

Investment Performance Review
Period Ending September 30, 2022

Austin Police



3rd Quarter 2022 Market Environment



The Economy

- Broadly, global markets declined during the 3rd quarter as inflation remained elevated, causing global central banks further drain liquidity from the market, and geopolitical risks increased as the conflict in Ukraine escalated.
- While inflation moderated slightly in the US, it showed signs of increasing, especially in Europe, where UK and German inflation reached multi-decade highs. US CPI was 8.3% in August, down from 9.1% at the end of the 2nd quarter.
- The US Federal Reserve Bank (the Fed) continued to increase interest rates during the quarter by raising 0.75% at the July and September meetings. Importantly, the Fed signaled it was committed to fight inflation by additional rate hikes if needed.
- The US labor market showed its resiliency during the quarter by adding an estimated 1.1 million jobs. As a result, the unemployment rate fell to 3.5% in September. The number of workers re-entering the workforce increased slightly during the period as wage growth remained strong.
- Real estate markets were under pressure during the quarter as rising interest rates pushed mortgages to their highest levels since 2007. As of September, the average 30-year fixed mortgage was roughly 6.7%, up from roughly 3.0% last year at the same time.

Equity (Domestic and International)

- US equities declined during the 3rd quarter as concerns regarding inflation, the path of interest rates, and a slowing global economy acted as headwinds. Small cap growth was the best performing domestic segment of the equity market relative to other US market capitalizations and styles during the period while large cap value performed the worst.
- Momentum was decidedly negative in international stocks during the 3rd quarter. The escalating conflict in Ukraine, rising inflation in Europe, and tightening monetary policy all contributed to the decline. The continued strength of the US dollar, which rose against most major developed market and emerging market currencies, also acted as a headwind. Finally, China continued its zero-tolerance policy regarding Covid-19, which led to additional restrictions.

Fixed Income

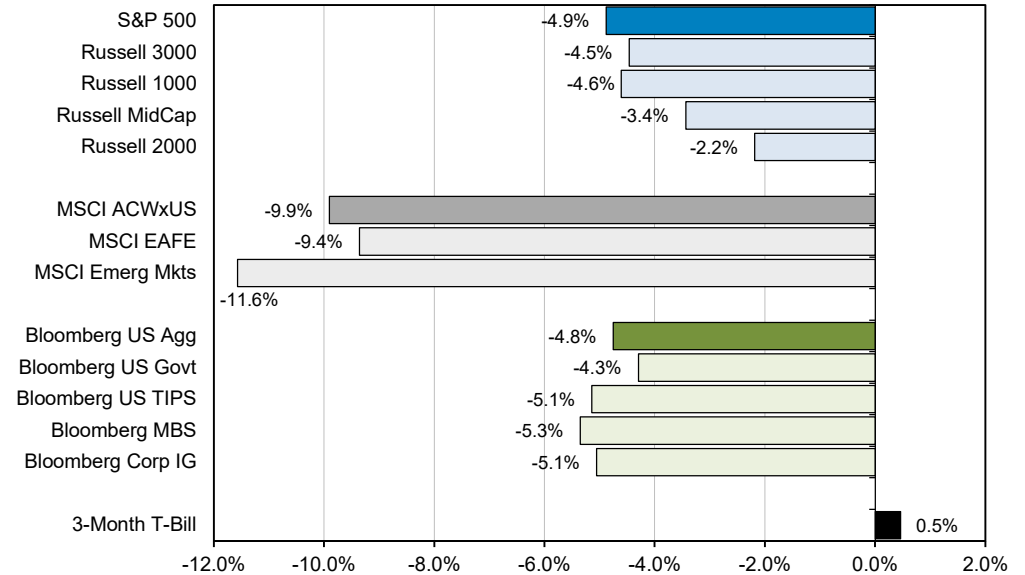
- While inflation fell slightly during the quarter, the Fed continued increasing interest rates which acted as a headwind for fixed income performance during the quarter. US interest rates moved significantly higher during the quarter with the US 10-Year Treasury bond rising 83 basis points to close at 3.80%.
- Performance across all bond market sectors was negative during the quarter, with US high yield corporate bonds and US Treasury bonds down the least.
- The combination of higher coupons and a shorter maturity profile relative to high quality government bonds was the primary driver of the relative outperformance of high yield bonds during the period.
- US Treasury bonds declined less than other investment grade bond market sectors during the quarter. During periods of increased volatility, investors have historically preferred the safety of government bonds over those with credit risk.

Market Themes

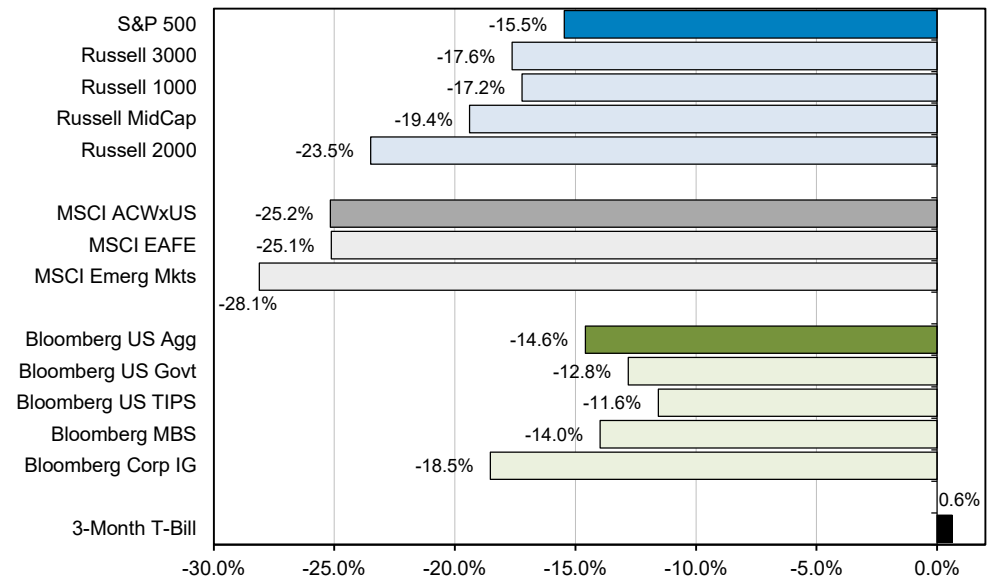
- Central banks remained hawkish during the quarter with several banks raising interest rates to fight higher inflation. The Fed, the Bank of England, and European Central Bank all raised rates during the quarter. Additionally, the Fed is currently allowing bonds to mature without reinvesting (quantitative tightening), while other banks are also considering similar actions. The outcome would be additional liquidity from the market.
- The escalating crisis in Ukraine spilled over as several gas pipelines were attacked in the Baltic Sea. The result was further disruption of energy supplies to Europe, Germany in particular. Energy costs have risen significantly since the start of the conflict which have negatively impacted economic activity in the region.
- US equity markets experienced their third consecutive quarter of negative performance during the 3rd quarter. Growth-oriented stocks outperformed value stocks as investors believe the Fed will begin slowing the rise of interest rates as economic growth declines. Historically, growth stocks have outperformed value stocks as the economy reaches the trough following a recession.
- Interest rates rose across the Treasury yield curve during the quarter as the Fed hiked interest rates by 0.75% at both the July and September meetings. The 3rd quarter marks the third consecutive quarter the bond market has suffered negative absolute returns. Long-term mortgage and investment grade corporate bonds underperformed during the quarter given their maturity profiles. High yield bonds outperformed primarily due to their shorter maturity profile and higher coupons.

- Negative momentum continued during the 3rd quarter as broad US equity markets experienced negative returns. Factors that contributed to performance included elevated inflation, tighter monetary policy, continued geopolitical events in Ukraine, and expectations of slower economic growth. For the period, the S&P 500 large cap benchmark returned -4.9%, compared to -3.4% for mid-cap and -2.2% for small cap indices.
- Like domestic equities, developed markets international equities also suffered negative results for the 3rd quarter. Europe was negatively impacted by higher-than-expected inflation, the conflict in Ukraine, uncertainty regarding energy supplies, and rising interest rates. Emerging markets were also negatively impacted by war in Ukraine and a strengthening USD. During the period, the MSCI EAFE Index returned -9.4% while the MSCI Emerging Markets Index declined by -11.6%.
- For the quarter, performance of the bond market was broadly negative due to continued concerns about inflation and the FOMC's decision to raise interest rates twice during the period. The Bloomberg (BB) US Aggregate Index returned -4.8%, for the period while Investment Grade Corporate bonds posted a return of -5.1%.
- Performance for developed equity markets was strongly negative over the trailing 1-year period. The primary drivers of return during the period were weakening global economic growth, more restrictive monetary policy from global central banks, and elevated inflation. The S&P 500 large cap stock index led equity market performance for the year with a return of -15.5%. The outlier was the MSCI ACWI ex-US index which declined by -25.2% for the year.
- Over the trailing 1-year period, international markets fell with the developed market MSCI EAFE Index returning -25.1% while the MSCI Emerging Markets Index fell by -28.1%. Global economic growth slowed throughout the year and both developed and emerging markets were negatively impacted by a strong USD and continued geopolitical concerns.
- Bond market returns disappointed over the trailing 1-year period due primarily to concerns about rising inflation and the expectation of higher future interest rates. US TIPS were the best performing sector returning -11.6% while investment grade corporate bonds was the worst, falling -18.5%.

Quarter Performance



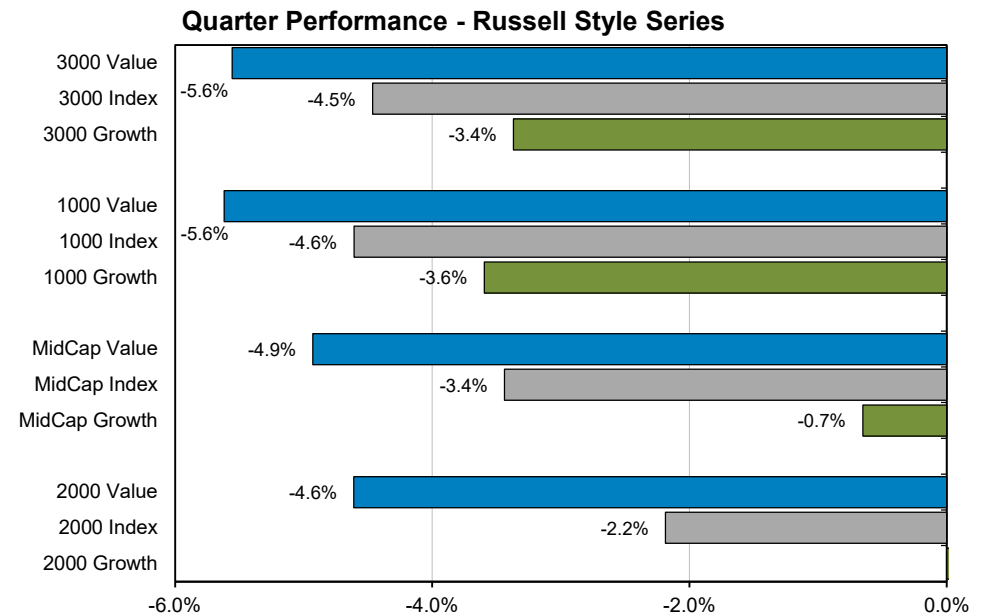
1-Year Performance



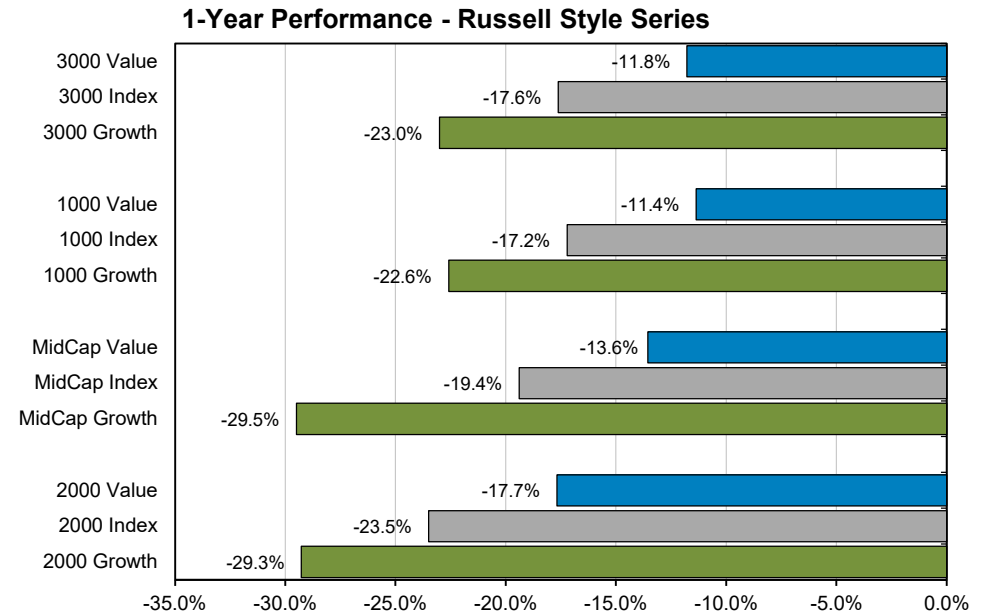
Source: Investment Metrics



- Volatility was high during the 3rd quarter as broad US equity markets rose sharply before falling to close the period with negative results across both the style and market capitalization spectrums. Leadership switched during the quarter with small cap stocks outperforming, followed by mid and large cap issues. The Russell 2000 Index declined by -2.2% for the quarter while the Russell Mid Cap Index and the Russell 1000 Index fell by -3.4% and -4.6%, respectively.
- Performance across styles and market capitalizations was disparate during the quarter. Large, mid, and small cap growth stocks all outperformed their value counterparts. For the period, the Russell 2000 Growth Index was the best relative performing style index, posting a return of 0.0%. Large and mid cap value stocks were the laggards during the period with the Russell Large Cap Value Index and Russell Mid Cap Value Index falling by -5.6% and -4.9%, respectively.



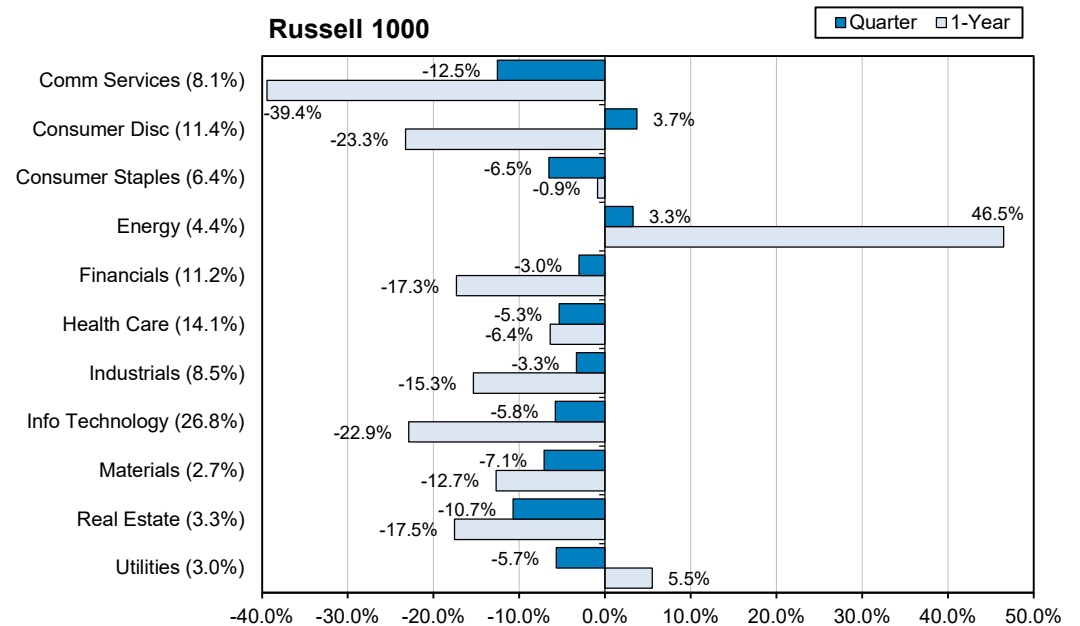
- Performance across all market capitalizations and styles was negative over the trailing 1-year period. Unlike the 3rd quarter, large cap stocks outperformed mid and small cap stocks for the year. The Russell 1000 Index return of -17.2% for the year, significantly outperformed both its mid and small cap growth index counterparts. The outlier during the period was the Russell 2000 Index which returned -23.5%.
- There was wide performance dispersion within across all style-based indexes. Value significantly outperformed growth over the year. Within large cap stocks, the Russell 1000 Value returned -11.4% compared to -22.6% for the Russell 1000 Growth benchmark. The Russell Mid Cap Value Index returned -13.6% while the Russell 2000 Value Index returned -17.7% for the period. In comparison, the Russell Mid Cap Growth Index returned -29.5%, while the Russell 2000 Growth Index declined by -29.3%.



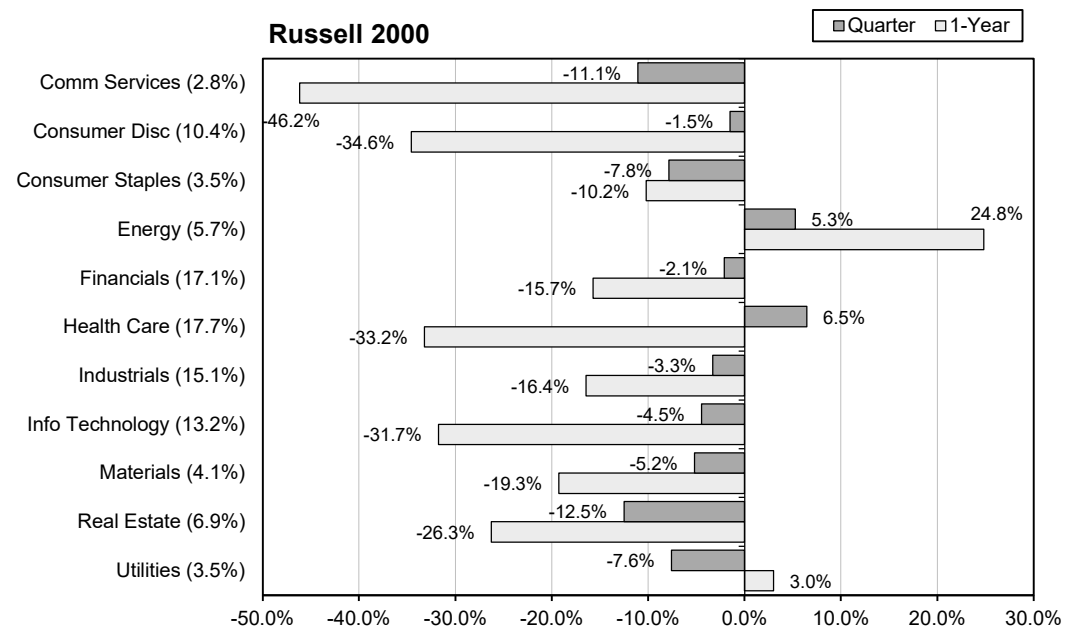
Source: Investment Metrics



- Economic sector performance was negative across nine of the eleven large cap economic sectors for the 3rd quarter. Four sectors outpaced the return of the broad index on a relative basis during the period.
- Consumer Discretionary (3.7%) and Energy (3.3%) were the only sectors with positive absolute performance during the period. Additionally, Financials (-3.0%) and Industrials (-3.3%) outperformed the broad index. Strong consumer demand acted as a tailwind for consumer-related stocks during the quarter. Energy continued its relative outperformance as the price of oil remained elevated.
- For the full year, six sectors exceeded the return of the broad large cap benchmark: Energy (46.5%), Utilities (5.5%), Consumer Staples (-0.9%), Health Care (-6.4%), Materials (-12.7%), and Industrials (-15.3%). The weakest economic sector performance in the Russell 1000 for the year was Communication Services which declined by returns (-39.4%).



- Small cap sector performance was also mixed during the quarter with two economic sectors posting positive performance relative to return of the broader Russell 2000 Index (-2.2%). Health Care (6.5%), and Energy (5.3%) were the best performing sectors for the period. Real Estate (-12.5%), and Communication Services (-11.1%) were the worst performing sectors for the quarter.
- For the trailing 1-year period, six of the eleven sectors outpaced the broad benchmark's return. Not surprisingly, sector performance was led by Energy (24.8%), Utilities (3.0%), Consumer Staples (-10.2%), Financials (-15.7%), and Industrials (-16.4%). The weakest sector over the full year was Communication Services (-46.2%), followed by Consumer Discretionary (-34.6%).



Source: Morningstar Direct
 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.



The Market Environment
Top 10 Index Weights & Quarterly Performance for the Russell 1000 & 2000
As of September 30, 2022

Top 10 Weighted Stocks				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Apple Inc	6.31%	1.22%	-1.79%	Information Technology
Microsoft Corp	5.21%	-9.12%	-16.69%	Information Technology
Amazon.com Inc	3.00%	6.39%	-31.20%	Consumer Discretionary
Tesla Inc	2.02%	18.17%	2.61%	Consumer Discretionary
Alphabet Inc Class A	1.72%	-12.22%	-28.45%	Communication Services
Alphabet Inc Class C	1.55%	-12.09%	-27.85%	Communication Services
Berkshire Hathaway Inc Class B	1.44%	-2.20%	-2.17%	Financials
UnitedHealth Group Inc	1.41%	-1.36%	30.94%	Health Care
Johnson & Johnson	1.28%	-7.35%	3.82%	Health Care
Exxon Mobil Corp	1.09%	2.91%	55.15%	Energy

Top 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Signify Health Inc Ordinary Shares	0.01%	111.23%	63.12%	Health Care
First Solar Inc	0.04%	94.14%	38.56%	Information Technology
Wolfspeed Inc	0.04%	62.90%	28.03%	Information Technology
Penumbra Inc	0.02%	52.26%	-28.86%	Health Care
Oak Street Health Inc Ordinary Shares	0.01%	49.15%	-42.35%	Health Care
Sarepta Therapeutics Inc	0.03%	47.47%	19.53%	Health Care
Constellation Energy Corp	0.08%	45.54%	N/A	Energy
The Trade Desk Inc Class A	0.08%	42.64%	-15.01%	Information Technology
Nutanix Inc Class A	0.01%	42.38%	-44.75%	Information Technology
Enphase Energy Inc	0.11%	42.12%	85.02%	Energy

Bottom 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Sotera Health Co Ordinary Shares	0.00%	-65.2%	-73.9%	Health Care
Novavax Inc	0.00%	-64.6%	-91.2%	Health Care
Spectrum Brands Holdings Inc	0.00%	-52.1%	-58.4%	Consumer Staples
AMC Entertainment Holdings Inc	0.01%	-48.6%	-81.7%	Communication Services
WeWork Inc	0.00%	-47.2%	N/A	Real Estate
The Scotts Miracle Gro Co A	0.01%	-45.4%	-70.1%	Materials
AppLovin Corp Ordinary Shares	0.01%	-43.4%	-73.1%	Information Technology
Azenta Inc	0.01%	-40.6%	-58.1%	Health Care
NCR Corp	0.01%	-38.9%	-51.0%	Information Technology
Enhabit Inc Shs	0.00%	-38.9%	N/A	Health Care

Top 10 Weighted Stocks				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
ShockWave Medical Inc	0.45%	45.5%	35.1%	Health Care
Biohaven Pharmaceutical Holding Co	0.43%	3.7%	8.8%	Health Care
Chart Industries Inc	0.31%	10.1%	-3.5%	Industrials
Karuna Therapeutics Inc	0.30%	77.8%	83.9%	Health Care
Apellis Pharmaceuticals Inc	0.28%	51.0%	107.2%	Health Care
Murphy USA Inc	0.28%	18.2%	65.3%	Consumer Discretionary
Texas Roadhouse Inc	0.27%	19.8%	-2.4%	Consumer Discretionary
SouthState Corp	0.27%	3.2%	8.5%	Financials
RBC Bearings Inc	0.27%	12.4%	-2.1%	Industrials
EMCOR Group Inc	0.27%	12.3%	0.5%	Information Technology

Top 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Akero Therapeutics Inc	0.04%	260.3%	52.3%	Health Care
Forma Therapeutics Holdings Inc	0.03%	189.6%	-14.0%	Health Care
Velo3D Inc	0.01%	185.5%	-52.9%	Industrials
Ventyx Biosciences Inc	0.04%	185.4%	N/A	Health Care
Verve Therapeutics Inc	0.06%	124.8%	-26.9%	Health Care
AN2 Therapeutics Inc	0.00%	124.3%	N/A	Health Care
Prothena Corp PLC	0.10%	123.3%	-14.9%	Health Care
Target Hospitality Corp Class A	0.02%	121.0%	238.3%	Consumer Discretionary
1Life Healthcare Inc Ordinary Shares	0.14%	118.8%	-15.3%	Health Care
Global Blood Therapeutics Inc	0.19%	113.1%	167.3%	Health Care

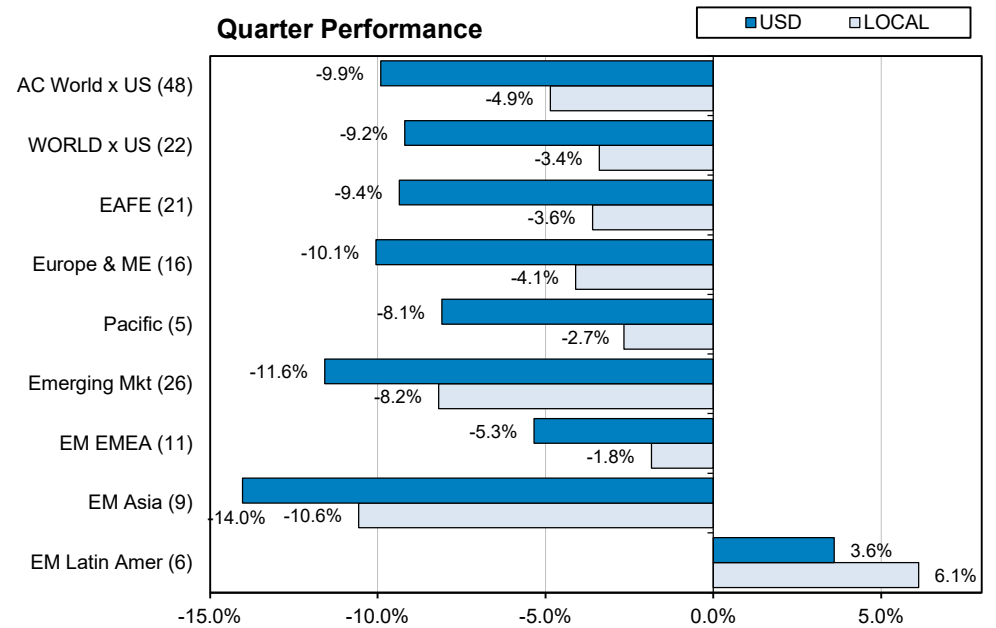
Bottom 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Leafly Holdings Inc	0.00%	-84.9%	0.0%	Communication Services
VistaGen Therapeutics Inc	0.00%	-82.7%	N/A	Health Care
Faraday Future Intelligent Electric Inc	0.00%	-75.5%	N/A	Consumer Discretionary
SelectQuote Inc Ordinary Shares	0.00%	-70.6%	-94.4%	Financials
IronNet Inc	0.00%	-68.8%	N/A	Information Technology
Core Scientific Inc Ord Shs - Class A	0.00%	-67.9%	N/A	Consumer Discretionary
Rockley Photonics Holdings Ltd	0.00%	-67.4%	N/A	Information Technology
Loyalty Ventures Inc Ordinary Shares	0.00%	-66.1%	0.0%	Communication Services
Cryptyde Inc	0.00%	-65.9%	0.0%	Materials
Vintage Wine Estates Inc	0.00%	-64.8%	-72.9%	Consumer Staples

Source: Morningstar Direct



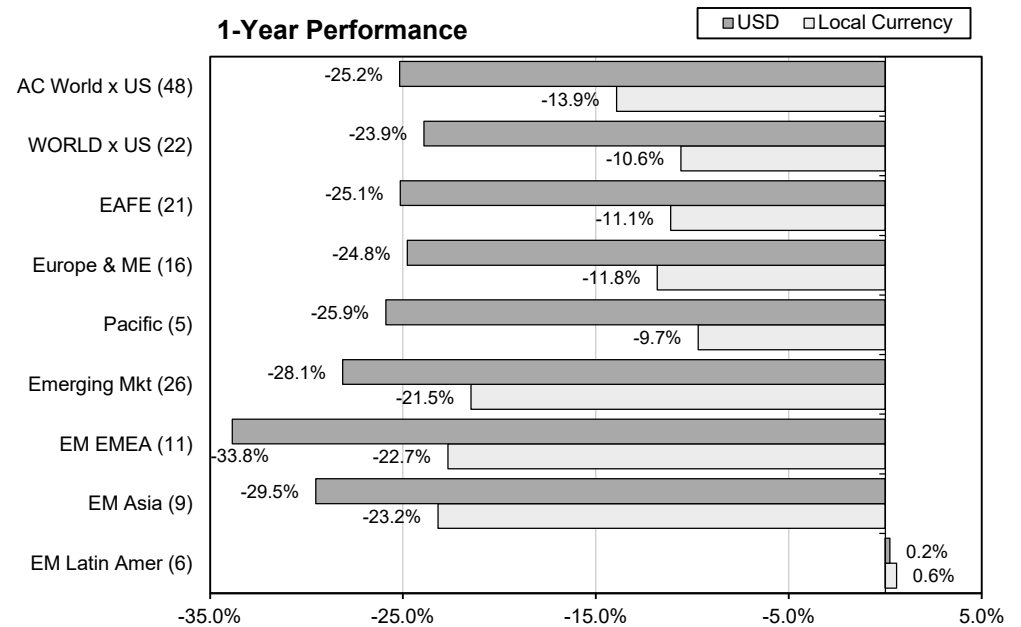
- Most developed and emerging market international equity indexes tracked in the chart posted negative returns in both US dollar (USD) and local currency (LC) terms for the 3rd quarter. The outlier during the period was the Latin America region. Higher commodity prices and demand benefited export-driven countries like Brazil. The developed market MSCI EAFE Index returned -9.4% in USD and -3.6% in LC terms for the period, while the MSCI Emerging Markets Index declined by -11.6% in USD and -8.2% in LC terms.

Quarter Performance



- The trailing 1-year results for international developed and emerging markets were broadly negative across most regions and currencies. The MSCI EAFE Index returned -25.1% in USD for the year and -11.1% in LC terms. Similarly, returns across emerging markets were broadly lower with the exception being Latin America with the MSCI Emerging Markets Index declining by -28.1% in USD and -21.5% in LC terms. Latin America regional index's return were the outlier, rising by 0.2% in USD and 0.6% in LC term. In contrast, performance in the EMEA regional benchmark significantly detracted from emerging market index performance with the EMEA Index returning -33.8% in USD and -22.7% in LC terms, respectively, due primarily to concerns related to Ukraine.

1-Year Performance



Source: MSCI Global Index Monitor (Returns are Net)



The Market Environment
US Dollar International Index Attribution & Country Detail
As of September 30, 2022

MSCI - EAFE	Sector Weight	Quarter Return	1-Year Return
Communication Services	4.8%	-13.7%	-28.6%
Consumer Discretionary	11.3%	-9.8%	-32.3%
Consumer Staples	11.3%	-7.1%	-17.3%
Energy	4.9%	-5.0%	6.0%
Financials	17.6%	-9.6%	-22.1%
Health Care	13.5%	-10.6%	-19.8%
Industrials	15.0%	-8.3%	-31.5%
Information Technology	7.9%	-8.3%	-38.9%
Materials	7.5%	-8.9%	-21.3%
Real Estate	2.8%	-13.1%	-29.1%
Utilities	3.4%	-13.3%	-20.3%
Total	100.0%	-9.4%	-25.1%

MSCI - ACWixUS	Sector Weight	Quarter Return	1-Year Return
Communication Services	6.1%	-16.5%	-32.0%
Consumer Discretionary	11.4%	-13.0%	-32.3%
Consumer Staples	9.4%	-6.4%	-16.7%
Energy	6.2%	-6.3%	-5.0%
Financials	20.7%	-7.9%	-18.3%
Health Care	9.6%	-11.0%	-23.5%
Industrials	12.1%	-8.2%	-28.7%
Information Technology	10.8%	-12.1%	-39.3%
Materials	8.2%	-7.9%	-21.1%
Real Estate	2.4%	-14.5%	-29.8%
Utilities	3.4%	-10.9%	-16.0%
Total	100.0%	-9.9%	-25.2%

MSCI - Emerging Mkt	Sector Weight	Quarter Return	1-Year Return
Communication Services	9.7%	-19.3%	-36.2%
Consumer Discretionary	14.0%	-18.7%	-33.7%
Consumer Staples	6.6%	-4.5%	-17.8%
Energy	5.3%	-2.6%	-30.1%
Financials	22.6%	-5.1%	-14.3%
Health Care	3.9%	-13.8%	-42.8%
Industrials	5.8%	-9.9%	-20.8%
Information Technology	18.3%	-15.5%	-36.1%
Materials	8.7%	-7.4%	-26.3%
Real Estate	2.0%	-19.3%	-31.9%
Utilities	3.2%	-4.3%	-8.0%
Total	100.0%	-11.6%	-28.1%

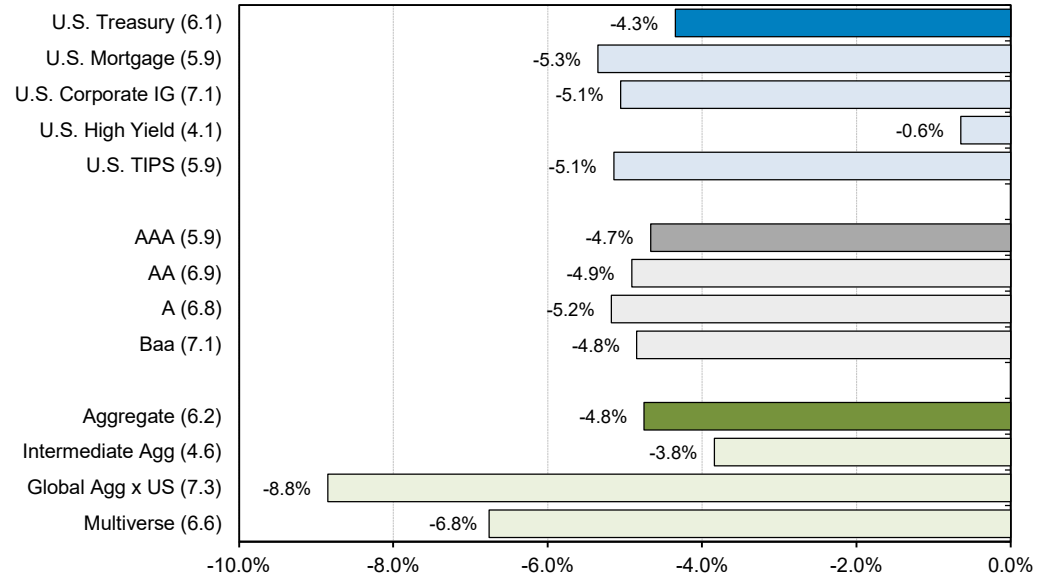
Country	MSCI-EAFE Weight	MSCI-ACWixUS Weight	Quarter Return	1-Year Return
Japan	22.6%	14.1%	-7.7%	-29.3%
United Kingdom	15.5%	9.7%	-10.8%	-14.1%
France	11.3%	7.1%	-8.9%	-24.0%
Switzerland	10.7%	6.7%	-7.5%	-16.5%
Australia	8.0%	5.0%	-6.7%	-16.4%
Germany	7.6%	4.7%	-12.6%	-37.1%
Netherlands	4.1%	2.6%	-10.7%	-38.2%
Sweden	3.4%	2.1%	-8.8%	-35.7%
Hong Kong	3.0%	1.9%	-17.0%	-22.3%
Denmark	2.6%	1.7%	-12.3%	-23.5%
Spain	2.4%	1.5%	-14.1%	-25.6%
Italy	2.3%	1.4%	-8.5%	-28.5%
Singapore	1.6%	1.0%	-1.5%	-22.1%
Belgium	1.0%	0.6%	-13.2%	-27.3%
Finland	1.0%	0.6%	-7.2%	-25.0%
Norway	0.8%	0.5%	-15.3%	-20.7%
Israel	0.8%	0.5%	-1.9%	-21.8%
Ireland	0.6%	0.4%	-5.5%	-38.9%
Portugal	0.2%	0.1%	-11.0%	-12.9%
Austria	0.2%	0.1%	-15.2%	-40.9%
New Zealand	0.2%	0.1%	-8.6%	-33.4%
Total EAFE Countries	100.0%	62.5%	-9.4%	-25.1%
Canada		8.2%	-7.8%	-12.6%
Total Developed Countries		70.7%	-9.2%	-23.9%
China		9.2%	-22.5%	-35.4%
Taiwan		4.0%	-14.5%	-30.5%
India		4.5%	6.5%	-9.9%
Korea		3.1%	-16.4%	-40.7%
Brazil		1.7%	8.5%	4.3%
Saudi Arabia		1.4%	-0.1%	1.9%
South Africa		1.0%	-12.3%	-19.2%
Mexico		0.7%	-5.4%	-7.4%
Thailand		0.6%	-2.9%	-6.8%
Indonesia		0.6%	7.8%	14.3%
Malaysia		0.4%	-7.1%	-15.9%
United Arab Emirates		0.4%	-2.5%	5.1%
Qatar		0.4%	3.1%	12.7%
Kuwait		0.3%	-5.5%	6.4%
Philippines		0.2%	-13.6%	-26.3%
Poland		0.2%	-25.1%	-51.9%
Chile		0.2%	3.2%	0.6%
Turkey		0.1%	16.3%	3.8%
Peru		0.1%	-0.9%	3.0%
Greece		0.1%	-7.5%	-25.2%
Colombia		0.0%	-18.5%	-23.6%
Czech Republic		0.0%	-19.2%	-9.8%
Hungary		0.0%	-15.0%	-54.3%
Egypt		0.0%	-1.3%	-28.8%
Total Emerging Countries		29.3%	-11.6%	-28.1%
Total ACWixUS Countries		100.0%	-9.9%	-25.2%

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.

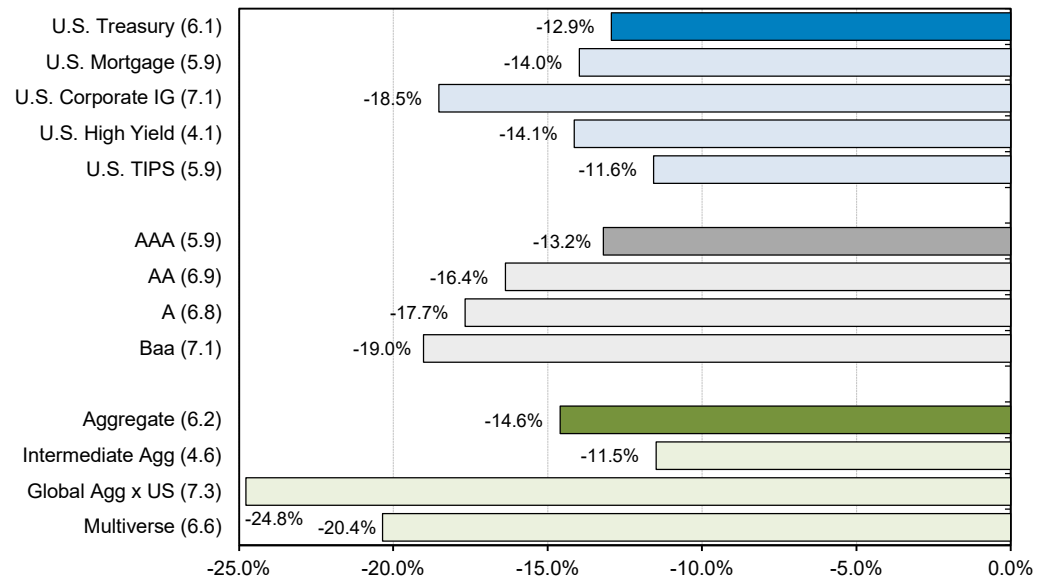


- Fixed income market results were broadly negative during the 3rd quarter. Investors' concerns about rising inflation, combined with expectations of higher US interest rates, detracted from performance. As a result, US Treasury yields continued to rise across the maturity curve throughout the quarter.
- The return for the BB US Aggregate Bond Index, the bellwether investment grade benchmark, was down -4.8% for the period.
- Performance across the investment grade index's segments was also negative during the period with the US Corporate Investment Grade bonds returning -5.1% and the US Mortgage index component posting a return of -5.3%.
- High yield bonds outperformed their investment grade counterparts, but still declined by -0.6%. US TIPS, which have delivered strong performance in recent periods, posted a decline of -5.1% as investors' expectations of future inflation declined.
- Outside of domestic markets, the BB Global Aggregate ex US Index posted a return of -8.8% for the quarter. Like domestic bonds, global bond index performance was negatively impacted by rising interest rates and a strengthening USD, which acted as a drag on domestic index returns.
- Over the trailing 1-year period, domestic investment grade benchmark performance was negative, led lower by investment grade corporate bonds (-18.5%), followed by mortgage-backed bonds (-14.0%), US Treasury bonds (-12.9%), and US TIPS (-11.6%). The bellwether Bloomberg US Aggregate Bond Index (-14.6%) declined for the year.
- Lower quality high yield corporate bonds outperformed their investment grade counterparts on a relative basis with the Bloomberg US High Yield Index returning -14.1% for the period.
- Performance for non-US bonds was broadly negative for the year with the developed market Bloomberg Global Aggregate ex US Index falling by -24.9%. The combination of rising interest rates overseas, persistent inflation, and USD strength hindered index performance for the year.

Quarter Performance



1-Year Performance

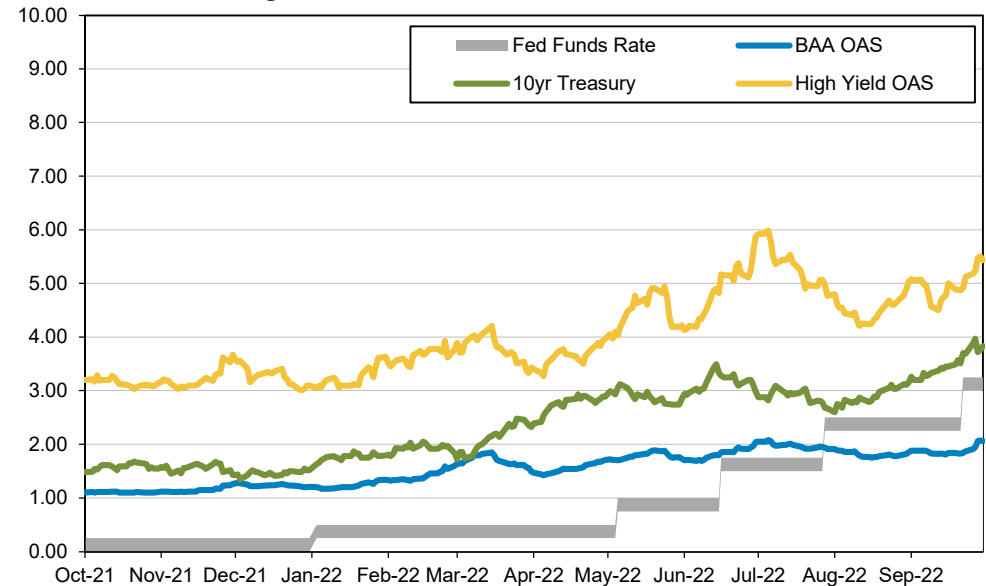


Source: Bloomberg

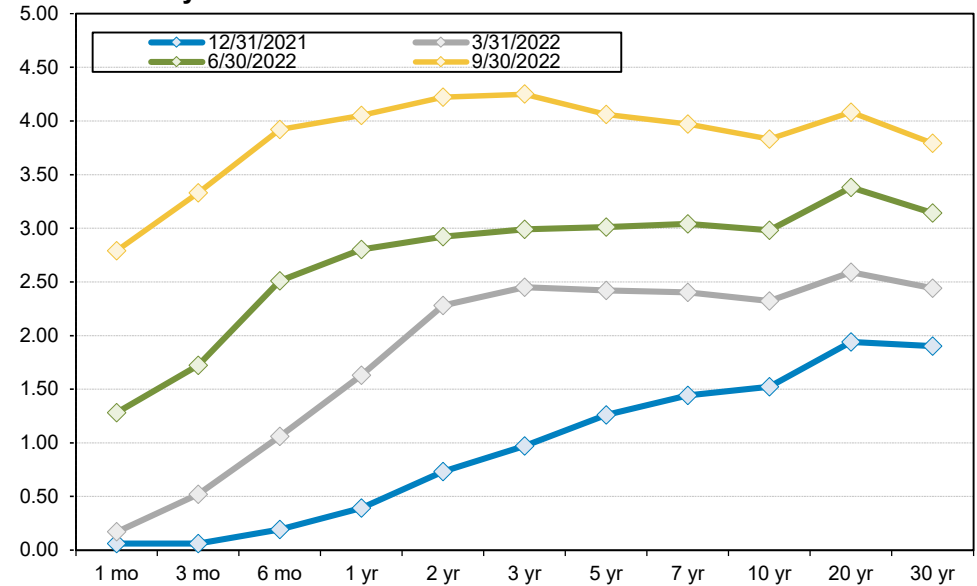


- The gray band across the graph illustrates the range of the current Fed Funds Rate. In the 3rd quarter this year, the Fed raised its target rate range from 1.75% to 3.25%. During its recent September meeting, the Federal Open Market Committee (FOMC) stated it intends to continue to remove liquidity from the market by raising interest rates and also allowing bonds held on its balance sheet to mature without reinvesting those proceeds. Importantly, the FOMC stated that it will remain vigilant in its fight against persistently higher inflation.
- The yield on the US 10-year Treasury (green line) ended the period higher as concerns over the pace of inflation, combined with the Fed's announced rate increase, drove yields higher. Interest rates continued to climb during the quarter, reaching a high of roughly 4.00% during the latter part of September 2022, before settling at 3.83% at the end of the month.
- 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-US Treasury investment grade issues. For the full year, the spread widened slightly from 1.10% to 2.06%. High Yield OAS was largely unchanged during the year as spreads rose from 3.17% to 5.43%. High Yield spreads reached as high as 5.80% in early July before trading lower the remainder of the quarter.
- The lower graph provides a snapshot of the US Treasury yield curve at the end of each of the last four quarters. Short-term rates continued to rise during the 3rd quarter as the FOMC continued raising rates to combat rising inflation. Both intermediate and longer-term rates were modestly higher across the curve, albeit less dramatically than short-term rates. The curve remained inverted between 2-year rates and 10-year rates. Said differently, the short-term rate was higher than the long-term rate. Historically, a persistent inversion of these two key rates has been an indication of a future recession withing 6- to 24-months.

1-Year Trailing Market Rates



Treasury Yield Curve



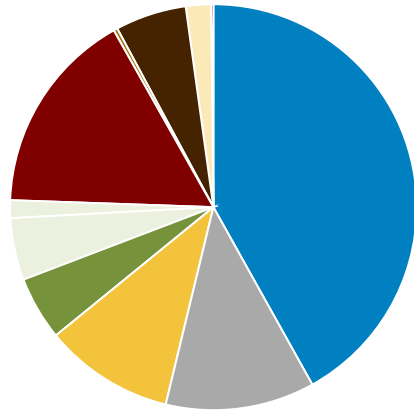
Source: US Department of Treasury, FRED (Federal Reserve of St. Louis)



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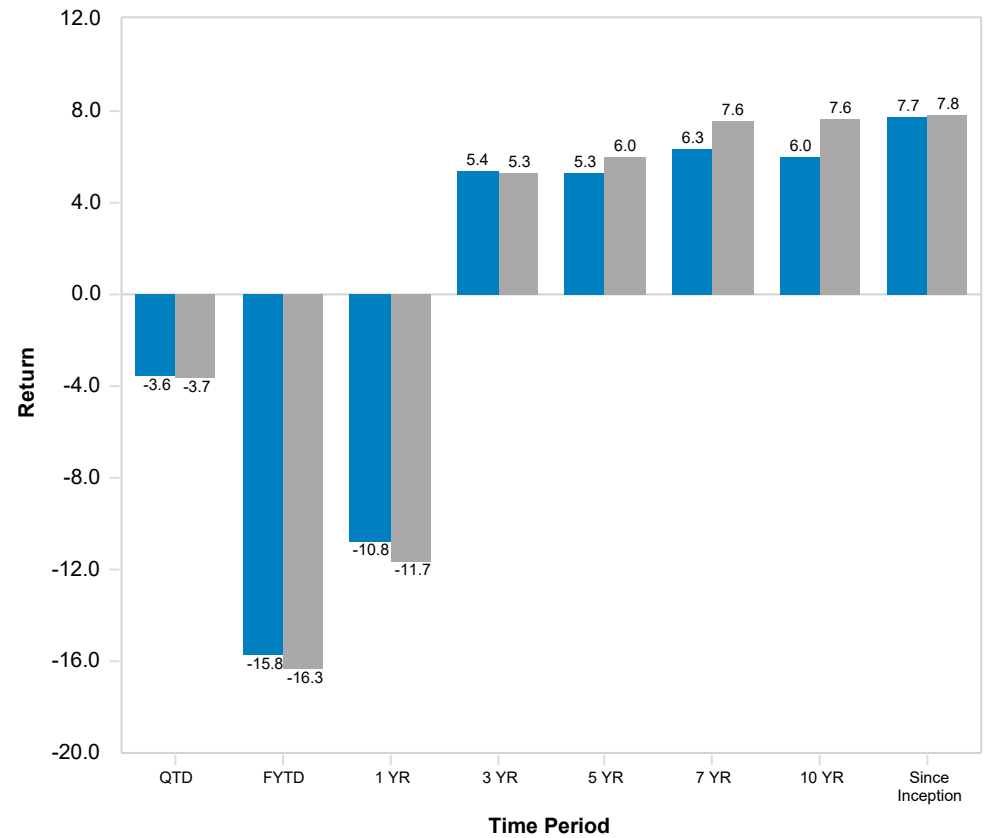
Asset Allocation by Segment
September 30, 2022 : \$892,947,481



Gain/Loss Summary

	QTD	FYTD	1 YR
Total Retirement System			
Beginning Market Value	935,886,066	1,079,736,817	1,022,796,259
Net Contributions	-9,238,325	-16,817,166	-20,056,202
Return on Investment	-32,822,490	-167,952,343	-107,290,106
Ending Market Value	892,947,481	892,947,481	892,947,481

Comparative Performance



Allocation

	Market Value	Allocation
Total Domestic Equity	374,302,341	41.9
Total International Equity	105,918,507	11.9
Total Other Equity	92,212,704	10.3
Total Core Fixed Income	45,378,751	5.1
Total Non Core Fixed Income	44,195,347	4.9
Total Other Fixed Income	12,622,830	1.4
Total Real Estate	145,454,433	16.3
Total Timber Funds	2,766,777	0.3
Total Multi Asset Funds	50,531,234	5.7
Cash Account	17,863,183	2.0
Cash Account PE	-	0.0
APRS Building	1,701,375	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.



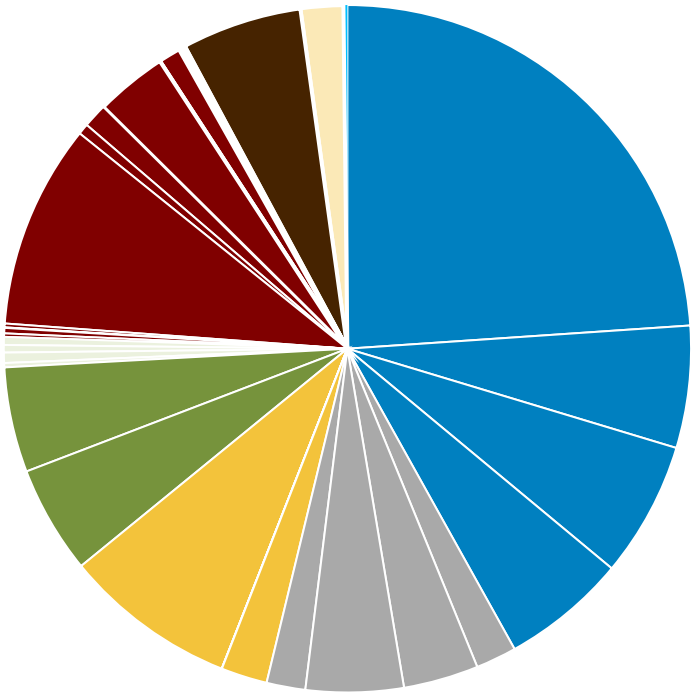
**Asset Allocation by Manager
Total Fund**

As of September 30, 2022

September 30, 2022 : \$892,947,481

Allocation

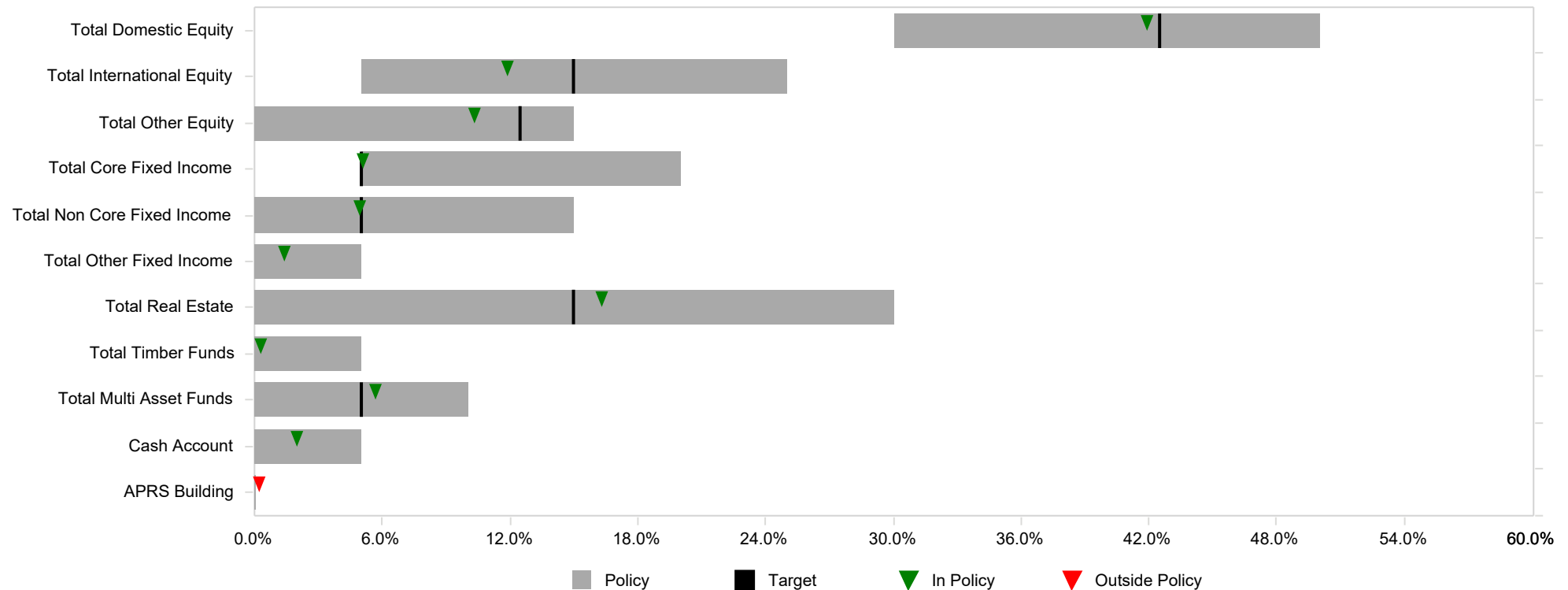
	Market Value	Allocation
NT Collective Russell 3000 Index	213,587,521	23.9
Baird Mid Cap Growth	51,260,723	5.7
Nuance Mid Cap Value	56,912,148	6.4
Kennedy Small Cap Value	52,541,949	5.9
Driehaus International Small Cap Growth	17,105,179	1.9
WCM Focused Intl Growth LP	31,521,280	3.5
Thompson Siegel & Walmsley	41,022,744	4.6
Wellington Emerging Markets Fund	16,269,304	1.8
Huff Energy Fund	19,396,200	2.2
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.	61,685	0.0
Franklin Park Private Equity	72,754,816	8.1
Orleans Capital	45,378,751	5.1
Pimco Diversified Income Fund	44,195,347	4.9
LBC Credit Partners III	1,791,840	0.2
LBC Credit Partners IV	4,319,850	0.5
Providence Debt Fund III	3,149,815	0.4
Capital Point Partners (Princeton Capital)	3,361,325	0.4
Rockspring Capital Land Funds (I - VI)	1,435,908	0.2
Edison Investments	2,294,809	0.3
India Property Fund	190,619	0.0
Gainesville Property	1,644,315	0.2
Morgan Stanley	85,773,719	9.6
AEW Partners Fund VIII	4,537,601	0.5
GreenOak US III	10,134,731	1.1
Brookfield Premier RE Partners	30,169,238	3.4
Artemis Real Estate IV	25,398	0.0
Stockbridge Smart Markets	9,248,096	1.0
Capitol Timberland Investments	1,244,881	0.1
Domain Environmental Investments II	1,521,896	0.2
BlackRock Multi Asset Fund	50,531,234	5.7
Cash Account	17,863,183	2.0
Cash Account PE	-	0.0
APRS Building	1,701,375	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	892,947,481	100.0	N/A	N/A	100.0
Total Domestic Equity	374,302,341	41.9	30.0	50.0	42.5
Total International Equity	105,918,507	11.9	5.0	25.0	15.0
Total Other Equity	92,212,704	10.3	0.0	15.0	12.5
Total Core Fixed Income	45,378,751	5.1	5.0	20.0	5.0
Total Non Core Fixed Income	44,195,347	4.9	0.0	15.0	5.0
Total Other Fixed Income	12,622,830	1.4	0.0	5.0	0.0
Total Real Estate	145,454,433	16.3	0.0	30.0	15.0
Total Timber Funds	2,766,777	0.3	0.0	5.0	0.0
Total Multi Asset Funds	50,531,234	5.7	0.0	10.0	5.0
Cash Account	17,863,183	2.0	0.0	5.0	0.0
APRS Building	1,701,375	0.2	0.0	0.0	0.0



Financial Reconciliation Quarter to Date

	Market Value 07/01/2022	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Return On Investment	Market Value 09/30/2022
Total Retirement System	935,886,066	-	14,760,233	-23,998,558	-836,859	-40,911	4,247,703	-37,070,193	-32,822,490	892,947,481
Total Equity	599,092,295	2,679,650	-	-	-621,561	-	1,249,281	-29,966,114	-28,716,832	572,433,552
Total Domestic Equity	391,411,329	372,071	-	-	-383,246	-	776,643	-17,874,455	-17,097,812	374,302,341
NT Collective Russell 3000 Index	223,515,318	-	-	-	-11,176	-	-	-9,916,621	-9,916,621	213,587,521
Baird Mid Cap Growth	50,896,174	88,831	-	-	-88,831	-	82,915	281,634	364,549	51,260,723
Nuance Mid Cap Value	62,213,124	146,179	-	-	-146,179	-	444,890	-5,745,865	-5,300,976	56,912,148
Kennedy Small Cap Value	54,786,713	137,061	-	-	-137,061	-	248,838	-2,493,603	-2,244,764	52,541,949
Total International Equity	117,537,527	36,204	-	-	-36,204	-	167,874	-11,786,894	-11,619,020	105,918,507
Driehaus International Small Cap Growth	18,865,656	-	-	-	-	-	-	-1,760,477	-1,760,477	17,105,179
Thompson Siegel & Walmsley	45,809,618	-	-	-	-	-	-	-4,786,874	-4,786,874	41,022,744
WCM Focused Intl Growth LP	33,997,182	-	-	-	-	-	-	-2,475,902	-2,475,902	31,521,280
Wellington Emerging Markets Fund	18,865,071	36,204	-	-	-36,204	-	167,874	-2,763,641	-2,595,767	16,269,304
Total Other Equity	90,143,439	2,271,375	-	-	-202,110	-	304,764	-304,764	-	92,212,704
Huff Energy Fund	19,396,200	-	-	-	-	-	-	-	-	19,396,200
Sail Venture Fund I	1	-	-	-	-	-	-	-	-	1
Sail Venture Fund II	1	-	-	-	-	-	-	-	-	1
Sail Pre-Exit Acceleration Fund	1	-	-	-	-	-	-	-	-	1
Excelsior Investors, Ltd.	61,685	-	-	-	-	-	-	-	-	61,685
Franklin Park Private Equity	70,685,551	2,271,375	-	-	-202,110	-	304,764	-304,764	-	72,754,816
Total Fixed Income	106,591,403	-1,023,867	-	-	-16,433	-	1,118,099	-4,472,274	-3,354,175	102,196,927
Orleans Capital	47,577,614	17,842	-	-	-17,842	-	411,704	-2,610,567	-2,198,863	45,378,751
Pimco Diversified Income Fund	45,350,659	-	-	-	-	-	505,149	-1,660,461	-1,155,312	44,195,347
Total Other Fixed Income	13,663,130	-1,041,709	-	-	1,408	-	201,245	-201,245	-	12,622,830
Capital Point Partners (Princeton Capital)	3,361,325	-	-	-	-	-	-	-	-	3,361,325
LBC Credit Partners III	1,994,455	-204,023	-	-	1,408	-	67,418	-67,418	-	1,791,840
LBC Credit Partners IV	4,938,545	-618,695	-	-	-	-	81,511	-81,511	-	4,319,850
Providence Debt Fund III	3,368,805	-218,990	-	-	-	-	52,316	-52,316	-	3,149,815

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



Financial Reconciliation

Total Fund

1 Quarter Ending September 30, 2022

	Market Value 07/01/2022	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Return On Investment	Market Value 09/30/2022
Total Real Estate & Timber	139,851,304	7,334,170	-	-	-198,865	-	919,034	315,567	1,234,602	148,221,210
Total Real Estate	135,373,114	9,183,191	-	-	-198,071	-	919,034	177,165	1,096,200	145,454,433
Rockspring Capital Land Funds (I - VI)	1,440,112	-	-	-	-	-	-	-4,204	-4,204	1,435,908
Rockspring Capital Land Fund II	827,024	-	-	-	-	-	-	-2,429	-2,429	824,595
Rockspring Capital Land Fund III	613,088	-	-	-	-	-	-	-1,775	-1,775	611,313
Edison Investments	2,285,167	-8,537	-	-	-	-	8,537	9,642	18,179	2,294,809
India Property Fund	190,619	-	-	-	-	-	-	-	-	190,619
Gainesville Property	1,644,315	-	-	-	-	-	-	-	-	1,644,315
Morgan Stanley	85,821,642	-	-	-	-	-	846,818	-894,742	-47,923	85,773,719
AEW Partners Fund VIII	4,426,416	-	-	-	-	-	-	111,185	111,185	4,537,601
GreenOak US III	10,134,731	-	-	-	-	-	-	-	-	10,134,731
Brookfield Premier Real Estate Partners	29,404,715	-	-	-	-176,428	-	-	940,951	940,951	30,169,238
Artemis Real Estate IV	25,398	-	-	-	-	-	-	-	-	25,398
Stockbridge Smart Markets	-	9,191,727	-	-	-21,643	-	63,679	14,333	78,012	9,248,096
Total Timber Funds	4,478,190	-1,849,021	-	-	-794	-	-	138,402	138,402	2,766,777
Capitol Timberland Investments	2,956,294	-1,849,021	-	-	-794	-	-	138,402	138,402	1,244,881
Domain Environmental Investments II	1,521,896	-	-	-	-	-	-	-	-	1,521,896

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



Financial Reconciliation

Total Fund

1 Quarter Ending September 30, 2022

	Market Value 07/01/2022	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Return On Investment	Market Value 09/30/2022
Total Multi Asset Funds	63,398,470	-10,808,273	-	-	-	-	888,410	-2,947,373	-2,058,963	50,531,234
BlackRock Multi Asset Fund	63,398,470	-10,808,273	-	-	-	-	888,410	-2,947,373	-2,058,963	50,531,234
Cash Account	25,251,220	1,818,320	14,760,233	-23,998,558	-	-40,911	72,879	-	72,879	17,863,183
APRS Building	1,701,375	-	-	-	-	-	-	-	-	1,701,375

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



Financial Reconciliation Year to Date										
	Market Value 01/01/2022	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Return On Investment	Market Value 09/30/2022
Total Retirement System	1,079,736,817	-	49,117,213	-65,934,378	-1,858,145	-161,683	12,065,068	-180,017,411	-167,952,343	892,947,481
Total Equity	719,550,764	6,948,878	-	-	-1,596,435	-	2,987,755	-155,457,410	-152,469,655	572,433,552
Total Domestic Equity	500,819,086	-6,663,019	-	-	-1,054,555	-	2,049,407	-120,848,579	-118,799,171	374,302,341
NT Collective Russell 3000 Index	293,239,825	-7,677,847	-	-	-39,727	-	-	-71,934,731	-71,934,731	213,587,521
Baird Mid Cap Growth	73,001,233	315,922	-	-	-315,922	-	211,879	-21,952,389	-21,740,510	51,260,723
Nuance Mid Cap Value	66,439,229	260,839	-	-	-260,839	-	1,118,938	-10,646,018	-9,527,080	56,912,148
Kennedy Small Cap Value	68,138,799	438,067	-	-	-438,067	-	718,591	-16,315,441	-15,596,850	52,541,949
Total International Equity	155,796,142	122,367	-	-	-122,367	-	562,174	-50,439,809	-49,877,635	105,918,507
Driehaus International Small Cap Growth	26,312,000	-	-	-	-	-	-	-9,206,821	-9,206,821	17,105,179
Thompson Siegel & Walmsley	56,167,444	-	-	-	-	-	-	-15,144,700	-15,144,700	41,022,744
WCM Focused Intl Growth LP	49,673,250	-	-	-	-	-	-	-18,151,970	-18,151,970	31,521,280
Wellington Emerging Markets Fund	23,643,448	122,367	-	-	-122,367	-	562,174	-7,936,318	-7,374,144	16,269,304
Total Other Equity	62,935,535	13,489,530	-	-	-419,513	-	376,174	15,830,978	16,207,152	92,212,704
Huff Energy Fund	6,749,813	-	-	-	-	-	-	12,646,387	12,646,387	19,396,200
Sail Venture Fund I	1	-	-	-	-	-	-	-	-	1
Sail Venture Fund II	1	-	-	-	-	-	-	-	-	1
Sail Pre-Exit Acceleration Fund	1	-	-	-	-	-	-	-	-	1
Excelsior Investors, Ltd.	192,563	-124,563	-	-	-	-	-	-6,315	-6,315	61,685
Franklin Park Private Equity	55,993,156	13,614,093	-	-	-419,513	-	376,174	3,190,906	3,567,080	72,754,816
Total Fixed Income	122,271,847	-2,519,039	-	-	-52,222	-	3,245,139	-20,748,798	-17,503,658	102,196,927
Orleans Capital	53,328,462	56,667	-	-	-56,667	-	1,197,397	-9,147,108	-7,949,711	45,378,751
Pimco Diversified Income Fund	53,696,036	-	-	-	-	-	1,492,273	-10,992,963	-9,500,690	44,195,347
Total Other Fixed Income	15,247,349	-2,575,705	-	-	4,444	-	555,469	-608,727	-53,258	12,622,830
Capital Point Partners (Princeton Capital)	3,269,282	-	-	-	-	-	-	92,043	92,043	3,361,325
LBC Credit Partners III	2,427,674	-457,348	-	-	4,444	-	186,125	-369,055	-182,930	1,791,840
LBC Credit Partners IV	5,977,334	-1,716,973	-	-	-	-	231,862	-172,373	59,489	4,319,850
Providence Debt Fund III	3,573,059	-401,384	-	-	-	-	137,483	-159,343	-21,860	3,149,815

Financial Reconciliation

Total Fund

Year To Date Ending September 30, 2022

	Market Value 01/01/2022	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Return On Investment	Market Value 09/30/2022
Total Real Estate & Timber	130,796,803	2,887,936	-	-	-209,487	-37,215	3,123,915	11,659,258	14,783,174	148,221,210
Total Real Estate	125,398,749	6,526,185	-	-	-198,071	-37,215	3,123,915	10,640,870	13,764,786	145,454,433
Rockspring Capital Land Funds (I - VI)	1,769,032	-294,338	-	-	-	-	-	-38,786	-38,786	1,435,908
Rockspring Capital Land Fund II	1,147,405	-294,338	-	-	-	-	-	-28,473	-28,473	824,595
Rockspring Capital Land Fund III	621,627	-	-	-	-	-	-	-10,314	-10,314	611,313
Edison Investments	2,265,439	-22,765	-	-	-	-	22,765	29,370	52,135	2,294,809
India Property Fund	219,287	-	-	-	-	-	-	-28,668	-28,668	190,619
Gainesville Property	1,644,315	12,489	-	-	-	-12,489	-	-	-	1,644,315
Morgan Stanley	77,832,113	-	-	-	-	-	2,434,689	5,506,917	7,941,606	85,773,719
AEW Partners Fund VIII	6,067,306	-2,411,053	-	-	-	-	-	881,348	881,348	4,537,601
GreenOak US III	10,105,027	-	-	-	-	-	-	29,704	29,704	10,134,731
Brookfield Premier Real Estate Partners	25,496,230	-	-	-	-176,428	-	602,783	4,246,653	4,849,436	30,169,238
Artemis Real Estate IV	-	50,124	-	-	-	-24,726	-	-	-	25,398
Stockbridge Smart Markets	-	9,191,727	-	-	-21,643	-	63,679	14,333	78,012	9,248,096
Total Timber Funds	5,398,054	-3,638,249	-	-	-11,416	-	-	1,018,388	1,018,388	2,766,777
Capitol Timberland Investments	3,555,618	-3,338,249	-	-	-11,416	-	-	1,038,928	1,038,928	1,244,881
Domain Environmental Investments II	1,842,436	-300,000	-	-	-	-	-	-20,540	-20,540	1,521,896

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



Financial Reconciliation

Total Fund

Year To Date Ending September 30, 2022

	Market Value 01/01/2022	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Return On Investment	Market Value 09/30/2022
Total Multi Asset Funds	83,396,375	-20,000,000	-	-	-	-	2,605,320	-15,470,462	-12,865,141	50,531,234
BlackRock Multi Asset Fund	83,396,375	-20,000,000	-	-	-	-	2,605,320	-15,470,462	-12,865,141	50,531,234
Cash Account	22,019,654	12,682,225	49,117,213	-65,934,378	-	-124,468	102,938	-	102,938	17,863,183
APRS Building	1,701,375	-	-	-	-	-	-	-	-	1,701,375

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



Comparative Performance Trailing Returns

	Performance (%)								
	QTR	YTD	1 YR	3 YR	5 YR	7 YR	10 YR	Inception	Inception Date
Total Retirement System (Net)	-3.60	-15.78	-10.83	5.42	5.30	6.33	5.99	7.75	10/01/1992
Total Retirement System (Gross)	-3.52 (20)	-15.62 (29)	-10.62 (22)	5.67 (18)	5.55 (28)	6.58 (50)	6.28 (70)	8.06 (18)	10/01/1992
Total Fund Policy	-3.69	-16.31	-11.68	5.34	6.00	7.60	7.64	7.84	
Variance	0.17	0.69	1.06	0.33	-0.45	-1.02	-1.36	0.22	
All Public Plans-Total Fund Median	-4.31	-17.47	-13.93	3.92	4.78	6.56	6.80	7.61	
Total Equity	-4.89	-21.31	-15.89	6.18	6.28	8.55	8.61	8.43	01/01/1994
Total Equity Policy	-5.63	-24.91	-19.09	5.58	6.48	8.98	9.31	8.05	
Variance	0.74	3.60	3.20	0.60	-0.20	-0.43	-0.70	0.38	
Domestic Equity	-4.46 (52)	-24.02 (54)	-17.35 (54)	6.88 (44)	7.65 (44)	9.92 (45)	N/A	9.30 (61)	05/01/2013
Russell 3000 Index	-4.46	-24.62	-17.63	7.70	8.62	10.90	11.39	10.67	
Variance	0.00	0.60	0.28	-0.82	-0.97	-0.98	N/A	-1.37	
IM U.S. Equity (SA+CF+MF) Median	-4.42	-23.43	-16.60	6.34	7.02	9.60	10.58	9.93	
NT Collective Russell 3000 Index	-4.44 (36)	-24.58 (64)	-17.57 (64)	7.70 (46)	8.62 (45)	10.92 (38)	N/A	9.42 (46)	01/01/2014
Russell 3000 Index	-4.46	-24.62	-17.63	7.70	8.62	10.90	11.39	9.40	
Variance	0.02	0.04	0.06	0.00	0.00	0.02	N/A	0.02	
IM U.S. All Cap Core Equity (SA+CF) Median	-4.56	-23.88	-17.01	7.49	8.41	10.47	11.23	9.08	
Baird Mid Cap Growth	0.56 (22)	-30.16 (30)	-25.05 (19)	6.73 (36)	10.22 (17)	11.00 (33)	N/A	8.98 (54)	07/01/2014
Russell Midcap Growth Index	-0.65	-31.45	-29.50	4.26	7.62	9.54	10.85	8.13	
Variance	1.21	1.29	4.45	2.47	2.60	1.46	N/A	0.85	
IM U.S. Mid Cap Growth Equity (SA+CF) Median	-1.71	-32.31	-29.83	5.32	8.77	10.24	11.24	9.11	
Nuance Mid Cap Value	-8.52 (95)	-14.34 (17)	-10.60 (45)	2.90 (88)	N/A	N/A	N/A	5.16 (72)	04/01/2019
Russell Midcap Value Index	-4.93	-20.36	-13.56	4.50	4.76	7.66	9.44	5.14	
Variance	-3.59	6.02	2.96	-1.60	N/A	N/A	N/A	0.02	
IM U.S. Mid Cap Value Equity (SA+CF) Median	-4.63	-18.11	-11.54	6.12	5.90	8.71	10.33	6.72	
Kennedy Small Cap Value	-4.32 (48)	-23.44 (87)	-15.02 (66)	6.81 (43)	3.04 (81)	N/A	N/A	7.89 (79)	03/01/2016
Russell 2000 Value Index	-4.61	-21.12	-17.69	4.72	2.87	7.42	7.94	8.47	
Variance	0.29	-2.32	2.67	2.09	0.17	N/A	N/A	-0.58	
IM U.S. Small Cap Value Equity (SA+CF) Median	-4.46	-19.26	-13.87	6.31	4.24	8.22	9.73	9.34	

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 September 30, 2022

	Performance (%)								Inception	Inception Date
	QTR	YTD	1 YR	3 YR	5 YR	7 YR	10 YR			
International Equity	-9.91 (48)	-32.08 (75)	-30.15 (68)	-1.94 (71)	-1.90 (80)	2.06 (88)	N/A	2.58 (71)	05/01/2013	
MSCI AC World ex USA	-9.80	-26.18	-24.79	-1.07	-0.34	3.78	3.48	2.32		
Variance	-0.11	-5.90	-5.36	-0.87	-1.56	-1.72	N/A	0.26		
IM International Equity (SA+CF+MF) Median	-10.03	-28.28	-27.07	-0.82	-0.47	3.96	4.39	3.46		
Driehaus International Small Cap Growth	-9.33 (41)	-34.99 (48)	-34.52 (51)	1.94 (11)	1.66 (9)	5.32 (11)	7.07 (10)	7.43 (10)	09/01/2012	
MSCI AC World ex USA Small Growth	-7.88	-33.66	-33.13	0.76	0.19	4.36	4.77	5.23		
Variance	-1.45	-1.33	-1.39	1.18	1.47	0.96	2.30	2.20		
IM International SMID Cap Growth Equity (MF) Median	-9.85	-35.17	-34.49	-1.99	-1.67	3.10	4.24	4.57		
Thompson Siegel & Walmsley	-10.45 (87)	-26.96 (43)	-24.11 (32)	-0.93 (60)	-1.21 (79)	2.22 (84)	N/A	1.14 (89)	10/01/2014	
MSCI EAFE (Net) Index	-9.36	-27.09	-25.13	-1.83	-0.84	2.84	3.67	1.33		
Variance	-1.09	0.13	1.02	0.90	-0.37	-0.62	N/A	-0.19		
IM International Large Cap Core Equity (SA+CF) Median	-9.25	-27.47	-25.49	-0.50	0.09	3.84	4.70	2.34		
WCM Focused Intl Growth LP	-7.28 (4)	-36.54 (85)	-33.07 (75)	N/A	N/A	N/A	N/A	-12.18 (52)	12/01/2020	
MSCI AC World ex USA Growth (Net)	-9.37	-31.84	-30.22	-1.38	0.18	4.09	3.95	-14.28		
Variance	2.09	-4.70	-2.85	N/A	N/A	N/A	N/A	2.10		
IM International Large Cap Growth Equity (MF) Median	-9.57	-30.90	-28.73	-0.84	-0.14	3.19	3.89	-12.11		
Wellington Emerging Markets Fund	-13.93 (93)	-31.60 (80)	-32.42 (81)	N/A	N/A	N/A	N/A	-7.33 (92)	02/01/2020	
MSCI Emerging Markets (Net) Index	-11.57	-27.16	-28.11	-2.07	-1.81	3.88	1.05	-4.64		
Variance	-2.36	-4.44	-4.31	N/A	N/A	N/A	N/A	-2.69		
IM Emerging Markets Equity (SA+CF) Median	-10.19	-27.04	-27.47	-0.62	-0.89	4.84	2.41	-2.96		
Total Other Equity	-0.22	25.11	27.48	10.64	9.07	N/A	N/A	6.27	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 September 30, 2022

	Performance (%)								Inception	Inception Date
	QTR	YTD	1 YR	3 YR	5 YR	7 YR	10 YR			
Total Fixed Income	-3.21	-14.52	-14.58	-2.96	-1.16	0.27	0.17	5.57	12/01/1993	
Total Fixed Income Policy	-5.39	-17.76	-17.97	-4.32	-1.19	0.11	0.11	4.03		
Variance	2.18	3.24	3.39	1.36	0.03	0.16	0.06	1.54		
Orleans Capital	-4.66 (63)	-15.00 (78)	-15.20 (79)	-3.34 (97)	-0.32 (98)	0.72 (85)	N/A	1.25 (96)	01/01/2014	
Blmbg. U.S. Aggregate Index	-4.75	-14.61	-14.60	-3.26	-0.27	0.54	0.89	1.23		
Variance	0.09	-0.39	-0.60	-0.08	-0.05	0.18	N/A	0.02		
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	-4.55	-14.43	-14.48	-2.70	0.18	1.07	1.37	1.71		
Pimco Diversified Income Fund	-2.55 (25)	-17.69 (51)	-17.73 (52)	N/A	N/A	N/A	N/A	-5.27 (36)	07/01/2020	
Blmbg. Global Credit (Hedged)	-3.84	-16.51	-16.53	-3.37	0.08	1.76	2.13	-5.80		
Variance	1.29	-1.18	-1.20	N/A	N/A	N/A	N/A	0.53		
IM Global Fixed Income (MF) Median	-4.13	-17.36	-17.63	-4.56	-1.13	0.24	-0.26	-6.60		
Total Other Fixed Income	0.01	-0.51	-0.08	4.42	3.60	N/A	N/A	2.88	01/01/2017	
Capital Point Partners (Princeton Capital)										
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 September 30, 2022

	Performance (%)							Inception	Inception Date
	QTR	YTD	1 YR	3 YR	5 YR	7 YR	10 YR		
Alternative Investments									
Multi Asset Funds	-3.45	-15.98	-14.37	-0.54	1.24	0.90	1.28	4.34	12/01/2008
HFRI Fund of Funds Composite Index	-0.41	-6.97	-6.57	4.13	3.06	3.16	3.46	3.41	
Variance	-3.04	-9.01	-7.80	-4.67	-1.82	-2.26	-2.18	0.93	
BlackRock Multi Asset Fund	-3.45	-15.98	-14.37	-0.54	N/A	N/A	N/A	0.85	02/01/2018
BlackRock Multi Hybrid	-5.40	-20.02	-16.91	0.97	N/A	N/A	N/A	1.95	
Variance	1.95	4.04	2.54	-1.51	N/A	N/A	N/A	-1.10	
Other Assets									
Cash Account	0.55	0.70	0.68	0.52	1.04	0.86	0.61	4.13	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	12/01/2004
Other Alternative Assets									
Total Real Estate	0.62	10.91	21.84	11.86	8.89	6.63	9.48	5.30	08/01/2005
NCREIF Property Index	0.57	9.35	16.08	9.91	8.62	8.45	9.48	8.39	
Variance	0.05	1.56	5.76	1.95	0.27	-1.82	0.00	-3.09	
Morgan Stanley	-0.06	10.20	20.78	11.24	9.67	N/A	N/A	9.50	01/01/2016
NCREIF Fund Index-ODCE (EW)	0.77	13.32	21.68	12.13	9.87	9.42	10.26	9.27	
Variance	-0.83	-3.12	-0.90	-0.89	-0.20	N/A	N/A	0.23	
Brookfield Premier Real Estate Partners	2.60	18.33	32.10	N/A	N/A	N/A	N/A	15.30	11/01/2019
NCREIF Fund Index-ODCE (EW)	0.77	13.32	21.68	12.13	9.87	9.42	10.26	12.49	
Variance	1.83	5.01	10.42	N/A	N/A	N/A	N/A	2.81	
Stockbridge Smart Markets	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.61	08/01/2022
NCREIF Fund Index-ODCE (EW)	0.77	13.32	21.68	12.13	9.87	9.42	10.26	0.77	
Variance	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-0.16	
Total Timber Funds	5.23	25.20	22.22	9.06	6.50	2.73	2.80	3.05	08/01/2005
NCREIF Timberland Index	2.38	7.64	12.54	5.80	4.69	4.28	5.90	6.41	
Variance	2.85	17.56	9.68	3.26	1.81	-1.55	-3.10	-3.36	

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Comparative Performance Fiscal Year Returns

	Performance (%)									
	YTD	2021	2020	2019	2018	2017	2016	2015	2014	
Total Retirement System (Net)	-15.78	17.68	11.65	20.92	-6.18	11.89	7.67	-1.05	5.61	
Total Retirement System (Gross)	-15.62 (29)	17.86 (12)	11.99 (58)	21.23 (13)	-5.95 (88)	12.17 (91)	7.87 (46)	-0.83 (69)	5.94 (59)	
Total Fund Policy	-16.31	16.64	13.37	19.81	-3.13	15.78	8.04	2.43	8.08	
Variance	0.69	1.22	-1.38	1.42	-2.82	-3.61	-0.17	-3.26	-2.14	
All Public Plans-Total Fund Median	-17.47	13.97	12.54	18.58	-4.02	15.12	7.67	-0.13	6.33	
Total Equity	-21.31	21.06	15.97	29.88	-9.83	18.49	11.41	-2.87	5.30	
Total Equity Policy	-24.91	22.48	17.62	29.04	-7.34	22.07	9.61	-0.51	6.91	
Variance	3.60	-1.42	-1.65	0.84	-2.49	-3.58	1.80	-2.36	-1.61	
Domestic Equity	-24.02 (54)	24.49 (56)	19.11 (42)	31.15 (36)	-7.18 (54)	17.39 (59)	15.76 (36)	-3.09 (70)	8.03 (64)	
Russell 3000 Index	-24.62	25.66	20.89	31.02	-5.24	21.13	12.74	0.48	12.56	
Variance	0.60	-1.17	-1.78	0.13	-1.94	-3.74	3.02	-3.57	-4.53	
IM U.S. Equity (SA+CF+MF) Median	-23.43	25.60	15.39	28.76	-6.58	19.21	12.51	-0.60	10.14	
NT Collective Russell 3000 Index	-24.58 (64)	25.68 (57)	20.83 (41)	31.02 (36)	-5.23 (54)	21.15 (49)	12.79 (37)	0.49 (46)	12.55 (47)	
Russell 3000 Index	-24.62	25.66	20.89	31.02	-5.24	21.13	12.74	0.48	12.56	
Variance	0.04	0.02	-0.06	0.00	0.01	0.02	0.05	0.01	-0.01	
IM U.S. All Cap Core Equity (SA+CF) Median	-23.88	26.27	18.60	29.22	-5.10	20.92	10.82	0.35	12.23	
Baird Mid Cap Growth	-30.16 (30)	21.76 (10)	35.15 (58)	36.27 (52)	-1.60 (33)	26.98 (37)	5.35 (50)	-3.03 (82)	N/A	
Russell Midcap Growth Index	-31.45	12.73	35.59	35.47	-4.75	25.27	7.33	-0.20	11.90	
Variance	1.29	9.03	-0.44	0.80	3.15	1.71	-1.98	-2.83	N/A	
IM U.S. Mid Cap Growth Equity (SA+CF) Median	-32.31	13.67	38.57	36.64	-4.26	25.98	5.29	1.22	8.69	
Nuance Mid Cap Value	-14.34 (17)	12.23 (100)	5.24 (45)	N/A	N/A	N/A	N/A	N/A	N/A	
Russell Midcap Value Index	-20.36	28.34	4.96	27.06	-12.29	13.34	20.00	-4.78	14.75	
Variance	6.02	-16.11	0.28	N/A	N/A	N/A	N/A	N/A	N/A	
IM U.S. Mid Cap Value Equity (SA+CF) Median	-18.11	29.42	4.63	29.05	-13.44	15.65	19.53	-3.06	11.93	
Kennedy Small Cap Value	-23.44 (87)	38.92 (15)	4.93 (51)	25.37 (47)	-19.83 (94)	12.51 (42)	N/A	N/A	N/A	
Russell 2000 Value Index	-21.12	28.27	4.63	22.39	-12.86	7.84	31.74	-7.47	4.22	
Variance	-2.32	10.65	0.30	2.98	-6.97	4.67	N/A	N/A	N/A	
IM U.S. Small Cap Value Equity (SA+CF) Median	-19.26	30.09	5.02	25.15	-14.11	11.56	27.22	-4.28	5.72	

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Comparative Performance

Total Fund

As of September 30, 2022

	Performance (%)									
	YTD	2021	2020	2019	2018	2017	2016	2015	2014	
International Equity	-32.08 (75)	11.90 (38)	12.54 (55)	20.92 (69)	-16.28 (65)	27.37 (64)	0.67 (70)	-2.40 (61)	-0.27 (27)	
MSCI AC World ex USA	-26.18	8.29	11.13	22.13	-13.78	27.77	5.01	-5.25	-3.44	
Variance	-5.90	3.61	1.41	-1.21	-2.50	-0.40	-4.34	2.85	3.17	
IM International Equity (SA+CF+MF) Median	-28.28	10.14	14.28	23.41	-14.92	29.67	2.83	-0.58	-3.33	
Driehaus International Small Cap Growth	-34.99 (48)	12.49 (49)	29.79 (17)	30.57 (11)	-16.92 (32)	41.19 (6)	-6.24 (89)	12.59 (11)	-4.32 (39)	
MSCI AC World ex USA Small Growth	-33.66	11.83	23.99	24.96	-18.07	33.99	-0.04	6.74	-3.35	
Variance	-1.33	0.66	5.80	5.61	1.15	7.20	-6.20	5.85	-0.97	
IM International SMID Cap Growth Equity (MF) Median	-35.17	12.40	14.79	24.29	-19.24	34.22	-0.76	6.36	-5.14	
Thompson Siegel & Walmsley	-26.96 (43)	13.82 (31)	6.62 (78)	21.18 (69)	-15.93 (74)	22.70 (93)	0.47 (64)	1.38 (40)	N/A	
MSCI EAFE (Net) Index	-27.09	11.26	7.82	22.01	-13.79	25.03	1.00	-0.81	-4.90	
Variance	0.13	2.56	-1.20	-0.83	-2.14	-2.33	-0.53	2.19	N/A	
IM International Large Cap Core Equity (SA+CF) Median	-27.47	12.09	11.76	23.49	-14.32	27.80	1.53	0.63	-3.67	
WCM Focused Intl Growth LP	-36.54 (85)	17.64 (3)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
MSCI AC World ex USA Growth (Net)	-31.84	5.09	22.20	27.34	-14.43	32.01	0.12	-1.25	-2.65	
Variance	-4.70	12.55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
IM International Large Cap Growth Equity (MF) Median	-30.90	8.88	20.00	27.50	-14.67	28.61	-1.94	0.25	-4.47	
Wellington Emerging Markets Fund	-31.60 (80)	-2.23 (63)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
MSCI Emerging Markets (Net) Index	-27.16	-2.54	18.31	18.42	-14.57	37.28	11.19	-14.92	-2.19	
Variance	-4.44	0.31	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
IM Emerging Markets Equity (SA+CF) Median	-27.04	0.87	18.63	20.62	-15.23	36.81	9.70	-12.16	0.02	
Total Other Equity	25.11	13.85	-5.66	65.17	-22.42	-17.60	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										

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Comparative Performance

Total Fund

As of September 30, 2022

	Performance (%)								
	YTD	2021	2020	2019	2018	2017	2016	2015	2014
Total Fixed Income	-14.52	1.69	4.10	4.08	0.06	2.86	4.36	-0.97	1.69
Total Fixed Income Policy	-17.76	-2.05	8.28	7.93	-0.66	5.60	2.77	-1.37	3.20
Variance	3.24	3.74	-4.18	-3.85	0.72	-2.74	1.59	0.40	-1.51
Orleans Capital	-15.00 (78)	-1.34 (57)	7.16 (93)	8.80 (69)	0.07 (47)	3.87 (59)	3.79 (29)	0.57 (73)	5.08 (94)
Blmbg. U.S. Aggregate Index	-14.61	-1.55	7.51	8.72	0.01	3.54	2.65	0.55	5.97
Variance	-0.39	0.21	-0.35	0.08	0.06	0.33	1.14	0.02	-0.89
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	-14.43	-1.23	8.51	9.19	0.06	4.01	3.10	0.82	6.14
Pimco Diversified Income Fund	-17.69 (51)	0.26 (5)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Blmbg. Global Credit (Hedged)	-16.51	-0.41	7.53	12.08	-0.81	5.89	7.33	-0.20	6.64
Variance	-1.18	0.67	N/A	N/A	N/A	N/A	N/A	N/A	N/A
IM Global Fixed Income (MF) Median	-17.36	-2.73	8.15	8.08	-1.78	6.82	2.92	-3.83	1.90
Total Other Fixed Income	-0.51	12.76	0.48	3.66	1.27	-0.49	N/A	N/A	N/A
Capital Point Partners (Princeton Capital)									
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 September 30, 2022

	Performance (%)								
	YTD	2021	2020	2019	2018	2017	2016	2015	2014
Alternative Investments									
Multi Asset Funds	-15.98	7.17	6.62	13.23	-2.74	0.81	0.37	-1.70	-6.00
HFRI Fund of Funds Composite Index	-6.97	6.17	10.88	8.39	-4.02	7.77	0.51	-0.27	3.37
Variance	-9.01	1.00	-4.26	4.84	1.28	-6.96	-0.14	-1.43	-9.37
BlackRock Multi Asset Fund	-15.98	7.17	6.55	14.21	N/A	N/A	N/A	N/A	N/A
BlackRock Multi Hybrid	-20.02	9.69	12.49	18.11	-4.19	N/A	N/A	N/A	N/A
Variance	4.04	-2.52	-5.94	-3.90	N/A	N/A	N/A	N/A	N/A
Other Assets									
Cash Account	0.70	0.01	0.43	2.11	1.72	0.76	0.27	0.01	0.06
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	N/A	0.01	0.45	2.12	1.72	0.77	0.27	0.02	0.01
Other Alternative Assets									
Total Real Estate	10.91	24.27	-0.45	5.75	5.14	2.90	0.76	5.40	31.16
NCREIF Property Index	9.35	17.70	1.60	6.42	6.72	6.96	7.97	13.33	11.82
Variance	1.56	6.57	-2.05	-0.67	-1.58	-4.06	-7.21	-7.93	19.34
Morgan Stanley	10.20	21.48	1.26	6.16	7.96	8.74	9.20	N/A	N/A
NCREIF Fund Index-ODCE (EW)	13.32	21.88	0.75	5.18	7.30	6.92	8.36	14.18	11.42
Variance	-3.12	-0.40	0.51	0.98	0.66	1.82	0.84	N/A	N/A
Brookfield Premier Real Estate Partners	18.33	25.66	0.57	N/A	N/A	N/A	N/A	N/A	N/A
NCREIF Fund Index-ODCE (EW)	13.32	21.88	0.75	5.18	7.30	6.92	8.36	14.18	11.42
Variance	5.01	3.78	-0.18	N/A	N/A	N/A	N/A	N/A	N/A
Stockbridge Smart Markets	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NCREIF Fund Index-ODCE (EW)	13.32	21.88	0.75	5.18	7.30	6.92	8.36	14.18	11.42
Variance	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Timber Funds	25.20	6.99	1.43	-1.12	0.13	-3.94	-6.92	1.93	10.81
NCREIF Timberland Index	7.64	9.17	0.81	1.30	3.21	3.63	2.59	4.97	10.48
Variance	17.56	-2.18	0.62	-2.42	-3.08	-7.57	-9.51	-3.04	0.33

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 September 30, 2022

Comparative Performance - IRR									
	Market Value (\$)	MTH	QTR	YTD	1 YR	3 YR	5 YR	Inception IRR	Inception Date
Total Real Estate Investments	145,454,433	0.62	0.62	10.69	21.61	11.63	9.19	7.48	07/31/2005
Edison Investments	2,294,809	0.80	0.80	2.31	3.05	3.00	9.27	11.95	09/30/1996
Rockspring Capital Land Funds (I - VI)	1,435,908	-0.29	-0.29	-2.40	20.66	0.74	-3.18	1.22	11/30/2003
India Property Fund	190,619	0.00	0.00	-13.07	-18.48	-28.29	-31.54	-7.98	05/24/2007
Gainesville Property	1,644,315	0.00	0.00	-0.76	-0.76	-0.86	-3.23	-6.48	01/31/2008
Morgan Stanley	85,773,719	-0.06	-0.06	10.20	20.78	11.26	9.83	9.66	12/31/2015
AEW Partners Fund VIII	4,537,601	2.51	2.51	20.07	35.05	25.30	22.49	20.41	06/26/2017
GreenOak US III	10,134,731	0.00	0.00	0.29	8.57	2.76	N/A	-0.33	06/22/2018
Brookfield Premier Real Estate Partners	30,169,238	2.60	2.60	18.33	32.10	15.11	N/A	15.11	10/01/2019
Artemis Real Estate IV	25,398	0.00	0.00	N/A	N/A	N/A	N/A	-49.33	06/23/2022
Stockbridge Smart Markets	9,248,096	0.61	0.61	N/A	N/A	N/A	N/A	0.61	07/01/2022
Total Timber Funds	2,766,777	5.27	4.75	26.31	19.80	2.06	2.45	0.19	07/31/2005
Capitol Timberland Investments	1,244,881	12.51	9.98	46.04	37.14	6.32	5.17	3.92	09/30/2004
Domain Environmental Investments II	1,521,896	0.00	0.00	-1.25	-5.55	-6.20	-6.38	-2.16	04/30/2008
Total Other Equity	92,212,704	0.00	-0.22	23.21	26.23	14.62	14.27	38.26	01/01/2017
Huff Energy Fund	19,396,200	0.00	0.00	187.36	187.36	2.20	10.18	5.82	12/31/2006
Excelsior Investors, Ltd.	61,685	0.00	0.00	-7.59	-51.17	-23.02	-6.57	-10.73	12/31/2014
Franklin Park Private Equity	72,754,816	0.00	-0.29	5.13	7.65	23.18	N/A	20.68	01/31/2018
Sail Venture Fund I	1	0.00	0.00	0.00	0.00	0.00	-93.46	-62.93	12/31/2008
Sail Venture Fund II	1	0.00	0.00	0.00	0.00	0.00	-92.08	-74.91	02/28/2009
Sail Pre-Exit Acceleration Fund	1	0.00	0.00	0.00	0.00	0.00	-92.07	-79.81	01/31/2013
Total Other Fixed Income	12,622,830	0.00	0.01	-0.35	0.11	4.17	3.23	N/A	12/21/2016
Capital Point Partners (Princeton Capital)	3,361,325	0.00	0.00	2.82	2.33	-1.72	-5.05	-0.63	03/31/2007
LBC Credit Partners III	1,791,840	0.00	0.07	-7.96	-5.84	4.98	2.13	7.87	03/07/2014
LBC Credit Partners IV	4,319,850	0.00	0.00	1.18	0.69	6.10	6.85	7.62	09/19/2016
Providence Debt Fund III	3,149,815	0.00	0.00	-0.64	0.96	4.20	3.73	6.47	04/21/2014



**Summary of Partnerships
Other Alternative Investments
As of September 30, 2022**

Private Equity Summary of Partnership

Partnerships	Drawn Down \$	Market Value \$	Distributed \$	IRR (%)	TVPI Multiple
Total Real Estate Investments					
Edison Investments	8,146,177	2,294,809	19,965,278	12.0	2.7
Rockspring Capital Land Fund II	7,870,282	824,595	9,594,747	2.8	1.3
Rockspring Capital Land Fund III	5,125,000	611,313	6,348,708	3.3	1.4
India Property Fund	4,354,162	190,619	2,359,366	-8.0	0.6
Gainesville Property	5,492,283	1,644,315	744,796	-6.5	0.4
Morgan Stanley	50,000,000	85,773,719	-	9.7	1.7
AEW Partners Fund VIII	15,381,261	4,537,601	17,482,279	20.4	1.4
GreenOak US III	10,551,648	10,134,731	329,434	-0.3	1.0
Brookfield Premier Real Estate Partners	20,000,000	30,169,238	-	15.1	1.5
Artemis Real Estate IV	50,124	25,398	-	-49.3	0.5
Stockbridge Smart Markets	9,191,727	9,248,096	-	0.6	1.0
Total Timber Investments					
Capitol Timberland Investments	14,563,707	1,244,881	21,716,765	3.9	1.6
Domain Environmental Investments II	7,623,603	1,521,896	4,943,231	-2.2	0.8

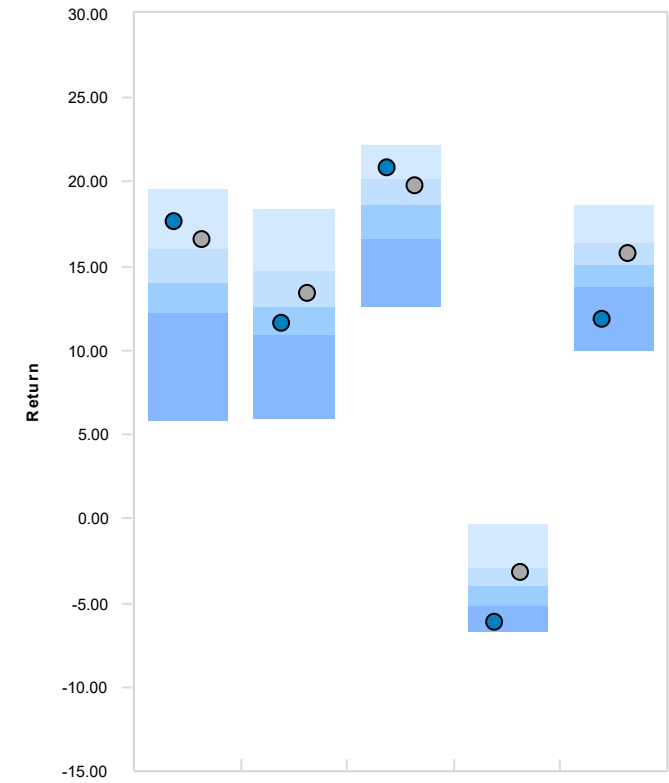
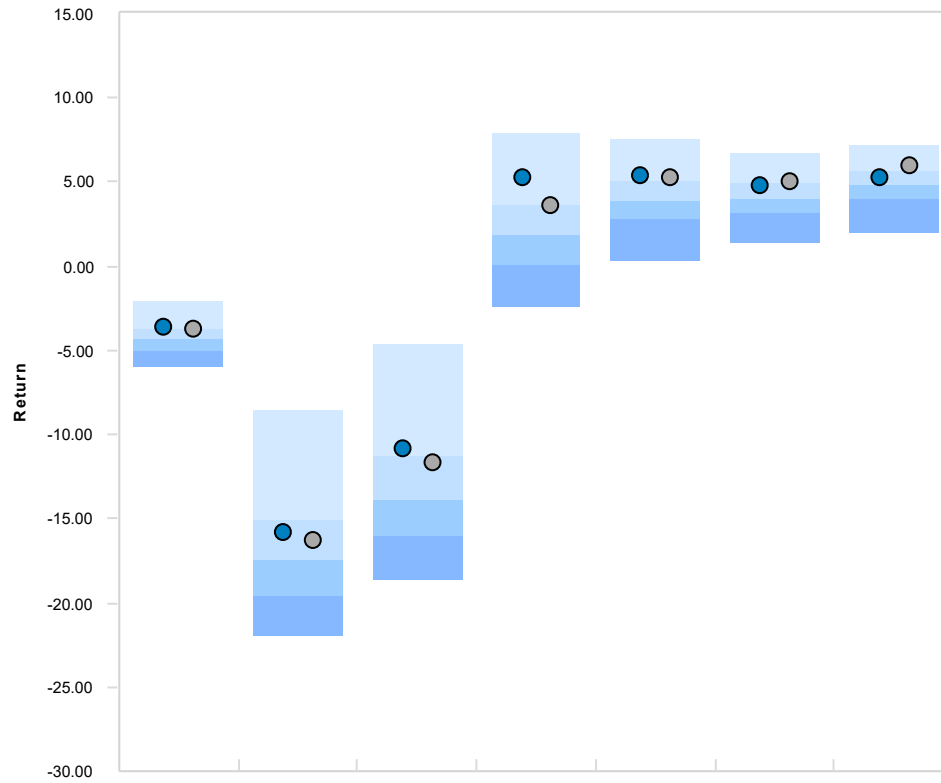


**Summary of Partnerships
Other Alternative Investments
As of September 30, 2022**

Partnerships	Drawn Down \$	Market Value \$	Distributed \$	IRR (%)	TVPI Multiple
Total Other Equity					
Huff Energy Fund	11,095,509	19,396,200	1,786,358	5.8	1.9
Excelsior Investors, Ltd.	1,018,466	61,685	478,641	-10.7	0.5
Franklin Park Private Equity	58,520,449	72,754,816	6,863,633	20.7	1.4
Sail Venture Fund I	5,000,000	1	343,503	-62.9	0.1
Sail Venture Fund II	5,366,749	1	688,247	-74.9	0.1
Sail Pre-Exit Acceleration Fund	4,947,894	1	-	-79.8	0.0
Total Other Fixed Income					
Capital Point Partners (Princeton Capital)	12,058,210	3,361,325	8,286,461	-0.6	1.0
LBC Credit Partners III	18,851,406	1,791,840	21,376,493	7.9	1.2
LBC Credit Partners IV	18,000,000	4,319,850	17,297,291	7.6	1.2
Providence Debt Fund III	11,128,113	3,149,815	11,237,778	6.5	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	-3.60 (22)	-15.78 (30)	-10.83 (22)	5.29 (16)	5.42 (20)	4.83 (27)	5.30 (35)
● Total Fund Policy	-3.69 (25)	-16.31 (36)	-11.68 (28)	3.59 (26)	5.34 (22)	5.06 (22)	6.00 (18)
Median	-4.31	-17.47	-13.93	1.82	3.92	4.02	4.78

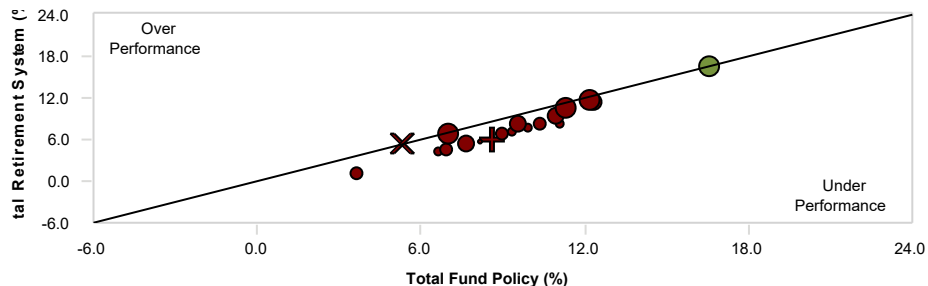
	2021	2020	2019	2018	2017
● Total Retirement System	17.68 (13)	11.65 (64)	20.92 (17)	-6.18 (91)	11.89 (92)
● Total Fund Policy	16.64 (22)	13.37 (39)	19.81 (31)	-3.13 (32)	15.78 (37)
Median	13.97	12.54	18.58	-4.02	15.12

Comparative Performance

	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021
Total Retirement System	-9.89 (51)	-3.04 (22)	5.88 (7)	0.97 (19)	6.05 (21)	3.80 (33)
Total Fund Policy	-10.34 (62)	-3.08 (23)	5.53 (13)	0.96 (19)	5.78 (30)	3.50 (44)
All Public Plans-Total Fund Median	-9.88	-4.29	4.34	0.05	5.43	3.27

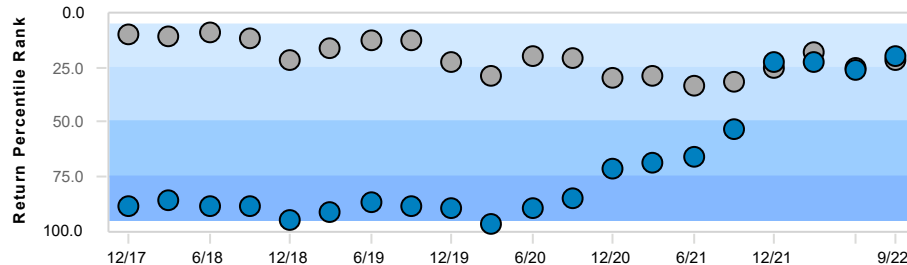


3 Yr Rolling Under/Over Performance - 5 Years



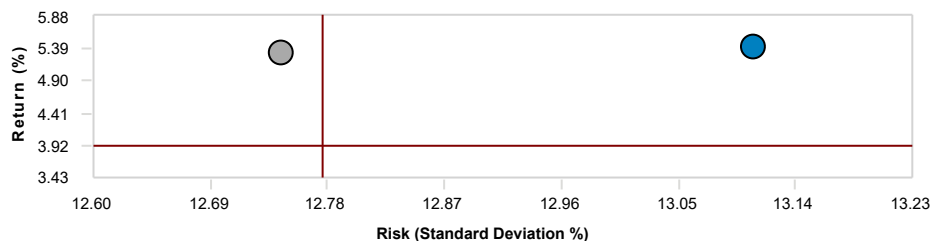
● Over Performance ● Under Performance
+ Earliest Date X Latest Date

3 Yr Rolling Percentile Ranking - 5 Years



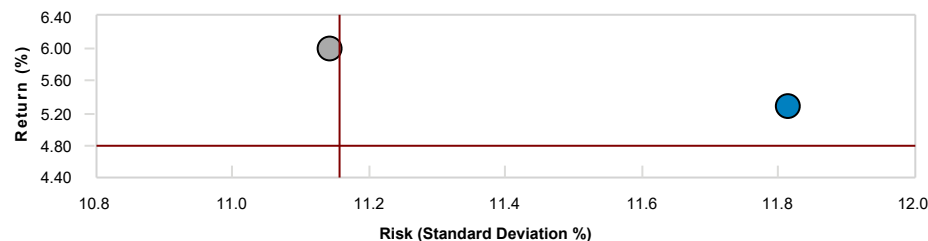
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
● Total Retirement System	20	3 (15%)	1 (5%)	4 (20%)	12 (60%)
● Total Fund Policy	20	15 (75%)	5 (25%)	0 (0%)	0 (0%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
● Total Retirement System	5.42	13.11
● Total Fund Policy	5.34	12.74
— Median	3.92	12.78

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
● Total Retirement System	5.30	11.81
● Total Fund Policy	6.00	11.14
— Median	4.78	11.16

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Retirement System	1.51	102.72	103.02	-0.01	0.08	0.42	1.02	9.13
Total Fund Policy	0.00	100.00	100.00	0.00	N/A	0.42	1.00	8.84

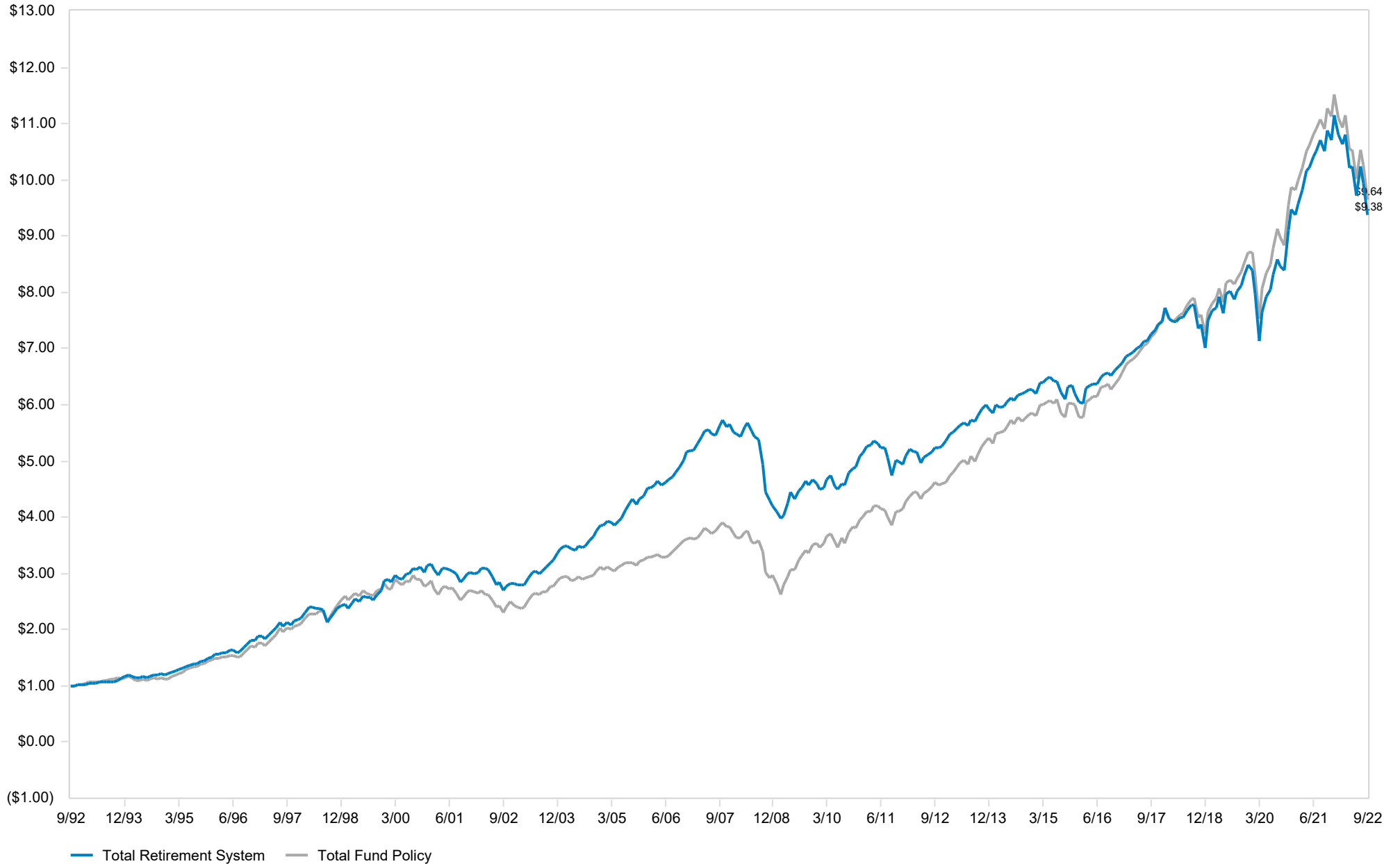
Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Retirement System	1.73	101.68	107.29	-0.90	-0.34	0.40	1.05	8.16
Total Fund Policy	0.00	100.00	100.00	0.00	N/A	0.47	1.00	7.67



**Growth of \$1
Total Retirement System
Since Inception Ending September 30, 2022**

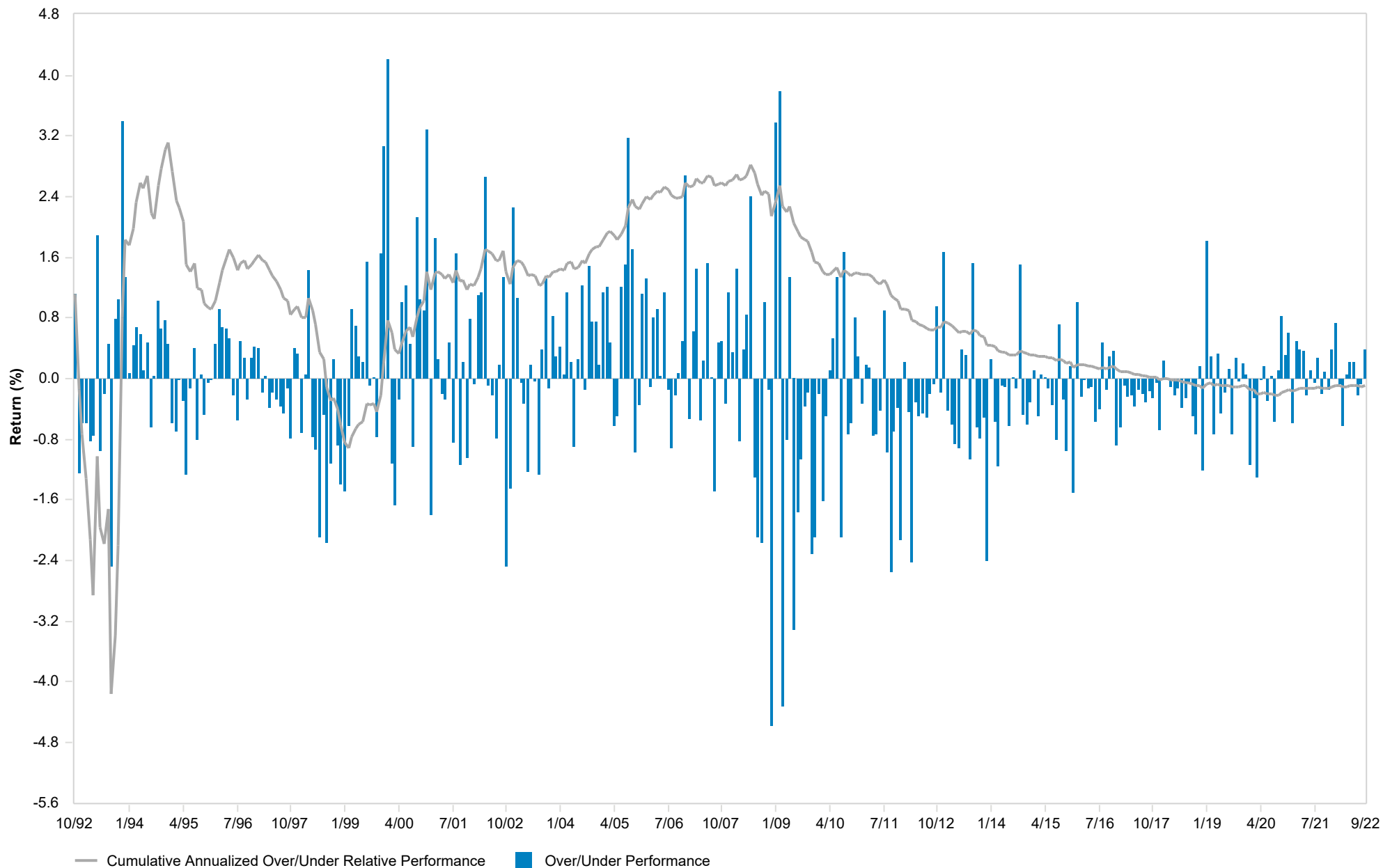
Growth of \$1



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 90% 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 40% 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.	•		



**Austin Police Retirement System
Compliance Checklist
As of September 30, 2022**

	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.	•			•			•			•				•	

	WCM			Wellington			Orleans			PIMCO		
	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 9/30/2022

Plan	Most Recent Statement Date	Statement Frequency	Statement Source
Total Retirement System			
Total Equity			
Total Domestic Equity			
NT Collective Russell 3000 Fund	9/30/2022	Monthly	Custodian
Baird Mid Cap Growth	9/30/2022	Monthly	Custodian
Nuance Mid Cap Value	9/30/2022	Monthly	Custodian
Kennedy Small Cap Value	9/30/2022	Monthly	Custodian
Total International Equity			
Thompson Siegel & Walmsley	9/30/2022	Monthly	Custodian
Driehaus International Small Cap Growth	9/30/2022	Monthly	Custodian
WCM Focused Intl	9/30/2022	Monthly	Custodian
Wellington Emerging Markets	9/30/2022	Monthly	Custodian
Total Other Equity			
Huff Energy Fund	12/31/2021	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.	6/30/2022	Quarterly	Manager
Franklin Park	6/30/2022	Quarterly	Manager
Total Fixed Income			
Total Fixed Income Funds			
Orleans Capital	9/30/2022	Monthly	Custodian

Austin Police Retirement System
Investment Pricing Summary
as of 9/30/2022

Plan	Most Recent Statement Date	Statement Frequency	Statement Source
PIMCO Diversified	9/30/2022	Monthly	Custodian
Total Other Fixed Income Funds			
Capital Point Partners	6/30/2022	Quarterly	Manager
LBC Credit Partners III	6/30/2022	Quarterly	Manager
LBC Credit Partners IV	6/30/2022	Quarterly	Manager
Providence Debt Fund III	6/30/2022	Quarterly	Manager
Total Alternatives			
Total Real Estate (Composite)(6091100)			
Rockspring Capital Land Funds (I - VI)	9/30/2022	Quarterly	Manager
Rockspring Capital Land Fund II	9/30/2022	Quarterly	Manager
Rockspring Capital Land Fund III	9/30/2022	Quarterly	Manager
Edison Investments	9/30/2022	Quarterly	Manager
India Property Fund	6/30/2022	Quarterly	Manager
Gainesville Property	12/31/2017	Quarterly	Manager
Morgan Stanley	9/30/2022	Quarterly	Manager
AEW Parters VIII	6/30/2022	Quarterly	Manager
GreenOak US III	6/30/2022	Quarterly	Manager
Brookfield	6/30/2022	Quarterly	Manager
Artemis IV	6/30/2022	Quarterly	Manager
Stockbridge	9/30/2022	Quarterly	Manager
Total Timber Funds			
Capitol Timberland Investments	9/30/2022	Quarterly	Manager

Austin Police Retirement System
Investment Pricing Summary
as of 9/30/2022

Plan	Most Recent Statement Date	Statement Frequency	Statement Source
Domain Environmental	6/30/2022	Quarterly	Manager
Total Multi Asset Funds			
BlackRock Multi Asset	9/30/2022	Monthly	Manager
Cash Account	9/30/2022	Monthly	Custodian
PE Cash Account	9/30/2022	Monthly	Custodian
APRS Building			

	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
Total Domestic Equity	0.35	374,302,341	1,308,130	
NT Collective Russell 3000 Index	0.02	213,587,521	42,718	0.02 % of Assets
Baird Mid Cap Growth	0.70	51,260,723	357,564	0.70 % of First \$50 M 0.60 % Thereafter
Nuance Mid Cap Value	0.67	56,912,148	382,429	0.70 % of First \$25 M 0.65 % Thereafter
Kennedy Small Cap Value	1.00	52,541,949	525,419	1.00 % of Assets
Total International Equity	0.82	105,918,507	868,703	
Thompson Siegel & Walmsley	0.65	41,022,744	266,648	0.65 % of Assets
Driehaus International Small Cap Growth	1.24	17,105,179	212,104	1.24 % of Assets
WCM Focused Intl Growth LP	0.85	31,521,280	267,931	0.85 % of Assets
Wellington Emerging Markets Fund	0.75	16,269,304	122,020	0.75 % of Assets
Total Other Equity	0.37	92,212,704	341,887	
Huff Energy Fund	0.77	19,396,200	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.	16.21	61,685	10,000	
*Franklin Park Private Equity	0.25	72,754,816	181,887	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	0.55	102,196,927	562,889	
Orleans Capital	0.15	45,378,751	68,068	0.15 % of Assets
Pimco Diversified Income Fund	0.75	44,195,347	331,465	0.75 % of Assets
Total Other Fixed Income	1.29	12,622,830	163,356	
Capital Point Partners (Princeton Capital)	1.65	3,361,325	55,462	
LBC Credit Partners III	1.25	1,791,840	22,398	
LBC Credit Partners IV	1.25	4,319,850	53,998	
Providence Debt Fund III	1.00	3,149,815	31,498	



	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
Total Real Estate	0.96	145,454,433	1,392,224	
Rockspring Capital Land Fund II	1.25	824,595	10,307	1.25 % of Assets
Rockspring Capital Land Fund III	1.25	611,313	7,641	1.25 % of Assets
Edison Investments	1.00	2,294,809	22,948	1.00 % of Assets
India Property Fund	2.00	190,619	3,812	2.00 % of Assets
Gainesville Property	0.00	1,644,315	-	0.00 % of Assets
Morgan Stanley	0.90	85,773,719	771,963	0.90 % of Assets
AEW Partners Fund VIII	1.25	4,537,601	56,720	1.25 % of Assets
GreenOak US III	1.50	10,134,731	152,021	1.50 % of Assets
Brookfield Premier Real Estate Partners	1.00	30,169,238	301,692	1.00 % of Assets
Artemis Real Estate IV	1.50	25,398	381	1.50 % of Assets
Stockbridge Smart Markets	0.70	9,248,096	64,737	0.70 % of Assets
Total Timber Funds	1.14	2,766,777	31,473	
Capitol Timberland Investments	1.00	1,244,881	12,449	1.00 % of Assets
Domain Environmental Investments II	1.25	1,521,896	19,024	1.25 % of Assets
Total Multi Asset Funds	0.57	50,531,234	288,028	
BlackRock Multi Asset Fund	0.57	50,531,234	288,028	0.57 % of Assets
Cash Account	0.00	17,863,183	-	0.00 % of Assets
APRS Building	0.00	1,701,375	-	0.00 % of Assets
Total Retirement System	0.54	892,947,481	4,793,334	



Total Fund Policy			
Allocation Mandate	Weight (%)	Allocation Mandate	Weight (%)
Jan-1976		Jan-2021	
S&P 500 Index	60.00	Russell 3000 Index	42.50
Blmbg. U.S. Aggregate Index	40.00	MSCI World ex U.S.	15.00
		Blmbg. U.S. Aggregate Index	10.00
		Blmbg. Global Credit	5.00
Jan-2014		NCREIF Property Index	15.00
Russell 3000 Index	30.00	HFRI Fund of Funds Composite Index	5.00
MSCI World ex U.S.	15.00	Credit Suisse Leveraged Loan Index	5.00
Blmbg. U.S. Aggregate Index	5.00	Cambridge Associates Private Equity Index	2.50
Blmbg. Global Multiverse	5.00		
NCREIF Property Index	15.00	Mar-2022	
NCREIF Timberland Index (Monthly)	5.00	Russell 3000 Index	45.00
Russell 3000 + 300 bps	12.50	MSCI World ex U.S.	15.00
HFRI Fund of Funds Composite Index	10.00	Blmbg. U.S. Aggregate Index	5.00
FTSE 3 Month T-Bill	2.50	Blmbg. Global Credit	5.00
		NCREIF Property Index	15.00
Jan-2017		HFRI Fund of Funds Composite Index	5.00
Russell 3000 Index	45.00	Credit Suisse Leveraged Loan Index	2.50
MSCI World ex U.S.	15.00	Cambridge Associates Private Equity Index	7.50
Blmbg. U.S. Aggregate Index	5.00		
Blmbg. Global Multiverse	5.00		
NCREIF Property Index	15.00		
NCREIF Timberland Index (Monthly)	2.50		
HFRI Fund of Funds Composite Index	5.00		
Credit Suisse Leveraged Loan Index	5.00		
Cambridge Associates Private Equity Index	2.50		
Jan-2018			
Russell 3000 Index	42.50		
MSCI World ex U.S.	15.00		
Blmbg. U.S. Aggregate Index	10.00		
Blmbg. 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		



Total Equity Policy		Total Private Equity Policy		Wellington Energy Hybrid	
Allocation Mandate	Weight (%)	Allocation Mandate	Weight (%)	Allocation Mandate	Weight (%)
Jan-1979		May-2013		Jan-1999	
Russell 3000 Index	67.00	Russell 3000 Index	100.00	Russell 3000 Energy SP	100.00
MSCI World ex U.S.	33.00				
Jan-2017		Jan-2017		Oct-2015	
Russell 3000 Index	75.00	Credit Suisse Leveraged Loan Index	67.00	S&P 500 Energy	100.00
MSCI World ex U.S.	25.00	Cambridge Associates Private Equity Index	33.00		

Total Hedge Fund Policy	
Allocation Mandate	Weight (%)
Jan-1990	
HFRI Fund of Funds Composite Index	100.00

Total Fixed Income Policy	
Allocation Mandate	Weight (%)
Dec-1993	
Blmbg. U.S. Aggregate Index	100.00
Jan-1999	
Blmbg. U.S. Aggregate Index	50.00
Blmbg. Global Multiverse	50.00
Jan-2021	
Blmbg. U.S. Aggregate Index	50.00
Blmbg. Global Credit	50.00

Total Timber Policy	
Allocation Mandate	Weight (%)
Apr-1987	
NCREIF Timberland Index	100.00

Total Real Estate Policy	
Allocation Mandate	Weight (%)
Jan-1978	
NCREIF Property Index	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 7.25%
- Prior to 1/1/2009 Capital Point (Princeton Capital) 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.

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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