

Investment Performance Review
Period Ending June 30, 2023

Austin Police



2nd Quarter 2023 Market Environment



The Economy

- Though the Atlanta Fed GDPNow model forecasted weak GDP growth in 2023 as the impact from higher interest rates continued to spread through the broader economy, the first quarter GDP final revision of 2% was markedly higher than the 1.3% first reported.
- The US Federal Reserve Bank (the Fed) continued to increase interest rates during the quarter with an additional 0.25% increase in the Fed Funds rate in May, followed by a pause in June. The Fed continues to prioritize fighting high inflation with the press release from the June meeting detailing the extent that additional policy firming (i.e., rate increases) will consider the cumulative tightening of monetary policy, the lags with which monetary policy affects economic activity and inflation, and economic and financial developments.
- June brought some weakness in the US labor market as nonfarm payrolls increased by 209,000, below the expected 240,000 new jobs. This represented the slowest month for job creation since December 2020. Initial jobless also rose for the week ending July 1st.
- The global banking sector came under duress in the first quarter of 2023, triggered by the second and third-largest regional bank failures in US history. Fears of deterioration in the banking sector have waned, likely helped by aggressive intervention from the FDIC and Federal Reserve.

Equity (Domestic and International)

- US equities moved broadly higher during the second quarter led by growth-oriented sectors. The S&P 500 Benchmark rose 8.7% for the quarter, its best-performing quarter since Q4-2021. Large-cap growth was the best-performing domestic segment of the equity market during the period while small-cap value, while positive, was the weakest relative performer for the quarter.
- International stocks experienced modest returns during the quarter. Local currency (LCL) performance outpaced US Dollar (USD) performance in most regions though both benchmarks were positive as the USD traded higher during the quarter.
- Global GDP growth continues to face challenges despite falling energy prices. European growth remained under pressure amid hawkish central bank policies. While China has fully reopened after almost three years of COVID-19 restrictions, there have been challenges associated with the region re-integrating with the global economy.

Fixed Income

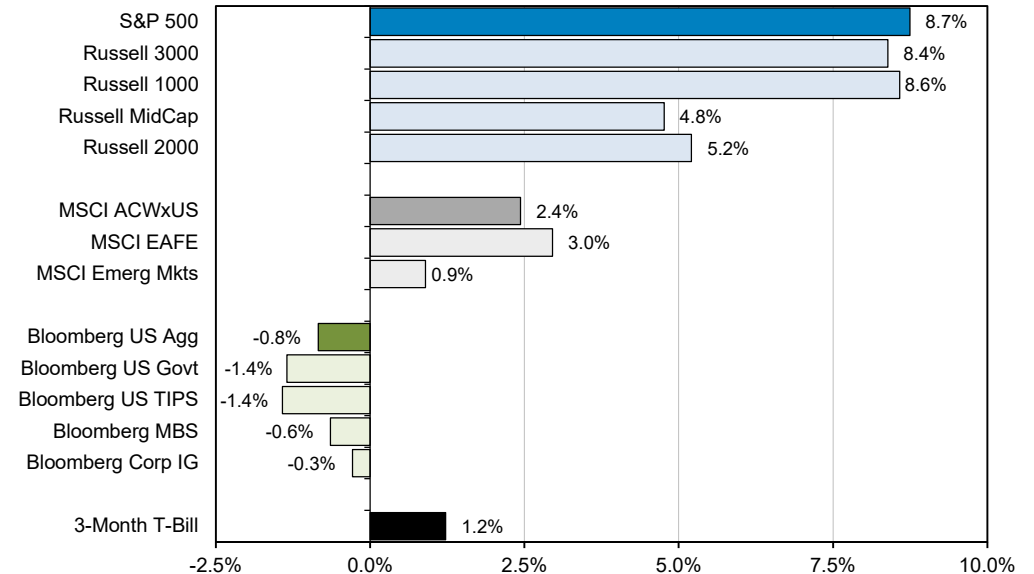
- While inflation continues to decline, the Fed maintained their inflation-fighting policy stance, increasing interest rates by 0.25% in May but opting to pause in June. The additional rate hike in May along with the possibility that additional rate hikes could occur in this tightening cycle, drove intermediate and long-term rates slightly higher during the quarter.
- US Government securities were the worst-performing sector during the quarter. US Treasuries lagged the corporate and securitized sectors as yields at longer maturities rose slightly and credit conditions were considered more favorable than the previous quarter.
- Corporate bonds with lower credit ratings held up better than higher quality issues, aided by narrowing credit spreads as well as their higher coupons. High-yield bonds were the best-performing segment of the domestic bond market, echoing the equity market's positive sentiment during the quarter.
- Global bonds underperformed US issues during the quarter and the trailing one-year period.

Market Themes

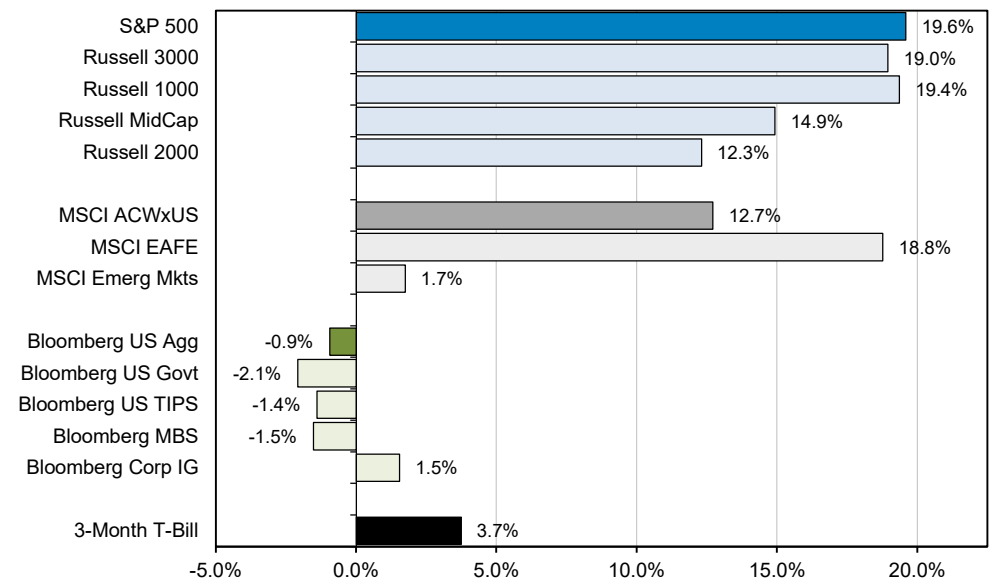
- Central banks remained vigilant in their fight against inflation with the Fed, the Bank of England, and the European Central foreshadowing the potential for further tightening with additional rate hikes in the coming months. GDP contraction in the Eurozone for the previous two quarters has been met with recovering asset prices in the most recent quarter as investors remain hopeful of future growth.
- The conflict in Ukraine continues without expectations of any resolution in the near future. Energy costs have subsided in recent months attributed to a mild winter in the Eurozone region and an increase in fossil fuel production in the US.
- Short-term interest rates rose across most developed markets as central banks continued to tighten policy stances. Despite previous concerns about the potential for slowing economic growth, lower-quality corporate bonds outpaced higher-quality government bonds as credit spreads narrowed.
- Both US and international equity markets continued to recover from the disappointing year that was 2022 on expectations that inflation would continue to moderate and central banks would slow the pace of their monetary tightening cycles. Growth has significantly outpaced value in the previous two quarters.

- Domestic equity markets started 2023 with solid results, led mostly by the large-cap names. The poor performance posted by domestic equities in the first half of 2022 has rolled off and now each index has turned positive on a trailing one-year basis. Factors contributing to the quarter's results include strong economic data in the face of higher benchmark rates and the expectation that the Fed would slow the pace of future interest rate increases. For the period, the S&P 500 large-cap benchmark returned 8.7% versus 4.8% for mid-cap and 5.2% for small-cap benchmarks.
- International developed and emerging market equities also delivered positive results, albeit lagging behind their domestic counterparts. Europe continues to face geopolitical risks related to the conflict in Ukraine and rising interest rates, though inflation has eased somewhat due to higher rates and more manageable energy prices. Performance in the emerging market index was led by the Latin America region whose regional index posted a strong 14.0% return in USD terms. The developed market MSCI EAFE Index returned 3.0% for the quarter and the MSCI Emerging Markets Index rose by 0.9%.
- The domestic bond market ebbed during the quarter due to higher rates from the Federal Reserve's decision to hike policy rates an additional 0.25%. The Bloomberg (BB) US Aggregate Index returned -0.8% for the period while investment-grade corporate bonds were down less with a return of -0.3%.
- During the one-year trailing period, US equity markets were positive as the weak performance from the first half of 2022 rolled off. The S&P 500 Index returned 19.6% for the year. The weakest relative performance for the year was the Russell 2000 Index, which still climbed 12.3% over the last 12-months.
- International markets also rolled off their poor performance in 2022. Over the trailing one-year period, the MSCI EAFE Index returned 18.8% while the MSCI Emerging Markets Index added a much more modest 1.7%. Concerns relating to the conflict in Ukraine continued to emanate throughout the region and globally. Elevated inflation and slowing global economic growth continue to be an additional headwind for global markets.
- Bond markets softened further, posting negative returns over the previous 1-year period for most indices. The primary driver of results during the first half of 2023 continues to be higher interest rates, which directly impact bond prices and index performance. Investment-grade corporate bonds were the only sector to post positive performance over the previous 12-months, adding 1.5%. The US Government sector suffered the most for the period, posting a return of -2.1%.

Quarter Performance



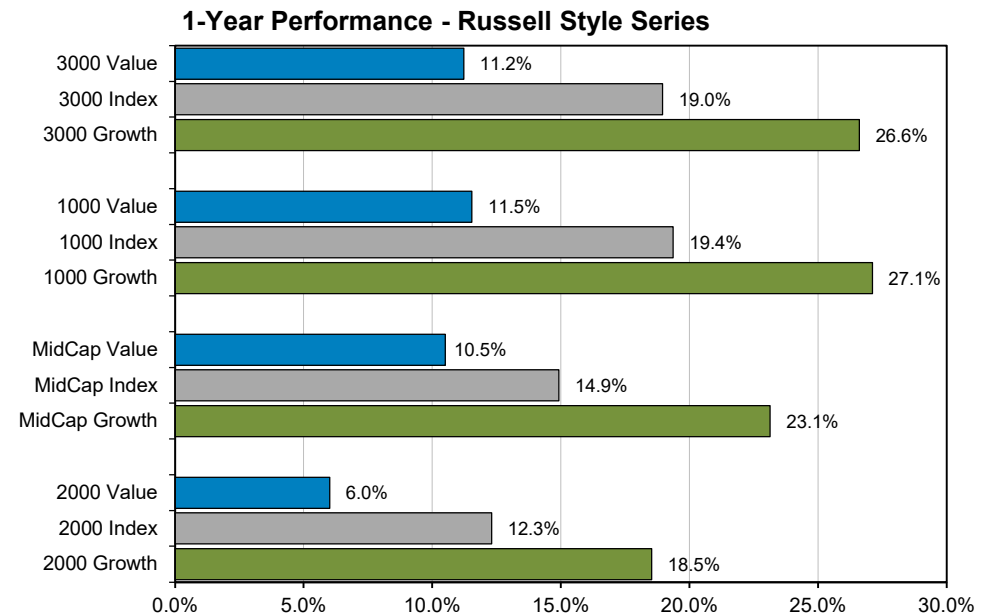
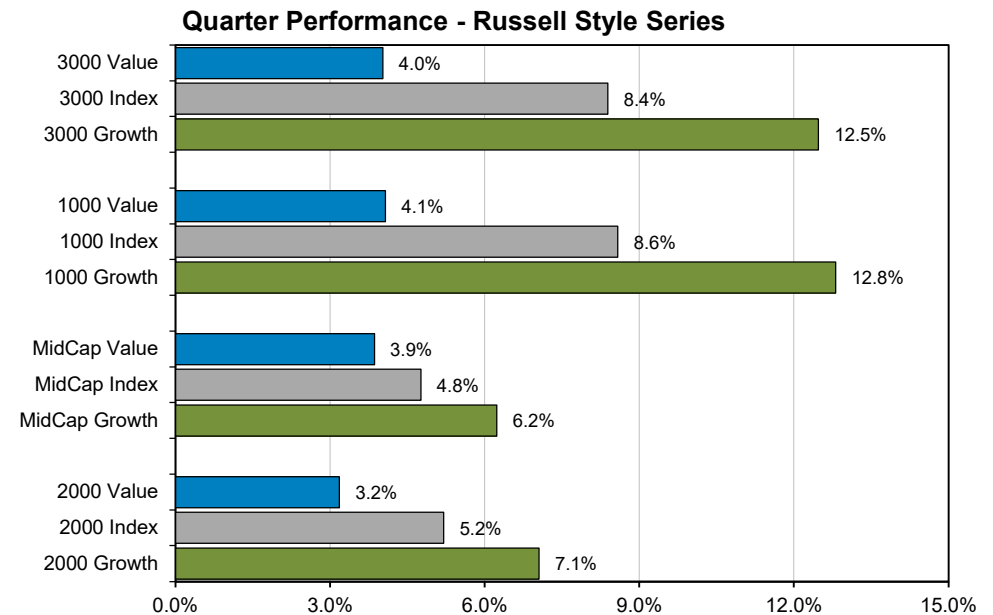
1-Year Performance



Source: Investment Metrics



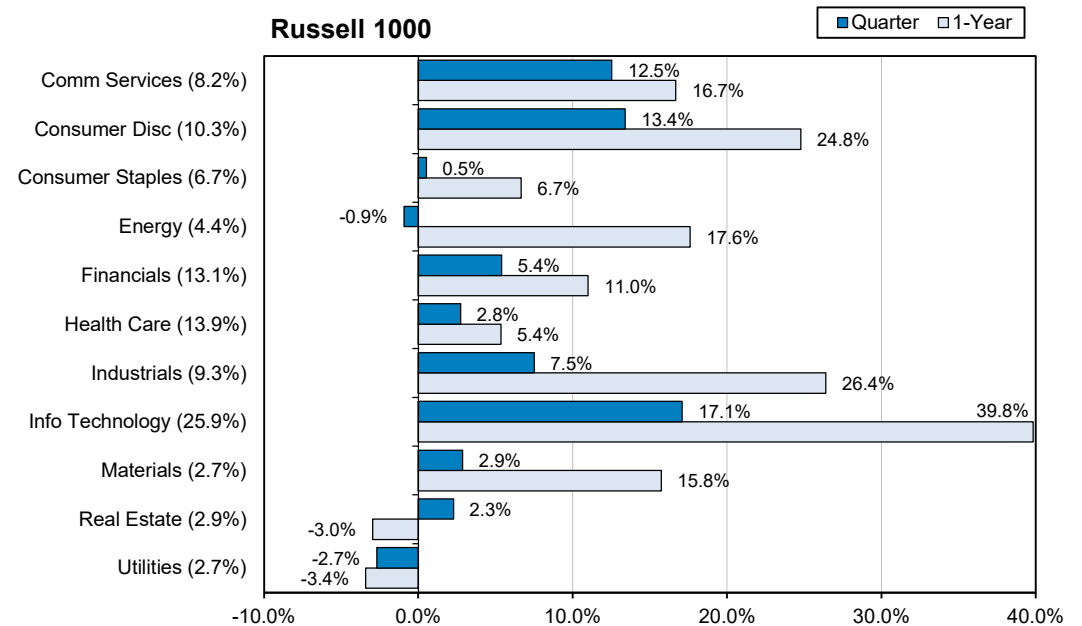
- Core domestic equity benchmarks posted positive results for the second quarter in a row. However, concerns regarding the regional banking sector and the financial sector's large weight in the value benchmarks weighed heavily on the broad value indices' performance in the first half of 2023. Large-cap stocks once again led results for the capitalization-based benchmarks, besting both the mid-cap and small-cap indices for the quarter. Growth benchmarks posted the strongest results as economic data continues to show favorable conditions for growth stocks. The Russell 1000 Growth Index topped the quarter, returning 12.8% followed by the Russell 2000 Growth Index and the Russell Midcap Growth Index, which rose by 7.1% and 6.2%, respectively.
- As previously stated, Growth stocks at all capitalization ranges outperformed their value counterparts by a wide margin for the quarter. This continued the 2023 theme of growth-based benchmark outperformance. Among the value benchmarks Large cap, mid-cap and small-cap value each posted positive performance for the quarter with the Russell 1000 Value Index leading the way at 4.1%.
- The second quarter's continued positive performance in tandem with the poor performance from the first half of 2022 rolling off the various benchmark returns turned the Russell indices positive on a trailing 12-month basis. Within large-cap stocks, the Russell 1000 Growth Index returned a strong 27.1%, leading the way among style and market capitalization classifications. The worst-performing index was the Russell 2000 Value, which posted a modest 6.0% return for the trailing 12-months.
- Growth rebounded from disappointing results in early 2022 and led value-based benchmarks in all market capitalization ranges during the trailing year. The Russell 2000 Growth Index returned 18.5%, outpacing the Russell 2000 Value index return of 6.0% by a span of 12.5%. The Russell 1000 Growth and Russell Midcap Growth benchmarks gained 27.1% and 23.1%, respectively, while their corresponding value index counterparts returned solid, but lagging, performance of 11.5% and 10.5%, respectively.



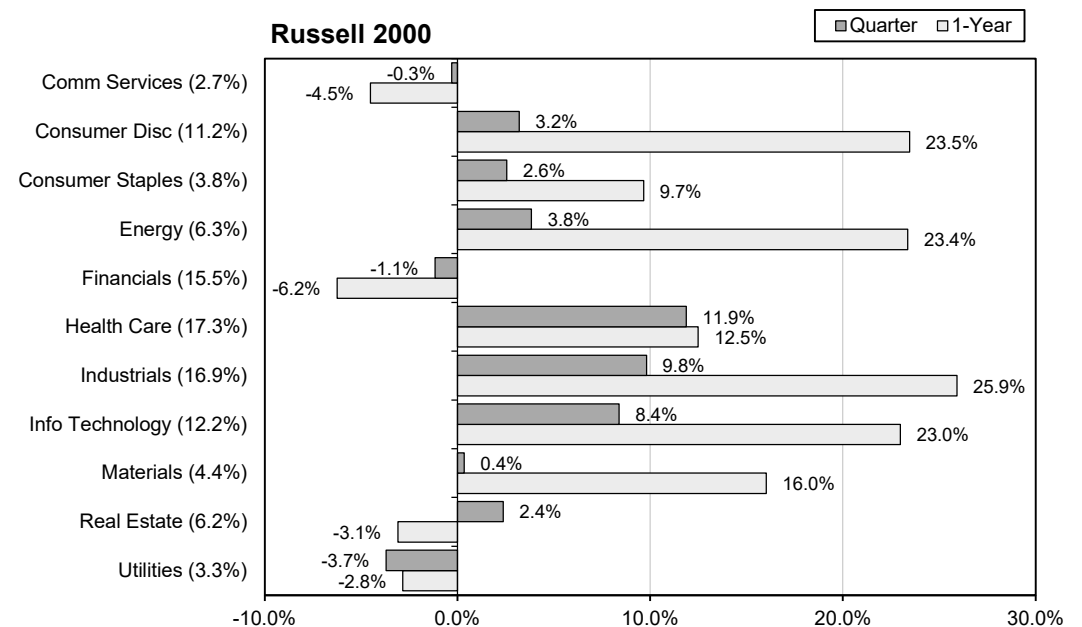
Source: Investment Metrics



- Large Cap sector performance was mostly positive for the second quarter. Nine of 11 economic sectors posted positive absolute performance for the quarter, but just three managed to outpace the return of the Russell 1000 index.
- After a challenging 2022, the information technology sector continued its dominating rebound, amassing an impressive 17.1% return for the quarter. The other two sectors that outpaced the headline index's return for the quarter were communication services (12.5%) and consumer discretionary (13.4%). Energy (-0.9%), and utilities (-2.7%) were the two sectors that lost ground for the quarter.
- For the full year, four economic sectors exceeded the return of the broad large-cap benchmark and seven of the eleven sectors posted positive performance. The weakest economic sector in the Russell 1000 for the year was utilities, which declined by -3.4% and was heavily impacted by rising energy costs and a market rotation away from defensive names.



- Eight small-cap economic sectors posted positive results during the quarter while just three exceeded the 5.2% return of the Russell 2000 Index. The health care (11.9%), industrials (9.8%), and information technology (8.4%) sectors led the way, outpacing the broad benchmark for the quarter while the utilities (-3.7%), financials (-1.1%), and communication services (-0.3%) sectors posted negative returns.
- Like large cap sector performance over the trailing year, seven small cap sectors were positive. Industrials posted the strongest sector results (25.9%) but the consumer discretionary, energy, and information technology sectors each also returned in excess of 20% for the last 12-months. Five of the 11 economic sectors fell short of core small-cap benchmark's return of 12.3% over the trailing year. The worst-performing sector for the year was financials with a return of -6.2%. The communication services (-4.5%), real estate (-3.1%), and utilities (-2.8%) sectors also posted negative results for the year.



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 June 30, 2023

Top 10 Weighted Stocks				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Apple Inc	7.0%	17.8%	42.7%	Information Technology
Microsoft Corp	6.2%	18.4%	33.9%	Information Technology
Amazon.com Inc	2.9%	26.2%	22.7%	Consumer Discretionary
NVIDIA Corp	2.4%	52.3%	179.3%	Information Technology
Tesla Inc	1.8%	26.2%	16.6%	Consumer Discretionary
Alphabet Inc Class A	1.7%	15.4%	9.9%	Communication Services
Meta Platforms Inc Class A	1.5%	35.4%	78.0%	Communication Services
Berkshire Hathaway Inc Class B	1.5%	10.4%	24.9%	Financials
Alphabet Inc Class C	1.5%	16.3%	10.6%	Communication Services
UnitedHealth Group Inc	1.1%	2.1%	-5.1%	Health Care

Top 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
XP Inc Class A	0.0%	97.6%	30.6%	Financials
Wayfair Inc Class A	0.0%	89.3%	49.2%	Consumer Discretionary
Carnival Corp	0.0%	85.5%	117.7%	Consumer Discretionary
XPO Inc	0.0%	85.0%	95.0%	Industrials
Palantir Technologies Inc	0.1%	81.4%	69.0%	Information Technology
MongoDB Inc Class A	0.1%	76.3%	58.4%	Information Technology
Vertiv Holdings Co Class A	0.0%	73.1%	201.6%	Industrials
Nu Holdings Ltd Ordinary Shares	0.0%	65.8%	111.0%	Financials
AppLovin Corp Ordinary Shares -	0.0%	63.4%	-25.3%	Information Technology
Norwegian Cruise Line Holdings Ltd	0.0%	61.9%	95.8%	Consumer Discretionary

Bottom 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Victoria's Secret & Co	0.0%	-49.0%	-37.7%	Consumer Discretionary
Advance Auto Parts Inc	0.0%	-41.5%	-58.1%	Consumer Discretionary
Tandem Diabetes Care Inc	0.0%	-39.6%	-58.5%	Health Care
First Horizon Corp	0.0%	-35.8%	-46.6%	Financials
Ubiquiti Inc	0.0%	-35.1%	-28.5%	Information Technology
Catalent Inc	0.0%	-34.0%	-59.6%	Health Care
Concentrix Corp Ordinary Shares	0.0%	-33.4%	-39.9%	Industrials
MarketAxess Holdings Inc	0.0%	-33.0%	3.1%	Financials
Mercury Systems Inc	0.0%	-32.3%	-46.2%	Industrials
Peloton Interactive Inc	0.0%	-32.2%	-16.2%	Consumer Discretionary

Top 10 Weighted Stocks				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Super Micro Computer Inc	0.5%	133.9%	517.7%	Information Technology
SPS Commerce Inc	0.3%	26.1%	69.9%	Information Technology
Rambus Inc	0.3%	25.2%	198.6%	Information Technology
Chart Industries Inc	0.3%	27.4%	-4.5%	Industrials
Novanta Inc	0.3%	15.7%	51.8%	Information Technology
Chord Energy Corp Ordinary Shares	0.3%	16.9%	38.0%	Energy
Light & Wonder Inc Ordinary Shares	0.3%	14.5%	46.3%	Consumer Discretionary
ChampionX Corp	0.3%	14.8%	57.8%	Energy
Atkore Inc	0.3%	11.0%	87.9%	Industrials
Commercial Metals Co	0.3%	8.0%	61.2%	Materials

Top 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
CXApp Inc Ordinary Shares - Class A	0.0%	503.3%	9.2%	Information Technology
Immunogen Inc	0.2%	391.4%	319.3%	Health Care
Applied Digital Corp	0.0%	317.4%	790.5%	Information Technology
Presto Automation Inc	0.0%	230.4%	N/A	Information Technology
EyePoint Pharmaceuticals Inc	0.0%	195.9%	10.5%	Health Care
CARISMA Therapeutics Inc	0.0%	182.9%	N/A	Health Care
P3 Health Partners Inc Class A	0.0%	182.1%	-19.6%	Health Care
Nano X Imaging Ltd Ordinary Shares	0.0%	168.5%	37.1%	Health Care
Carvana Co Class A	0.1%	164.8%	14.8%	Consumer Discretionary
Bit Digital Inc Ordinary Shares	0.0%	163.6%	209.9%	Information Technology

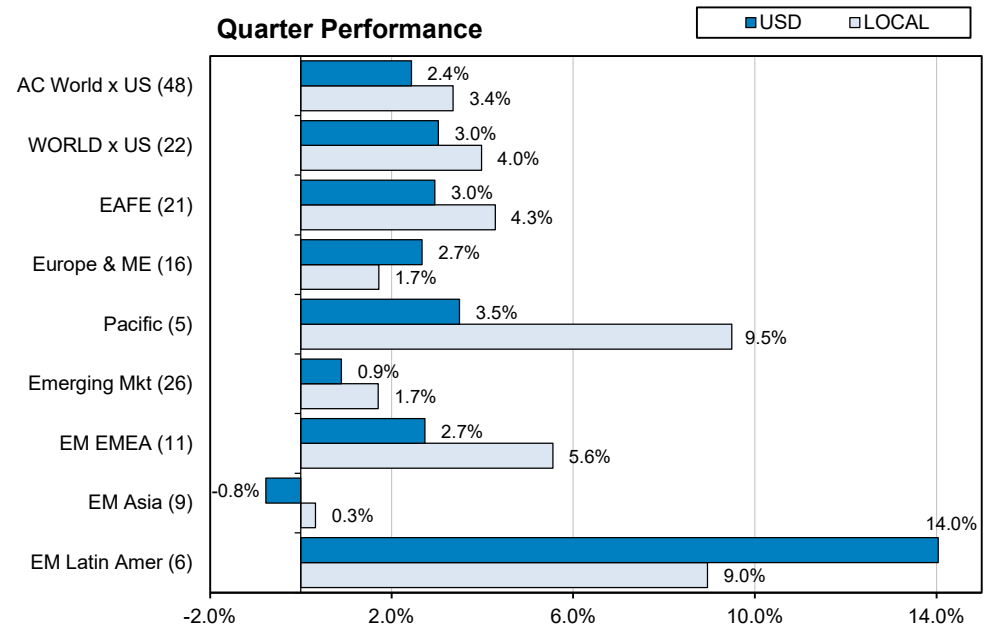
Bottom 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Babylon Holdings Ltd Ordinary Shares	0.0%	-98.6%	-99.7%	Health Care
ViewRay Inc	0.0%	-89.8%	-86.7%	Health Care
Rain Oncology Inc	0.0%	-86.3%	-78.4%	Health Care
FibroGen Inc	0.0%	-85.5%	-74.4%	Health Care
HomeStreet Inc	0.0%	-66.6%	-82.0%	Financials
BioXcel Therapeutics Inc	0.0%	-64.3%	-49.5%	Health Care
Orchestra BioMed Holdings Inc	0.0%	-64.2%	N/A	Health Care
PolyMet Mining Corp	0.0%	-63.2%	-68.6%	Materials
Enviva Inc	0.0%	-62.4%	-80.1%	Energy
NanoString Technologies Inc	0.0%	-59.1%	-68.1%	Health Care

Source: Morningstar Direct

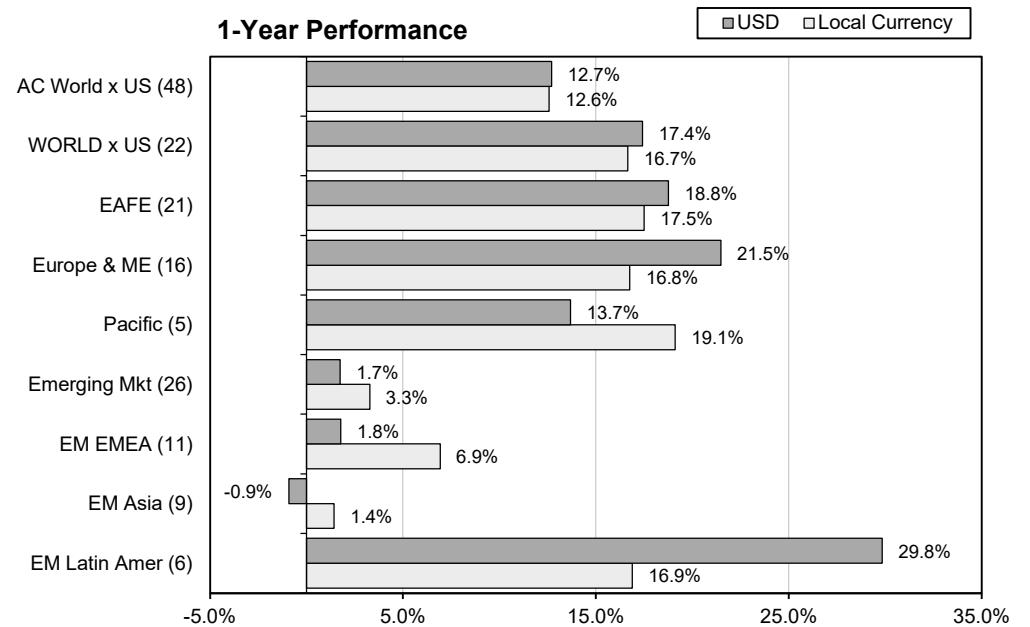


- Many of the international developed and emerging market benchmarks posted positive performance in both USD and LCL terms for the second quarter. While the strengthening of the USD chilled non-US index performance in USD during the quarter, the developed market MSCI EAFE Index still returned a solid 3.0% in USD and 4.3% in LCL terms for the period. The MSCI Emerging Markets Index rose by 0.9% in USD and 1.7% in LCL terms.
- Latin America (LATAM) dramatically outpaced other emerging markets for the quarter with the regional index earning a solid 14.0% in USD and 9.0% in LCL terms. Performance in the region was driven by strong demand for commodity exports from growing worldwide production along with a USD performance boost due to local currency strength in the region.
- The largest weighted country in the emerging market index (China, 8.2%) lagged during the quarters. Investors have struggled to accurately forecast the pace of China's recovery after its grand economic reopening from COVID-19 lockdowns, which led to a flurry of spending that has since cooled.
- Much like domestic markets, trailing one-year results for international developed and emerging markets rolled off their poor performance from early 2022 which resulted in strong results for the trailing year. Much of the strong USD performance in late 2022 has been reversed in 2023 with the MSCI EAFE Index returning 18.8% in USD for the year and 17.5% in LCL terms.
- Annual returns across emerging markets were more bifurcated. Latin American results led the way with returns of 29.8% in USD and 16.9% in LC terms. Performance in the EM Asia regional benchmark detracted from emerging market index with the EM Asia Index posting returns of -0.9% in USD and 1.4% in LCL terms. As a result, the broad MSCI Emerging Markets Index returned a muted 1.7% in USD and 3.3% in LCL terms for the year.

Quarter Performance



1-Year Performance



Source: MSCI Global Index Monitor (Returns are Net)



The Market Environment
US Dollar International Index Attribution & Country Detail
As of June 30, 2023

MSCI - EAFE	Sector Weight	Quarter Return	1-Year Return
Communication Services	4.1%	-2.6%	2.2%
Consumer Discretionary	12.6%	5.0%	30.6%
Consumer Staples	10.1%	-0.6%	9.9%
Energy	4.2%	0.1%	14.3%
Financials	18.3%	4.6%	20.2%
Health Care	13.2%	2.0%	9.8%
Industrials	16.2%	6.2%	29.6%
Information Technology	8.2%	5.9%	32.7%
Materials	7.4%	-1.7%	16.4%
Real Estate	2.3%	-2.0%	-7.4%
Utilities	3.5%	4.0%	16.5%
Total	100.0%	3.0%	18.8%

MSCI - ACWixUS	Sector Weight	Quarter Return	1-Year Return
Communication Services	5.5%	-4.6%	-0.7%
Consumer Discretionary	12.1%	1.5%	12.6%
Consumer Staples	8.6%	-0.4%	9.0%
Energy	5.4%	3.4%	9.4%
Financials	20.6%	4.9%	13.2%
Health Care	9.6%	1.5%	7.4%
Industrials	13.2%	5.4%	24.9%
Information Technology	11.9%	6.1%	24.1%
Materials	7.9%	-2.7%	10.7%
Real Estate	2.0%	-2.5%	-9.5%
Utilities	3.2%	3.7%	7.8%
Total	100.0%	2.4%	12.7%

MSCI - Emerging Mkt	Sector Weight	Quarter Return	1-Year Return
Communication Services	9.8%	-6.8%	-3.6%
Consumer Discretionary	13.2%	-6.3%	-15.3%
Consumer Staples	6.4%	0.3%	4.4%
Energy	5.0%	12.1%	13.5%
Financials	21.9%	5.7%	6.4%
Health Care	3.8%	-2.5%	-9.6%
Industrials	6.3%	1.8%	5.3%
Information Technology	21.2%	5.1%	14.1%
Materials	8.1%	-4.2%	1.8%
Real Estate	1.8%	-4.9%	-17.7%
Utilities	2.6%	4.2%	-6.7%
Total	100.0%	0.9%	1.7%

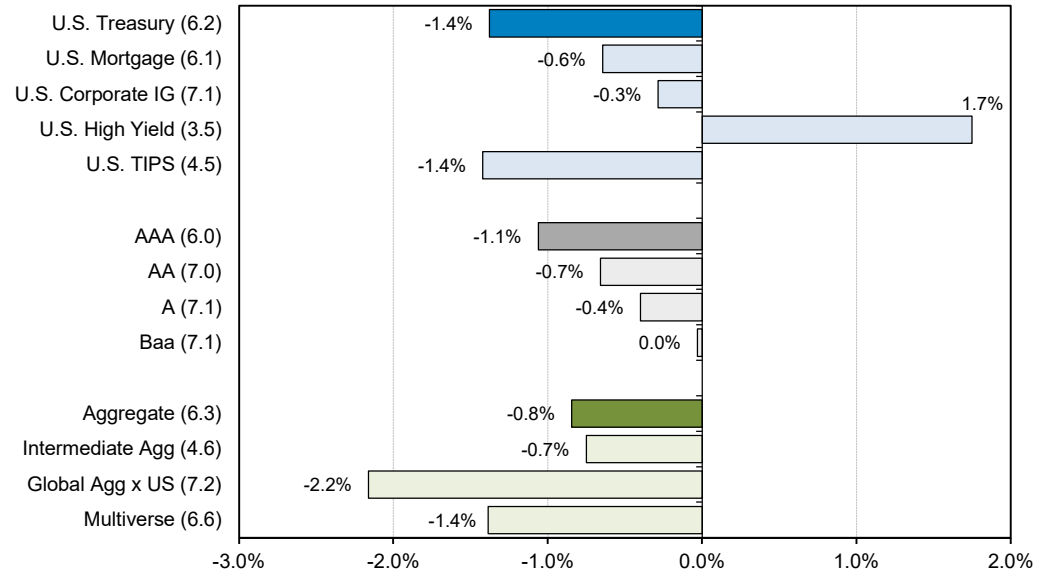
Country	MSCI-EAFE Weight	MSCI-ACWixUS Weight	Quarter Return	1-Year Return
Japan	22.4%	14.5%	6.4%	18.1%
United Kingdom	14.7%	9.5%	2.2%	13.2%
France	12.4%	8.0%	3.2%	31.7%
Switzerland	10.1%	6.5%	4.0%	13.3%
Germany	8.6%	5.6%	2.8%	28.4%
Australia	7.3%	4.7%	0.3%	11.2%
Netherlands	4.6%	3.0%	4.1%	31.2%
Sweden	3.3%	2.1%	-1.2%	16.6%
Denmark	3.1%	2.0%	1.7%	31.9%
Spain	2.6%	1.7%	5.6%	29.0%
Italy	2.5%	1.6%	8.2%	43.4%
Hong Kong	2.5%	1.6%	-5.1%	-9.0%
Singapore	1.4%	0.9%	-5.6%	10.0%
Belgium	0.9%	0.6%	-6.1%	6.1%
Finland	0.9%	0.6%	-8.1%	-1.2%
Ireland	0.8%	0.5%	4.3%	45.3%
Norway	0.6%	0.4%	-1.0%	-9.0%
Israel	0.6%	0.4%	-4.0%	-4.7%
Portugal	0.2%	0.1%	-1.1%	6.7%
New Zealand	0.2%	0.1%	-6.0%	15.5%
Austria	0.2%	0.1%	4.4%	18.9%
Total EAFE Countries	100.0%	64.6%	3.0%	18.8%
Canada		7.6%	3.7%	7.0%
Total Developed Countries		72.2%	3.0%	17.4%
China		8.2%	-9.7%	-16.8%
Taiwan		4.3%	4.5%	12.5%
India		4.1%	12.2%	14.2%
Korea		3.4%	4.4%	13.0%
Brazil		1.5%	20.7%	29.8%
Saudi Arabia		1.2%	6.3%	-1.7%
South Africa		0.9%	-4.9%	-1.9%
Mexico		0.8%	5.6%	35.1%
Indonesia		0.6%	2.8%	13.2%
Thailand		0.5%	-8.2%	1.7%
Malaysia		0.4%	-8.4%	-6.4%
United Arab Emirates		0.4%	5.8%	-6.1%
Qatar		0.3%	-2.4%	-15.4%
Poland		0.2%	24.5%	36.4%
Kuwait		0.2%	-0.9%	-4.7%
Philippines		0.2%	-1.3%	5.8%
Chile		0.2%	2.4%	18.1%
Turkey		0.2%	-10.7%	53.3%
Greece		0.1%	23.9%	71.3%
Peru		0.1%	6.5%	34.0%
Hungary		0.1%	24.8%	48.8%
Czech Republic		0.0%	-5.1%	8.7%
Colombia		0.0%	11.7%	-5.7%
Egypt		0.0%	3.9%	27.0%
Total Emerging Countries		27.8%	0.9%	1.7%
Total ACWixUS Countries		100.0%	2.4%	12.7%

Source: Morningstar Direct, MSCI Global Index Monitor (Returns are Net in USD)
As a result of the GICS classification changes on 9/28/2018 and certain associated reporting limitations, sector performance represents backward looking performance for the prior year of each sector's current constituency, post creation of the Communication Services sector.

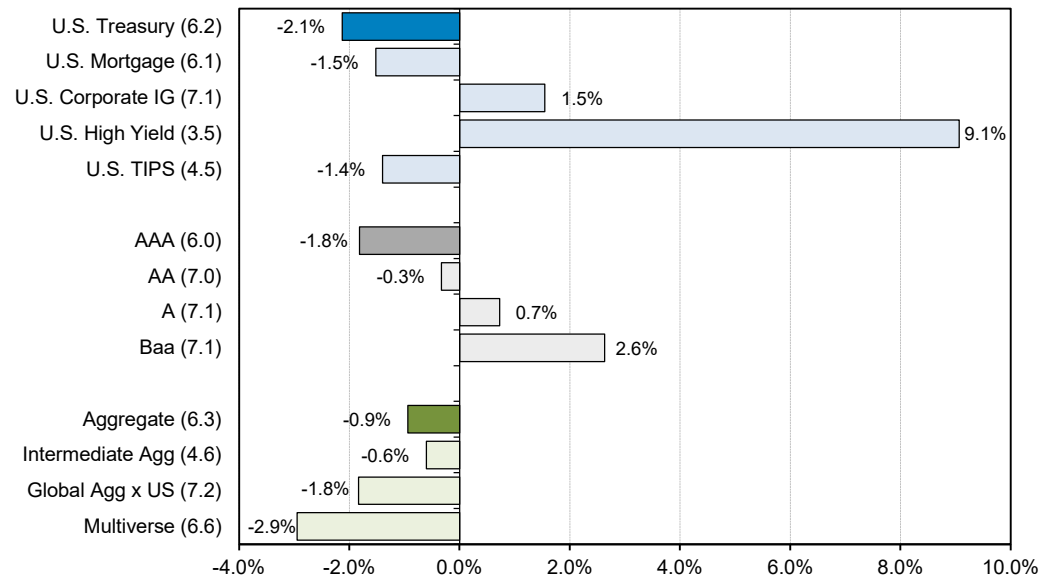


- Fixed income markets started 2023 strong but performance stalled during the second quarter. Yields remain elevated on the back of the Federal Reserve's decision to hike policy rates an additional 0.25% in May. After a challenging 2022 in fixed-income markets brought on by the largest and most rapid increase in interest rates since the early 1980s, higher yields and an expected slower pace of rate increase led investors to expect better outcomes in 2023. That expectation was at least temporarily frustrated during the second quarter, as the quarter's 0.25% rate hike and increased expectations for future rate hikes weighed on the asset class and many of the major domestic fixed-income indices posted negative absolute returns.
- The Bloomberg US Aggregate Bond Index, the bellwether US investment grade benchmark, returned a mild negative result, returning -0.8% for the quarter. Performance across the investment grade index's segments soured during the period with the Bloomberg US Corporate Investment Grade Index returning -0.3% and the US Mortgage Index sliding -0.6%.
- Outside of the aggregate index's sub-components, high-yield bonds continued to rise with a return of 1.7% as credit spreads narrowed during the quarter. US TIPS lost -1.4% for the quarter. The Bloomberg Global Aggregate ex-US Index lagged most domestic fixed-income indexes and the multiverse benchmark, posting a loss of -2.2% for the quarter.
- Over the trailing one-year period, the Bloomberg US Aggregate Bond Index declined by -0.9%. The benchmark's sub-components fell in a narrow band above and below the broad index's return. US TIPS, which are excluded from the aggregate index, dropped by -1.4% for the year. High-yield corporate bonds, which have a much shorter duration, have outpaced their investment grade counterparts with the Bloomberg US High Yield Index returning a strong 9.1% for the last year.
- Performance for non-US bonds was also negative for the year with the Bloomberg Global Aggregate ex-US Index falling by -1.8%. The combination of rising interest rates, elevated inflation, and geopolitical risks were a hindrance for non-US index performance.

Quarter Performance



1-Year Performance

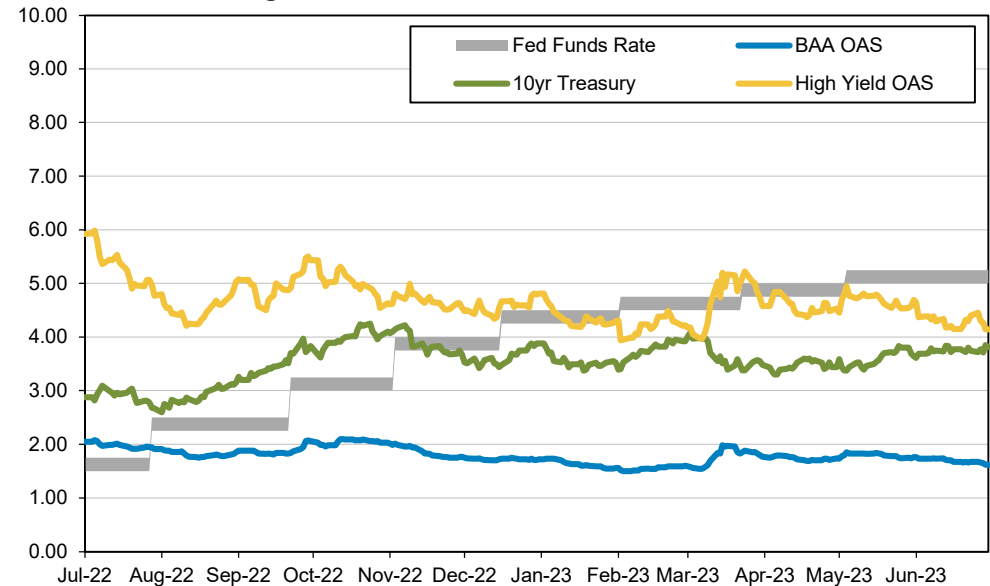


Source: Bloomberg

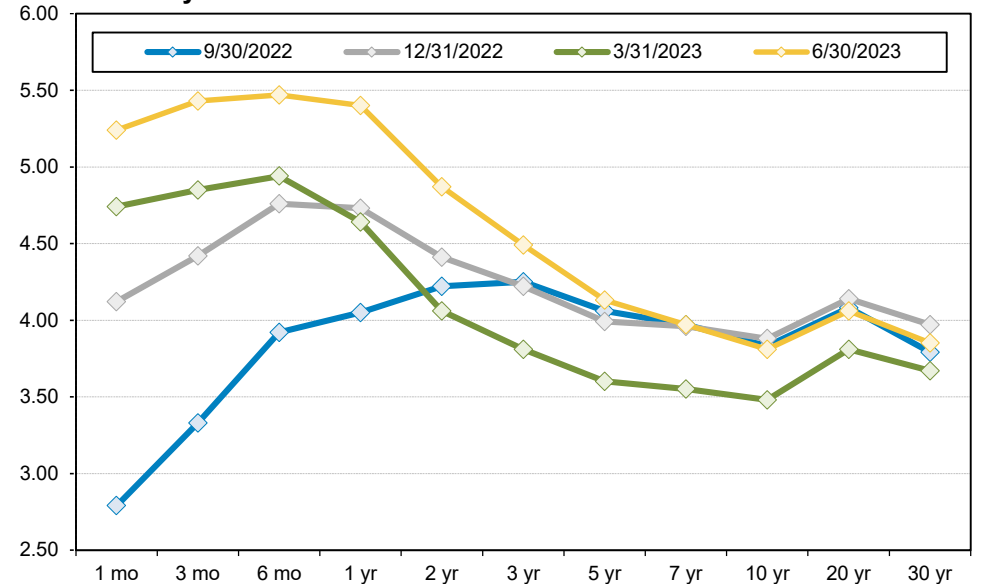


- The gray band across the graph illustrates the range of the current Fed Funds target rate. During the second quarter, the Federal Open Market Committee (FOMC) raised the lower end of its target rate range from 4.75% to 5.00% at their May meeting. While the FOMC pushed pause on a rate increase at their June meeting, several speeches and public comments since that meeting have made it clear that additional rate hikes should not be ruled out. The FOMC is continuing its policy of removing liquidity from the market by allowing bonds held on its balance sheet to mature without reinvesting those proceeds. Despite the potential for further rate increases, market participants appear to believe the Fed may be nearing the end of its rate hiking cycle.
- The yield on the US 10-year Treasury (green line) rose a modest 0.33% partially due to increases in the policy rate and renewed prospects for future growth. The closing yield on the 10-Year Treasury was 3.81% as of June 30, 2023, down just 7 basis points from its 3.88% yield at year-end. The benchmark's rate peaked in October 2022, cresting at just over 4.00% before pulling back to its current level.
- The blue line illustrates changes in the BAA OAS (Option Adjusted Spread) for BAA-rated corporate bonds. This measure quantifies the additional yield premium that investors require to purchase and hold non-US Treasury investment grade issues with the lowest investment grade rating. For the full year, the spread has narrowed from 2.05% to 1.62%, signaling a lower premium for credit risk than was the case a year prior. High Yield OAS spreads have narrowed from 5.92% in July 2022 to 4.14% as of the end of Q2. High-yield spreads reached their highs in July 2022 before trading lower the remainder of the year and have continued to tighten in 2023. A spike in both the BAA OAS and High Yield spreads is visible in March following a short-lived crisis of confidence in the banking sector, which was addressed quickly by the FDIC and supported further by the Fed's aggressive short-term par loan program. Both spread measures traded lower on the news of the Government's intervention, and as fears of possible contagion waned, credit spreads returned to their levels prior to February.
- 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 second quarter as the Fed increased interest rates to continue combatting inflation. Despite these short-term rate increases, at the end of the quarter, both intermediate and longer-term yields were slightly lower than they were at the end of 2022. The yield curve has further inverted (short-term rates higher than long-term rates) between two- and 10-year maturities. Historically, a persistent inversion of these two key rates has been a precursor of an economic recession within six- to 24 months.

1-Year Trailing Market Rates



Treasury Yield Curve



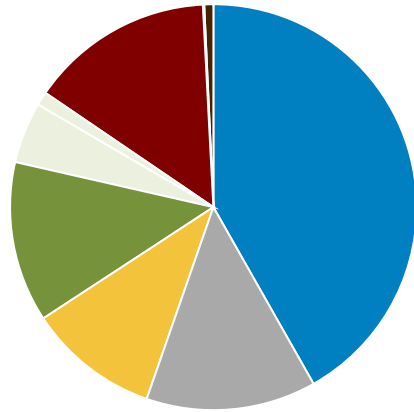
Source: US Department of Treasury, FRED (Federal Reserve of St. Louis)



Page Intentionally Left Blank



Asset Allocation by Segment
Jun-2023 : \$984,161,525



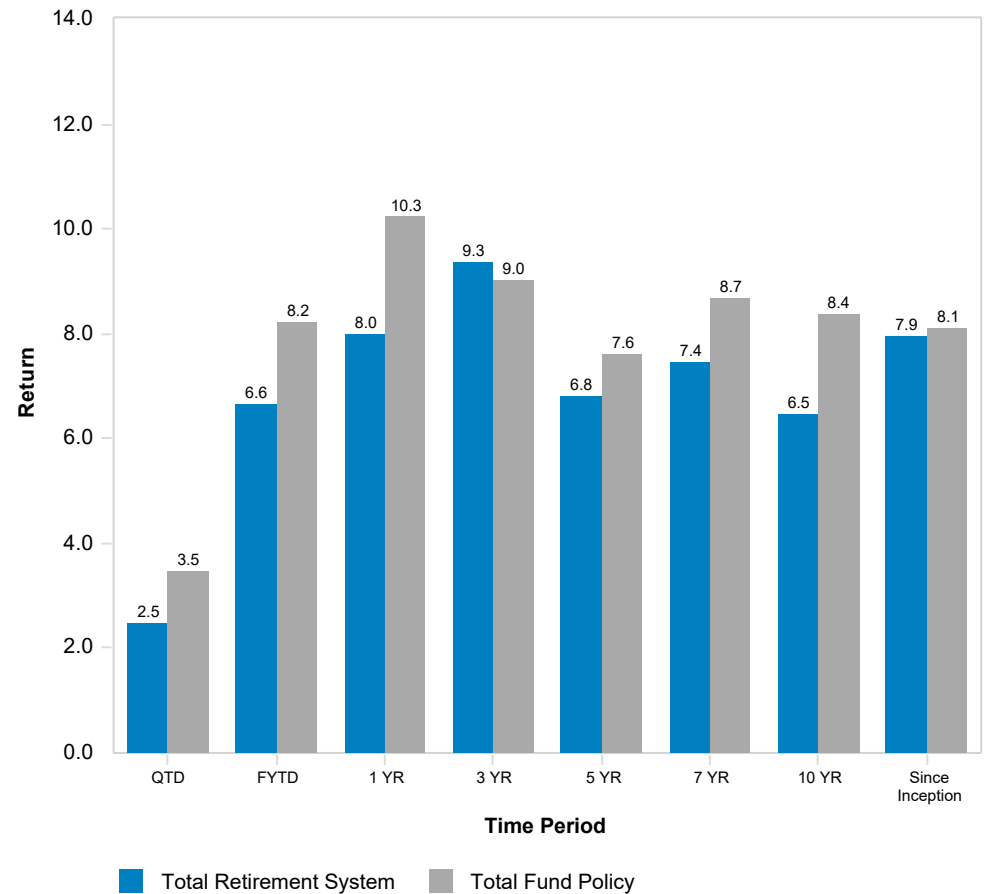
Allocation

	Market Value	Allocation
Total Domestic Equity	411,391,210	41.8
Total International Equity	133,084,012	13.5
Total Other Equity	102,802,575	10.4
Total Core Fixed Income	125,978,856	12.8
Total Non Core Fixed Income	47,905,000	4.9
Total Other Fixed Income	10,681,342	1.1
Total Real Estate	144,128,971	14.6
Total Timber Funds	1,028,392	0.1
Cash Account	7,161,167	0.7

Gain/Loss Summary

	QTD	FYTD	1 YR
Total Retirement System			
Beginning Market Value	965,941,088	933,934,678	935,886,066
Net Contributions	-5,504,930	-11,498,391	-24,820,680
Return on Investment	24,370,140	63,171,201	75,642,997
Ending Market Value	984,161,525	984,161,525	984,161,525

Comparative Performance



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.

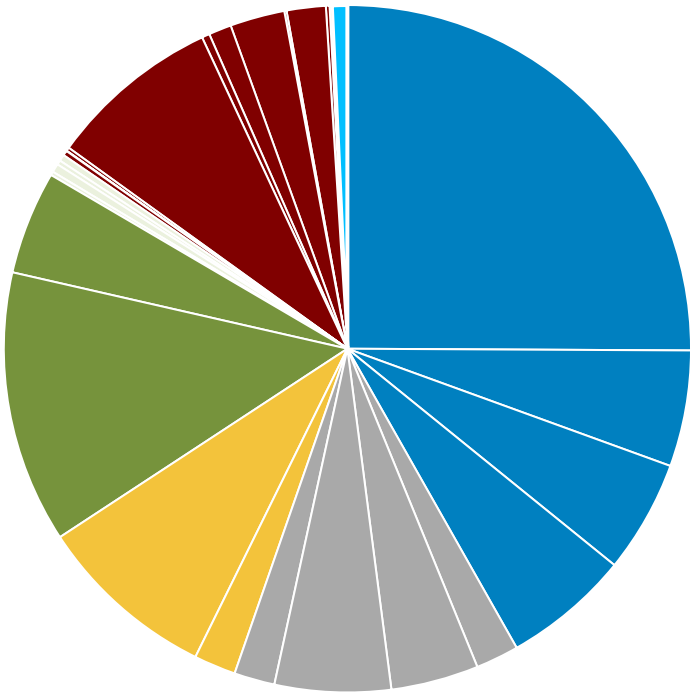


Asset Allocation by Manager
Total Fund
As of June 30, 2023

Jun-2023 : \$984,161,525

Allocation

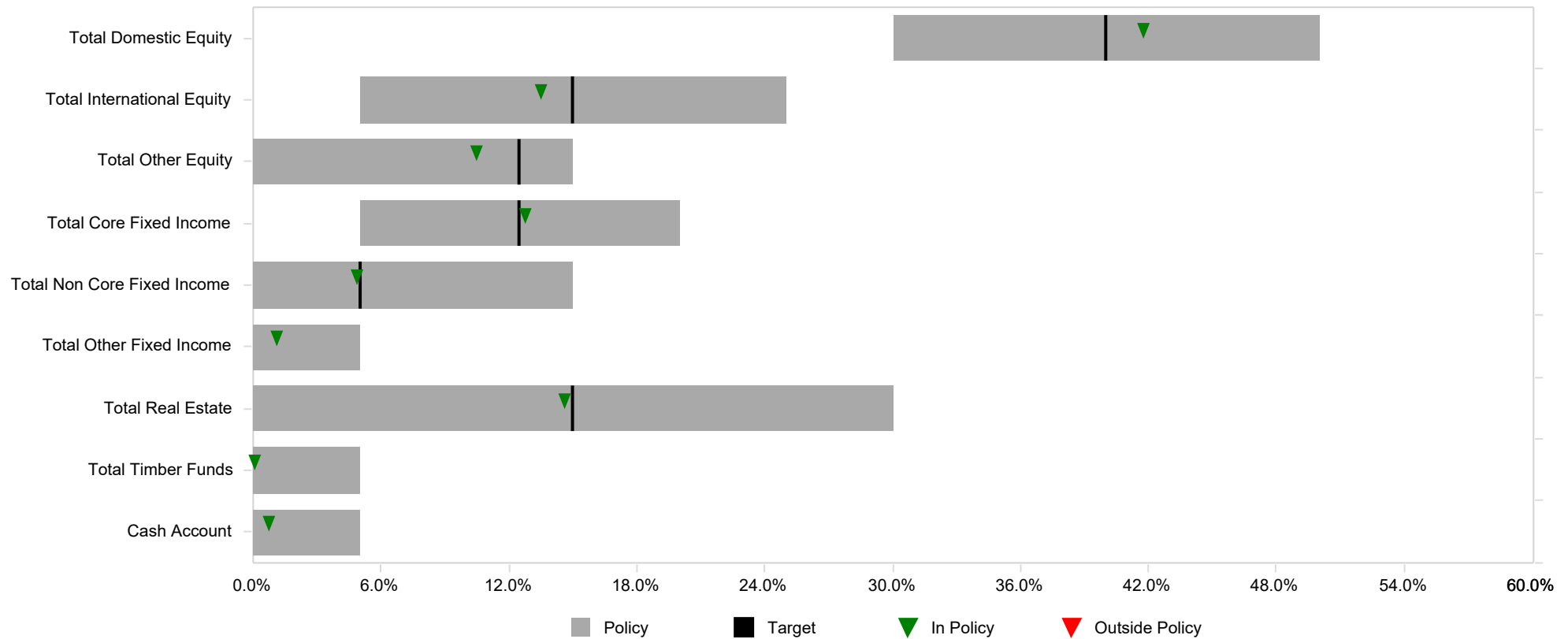
	Market Value	Allocation
■ NT Collective Russell 3000 Index	246,820,877	25.1
■ Baird Mid Cap Growth	53,730,237	5.5
■ Nuance Mid Cap Value	52,155,961	5.3
■ Kennedy Small Cap Value	58,684,135	6.0
■ Driehaus International Small Cap Growth	19,959,406	2.0
■ WCM Focused Intl Growth LP	40,615,253	4.1
■ Thompson Siegel & Walmsley	53,716,474	5.5
■ Wellington Emerging Markets Fund	18,792,879	1.9
■ Huff Energy Fund	19,396,200	2.0
■ Franklin Park Private Equity	83,406,375	8.5
■ Orleans Capital	125,978,856	12.8
■ Pimco Diversified Income Fund	47,905,000	4.9
■ LBC Credit Partners III	1,688,874	0.2
■ LBC Credit Partners IV	4,002,476	0.4
■ Providence Debt Fund III	2,023,458	0.2
■ Capital Point Partners (Princeton Capital)	2,966,534	0.3
■ Edison Investments	2,324,204	0.2
■ India Property Fund	164,345	0.0
■ Gainesville Property	1,644,315	0.2
■ Morgan Stanley	79,754,088	8.1
■ AEW Partners Fund VIII	3,629,911	0.4
■ GreenOak US III	10,479,832	1.1
■ Brookfield Premier RE Partners	25,353,561	2.6
■ Artemis Real Estate IV	1,010,073	0.1
■ Stockbridge Smart Markets	18,067,268	1.8
■ APRS Building	1,701,375	0.2
■ Domain Environmental Investments II	1,028,392	0.1
■ Cash Account	7,161,167	0.7



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	984,161,525	100.0	N/A	N/A	100.0
Total Domestic Equity	411,391,210	41.8	30.0	50.0	40.0
Total International Equity	133,084,012	13.5	5.0	25.0	15.0
Total Other Equity	102,802,575	10.4	0.0	15.0	12.5
Total Core Fixed Income	125,978,856	12.8	5.0	20.0	12.5
Total Non Core Fixed Income	47,905,000	4.9	0.0	15.0	5.0
Total Other Fixed Income	10,681,342	1.1	0.0	5.0	0.0
Total Real Estate	144,128,971	14.6	0.0	30.0	15.0
Total Timber Funds	1,028,392	0.1	0.0	5.0	0.0
Cash Account	7,161,167	0.7	0.0	5.0	0.0



Financial Reconciliation
Total Fund
1 Quarter Ending June 30, 2023

Financial Reconciliation Quarter to Date											
	Market Value 04/01/2023	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Return On Investment	Market Value 06/30/2023	
Total Retirement System	965,941,088	-	19,821,009	-25,325,939	-531,117	-113,657	4,041,764	20,328,377	24,370,140	984,161,525	
Total Equity	628,604,931	-9,493,057	-	-	-506,943	-	961,307	27,711,559	28,672,866	647,277,797	
Total Domestic Equity	398,452,102	-12,003,528	-	-	-471,472	-	822,903	24,591,205	25,414,108	411,391,210	
NT Collective Russell 3000 Index	240,005,754	-12,463,000	-	-	-12,000	-	-	19,290,123	19,290,123	246,820,877	
Baird Mid Cap Growth	51,208,050	181,711	-	-	-181,711	-	99,742	2,422,445	2,522,187	53,730,237	
Nuance Mid Cap Value	51,146,887	139,122	-	-	-139,122	-	429,352	579,722	1,009,073	52,155,961	
Kennedy Small Cap Value	56,091,410	138,639	-	-	-138,639	-	293,809	2,298,916	2,592,725	58,684,135	
Total International Equity	129,825,254	35,470	-	-	-35,470	-	138,404	3,120,354	3,258,758	133,084,012	
Driehaus International Small Cap Growth	19,601,980	-	-	-	-	-	-	357,426	357,426	19,959,406	
Thompson Siegel & Walmsley	52,319,363	-	-	-	-	-	-	1,397,111	1,397,111	53,716,474	
WCM Focused Intl Growth LP	39,148,747	-	-	-	-	-	-	1,466,506	1,466,506	40,615,253	
Wellington Emerging Markets Fund	18,755,164	35,470	-	-	-35,470	-	138,404	-100,689	37,715	18,792,879	
Total Other Equity	100,327,575	2,475,000	-	-	-	-	-	-	-	102,802,575	
Huff Energy Fund	19,396,200	-	-	-	-	-	-	-	-	19,396,200	
Franklin Park Private Equity	80,931,375	2,475,000	-	-	-	-	-	-	-	83,406,375	
Total Fixed Income	186,039,207	-1,200,894	-	-	-24,174	-	2,008,866	-2,257,807	-248,941	184,565,199	
Orleans Capital	126,644,627	24,629	-	-	-24,629	-	1,278,966	-1,944,737	-665,771	125,978,856	
Pimco Diversified Income Fund	47,488,171	-	-	-	-	-	571,115	-154,286	416,830	47,905,000	
Total Other Fixed Income	11,906,409	-1,225,523	-	-	455	-	158,785	-158,785	-	10,681,342	
Capital Point Partners (Princeton Capital)	2,966,534	-	-	-	-	-	-	-	-	2,966,534	
LBC Credit Partners III	1,736,532	-48,113	-	-	455	-	47,658	-47,658	-	1,688,874	
LBC Credit Partners IV	4,405,973	-403,497	-	-	-	-	66,708	-66,708	-	4,002,476	
Providence Debt Fund III	2,797,371	-773,913	-	-	-	-	44,419	-44,419	-	2,023,458	

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



Financial Reconciliation
Total Fund
1 Quarter Ending June 30, 2023

	Market Value 04/01/2023	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Return On Investment	Market Value 06/30/2023
Total Real Estate & Timber	149,072,527	312,443	-	-	-	-69,565	961,718	-5,119,760	-4,158,043	145,157,363
Total Real Estate	147,894,135	462,443	-	-	-	-69,565	961,718	-5,119,760	-4,158,043	144,128,971
Edison Investments	2,315,711	-8,537	-	-	-	-	8,537	8,493	17,030	2,324,204
India Property Fund	164,345	-	-	-	-	-	-	-	-	164,345
Gainesville Property	1,644,315	14,109	-	-	-	-14,109	-	-	-	1,644,315
Morgan Stanley	81,582,553	-	-	-	-	-	805,721	-2,634,186	-1,828,466	79,754,088
AEW Partners Fund VIII	3,748,333	-118,422	-	-	-	-	-	-	-	3,629,911
GreenOak US III	10,479,832	-	-	-	-	-	-	-	-	10,479,832
Brookfield Premier Real Estate Partners	26,971,873	-	-	-	-	-	-	-1,618,312	-1,618,312	25,353,561
Artemis Real Estate IV	490,236	575,293	-	-	-	-55,456	4,908	-4,908	-	1,010,073
Stockbridge Smart Markets	18,795,562	-	-	-	-	-	142,552	-870,847	-728,295	18,067,268
APRS Building	1,701,375	-	-	-	-	-	-	-	-	1,701,375
Total Timber Funds	1,178,392	-150,000	-	-	-	-	-	-	-	1,028,392
Domain Environmental Investments II	1,178,392	-150,000	-	-	-	-	-	-	-	1,028,392
Cash Account	2,224,423	10,381,508	19,821,009	-25,325,939	-	-44,092	109,873	-5,615	104,258	7,161,167

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



Financial Reconciliation
Total Fund
Year To Date Ending June 30, 2023

Financial Reconciliation Year to Date										
	Market Value 01/01/2023	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Return On Investment	Market Value 06/30/2023
Total Retirement System	933,934,678	-	38,083,796	-49,582,187	-1,259,815	-186,148	8,648,357	54,522,844	63,171,201	984,161,525
Total Equity	616,613,154	-33,017,329	-	-	-1,175,037	-	1,992,677	62,864,332	64,857,009	647,277,797
Total Domestic Equity	397,664,840	-34,569,780	-	-	-905,220	-	1,772,453	47,428,917	49,201,370	411,391,210
NT Collective Russell 3000 Index	223,929,044	-12,441,124	-	-	-33,876	-	-	35,366,833	35,366,833	246,820,877
Baird Mid Cap Growth	53,296,257	-7,818,289	-	-	-181,711	-	212,084	8,221,895	8,433,980	53,730,237
Nuance Mid Cap Value	63,994,131	-14,719,206	-	-	-280,794	-	991,286	2,170,543	3,161,829	52,155,961
Kennedy Small Cap Value	56,445,407	408,839	-	-	-408,839	-	569,083	1,669,645	2,238,728	58,684,135
Total International Equity	120,605,613	65,992	-	-	-67,858	-	217,664	12,262,602	12,480,265	133,084,012
Driehaus International Small Cap Growth	18,794,285	-1,866	-	-	-	-	-	1,166,986	1,166,986	19,959,406
Thompson Siegel & Walmsley	48,366,324	-	-	-	-	-	-	5,350,150	5,350,150	53,716,474
WCM Focused Intl Growth LP	35,451,214	-	-	-	-	-	-	5,164,039	5,164,039	40,615,253
Wellington Emerging Markets Fund	17,993,789	67,858	-	-	-67,858	-	217,664	581,426	799,090	18,792,879
Total Other Equity	98,342,702	1,486,460	-	-	-201,960	-	2,560	3,172,813	3,175,373	102,802,575
Huff Energy Fund	19,396,200	-	-	-	-	-	-	-	-	19,396,200
Sail Venture Fund I	1	-	-	-	-	-	-	-1	-1	-
Sail Venture Fund II	1	-	-	-	-	-	-	-1	-1	-
Sail Pre-Exit Acceleration Fund	1	-	-	-	-	-	-	-1	-1	-
Excelsior Investors, Ltd.	122,366	-83,465	-	-	-	-	-	-38,901	-38,901	-
Franklin Park Private Equity	78,824,133	1,569,925	-	-	-201,960	-	2,560	3,211,717	3,214,277	83,406,375
Total Fixed Income	104,845,570	76,259,143	-	-	-40,829	-	3,311,094	190,220	3,501,315	184,565,199
Orleans Capital	46,504,138	77,779,565	-	-	-42,068	-	1,914,943	-177,723	1,737,220	125,978,856
Pimco Diversified Income Fund	46,278,146	-	-	-	-	-	1,118,213	508,642	1,626,854	47,905,000
Total Other Fixed Income	12,063,285	-1,520,422	-	-	1,239	-	277,939	-140,699	137,240	10,681,342
Capital Point Partners (Princeton Capital)	3,257,754	-	-	-	-	-	-	-291,220	-291,220	2,966,534
LBC Credit Partners III	1,531,158	-48,896	-	-	1,239	-	47,658	157,716	205,373	1,688,874
LBC Credit Partners IV	4,295,655	-541,429	-	-	-	-	136,111	112,139	248,250	4,002,476
Providence Debt Fund III	2,978,718	-930,097	-	-	-	-	94,170	-119,333	-25,163	2,023,458

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



Financial Reconciliation

Total Fund

Year To Date Ending June 30, 2023

	Market Value 01/01/2023	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Return On Investment	Market Value 06/30/2023
Total Real Estate & Timber	150,592,903	1,623,255	-	-	-43,949	-99,381	2,388,820	-9,304,285	-6,915,465	145,157,363
Total Real Estate	148,252,053	2,829,956	-	-	-43,949	-99,381	2,388,820	-9,198,528	-6,809,708	144,128,971
Edison Investments	2,304,992	-17,074	-	-	-	-	17,074	19,212	36,286	2,324,204
India Property Fund	173,212	-	-	-	-	-	-	-8,867	-8,867	164,345
Gainesville Property	1,644,315	16,618	-	-	-	-16,618	-	-	-	1,644,315
Morgan Stanley	82,607,316	-	-	-	-	-	1,621,846	-4,475,074	-2,853,229	79,754,088
AEW Partners Fund VIII	3,725,317	-118,422	-	-	-	-	-	23,016	23,016	3,629,911
GreenOak US III	10,019,132	494,803	-	-	-	-	-	-34,103	-34,103	10,479,832
Brookfield Premier Real Estate Partners	28,185,074	-	-	-	-	-	252,180	-3,083,693	-2,831,513	25,353,561
Artemis Real Estate IV	399,234	752,656	-	-	-	-82,763	11,051	-70,105	-59,054	1,010,073
Stockbridge Smart Markets	19,193,461	-	-	-	-43,949	-	486,669	-1,568,913	-1,082,245	18,067,268
APRS Building	-	1,701,375	-	-	-	-	-	-	-	1,701,375
Total Timber Funds	2,340,850	-1,206,701	-	-	-	-	-	-105,757	-105,757	1,028,392
Capitol Timberland Investments	1,021,897	-996,701	-	-	-	-	-	-25,196	-25,196	-
Domain Environmental Investments II	1,318,953	-210,000	-	-	-	-	-	-80,561	-80,561	1,028,392
Total Multi Asset Funds	53,241,377	-54,737,498	-	-	-	-	717,929	778,192	1,496,121	-
BlackRock Multi Asset Fund	53,241,377	-54,737,498	-	-	-	-	717,929	778,192	1,496,121	-
Cash Account	6,940,300	11,573,803	38,083,796	-49,582,187	-	-86,767	237,837	-5,615	232,222	7,161,167
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)	2.47	6.64	7.97	9.34	6.82	7.44	6.45	7.95	10/01/1992
Total Retirement System (Gross)	2.53 (76)	6.78 (66)	8.23 (59)	9.57 (13)	7.07 (29)	7.69 (46)	6.72 (74)	8.26 (24)	10/01/1992
Total Fund Policy	3.46	8.23	10.25	9.02	7.60	8.67	8.35	8.11	
Variance	-0.93	-1.45	-2.02	0.55	-0.53	-0.98	-1.63	0.15	
All Public Plans-Total Fund Median	3.05	7.46	8.83	7.70	6.57	7.57	7.28	7.81	
Total Equity	4.55	10.62	13.49	12.40	8.71	10.49	9.46	8.85	01/01/1994
Total Equity Policy	7.12	15.08	18.86	12.94	9.86	11.53	10.52	8.68	
Variance	-2.57	-4.46	-5.37	-0.54	-1.15	-1.04	-1.06	0.17	
Domestic Equity	6.42 (40)	12.71 (40)	15.78 (51)	12.94 (56)	9.98 (41)	11.79 (45)	10.83 (50)	10.66 (60)	05/01/2013
Russell 3000 Index	8.39	16.17	18.95	13.89	11.39	12.86	12.34	12.24	
Variance	-1.97	-3.46	-3.17	-0.95	-1.41	-1.07	-1.51	-1.58	
IM U.S. Equity (SA+CF+MF) Median	5.46	9.93	15.83	13.66	9.10	11.23	10.78	11.24	
NT Collective Russell 3000 Index	8.38 (28)	16.15 (26)	18.99 (37)	13.91 (51)	11.40 (46)	12.87 (42)	N/A	11.18 (37)	01/01/2014
Russell 3000 Index	8.39	16.17	18.95	13.89	11.39	12.86	12.34	11.17	
Variance	-0.01	-0.02	0.04	0.02	0.01	0.01	N/A	0.01	
IM U.S. All Cap Core Equity (SA+CF) Median	7.00	12.90	17.24	13.91	10.97	12.58	11.88	10.59	
Baird Mid Cap Growth	4.56 (93)	16.44 (42)	21.54 (40)	9.81 (25)	11.76 (24)	13.51 (32)	N/A	10.51 (61)	07/01/2014
Russell Midcap Growth Index	6.23	15.94	23.13	7.63	9.71	11.96	11.53	10.02	
Variance	-1.67	0.50	-1.59	2.18	2.05	1.55	N/A	0.49	
IM U.S. Mid Cap Growth Equity (SA+CF) Median	6.61	15.92	20.71	8.12	10.48	12.95	12.09	10.83	
Nuance Mid Cap Value	1.97 (95)	5.44 (60)	8.46 (86)	9.82 (99)	N/A	N/A	N/A	8.49 (78)	04/01/2019
Russell Midcap Value Index	3.86	5.23	10.50	15.04	6.84	8.20	9.03	7.97	
Variance	-1.89	0.21	-2.04	-5.22	N/A	N/A	N/A	0.52	
IM U.S. Mid Cap Value Equity (SA+CF) Median	4.71	7.15	14.30	17.95	8.06	10.23	10.14	10.10	
Kennedy Small Cap Value	4.36 (45)	3.23 (84)	6.11 (94)	17.02 (65)	4.17 (89)	7.76 (90)	N/A	8.58 (94)	03/01/2016
Russell 2000 Value Index	3.18	2.50	6.01	15.43	3.54	7.70	7.29	9.13	
Variance	1.18	0.73	0.10	1.59	0.63	0.06	N/A	-0.55	
IM U.S. Small Cap Value Equity (SA+CF) Median	4.11	6.71	13.68	18.18	6.63	9.75	9.35	10.93	

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 June 30, 2023

	Performance (%)								Inception Date
	QTR	YTD	1 YR	3 YR	5 YR	7 YR	10 YR	Inception	
International Equity	2.48 (57)	10.36 (51)	14.21 (54)	7.41 (53)	2.47 (77)	5.61 (81)	5.03 (75)	4.81 (80)	05/01/2013
MSCI AC World ex USA	2.67	9.86	13.33	7.75	4.01	6.83	5.24	4.47	
Variance	-0.19	0.50	0.88	-0.34	-1.54	-1.22	-0.21	0.34	
IM International Equity (SA+CF+MF) Median	2.71	10.43	14.98	7.64	4.23	7.09	6.00	5.76	
Driehaus International Small Cap Growth	1.82 (22)	5.81 (72)	11.65 (37)	7.10 (24)	4.41 (8)	8.03 (7)	7.90 (5)	8.98 (7)	09/01/2012
MSCI AC World ex USA Small Growth	1.95	7.75	10.96	5.52	2.69	6.25	6.29	6.68	
Variance	-0.13	-1.94	0.69	1.58	1.72	1.78	1.61	2.30	
IM International SMID Cap Growth Equity (MF) Median	0.69	6.88	10.77	4.45	1.55	5.63	5.29	6.24	
Thompson Siegel & Walmsley	2.67 (72)	11.06 (65)	17.26 (58)	10.54 (20)	4.02 (75)	6.47 (76)	N/A	4.21 (87)	10/01/2014
MSCI EAFE (Net) Index	2.95	11.67	18.77	8.93	4.39	6.88	5.41	4.39	
Variance	-0.28	-0.61	-1.51	1.61	-0.37	-0.41	N/A	-0.18	
IM International Large Cap Core Equity (SA+CF) Median	3.30	11.82	17.84	8.98	4.77	7.39	6.34	5.27	
WCM Focused Intl Growth LP	3.75 (16)	14.57 (14)	19.47 (23)	N/A	N/A	N/A	N/A	0.59 (55)	12/01/2020
MSCI AC World ex USA Growth (Net)	1.94	10.70	13.26	3.96	4.06	6.69	5.61	-2.28	
Variance	1.81	3.87	6.21	N/A	N/A	N/A	N/A	2.87	
IM International Large Cap Growth Equity (MF) Median	2.45	12.21	16.77	6.51	4.72	7.01	5.67	1.07	
Wellington Emerging Markets Fund	0.01 (82)	4.06 (84)	-1.15 (89)	0.50 (81)	N/A	N/A	N/A	-1.87 (91)	02/01/2020
MSCI Emerging Markets (Net) Index	0.90	4.89	1.75	2.32	0.93	4.95	2.95	0.40	
Variance	-0.89	-0.83	-2.90	-1.82	N/A	N/A	N/A	-2.27	
IM Emerging Markets Equity (SA+CF) Median	2.46	7.41	6.97	4.37	2.93	6.17	4.41	2.28	
Total Other Equity	0.00	3.02	3.89	15.88	12.69	N/A	N/A	6.19	01/01/2017
Huff Energy Fund									
Franklin Park Private Equity									

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 June 30, 2023

	Performance (%)								Inception Date
	QTR	YTD	1 YR	3 YR	5 YR	7 YR	10 YR	Inception	
Total Fixed Income	-0.15	2.08	2.55	-1.01	0.22	0.44	0.74	5.63	12/01/1993
Total Fixed Income Policy	-0.55	2.57	0.70	-3.81	0.23	0.11	1.10	4.14	
Variance	0.40	-0.49	1.85	2.80	-0.01	0.33	-0.36	1.49	
Orleans Capital	-0.55 (29)	1.58 (98)	-0.79 (68)	-3.88 (76)	0.66 (99)	0.51 (85)	N/A	1.57 (91)	01/01/2014
Blmbg. U.S. Aggregate Index	-0.84	2.09	-0.94	-3.97	0.77	0.44	1.52	1.55	
Variance	0.29	-0.51	0.15	0.09	-0.11	0.07	N/A	0.02	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	-0.72	2.42	-0.41	-3.43	1.20	0.94	1.96	1.98	
Pimco Diversified Income Fund	0.88 (8)	3.52 (12)	5.63 (6)	-1.37 (22)	N/A	N/A	N/A	-1.37 (22)	07/01/2020
Blmbg. Global Credit (Hedged)	0.28	3.27	2.59	-2.30	1.50	1.75	2.78	-2.30	
Variance	0.60	0.25	3.04	0.93	N/A	N/A	N/A	0.93	
IM Global Fixed Income (MF) Median	-0.58	1.83	0.49	-3.22	-0.17	0.04	0.66	-3.22	
Total Other Fixed Income	0.00	1.21	6.68	9.48	4.42	N/A	N/A	3.57	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 June 30, 2023

	Performance (%)								Inception Date
	QTR	YTD	1 YR	3 YR	5 YR	7 YR	10 YR	Inception	
Alternative Investments									
Other Assets									
Cash Account	1.14	2.21	3.47	1.21	1.42	1.25	0.89	4.13	06/01/1988
Other Alternative Assets									
Total Real Estate	-2.80	-4.55	-7.97	8.39	6.34	5.19	7.85	4.55	08/01/2005
NCREIF Property Index	-1.98	-3.76	-6.60	6.79	5.90	6.24	7.82	7.58	
Variance	-0.82	-0.79	-1.37	1.60	0.44	-1.05	0.03	-3.03	
Morgan Stanley	-2.24	-3.45	-7.07	8.48	6.83	7.37	N/A	7.46	01/01/2016
NCREIF Fund Index-ODCE (EW)	-3.03	-6.42	-10.50	7.60	6.07	6.46	8.12	6.61	
Variance	0.79	2.97	3.43	0.88	0.76	0.91	N/A	0.85	
Brookfield Premier Real Estate Partners	-6.00	-10.05	-13.78	8.20	N/A	N/A	N/A	6.80	11/01/2019
NCREIF Fund Index-ODCE (EW)	-3.03	-6.42	-10.50	7.60	6.07	6.46	8.12	6.32	
Variance	-2.97	-3.63	-3.28	0.60	N/A	N/A	N/A	0.48	
Stockbridge Smart Markets	-3.87	-5.87	N/A	N/A	N/A	N/A	N/A	-9.37	08/01/2022
NCREIF Fund Index-ODCE (EW)	-3.03	-6.42	-10.50	7.60	6.07	6.46	8.12	-10.50	
Variance	-0.84	0.55	N/A	N/A	N/A	N/A	N/A	1.13	
Total Timber Funds	0.00	-7.42	-5.15	7.34	3.95	1.17	1.39	2.33	08/01/2005
NCREIF Timberland Index	1.71	3.49	11.13	8.67	5.80	5.13	5.90	6.62	
Variance	-1.71	-10.91	-16.28	-1.33	-1.85	-3.96	-4.51	-4.29	

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



Comparative Performance Fiscal Year Returns

	Performance (%)									
	YTD	2022	2021	2020	2019	2018	2017	2016	2015	
Total Retirement System (Net)	6.64	-11.54	17.68	11.65	20.92	-6.18	11.89	7.67	-1.05	
Total Retirement System (Gross)	6.78 (66)	-11.36 (31)	17.86 (12)	11.99 (59)	21.23 (14)	-5.95 (89)	12.17 (92)	7.87 (47)	-0.83 (70)	
Total Fund Policy	8.23	-11.70	16.63	13.40	19.81	-3.12	15.79	8.04	2.43	
Variance	-1.45	0.34	1.23	-1.41	1.42	-2.83	-3.62	-0.17	-3.26	
All Public Plans-Total Fund Median	7.46	-12.78	14.01	12.54	18.57	-4.02	15.15	7.69	-0.12	
Total Equity	10.62	-15.13	21.06	15.97	29.88	-9.83	18.49	11.41	-2.87	
Total Equity Policy	15.08	-17.82	22.48	17.62	29.04	-7.34	22.07	9.61	-0.51	
Variance	-4.46	2.69	-1.42	-1.65	0.84	-2.49	-3.58	1.80	-2.36	
Domestic Equity	12.71 (40)	-18.31 (58)	24.49 (56)	19.11 (42)	31.15 (36)	-7.18 (54)	17.39 (59)	15.76 (36)	-3.09 (70)	
Russell 3000 Index	16.17	-19.21	25.66	20.89	31.02	-5.24	21.13	12.74	0.48	
Variance	-3.46	0.90	-1.17	-1.78	0.13	-1.94	-3.74	3.02	-3.57	
IM U.S. Equity (SA+CF+MF) Median	9.93	-16.43	25.60	15.37	28.75	-6.58	19.22	12.51	-0.61	
NT Collective Russell 3000 Index	16.15 (26)	-19.15 (76)	25.68 (58)	20.83 (41)	31.02 (36)	-5.23 (54)	21.15 (48)	12.79 (38)	0.49 (47)	
Russell 3000 Index	16.17	-19.21	25.66	20.89	31.02	-5.24	21.13	12.74	0.48	
Variance	-0.02	0.06	0.02	-0.06	0.00	0.01	0.02	0.05	0.01	
IM U.S. All Cap Core Equity (SA+CF) Median	12.90	-17.15	26.28	18.60	29.00	-5.10	20.92	10.86	0.37	
Baird Mid Cap Growth	16.44 (42)	-27.51 (51)	21.76 (9)	35.15 (58)	36.27 (51)	-1.60 (33)	26.98 (37)	5.35 (50)	-3.03 (82)	
Russell Midcap Growth Index	15.94	-26.72	12.73	35.59	35.47	-4.75	25.27	7.33	-0.20	
Variance	0.50	-0.79	9.03	-0.44	0.80	3.15	1.71	-1.98	-2.83	
IM U.S. Mid Cap Growth Equity (SA+CF) Median	15.92	-27.47	13.70	38.57	36.32	-4.26	25.98	5.29	1.22	
Nuance Mid Cap Value	5.44 (60)	-3.68 (17)	12.23 (100)	5.24 (45)	N/A	N/A	N/A	N/A	N/A	
Russell Midcap Value Index	5.23	-12.03	28.34	4.96	27.06	-12.29	13.34	20.00	-4.78	
Variance	0.21	8.35	-16.11	0.28	N/A	N/A	N/A	N/A	N/A	
IM U.S. Mid Cap Value Equity (SA+CF) Median	7.15	-8.49	29.45	4.63	29.05	-13.44	15.65	19.53	-3.02	
Kennedy Small Cap Value	3.23 (84)	-17.75 (91)	38.92 (15)	4.93 (51)	25.37 (47)	-19.83 (94)	12.51 (43)	N/A	N/A	
Russell 2000 Value Index	2.50	-14.48	28.27	4.63	22.39	-12.86	7.84	31.74	-7.47	
Variance	0.73	-3.27	10.65	0.30	2.98	-6.97	4.67	N/A	N/A	
IM U.S. Small Cap Value Equity (SA+CF) Median	6.71	-10.72	29.80	5.13	24.99	-14.08	11.59	27.32	-4.31	

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 June 30, 2023

	Performance (%)									
	YTD	2022	2021	2020	2019	2018	2017	2016	2015	
International Equity	10.36 (51)	-21.97 (70)	11.90 (38)	12.54 (55)	20.92 (69)	-16.28 (65)	27.37 (64)	0.67 (70)	-2.40 (61)	
MSCI AC World ex USA	9.86	-15.57	8.29	11.13	22.13	-13.78	27.77	5.01	-5.25	
Variance	0.50	-6.40	3.61	1.41	-1.21	-2.50	-0.40	-4.34	2.85	
IM International Equity (SA+CF+MF) Median	10.43	-17.72	10.17	14.23	23.42	-14.92	29.67	2.83	-0.58	
Driehaus International Small Cap Growth	5.81 (72)	-24.34 (45)	12.49 (49)	29.79 (17)	30.57 (11)	-16.92 (32)	41.19 (6)	-6.24 (89)	12.59 (11)	
MSCI AC World ex USA Small Growth	7.75	-25.85	11.83	23.99	24.96	-18.07	33.99	-0.04	6.74	
Variance	-1.94	1.51	0.66	5.80	5.61	1.15	7.20	-6.20	5.85	
IM International SMID Cap Growth Equity (MF) Median	6.88	-25.69	12.40	14.79	24.29	-19.24	34.22	-0.76	6.36	
Thompson Siegel & Walmsley	11.06 (65)	-13.89 (33)	13.82 (30)	6.62 (79)	21.18 (70)	-15.93 (75)	22.70 (93)	0.47 (64)	1.38 (39)	
MSCI EAFE (Net) Index	11.67	-14.45	11.26	7.82	22.01	-13.79	25.03	1.00	-0.81	
Variance	-0.61	0.56	2.56	-1.20	-0.83	-2.14	-2.33	-0.53	2.19	
IM International Large Cap Core Equity (SA+CF) Median	11.82	-15.89	12.14	11.77	23.58	-14.27	27.84	1.56	0.58	
WCM Focused Intl Growth LP	14.57 (14)	-28.63 (88)	17.64 (3)	N/A	N/A	N/A	N/A	N/A	N/A	
MSCI AC World ex USA Growth (Net)	10.70	-23.05	5.09	22.20	27.34	-14.43	32.01	0.12	-1.25	
Variance	3.87	-5.58	12.55	N/A	N/A	N/A	N/A	N/A	N/A	
IM International Large Cap Growth Equity (MF) Median	12.21	-20.24	8.88	20.00	27.50	-14.67	28.61	-1.94	0.25	
Wellington Emerging Markets Fund	4.06 (84)	-24.51 (78)	-2.23 (63)	N/A	N/A	N/A	N/A	N/A	N/A	
MSCI Emerging Markets (Net) Index	4.89	-20.09	-2.54	18.31	18.42	-14.57	37.28	11.19	-14.92	
Variance	-0.83	-4.42	0.31	N/A	N/A	N/A	N/A	N/A	N/A	
IM Emerging Markets Equity (SA+CF) Median	7.41	-19.46	0.91	18.39	20.17	-15.23	36.89	9.87	-12.11	
Total Other Equity	3.02	26.45	13.85	-5.66	65.17	-22.42	-17.60	N/A	N/A	
Huff Energy Fund										
Franklin Park Private Equity										

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 June 30, 2023

	Performance (%)								
	YTD	2022	2021	2020	2019	2018	2017	2016	2015
Total Fixed Income	2.08	-11.28	1.69	4.10	4.08	0.06	2.86	4.36	-0.97
Total Fixed Income Policy	2.57	-14.66	-2.05	8.28	7.93	-0.66	5.60	2.77	-1.37
Variance	-0.49	3.38	3.74	-4.18	-3.85	0.72	-2.74	1.59	0.40
Orleans Capital	1.58 (98)	-12.93 (48)	-1.34 (56)	7.16 (93)	8.80 (68)	0.07 (46)	3.87 (58)	3.79 (28)	0.57 (74)
Blmbg. U.S. Aggregate Index	2.09	-13.01	-1.55	7.51	8.72	0.01	3.54	2.65	0.55
Variance	-0.51	0.08	0.21	-0.35	0.08	0.06	0.33	1.14	0.02
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	2.42	-12.95	-1.24	8.49	9.17	0.06	3.99	3.04	0.81
Pimco Diversified Income Fund	3.52 (12)	-13.81 (50)	0.26 (5)	N/A	N/A	N/A	N/A	N/A	N/A
Blmbg. Global Credit (Hedged)	3.27	-13.75	-0.41	7.53	12.08	-0.81	5.89	7.33	-0.20
Variance	0.25	-0.06	0.67	N/A	N/A	N/A	N/A	N/A	N/A
IM Global Fixed Income (MF) Median	1.83	-14.66	-2.73	8.29	8.08	-1.78	6.82	2.92	-3.83
Total Other Fixed Income	1.21	4.87	12.76	0.48	3.66	1.27	-0.49	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.



	Performance (%)								
	YTD	2022	2021	2020	2019	2018	2017	2016	2015
Alternative Investments									
Other Assets									
Cash Account	2.21	1.38	0.01	0.43	2.11	1.72	0.76	0.27	0.01
Other Alternative Assets									
Total Real Estate	-4.55	6.27	24.27	-0.45	5.75	5.14	2.90	0.76	5.40
NCREIF Property Index	-3.76	5.52	17.70	1.60	6.42	6.72	6.96	7.97	13.33
Variance	-0.79	0.75	6.57	-2.05	-0.67	-1.58	-4.06	-7.21	-7.93
Morgan Stanley	-3.45	6.14	21.48	1.26	6.16	7.96	8.74	9.20	N/A
NCREIF Fund Index-ODCE (EW)	-6.42	7.56	21.88	0.75	5.18	7.30	6.92	8.36	14.18
Variance	2.97	-1.42	-0.40	0.51	0.98	0.66	1.82	0.84	N/A
Brookfield Premier Real Estate Partners	-10.05	10.55	25.66	0.57	N/A	N/A	N/A	N/A	N/A
NCREIF Fund Index-ODCE (EW)	-6.42	7.56	21.88	0.75	5.18	7.30	6.92	8.36	14.18
Variance	-3.63	2.99	3.78	-0.18	N/A	N/A	N/A	N/A	N/A
Stockbridge Smart Markets	-5.87	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NCREIF Fund Index-ODCE (EW)	-6.42	7.56	21.88	0.75	5.18	7.30	6.92	8.36	14.18
Variance	0.55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Timber Funds	-7.42	21.88	6.99	1.43	-1.12	0.13	-3.94	-6.92	1.93
NCREIF Timberland Index	3.49	12.90	9.17	0.81	1.30	3.21	3.63	2.59	4.97
Variance	-10.91	8.98	-2.18	0.62	-2.42	-3.08	-7.57	-9.51	-3.04

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 June 30, 2023

Comparative Performance - IRR									
	Market Value (\$)	MTH	QTR	YTD	1 YR	3 YR	5 YR	Inception IRR	Inception Date
Total Real Estate Investments	144,128,971	-2.80	-2.85	-4.63	-8.21	7.67	5.94	6.68	07/31/2005
Edison Investments	2,324,204	0.74	0.74	1.58	3.23	3.07	4.04	11.93	09/30/1996
India Property Fund	164,345	0.00	0.00	-5.12	-13.78	-20.84	-30.08	-8.12	05/24/2007
Gainesville Property	1,644,315	0.00	-0.85	-1.01	-1.08	-0.88	-1.06	-6.26	01/31/2008
Morgan Stanley	79,754,088	-2.24	-2.24	-3.45	-7.07	8.48	6.82	7.36	12/31/2015
AEW Partners Fund VIII	3,629,911	0.00	0.00	0.62	4.21	30.74	23.11	19.46	06/26/2017
GreenOak US III	10,479,832	0.00	0.00	-0.33	-1.46	3.41	0.55	-0.70	06/22/2018
Brookfield Premier Real Estate Partners	25,353,561	-6.00	-6.00	-10.05	-13.78	8.20	N/A	6.68	10/01/2019
Artemis Real Estate IV	1,010,073	-0.52	-6.19	-19.81	-52.64	N/A	N/A	-54.09	06/23/2022
Stockbridge Smart Markets	18,067,268	-3.87	-3.87	-5.87	-11.15	N/A	N/A	-11.15	07/01/2022
Total Timber Funds	1,028,392	0.00	0.00	-7.49	-1.74	9.16	2.17	0.16	07/31/2005
Domain Environmental Investments II	1,028,392	0.00	0.00	-6.40	-15.38	-11.50	-6.28	-2.61	04/30/2008
Total Other Equity	102,802,575	0.00	0.00	3.03	3.99	16.14	14.29	28.32	01/01/2017
Huff Energy Fund	19,396,200	0.00	0.00	0.00	0.00	8.71	10.18	5.50	12/31/2006
Franklin Park Private Equity	83,406,375	0.00	0.00	3.84	5.00	19.37	16.87	16.59	01/31/2018
Total Other Fixed Income	10,681,342	0.00	0.00	1.20	6.91	11.72	3.66	N/A	12/21/2016
Capital Point Partners (Princeton Capital)	2,966,534	0.00	0.00	-8.94	15.77	21.10	-0.91	0.08	03/31/2007
LBC Credit Partners III	1,688,874	0.00	0.03	13.61	3.82	20.85	2.61	7.83	03/07/2014
LBC Credit Partners IV	4,002,476	0.00	0.00	6.06	8.41	7.82	6.82	7.82	09/19/2016
Providence Debt Fund III	2,023,458	0.00	0.00	-0.93	-2.19	7.88	2.20	6.17	04/21/2014



**Summary of Partnerships
Other Alternative Investments
As of June 30, 2023**

Private Equity Summary of Partnership

Partnerships	Drawn Down \$	Market Value \$	Distributed \$	IRR (%)	TVPI Multiple
Total Real Estate Investments					
Edison Investments	8,146,177	2,324,204	19,990,888	11.9	2.7
India Property Fund	4,354,162	164,345	2,359,366	-8.1	0.6
Gainesville Property	5,510,156	1,644,315	746,061	-6.3	0.4
Morgan Stanley	50,000,000	79,754,088	-	7.4	1.6
AEW Partners Fund VIII	15,381,261	3,629,911	18,441,894	19.5	1.4
GreenOak US III	12,151,340	10,479,832	1,434,323	-0.7	1.0
Brookfield Premier Real Estate Partners	20,000,000	25,353,561	-	6.7	1.3
Artemis Real Estate IV	1,720,880	1,010,073	360,908	-54.1	0.8
Stockbridge Smart Markets	20,000,000	18,067,268	-	-11.2	0.9
Total Timber Investments					
Domain Environmental Investments II	7,623,603	1,028,392	5,213,231	-2.6	0.8

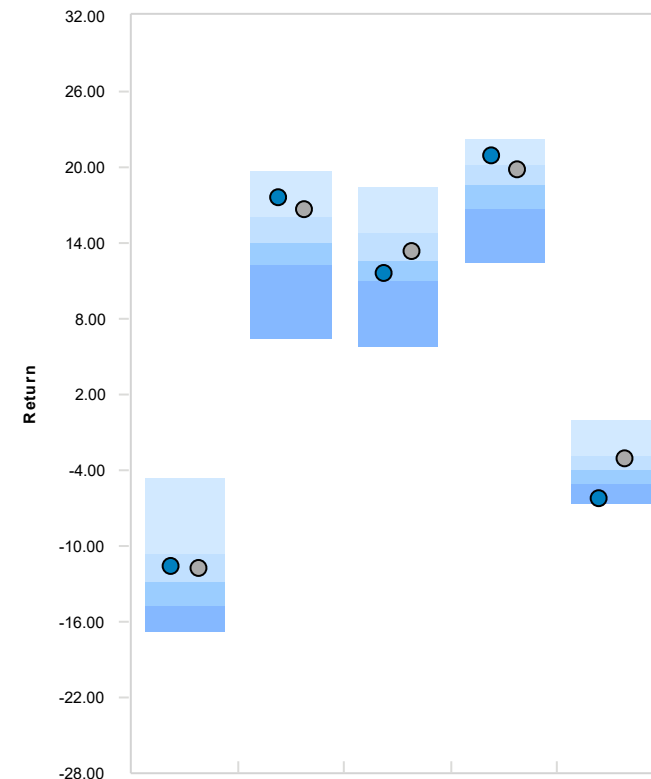
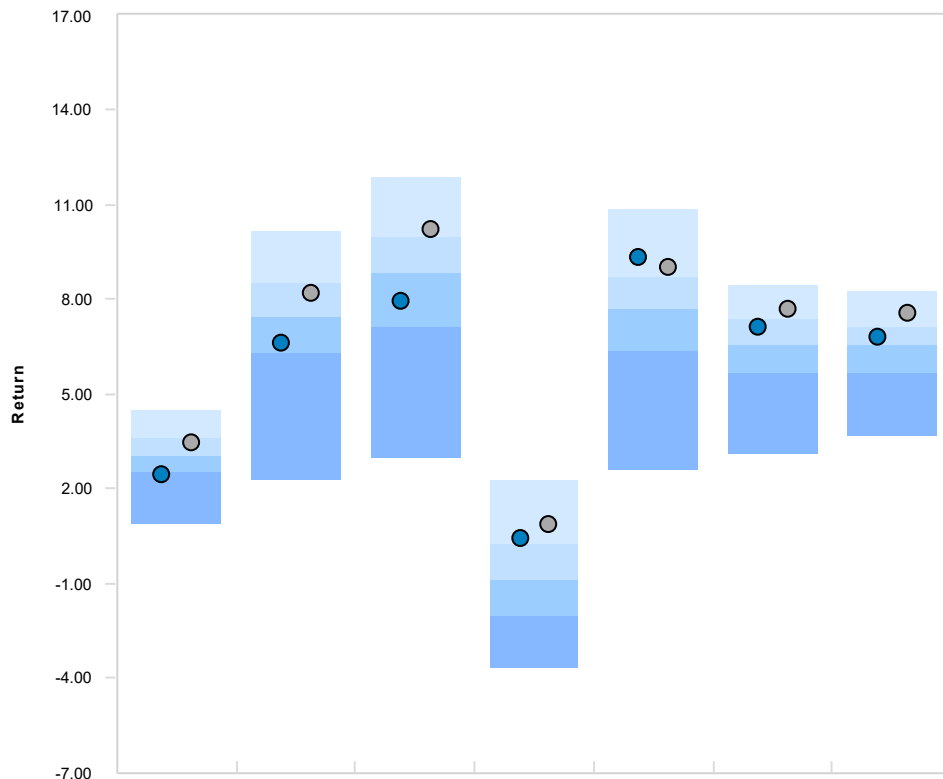


**Summary of Partnerships
Other Alternative Investments
As of June 30, 2023**

Partnerships	Drawn Down \$	Market Value \$	Distributed \$	IRR (%)	TVPI Multiple
Total Other Equity					
Huff Energy Fund	11,095,509	19,396,200	1,786,358	5.5	1.9
Franklin Park Private Equity	67,216,159	83,406,375	8,859,478	16.6	1.4
Total Other Fixed Income					
Capital Point Partners (Princeton Capital)	12,058,210	2,966,534	9,145,851	0.1	1.0
LBC Credit Partners III	18,851,406	1,688,874	21,545,155	7.8	1.2
LBC Credit Partners IV	18,000,000	4,002,476	17,969,155	7.8	1.2
Providence Debt Fund III	11,128,113	2,023,458	12,299,305	6.2	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	2.47 (79)	6.64 (69)	7.97 (63)	0.42 (22)	9.34 (16)	7.17 (30)	6.82 (40)
● Total Fund Policy	3.46 (33)	8.23 (32)	10.25 (21)	0.90 (15)	9.02 (21)	7.73 (17)	7.60 (12)
Median	3.05	7.46	8.83	-0.86	7.70	6.56	6.57

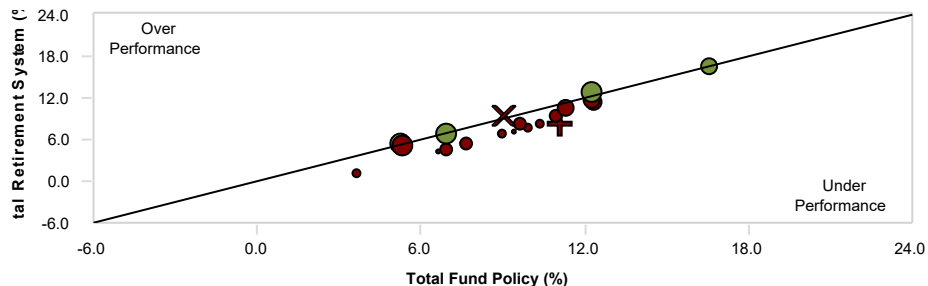
	2022	2021	2020	2019	2018
● Total Retirement System	11.54 (34)	17.68 (13)	11.65 (64)	20.92 (17)	-6.18 (91)
● Total Fund Policy	11.70 (37)	16.63 (22)	13.40 (39)	19.81 (32)	-3.12 (31)
Median	12.78	14.01	12.54	18.57	-4.02

Comparative Performance

	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022	1 Qtr Ending Sep-2022	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021
Total Retirement System	4.07 (56)	4.91 (71)	-3.49 (19)	-9.89 (51)	-3.04 (22)	5.88 (7)
Total Fund Policy	4.62 (31)	5.76 (45)	-3.68 (24)	-10.63 (69)	-3.01 (22)	5.54 (13)
All Public Plans-Total Fund Median	4.16	5.63	-4.31	-9.88	-4.27	4.36

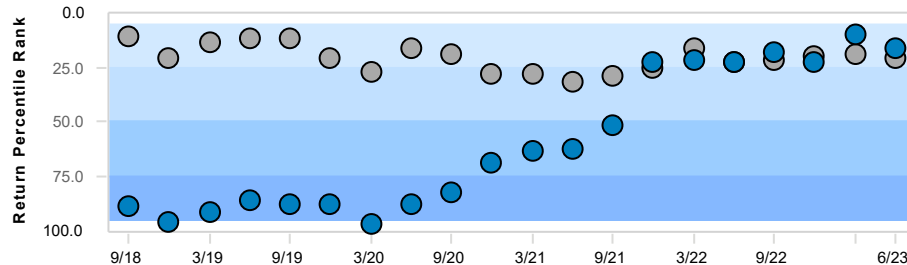


3 Yr Rolling Under/Over Performance - 5 Years



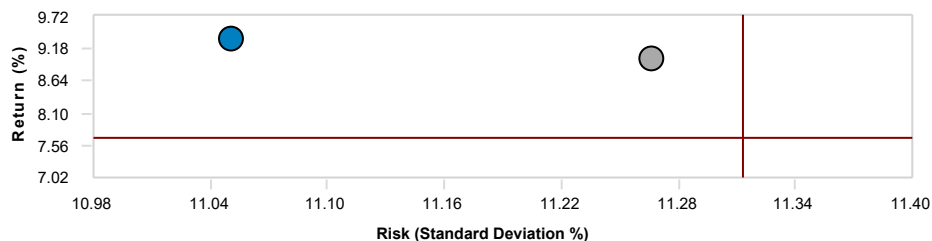
● Over Performance ● Under Performance
+ Earliest Date × Latest Date

3 Yr Rolling Percentile Ranking - 5 Years



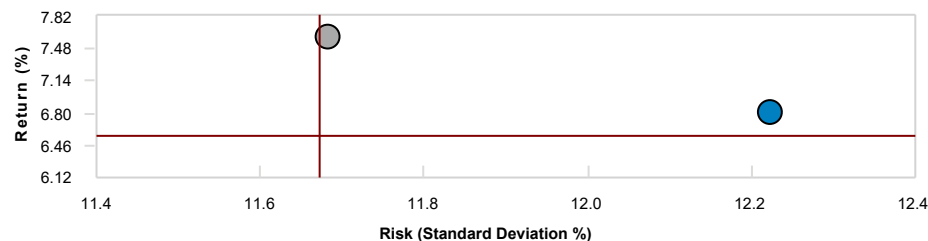
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
● Total Retirement System	20	7 (35%)	0 (0%)	4 (20%)	9 (45%)
● Total Fund Policy	20	15 (75%)	5 (25%)	0 (0%)	0 (0%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
● Total Retirement System	9.34	11.05
● Total Fund Policy	9.02	11.27
— Median	7.70	11.31

Peer Group Scattergram - 5 Years



	Return	Standard Deviation
● Total Retirement System	6.82	12.22
● Total Fund Policy	7.60	11.68
— Median	6.57	11.67

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Retirement System	1.34	99.10	96.22	0.51	0.20	0.75	0.97	6.51
Total Fund Policy	0.00	100.00	100.00	0.00	N/A	0.71	1.00	6.87

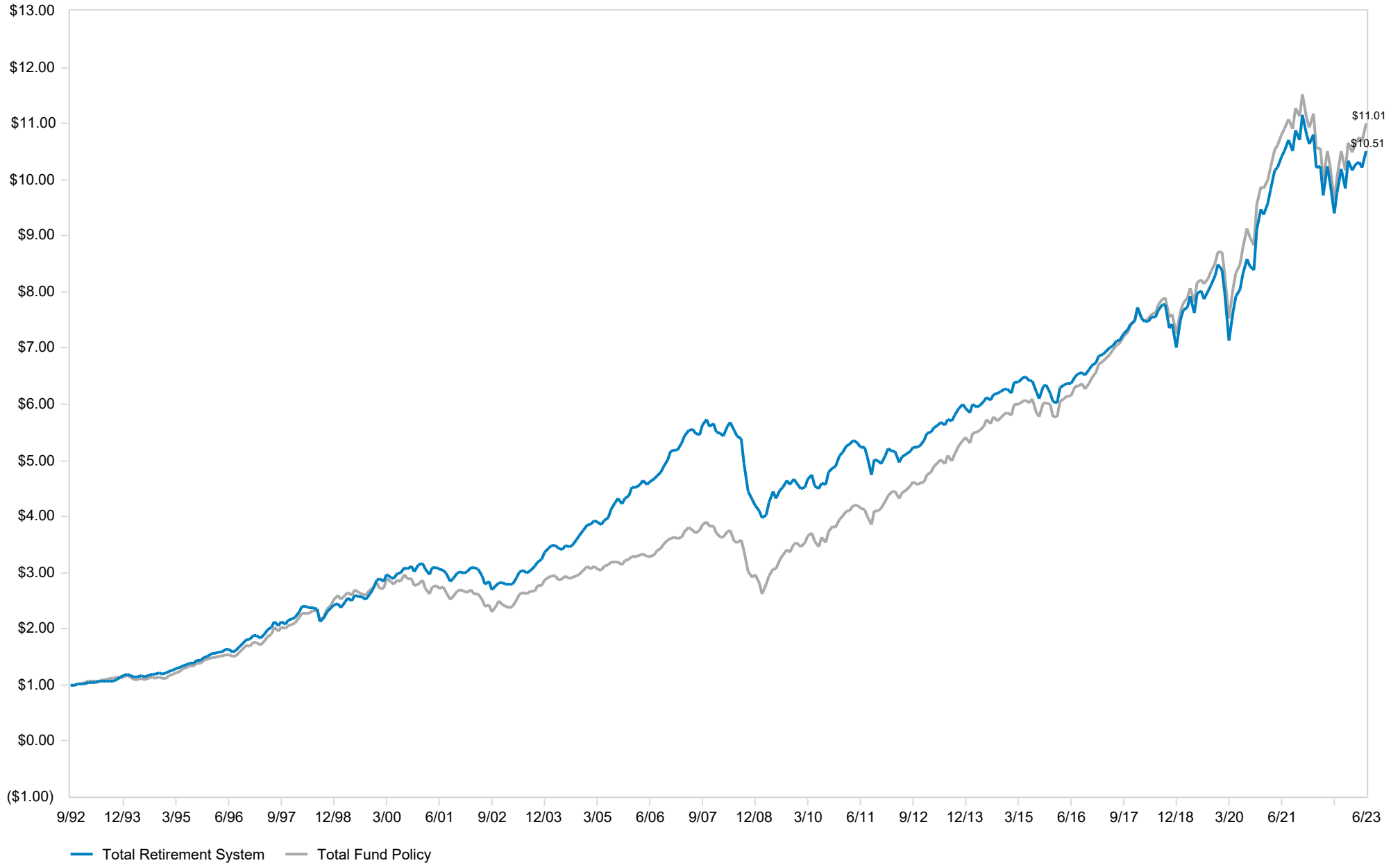
Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Retirement System	1.76	100.79	106.47	-0.95	-0.38	0.47	1.04	8.23
Total Fund Policy	0.00	100.00	100.00	0.00	N/A	0.55	1.00	7.79



**Growth of \$1
Total Retirement System
Since Inception Ending June 30, 2023**

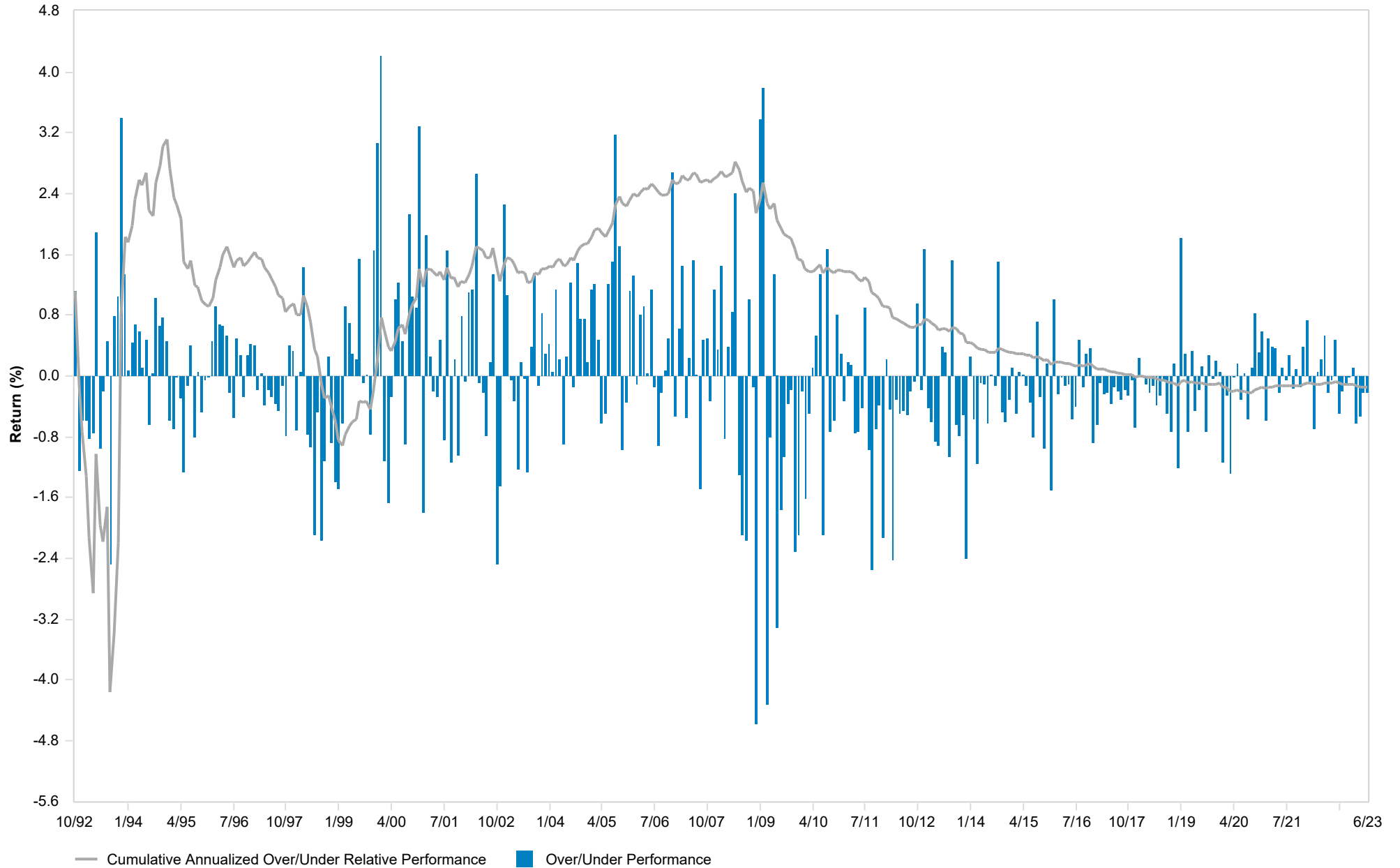
Growth of \$1



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.	•		



	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 6/30/2023

Plan	Most Recent Statement Date	Statement Frequency	Statement Source
Total Retirement System			
Total Equity			
Total Domestic Equity			
NT Collective Russell 3000 Fund	6/30/2023	Monthly	Custodian
Baird Mid Cap Growth	6/30/2023	Monthly	Custodian
Nuance Mid Cap Value	6/30/2023	Monthly	Custodian
Kennedy Small Cap Value	6/30/2023	Monthly	Custodian
Total International Equity			
Thompson Siegel & Walmsley	6/30/2023	Monthly	Custodian
Driehaus International Small Cap Growth	6/30/2023	Monthly	Custodian
WCM Focused Intl	6/30/2023	Monthly	Custodian
Wellington Emerging Markets	6/30/2023	Monthly	Custodian
Total Other Equity			
Huff Energy Fund	12/31/2021	Quarterly	Manager
Franklin Park	3/31/2023	Quarterly	Manager
Total Fixed Income			
Total Fixed Income Funds			
Orleans Capital	6/30/2023	Monthly	Custodian
PIMCO Diversified	6/30/2023	Monthly	Custodian
Total Other Fixed Income Funds			
Capital Point Partners	3/31/2023	Quarterly	Manager
LBC Credit Partners III	3/31/2023	Quarterly	Manager

Austin Police Retirement System
Investment Pricing Summary
as of 6/30/2023

Plan	Most Recent Statement Date	Statement Frequency	Statement Source
LBC Credit Partners IV	3/31/2023	Quarterly	Manager
Providence Debt Fund III	3/31/2023	Quarterly	Manager
Total Alternatives			
Total Real Estate (Composite)(6091100)			
Edison Investments	6/30/2023	Quarterly	Manager
India Property Fund	3/31/2023	Quarterly	Manager
Gainesville Property	12/31/2017	N/A	Manager
Morgan Stanley	6/30/2023	Quarterly	Manager
AEW Parters VIII	3/31/2023	Quarterly	Manager
GreenOak US III	3/31/2023	Quarterly	Manager
Brookfield	3/31/2023	Quarterly	Manager
Artemis IV	3/31/2023	Quarterly	Manager
Stockbridge	6/30/2023	Quarterly	Manager
APRS Building	9/30/2021	N/A	Client
Total Timber Funds			
Domain Environmental	3/31/2023	Quarterly	Manager
Cash Account	6/30/2023	Monthly	Custodian

	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
Total Domestic Equity	0.33	411,391,210	1,360,101	
NT Collective Russell 3000 Index	0.02	246,820,877	49,364	0.02 % of Assets
Baird Mid Cap Growth	0.69	53,730,237	372,381	0.70 % of First \$50 M 0.60 % Thereafter
Nuance Mid Cap Value	0.67	52,155,961	351,514	0.70 % of First \$25 M 0.65 % Thereafter
Kennedy Small Cap Value	1.00	58,684,135	586,841	1.00 % of Assets
Total International Equity	0.76	133,084,012	1,014,968	
Thompson Siegel & Walmsley	0.65	53,716,474	349,157	0.65 % of Assets
Driehaus International Small Cap Growth	0.90	19,959,406	179,635	0.90 % of Assets
WCM Focused Intl Growth LP	0.85	40,615,253	345,230	0.85 % of Assets
Wellington Emerging Markets Fund	0.75	18,792,879	140,947	0.75 % of Assets
Total Other Equity	0.35	102,802,575	358,516	
Huff Energy Fund	0.77	19,396,200	150,000	
*Franklin Park Private Equity	0.25	83,406,375	208,516	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	0.36	184,565,199	655,669	
Orleans Capital	0.13	125,978,856	166,175	0.15 % of First \$50 M 0.12 % Thereafter
Pimco Diversified Income Fund	0.75	47,905,000	359,288	0.75 % of Assets
Total Other Fixed Income	1.22	10,681,342	130,207	
Capital Point Partners (Princeton Capital)	1.65	2,966,534	48,948	
LBC Credit Partners III	1.25	1,688,874	21,111	
LBC Credit Partners IV	1.25	4,002,476	50,031	
Providence Debt Fund III	0.50	2,023,458	10,117	

Fee information on this page is an illustrative estimate of management fees based on current reported portfolio values. Fee estimates do not reflect actual calculation methodologies or applicable carried interest.



	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
Total Real Estate	0.93	144,128,971	1,342,045	
Edison Investments	1.00	2,324,204	23,242	1.00 % of Assets
India Property Fund	2.00	164,345	3,287	2.00 % of Assets
Gainesville Property	0.00	1,644,315	-	0.00 % of Assets
Morgan Stanley	0.90	79,754,088	717,787	0.90 % of Assets
AEW Partners Fund VIII	1.25	3,629,911	45,374	1.25 % of Assets
GreenOak US III	1.50	10,479,832	157,197	1.50 % of Assets
Brookfield Premier Real Estate Partners	1.00	25,353,561	253,536	1.00 % of Assets
Artemis Real Estate IV	1.50	1,010,073	15,151	1.50 % of Assets
Stockbridge Smart Markets	0.70	18,067,268	126,471	0.70 % of Assets
APRS Building	0.00	1,701,375	-	0.00 % of Assets
Total Timber Funds	1.25	1,028,392	12,855	
Domain Environmental Investments II	1.25	1,028,392	12,855	1.25 % of Assets
Cash Account	0.00	7,161,167	-	0.00 % of Assets
Total Retirement System	0.48	984,161,525	4,744,153	

Fee information on this page is an illustrative estimate of management fees based on current reported portfolio values. Fee estimates do not reflect actual calculation methodologies or applicable carried interest.



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
Jan-2014		Blmbg. U.S. Aggregate Index	10.00
Russell 3000 Index	30.00	Blmbg. Global Credit	5.00
MSCI World ex U.S.	15.00	NCREIF Property Index	15.00
Blmbg. U.S. Aggregate Index	5.00	HFRI Fund of Funds Composite Index	5.00
Blmbg. Global Multiverse	5.00	Credit Suisse Leveraged Loan Index	5.00
NCREIF Property Index	15.00	Cambridge Associates Private Equity Index	2.50
NCREIF Timberland Index (Monthly)	5.00	Mar-2022	
Russell 3000 + 300 bps	12.50	Russell 3000 Index	45.00
HFRI Fund of Funds Composite Index	10.00	MSCI World ex U.S.	15.00
FTSE 3 Month T-Bill	2.50	Blmbg. U.S. Aggregate Index	5.00
Jan-2017		Blmbg. Global Credit	5.00
Russell 3000 Index	45.00	NCREIF Property Index	15.00
MSCI World ex U.S.	15.00	HFRI Fund of Funds Composite Index	5.00
Blmbg. U.S. Aggregate Index	5.00	Credit Suisse Leveraged Loan Index	2.50
Blmbg. Global Multiverse	5.00	Cambridge Associates Private Equity Index	7.50
NCREIF Property Index	15.00	Apr-2023	
NCREIF Timberland Index (Monthly)	2.50	Russell 3000 Index	40.00
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	12.50
Cambridge Associates Private Equity Index	2.50	Blmbg. Global Credit	5.00
Jan-2018		NCREIF Property Index	15.00
Russell 3000 Index	42.50	Cambridge Associates Private Equity Index	12.50
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		
		Apr-2023			
		Cambridge Associates Private Equity Index	100.00		
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			
Apr-2023					
Blmbg. U.S. Aggregate Index		75.00			
Blmbg. Global Credit		25.00			
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.

This performance report is based on data obtained by the client's custodian(s), investment fund administrator, or other sources believed to be reliable. While these sources are believed to be reliable, the data providers are responsible for the accuracy and completeness of their statements. Clients are encouraged to compare the records of their custodian(s) to ensure this report fairly and accurately reflects their various asset positions.

The strategies listed may not be suitable for all investors. We believe the information provided here is reliable, but do not warrant its accuracy or completeness. Past performance is not an indication of future performance. Any information contained in this report is for informational purposes only and should not be construed to be an offer to buy or sell any securities, investment consulting, or investment management services.

Additional information included in this document may contain data provided by from index databases, public economic sources and the managers themselves.

This document may contain data provided by Bloomberg Barclays. Bloomberg Barclays Index data provided by way of Barclays Live.

This document may contain data provided by Standard and Poor's. Nothing contained within any document, advertisement or presentation from S&P Indices constitutes an offer of services in jurisdictions where S&P Indices does not have the necessary licenses. All information provided by S&P Indices is impersonal and is not tailored to the needs of any person, entity or group of persons. Any returns or performance provided within any document is provided for illustrative purposes only and does not demonstrate actual performance. Past performance is not a guarantee of future investment results.

This document may contain data provided by MSCI, Inc. Copyright MSCI, 2017. Unpublished. All Rights Reserved. This information may only be used for your internal use, may not be reproduced or disseminated in any form and may not be used to create any financial instruments or products or any indices. This information is provided on an "as is" basis and the user of this information assumes the entire risk of any use it may make or permit to be made of this information. Neither MSCI, any of its affiliates or any other person involved in or related to compiling, computing or creating this information makes any express or implied warranties or representations with respect to such information or the results to be obtained by the use thereof, and MSCI, its affiliates and each such other person hereby expressly disclaim all warranties (including, without limitation, all warranties of originality, accuracy, completeness, timeliness, non-infringement, merchantability and fitness for a particular purpose) with respect to this information. Without limiting any of the foregoing, in no event shall MSCI, any of its affiliates or any other person involved in or related to compiling, computing or creating this information have any liability for any direct, indirect, special, incidental, punitive, consequential or any other damages (including, without limitation, lost profits) even if notified of, or if it might otherwise have anticipated, the possibility of such damages.

This document may contain data provided by Russell Investment Group. Russell Investment Group is the source owner of the data contained or reflected in this material and all trademarks and copyrights related thereto. The material may contain confidential information and unauthorized use, disclosure, copying, dissemination or redistribution is strictly prohibited. This is a user presentation of the data. Russell Investment Group is not responsible for the formatting or configuration of this material or for any inaccuracy in presentation thereof.

This document may contain data provided by Morningstar. All rights reserved. Use of this content requires expert knowledge. It is to be used by specialist institutions only. The information contained herein: (1) is proprietary to Morningstar and/or its content providers; (2) may not be copied, adapted or distributed; and (3) is not warranted to be accurate, complete or timely. Neither Morningstar nor its content providers are responsible for any damages or losses arising from any use of this information, except where such damages or losses cannot be limited or excluded by law in your jurisdiction. Past financial performance is not guarantee of future results.



Clients first.



CHICAGO | CLEVELAND | DALLAS | DETROIT | ORLANDO | PITTSBURGH | RENO

AndCo Consulting | (844) 44-ANDCO | *AndCoConsulting.com*