
Austin Police

Investment Performance Review
Period Ending June 30, 2024

MARINER

2nd Quarter 2024 Market Environment

The Economy

- The US Federal Reserve (the Fed) continued on its stable trajectory, holding rates steady during the second quarter. Capital markets have struggled to accurately predict the pace and timing of future Fed actions, resulting in an up and down quarter. In its press release for the June meeting, the Fed continued to assert that “In considering any adjustments to the target range for the federal funds rate, the Committee will carefully assess incoming data, the evolving outlook, and the balance of risks.”
- The Fed’s prolonged pause in its rate-hiking cycle and the insertion of the word “any” in its December press release provided capital markets hope that the Fed may pivot in its stance and begin reducing rates to a less restrictive level in 2024. The Fed’s published June “Dot Plot” revised expectations from three quarter-point rate cuts during the year to just one quarter-point rate cut. If this projection were to materialize, it would result in the first rate cut since the COVID pandemic in 2020.
- Growth in the US labor market continued in June, as nonfarm payrolls increased by 206,000 while unemployment rose slightly from 3.8% at the end of the first quarter to 4.1% at the end of the second quarter. Federal Reserve Chair Jerome Powell has maintained that “an unexpected weakening in the labor market could also warrant a policy response,” later defining unexpected weakening as something that would occur outside of their general forecasts.

Equity (Domestic and International)

- US equity results were mixed for the quarter, with large-capitalization (cap) stocks strongly outpacing small-cap stocks. As market participants continue to revise projections of future Fed actions, they sought safety among large-cap stocks due to these companies lessened dependence on external financing. The S&P 500 Index rose a solid 4.3% for the quarter, but ended a two-quarter streak of double-digit gains.
- Large-cap equity benchmarks continue to experience top-heavy concentration among a limited number of stocks. The top 10 stocks in the S&P 500 Index make up nearly 36% of the index’s weight as of June 2024. Year-to-date, these 10 stocks have contributed to more than 60% of the benchmark’s total return.
- International stocks also continued to experience growth during the second quarter, but results were muted by a strengthening US Dollar (USD). USD performance of international stocks lagged local currency (LCL) returns in most regions for the quarter, albeit to varying degrees.

Fixed Income

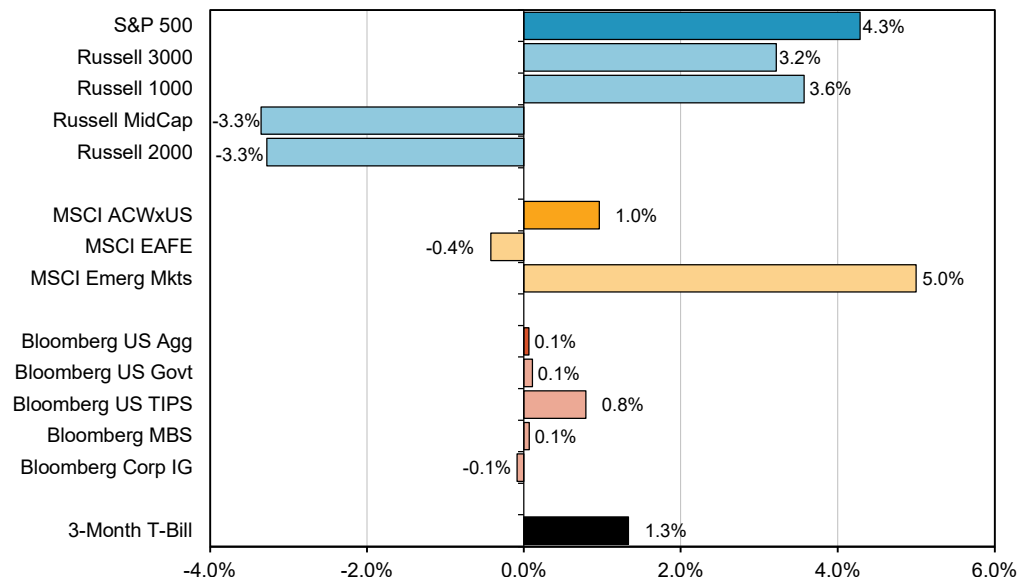
- Fixed-income markets remained largely steady during the quarter. While sticky inflation numbers and a robust job market prompted the Fed to keep the fed funds rate unchanged during the quarter, this lack of action also tempered expectations for the number of potential rate cuts in 2024.
- High-yield bonds outperformed investment-grade issues for the quarter, largely due to higher coupons. The high-yield index edged out the Bloomberg US Aggregate Bond Index, the bellwether bond benchmark, due to relative stability in both the yield curve and economic conditions.
- Global bonds continue to lag the domestic bond market, with the Bloomberg US Aggregate Bond Index outpacing the Global Aggregate ex-US Index by 2.2% for the quarter. The return gap between the two benchmarks continues to widen as the domestic index has outperformed the global index by 3.3% year-to-date.

Market Themes

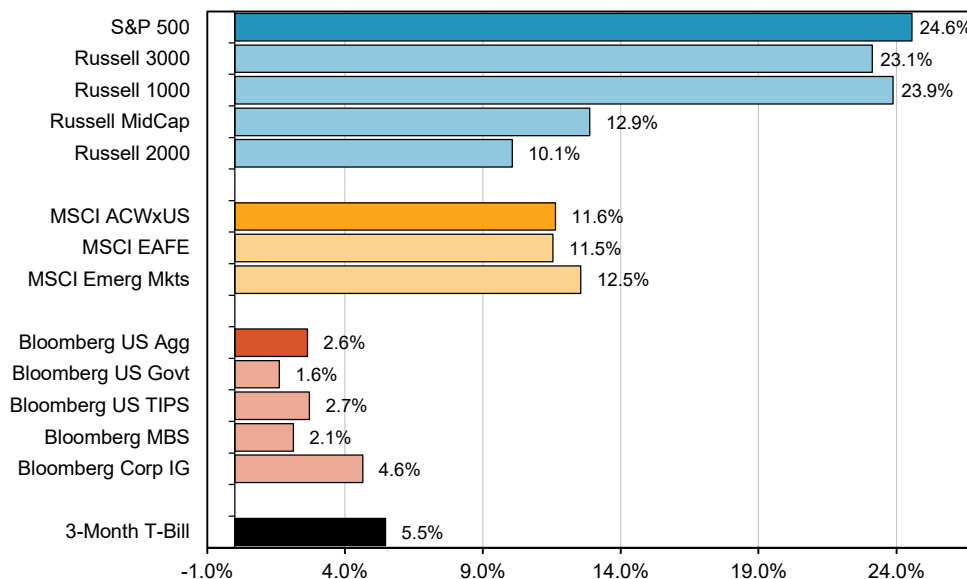
- Domestic and international equity markets posted strong results in the second quarter. Continuing their robust 2023 run, large-cap growth sectors continued to outpace their value counterparts in 2024, and by a wider margin than the prior year. The brief increased breadth markets experienced during of the first quarter did not continue during the second quarter, and so once again, large-cap growth stocks were the best-performing US asset category.
- Central banks remained vigilant in their stances to bring inflation under control. While inflation readings remain stubbornly elevated, signs of stable-to-cooling price pressures have shown up in most regions around the world. Domestically, job growth has slowed from a pace of 300,000+ month-over-month growth to just over 200,000 net new jobs.
- Policy rates were stable across most developed markets as central banks continued their tight monetary stances. Expectations of looser monetary policy have been frustrated by mixed economic data and central banks’ inaction so far this year.
- Ongoing military conflicts coupled with global economic uncertainty continue to act as headwinds to international market results. While global disruptions from the Russia-Ukraine conflict seemed to subside during the quarter, the proxy war in the Middle East has spread to other countries in the region and unsettled shipping channels globally.

- Performance in the domestic equity markets was disparate during the second quarter. After a more encouraging showing last quarter, where markets broadened out in terms of strength, large-cap stocks once again surged ahead while smaller-cap stocks weakened slightly. For the period, the large-cap S&P 500 and Russell 1000 indexes posted returns of 4.3% and 3.6%, respectively. The broad-cap Russell 3000 index lagged slightly, returning a more modest 3.2%. Outside of large-cap issues, the Russell Mid Cap and Russell 2000 indexes both experienced equivalent pullbacks during the quarter, with each benchmark returning -3.3%.
- International developed market equities were muted during the quarter. The MSCI ACWI ex US Index posted a modest 1.0% gain for the quarter, while the MSCI EAFE Index fell slightly, posting a return of -0.4% in USD terms. International emerging market (EM) equities posting a 5.0% return for the quarter, outpacing the performance of their developed market counterparts. Much of the solid performance in the EM region was attributed to a bounce back in China, Taiwan, and Singapore, each posting strong USD results during the quarter.
- Most broad fixed-income indexes rose slightly during the second quarter of 2024. The Bloomberg US Aggregate Index returned 0.1% for the quarter, while investment-grade corporate bonds slid -0.1%. The TIPS market was the best-performing sector during the quarter, outpacing the rest of the domestic fixed-income categories with a return of 0.8%.
- Large-cap US equity indexes have been a performance juggernaut over the trailing 12 months. The S&P 500 Index has gained 24.6% while the Russell 1000 Index was nearly as strong with a return of 23.9%. The weakest performing class of domestic equities for the year was the small-cap Russell 2000 Index, which still posted a double-digit return of 10.1% over the last 12 months.
- International markets also showcased healthy performance for the one-year trailing period. The MSCI EM Index was the best international performer, returning 12.5%, while the MSCI EAFE and MSCI ACWI ex US indexes posted returns of 11.5% and 11.6%, respectively.
- Bond markets posted positive but muted results for the trailing one-year period which substantially lagged equity benchmark results. Investment-grade corporate bonds led the way, up by 4.6% for the year. Meanwhile, Treasuries lagged, returning just 1.6% over the period. The bellwether fixed-income benchmark, the Bloomberg US Aggregate Bond Index, returned a mild 2.6% for the year.

Quarter Performance

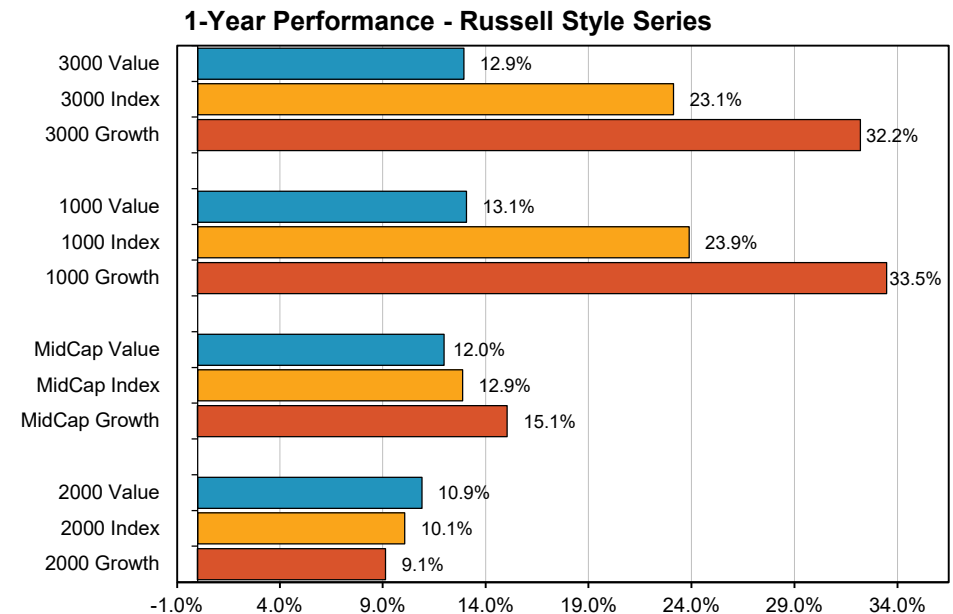
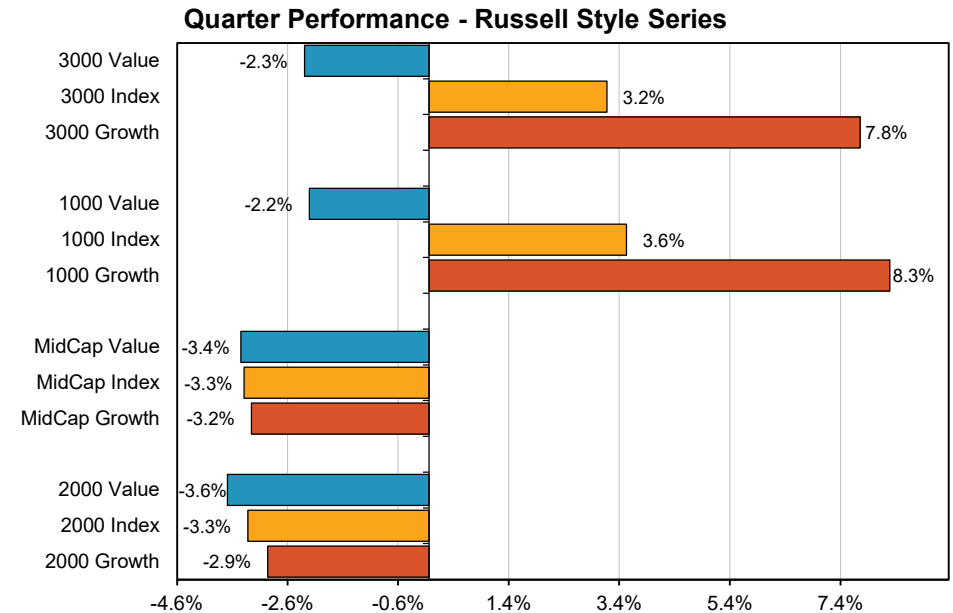


1-Year Performance



Source: Investment Metrics

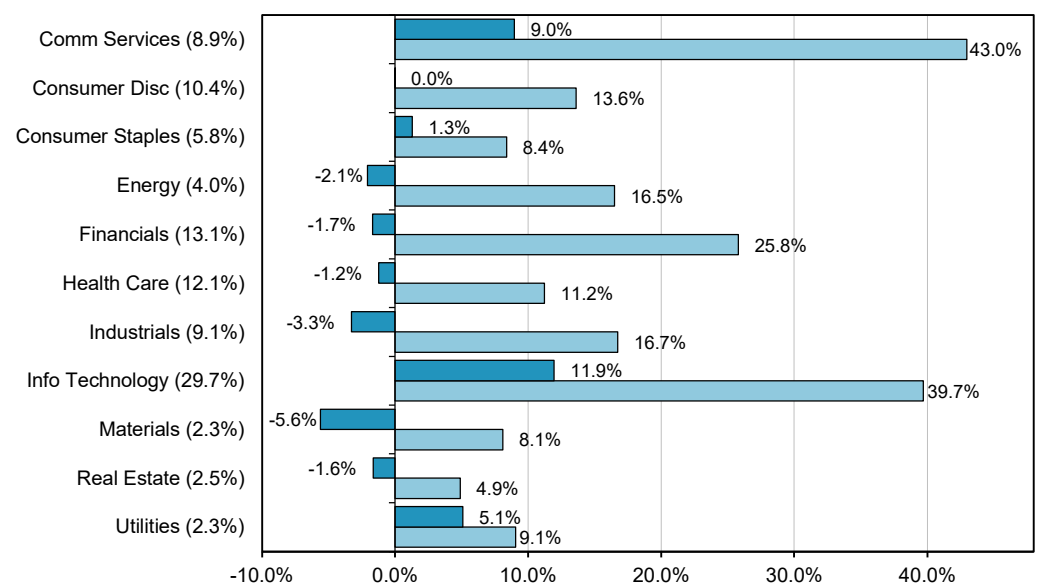
- Domestic equity benchmarks posted mixed absolute results for the second quarter, but growth stocks outpaced their value counterparts at each capitalization level. The best-performing area of the equity market continues to be large-cap growth with the Russell 1000 Growth Index returning 8.3% for the quarter. The worst-performing segment of the domestic equity market for the second consecutive quarter was small-cap value with the Russell 2000 Value index falling -3.6% for the quarter. From a capitalization perspective, large-cap stocks once again led their small-cap counterparts, with the Russell 1000 Index returning 3.2% and the Russell 2000 Index falling by -3.3%.
- The market's growth-led rally continued during the quarter, and this disparity was most visible in large-cap style performance, with the Russell 1000 Growth Index outpacing the Russell 1000 Value Index by double digits (10.1%). While mid-cap and small-cap growth fell in absolute terms for the quarter, the mid- and small-cap growth indexes held up slightly better than their value counterparts. This quarter's results followed the theme of large-cap growth stocks being the best-performing segment of the domestic equity market over the past several years.
- For the year the Russell 1000 Growth Index returned an impressive 33.5%, leading the way among style and market capitalization classifications. Much of this strong performance has been attributable to the emergence of the "Magnificent 7" stocks, which have dominated the large-cap indexes over the past several years. The seven biggest stocks in the Russell 1000 Index contributed more than 70% of the index's total performance in the trailing 12-month period.
- The weakest performing index for the year was the Russell 2000 Growth, which still posted a solid return of 9.1%.
- The dominance of growth sectors is evident in the chart with the broad-cap, large-cap, and mid-cap benchmarks handily outperforming the core and value indexes for the trailing one-year period. The performance gap between the Russell 1000 Growth Index and the Russell 1000 Value Index was a staggering 20.4% for the year while the mid-cap growth index edged past the mid-cap value index by just 3.1%. Small-cap stocks bucked the growth-dominance trend with the Russell 2000 Value Index posting a return of 10.9% versus a return of 9.1% for the Russell 2000 Growth Index.



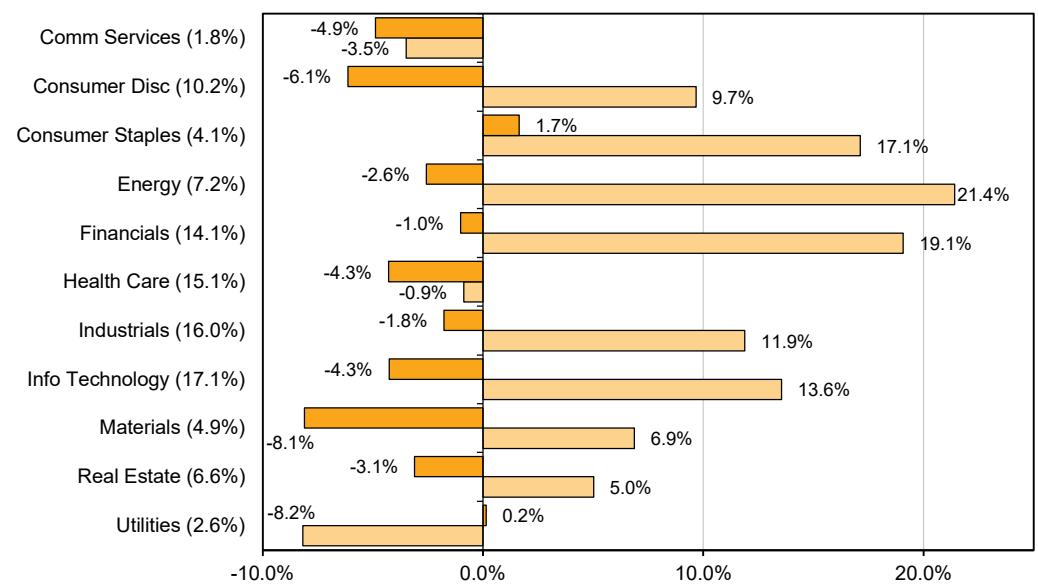
Source: Investment Metrics

- Economic sector performance was choppy during the second quarter. This quarter broke the preceding trend of broader participation in the equity market's rally. Only five of the 11 economic sectors posted positive absolute returns for the quarter, with information technology (11.9%), communication services (9.0%), and utilities (5.1%) leading the way.
- In contrast, full-year results were more consistent as all 11 economic sectors finished the year in positive territory. Of the 11 sectors, three (communication services, up 43.0%; information technology, up 39.7%; and financials, up 25.8%) were up by more than 25.0% for the past year. With their more than 40% combined weight in the benchmark, these three sectors were also the only ones to outpace the Russell 1000 Index's return of 23.9%. Despite solid positive performance, utilities (up 9.1%), consumer staples (8.4%), materials (8.1%), consumer staples (8.4%), and real estate (4.9%) were all relative detractors for the year with their single-digit returns.
- Nine of the 11 small-cap economic sectors lost value during the quarter. Consumer staples (up 1.7%), and utilities (0.2%) were the only two sectors to post gains for the quarter. Materials was the worst-performing sector posting a loss of -8.1% for the quarter. While not always the case, small-cap stocks generally have greater dependence on liquidity and access to capital which can lead to lagging performance relative to large-cap stocks during periods of restrictive monetary policy.
- Similar to large-cap sector performance, eight of the 11 small-cap sectors were positive over the trailing one-year period. Energy posted the strongest sector performance with a return of 21.4%, followed closely by the financials sector return of 19.1%. Consumer staples (up 17.1%), information technology (13.6%), and industrials (11.9%) each produced double-digit results for the period. Three sectors (communication services, health care, and utilities) posted negative results during the period.

Russell 1000



Russell 2000



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, 2024

Top 10 Weighted Stocks				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Microsoft Corp	6.7%	6.4%	32.3%	Information Technology
Apple Inc	6.2%	23.0%	9.2%	Information Technology
NVIDIA Corp	5.9%	36.7%	192.1%	Information Technology
Amazon.com Inc	3.5%	7.1%	48.2%	Consumer Discretionary
Meta Platforms Inc Class A	2.2%	3.9%	76.1%	Communication Services
Alphabet Inc Class A	2.2%	20.8%	52.3%	Communication Services
Alphabet Inc Class C	1.9%	20.6%	51.8%	Communication Services
Eli Lilly and Co	1.5%	16.6%	94.5%	Health Care
Berkshire Hathaway Inc Class B	1.5%	21.5%	88.4%	Financials
Broadcom Inc	1.4%	-3.3%	19.3%	Information Technology

Top 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
GameStop Corp Class A	0.0%	97.2%	1.8%	Consumer Discretionary
Petco Health and Wellness Co	0.0%	65.8%	-57.5%	Consumer Discretionary
Alnylam Pharmaceuticals Inc	0.1%	62.6%	27.9%	Health Care
United Therapeutics Corp	0.0%	38.7%	44.3%	Health Care
Cirrus Logic Inc	0.0%	37.9%	57.6%	Information Technology
NCR Atleos Corp	0.0%	36.8%	N/A	Financials
NVIDIA Corp	5.9%	36.7%	192.1%	Information Technology
AMC Entertainment	0.0%	33.9%	-87.2%	Communication Services
First Solar Inc	0.0%	33.6%	18.6%	Information Technology
Cava Group Inc	0.0%	32.4%	126.5%	Consumer Discretionary

Bottom 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Ginkgo Bioworks Holdings Inc	0.0%	-71.2%	-82.0%	Materials
Hertz Global Holdings Inc	0.0%	-54.9%	-80.8%	Industrials
10x Genomics Inc	0.0%	-48.2%	-65.2%	Health Care
DoubleVerify Holdings Inc	0.0%	-44.6%	-50.0%	Information Technology
UiPath Inc Class A	0.0%	-44.1%	-23.5%	Information Technology
Walgreens Boots Alliance Inc	0.0%	-43.5%	-54.6%	Consumer Staples
Fortrea Holdings Inc	0.0%	-41.9%	-31.4%	Health Care
Five Below Inc	0.0%	-39.9%	-44.6%	Consumer Discretionary
Leggett & Platt Inc	0.0%	-39.9%	-58.8%	Consumer Discretionary
Unity Software Inc Ordinary Shares	0.0%	-39.1%	-62.6%	Information Technology

Top 10 Weighted Stocks				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Super Micro Computer Inc	1.6%	-18.9%	228.7%	Information Technology
MicroStrategy Inc Class A	0.8%	-19.2%	302.3%	Information Technology
Carvana Co Class A	0.5%	46.4%	396.6%	Consumer Discretionary
e.l.f. Beauty Inc	0.4%	7.5%	84.5%	Consumer Staples
Comfort Systems USA Inc	0.4%	-4.2%	86.0%	Industrials
Onto Innovation Inc	0.4%	21.3%	88.5%	Information Technology
FTAI Aviation Ltd	0.4%	54.0%	234.2%	Industrials
Light & Wonder Inc Ordinary Shares	0.4%	2.7%	52.5%	Consumer Discretionary
Insmmed Inc	0.4%	147.0%	217.5%	Health Care
Fabrinet	0.4%	29.5%	88.5%	Information Technology

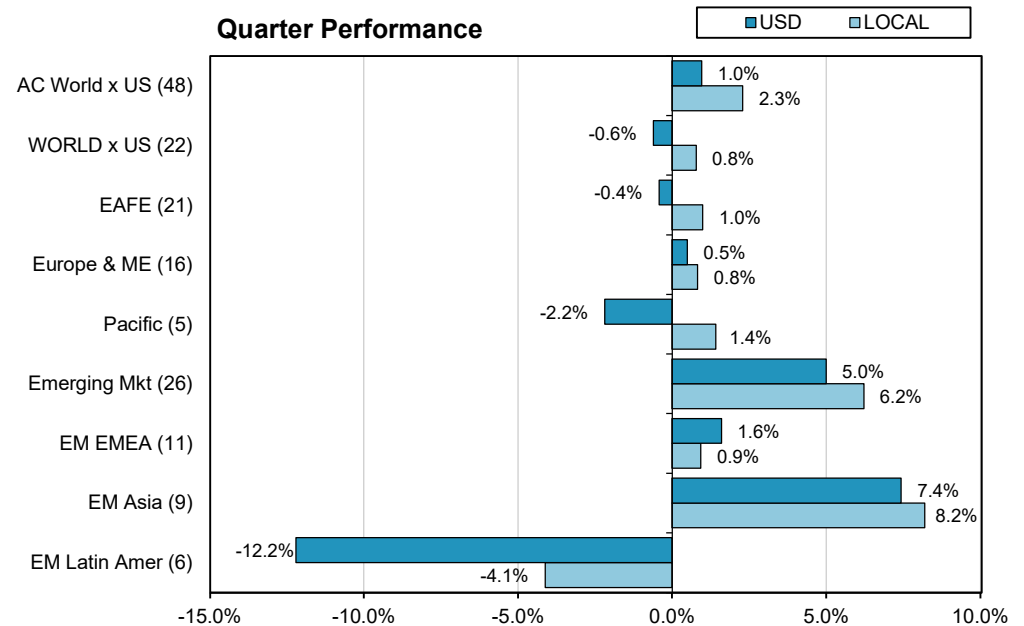
Top 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
AST SpaceMobile Inc Ordinary Shares	0.1%	300.3%	147.0%	Communication Services
Emergent BioSolutions Inc	0.0%	169.6%	-7.2%	Health Care
Novavax Inc	0.1%	164.9%	70.4%	Health Care
Rent the Runway Inc Class A	0.0%	154.3%	-55.6%	Consumer Discretionary
Insmmed Inc	0.4%	147.0%	217.5%	Health Care
Innodata Inc	0.0%	124.7%	30.9%	Industrials
NuScale Power Corp Class A	0.0%	120.2%	71.9%	Industrials
TransMedics Group Inc	0.2%	103.7%	79.4%	Health Care
Vital Farms Inc Ordinary Shares	0.1%	101.2%	290.1%	Consumer Staples
Matterport Inc Ordinary Shares	0.0%	97.8%	41.9%	Information Technology

Bottom 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Aerovate Therapeutics Inc	0.0%	-94.4%	-90.3%	Health Care
Marinus Pharmaceuticals Inc	0.0%	-87.1%	-89.2%	Health Care
Cerence Inc Ordinary Shares	0.0%	-82.0%	-90.3%	Information Technology
Velo3D Inc	0.0%	-79.2%	-95.6%	Industrials
Akoustis Technologies Inc	0.0%	-77.7%	-95.9%	Information Technology
Gritstone Bio Inc	0.0%	-76.0%	-68.3%	Health Care
Ovid Therapeutics Inc	0.0%	-74.8%	-76.5%	Health Care
Maxon Solar Technologies Ltd	0.0%	-74.4%	-97.0%	Information Technology
Zentalis Pharmaceuticals Inc	0.0%	-74.0%	-85.5%	Health Care
Nikola Corp	0.0%	-73.8%	-80.2%	Industrials

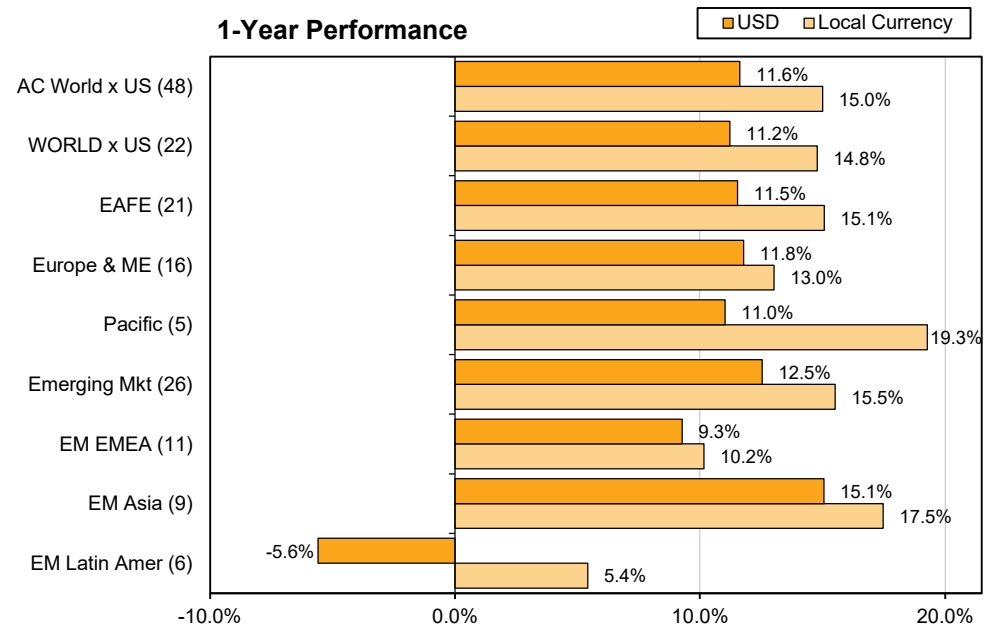
Source: Morningstar Direct

- Results among the broad international equity indexes were mixed during the quarter, echoing the performance of major domestic indexes. The strengthening USD relative to many major currencies during the quarter was a detractor to the USD performance of regional benchmark returns across most regions. The developed-market MSCI EAFE Index returned a muted 1.0% in LCL terms but fell -0.4% in USD terms. The MSCI Emerging Markets Index was the best-performing broad index and rose by 5.0% in USD and 6.2% in LCL terms for the quarter.
- Latin America continued to struggle during the quarter in both USD and LCL terms. The cyclical demand for commodity exports in the region has resulted in greater volatility due to ongoing uncertainty over central bank policies and future global demand.
- The heaviest-weighted country in the emerging market index (China) rebounded 7.1% during the quarter. The Chinese economy grew at a rate of 5.2% in 2023, lower than its pre-pandemic rate of 6.0% and has been a headwind for performance. Troubles in the commercial property and banking sectors have also created challenges for growth in the region. Despite the additive performance in the region, the Chinese banking sector underwent heavy consolidation during the second quarter amid regional bank failures across the country.
- Much like domestic markets, trailing one-year results for international developed and emerging markets benchmarks were strong. Higher LCL versus USD returns for most international benchmarks demonstrate the USD's strength over the trailing one-year period.
- Most broad and regional indexes were positive for the trailing 12 months in both USD and LCL terms. The sole exception was EM Latin America, where USD strength turned the region's positive LCL performance negative in USD terms. In LCL terms, the MSCI Pacific Index led the way with a return of 19.3% for the trailing year. USD returns for the region were still strong but returned a more muted 11.0%. The EM Asia regional index posted the strongest relative USD performance, returning 15.1% over the trailing 12 months.

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, 2024

MSCI - EAFE	Sector Weight	Quarter Return	1-Year Return
Communication Services	4.1%	0.5%	10.1%
Consumer Discretionary	11.5%	-9.0%	0.1%
Consumer Staples	8.5%	-1.6%	-6.8%
Energy	4.1%	1.3%	15.9%
Financials	20.0%	3.3%	24.2%
Health Care	13.5%	4.7%	11.5%
Industrials	16.9%	-0.8%	15.0%
Information Technology	9.5%	0.2%	24.1%
Materials	6.7%	-3.2%	8.5%
Real Estate	2.0%	-6.7%	7.6%
Utilities	3.1%	0.8%	-0.6%
Total	100.0%	-0.4%	11.5%

MSCI - ACWixUS	Sector Weight	Quarter Return	1-Year Return
Communication Services	5.3%	4.0%	5.7%
Consumer Discretionary	11.1%	-4.8%	1.9%
Consumer Staples	7.2%	-1.7%	-5.9%
Energy	5.5%	1.3%	18.9%
Financials	21.7%	2.6%	18.7%
Health Care	9.5%	3.8%	10.0%
Industrials	13.7%	-0.5%	13.1%
Information Technology	14.0%	5.2%	28.3%
Materials	7.1%	-1.9%	5.1%
Real Estate	1.8%	-4.7%	4.5%
Utilities	3.1%	2.2%	3.7%
Total	100.0%	1.0%	11.6%

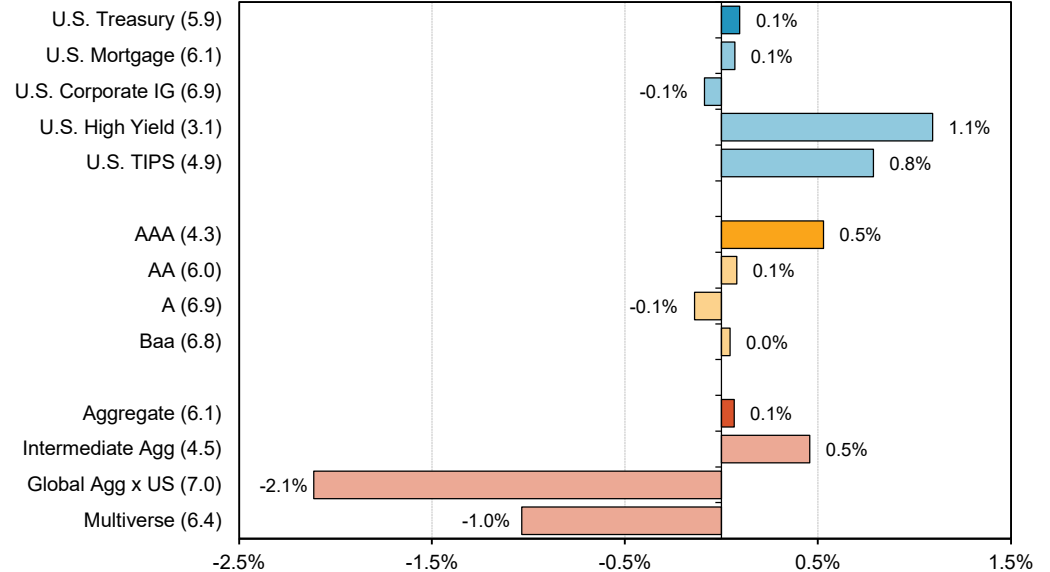
MSCI - Emerging Mkt	Sector Weight	Quarter Return	1-Year Return
Communication Services	8.9%	8.2%	2.7%
Consumer Discretionary	12.3%	5.1%	6.3%
Consumer Staples	5.2%	-3.0%	-5.7%
Energy	5.2%	3.3%	25.2%
Financials	21.9%	3.5%	12.6%
Health Care	3.2%	-4.3%	-2.8%
Industrials	6.9%	4.0%	6.9%
Information Technology	25.1%	11.3%	34.2%
Materials	6.9%	-1.8%	-3.1%
Real Estate	1.5%	2.8%	-4.1%
Utilities	3.0%	6.2%	20.3%
Total	100.0%	5.0%	12.5%

Country	MSCI-EAFE Weight	MSCI-ACWixUS Weight	Quarter Return	1-Year Return
Japan	22.7%	14.4%	-4.3%	13.2%
United Kingdom	14.9%	9.5%	3.7%	12.5%
France	11.2%	7.1%	-7.5%	0.5%
Switzerland	9.7%	6.2%	3.1%	6.1%
Germany	8.7%	5.5%	-1.4%	10.1%
Australia	7.5%	4.8%	1.6%	14.1%
Netherlands	5.4%	3.4%	5.0%	25.6%
Denmark	4.0%	2.5%	7.5%	42.1%
Sweden	3.2%	2.1%	2.2%	18.2%
Italy	2.7%	1.7%	-3.4%	21.3%
Spain	2.7%	1.7%	-1.6%	15.0%
Hong Kong	1.8%	1.1%	1.0%	-18.0%
Singapore	1.4%	0.9%	8.9%	13.5%
Finland	1.0%	0.6%	3.0%	1.7%
Belgium	1.0%	0.6%	0.9%	9.0%
Israel	0.7%	0.5%	-4.2%	23.6%
Norway	0.6%	0.4%	6.6%	14.2%
Ireland	0.3%	0.2%	-0.8%	12.5%
Portugal	0.2%	0.1%	8.5%	-6.4%
Austria	0.2%	0.1%	7.1%	17.9%
New Zealand	0.2%	0.1%	3.2%	3.7%
Total EAFE Countries	100.0%	63.6%	-0.4%	11.5%
Canada	7.4%	-2.1%	-2.1%	8.6%
Total Developed Countries		71.0%	-0.6%	11.2%
China		7.3%	7.1%	-1.6%
Taiwan		5.6%	15.1%	40.7%
India		5.6%	10.2%	34.4%
Korea		3.5%	-1.2%	8.1%
Brazil		1.2%	-12.2%	-7.7%
Saudi Arabia		1.1%	-7.4%	0.9%
South Africa		0.9%	12.3%	12.3%
Mexico		0.6%	-16.1%	-6.5%
Indonesia		0.5%	-12.4%	-11.8%
Malaysia		0.4%	4.4%	17.5%
Thailand		0.4%	-4.8%	-13.3%
United Arab Emirates		0.3%	-2.3%	0.8%
Poland		0.3%	6.1%	32.4%
Turkey		0.2%	21.4%	62.1%
Qatar		0.2%	-0.3%	0.7%
Kuwait		0.2%	-2.8%	2.2%
Philippines		0.1%	-10.7%	-3.1%
Greece		0.1%	-1.2%	9.6%
Chile		0.1%	-1.3%	-9.3%
Peru		0.1%	2.0%	40.0%
Hungary		0.1%	9.2%	29.0%
Czech Republic		0.0%	6.3%	3.5%
Colombia		0.0%	-4.6%	26.7%
Egypt		0.0%	-4.2%	-4.8%
Total Emerging Countries		29.0%	5.0%	12.5%
Total ACWixUS Countries		100.0%	1.0%	11.6%

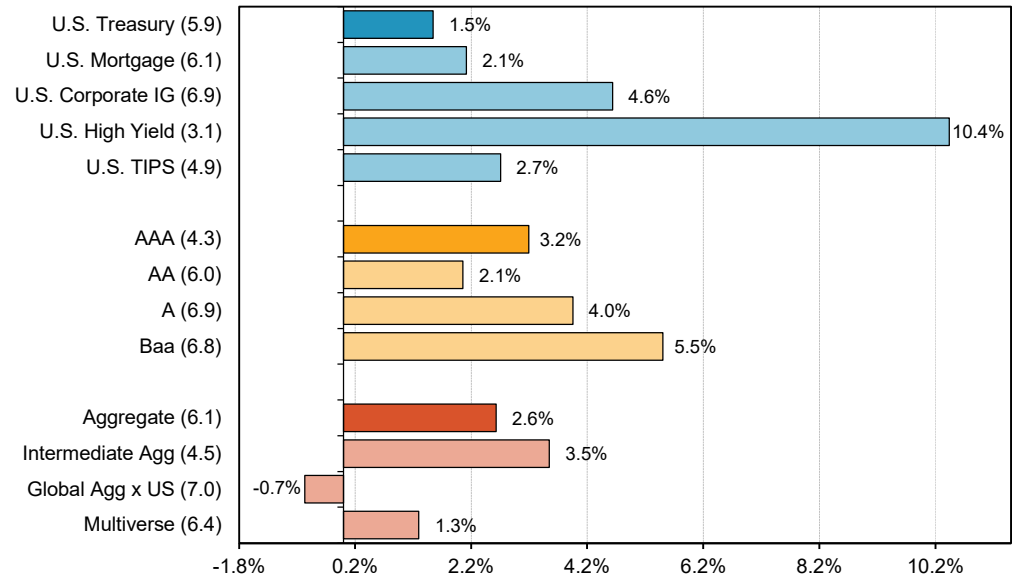
Source: Morningstar Direct, MSCI Global Index Monitor (Returns are Net in USD)
As a result of the GICS classification changes on 9/28/2018 and certain associated reporting limitations, sector performance represents backward looking performance for the prior year of each sector's current constituency,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

- Fixed-income markets fell in a relatively tight range for the quarter with many domestic sectors returning less than 0.5%. Yields remained at elevated levels as the Federal Reserve maintained its restrictive policy stance. If market expectations hold and the Fed begins to cut rates in 2024, to the extent any cuts lower yields across the curve, it will provide a jolt to bondholder performance since bond prices move in the opposite direction of yields.
- The Bloomberg US Aggregate Bond Index had a mixed quarter of performance made up of a large drawdown in April follow by smaller recoveries in May and June that combined for an index return of 0.1%. Performance across the investment-grade index's segments for the quarter was similarly muted with the Bloomberg US Corporate Investment Grade Index returning -0.1% and the US Mortgage Index gaining 0.1%.
- Outside of the Aggregate index's sub-components, high-yield bonds continued to rise, posting a return of 1.1%, boosted by the higher coupon income, and US TIPS climbed 0.8% for the quarter. The Bloomberg Global Aggregate ex-US Index returned -2.1% for the quarter with USD strength exerting downward pressure on performance. This global performance lagged domestic fixed-income indexes as well as the multiverse benchmark's return of -1.0%.
- Over the trailing one-year period, the Bloomberg US Aggregate Bond Index managed a 2.6% return. The benchmark's sub-components also posted positive performance over the trailing 12 months with the Bloomberg US Corporate Investment Grade Index rising 4.6% and the US Mortgage Index posting a more modest 2.1% return. US TIPS and high-yield corporate bonds, which are excluded from the aggregate index, each posted gains in the trailing year with returns of 2.7% and 10.4%, respectively. In addition to their higher coupons, high-yield bonds benefited from generally shorter duration than investment-grade corporate debt. This lower duration acted as a tailwind for high-yield bonds as interest rates rose during the trailing year.
- Among credit qualities, lower-quality bonds (both investment grade and non-investment grade) have outperformed higher-quality bonds due to both their higher yields, which contribute to higher interest payments, and narrowing credit spreads over the last year.
- Performance for non-US bonds was negative for the trailing year with the Bloomberg Global Aggregate ex-US Index falling -0.7%. With foreign central banks largely tracking the Fed's tight monetary stance, the negative performance of global bonds is largely attributable to USD strength over the last year.

Quarter Performance



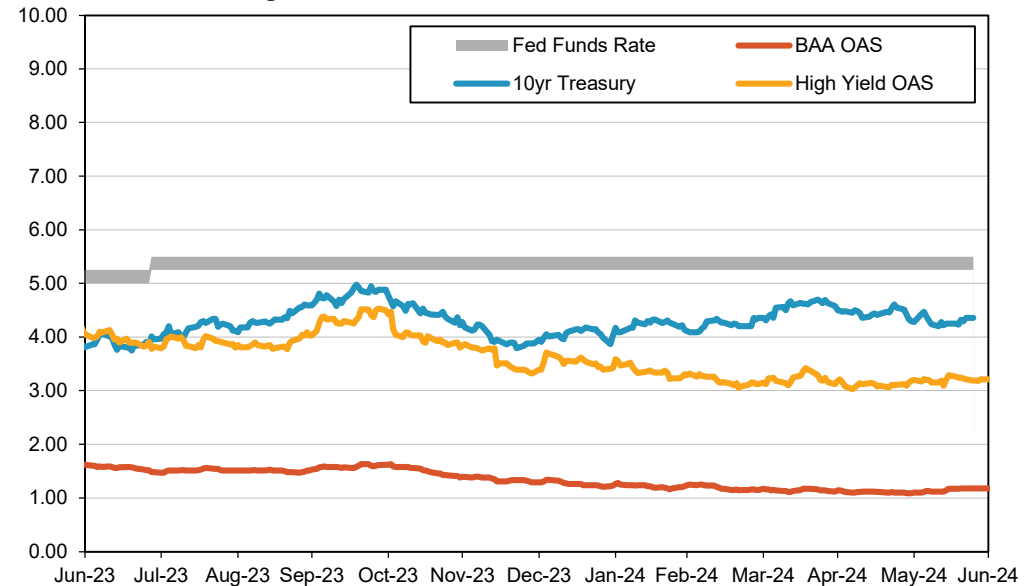
1-Year Performance



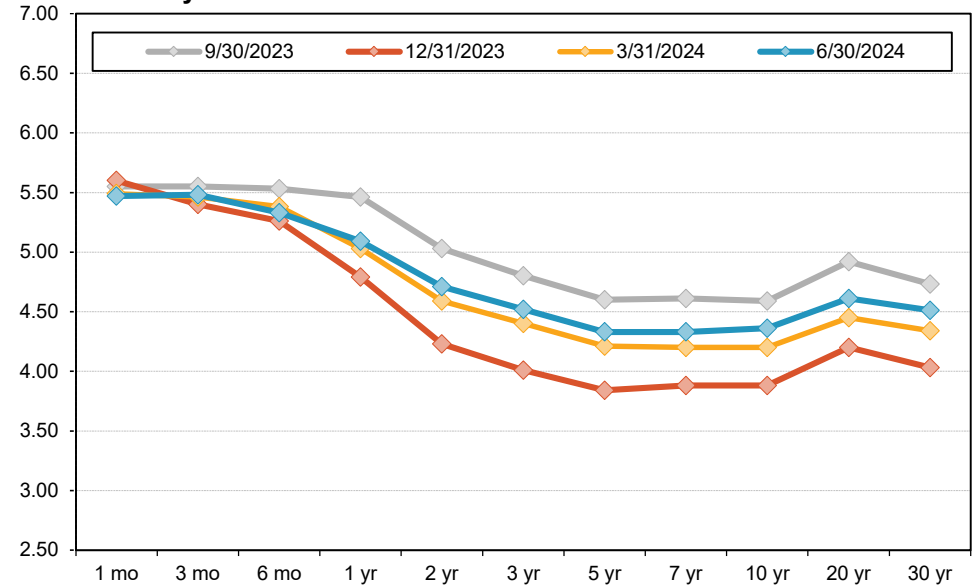
Source: Bloomberg

- The gray band across the graph illustrates the current fed funds target rate range over the last 12 months. During the second quarter, the Federal Open Market Committee (FOMC) continued to hold fed funds rates steady in the 5.25%-5.50% target range. The last rate increase in the current cycle occurred at the FOMC's July 2023 meeting. While the FOMC's press releases have continued to push economic data-dependent outcomes, the language used to describe economic conditions in these releases has also softened, resulting in market expectations that the next rate action by the FOMC will likely be a cut. The CME FedWatch tool, which forecasts rates based on Fed Fund futures pricing, currently shows a greater than 90% probability of a 0.25% rate decrease at the FOMC September meeting. Fed officials and market participants continue to express concern that leaving rates at their current levels for an extended period could tip the US economy into a recession. However, inflation remains above the FOMC's long-term 2.0% target level. Additionally, the FOMC continues to remove liquidity from the market by allowing bonds held on its balance sheet to mature without reinvesting principal payments.
- The yield on the US 10-year Treasury (blue line of the top chart) remained stable, opening the quarter at 4.33% and finishing June at a yield of 4.36%. The stability of the benchmark rate reflects the stability of the Federal Reserve's policy stance and the persistently high level of inflation throughout the economy. The 10-year Treasury benchmark's rate peaked in October 2023, cresting at a yield of just under 5.00% before pulling back in the remainder of the year.
- The red line in the top chart shows the Option Adjusted Spread (OAS) for BAA-rated corporate bonds. This measure quantifies the additional yield premium that investors require to purchase and hold non-US Treasury issues with the lowest investment grade rating. During the quarter, the yield spread was relatively unchanged, beginning the quarter at 1.18% and finishing June at 1.17%. The spread measure narrowed over the trailing 12-month period after concerns about the regional banking sector during March 2023 caused credit spreads to spike. High-yield OAS spreads (represented by the orange line in the top chart) have also remained relatively unchanged, rising by just 0.07%. The spread measures' stability results from steady economic growth, stable monetary policy, and falling inflation readings.
- The lower graph provides a snapshot of the US Treasury yield curve at the end of each of the last four quarters. The yield curve has been inverted for each of the last four quarter-end readings on the graph and for most of last two years. Historically, a persistent yield curve inversion 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)

[CME FedWatch Tool - CME Group](#)

[Effective Federal Funds Rate - FEDERAL RESERVE BANK of NEW YORK \(newyorkfed.org\)](#)

[ICE BofA US High Yield Index Option-Adjusted Spread \(BAMLH0A0HYM2\) | FRED | St. Louis Fed \(stlouisfed.org\)](#)

[When will the Federal Reserve start cutting interest rates? | J.P. Morgan Asset Management \(jpmorgan.com\)](#)

[Resource Center | U.S. Department of the Treasury](#)

[China's Economy Limps Into 2024 – WSJ](#)

[Support Site - Global Index Lens: Index Returns – MSCI](#)

[Federal Reserve issues FOMC statement](#)

[Transcript of Chair Powell's Press Conference -- June 12, 2024 \(federalreserve.gov\)](#)

[U.S. Treasurys: investors look to inflation data due in week ahead \(cnbc.com\)](#)

[Yen drops to 38-year low, U.S. dollar slumps after weak data \(cnbc.com\)](#)

[Jobs report June 2024: \(cnbc.com\)](#)

[The Fed - June 12, 2024: FOMC Projections materials, accessible version \(federalreserve.gov\)](#)

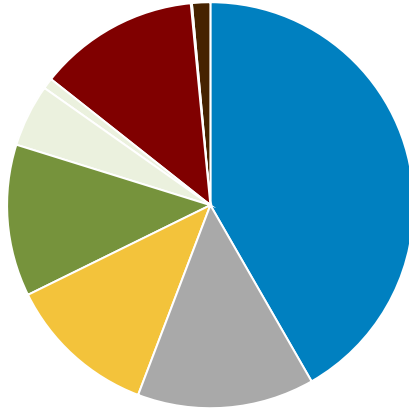
[The Federal Reserve's latest dot plot, explained – and what it says about interest rates | Bankrate](#)

[Top 25 Stocks in the S&P 500 By Index Weight for July 2024 \(investopedia.com\)](#)

[Will Small-Cap Stocks Ever Catch Up? | Morningstar](#)

[Why Chinese banks are now vanishing \(economist.com\)](#)

Asset Allocation by Segment
Jun-2024 : \$1,045,583,945



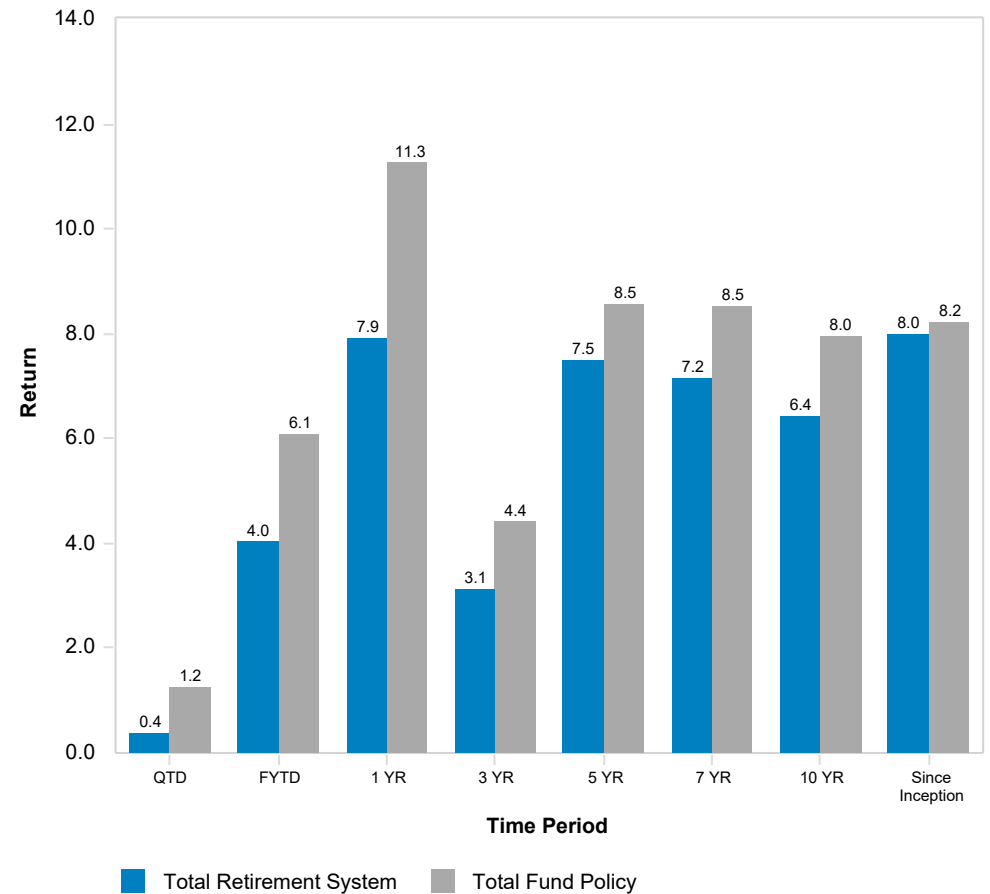
Allocation

	Market Value	Allocation
Total Domestic Equity	436,226,487	41.7
Total International Equity	147,125,102	14.1
Total Other Equity	124,788,984	11.9
Total Core Fixed Income	126,431,689	12.1
Total Non Core Fixed Income	52,070,270	5.0
Total Other Fixed Income	8,989,218	0.9
Total Real Estate	133,815,681	12.8
Total Timber Funds	896,065	0.1
Cash Account	15,240,448	1.5

Gain/Loss Summary

	QTD	FYTD	1 YR
Total Retirement System			
Beginning Market Value	1,046,667,305	1,015,706,092	992,108,775
Net Contributions	-4,729,359	-10,806,788	-23,497,036
Return on Investment	4,263,850	42,179,858	80,185,005
Ending Market Value	1,045,583,945	1,045,583,945	1,045,583,945

Comparative Performance



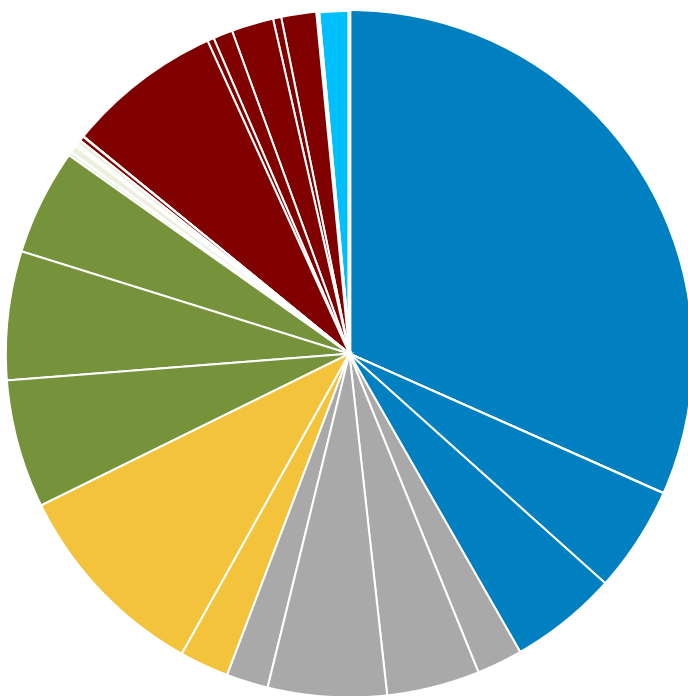
Asset Allocation by Manager Total Fund

As of June 30, 2024

Jun-2024 : \$1,045,583,945

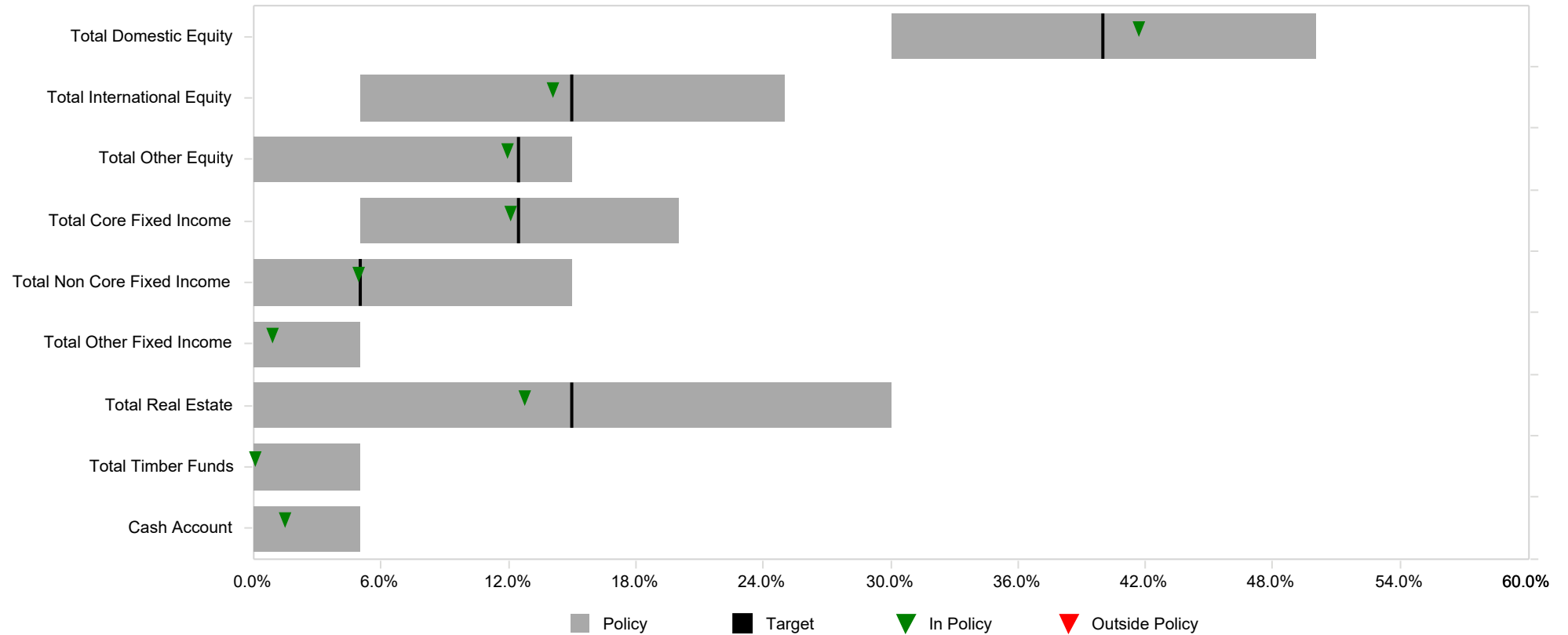
Allocation

	Market Value	Allocation
NT Collective Russell 3000 Index	330,863,955	31.6
Baird Mid Cap Growth	17,596	0.0
Nuance Mid Cap Value	124,400	0.0
MFS Mid Cap Value	52,089,183	5.0
Westfield Mid Cap Growth	53,131,352	5.1
Driehaus International Small Cap Growth	22,499,010	2.2
WCM Focused Intl Growth LP	45,726,029	4.4
Thompson Siegel & Walmsley	58,330,362	5.6
Wellington Emerging Markets Fund	20,569,702	2.0
Huff Energy Fund	24,253,938	2.3
Franklin Park Private Equity	100,535,046	9.6
Baird Aggregate Income Bond Fund	63,123,291	6.0
Dodge & Cox Fixed Income Fund	63,308,397	6.1
Pimco Diversified Income Fund	52,070,270	5.0
LBC Credit Partners III	1,885,881	0.2
LBC Credit Partners IV	3,564,176	0.3
Providence Debt Fund III	1,265,562	0.1
Capital Point Partners (Princeton Capital)	2,273,600	0.2
Edison Investments	2,361,058	0.2
India Property Fund	126,425	0.0
Gainesville Property	1	0.0
Morgan Stanley	76,642,565	7.3
AEW Partners Fund VIII	3,197,386	0.3
GreenOak US III	9,585,548	0.9
Brookfield Premier RE Partners	20,702,272	2.0
Artemis Real Estate IV	4,003,400	0.4
Stockbridge Smart Markets	17,197,025	1.6
Domain Environmental Investments II	896,065	0.1
Cash Account	15,240,448	1.5



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	1,045,583,945	100.0	N/A	N/A	100.0
Total Domestic Equity	436,226,487	41.7	30.0	50.0	40.0
Total International Equity	147,125,102	14.1	5.0	25.0	15.0
Total Other Equity	124,788,984	11.9	0.0	15.0	12.5
Total Core Fixed Income	126,431,689	12.1	5.0	20.0	12.5
Total Non Core Fixed Income	52,070,270	5.0	0.0	15.0	5.0
Total Other Fixed Income	8,989,218	0.9	0.0	5.0	0.0
Total Real Estate	133,815,681	12.8	0.0	30.0	15.0
Total Timber Funds	896,065	0.1	0.0	5.0	0.0
Cash Account	15,240,448	1.5	0.0	5.0	0.0

Financial Reconciliation
Total Fund
1 Quarter Ending June 30, 2024

Financial Reconciliation Quarter to Date										
	Market Value 04/01/2024	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Return On Investment	Market Value 06/30/2024
Total Retirement System	1,046,667,305	-	21,811,893	-26,541,252	-534,017	-83,834	4,095,771	168,078	4,263,850	1,045,583,945
Total Equity	708,522,838	-4,090,611	-	-	-234,150	-	850,996	3,091,500	3,942,496	708,140,573
Total Domestic Equity	432,307,431	129,948	-	-	-171,150	-	509,773	3,450,484	3,960,257	436,226,487
NT Collective Russell 3000 Index	320,556,301	16,028	-	-	-16,028	-	-	10,307,654	10,307,654	330,863,955
Baird Mid Cap Growth	58,207,861	-53,131,352	-	-	-	-	120,792	-5,179,704	-5,058,912	17,596
Nuance Mid Cap Value	53,541,273	-52,043,477	-	-	-45,706	-	390,977	-1,718,667	-1,327,690	124,400
Kennedy Small Cap Value	1,996	68,215	-	-	-109,416	-	-1,996	41,201	39,205	-
MFS Mid Cap Value	-	52,089,183	-	-	-	-	-	-	-	52,089,183
Westfield Mid Cap Growth	-	53,131,352	-	-	-	-	-	-	-	53,131,352
Total International Equity	147,142,863	-	-	-	-	-	194,911	-212,672	-17,761	147,125,102
Driehaus International Small Cap Growth	22,931,683	-	-	-	-	-	-	-432,673	-432,673	22,499,010
Thompson Siegel & Walmsley	58,484,301	-	-	-	-	-	-	-153,939	-153,939	58,330,362
WCM Focused Intl Growth LP	46,313,442	-	-	-	-	-	-	-587,413	-587,413	45,726,029
Wellington Emerging Markets Fund	19,413,438	-	-	-	-	-	194,911	961,353	1,156,264	20,569,702
Total Other Equity	129,072,543	-4,220,559	-	-	-63,000	-	146,312	-146,312	-	124,788,984
Huff Energy Fund	24,253,938	-	-	-	-	-	-	-	-	24,253,938
Franklin Park Private Equity	104,818,605	-4,220,559	-	-	-63,000	-	146,312	-146,312	-	100,535,046
Total Fixed Income	187,086,073	-361,328	-	-	-	-	2,019,377	-1,252,945	766,432	187,491,177
Baird Aggregate Income Bond Fund	62,970,147	-689	-	-	-	-	601,066	-447,233	153,833	63,123,291
Dodge & Cox Fixed Income Fund	62,990,025	-	-	-	-	-	677,965	-359,593	318,372	63,308,397
Orleans Capital	44,103	-44,103	-	-	-	-	-	-	-	-
Pimco Diversified Income Fund	51,776,043	-	-	-	-	-	670,572	-376,345	294,227	52,070,270
Total Other Fixed Income	9,305,754	-316,536	-	-	-	-	69,774	-69,774	-	8,989,218
Capital Point Partners (Princeton Capital)	2,273,600	-	-	-	-	-	-	-	-	2,273,600
LBC Credit Partners III	1,885,881	-	-	-	-	-	-	-	-	1,885,881
LBC Credit Partners IV	3,860,074	-295,898	-	-	-	-	49,136	-49,136	-	3,564,176
Providence Debt Fund III	1,286,200	-20,638	-	-	-	-	20,638	-20,638	-	1,265,562

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

Financial Reconciliation
Total Fund
1 Quarter Ending June 30, 2024

	Market Value 04/01/2024	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Return On Investment	Market Value 06/30/2024
Total Real Estate & Timber	135,598,168	1,849,323	-	-1,701,375	-299,867	-38,668	974,641	-1,670,476	-695,836	134,711,746
Total Real Estate	134,702,103	1,849,323	-	-1,701,375	-299,867	-38,668	974,641	-1,670,476	-695,836	133,815,681
Edison Investments	2,351,775	-8,537	-	-	-	-	8,537	9,283	17,820	2,361,058
India Property Fund	126,425	-	-	-	-	-	-	-	-	126,425
Gainesville Property	1	-	-	-	-	-	-	-	-	1
Morgan Stanley	76,778,793	-	-	-	-	-	757,292	-893,519	-136,227	76,642,565
AEW Partners Fund VIII	3,446,792	-249,406	-	-	-	-	-	-	-	3,197,386
GreenOak US III	9,223,642	396,921	-	-	-35,015	-	-	-	-	9,585,548
Brookfield Premier Real Estate Partners	21,276,744	-	-	-	-	-	-	-574,472	-574,472	20,702,272
Artemis Real Estate IV	2,556,519	1,710,345	-	-	-224,796	-38,668	-	-	-	4,003,400
Stockbridge Smart Markets	17,240,037	-	-	-	-40,056	-	208,812	-211,768	-2,956	17,197,025
Total Timber Funds	896,065	-	-	-	-	-	-	-	-	896,065
Domain Environmental Investments II	896,065	-	-	-	-	-	-	-	-	896,065
 Cash Account	 15,460,226	 2,602,615	 21,811,893	 -24,839,877	 -	 -45,166	 250,757	 -	 250,757	 15,240,448

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

Financial Reconciliation
Total Fund
Year To Date Ending June 30, 2024

Financial Reconciliation Year to Date										
	Market Value 01/01/2024	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Return On Investment	Market Value 06/30/2024
Total Retirement System	1,015,706,092	-	39,574,018	-50,380,806	-1,355,572	-139,646	9,061,854	33,118,004	42,179,858	1,045,583,945
Total Equity	670,476,883	-5,724,577	-	-	-791,184	-	1,638,671	42,540,780	44,179,451	708,140,573
Total Domestic Equity	409,941,879	-5,350,442	-	-	-445,760	-	1,222,346	30,858,464	32,080,810	436,226,487
NT Collective Russell 3000 Index	237,439,399	58,588,490	-	-	-16,028	-	8	34,852,086	34,852,094	330,863,955
Baird Mid Cap Growth	55,535,501	-53,035,580	-	-	-95,773	-	241,516	-2,628,068	-2,386,552	17,596
Nuance Mid Cap Value	53,248,145	-52,000,701	-	-	-88,482	-	743,663	-1,778,225	-1,034,562	124,400
Kennedy Small Cap Value	63,718,833	-64,123,186	-	-	-245,478	-	237,159	412,672	649,831	-
MFS Mid Cap Value	-	52,089,183	-	-	-	-	-	-	-	52,089,183
Westfield Mid Cap Growth	-	53,131,352	-	-	-	-	-	-	-	53,131,352
Total International Equity	138,008,843	34,282	-	-	-34,282	-	270,013	8,846,247	9,116,260	147,125,102
Driehaus International Small Cap Growth	21,276,238	-	-	-	-	-	-	1,222,772	1,222,772	22,499,010
Thompson Siegel & Walmsley	56,357,924	-	-	-	-	-	-	1,972,438	1,972,438	58,330,362
WCM Focused Intl Growth LP	41,365,321	-	-	-	-	-	-	4,360,708	4,360,708	45,726,029
Wellington Emerging Markets Fund	19,009,360	34,282	-	-	-34,282	-	270,013	1,290,328	1,560,342	20,569,702
Total Other Equity	122,526,162	-408,417	-	-	-311,142	-	146,312	2,836,069	2,982,381	124,788,984
Huff Energy Fund	24,253,938	-	-	-	-	-	-	-	-	24,253,938
Franklin Park Private Equity	98,272,224	-408,417	-	-	-311,142	-	146,312	2,836,069	2,982,381	100,535,046
Total Fixed Income	192,206,203	-4,920,341	-	-	-73,941	-	4,800,751	-4,521,495	279,256	187,491,177
Baird Aggregate Income Bond Fund	-	62,892,635	-	-	-	-	806,478	-575,822	230,656	63,123,291
Dodge & Cox Fixed Income Fund	-	62,893,324	-	-	-	-	1,323,923	-908,850	415,073	63,308,397
Orleans Capital	130,768,314	-129,916,668	-	-	-73,941	-	1,232,325	-2,010,030	-777,704	-
Pimco Diversified Income Fund	51,093,840	-	-	-	-	-	1,295,361	-318,931	976,430	52,070,270
Total Other Fixed Income	10,344,050	-789,632	-	-	-	-	142,663	-707,862	-565,199	8,989,218
Capital Point Partners (Princeton Capital)	3,063,735	-	-	-	-	-	-	-790,135	-790,135	2,273,600
LBC Credit Partners III	1,760,465	-	-	-	-	-	-	125,416	125,416	1,885,881
LBC Credit Partners IV	3,836,436	-429,663	-	-	-	-	101,994	55,409	157,403	3,564,176
Providence Debt Fund III	1,683,414	-359,969	-	-	-	-	40,669	-98,552	-57,883	1,265,562

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

Financial Reconciliation

Total Fund

Year To Date Ending June 30, 2024

	Market Value 01/01/2024	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Return On Investment	Market Value 06/30/2024
Total Real Estate & Timber	136,869,696	2,889,640	-	-1,701,375	-490,446	-52,295	2,097,806	-4,901,280	-2,803,474	134,711,746
Total Real Estate	135,983,696	2,889,640	-	-1,701,375	-490,446	-52,295	2,097,806	-4,911,345	-2,813,539	133,815,681
Edison Investments	2,342,426	-17,074	-	-	-	-	17,074	18,632	35,706	2,361,058
India Property Fund	125,024	-	-	-	-	-	-	1,401	1,401	126,425
Gainesville Property	1	-	-	-	-	-	-	-	-	1
Morgan Stanley	77,825,160	-	-	-	-	-	1,526,223	-2,708,817	-1,182,594	76,642,565
AEW Partners Fund VIII	3,218,019	-249,406	-	-	-	-	-	228,773	228,773	3,197,386
GreenOak US III	8,891,678	777,239	-	-	-35,015	-	-	-48,354	-48,354	9,585,548
Brookfield Premier Real Estate Partners	22,570,516	-	-	-	-	-	135,836	-2,004,079	-1,868,244	20,702,272
Artemis Real Estate IV	1,966,437	2,378,881	-	-	-375,207	-52,295	-	85,584	85,584	4,003,400
Stockbridge Smart Markets	17,343,061	-	-	-	-80,224	-	418,674	-484,485	-65,811	17,197,025
Total Timber Funds	886,000	-	-	-	-	-	-	10,065	10,065	896,065
Domain Environmental Investments II	886,000	-	-	-	-	-	-	10,065	10,065	896,065
Cash Account	16,153,309	7,755,277	39,574,018	-48,679,431	-	-87,351	524,626	-	524,626	15,240,448

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)	0.36	4.03	7.90	3.13	7.49	7.16	6.42	7.98	10/01/1992
Total Retirement System (Gross)	0.41 (87)	4.17 (81)	8.21 (85)	3.38 (41)	7.76 (39)	7.42 (51)	6.68 (54)	8.28 (24)	10/01/1992
Total Fund Policy	1.24	6.08	11.27	4.42	8.54	8.50	7.95	8.23	
Variance	-0.83	-1.91	-3.06	-1.04	-0.78	-1.08	-1.27	0.05	
All Public Plans-Total Fund Median	1.11	5.56	10.73	3.04	7.44	7.43	6.77	7.90	
Total Equity	0.53	6.51	12.43	4.61	10.33	9.68	8.26	9.01	01/01/1994
Total Equity Policy	2.34	11.49	20.25	6.94	12.41	11.73	10.10	9.05	
Variance	-1.81	-4.98	-7.82	-2.33	-2.08	-2.05	-1.84	-0.04	
Domestic Equity	0.90 (39)	7.88 (50)	15.27 (53)	4.98 (55)	11.55 (44)	11.12 (46)	9.78 (51)	11.06 (58)	05/01/2013
Russell 3000 Index	3.22	13.56	23.12	8.05	14.14	13.48	12.15	13.17	
Variance	-2.32	-5.68	-7.85	-3.07	-2.59	-2.36	-2.37	-2.11	
IM U.S. Equity (SA+CF+MF) Median	-0.87	7.69	15.78	5.67	10.95	10.59	9.82	11.47	
NT Collective Russell 3000 Index	3.21 (36)	13.55 (35)	23.12 (36)	8.08 (40)	14.14 (34)	13.49 (38)	12.16 (31)	12.27 (30)	01/01/2014
Russell 3000 Index	3.22	13.56	23.12	8.05	14.14	13.48	12.15	12.25	
Variance	-0.01	-0.01	0.00	0.03	0.00	0.01	0.01	0.02	
IM U.S. All Cap Core Equity (SA+CF) Median	2.21	11.53	19.61	7.39	13.46	12.66	11.29	11.41	
MFS Mid Cap Value	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	07/01/2024
Russell Midcap Value Index	-3.40	4.54	11.98	3.65	8.49	7.67	7.60	N/A	
Variance	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
IM U.S. Mid Cap Value Equity (MF) Median	-3.81	3.93	11.36	5.40	9.13	7.84	7.42	N/A	
Westfield Mid Cap Growth	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	07/01/2024
Russell Midcap Growth Index	-3.21	5.98	15.05	-0.08	9.93	11.69	10.51	N/A	
Variance	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
IM U.S. Mid Cap Growth Equity (SA+CF) Median	-3.66	5.37	11.79	-1.22	9.24	10.89	10.04	N/A	

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, 2024

	Performance (%)								Inception Date
	QTR	YTD	1 YR	3 YR	5 YR	7 YR	10 YR	Inception	
International Equity	-0.01 (64)	6.58 (43)	10.46 (58)	-1.41 (63)	5.48 (68)	4.24 (81)	3.53 (82)	5.30 (79)	05/01/2013
MSCI AC World ex USA	1.17	6.04	12.17	0.97	6.05	5.68	4.34	5.13	
Variance	-1.18	0.54	-1.71	-2.38	-0.57	-1.44	-0.81	0.17	
IM International Equity (SA+CF+MF) Median	0.71	5.74	11.37	0.64	6.58	5.89	4.95	6.34	
Driehaus International Small Cap Growth	-1.89 (60)	5.75 (14)	12.72 (12)	-3.50 (45)	8.06 (1)	7.42 (3)	6.81 (1)	9.29 (5)	09/01/2012
MSCI AC World ex USA Small Growth	0.81	2.70	9.10	-4.08	5.83	5.13	4.80	6.88	
Variance	-2.70	3.05	3.62	0.58	2.23	2.29	2.01	2.41	
IM International SMID Cap Growth Equity (MF) Median	-1.39	1.23	7.23	-3.96	4.37	3.81	3.95	6.48	
Thompson Siegel & Walmsley	-0.26 (74)	3.50 (90)	8.59 (85)	2.05 (56)	6.64 (69)	4.82 (93)	N/A	4.65 (94)	10/01/2014
MSCI EAFE (Net) Index	-0.42	5.34	11.54	2.89	6.46	5.73	4.33	5.10	
Variance	0.16	-1.84	-2.95	-0.84	0.18	-0.91	N/A	-0.45	
IM International Large Cap Core Equity (SA+CF) Median	0.41	6.27	12.22	2.54	7.13	6.48	5.23	5.97	
WCM Focused Intl Growth LP	-1.27 (81)	10.54 (19)	12.58 (23)	-0.80 (59)	N/A	N/A	N/A	3.80 (43)	12/01/2020
MSCI AC World ex USA Growth (Net)	0.72	6.68	9.88	-2.62	5.49	5.69	4.74	0.97	
Variance	-1.99	3.86	2.70	1.82	N/A	N/A	N/A	2.83	
IM International Large Cap Growth Equity (MF) Median	-0.11	6.62	10.16	0.20	6.24	5.95	4.69	3.50	
Wellington Emerging Markets Fund	5.96 (30)	8.01 (48)	8.84 (74)	-8.38 (84)	N/A	N/A	N/A	0.46 (92)	02/01/2020
MSCI Emerging Markets (Net) Index	5.00	7.49	12.55	-5.07	3.10	3.54	2.79	3.03	
Variance	0.96	0.52	-3.71	-3.31	N/A	N/A	N/A	-2.57	
IM Emerging Markets Equity (SA+CF) Median	4.71	7.69	13.69	-2.89	4.65	4.95	4.31	4.85	
Total Other Equity	-0.05	2.13	6.04	18.53	9.95	8.99	N/A	7.12	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, 2024

	Performance (%)								Inception Date
	QTR	YTD	1 YR	3 YR	5 YR	7 YR	10 YR	Inception	
Total Fixed Income	0.41	0.15	4.57	-1.75	0.09	0.85	0.85	5.61	12/01/1993
Total Fixed Income Policy	0.04	-0.66	3.34	-3.48	-0.46	0.70	0.84	4.11	
Variance	0.37	0.81	1.23	1.73	0.55	0.15	0.01	1.50	
Total Core Fixed Income	0.38 (9)	-0.10 (29)	3.63 (21)	-2.89 (51)	-0.09 (64)	0.94 (66)	1.44 (64)	0.86 (96)	05/01/2013
Blmbg. U.S. Aggregate Index	0.07	-0.71	2.63	-3.02	-0.23	0.86	1.35	1.29	
Variance	0.31	0.61	1.00	0.13	0.14	0.08	0.09	-0.43	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	0.17	-0.33	2.96	-2.89	0.05	1.09	1.53	1.49	
Baird Aggregate Income Bond Fund	0.24 (44)	N/A	N/A	N/A	N/A	N/A	N/A	0.24 (44)	04/01/2024
Blmbg. U.S. Aggregate Index	0.07	-0.71	2.63	-3.02	-0.23	0.86	1.35	0.07	
Variance	0.17	N/A	N/A	N/A	N/A	N/A	N/A	0.17	
IM U.S. Broad Market Core Fixed Income (MF) Median	0.21	-0.34	3.13	-3.10	-0.08	0.89	1.34	0.21	
Dodge & Cox Fixed Income Fund	0.51 (13)	N/A	N/A	N/A	N/A	N/A	N/A	0.51 (13)	04/01/2024
Blmbg. U.S. Aggregate Index	0.07	-0.71	2.63	-3.02	-0.23	0.86	1.35	0.07	
Variance	0.44	N/A	N/A	N/A	N/A	N/A	N/A	0.44	
IM U.S. Broad Market Core Fixed Income (MF) Median	0.21	-0.34	3.13	-3.10	-0.08	0.89	1.34	0.21	
Pimco Diversified Income Fund	0.57 (11)	1.91 (12)	8.69 (3)	-0.99 (20)	N/A	N/A	N/A	1.06 (11)	07/01/2020
Blmbg. Global Credit (Hedged)	0.32	0.72	6.66	-1.68	1.00	2.13	2.66	-0.13	
Variance	0.25	1.19	2.03	0.69	N/A	N/A	N/A	1.19	
IM Global Fixed Income (MF) Median	-0.30	-0.67	4.07	-2.79	-0.32	0.74	0.68	-1.58	
Total Other Fixed Income	0.00	-5.69	-3.61	2.19	4.30	4.01	N/A	3.31	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, 2024

	Performance (%)								
	QTR	YTD	1 YR	3 YR	5 YR	7 YR	10 YR	Inception	Inception Date
Alternative Investments									
Other Assets									
Cash Account	1.27	2.61	5.35	2.97	2.06	1.95	1.41	4.16	06/01/1988
Other Alternative Assets									
Total Real Estate	-0.74	-2.41	-7.49	3.23	3.72	3.94	6.10	3.89	08/01/2005
NCREIF Property Index	-0.26	-1.24	-5.53	2.33	3.39	4.37	6.07	6.84	
Variance	-0.48	-1.17	-1.96	0.90	0.33	-0.43	0.03	-2.95	
Morgan Stanley	-0.18	-1.52	-3.90	4.53	4.52	5.44	N/A	6.06	01/01/2016
NCREIF Fund Index-ODCE (EW)	-0.83	-3.19	-10.32	1.13	2.58	3.78	5.80	4.46	
Variance	0.65	1.67	6.42	3.40	1.94	1.66	N/A	1.60	
Brookfield Premier Real Estate Partners	-2.70	-8.28	-17.79	-1.51	N/A	N/A	N/A	0.83	11/01/2019
NCREIF Fund Index-ODCE (EW)	-0.83	-3.19	-10.32	1.13	2.58	3.78	5.80	2.51	
Variance	-1.87	-5.09	-7.47	-2.64	N/A	N/A	N/A	-1.68	
Stockbridge Smart Markets	-0.25	-0.84	-4.82	N/A	N/A	N/A	N/A	-7.42	08/01/2022
NCREIF Fund Index-ODCE (EW)	-0.83	-3.19	-10.32	1.13	2.58	3.78	5.80	-10.85	
Variance	0.58	2.35	5.50	N/A	N/A	N/A	N/A	3.43	
Total Timber Funds	0.00	1.14	-12.56	-1.11	0.59	0.89	0.34	1.46	08/01/2005
NCREIF Timberland Index	1.71	3.86	9.84	10.99	7.18	6.05	5.89	6.79	
Variance	-1.71	-2.72	-22.40	-12.10	-6.59	-5.16	-5.55	-5.33	

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

Total Fund

As of June 30, 2024

Comparative Performance Fiscal Year Returns

	Performance (%)								
	YTD	2023	2022	2021	2020	2019	2018	2017	2016
Total Retirement System (Net)	4.03	11.50	-11.54	17.68	11.65	20.92	-6.18	11.89	7.67
Total Retirement System (Gross)	4.17 (81)	11.82 (63)	-11.36 (34)	17.86 (11)	11.99 (58)	21.23 (14)	-5.95 (88)	12.17 (90)	7.87 (47)
Total Fund Policy	6.08	14.11	-11.69	16.63	13.40	19.81	-3.12	15.79	8.04
Variance	-1.91	-2.29	0.33	1.23	-1.41	1.42	-2.83	-3.62	-0.17
All Public Plans-Total Fund Median	5.56	12.68	-12.66	14.18	12.47	18.63	-4.08	15.16	7.69
Total Equity	6.51	17.99	-15.13	21.06	15.97	29.88	-9.83	18.49	11.41
Total Equity Policy	11.49	24.12	-17.82	22.48	17.62	29.04	-7.34	22.07	9.61
Variance	-4.98	-6.13	2.69	-1.42	-1.65	0.84	-2.49	-3.58	1.80
Domestic Equity	7.88 (50)	20.43 (43)	-18.31 (58)	24.49 (56)	19.11 (42)	31.15 (36)	-7.18 (54)	17.39 (59)	15.76 (36)
Russell 3000 Index	13.56	25.96	-19.21	25.66	20.89	31.02	-5.24	21.13	12.74
Variance	-5.68	-5.53	0.90	-1.17	-1.78	0.13	-1.94	-3.74	3.02
IM U.S. Equity (SA+CF+MF) Median	7.69	18.56	-16.40	25.61	15.39	28.76	-6.57	19.25	12.52
NT Collective Russell 3000 Index	13.55 (35)	25.95 (35)	-19.15 (76)	25.68 (57)	20.83 (41)	31.02 (35)	-5.23 (54)	21.15 (48)	12.79 (37)
Russell 3000 Index	13.56	25.96	-19.21	25.66	20.89	31.02	-5.24	21.13	12.74
Variance	-0.01	-0.01	0.06	0.02	-0.06	0.00	0.01	0.02	0.05
IM U.S. All Cap Core Equity (SA+CF) Median	11.53	23.01	-17.21	26.27	18.60	29.22	-5.10	20.92	10.91
MFS Mid Cap Value	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Russell Midcap Value Index	4.54	12.71	-12.03	28.34	4.96	27.06	-12.29	13.34	20.00
Variance	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
IM U.S. Mid Cap Value Equity (MF) Median	3.93	11.55	-8.03	28.79	2.50	26.77	-13.80	13.62	16.23
Westfield Mid Cap Growth	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Russell Midcap Growth Index	5.98	25.87	-26.72	12.73	35.59	35.47	-4.75	25.27	7.33
Variance	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
IM U.S. Mid Cap Growth Equity (SA+CF) Median	5.37	23.20	-27.05	13.15	34.27	34.69	-5.40	24.18	4.88

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, 2024

	Performance (%)									
	YTD	2023	2022	2021	2020	2019	2018	2017	2016	
International Equity	6.58 (43)	14.38 (68)	-21.97 (70)	11.90 (38)	12.54 (55)	20.92 (69)	-16.28 (65)	27.37 (65)	0.67 (70)	
MSCI AC World ex USA	6.04	16.21	-15.57	8.29	11.13	22.13	-13.78	27.77	5.01	
Variance	0.54	-1.83	-6.40	3.61	1.41	-1.21	-2.50	-0.40	-4.34	
IM International Equity (SA+CF+MF) Median	5.74	16.57	-17.67	10.20	14.11	23.43	-14.91	29.70	2.83	
Driehaus International Small Cap Growth	5.75 (14)	12.79 (59)	-24.34 (45)	12.49 (49)	29.79 (17)	30.57 (11)	-16.92 (32)	41.19 (6)	-6.24 (89)	
MSCI AC World ex USA Small Growth	2.70	14.47	-25.85	11.83	23.99	24.96	-18.07	33.99	-0.04	
Variance	3.05	-1.68	1.51	0.66	5.80	5.61	1.15	7.20	-6.20	
IM International SMID Cap Growth Equity (MF) Median	1.23	13.44	-25.76	12.40	14.79	24.29	-19.24	34.22	-0.76	
Thompson Siegel & Walmsley	3.50 (90)	16.52 (69)	-13.89 (31)	13.82 (29)	6.62 (81)	21.18 (71)	-15.93 (74)	22.70 (93)	0.47 (65)	
MSCI EAFE (Net) Index	5.34	18.24	-14.45	11.26	7.82	22.01	-13.79	25.03	1.00	
Variance	-1.84	-1.72	0.56	2.56	-1.20	-0.83	-2.14	-2.33	-0.53	
IM International Large Cap Core Equity (SA+CF) Median	6.27	18.09	-15.93	11.97	11.76	23.61	-14.32	27.86	1.71	
WCM Focused Intl Growth LP	10.54 (19)	16.68 (30)	-28.63 (88)	17.64 (3)	N/A	N/A	N/A	N/A	N/A	
MSCI AC World ex USA Growth (Net)	6.68	14.03	-23.05	5.09	22.20	27.34	-14.43	32.01	0.12	
Variance	3.86	2.65	-5.58	12.55	N/A	N/A	N/A	N/A	N/A	
IM International Large Cap Growth Equity (MF) Median	6.62	15.54	-20.24	8.88	20.00	27.50	-14.67	28.61	-1.94	
Wellington Emerging Markets Fund	8.01 (48)	4.86 (89)	-24.51 (78)	-2.23 (64)	N/A	N/A	N/A	N/A	N/A	
MSCI Emerging Markets (Net) Index	7.49	9.83	-20.09	-2.54	18.31	18.42	-14.57	37.28	11.19	
Variance	0.52	-4.97	-4.42	0.31	N/A	N/A	N/A	N/A	N/A	
IM Emerging Markets Equity (SA+CF) Median	7.69	12.87	-19.69	0.94	18.40	20.15	-15.23	37.08	9.84	
Total Other Equity	2.13	14.39	26.45	13.85	-5.66	65.17	-22.42	-17.60	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, 2024

	Performance (%)								
	YTD	2023	2022	2021	2020	2019	2018	2017	2016
Total Fixed Income	0.15	6.94	-11.28	1.69	4.10	4.08	0.06	2.86	4.36
Total Fixed Income Policy	-0.66	6.70	-14.66	-2.05	8.28	7.93	-0.66	5.60	2.77
Variance	0.81	0.24	3.38	3.74	-4.18	-3.85	0.72	-2.74	1.59
Total Core Fixed Income	-0.10 (29)	5.37 (76)	-12.93 (36)	-1.34 (43)	7.21 (80)	8.80 (52)	-0.24 (58)	3.87 (36)	3.79 (19)
Blmbg. U.S. Aggregate Index	-0.71	5.53	-13.01	-1.55	7.51	8.72	0.01	3.54	2.65
Variance	0.61	-0.16	0.08	0.21	-0.30	0.08	-0.25	0.33	1.14
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	-0.33	5.81	-13.13	-1.47	8.03	8.82	-0.14	3.71	2.85
Baird Aggregate Income Bond Fund	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Blmbg. U.S. Aggregate Index	-0.71	5.53	-13.01	-1.55	7.51	8.72	0.01	3.54	2.65
Variance	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
IM U.S. Broad Market Core Fixed Income (MF) Median	-0.34	5.77	-13.66	-1.33	8.16	8.76	-0.62	3.60	2.90
Dodge & Cox Fixed Income Fund	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Blmbg. U.S. Aggregate Index	-0.71	5.53	-13.01	-1.55	7.51	8.72	0.01	3.54	2.65
Variance	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
IM U.S. Broad Market Core Fixed Income (MF) Median	-0.34	5.77	-13.66	-1.33	8.16	8.76	-0.62	3.60	2.90
Pimco Diversified Income Fund	1.91 (12)	10.41 (4)	-13.81 (50)	0.26 (5)	N/A	N/A	N/A	N/A	N/A
Blmbg. Global Credit (Hedged)	0.72	9.36	-13.75	-0.41	7.53	12.08	-0.81	5.89	7.33
Variance	1.19	1.05	-0.06	0.67	N/A	N/A	N/A	N/A	N/A
IM Global Fixed Income (MF) Median	-0.67	6.74	-14.66	-2.73	8.29	8.08	-1.78	6.82	2.92
Total Other Fixed Income	-5.69	9.04	4.87	12.76	0.48	3.66	1.27	-0.49	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 June 30, 2024

	Performance (%)								
	YTD	2023	2022	2021	2020	2019	2018	2017	2016
Alternative Investments									
Other Assets									
Cash Account	2.61	4.94	1.38	0.01	0.43	2.11	1.72	0.76	0.27
Other Alternative Assets									
Total Real Estate	-2.41	-9.31	6.27	24.27	-0.45	5.75	5.14	2.90	0.76
NCREIF Property Index	-1.24	-7.94	5.52	17.70	1.60	6.42	6.72	6.96	7.97
Variance	-1.17	-1.37	0.75	6.57	-2.05	-0.67	-1.58	-4.06	-7.21
Morgan Stanley	-1.52	-5.79	6.14	21.48	1.26	6.16	7.96	8.74	9.20
NCREIF Fund Index-ODCE (EW)	-3.19	-13.33	7.56	21.88	0.75	5.18	7.30	6.92	8.36
Variance	1.67	7.54	-1.42	-0.40	0.51	0.98	0.66	1.82	0.84
Brookfield Premier Real Estate Partners	-8.28	-19.92	10.55	25.66	0.57	N/A	N/A	N/A	N/A
NCREIF Fund Index-ODCE (EW)	-3.19	-13.33	7.56	21.88	0.75	5.18	7.30	6.92	8.36
Variance	-5.09	-6.59	2.99	3.78	-0.18	N/A	N/A	N/A	N/A
Stockbridge Smart Markets	-0.84	-9.64	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NCREIF Fund Index-ODCE (EW)	-3.19	-13.33	7.56	21.88	0.75	5.18	7.30	6.92	8.36
Variance	2.35	3.69	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Timber Funds	1.14	-20.21	21.88	6.99	1.43	-1.12	0.13	-3.94	-6.92
NCREIF Timberland Index	3.86	9.45	12.90	9.17	0.81	1.30	3.21	3.63	2.59
Variance	-2.72	-29.66	8.98	-2.18	0.62	-2.42	-3.08	-7.57	-9.51

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, 2024

Comparative Performance - IRR									
	Market Value (\$)	MTH	QTR	YTD	1 YR	3 YR	5 YR	Inception IRR	Inception Date
Total Real Estate Investments	133,815,681	-0.55	-0.76	-2.45	-7.50	2.24	3.02	5.93	07/31/2005
Edison Investments	2,361,058	0.76	0.76	1.53	3.32	3.19	3.09	11.90	09/30/1996
India Property Fund	126,425	0.00	0.00	1.12	-1.69	-14.76	-24.62	-8.09	05/24/2007
Gainesville Property	1	0.00	0.00	0.00	52.03	4.46	1.90	-5.47	01/31/2008
Morgan Stanley	76,642,565	-0.18	-0.18	-1.52	-3.89	4.53	4.50	5.81	12/31/2015
AEW Partners Fund VIII	3,197,386	0.00	0.00	7.14	4.61	40.98	21.79	18.89	06/26/2017
GreenOak US III	9,585,548	0.00	-0.37	-0.89	-20.64	-4.86	-4.46	-5.51	06/22/2018
Brookfield Premier Real Estate Partners	20,702,272	-2.70	-2.70	-8.28	-17.75	-1.51	N/A	0.74	10/01/2019
Artemis Real Estate IV	4,003,400	-0.26	-7.66	-11.76	-20.90	N/A	N/A	-24.89	06/23/2022
Stockbridge Smart Markets	17,197,025	-0.25	-0.25	-0.84	-4.80	N/A	N/A	-7.80	07/01/2022
Total Timber Funds	896,065	0.00	0.00	1.14	-12.53	7.91	1.55	0.14	07/31/2005
Domain Environmental Investments II	896,065	0.00	0.00	1.14	-12.53	-10.58	-9.07	-2.86	04/30/2008
Total Other Equity	124,788,984	0.00	-0.05	2.13	5.92	16.51	11.94	23.45	01/01/2017
Huff Energy Fund	24,253,938	0.00	0.00	0.00	0.00	53.11	5.94	6.71	12/31/2006
Franklin Park Private Equity	100,535,046	0.00	-0.06	2.64	7.47	10.86	15.09	14.54	01/31/2018
Total Other Fixed Income	8,989,218	0.00	0.00	-5.72	-3.35	2.22	4.14	N/A	12/21/2016
Capital Point Partners (Princeton Capital)	2,273,600	0.00	0.00	-25.79	-28.56	-4.05	-4.20	-0.94	03/31/2007
LBC Credit Partners III	1,885,881	0.00	0.00	7.12	5.11	-0.09	6.53	7.98	03/07/2014
LBC Credit Partners IV	3,564,176	0.00	0.00	4.30	13.13	8.37	7.42	8.39	09/19/2016
Providence Debt Fund III	1,265,562	0.00	0.00	-4.16	-0.53	-0.07	2.71	6.01	04/21/2014

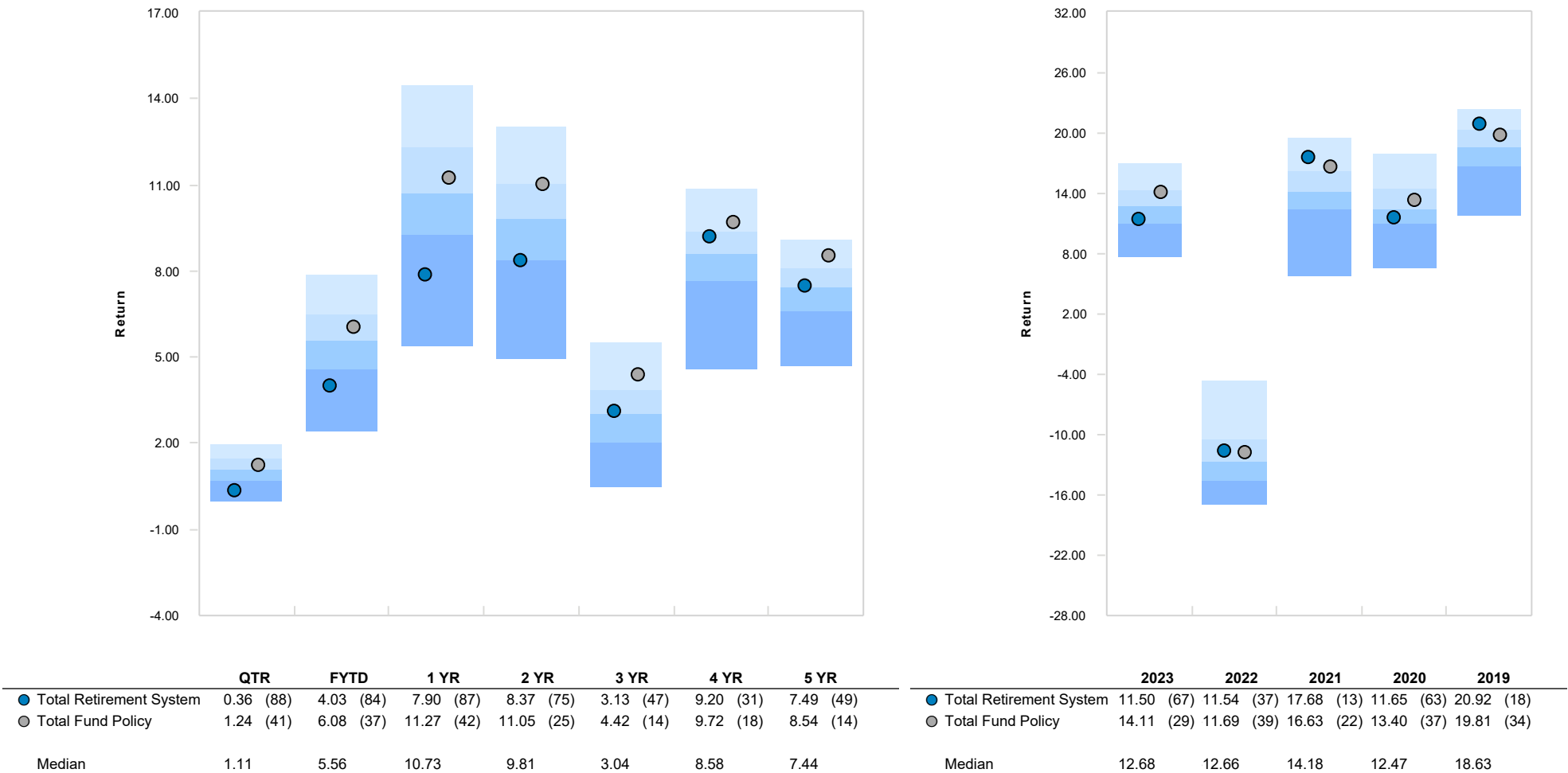
**Summary of Partnerships
Other Alternative Investments
As of June 30, 2024**

Private Equity Summary of Partnership					
Partnerships	Drawn Down \$	Market Value \$	Distributed \$	IRR (%)	TVPI Multiple
Total Real Estate Investments					
Edison Investments	8,146,177	2,361,058	20,030,727	11.9	2.7
India Property Fund	4,354,162	126,425	2,388,478	-8.1	0.6
Gainesville Property	5,510,156	1	2,609,488	-5.5	0.5
Morgan Stanley	50,000,000	76,642,565	-	5.8	1.5
AEW Partners Fund VIII	15,381,261	3,197,386	19,157,162	18.9	1.5
GreenOak US III	13,291,019	9,585,548	1,434,323	-5.5	0.8
Brookfield Premier Real Estate Partners	20,000,000	20,702,272	-	0.7	1.0
Artemis Real Estate IV	5,147,563	4,003,400	360,908	-24.9	0.8
Stockbridge Smart Markets	20,000,000	17,197,025	-	-7.8	0.9
Total Timber Investments					
Domain Environmental Investments II	7,623,603	896,065	5,213,231	-2.9	0.8

**Summary of Partnerships
Other Alternative Investments
As of June 30, 2024**

Partnerships	Drawn Down \$	Market Value \$	Distributed \$	IRR (%)	TVPI Multiple
Total Other Equity					
Huff Energy Fund	11,095,509	24,253,938	1,786,358	6.7	2.3
Franklin Park Private Equity	79,705,569	100,535,046	13,323,619	14.5	1.4
Total Other Fixed Income					
Capital Point Partners (Princeton Capital)	12,058,210	2,273,600	9,145,851	-0.9	0.9
LBC Credit Partners III	18,851,406	1,885,881	21,616,666	8.0	1.2
LBC Credit Partners IV	18,000,000	3,564,176	19,095,396	8.4	1.3
Providence Debt Fund III	11,128,113	1,265,562	13,041,021	6.0	1.3

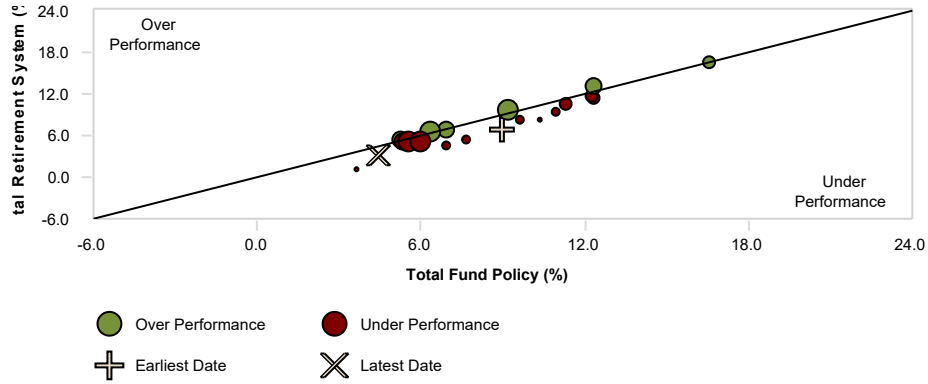
Plan Sponsor Peer Group Analysis - All Public Plans-Total Fund



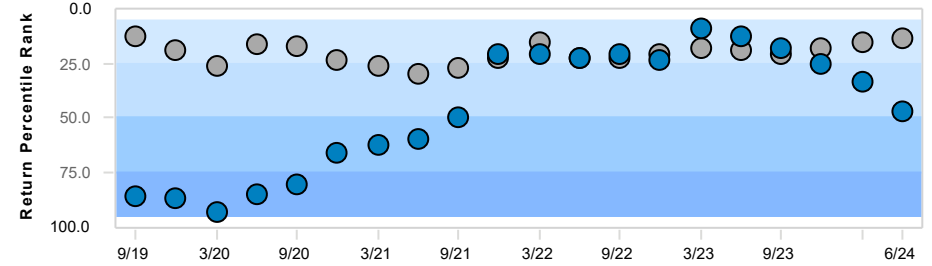
Comparative Performance

	1 Qtr Ending Mar-2024	1 Qtr Ending Dec-2023	1 Qtr Ending Sep-2023	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022
Total Retirement System	3.65 (78)	7.07 (67)	-3.13 (71)	2.78 (68)	4.59 (32)	4.91 (70)
Total Fund Policy	4.78 (41)	7.58 (55)	-2.50 (49)	3.79 (19)	4.81 (25)	5.77 (47)
All Public Plans-Total Fund Median	4.47	7.75	-2.54	3.12	4.16	5.68

3 Yr Rolling Under/Over Performance - 5 Years

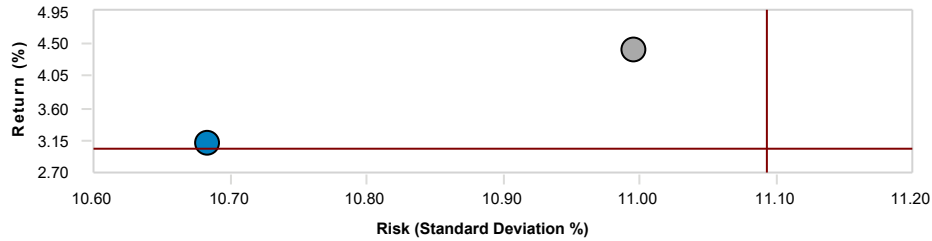


3 Yr Rolling Percentile Ranking - 5 Years



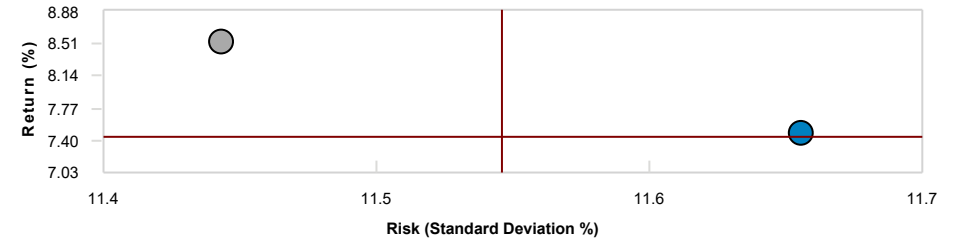
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Total Retirement System	20	9 (45%)	3 (15%)	3 (15%)	5 (25%)
Total Fund Policy	20	16 (80%)	4 (20%)	0 (0%)	0 (0%)

Peer Group Scattergram - 3 Years



	Return	Standard Deviation
Total Retirement System	3.13	10.68
Total Fund Policy	4.42	11.00
Median	3.04	11.09

Peer Group Scattergram - 5 Years



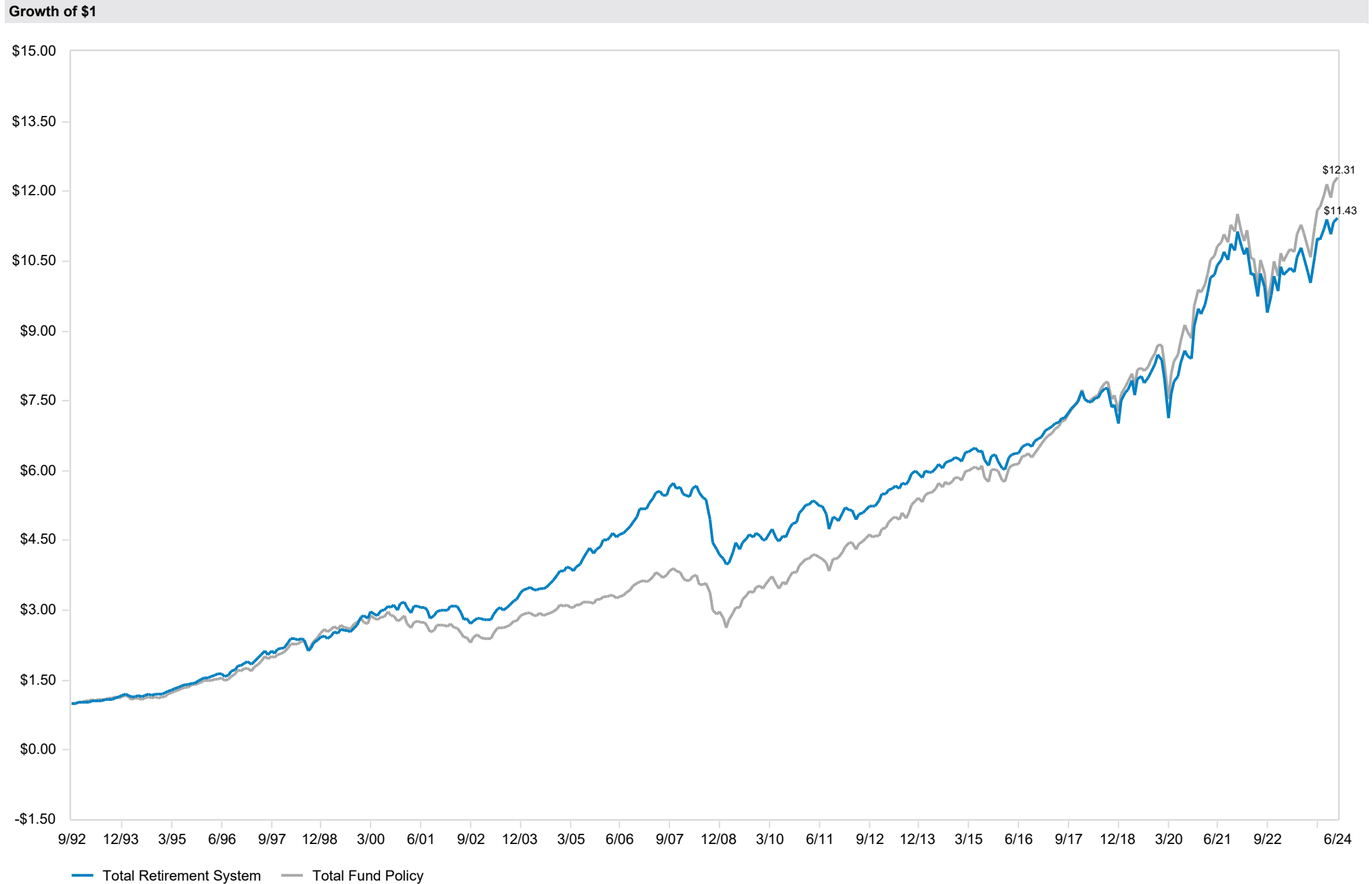
	Return	Standard Deviation
Total Retirement System	7.49	11.66
Total Fund Policy	8.54	11.44
Median	7.44	11.55

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Retirement System	1.22	93.06	99.74	-1.11	-1.06	0.06	0.97	7.04
Total Fund Policy	0.00	100.00	100.00	0.00	N/A	0.18	1.00	7.25

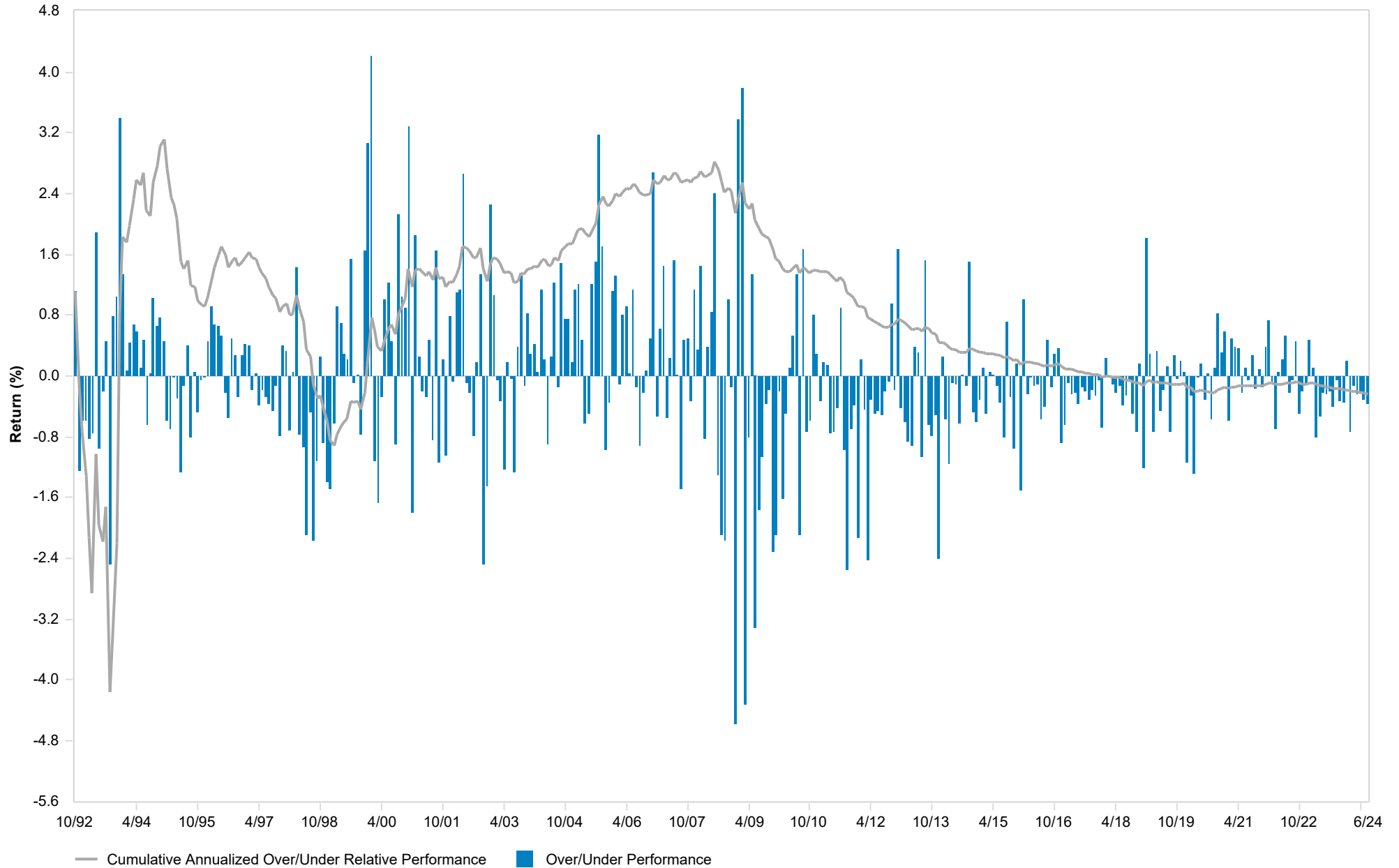
Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Retirement System	1.44	98.14	104.63	-1.04	-0.66	0.49	1.01	7.62
Total Fund Policy	0.00	100.00	100.00	0.00	N/A	0.59	1.00	7.39



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 June 30, 2024

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

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

Austin Police Retirement System
Investment Pricing Summary
as of 6/30/2024

Plan	Most Recent Statement Date	Statement Frequency	Statement Source
Total Retirement System			
Total Equity			
Total Domestic Equity			
NT Collective Russell 3000 Fund	6/30/2024	Monthly	Custodian
MFS Mid Cap Value	6/30/2024	Monthly	Custodian
Westfield Mid Cap Growth	6/30/2024	Monthly	Custodian
Total International Equity			
Thompson Siegel & Walmsley	6/30/2024	Monthly	Custodian
Driehaus International Small Cap Growth	6/30/2024	Monthly	Custodian
WCM Focused Intl	6/30/2024	Monthly	Custodian
Wellington Emerging Markets	6/30/2024	Monthly	Custodian
Total Other Equity			
Huff Energy Fund	12/31/2022	Quarterly	Manager
Franklin Park	3/31/2024	Quarterly	Manager
Total Fixed Income			
Total Fixed Income Funds			
Baird Aggregate	6/30/2024	Monthly	Custodian
Dodge & Cox	6/30/2024	Monthly	Custodian
PIMCO Diversified	6/30/2024	Monthly	Custodian
Total Other Fixed Income Funds			
Capital Point Partners	3/31/2024	Quarterly	Manager
LBC Credit Partners III	3/31/2024	Quarterly	Manager

Austin Police Retirement System
Investment Pricing Summary
as of 6/30/2024

Plan	Most Recent Statement Date	Statement Frequency	Statement Source
LBC Credit Partners IV	3/31/2024	Quarterly	Manager
Providence Debt Fund III	3/31/2024	Quarterly	Manager
Total Alternatives			
Total Real Estate (Composite)(6091100)			
Edison Investments	6/30/2024	Quarterly	Manager
India Property Fund	3/31/2024	Quarterly	Manager
Gainesville Property	12/31/2017	N/A	Manager
Morgan Stanley	6/30/2024	Quarterly	Manager
AEW Parters VIII	3/31/2024	Quarterly	Manager
GreenOak US III	3/31/2024	Quarterly	Manager
Brookfield	3/31/2024	Quarterly	Manager
Artemis IV	3/31/2024	Quarterly	Manager
Stockbridge	6/30/2024	Quarterly	Manager
Total Timber Funds			
Domain Environmental	3/31/2024	Quarterly	Manager
Cash Account	6/30/2024	Monthly	Custodian

	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
Total Domestic Equity	0.17	436,226,487	758,908	
NT Collective Russell 3000 Index	0.02	330,863,955	66,173	0.02 % of Assets
MFS Mid Cap Value	0.62	52,089,183	322,953	0.62 % of Assets
Westfield Mid Cap Growth	0.69	53,131,352	368,788	0.80 % of First \$25 M 0.60 % of Next \$50 M 0.50 % Thereafter
Baird Mid Cap Growth	0.70	17,596	123	0.70 % of First \$50 M 0.60 % Thereafter
Nuance Mid Cap Value	0.70	124,400	871	0.70 % of First \$25 M 0.65 % Thereafter
Total International Equity	0.76	147,125,102	1,124,582	
Thompson Siegel & Walmsley	0.65	58,330,362	379,147	0.65 % of Assets
Driehaus International Small Cap Growth	0.90	22,499,010	202,491	0.90 % of Assets
WCM Focused Intl Growth LP	0.85	45,726,029	388,671	0.85 % of Assets
Wellington Emerging Markets Fund	0.75	20,569,702	154,273	0.75 % of Assets
Total Other Equity	0.32	124,788,984	401,338	
Huff Energy Fund	0.62	24,253,938	150,000	
*Franklin Park Private Equity	0.25	100,535,046	251,338	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	0.51	187,491,177	951,429	
Baird Aggregate Income Bond Fund	0.30	63,123,291	189,370	0.30 % of Assets
Dodge & Cox Fixed Income Fund	0.41	63,308,397	259,564	0.41 % of Assets
Pimco Diversified Income Fund	0.75	52,070,270	390,527	0.75 % of Assets
Total Other Fixed Income	1.25	8,989,218	111,968	
Capital Point Partners (Princeton Capital)	1.65	2,273,600	37,514	
LBC Credit Partners III	1.25	1,885,881	23,574	
LBC Credit Partners IV	1.25	3,564,176	44,552	
Providence Debt Fund III	0.50	1,265,562	6,328	

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	0.96	133,815,681	1,287,126	
Edison Investments	1.00	2,361,058	23,611	1.00 % of Assets
India Property Fund	2.00	126,425	2,529	2.00 % of Assets
Gainesville Property	0.00	1	-	0.00 % of Assets
Morgan Stanley	0.90	76,642,565	689,783	0.90 % of Assets
AEW Partners Fund VIII	1.25	3,197,386	39,967	1.25 % of Assets
GreenOak US III	1.50	9,585,548	143,783	1.50 % of Assets
Brookfield Premier Real Estate Partners	1.00	20,702,272	207,023	1.00 % of Assets
Artemis Real Estate IV	1.50	4,003,400	60,051	1.50 % of Assets
Stockbridge Smart Markets	0.70	17,197,025	120,379	0.70 % of Assets
Total Timber Funds	1.25	896,065	11,201	
Domain Environmental Investments II	1.25	896,065	11,201	1.25 % of Assets
Cash Account	0.00	15,240,448	-	0.00 % of Assets
Total Retirement System	0.43	1,045,583,945	4,534,584	

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

Austin Police Retirement System
Historical Hybrid Compositions
 As of June 30, 2024

[illegible]

-
- 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.

Mariner Institutional compiled this report for the sole use of the client for which it was prepared. Mariner Institutional 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. Mariner Institutional uses the results from this evaluation to make observations and recommendations to the client.

Mariner Institutional 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. Mariner Institutional analyzes transactions as indicated on the custodian statements and reviews the custodial market values of the portfolio. As a result, this provides Mariner Institutional with a reasonable basis that the investment information presented is free from material misstatement. This methodology of evaluating and measuring performance provides Mariner Institutional with a practical foundation for our observations and recommendations. Nothing came to our attention that would cause Mariner Institutional 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 index databases, public economic sources, and the managers themselves.

This document may contain data provided by Bloomberg.

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.

***IMPORTANT DISCLOSURE INFORMATION RE GREENWICH QUALITY LEADER AWARD**

These ratings are not indicative of Mariner Institutional's future performance. These awards or any other rankings and/or recognition by unaffiliated rating services and/or publications should not be construed as a guarantee that a client will experience a certain level of results or satisfaction if they invest with Mariner Institutional, nor should it be construed as a current or past endorsement by any of our clients. Mariner Institutional did not pay a fee to participate in this award survey.

Methodology for this Award: For the 2022 Greenwich Quality Award for Overall U.S. Investment Consulting – Midsize Consultants – Between February and November 2022, Coalition Greenwich conducted interviews with 727 individuals from 590 of the largest tax-exempt funds in the United States. These U.S.-based institutional investors are corporate and union funds, public funds, and endowment and foundation funds, with either pension or investment pool assets greater than \$150 million. Study participants were asked to provide quantitative and qualitative evaluations of their asset management and investment consulting providers, including qualitative assessments of those firms soliciting their business and detailed information on important market trends.

MARINER

Access to a wealth of knowledge and solutions.