/)	A II 4! B4 I - 1	M/-! (0/)		
Allocation Mandate	Weight (%)	Allocation Mandate  Apr-1987	Weight (%)	Allocation Mandate  Jan-1978	Weight (%)



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

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



Δ	cti	ve	R	۵tı	ırn

- 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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