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# Austin Police

Investment Performance Review  
Period Ending September 30, 2024

**MARINER**

## **3rd Quarter 2024 Market Environment**

## The Economy

- The US Federal Reserve (the Fed) shifted its policy stance during the quarter and cut the fed funds rate by 0.50% for the first time in four years to a range of 4.75%-5.00%. Capital markets celebrated the move after struggling to predict the pace and timing of future Fed actions earlier in the year. In its press release for the September meeting, the Fed continued to assert its stance on fighting inflation, while also inserting that the committee is strongly committed to “supporting maximum employment.” Fed Chairman Jerome Powell signaled to the markets that the expectation is for the committee to shift to a more expansionary policy moving forward.
- The Fed’s September “Dot Plot” showed revised expectations from a single 0.25% rate cut for the remainder of 2024 to a low-end estimate of a 4.25%-4.50% range. The dots also showed the target rate range decreasing below 4.00% in 2025.
- Growth in the US labor market continued in the third quarter, albeit at a slower pace than previous quarters with growth coming in at 527,000 new jobs. However, the strength of the labor market during the previous year was undermined by the large downward revision (818,000) on the trailing one-year statistic.

## Equity (Domestic and International)

- US equity results were sharply higher for the quarter, which also saw a significant broadening of returns across both the style and capitalization spectrum. The S&P 500 Index rose a solid 5.9% for the quarter and the small-cap Russell 2000 Index posted a higher gain of 9.3%. This quarter not only saw a significant rotation from large-cap to small-cap stocks but also from growth stocks to value stocks as value indexes outpaced their growth counterparts.
- Large-cap equity benchmarks continue to represent top-heavy concentration among a limited number of stocks. As of quarter end, the top 10 stocks in the S&P 500 Index made up nearly 35% of the index.
- International stocks continued delivering positive results during the third quarter and US Dollar (USD) denominated results were further helped by a weakening USD. USD performance of international stocks surged past local currency (LCL) returns in most regions for the quarter, albeit to varying degrees.

## Fixed Income

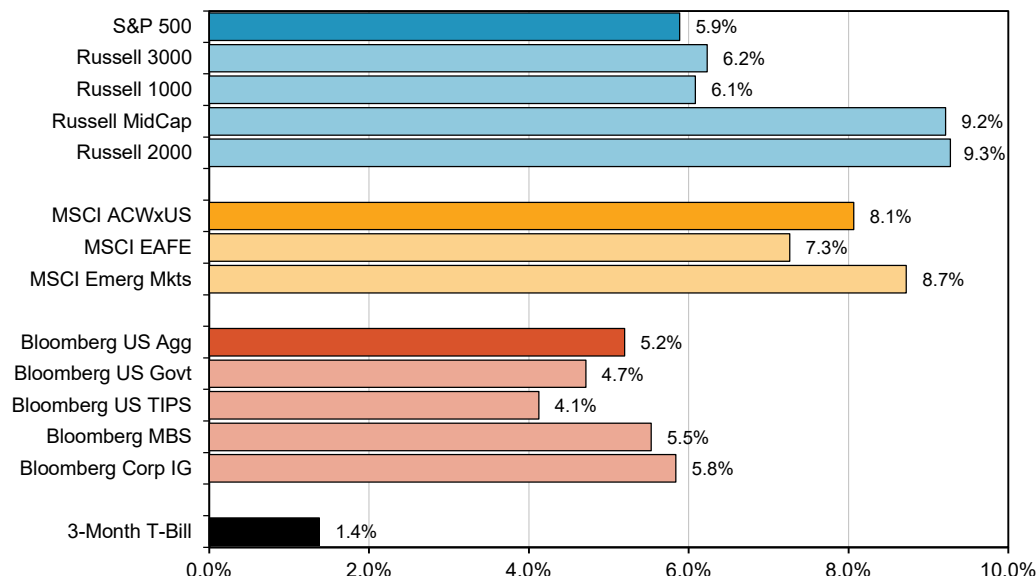
- Fixed-income markets traded higher during the quarter on the back of the Fed’s policy shift as Treasury yields fell. The inverse relationship between prices and yields resulted in the Bloomberg US Aggregate Bond Index advancing 5.2%. The yield on the bellwether 10-year Treasury declined by 0.55% during the quarter.
- High-yield bonds slightly outperformed the Bloomberg US Aggregate Bond Index for the quarter, largely due to higher coupons and partly due to narrowing option-adjusted spreads (OAS) for the Bloomberg US High-Yield index.
- Global bonds outpaced the domestic benchmarks, with the Bloomberg Global Aggregate ex-US returning 8.5% for the quarter in USD terms. Global bond performance was boosted by a weakening USD during the quarter.

## Market Themes

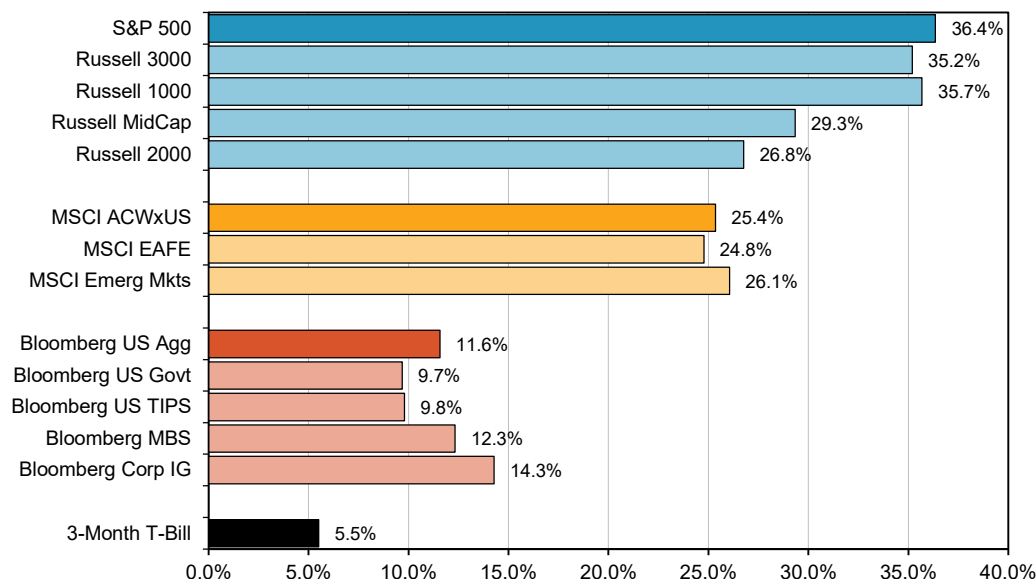
- Divergent monetary policies across regions led to increased volatility during the quarter. Most developed markets across the world kept rates at elevated levels as central banks continued their tight monetary stances. However, the Japanese Central Bank chose to raise its policy rates at the end of July, shortly before the Fed cut its policy rate in September. This divergence led to an unwinding of the systematic Yen carry trade, where investors quickly took action to cover short yen positions by taking down positions in various higher growth investments, including US equities. This subsequently led to a sharp decline in equity markets around the world in early August.
- Ongoing military conflicts in Ukraine and the Middle East, coupled with global economic uncertainty, continue to act as headwinds for international market results but they received a boost from the weakening USD. New escalations to existing conflicts have resulted in anticipated and unanticipated consequences. Domestic Defense companies have tended to trade higher on the news of developing escalations abroad while similarly putting upward pressure on oil prices and downward pressure on energy stocks as a result.

- Performance in the domestic equity markets was broadly positive after markets received a boost from the Fed's first rate cut in four years. Small-cap stocks outperformed their large-cap counterparts, with the Russell 2000 returning 9.3% versus a gain of 5.9% for the S&P 500. The all-cap Russell 3000, which is heavily weighted in its large-cap names, lagged the Russell 2000 Index by 3.1%, returning 6.2% for the quarter.
- International developed market equities realized similar results with both the MSCI ACWI ex US and MSCI EAFE indexes gaining during the quarter. The MSCI ACWI ex US Index posted a strong 8.1% for the quarter, while the MSCI EAFE Index returned a slightly lower 7.3%, both in USD terms. International emerging market (EM) equities were the best performing foreign segment, gaining 8.7% in for the quarter and outpacing their developed market counterparts. Much of the solid USD performance for EM can be attributed to the Far East index countries, particularly China, Taiwan, and Singapore.
- Broad fixed-income indexes added to their year-to-date results during the quarter, thanks in large part to the Fed's 0.50% rate cut on September 18th. The Bloomberg US Aggregate Index returned a solid 5.2% for the quarter. Investment-grade corporate bonds topped other US fixed-income sectors for the quarter, finishing with a return of 5.8%. The TIPS market, which is not part of the Aggregate Index, was the worst-performing bond benchmark during the quarter with a return of 4.1%, lagging the rest of the domestic fixed-income indexes.
- Large-cap US equity indexes built on their already massive returns over the trailing one-year period. The S&P 500 Index has gained 36.4%, while the Russell 1000 Index returned 35.7%. The weakest performing capitalization range of domestic equities for the year has been the small-cap Russell 2000 Index, which still posted a double-digit return of 26.8% over the last 12 months.
- Domestic bond indexes also produced strong, positive results for the year. Investment-grade corporate bonds continued to lead, returning an impressive 14.3% for the trailing one-year. The government bond index lagged for the year, but still returned a solid 9.7%.
- International markets also showcased healthy performance for the trailing one-year period. The MSCI EM Index was the best international performer, returning 26.1%, while the MSCI EAFE and MSCI ACWI ex US indexes posted returns of 24.8% and 25.4%, respectively.

### Quarter Performance

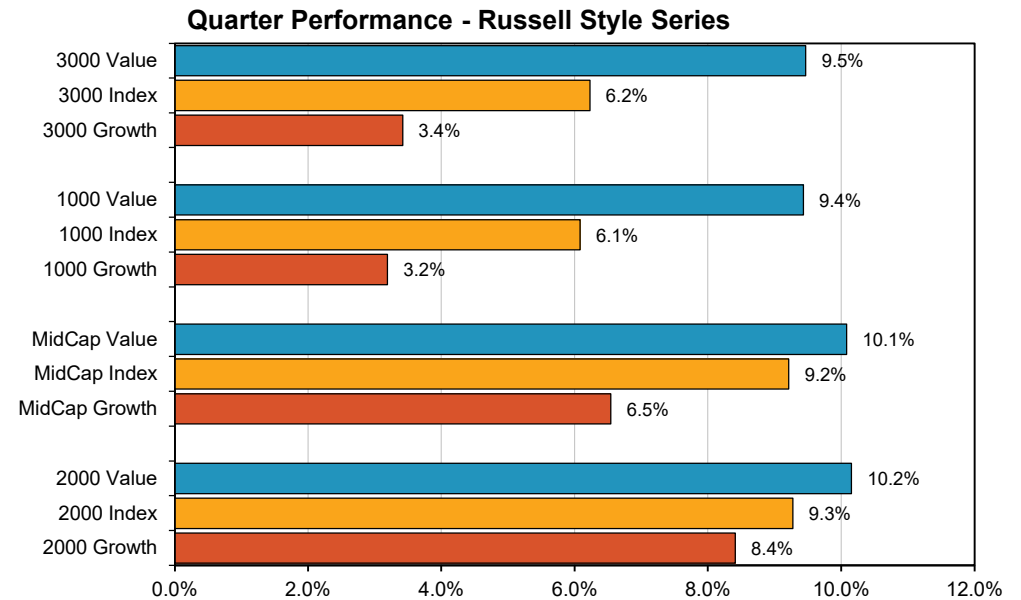


### 1-Year Performance

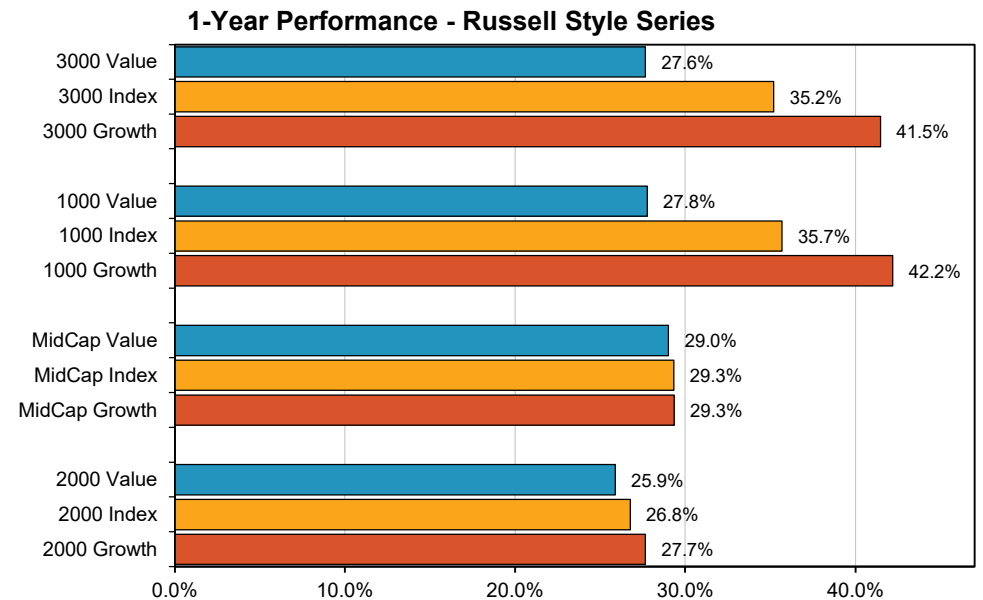


Source: Investment Metrics

- Domestic equity benchmarks posted strong absolute results across styles and market capitalization ranges. During the third quarter, value stocks outpaced their growth counterparts at each capitalization level for the first time since Q4 2022. The best-performing segment of the equity market was small-cap value, with the Russell 2000 Value Index advancing 10.2% for the quarter. Conversely, the large-cap growth Russell 1000 Growth Index produced the weakest relative equity performance, returning just 3.2%.
- The growth-oriented rally took a hiatus during the quarter with the broadest disparity visible in large-cap indexes. The Russell 1000 Value Index return of 9.4% surpassed the Russell 1000 Growth Index return by 6.2%. This quarter's results bucked the trend of large-cap growth stocks being the best-performing segment of the domestic equity market.



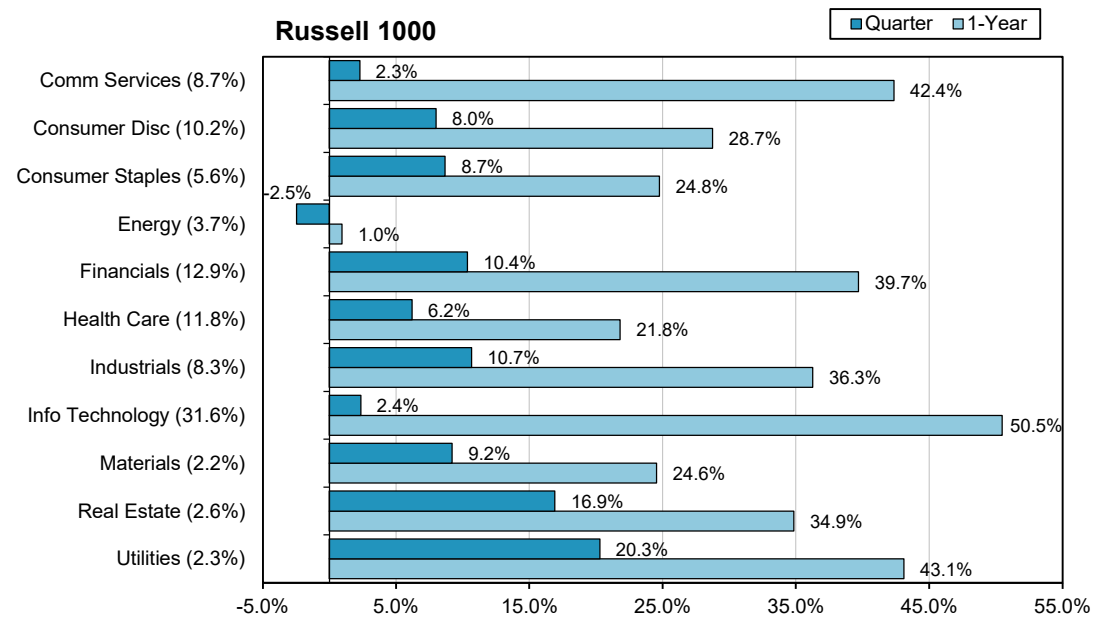
- This quarter's resurgence by the value indexes was not enough to bring them above growth indexes on a trailing one-year basis. The Russell 1000 Growth Index amassed a staggering 42.2%, leading the way among style and market capitalization classifications. Much of this strong performance has been attributable to the emergence of the "Magnificent 7" stocks (Alphabet, Amazon, Apple, Meta, Microsoft, Nvidia, and Tesla) which have dominated the large-cap core and growth indexes over the past several years. The 10 largest stocks in the Russell 1000 Index have contributed more than 50% of the index's total performance over the trailing 12-month period. The weakest performing index for the year was the Russell 2000 Value Index, which still posted an impressive 25.9%.
- The strength of growth sectors is evident in the chart with the broad-cap, large-cap, and small-cap benchmarks outpacing their value counterparts for the trailing one-year period. The gap between the Russell 1000 Growth Index and the Russell 1000 Value Index was in double-digits for the year, while the gaps for mid- and small-cap indexes were much narrower.



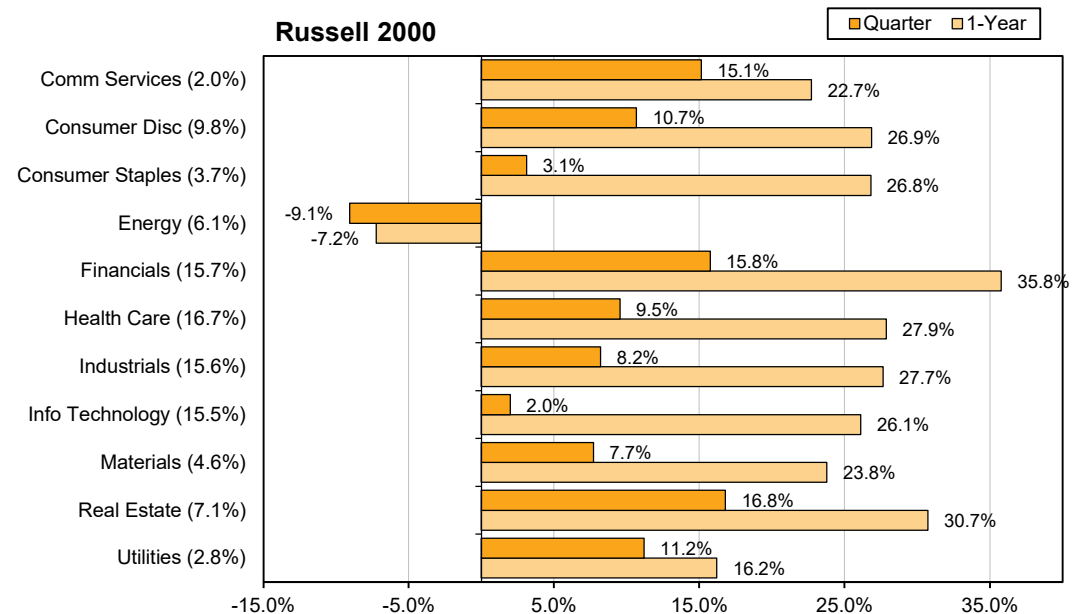
Source: Investment Metrics

- Economic sector performance was mostly positive during the third quarter, with 10 of the 11 economic sectors moving higher in both the large-cap and small-cap indexes. The quarter continued the previous trend in the domestic equities markets of broader participation in companies outside of the technology sector. Energy was the lone sector to slide during the quarter, posting a return of -2.5%.
- Third-quarter results for the large-cap benchmark added to already strong trailing one-year numbers, with all but one sector producing a return of greater than 20%. Similar to the quarter's results, the energy sector was the one to fall short, gaining just 1.0% over the trailing year. Of the 11 sectors, three (communication services, information technology, and utilities) were up by more than 40.0% for the past year. Financials, industrials, and real estate followed closely behind with gains of 39.7%, 36.3%, and 34.9%, respectively. Despite this strong sector performance, only five of the six leading sectors managed to outpace the Russell 1000 Index's return of 35.7%, which was lifted even higher by the strong results in the most heavily weighted sector, information technology.
- Small-cap stocks displayed similar strength, with 10 of the 11 small-cap economic sectors gaining value during the quarter. Real estate, financials, and communication services led the way with gains of more than 15% for the quarter. Similar to the large-cap benchmark, energy was the worst-performing sector for the quarter and produced the sole negative sector return, falling -9.1%.
- Small-cap stocks also had a strong performance for the trailing year. The same 10 small-cap sectors that advanced during the quarter moved higher over the trailing one-year period. Energy remains the weakest performing sector, with the most recent quarterly return dragging the sector's performance to -7.2% for the trailing year. Financials (up 35.8%), and seven other sectors earned more than 20%.

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 September 30, 2024

Top 10 Weighted Stocks				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Apple Inc	6.4%	10.8%	36.8%	Information Technology
Microsoft Corp	6.1%	-3.6%	37.3%	Information Technology
NVIDIA Corp	5.4%	-1.7%	179.3%	Information Technology
Amazon.com Inc	3.3%	-3.6%	46.6%	Consumer Discretionary
Meta Platforms Inc Class A	2.4%	13.6%	91.3%	Communication Services
Alphabet Inc Class A	1.8%	-8.8%	27.1%	Communication Services
Berkshire Hathaway Inc Class B	1.6%	13.1%	31.4%	Financials
Alphabet Inc Class C	1.6%	-8.7%	27.1%	Communication Services
Broadcom Inc	1.5%	7.8%	110.9%	Information Technology
Tesla Inc	1.4%	32.2%	4.6%	Consumer Discretionary

Top 10 Weighted Stocks				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Vaxcyte Inc Ordinary Shares	0.5%	51.3%	124.1%	Health Care
FTAI Aviation Ltd	0.5%	29.1%	281.0%	Industrials
Insmed Inc	0.4%	9.0%	189.1%	Health Care
Sprouts Farmers Market Inc	0.4%	32.0%	158.0%	Consumer Staples
Fabrinet	0.3%	-3.4%	41.9%	Information Technology
Applied Industrial Technologies Inc	0.3%	15.2%	45.4%	Industrials
Mueller Industries Inc	0.3%	30.5%	100.0%	Industrials
Fluor Corp	0.3%	9.6%	30.0%	Industrials
Ensign Group Inc	0.3%	16.3%	55.1%	Health Care
UFP Industries Inc	0.3%	17.5%	29.6%	Industrials

Top 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Exact Sciences Corp	0.0%	61.2%	-0.1%	Healthcare
Inspire Medical Systems Inc	0.0%	57.7%	6.4%	Healthcare
AppLovin Corp Ordinary Shares - A	0.1%	56.9%	226.7%	Information Technology
Doximity Inc Class A	0.0%	55.8%	105.3%	Healthcare
Ubiquiti Inc	0.0%	52.7%	55.3%	Information Technology
Vornado Realty Trust	0.0%	49.9%	75.4%	Real Estate
GE Vernova Inc	0.1%	48.7%	N/A	Utilities
VF Corp	0.0%	48.5%	15.5%	Communication Services
Palantir Technologies Inc Ordinary - A	0.1%	46.9%	132.5%	Technology
SharkNinja Inc	0.0%	44.7%	139.9%	Communication Services

Top 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Lumen Technologies Inc Ordinary	0.1%	545.5%	400.0%	Communication Services
CommScope Holding Co Inc	0.0%	396.7%	81.8%	Information Technology
Capricor Therapeutics Inc	0.0%	218.9%	344.7%	Health Care
Summit Therapeutics Inc Ordinary	0.0%	180.8%	1071.1%	Health Care
Q32 Bio Inc	0.0%	148.6%	N/A	Health Care
Intuitive Machines Inc Ordinary - A	0.0%	143.9%	120.5%	Industrials
IGM Biosciences Inc Ordinary	0.0%	140.8%	98.1%	Health Care
Cassava Sciences Inc	0.0%	138.3%	76.9%	Health Care
AST SpaceMobile Inc Ordinary - A	0.1%	125.2%	588.2%	Communication Services
Biomea Fusion Inc	0.0%	124.4%	-26.6%	Health Care

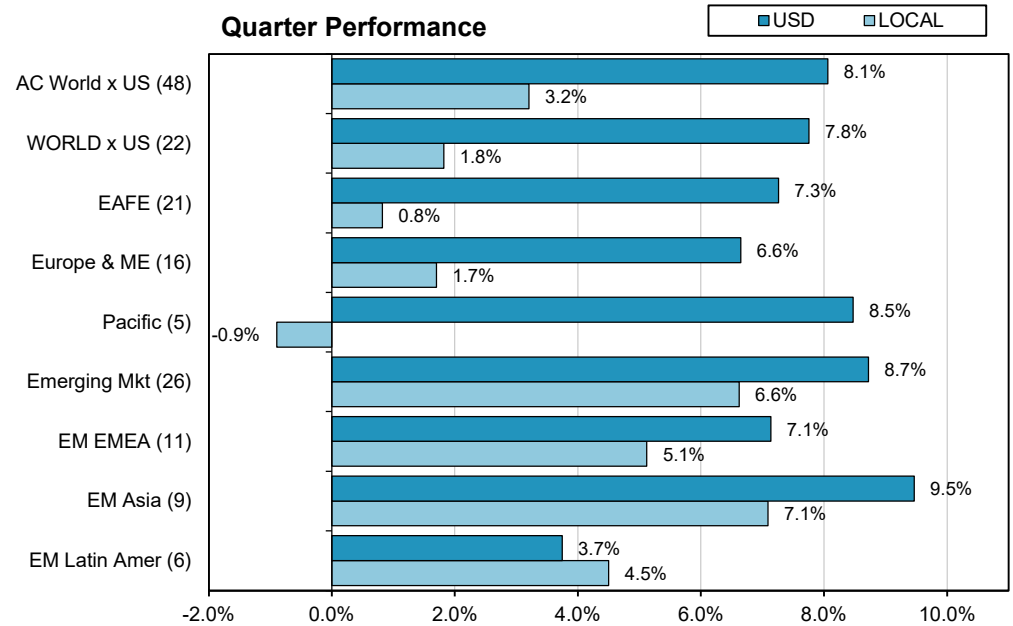
Bottom 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
New Fortress Energy Inc Class A	0.0%	-58.3%	-71.7%	Utilities
Wolfspeed Inc	0.0%	-57.4%	-74.5%	Information Technology
Trump Media & Technology Group Corp	0.0%	-50.9%	N/A	Communication Services
Super Micro Computer Inc	0.0%	-49.2%	51.8%	Information Technology
e.l.f. Beauty Inc	0.0%	-48.3%	-0.7%	Consumer Staples
Celsius Holdings Inc	0.0%	-45.1%	-45.2%	Consumer Staples
Moderna Inc	0.1%	-43.7%	-35.3%	Health Care
DexCom Inc	0.1%	-40.9%	-28.1%	Health Care
Advance Auto Parts Inc	0.0%	-38.2%	-29.1%	Communication Services
Dollar General Corp	0.0%	-35.7%	-18.6%	Consumer Staples

Bottom 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Conduit Pharmaceuticals Inc	0.0%	-88.8%	-98.0%	Health Care
HilleVax Inc	0.0%	-87.8%	-86.9%	Health Care
iLearningEngines Inc	0.0%	-81.6%	N/A	Information Technology
SolarMax Technology Inc	0.0%	-80.8%	N/A	Industrials
Verrica Pharmaceuticals Inc	0.0%	-80.1%	-62.7%	Health Care
Elevation Oncology Inc	0.0%	-77.8%	-9.5%	Health Care
Actinium Pharmaceuticals Inc	0.0%	-74.6%	-68.2%	Health Care
Renovaro Inc	0.0%	-72.4%	-89.2%	Health Care
B. Riley Financial Inc	0.0%	-70.2%	-86.1%	Financials
ALX Oncology Holdings Inc Ordinary	0.0%	-69.8%	-62.1%	Health Care

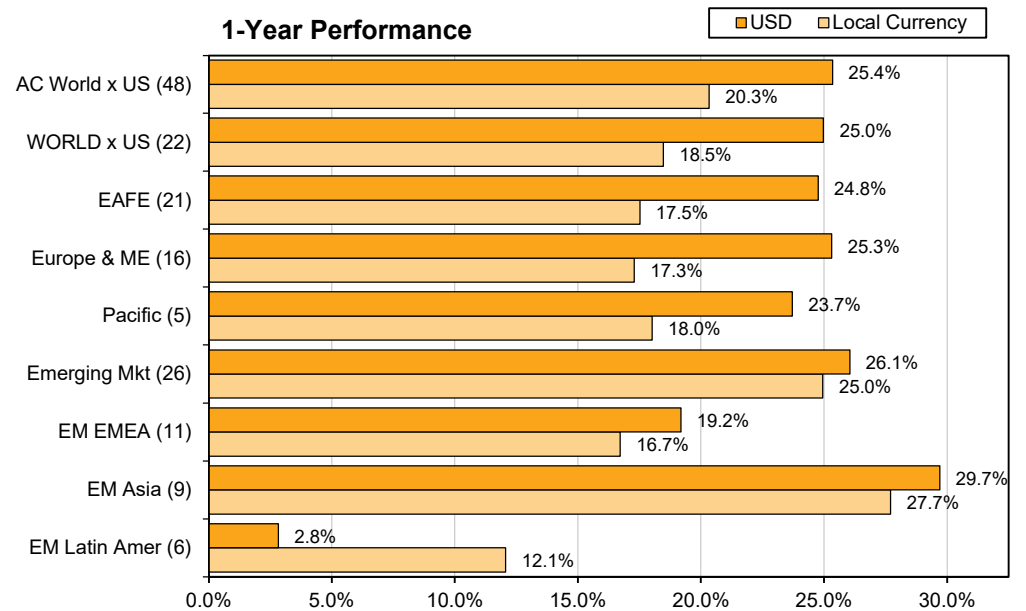
Source: Morningstar Direct

- Results in USD terms among the headline international equity indexes were sharply higher during the quarter, echoing the performance of major domestic equity benchmarks. The weakening USD relative to many major currencies during the quarter was a tailwind for the USD performance of most regional benchmarks' returns. The developed-market MSCI EAFE Index returned a muted 0.8% in LCL terms but rose 7.3% in USD terms. The MSCI Emerging Markets Index was the best-performing broad index, climbing 8.7% in USD and 6.6% in LCL terms for the quarter.
- Latin America lagged other regions during the quarter in USD terms, posting a return of 3.7%. Weakening currencies in the region put pressure on performance, making it the only region with USD performance that lagged LCL currency performance. The MSCI Pacific benchmark was the only regional benchmark to deliver negative performance in LCL teams (-0.9%), but USD weakness led to an 8.5% positive return in USD terms. Regional LCL currency performance struggles were led by the unwinding of the carry trade in the Japanese equity markets in early August which carried over to neighboring Pacific countries and US markets.
- China, which is the most heavily weighted country in the emerging market index, continued its rebound during the quarter posting a 23.5% gain in USD terms. Recently announced government stimulus for the Chinese economy helped lift equity markets in the country during the quarter. The Chinese economy has yet to expand at its pre-pandemic rate of roughly 5.0% primarily due to troubles in its commercial property and banking sectors, which have created challenges for growth in the region.
- Much like domestic markets, trailing one-year results for international developed and emerging markets benchmarks were strongly positive. Higher USD versus LCL returns for most international benchmarks demonstrate the USD's relative weakness over the trailing one-year period.
- All broad and regional indexes were positive for the trailing 12 months in both USD and LCL terms. The EM Latin America index, where weakening local currencies dragged the region's double-digit LCL performance to a muted 2.8% in USD terms. MSCI Asia Index led the way with a return of 27.7% in LCL terms for the trailing year. The relative weakening of the USD during the period further boosted returns in the region to 29.7% in USD terms.

**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 September 30, 2024

MSCI - EAFE	Sector Weight	Quarter Return	1-Year Return
Communication Services	4.3%	11.5%	27.1%
Consumer Discretionary	11.0%	4.8%	14.4%
Consumer Staples	8.7%	10.6%	10.9%
Energy	3.6%	-5.8%	-2.1%
Financials	20.6%	10.4%	36.0%
Health Care	13.3%	4.6%	20.4%
Industrials	17.3%	9.4%	33.8%
Information Technology	8.7%	-2.4%	35.6%
Materials	6.8%	10.7%	24.0%
Real Estate	2.2%	17.3%	27.6%
Utilities	3.4%	14.9%	25.4%
<b>Total</b>	<b>100.0%</b>	<b>7.3%</b>	<b>24.8%</b>

MSCI - ACWixUS	Sector Weight	Quarter Return	1-Year Return
Communication Services	5.6%	13.6%	26.3%
Consumer Discretionary	11.3%	11.5%	20.4%
Consumer Staples	7.4%	10.5%	11.1%
Energy	5.0%	-1.7%	7.2%
Financials	22.5%	11.4%	33.2%
Health Care	9.4%	6.4%	20.4%
Industrials	13.8%	8.7%	30.5%
Information Technology	12.8%	-1.6%	38.3%
Materials	7.1%	9.4%	18.8%
Real Estate	1.9%	16.9%	23.5%
Utilities	3.2%	13.4%	27.7%
<b>Total</b>	<b>100.0%</b>	<b>8.1%</b>	<b>25.4%</b>

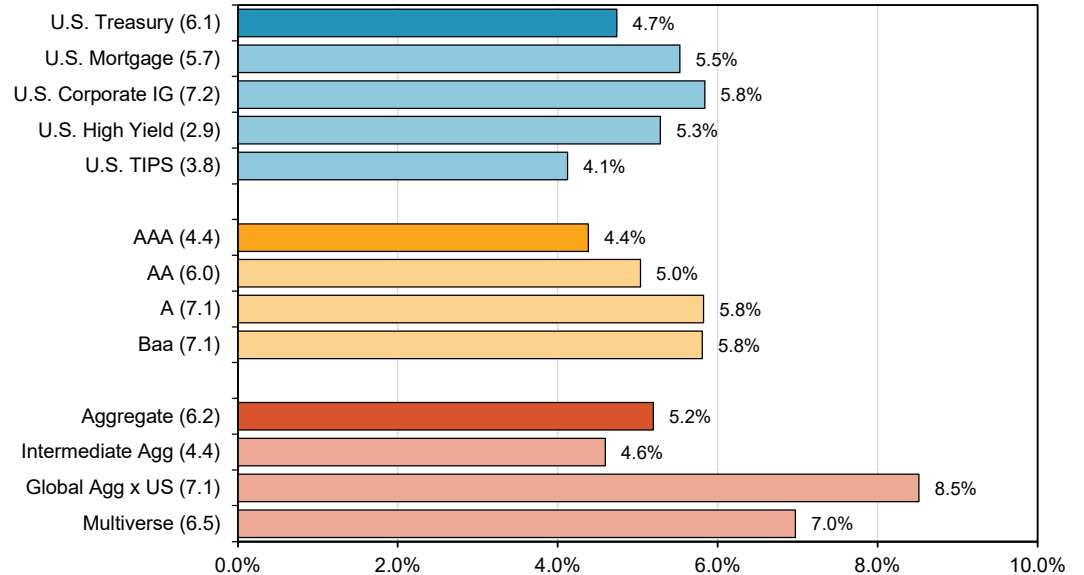
MSCI - Emerging Mkt	Sector Weight	Quarter Return	1-Year Return
Communication Services	9.4%	15.6%	26.2%
Consumer Discretionary	14.0%	25.0%	31.9%
Consumer Staples	5.2%	11.1%	9.6%
Energy	4.8%	-0.4%	17.4%
Financials	22.8%	10.4%	26.5%
Health Care	3.6%	22.9%	20.5%
Industrials	6.8%	7.0%	19.9%
Information Technology	22.2%	-2.6%	40.3%
Materials	6.6%	5.5%	5.5%
Real Estate	1.6%	14.8%	10.8%
Utilities	2.9%	9.3%	35.5%
<b>Total</b>	<b>100.0%</b>	<b>8.7%</b>	<b>26.1%</b>

Country	MSCI-EAFE Weight	MSCI-ACWixUS Weight	Quarter Return	1-Year Return
Japan	22.3%	14.0%	5.7%	21.6%
United Kingdom	14.7%	9.3%	7.9%	23.3%
France	11.4%	7.1%	7.7%	16.4%
Switzerland	9.9%	6.2%	8.5%	21.6%
Germany	9.0%	5.7%	10.7%	32.1%
Australia	7.8%	4.9%	11.5%	31.6%
Netherlands	4.8%	3.0%	-4.5%	38.7%
Denmark	3.4%	2.1%	-10.3%	24.5%
Sweden	3.4%	2.1%	8.4%	35.8%
Italy	2.7%	1.7%	8.6%	34.4%
Spain	2.8%	1.8%	13.7%	35.9%
Hong Kong	2.0%	1.3%	24.4%	14.8%
Singapore	1.5%	0.9%	17.6%	33.9%
Finland	1.0%	0.7%	8.1%	16.5%
Belgium	1.0%	0.6%	15.3%	25.9%
Israel	0.8%	0.5%	12.4%	32.4%
Norway	0.6%	0.4%	2.1%	4.5%
Ireland	0.3%	0.2%	13.9%	38.6%
Portugal	0.2%	0.1%	8.7%	11.3%
Austria	0.2%	0.1%	8.7%	28.3%
New Zealand	0.2%	0.1%	5.6%	20.1%
<b>Total EAFE Countries</b>	<b>100.0%</b>	<b>62.7%</b>	<b>7.3%</b>	<b>24.8%</b>
Canada		7.7%	12.0%	26.8%
<b>Total Developed Countries</b>		<b>70.4%</b>	<b>7.8%</b>	<b>25.0%</b>
China		8.2%	23.5%	23.9%
India		5.8%	7.3%	40.3%
Taiwan		5.2%	0.5%	52.7%
Korea		3.1%	-5.6%	9.3%
Brazil		1.4%	7.1%	2.6%
Saudi Arabia		1.1%	5.3%	11.2%
South Africa		0.9%	16.1%	36.7%
Mexico		0.6%	-3.4%	-3.4%
Indonesia		0.5%	15.3%	5.2%
Malaysia		0.4%	20.5%	35.6%
Thailand		0.4%	28.9%	17.0%
United Arab Emirates		0.3%	12.0%	6.4%
Poland		0.3%	-3.9%	45.7%
Turkey		0.2%	-12.6%	6.8%
Qatar		0.2%	10.6%	11.2%
Kuwait		0.2%	3.7%	8.9%
Philippines		0.2%	21.7%	22.7%
Greece		0.1%	10.4%	31.3%
Chile		0.1%	5.3%	5.8%
Peru		0.1%	7.9%	57.4%
Hungary		0.1%	6.3%	36.4%
Czech Republic		0.0%	5.1%	7.7%
Colombia		0.0%	-0.9%	25.4%
Egypt		0.0%	12.3%	-7.3%
<b>Total Emerging Countries</b>		<b>29.6%</b>	<b>8.7%</b>	<b>26.1%</b>
<b>Total ACWixUS Countries</b>		<b>100.0%</b>	<b>8.1%</b>	<b>25.4%</b>

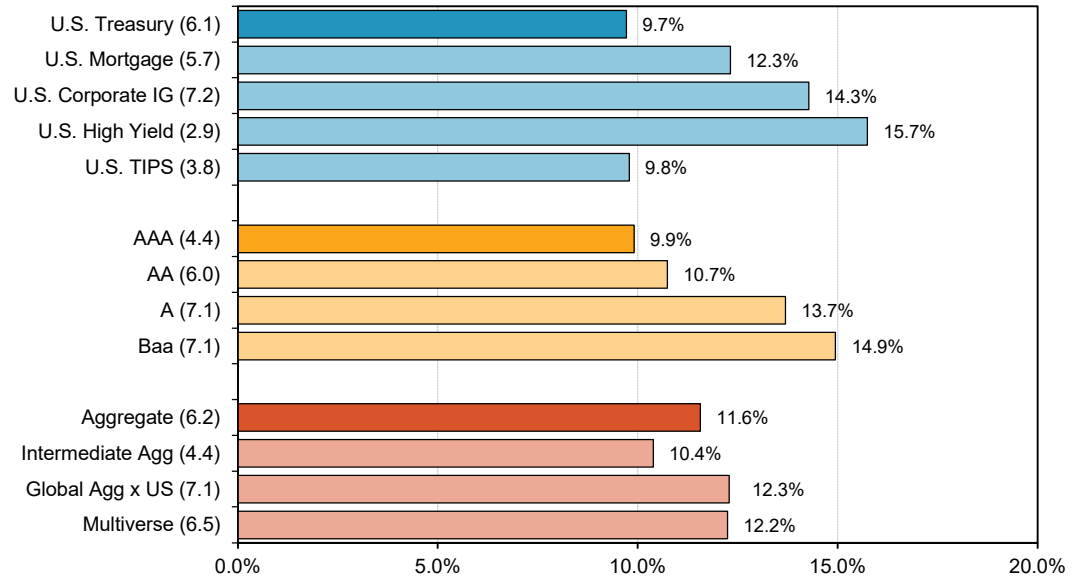
Source: Morningstar Direct, MSCI Global Index Monitor (Returns are Net in USD)  
As a result of the GICS classification changes on 9/28/2018 and certain associated reporting limitations, sector performance represents backward looking performance for the prior year of each sector's current constituency,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

- Domestic fixed-income markets advanced during the third quarter. Although the Federal Reserve began to unwind its tight monetary policy stance that began in 2022 during the quarter, yields remained elevated. On September 18, the Fed reduced its target policy rate by 0.50%, a move that was celebrated in a performance boost by equity and bond markets alike.
- After a muted first half of 2024, which held the Bloomberg US Aggregate Bond Index slightly negative for the year, the index posted its best quarterly performance year-to-date, climbing 5.2% during the third quarter. Performance across the investment-grade index's segments was more favorable in the credit sectors, with the corporate investment-grade index rising 5.8%, outpacing the government and mortgage-backed-securities sectors. Lower quality issues also performed better, with A and BAA components of the index outpacing higher quality issues during the quarter.
- High Yield bonds underperformed investment grade issues as interest rates declined primarily due to the high-yield benchmark's lower duration. Despite their lower duration, below-investment grade issues continued to rise, posting a return of 5.3% for the quarter. The Bloomberg Global Aggregate ex-US Index outperformed all broad-market domestic indexes with a return of 8.5% for the quarter, aided by a weakening USD.
- Over the trailing one-year period, the Bloomberg US Aggregate Bond Index posted a solid 11.6% return. The benchmark's sub-components also posted positive performance over the trailing 12 months with the Bloomberg US Corporate Investment Grade Index rising a strong 14.3% and the US Mortgage Index returning 12.3%. US TIPS, which are excluded from the Bloomberg US Aggregate Bond Index, returned 9.8% for the trailing year.
- Among credit qualities, lower-quality issues (both within investment grade and below investment grade) have outperformed higher-quality bonds due to higher yields and credit spread compression over the last year. Higher yields mean larger coupon payments as well as greater sensitivity to changes in credit spreads, which narrowed. High-yield bonds have enjoyed a healthy 15.7% gain for the trailing year.
- The Bloomberg Global Aggregate ex-US Index moderately outpaced its domestic counterpart, the Bloomberg US Aggregate Bond Index, by 0.7% during the trailing year.

**Quarter Performance**



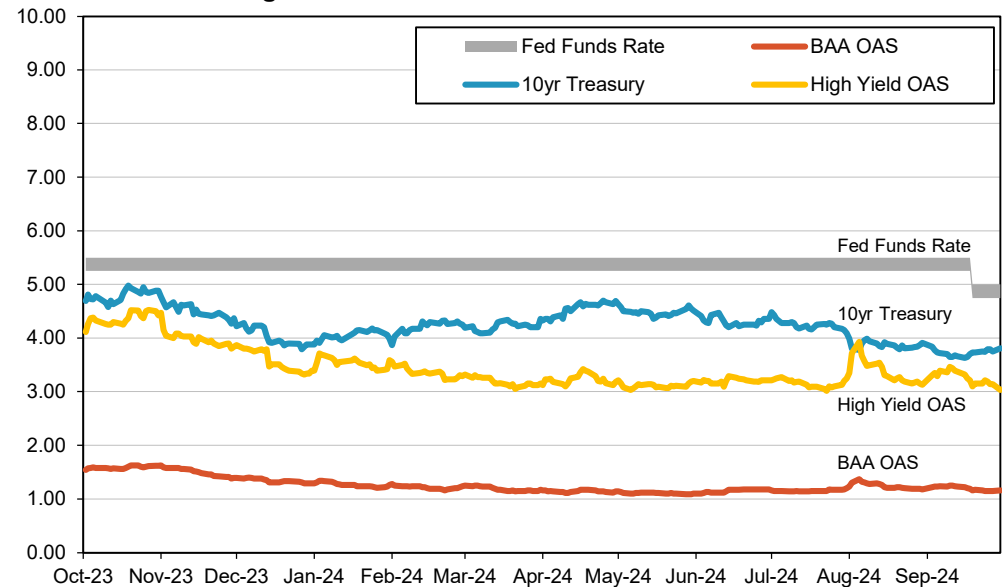
**1-Year Performance**



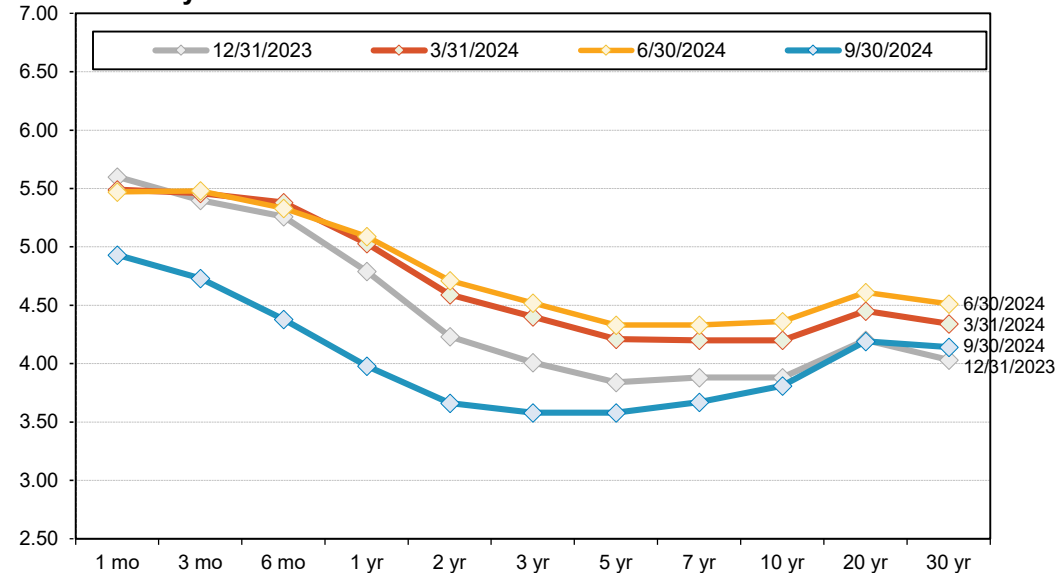
Source: Bloomberg

- The gray band across the graph illustrates the fed funds target rate range over the last 12 months. During the third quarter, the Federal Open Market Committee (FOMC) cut its policy rates by 0.50%, to a range of 4.75-5.00%. The last rate increase occurred at the FOMC's July 2023 meeting, and this was the first rate cut since March of 2020. With inflation declining and unemployment remaining largely stable, the Fed appears to be pivoting from a tight monetary policy stance. The most recent FOMC press release continued to emphasize economic data-dependent outcomes while placing renewed emphasis on the second part of the committee's dual mandate: full employment. The CME FedWatch tool, which forecasts rates based on fed fund futures pricing, showed a greater than 80% probability of a 0.25% rate decrease at the FOMC November meeting at the time of this writing. Fed officials and market participants continue to express concern that leaving rates at their current elevated 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.
- The yield on the US 10-year Treasury (blue line of the top chart) fell roughly 0.55% during the quarter, attributable to Fed policy decisions and expectations of future rate actions. The bellwether benchmark rate opened the quarter at a yield of 4.36% and finished September at a yield of 3.81%. The 10-year Treasury benchmark's rate peaked in October 2023, cresting at a yield of just under 5.00% before pulling back during 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 investors require to purchase and hold non-US Treasury issues with the lowest investment grade rating. During the quarter, the yield spread was relatively stable, beginning July at 1.18% and finishing September at 1.16%. High-yield OAS spreads (represented by the yellow line in the top chart) have also remained relatively unchanged, despite a sharp spike in early August spurred by an unwinding of the Yen carry trade. The high-yield OAS fell 0.18% over the quarter from 3.21% to 3.03%. The spread measure's relative stability over the trailing year 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. For the first time since July 2022, the quarter-end yield on the 10-year Treasury was higher relative to the two-year Treasury. The yield curve has been inverted for each of the previous three quarter-end readings on the graph and for much of the last two years. This 2-10-year yield curve inversion is a common heuristic used to foretell a pending recession environment.

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 \(jpmorgan.com\)](#)

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

[China's Economy Limpes Into 2024 – WSJ Support Site - Global Index Lens: Index Returns – MSCI](#)

[Federal Reserve issues FOMC statement](#)

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

[U.S. job growth revised down by the most since 2009. Why this time is different \(cnbc.com\)](#)

[The Fed - Meeting calendars and information \(federalreserve.gov\)](#)

[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 \(investopedia.com\)](#)

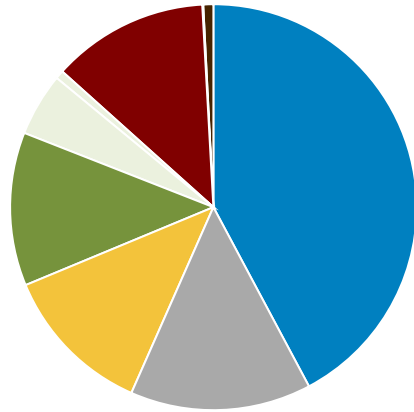
[Fed's Jerome Powell Declares 'Time Has Come' for Interest-Rate Cuts – WSJ](#)

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

[Fed rate cut: Here's what changed in the central bank's statement \(cnbc.com\)](#)

[10-Year Treasury Constant Maturity Minus 2-Year Treasury Constant Maturity \(T10Y2Y\) | FRED | St. Louis Fed \(stlouisfed.org\)](#)

**Asset Allocation by Segment**  
Sep-2024 : \$1,089,180,768



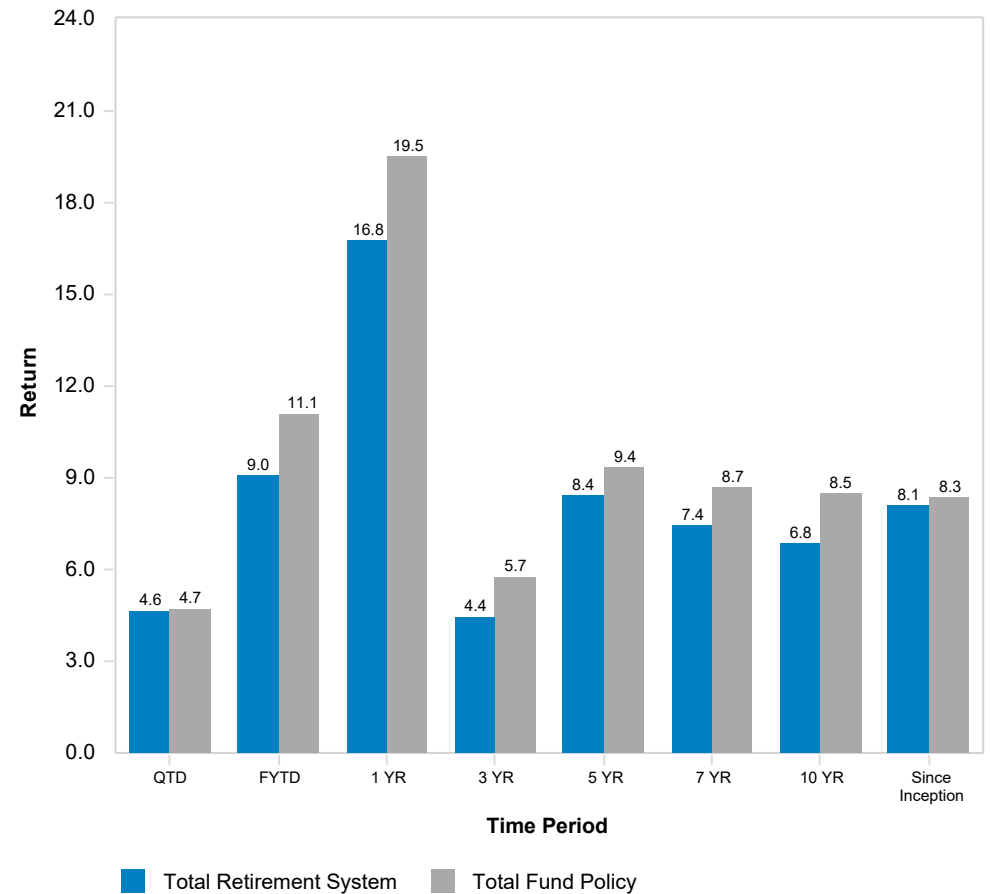
**Allocation**

	Market Value	Allocation
Total Domestic Equity	459,883,050	42.2
Total International Equity	156,667,316	14.4
Total Other Equity	132,066,823	12.1
Total Core Fixed Income	133,276,882	12.2
Total Non Core Fixed Income	54,678,863	5.0
Total Other Fixed Income	7,327,396	0.7
Total Real Estate	135,623,142	12.5
Total Timber Funds	943,241	0.1
Cash Account	8,714,055	0.8

**Gain/Loss Summary**

	QTD	FYTD	1 YR
Total Retirement System			
Beginning Market Value	1,047,430,888	1,015,706,092	953,868,251
Net Contributions	-6,886,852	-17,693,640	-23,109,086
Return on Investment	49,271,471	93,298,273	161,323,087
Ending Market Value	1,089,180,768	1,089,180,768	1,089,180,768

**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.

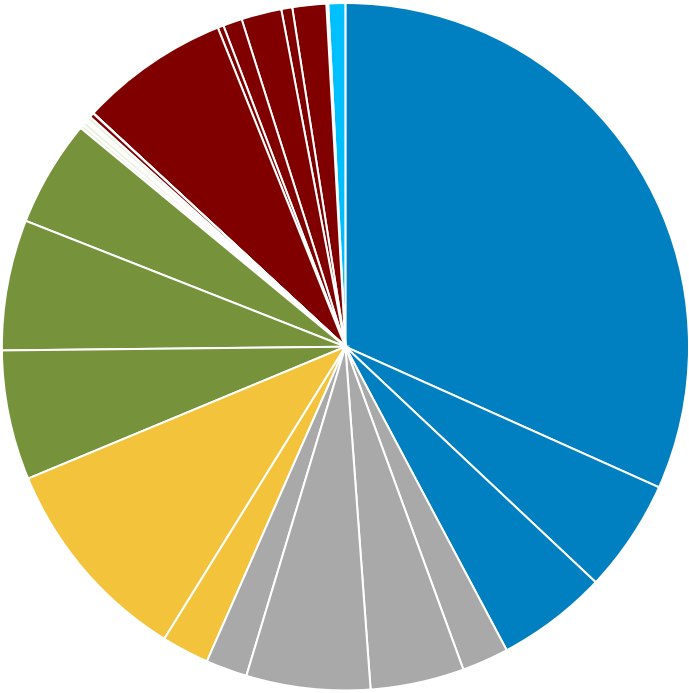
**Asset Allocation by Manager  
Total Fund**

**As of September 30, 2024**

**Sep-2024 : \$1,089,180,768**

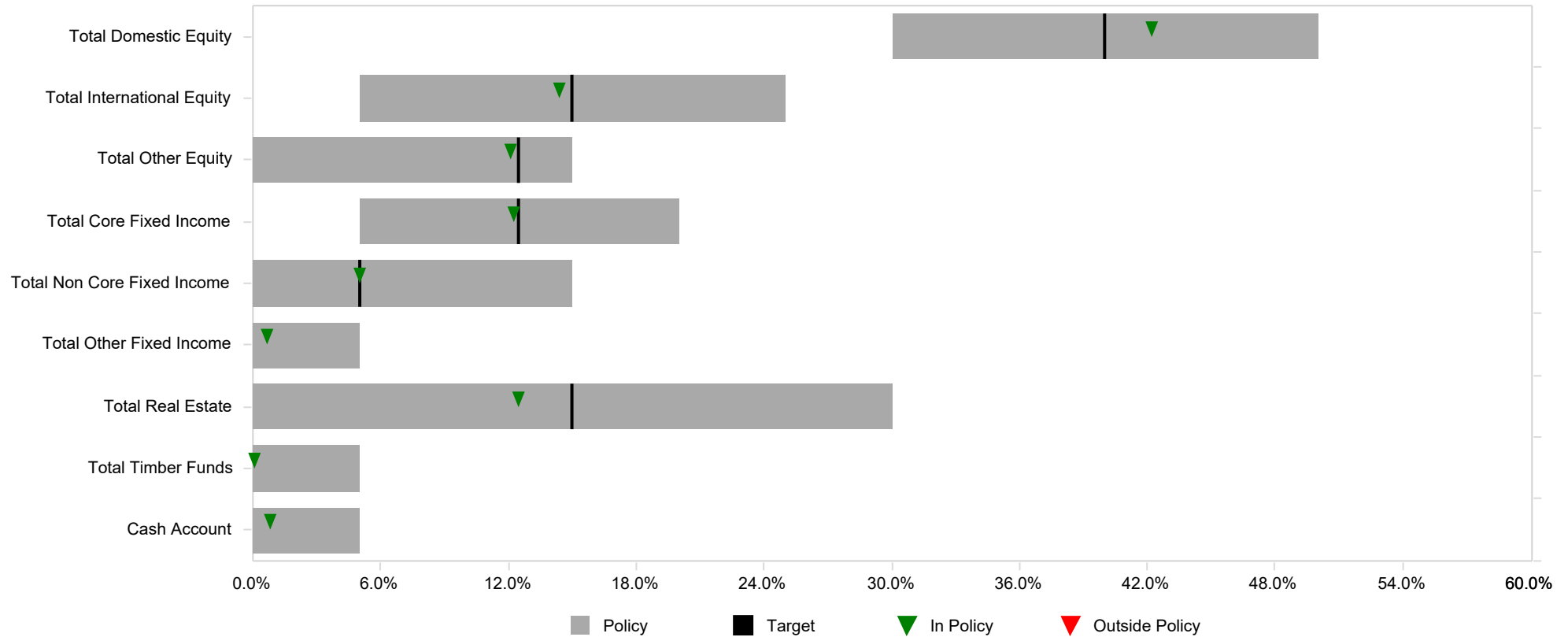
**Allocation**

	<b>Market Value</b>	<b>Allocation</b>
NT Collective Russell 3000 Index	345,332,899	31.7
MFS Mid Cap Value	57,776,897	5.3
Westfield Mid Cap Growth	56,773,253	5.2
Driehaus International Small Cap Growth	23,985,149	2.2
WCM Focused Intl Growth LP	47,989,772	4.4
Thompson Siegel & Walmsley	63,465,154	5.8
Fidelity Total International Index	21,227,242	1.9
Huff Energy Fund	24,253,938	2.2
Franklin Park Private Equity	107,812,885	9.9
Baird Aggregate Income Bond Fund	66,429,760	6.1
Dodge & Cox Fixed Income Fund	66,847,122	6.1
Pimco Diversified Income Fund	54,678,863	5.0
LBC Credit Partners III	1,873,552	0.2
LBC Credit Partners IV	2,180,847	0.2
Providence Debt Fund III	1,131,541	0.1
Capital Point Partners (Princeton Capital)	2,141,456	0.2
Edison Investments	2,369,664	0.2
India Property Fund	123,833	0.0
Gainesville Property	1	0.0
Morgan Stanley	76,807,568	7.1
AEW Partners Fund VIII	3,013,068	0.3
GreenOak US III	9,776,118	0.9
Brookfield Premier RE Partners	20,574,860	1.9
Artemis Real Estate IV	5,656,774	0.5
Stockbridge Smart Markets	17,301,257	1.6
Domain Environmental Investments II	943,241	0.1
Cash Account	8,714,055	0.8



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 (%)
<b>Total Retirement System</b>	<b>1,089,180,768</b>	<b>100.0</b>	<b>N/A</b>	<b>N/A</b>	<b>100.0</b>
Total Domestic Equity	459,883,050	42.2	30.0	50.0	40.0
Total International Equity	156,667,316	14.4	5.0	25.0	15.0
Total Other Equity	132,066,823	12.1	0.0	15.0	12.5
Total Core Fixed Income	133,276,882	12.2	5.0	20.0	12.5
Total Non Core Fixed Income	54,678,863	5.0	0.0	15.0	5.0
Total Other Fixed Income	7,327,396	0.7	0.0	5.0	0.0
Total Real Estate	135,623,142	12.5	0.0	30.0	15.0
Total Timber Funds	943,241	0.1	0.0	5.0	0.0
Cash Account	8,714,055	0.8	0.0	5.0	0.0

Financial Reconciliation Quarter to Date										
	Market Value 07/01/2024	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Return On Investment	Market Value 09/30/2024
<b>Total Retirement System</b>	<b>1,047,430,888</b>	<b>-</b>	<b>18,388,216</b>	<b>-25,275,068</b>	<b>-572,368</b>	<b>-62,372</b>	<b>3,527,299</b>	<b>45,744,172</b>	<b>49,271,471</b>	<b>1,089,180,768</b>
<b>Total Equity</b>	<b>709,478,412</b>	<b>183,915</b>	<b>-</b>	<b>-</b>	<b>-429,082</b>	<b>-</b>	<b>234,531</b>	<b>39,149,412</b>	<b>39,383,943</b>	<b>748,617,189</b>
<b>Total Domestic Equity</b>	<b>436,226,487</b>	<b>-6,032,596</b>	<b>-</b>	<b>-</b>	<b>-152,571</b>	<b>-</b>	<b>144,275</b>	<b>29,697,455</b>	<b>29,841,730</b>	<b>459,883,050</b>
NT Collective Russell 3000 Index	330,863,955	-5,983,457	-	-	-16,543	-	-	20,468,944	20,468,944	345,332,899
Baird Mid Cap Growth	17,596	65,022	-	-	-93,133	-	10,514	-	10,514	-
Nuance Mid Cap Value	124,400	-114,161	-	-	-42,894	-	32,655	-	32,655	-
MFS Mid Cap Value	52,089,183	-	-	-	-	-	-	5,687,715	5,687,715	57,776,897
Westfield Mid Cap Growth	53,131,352	-	-	-	-	-	101,105	3,540,796	3,641,901	56,773,253
<b>Total International Equity</b>	<b>147,125,102</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>90,256</b>	<b>9,451,957</b>	<b>9,542,213</b>	<b>156,667,316</b>
Driehaus International Small Cap Growth	22,499,010	-	-	-	-	-	-	1,486,139	1,486,139	23,985,149
Thompson Siegel & Walmsley	58,330,362	-	-	-	-	-	-	5,134,792	5,134,792	63,465,154
WCM Focused Intl Growth LP	45,726,029	-	-	-	-	-	-	2,263,743	2,263,743	47,989,772
Fidelity Total International Index	-	20,431,575	-	-	-	-	-	795,666	795,666	21,227,242
Wellington Emerging Markets Fund	20,569,702	-20,431,575	-	-	-	-	90,256	-228,382	-138,126	-
<b>Total Other Equity</b>	<b>126,126,823</b>	<b>6,216,511</b>	<b>-</b>	<b>-</b>	<b>-276,511</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>132,066,823</b>
Huff Energy Fund	24,253,938	-	-	-	-	-	-	-	-	24,253,938
Franklin Park Private Equity	101,872,885	6,216,511	-	-	-276,511	-	-	-	-	107,812,885
<b>Total Fixed Income</b>	<b>187,493,384</b>	<b>-1,664,973</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2,083,067</b>	<b>7,371,662</b>	<b>9,454,730</b>	<b>195,283,141</b>
Baird Aggregate Income Bond Fund	63,123,291	-943	-	-	-	-	620,435	2,686,977	3,307,412	66,429,760
Dodge & Cox Fixed Income Fund	63,308,397	-	-	-	-	-	675,017	2,863,708	3,538,725	66,847,122
Pimco Diversified Income Fund	52,070,270	-	-	-	-	-	675,092	1,933,501	2,608,593	54,678,863
<b>Total Other Fixed Income</b>	<b>8,991,426</b>	<b>-1,664,029</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>112,523</b>	<b>-112,523</b>	<b>-</b>	<b>7,327,396</b>
Capital Point Partners (Princeton Capital)	2,141,456	-	-	-	-	-	-	-	-	2,141,456
LBC Credit Partners III	1,909,308	-35,756	-	-	-	-	35,756	-35,756	-	1,873,552
LBC Credit Partners IV	3,687,236	-1,506,389	-	-	-	-	61,315	-61,315	-	2,180,847
Providence Debt Fund III	1,253,426	-121,885	-	-	-	-	15,452	-15,452	-	1,131,541

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



Financial Reconciliation

Total Fund

1 Quarter Ending September 30, 2024

	Market Value 07/01/2024	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Return On Investment	Market Value 09/30/2024
<b>Total Real Estate &amp; Timber</b>	<b>135,218,644</b>	<b>1,308,884</b>	-	-	<b>-143,286</b>	<b>-20,323</b>	<b>979,367</b>	<b>-776,903</b>	<b>202,464</b>	<b>136,566,383</b>
<b>Total Real Estate</b>	<b>134,275,403</b>	<b>1,308,884</b>	-	-	<b>-143,286</b>	<b>-20,323</b>	<b>979,367</b>	<b>-776,903</b>	<b>202,464</b>	<b>135,623,142</b>
Edison Investments	2,361,058	-8,537	-	-	-	-	8,537	8,606	17,143	2,369,664
India Property Fund	123,833	-	-	-	-	-	-	-	-	123,833
Gainesville Property	1	-	-	-	-	-	-	-	-	1
Morgan Stanley	76,642,565	-	-	-	-	-	757,005	-592,003	165,002	76,807,568
AEW Partners Fund VIII	3,284,517	-271,449	-	-	-	-	-	-	-	3,013,068
GreenOak US III	9,565,713	237,999	-	-	-27,594	-	-	-	-	9,776,118
Brookfield Premier Real Estate Partners	20,699,054	-	-	-	-	-	-	-124,194	-124,194	20,574,860
Artemis Real Estate IV	4,401,636	1,350,871	-	-	-75,410	-20,323	-	-	-	5,656,774
Stockbridge Smart Markets	17,197,025	-	-	-	-40,282	-	213,826	-69,312	144,514	17,301,257
<b>Total Timber Funds</b>	<b>943,241</b>	-	-	-	-	-	-	-	-	<b>943,241</b>
Domain Environmental Investments II	943,241	-	-	-	-	-	-	-	-	943,241
<b>Cash Account</b>	<b>15,240,448</b>	<b>172,173</b>	<b>18,388,216</b>	<b>-25,275,068</b>	-	<b>-42,049</b>	<b>230,334</b>	-	<b>230,334</b>	<b>8,714,055</b>

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

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 09/30/2024	
<b>Total Retirement System</b>	<b>1,015,706,092</b>	<b>-</b>	<b>57,962,234</b>	<b>-75,655,874</b>	<b>-1,927,940</b>	<b>-202,018</b>	<b>12,706,723</b>	<b>80,591,550</b>	<b>93,298,273</b>	<b>1,089,180,768</b>	
<b>Total Equity</b>	<b>670,476,883</b>	<b>-5,540,662</b>	<b>-</b>	<b>-</b>	<b>-1,220,266</b>	<b>-</b>	<b>1,873,202</b>	<b>83,028,031</b>	<b>84,901,233</b>	<b>748,617,189</b>	
<b>Total Domestic Equity</b>	<b>409,941,879</b>	<b>-11,383,038</b>	<b>-</b>	<b>-</b>	<b>-598,331</b>	<b>-</b>	<b>1,366,621</b>	<b>60,555,919</b>	<b>61,922,540</b>	<b>459,883,050</b>	
NT Collective Russell 3000 Index	237,439,399	52,605,033	-	-	-32,571	-	8	55,321,030	55,321,038	345,332,899	
Baird Mid Cap Growth	55,535,501	-52,970,557	-	-	-188,906	-	252,031	-2,628,068	-2,376,038	-	
Nuance Mid Cap Value	53,248,145	-52,114,862	-	-	-131,376	-	776,318	-1,778,225	-1,001,907	-	
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	-	-	-	-	-	5,687,715	5,687,715	57,776,897	
Westfield Mid Cap Growth	-	53,131,352	-	-	-	-	101,105	3,540,796	3,641,901	56,773,253	
<b>Total International Equity</b>	<b>138,008,843</b>	<b>34,282</b>	<b>-</b>	<b>-</b>	<b>-34,282</b>	<b>-</b>	<b>360,269</b>	<b>18,298,204</b>	<b>18,658,473</b>	<b>156,667,316</b>	
Driehaus International Small Cap Growth	21,276,238	-	-	-	-	-	-	2,708,911	2,708,911	23,985,149	
Thompson Siegel & Walmsley	56,357,924	-	-	-	-	-	-	7,107,230	7,107,230	63,465,154	
WCM Focused Intl Growth LP	41,365,321	-	-	-	-	-	-	6,624,451	6,624,451	47,989,772	
Fidelity Total International Index	-	20,431,575	-	-	-	-	-	795,666	795,666	21,227,242	
Wellington Emerging Markets Fund	19,009,360	-20,397,293	-	-	-34,282	-	360,269	1,061,946	1,422,215	-	
<b>Total Other Equity</b>	<b>122,526,162</b>	<b>5,808,094</b>	<b>-</b>	<b>-</b>	<b>-587,653</b>	<b>-</b>	<b>146,312</b>	<b>4,173,908</b>	<b>4,320,220</b>	<b>132,066,823</b>	
Huff Energy Fund	24,253,938	-	-	-	-	-	-	-	-	24,253,938	
Franklin Park Private Equity	98,272,224	5,808,094	-	-	-587,653	-	146,312	4,173,908	4,320,220	107,812,885	
<b>Total Fixed Income</b>	<b>192,206,203</b>	<b>-6,585,313</b>	<b>-</b>	<b>-</b>	<b>-73,941</b>	<b>-</b>	<b>6,883,818</b>	<b>2,852,375</b>	<b>9,736,192</b>	<b>195,283,141</b>	
Baird Aggregate Income Bond Fund	-	62,891,692	-	-	-	-	1,426,914	2,111,155	3,538,068	66,429,760	
Dodge & Cox Fixed Income Fund	-	62,893,324	-	-	-	-	1,998,940	1,954,857	3,953,798	66,847,122	
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	-	-	-	-	-	1,970,453	1,614,570	3,585,023	54,678,863	
<b>Total Other Fixed Income</b>	<b>10,344,050</b>	<b>-2,453,662</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>255,185</b>	<b>-818,177</b>	<b>-562,992</b>	<b>7,327,396</b>	
Capital Point Partners (Princeton Capital)	3,063,735	-	-	-	-	-	-	-922,279	-922,279	2,141,456	
LBC Credit Partners III	1,760,465	-35,756	-	-	-	-	35,756	113,087	148,843	1,873,552	
LBC Credit Partners IV	3,836,436	-1,936,052	-	-	-	-	163,309	117,154	280,463	2,180,847	
Providence Debt Fund III	1,683,414	-481,854	-	-	-	-	56,121	-126,140	-70,019	1,131,541	

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

Financial Reconciliation

Total Fund

Year To Date Ending September 30, 2024

	Market Value 01/01/2024	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Return On Investment	Market Value 09/30/2024
<b>Total Real Estate &amp; Timber</b>	<b>136,869,696</b>	<b>4,198,525</b>	-	<b>-1,701,375</b>	<b>-633,732</b>	<b>-72,618</b>	<b>3,194,743</b>	<b>-5,288,855</b>	<b>-2,094,113</b>	<b>136,566,383</b>
<b>Total Real Estate</b>	<b>135,983,696</b>	<b>4,198,525</b>	-	<b>-1,701,375</b>	<b>-633,732</b>	<b>-72,618</b>	<b>3,194,743</b>	<b>-5,346,096</b>	<b>-2,151,354</b>	<b>135,623,142</b>
Edison Investments	2,342,426	-25,610	-	-	-	-	25,610	27,238	52,848	2,369,664
India Property Fund	125,024	-	-	-	-	-	-	-1,191	-1,191	123,833
Gainesville Property	1	-	-	-	-	-	-	-	-	1
Morgan Stanley	77,825,160	-	-	-	-	-	2,283,228	-3,300,820	-1,017,592	76,807,568
AEW Partners Fund VIII	3,218,019	-520,855	-	-	-	-	-	315,904	315,904	3,013,068
GreenOak US III	8,891,678	1,015,238	-	-	-62,609	-	-	-68,189	-68,189	9,776,118
Brookfield Premier Real Estate Partners	22,570,516	-	-	-	-	-	253,405	-2,249,061	-1,995,656	20,574,860
Artemis Real Estate IV	1,966,437	3,729,752	-	-	-450,617	-72,618	-	483,820	483,820	5,656,774
Stockbridge Smart Markets	17,343,061	-	-	-	-120,506	-	632,500	-553,797	78,703	17,301,257
<b>Total Timber Funds</b>	<b>886,000</b>	-	-	-	-	-	-	<b>57,241</b>	<b>57,241</b>	<b>943,241</b>
Domain Environmental Investments II	886,000	-	-	-	-	-	-	57,241	57,241	943,241
<b>Cash Account</b>	<b>16,153,309</b>	<b>7,927,450</b>	<b>57,962,234</b>	<b>-73,954,499</b>	-	<b>-129,400</b>	<b>754,960</b>	-	<b>754,960</b>	<b>8,714,055</b>

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
<b>Total Retirement System (Net)</b>	<b>4.64</b>	<b>9.05</b>	<b>16.76</b>	<b>4.43</b>	<b>8.39</b>	<b>7.45</b>	<b>6.82</b>	<b>8.07</b>	<b>10/01/1992</b>
<b>Total Retirement System (Gross)</b>	<b>4.70 (70)</b>	<b>9.25 (80)</b>	<b>17.06 (76)</b>	<b>4.68 (51)</b>	<b>8.65 (38)</b>	<b>7.71 (46)</b>	<b>7.08 (63)</b>	<b>8.38 (19)</b>	<b>10/01/1992</b>
Total Fund Policy	4.73	11.09	19.51	5.72	9.36	8.67	8.50	8.32	
Variance	-0.03	-1.84	-2.45	-1.04	-0.71	-0.96	-1.42	0.06	
All Public Plans-Total Fund Median	5.32	11.16	19.81	4.71	8.31	7.63	7.37	7.90	
<b>Total Equity</b>	<b>5.50</b>	<b>12.58</b>	<b>23.60</b>	<b>6.42</b>	<b>11.39</b>	<b>9.95</b>	<b>9.15</b>	<b>9.13</b>	<b>01/01/1994</b>
Total Equity Policy	6.63	18.89	32.80	9.33	13.71	12.00	11.02	9.20	
Variance	-1.13	-6.31	-9.20	-2.91	-2.32	-2.05	-1.87	-0.07	
<b>Domestic Equity</b>	<b>6.83 (55)</b>	<b>15.25 (55)</b>	<b>29.55 (48)</b>	<b>7.24 (61)</b>	<b>12.74 (53)</b>	<b>11.61 (48)</b>	<b>10.71 (58)</b>	<b>11.45 (60)</b>	<b>05/01/2013</b>
Russell 3000 Index	6.23	20.63	35.19	10.29	15.26	13.74	12.83	13.46	
Variance	0.60	-5.38	-5.64	-3.05	-2.52	-2.13	-2.12	-2.01	
IM U.S. Equity (SA+CF) Median	7.17	15.94	29.09	8.59	12.91	11.43	11.20	11.90	
NT Collective Russell 3000 Index	6.21 (53)	20.60 (30)	35.16 (33)	10.31 (34)	15.26 (30)	13.74 (37)	12.84 (34)	12.59 (31)	01/01/2014
Russell 3000 Index	6.23	20.63	35.19	10.29	15.26	13.74	12.83	12.58	
Variance	-0.02	-0.03	-0.03	0.02	0.00	0.00	0.01	0.01	
IM U.S. All Cap Core Equity (SA+CF) Median	6.23	18.84	31.98	9.80	14.61	12.92	12.20	11.88	
MFS Mid Cap Value	9.97 (25)	N/A	N/A	N/A	N/A	N/A	N/A	9.97 (25)	07/01/2024
Russell Midcap Value Index	10.08	15.08	29.01	7.39	10.33	8.82	8.93	10.08	
Variance	-0.11	N/A	N/A	N/A	N/A	N/A	N/A	-0.11	
Mid-Cap Value Median	9.07	12.80	26.05	8.67	10.54	8.52	8.79	9.07	
Westfield Mid Cap Growth	6.85 (21)	N/A	N/A	N/A	N/A	N/A	N/A	6.85 (21)	07/01/2024
Russell Midcap Growth Index	6.54	12.91	29.33	2.32	11.48	11.88	11.30	6.54	
Variance	0.31	N/A	N/A	N/A	N/A	N/A	N/A	0.31	
IM U.S. Mid Cap Growth Equity (SA+CF) Median	4.83	11.22	24.90	-0.16	10.89	11.10	10.68	4.83	

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Comparative Performance

Total Fund

As of September 30, 2024

	Performance (%)								Inception	Inception Date
	QTR	YTD	1 YR	3 YR	5 YR	7 YR	10 YR			
<b>International Equity</b>	<b>6.50 (73)</b>	<b>13.51 (51)</b>	<b>24.46 (60)</b>	<b>1.37 (75)</b>	<b>7.06 (81)</b>	<b>4.44 (87)</b>	<b>4.65 (94)</b>	<b>5.76 (83)</b>	<b>05/01/2013</b>	
MSCI AC World ex USA	8.17	14.70	25.96	4.67	8.10	5.95	5.72	5.74		
Variance	-1.67	-1.19	-1.50	-3.30	-1.04	-1.51	-1.07	0.02		
IM International Equity (SA+CF) Median	7.80	13.58	25.22	4.59	8.75	6.39	6.65	6.90		
Driehaus International Small Cap Growth	6.61 (77)	12.73 (24)	23.31 (48)	-1.04 (14)	9.41 (5)	7.01 (5)	8.32 (1)	9.67 (9)	09/01/2012	
MSCI AC World ex USA Small Growth	8.54	11.47	22.87	-1.56	7.85	5.35	6.36	7.46		
Variance	-1.93	1.26	0.44	0.52	1.56	1.66	1.96	2.21		
Foreign Small/Mid Growth Median	8.13	9.60	23.00	-3.51	5.43	4.00	5.66	7.14		
Thompson Siegel & Walmsley	8.80 (17)	12.61 (74)	23.73 (84)	5.49 (45)	8.51 (66)	5.51 (82)	5.42 (93)	5.42 (93)	10/01/2014	
MSCI EAFE (Net) Index	7.26	12.99	24.77	5.48	8.20	6.00	5.71	5.71		
Variance	1.54	-0.38	-1.04	0.01	0.31	-0.49	-0.29	-0.29		
IM International Large Cap Core Equity (SA+CF) Median	6.97	14.13	25.71	5.22	9.00	6.50	6.56	6.56		
WCM Focused Intl Growth LP	4.95 (74)	16.01 (17)	29.51 (27)	0.63 (46)	N/A	N/A	N/A	4.87 (33)	12/01/2020	
MSCI AC World ex USA Growth (Net)	6.92	14.06	26.75	0.81	7.09	5.77	5.97	2.69		
Variance	-1.97	1.95	2.76	-0.18	N/A	N/A	N/A	2.18		
Foreign Large Growth Median	6.13	12.70	26.17	-0.02	7.46	5.90	6.26	2.72		
Fidelity Total International Index	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	10/01/2024	
MSCI AC World ex USA (Net)	8.06	14.21	25.35	4.14	7.59	5.44	5.22	N/A		
Variance	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Foreign Large Blend Median	7.12	12.96	24.46	4.25	7.78	5.45	5.40	N/A		
<b>Total Other Equity</b>	<b>-0.22</b>	<b>2.98</b>	<b>4.82</b>	<b>14.92</b>	<b>10.03</b>	<b>9.08</b>	<b>N/A</b>	<b>7.00</b>	<b>01/01/2017</b>	
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 September 30, 2024

	Performance (%)								
	QTR	YTD	1 YR	3 YR	5 YR	7 YR	10 YR	Inception	Inception Date
<b>Total Fixed Income</b>	<b>5.06</b>	<b>5.21</b>	<b>12.60</b>	<b>-0.08</b>	<b>1.31</b>	<b>1.39</b>	<b>1.48</b>	<b>5.73</b>	<b>12/01/1993</b>
Total Fixed Income Policy	5.46	4.77	12.40	-1.64	0.32	1.27	1.54	4.26	
Variance	-0.40	0.44	0.20	1.56	0.99	0.12	-0.06	1.47	
<b>Total Core Fixed Income</b>	<b>5.41 (11)</b>	<b>5.31 (18)</b>	<b>12.78 (15)</b>	<b>-1.21 (48)</b>	<b>0.54 (59)</b>	<b>1.58 (66)</b>	<b>1.98 (60)</b>	<b>1.31 (95)</b>	<b>05/01/2013</b>
Blmbg. U.S. Aggregate Index	5.20	4.45	11.57	-1.39	0.33	1.47	1.84	1.71	
Variance	0.21	0.86	1.21	0.18	0.21	0.11	0.14	-0.40	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	5.19	4.76	12.02	-1.22	0.59	1.71	2.05	1.90	
Baird Aggregate Income Bond Fund	5.24 (29)	N/A	N/A	N/A	N/A	N/A	N/A	5.50 (25)	04/01/2024
Blmbg. U.S. Aggregate Index	5.20	4.45	11.57	-1.39	0.33	1.47	1.84	5.26	
Variance	0.04	N/A	N/A	N/A	N/A	N/A	N/A	0.24	
Intermediate Core Bond Median	5.13	4.64	11.69	-1.51	0.38	1.43	1.78	5.31	
Dodge & Cox Fixed Income Fund	5.59 (7)	N/A	N/A	N/A	N/A	N/A	N/A	6.12 (4)	04/01/2024
Blmbg. U.S. Aggregate Index	5.20	4.45	11.57	-1.39	0.33	1.47	1.84	5.26	
Variance	0.39	N/A	N/A	N/A	N/A	N/A	N/A	0.86	
Intermediate Core Bond Median	5.13	4.64	11.69	-1.51	0.38	1.43	1.78	5.31	
Pimco Diversified Income Fund	5.01 (74)	7.02 (1)	15.38 (2)	0.59 (16)	N/A	N/A	N/A	2.16 (6)	07/01/2020
Blmbg. Global Credit (Hedged)	4.93	5.68	13.42	-0.11	1.50	2.62	3.13	1.01	
Variance	0.08	1.34	1.96	0.70	N/A	N/A	N/A	1.15	
Global Bond Median	6.83	3.73	11.97	-2.13	-0.72	0.11	0.47	-1.13	
<b>Total Other Fixed Income</b>	<b>0.00</b>	<b>-5.66</b>	<b>-3.35</b>	<b>2.70</b>	<b>4.30</b>	<b>3.75</b>	<b>N/A</b>	<b>3.20</b>	<b>01/01/2017</b>
Capital Point Partners (Princeton Capital)									
LBC Credit Partners III									
LBC Credit Partners IV									
Providence Debt Fund III									

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

Comparative Performance

Total Fund

As of September 30, 2024

	Performance (%)								Inception Date
	QTR	YTD	1 YR	3 YR	5 YR	7 YR	10 YR	Inception	
<b>Alternative Investments</b>									
<b>Other Assets</b>									
Cash Account	1.33	3.97	5.36	3.41	2.21	2.11	1.55	4.17	06/01/1988
<b>Other Alternative Assets</b>									
Total Real Estate	0.04	-2.03	-5.93	1.23	3.57	3.86	4.29	3.86	08/01/2005
NCREIF Property Index	0.78	-0.46	-3.47	0.87	3.26	4.23	5.88	6.79	
Variance	-0.74	-1.57	-2.46	0.36	0.31	-0.37	-1.59	-2.93	
Morgan Stanley	0.22	-1.31	-3.48	2.65	4.27	5.14	N/A	5.91	01/01/2016
NCREIF Fund Index-ODCE (EW)	-0.07	-3.25	-8.44	-1.06	2.33	3.52	5.46	4.32	
Variance	0.29	1.94	4.96	3.71	1.94	1.62	N/A	1.59	
Brookfield Premier Real Estate Partners	-0.60	-8.84	-13.88	-3.42	N/A	N/A	N/A	0.66	11/01/2019
NCREIF Fund Index-ODCE (EW)	-0.07	-3.25	-8.44	-1.06	2.33	3.52	5.46	2.37	
Variance	-0.53	-5.59	-5.44	-2.36	N/A	N/A	N/A	-1.71	
Stockbridge Smart Markets	0.61	-0.24	-3.17	N/A	N/A	N/A	N/A	-6.33	08/01/2022
NCREIF Fund Index-ODCE (EW)	-0.07	-3.25	-8.44	-1.06	2.33	3.52	5.46	-9.68	
Variance	0.68	3.01	5.27	N/A	N/A	N/A	N/A	3.35	
Total Timber Funds	0.00	6.46	-4.88	0.35	1.41	1.80	0.79	1.72	08/01/2005
NCREIF Timberland Index	1.53	5.45	10.02	10.86	7.47	6.19	5.90	6.78	
Variance	-1.53	1.01	-14.90	-10.51	-6.06	-4.39	-5.11	-5.06	

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	2023	2022	2021	2020	2019	2018	2017	2016	
<b>Total Retirement System (Net)</b>	<b>9.05</b>	<b>11.50</b>	<b>-11.54</b>	<b>17.68</b>	<b>11.65</b>	<b>20.92</b>	<b>-6.18</b>	<b>11.89</b>	<b>7.67</b>	
<b>Total Retirement System (Gross)</b>	<b>9.25 (80)</b>	<b>11.82 (63)</b>	<b>-11.36 (34)</b>	<b>17.86 (11)</b>	<b>11.99 (58)</b>	<b>21.23 (14)</b>	<b>-5.95 (88)</b>	<b>12.17 (90)</b>	<b>7.87 (46)</b>	
Total Fund Policy	11.09	14.11	-11.69	16.63	13.40	19.81	-3.12	15.79	8.04	
Variance	-1.84	-2.29	0.33	1.23	-1.41	1.42	-2.83	-3.62	-0.17	
All Public Plans-Total Fund Median	11.16	12.68	-12.65	14.14	12.47	18.63	-4.05	15.13	7.67	
<b>Total Equity</b>	<b>12.58</b>	<b>17.99</b>	<b>-15.13</b>	<b>21.06</b>	<b>15.97</b>	<b>29.88</b>	<b>-9.83</b>	<b>18.49</b>	<b>11.41</b>	
Total Equity Policy	18.89	24.12	-17.82	22.48	17.62	29.04	-7.34	22.07	9.61	
Variance	-6.31	-6.13	2.69	-1.42	-1.65	0.84	-2.49	-3.58	1.80	
<b>Domestic Equity</b>	<b>15.25 (55)</b>	<b>20.43 (46)</b>	<b>-18.31 (60)</b>	<b>24.49 (61)</b>	<b>19.11 (44)</b>	<b>31.15 (35)</b>	<b>-7.18 (51)</b>	<b>17.39 (60)</b>	<b>15.76 (40)</b>	
Russell 3000 Index	20.63	25.96	-19.21	25.66	20.89	31.02	-5.24	21.13	12.74	
Variance	-5.38	-5.53	0.90	-1.17	-1.78	0.13	-1.94	-3.74	3.02	
IM U.S. Equity (SA+CF) Median	15.94	19.37	-16.42	26.12	16.74	28.64	-7.07	19.44	13.16	
NT Collective Russell 3000 Index	20.60 (30)	25.95 (36)	-19.15 (76)	25.68 (57)	20.83 (41)	31.02 (35)	-5.23 (54)	21.15 (48)	12.79 (37)	
Russell 3000 Index	20.63	25.96	-19.21	25.66	20.89	31.02	-5.24	21.13	12.74	
Variance	-0.03	-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	18.84	23.18	-17.15	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	15.08	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	
Mid-Cap Value Median	12.80	12.25	-7.90	28.64	2.85	26.76	-13.31	13.48	17.42	
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	12.91	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	11.22	23.20	-27.11	13.15	34.27	34.69	-5.40	24.18	4.88	

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Comparative Performance

Total Fund

As of September 30, 2024

	Performance (%)									
	YTD	2023	2022	2021	2020	2019	2018	2017	2016	
<b>International Equity</b>	<b>13.51 (51)</b>	<b>14.38 (78)</b>	<b>-21.97 (77)</b>	<b>11.90 (50)</b>	<b>12.54 (48)</b>	<b>20.92 (71)</b>	<b>-16.28 (67)</b>	<b>27.37 (60)</b>	<b>0.67 (68)</b>	
MSCI AC World ex USA	14.70	16.21	-15.57	8.29	11.13	22.13	-13.78	27.77	5.01	
Variance	-1.19	-1.83	-6.40	3.61	1.41	-1.21	-2.50	-0.40	-4.34	
IM International Equity (SA+CF) Median	13.58	17.66	-16.30	11.79	11.61	23.51	-14.56	28.68	2.44	
Driehaus International Small Cap Growth	12.73 (24)	12.79 (45)	-24.34 (16)	12.49 (41)	29.79 (29)	30.57 (16)	-16.92 (43)	41.19 (10)	-6.24 (83)	
MSCI AC World ex USA Small Growth	11.47	14.47	-25.85	11.83	23.99	24.96	-18.07	33.99	-0.04	
Variance	1.26	-1.68	1.51	0.66	5.80	5.61	1.15	7.20	-6.20	
Foreign Small/Mid Growth Median	9.60	12.46	-28.60	10.29	19.67	25.94	-17.77	34.82	-1.28	
Thompson Siegel & Walmsley	12.61 (74)	16.52 (69)	-13.89 (32)	13.82 (29)	6.62 (81)	21.18 (71)	-15.93 (73)	22.70 (93)	0.47 (65)	
MSCI EAFE (Net) Index	12.99	18.24	-14.45	11.26	7.82	22.01	-13.79	25.03	1.00	
Variance	-0.38	-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	14.13	17.94	-15.93	11.88	11.78	23.63	-14.32	27.86	1.71	
WCM Focused Intl Growth LP	16.01 (17)	16.68 (44)	-28.63 (77)	17.64 (5)	N/A	N/A	N/A	N/A	N/A	
MSCI AC World ex USA Growth (Net)	14.06	14.03	-23.05	5.09	22.20	27.34	-14.43	32.01	0.12	
Variance	1.95	2.65	-5.58	12.55	N/A	N/A	N/A	N/A	N/A	
Foreign Large Growth Median	12.70	16.02	-24.82	8.72	22.09	28.05	-13.96	31.08	-2.30	
Fidelity Total International Index	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
MSCI AC World ex USA (Net)	14.21	15.62	-16.00	7.82	10.65	21.51	-14.20	27.19	4.50	
Variance	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Foreign Large Blend Median	12.96	16.31	-15.68	10.45	9.25	21.99	-14.90	25.54	0.65	
<b>Total Other Equity</b>	<b>2.98</b>	<b>14.39</b>	<b>26.45</b>	<b>13.85</b>	<b>-5.66</b>	<b>65.17</b>	<b>-22.42</b>	<b>-17.60</b>	<b>N/A</b>	
Huff Energy Fund										
Franklin Park Private Equity										

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Comparative Performance

Total Fund

As of September 30, 2024

	Performance (%)								
	YTD	2023	2022	2021	2020	2019	2018	2017	2016
<b>Total Fixed Income</b>	<b>5.21</b>	<b>6.94</b>	<b>-11.28</b>	<b>1.69</b>	<b>4.10</b>	<b>4.08</b>	<b>0.06</b>	<b>2.86</b>	<b>4.36</b>
Total Fixed Income Policy	4.77	6.70	-14.66	-2.05	8.28	7.93	-0.66	5.60	2.77
Variance	0.44	0.24	3.38	3.74	-4.18	-3.85	0.72	-2.74	1.59
<b>Total Core Fixed Income</b>	<b>5.31 (18)</b>	<b>5.37 (76)</b>	<b>-12.93 (36)</b>	<b>-1.34 (43)</b>	<b>7.21 (80)</b>	<b>8.80 (52)</b>	<b>-0.24 (58)</b>	<b>3.87 (36)</b>	<b>3.79 (19)</b>
Blmbg. U.S. Aggregate Index	4.45	5.53	-13.01	-1.55	7.51	8.72	0.01	3.54	2.65
Variance	0.86	-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	4.76	5.80	-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	4.45	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
Intermediate Core Bond Median	4.64	5.58	-13.43	-1.58	7.83	8.50	-0.43	3.43	2.64
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	4.45	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
Intermediate Core Bond Median	4.64	5.58	-13.43	-1.58	7.83	8.50	-0.43	3.43	2.64
Pimco Diversified Income Fund	7.02 (1)	10.41 (4)	-13.81 (41)	0.26 (5)	N/A	N/A	N/A	N/A	N/A
Blmbg. Global Credit (Hedged)	5.68	9.36	-13.75	-0.41	7.53	12.08	-0.81	5.89	7.33
Variance	1.34	1.05	-0.06	0.67	N/A	N/A	N/A	N/A	N/A
Global Bond Median	3.73	6.17	-15.56	-4.93	9.09	6.92	-2.40	7.66	2.73
<b>Total Other Fixed Income</b>	<b>-5.66</b>	<b>9.04</b>	<b>4.87</b>	<b>12.76</b>	<b>0.48</b>	<b>3.66</b>	<b>1.27</b>	<b>-0.49</b>	<b>N/A</b>
Capital Point Partners (Princeton Capital)									
LBC Credit Partners III									
LBC Credit Partners IV									
Providence Debt Fund III									

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

Comparative Performance

Total Fund

As of September 30, 2024

	Performance (%)								
	YTD	2023	2022	2021	2020	2019	2018	2017	2016
<b>Alternative Investments</b>									
<b>Other Assets</b>									
Cash Account	3.97	4.94	1.38	0.01	0.43	2.11	1.72	0.76	0.27
<b>Other Alternative Assets</b>									
Total Real Estate	-2.03	-9.31	6.27	24.27	-0.45	5.75	5.14	2.90	0.76
NCREIF Property Index	-0.46	-7.94	5.52	17.70	1.60	6.42	6.72	6.96	7.97
Variance	-1.57	-1.37	0.75	6.57	-2.05	-0.67	-1.58	-4.06	-7.21
Morgan Stanley	-1.31	-5.79	6.14	21.48	1.26	6.16	7.96	8.74	9.20
NCREIF Fund Index-ODCE (EW)	-3.25	-13.33	7.56	21.88	0.75	5.18	7.30	6.92	8.36
Variance	1.94	7.54	-1.42	-0.40	0.51	0.98	0.66	1.82	0.84
Brookfield Premier Real Estate Partners	-8.84	-19.92	10.55	25.66	0.57	N/A	N/A	N/A	N/A
NCREIF Fund Index-ODCE (EW)	-3.25	-13.33	7.56	21.88	0.75	5.18	7.30	6.92	8.36
Variance	-5.59	-6.59	2.99	3.78	-0.18	N/A	N/A	N/A	N/A
Stockbridge Smart Markets	-0.24	-9.64	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NCREIF Fund Index-ODCE (EW)	-3.25	-13.33	7.56	21.88	0.75	5.18	7.30	6.92	8.36
Variance	3.01	3.69	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Timber Funds	6.46	-20.21	21.88	6.99	1.43	-1.12	0.13	-3.94	-6.92
NCREIF Timberland Index	5.45	9.45	12.90	9.17	0.81	1.30	3.21	3.63	2.59
Variance	1.01	-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 September 30, 2024

<b>Comparative Performance - IRR</b>									
	Market Value (\$)	MTH	QTR	YTD	1 YR	3 YR	5 YR	Inception IRR	Inception Date
<b>Total Real Estate Investments</b>	<b>135,623,142</b>	<b>0.06</b>	<b>0.03</b>	<b>-2.08</b>	<b>-5.94</b>	<b>0.39</b>	<b>2.89</b>	<b>5.87</b>	<b>07/31/2005</b>
Edison Investments	2,369,664	0.73	0.73	2.27	3.17	3.18	3.09	11.90	09/30/1996
India Property Fund	123,833	0.00	0.00	-0.95	-0.12	-13.97	-22.44	-8.09	05/24/2007
Gainesville Property	1	0.00	0.00	0.00	0.00	5.45	2.25	-5.47	01/31/2008
Morgan Stanley	76,807,568	0.22	0.22	-1.31	-3.47	2.65	4.26	5.65	12/31/2015
AEW Partners Fund VIII	3,013,068	0.00	0.00	10.20	9.68	19.42	22.32	18.81	06/26/2017
GreenOak US III	9,776,118	0.00	-0.28	-1.37	-20.16	-5.07	-4.20	-5.28	06/22/2018
Brookfield Premier Real Estate Partners	20,574,860	-0.60	-0.60	-8.84	-13.84	-3.42	0.58	0.58	10/01/2019
Artemis Real Estate IV	5,656,774	-1.54	-1.98	-1.12	-3.09	N/A	N/A	-10.81	06/23/2022
Stockbridge Smart Markets	17,301,257	0.61	0.61	-0.24	-3.17	N/A	N/A	-6.63	07/01/2022
<b>Total Timber Funds</b>	<b>943,241</b>	<b>0.00</b>	<b>0.00</b>	<b>6.46</b>	<b>-4.87</b>	<b>9.54</b>	<b>1.25</b>	<b>0.15</b>	<b>07/31/2005</b>
Domain Environmental Investments II	943,241	0.00	0.00	6.46	-4.87	-9.82	-8.06	-2.73	04/30/2008
<b>Total Other Equity</b>	<b>132,066,823</b>	<b>0.00</b>	<b>-0.22</b>	<b>2.99</b>	<b>4.74</b>	<b>13.55</b>	<b>11.62</b>	<b>21.88</b>	<b>01/01/2017</b>
Huff Energy Fund	24,253,938	0.00	0.00	0.00	0.00	53.11	5.94	6.59	12/31/2006
Franklin Park Private Equity	107,812,885	0.00	-0.27	3.71	5.93	8.04	14.36	13.74	01/31/2018
<b>Total Other Fixed Income</b>	<b>7,327,396</b>	<b>0.00</b>	<b>0.00</b>	<b>-5.88</b>	<b>-3.26</b>	<b>3.11</b>	<b>4.44</b>	<b>N/A</b>	<b>12/21/2016</b>
Capital Point Partners (Princeton Capital)	2,141,456	0.00	0.00	-30.10	-30.38	-3.54	-3.60	-1.14	03/31/2007
LBC Credit Partners III	1,873,552	0.00	0.00	8.48	15.54	3.78	6.29	7.97	03/07/2014
LBC Credit Partners IV	2,180,847	0.00	0.00	8.17	12.15	8.96	7.86	8.46	09/19/2016
Providence Debt Fund III	1,131,541	0.00	0.00	-5.22	-4.09	-0.81	2.79	5.97	04/21/2014

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

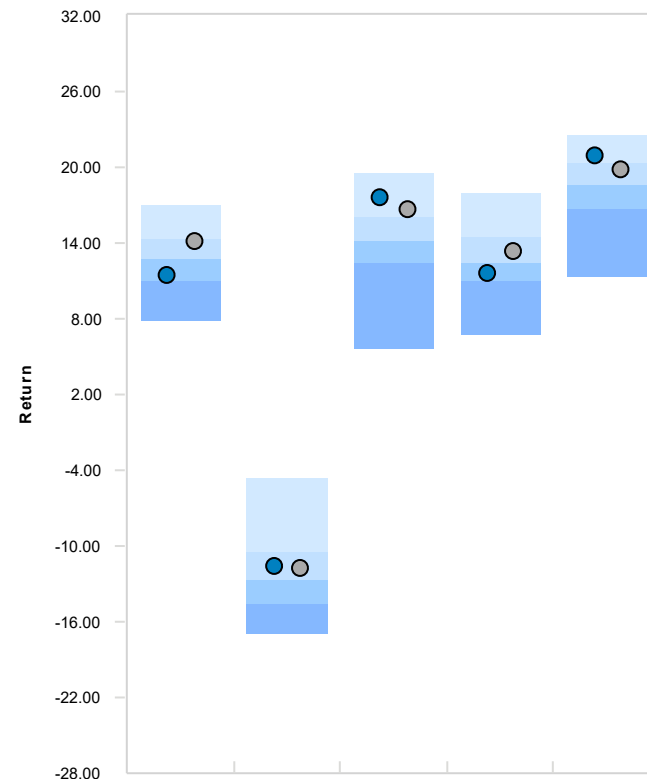
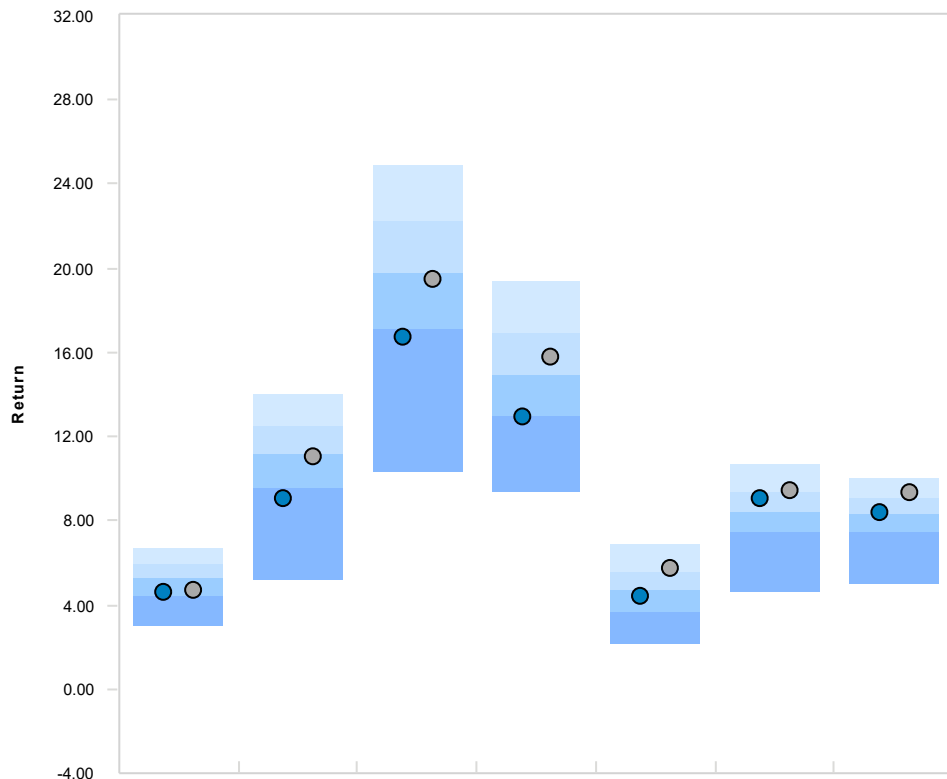
<b>Private Equity Summary of Partnership</b>						
<b>Partnerships</b>	<b>Drawn Down \$</b>	<b>Market Value \$</b>	<b>Distributed \$</b>	<b>IRR (%)</b>	<b>TVPI Multiple</b>	
<b>Total Real Estate Investments</b>						
Edison Investments	8,146,177	2,369,664	20,039,264	11.9	2.8	
India Property Fund	4,354,162	123,833	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	76,807,568	-	5.6	1.5	
AEW Partners Fund VIII	15,381,261	3,013,068	19,428,611	18.8	1.5	
GreenOak US III	13,529,018	9,776,118	1,434,323	-5.3	0.8	
Brookfield Premier Real Estate Partners	20,000,000	20,574,860	-	0.6	1.0	
Artemis Real Estate IV	6,498,434	5,656,774	360,908	-10.8	0.9	
Stockbridge Smart Markets	20,000,000	17,301,257	-	-6.6	0.9	
<b>Total Timber Investments</b>						
Domain Environmental Investments II	7,623,603	943,241	5,213,231	-2.7	0.8	

**Summary of Partnerships  
Other Alternative Investments**

As of September 30, 2024

Partnerships	Drawn Down \$	Market Value \$	Distributed \$	IRR (%)	TVPI Multiple
<b>Total Other Equity</b>					
Huff Energy Fund	11,095,509	24,253,938	1,786,358	6.6	2.3
Franklin Park Private Equity	85,922,080	107,812,885	13,323,619	13.7	1.4
<b>Total Other Fixed Income</b>					
Capital Point Partners (Princeton Capital)	12,058,210	2,141,456	9,145,851	-1.1	0.9
LBC Credit Partners III	18,851,406	1,873,552	21,652,421	8.0	1.2
LBC Credit Partners IV	18,000,000	2,180,847	20,601,785	8.5	1.3
Providence Debt Fund III	11,128,113	1,131,541	13,162,906	6.0	1.3

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



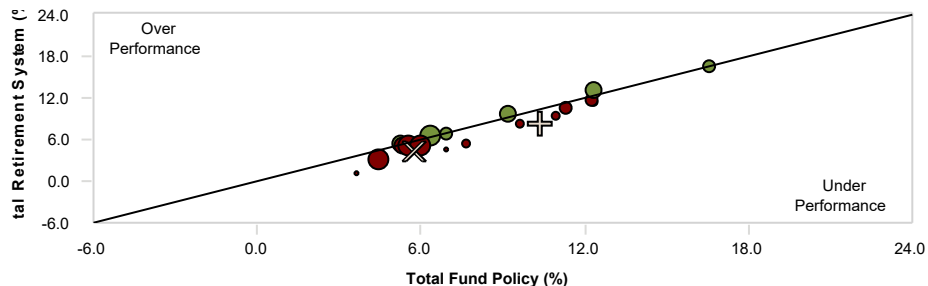
	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Total Retirement System	4.64 (71)	9.05 (81)	16.76 (79)	12.94 (76)	4.43 (56)	9.08 (35)	8.39 (47)
● Total Fund Policy	4.73 (69)	11.09 (52)	19.51 (53)	15.79 (41)	5.72 (21)	9.46 (23)	9.36 (16)
Median	5.32	11.16	19.81	14.92	4.71	8.44	8.31

	2023	2022	2021	2020	2019
● Total Retirement System	11.50 (67)	11.54 (37)	17.68 (12)	11.65 (63)	20.92 (18)
● Total Fund Policy	14.11 (29)	11.69 (39)	16.63 (22)	13.40 (37)	19.81 (34)
Median	12.68	12.65	14.14	12.47	18.63

Comparative Performance

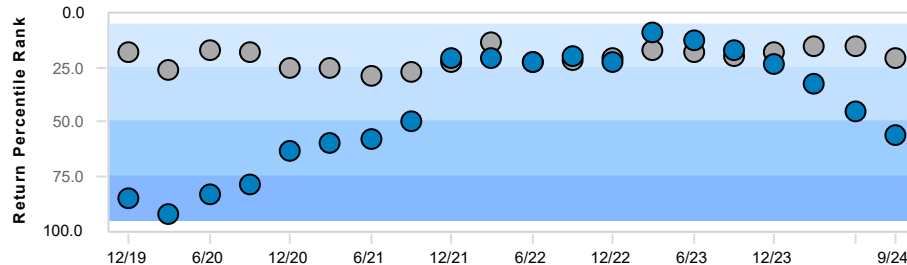
	1 Qtr Ending Jun-2024	1 Qtr Ending Mar-2024	1 Qtr Ending Dec-2023	1 Qtr Ending Sep-2023	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023
Total Retirement System	0.54 (83)	3.65 (78)	7.07 (66)	-3.13 (71)	2.78 (68)	4.59 (32)
Total Fund Policy	1.24 (43)	4.78 (40)	7.58 (55)	-2.50 (49)	3.79 (19)	4.81 (25)
All Public Plans-Total Fund Median	1.12	4.46	7.74	-2.53	3.11	4.16

### 3 Yr Rolling Under/Over Performance - 5 Years



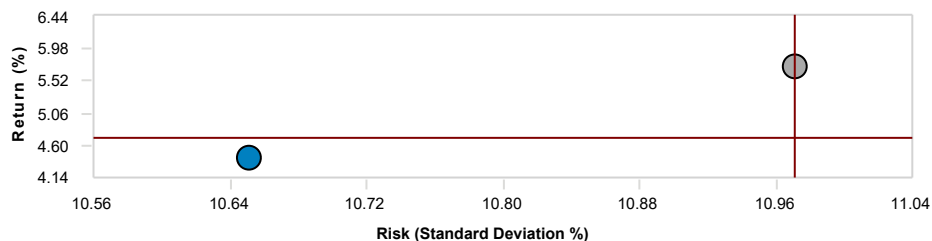
- Over Performance
- Under Performance
- ⊕ Earliest Date
- ⊗ Latest Date

### 3 Yr Rolling Percentile Ranking - 5 Years



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
<span style="color: blue;">●</span> Total Retirement System	20	9 (45%)	3 (15%)	4 (20%)	4 (20%)
<span style="color: grey;">●</span> Total Fund Policy	20	17 (85%)	3 (15%)	0 (0%)	0 (0%)

### Peer Group Scattergram - 3 Years



	Return	Standard Deviation
<span style="color: blue;">●</span> Total Retirement System	4.43	10.65
<span style="color: grey;">●</span> Total Fund Policy	5.72	10.97
— Median	4.71	10.97

### Peer Group Scattergram - 5 Years



	Return	Standard Deviation
<span style="color: blue;">●</span> Total Retirement System	8.39	11.62
<span style="color: grey;">●</span> Total Fund Policy	9.36	11.43
— Median	8.31	11.44

### Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Retirement System	1.19	93.12	99.34	-1.05	-1.06	0.14	0.97	6.97
Total Fund Policy	0.00	100.00	100.00	0.00	N/A	0.25	1.00	7.20

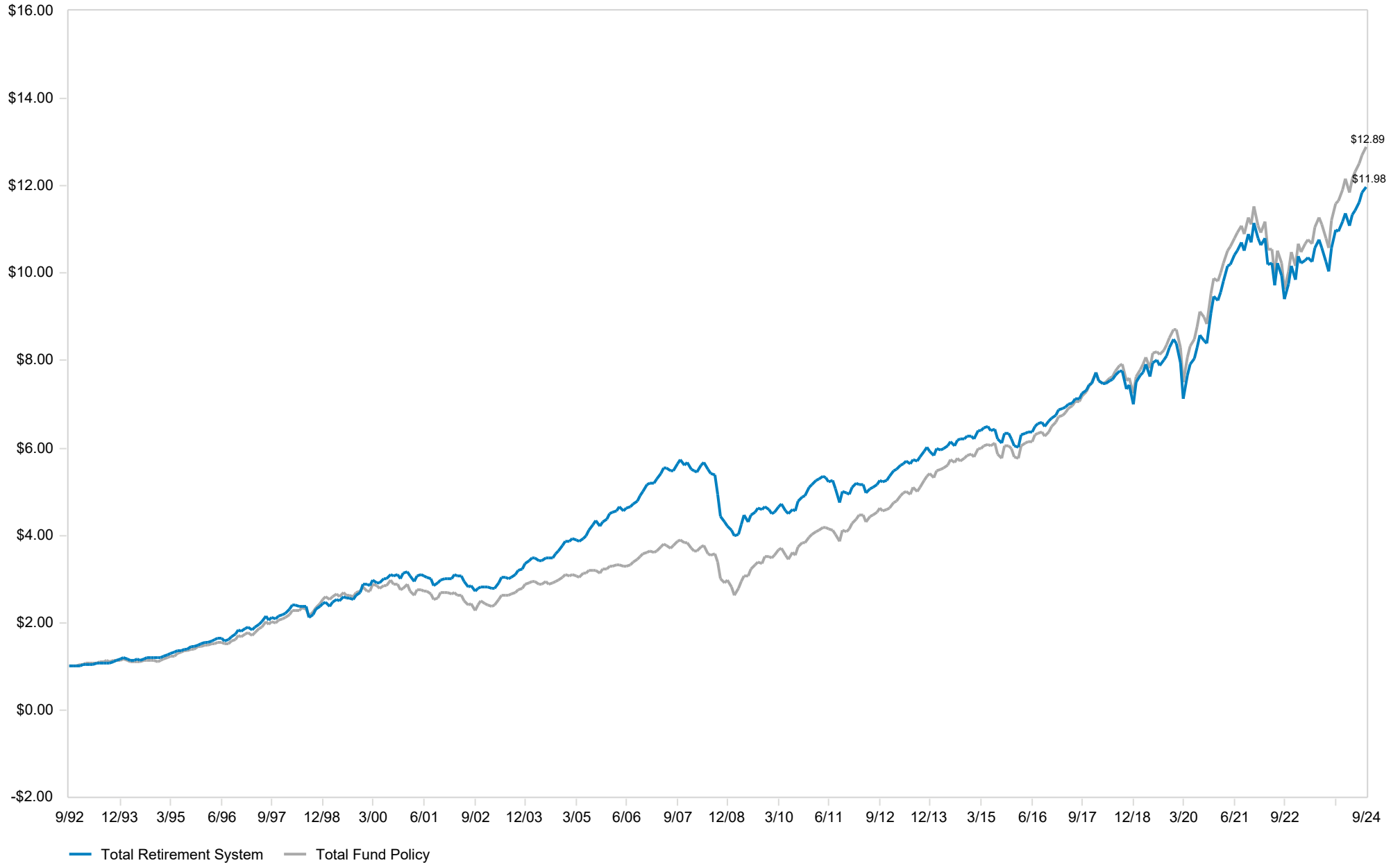
### Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Retirement System	1.40	97.90	103.49	-0.96	-0.62	0.55	1.01	7.59
Total Fund Policy	0.00	100.00	100.00	0.00	N/A	0.64	1.00	7.38



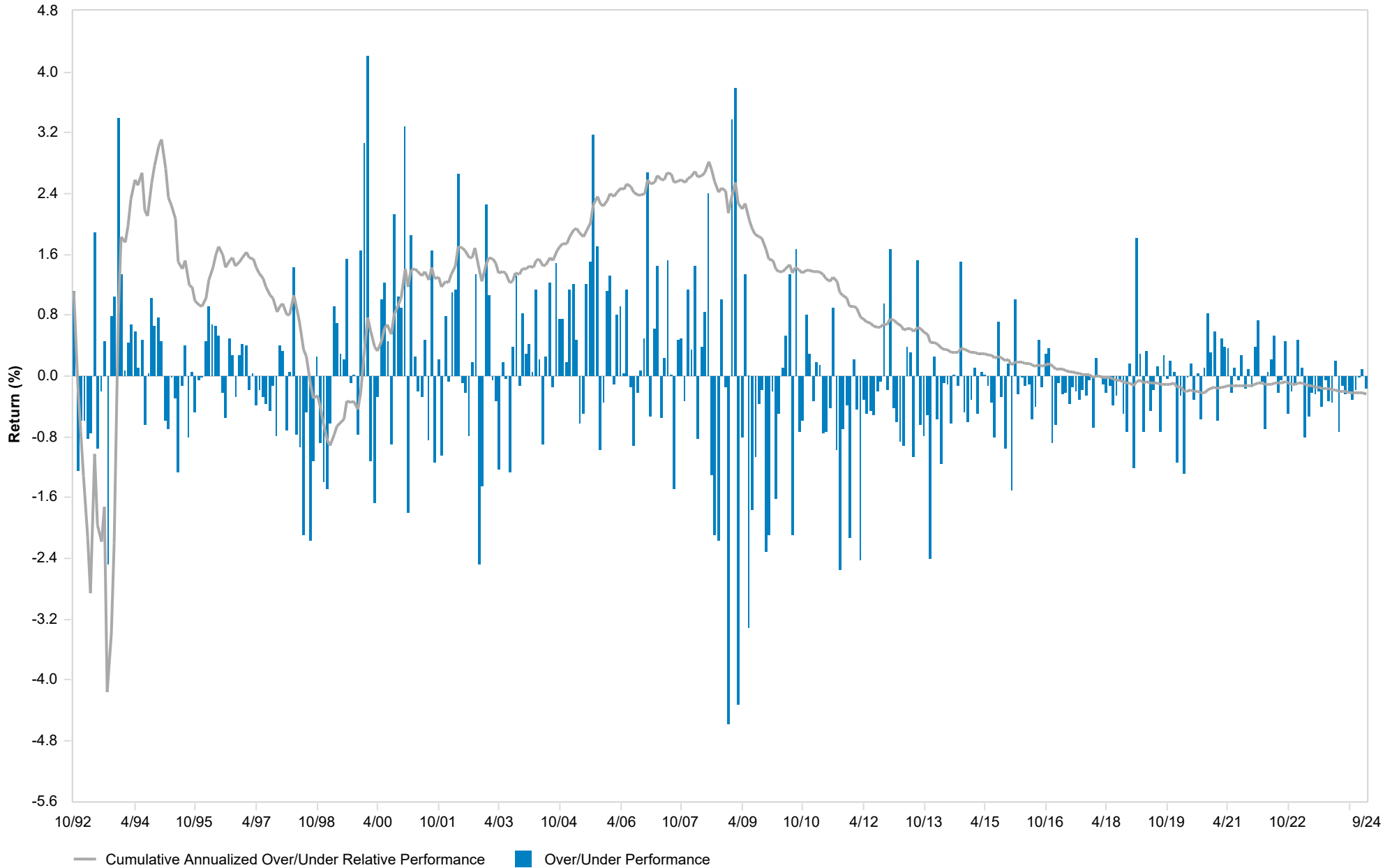
**Growth of \$1  
Total Retirement System  
Since Inception Ending September 30, 2024**

**Growth of \$1**



Calculation based on monthly periodicity.

Relative Performance



Calculation based on monthly periodicity.

<b>Total Fund Compliance:</b>	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.		•	

<b>Equity Compliance:</b>	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.	•		

<b>Fixed Income Compliance:</b>	Yes	No	N/A
Total core fixed income return equaled or exceed the benchmark over the trailing three and five year periods.	•		
Total core fixed income return ranked within the top 50th percentile of its peer group over the trailing three and five year periods.		•	
Total non-US fixed income return equaled or exceed the benchmark over the trailing three and five year periods.	•		
Total non-US fixed income return ranked within the top 50th percentile of its peer group over the trailing three and five year periods.	•		
The total fixed income allocation was less than or equal to 40% but greater than or equal to 5% of the total fund value at market.	•		
The core fixed income allocation was less than or equal to 20% but greater than or equal to 5% of the total fund value at market.	•		
The total non-US fixed income allocation was less than or equal to 15% of the total fund value at market.	•		

**Austin Police Retirement System  
Compliance Checklist  
As of September 30, 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			
	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			Fidelity			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 9/30/2024

Plan	Most Recent Statement Date	Statement Frequency	Statement Source
<b>Total Retirement System</b>			
<b>Total Equity</b>			
<b>Total Domestic Equity</b>			
NT Collective Russell 3000 Fund	9/30/2024	Monthly	Custodian
MFS Mid Cap Value	9/30/2024	Monthly	Custodian
Westfield Mid Cap Growth	9/30/2024	Monthly	Custodian
<b>Total International Equity</b>			
Thompson Siegel & Walmsley	9/30/2024	Monthly	Custodian
Driehaus International Small Cap Growth	9/30/2024	Monthly	Custodian
WCM Focused Intl	9/30/2024	Monthly	Custodian
Fidelity Total International	9/30/2024	Monthly	Custodian
<b>Total Other Equity</b>			
Huff Energy Fund	12/31/2022	Quarterly	Manager
Franklin Park	6/30/2024	Quarterly	Manager
<b>Total Fixed Income</b>			
<b>Total Fixed Income Funds</b>			
Baird Aggregate	9/30/2024	Monthly	Custodian
Dodge & Cox	9/30/2024	Monthly	Custodian
PIMCO Diversified	9/30/2024	Monthly	Custodian
<b>Total Other Fixed Income Funds</b>			
Capital Point Partners	6/30/2024	Quarterly	Manager
LBC Credit Partners III	6/30/2024	Quarterly	Manager

**Austin Police Retirement System**  
**Investment Pricing Summary**  
as of 9/30/2024

Plan	Most Recent Statement Date	Statement Frequency	Statement Source
LBC Credit Partners IV	6/30/2024	Quarterly	Manager
Providence Debt Fund III	6/30/2024	Quarterly	Manager
<b>Total Alternatives</b>			
<b>Total Real Estate (Composite)(6091100)</b>			
Edison Investments	9/30/2024	Quarterly	Manager
India Property Fund	6/30/2024	Quarterly	Manager
Gainesville Property	12/31/2017	N/A	Manager
Morgan Stanley	9/30/2024	Quarterly	Manager
AEW Parters VIII	6/30/2024	Quarterly	Manager
GreenOak US III	6/30/2024	Quarterly	Manager
Brookfield	6/30/2024	Quarterly	Manager
Artemis IV	6/30/2024	Quarterly	Manager
Stockbridge	9/30/2024	Quarterly	Manager
<b>Total Timber Funds</b>			
Domain Environmental	6/30/2024	Quarterly	Manager
Cash Account	9/30/2024	Monthly	Custodian

**Austin Police  
Fee Analysis  
As of September 30, 2024**

	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
<b>Total Domestic Equity</b>	<b>0.18</b>	<b>459,883,050</b>	<b>817,923</b>	
NT Collective Russell 3000 Index	0.02	345,332,899	69,067	0.02 % of Assets
MFS Mid Cap Value	0.62	57,776,897	358,217	0.62 % of Assets
Westfield Mid Cap Growth	0.69	56,773,253	390,640	0.80 % of First \$25 M 0.60 % of Next \$50 M 0.50 % Thereafter
<b>Total International Equity</b>	<b>0.67</b>	<b>156,667,316</b>	<b>1,049,039</b>	
Thompson Siegel & Walmsley	0.65	63,465,154	412,524	0.65 % of Assets
Driehaus International Small Cap Growth	0.90	23,985,149	215,866	0.90 % of Assets
WCM Focused Intl Growth LP	0.85	47,989,772	407,913	0.85 % of Assets
Fidelity Total International Index	0.06	21,227,242	12,736	0.06 % of Assets
<b>Total Other Equity</b>	<b>0.32</b>	<b>132,066,823</b>	<b>419,532</b>	
Huff Energy Fund	0.62	24,253,938	150,000	
*Franklin Park Private Equity	0.25	107,812,885	269,532	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.				
<b>Total Fixed Income</b>	<b>0.50</b>	<b>195,283,141</b>	<b>975,126</b>	
Baird Aggregate Income Bond Fund	0.30	66,429,760	199,289	0.30 % of Assets
Dodge & Cox Fixed Income Fund	0.41	66,847,122	274,073	0.41 % of Assets
Pimco Diversified Income Fund	0.75	54,678,863	410,091	0.75 % of Assets
<b>Total Other Fixed Income</b>	<b>1.25</b>	<b>7,327,396</b>	<b>91,672</b>	
Capital Point Partners (Princeton Capital)	1.65	2,141,456	35,334	
LBC Credit Partners III	1.25	1,873,552	23,419	
LBC Credit Partners IV	1.25	2,180,847	27,261	
Providence Debt Fund III	0.50	1,131,541	5,658	

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
<b>Total Real Estate</b>	<b>0.97</b>	<b>135,623,142</b>	<b>1,313,456</b>	
Edison Investments	1.00	2,369,664	23,697	1.00 % of Assets
India Property Fund	2.00	123,833	2,477	2.00 % of Assets
Gainesville Property	0.00	1	-	0.00 % of Assets
Morgan Stanley	0.90	76,807,568	691,268	0.90 % of Assets
AEW Partners Fund VIII	1.25	3,013,068	37,663	1.25 % of Assets
GreenOak US III	1.50	9,776,118	146,642	1.50 % of Assets
Brookfield Premier Real Estate Partners	1.00	20,574,860	205,749	1.00 % of Assets
Artemis Real Estate IV	1.50	5,656,774	84,852	1.50 % of Assets
Stockbridge Smart Markets	0.70	17,301,257	121,109	0.70 % of Assets
<b>Total Timber Funds</b>	<b>1.25</b>	<b>943,241</b>	<b>11,791</b>	
Domain Environmental Investments II	1.25	943,241	11,791	1.25 % of Assets
Cash Account	0.00	8,714,055	-	0.00 % of Assets
<b>Total Retirement System</b>	<b>0.42</b>	<b>1,089,180,768</b>	<b>4,586,866</b>	

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 (%)
<b>Jan-1976</b>		<b>Jan-2021</b>	
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
<b>Jan-2014</b>		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	<b>Mar-2022</b>	
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
<b>Jan-2017</b>		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	<b>Apr-2023</b>	
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
<b>Jan-2018</b>		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		

<b>Total Equity Policy</b>		<b>Total Private Equity Policy</b>		<b>Wellington Energy Hybrid</b>	
<b>Allocation Mandate</b>	<b>Weight (%)</b>	<b>Allocation Mandate</b>	<b>Weight (%)</b>	<b>Allocation Mandate</b>	<b>Weight (%)</b>
<b>Jan-1979</b>		<b>May-2013</b>		<b>Jan-1999</b>	
Russell 3000 Index	67.00	Russell 3000 Index	100.00	Russell 3000 Energy SP	100.00
MSCI World ex U.S.	33.00				
<b>Jan-2017</b>		<b>Jan-2017</b>		<b>Oct-2015</b>	
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		
		<b>Apr-2023</b>			
		Cambridge Associates Private Equity Index	100.00		
<b>Total Hedge Fund Policy</b>					
<b>Allocation Mandate</b>		<b>Weight (%)</b>			
<b>Jan-1990</b>					
HFRI Fund of Funds Composite Index		100.00			
<b>Total Fixed Income Policy</b>					
<b>Allocation Mandate</b>		<b>Weight (%)</b>			
<b>Dec-1993</b>					
Blmbg. U.S. Aggregate Index		100.00			
<b>Jan-1999</b>					
Blmbg. U.S. Aggregate Index		50.00			
Blmbg. Global Multiverse		50.00			
<b>Jan-2021</b>					
Blmbg. U.S. Aggregate Index		50.00			
Blmbg. Global Credit		50.00			
<b>Apr-2023</b>					
Blmbg. U.S. Aggregate Index		75.00			
Blmbg. Global Credit		25.00			
<b>Total Timber Policy</b>					
<b>Allocation Mandate</b>		<b>Weight (%)</b>			
<b>Apr-1987</b>					
NCREIF Timberland Index		100.00			
<b>Total Real Estate Policy</b>					
<b>Allocation Mandate</b>		<b>Weight (%)</b>			
<b>Jan-1978</b>					
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.

<b>Active Return</b>	- Arithmetic difference between the manager's performance and the designated benchmark return over a specified time period.
<b>Alpha</b>	- 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.
<b>Beta</b>	- A measure of the sensitivity of a portfolio to the movements in the market. It is a measure of the portfolio's systematic risk.
<b>Consistency</b>	- 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.
<b>Distributed to Paid In (DPI)</b>	- 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.
<b>Down Market Capture</b>	- The ratio of average portfolio performance over the designated benchmark during periods of negative returns. A lower value indicates better product performance
<b>Downside Risk</b>	- 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.
<b>Excess Return</b>	- Arithmetic difference between the manager's performance and the risk-free return over a specified time period.
<b>Excess Risk</b>	- A measure of the standard deviation of a portfolio's performance relative to the risk free return.
<b>Information Ratio</b>	- 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.
<b>Public Market Equivalent (PME)</b>	- 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.
<b>R-Squared</b>	- 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.
<b>Return</b>	- Compounded rate of return for the period.
<b>Sharpe Ratio</b>	- 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.
<b>Standard Deviation</b>	- 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.
<b>Total Value to Paid In (TVPI)</b>	- 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
<b>Tracking Error</b>	- This is a measure of the standard deviation of a portfolio's returns in relation to the performance of its designated market benchmark.
<b>Treynor Ratio</b>	- 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.
<b>Up Market Capture</b>	- The ratio of average portfolio performance over the designated benchmark during periods of positive returns. A higher value indicates better product performance.

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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.

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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.

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