# Lake Worth Beach Firefighters' Relief and Pension Fund

Investment Performance Review Period Ending March 31, 2024

# MARINER

**1st Quarter 2024 Market Environment** 

#### The Economy

- The US Federal Reserve (the Fed) held rates steady during the first quarter. However, domestic equities rallied on the prospect that the Fed could cut rates later in 2024. In its press release for the March meeting, the Fed stated 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." In addition, the Fed will continue reducing its balance sheet as described in its previously announced plans.
- The Fed's prolonged pause in its rate-hiking cycle and the insertion of the word "any" in its December press release gave the market hope that the Fed may be ready to pivot in its stance and begin reducing rates to a less restrictive level in 2024. The Fed's published "Dot Plot" shared expectations of three quarter-point rate cuts during the year, which would be the first rate cut since the COVID pandemic in 2020.
- Growth in the US labor market continued in March, as nonfarm payrolls increased by 303,000 and unemployment held steady at 3.8%. Federal Reserve Chair Jerome Powell stated, "Strong hiring in and of itself would not be a reason to hold off on rate cuts," adding that the job market is not a primary cause for concern around inflation. Powell added "an unexpected weakening in the labor market could also warrant a policy response."

#### Equity (Domestic and International)

- US equities moved broadly higher during the first quarter based on expectations of a more favorable interest rate environment in the coming year. The S&P 500 Index rose 10.6% for the quarter.
- International stocks experienced robust growth to begin the year, albeit muted by a strengthening US Dollar (USD). USD performance lagged local currency (LCL) performance in most regions for the quarter, though both currency readings were positive.
- GDP growth across regions remains mixed as many regions are dealing with local headwinds and tailwinds as much of the world continues to navigate sticky inflation with varying degrees of success. Conflicts abroad have dragged on performance, but as we have seen with the Russia-Ukraine conflict, market conditions will typically normalize once the broader impact has been reasonably assessed.

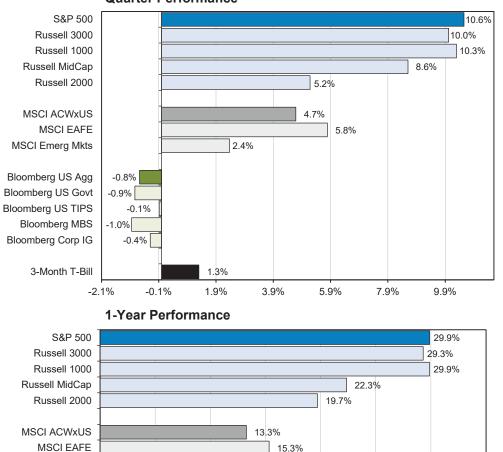
#### Fixed Income

- While sticky inflation numbers and a robust job market likely prompted the Fed to keep the fed funds rate unchanged during the quarter, this lack of action also tempered expectations for potential rate cuts in 2024. Fixed-income markets fell in March (yield rose) on the belief that rates could be higher for longer.
- High-yield bonds outperformed investment-grade issues for the quarter, largely due to narrowing credit spreads and higher coupons. Although the high-yield bond benchmark's duration is almost half of the US Aggregate Bond index's duration, the high-yield index edged out the bellwether bond benchmark due to a relatively stable yield curve and the aforementioned narrowing credit spreads.
- Global bonds lagged the domestic bond market with the US Aggregate Index beating the Global Aggregate ex-US Index by 2.4%. This broke the two indexes' tie in 2023 and left global bonds 2.4% behind the domestic bond market for the full year.

#### **Market Themes**

- 2024 opened with strong results in domestic and international equity markets, continuing what was a robust 2023. Growth sectors continued to outpace value sectors but by a narrower margin than 2023, showcasing increased breadth across many markets.
- 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.
- Policy rates remained relatively stable across most developed markets as central banks continued their tight policy stance. However, there are expectations of looser monetary policy to take hold as 2024 progresses.
- Ongoing military conflicts coupled with economic uncertainty around the globe continue to act as headwinds in international markets. While global disruptions from the Russia-Ukraine conflict seemed to subside, the proxy war in the Middle East has spread to other countries in the region and unsettled shipping channels globally.

- Domestic equity markets carried their momentum from late 2023 into the first quarter of 2024. Economic indicators continued to signal improving conditions for growth and softening inflation, resulting in an ongoing tailwind for risk assets. For the period, the S&P 500 large-cap benchmark returned 10.6% versus 8.6% for the Russell Mid Cap Index and 5.2% for the Russell 2000 small-cap index.
- International developed and emerging market equities also posted solid results. European markets continue to face geopolitical risks related to the conflict in Ukraine, the Middle East is grappling with a proxy war that has spread beyond Israel and Palestine, and Asia is feeling contagion effects from China's economic uncertainty. Despite the uncertainty, the developed market MSCI EAFE Index returned 5.8% for the quarter, while the MSCI Emerging Markets Index advanced 2.4%.
- Most broad fixed income indexes fell slightly during the first quarter of 2024. While market participants were generally optimistic about the possibility of a Fed rate cut during the first half of the year, sticky inflation pushed out these expectations and caused markets to re-think the timing of 2024's potential rate cuts. The Bloomberg (BB) US Aggregate Index returned -0.8% for the quarter while investment-grade corporate bonds were down less, returning -0.4%.
- US equity markets posted a stellar 29.9% during the trailing one-year period. The weakest relative performance for the year was the Russell 2000 Index, which nonetheless climbed 19.7% over the last 12 months.
- International markets also showcased a healthy rebound in 2023. Over the trailing one-year period, the MSCI EAFE Index was the best international performer, returning 15.3% while the MSCI Emerging Markets Index added a more modest 8.2%.
- Bond markets were relatively flat over the previous 12 months. Investmentgrade corporate bonds were the best-performing sector, up by 4.4%. Meanwhile, Treasuries have lagged, returning just 0.1% over the previous 12 months. The bellwether fixed-income benchmark, the Bloomberg US Aggregate Index, returned a muted 1.7% for the year.



8.2%

10.0%

15.0%

20.0%

25.0%

30.0%

35.0%

1.7%

1.4%

4.4%

5.0%

5.3%

0.1%

0.0%

0.5%

#### Quarter Performance

MSCI Emerg Mkts

Bloomberg US Agg

Bloomberg US Govt

Bloomberg US TIPS

Bloomberg Corp IG

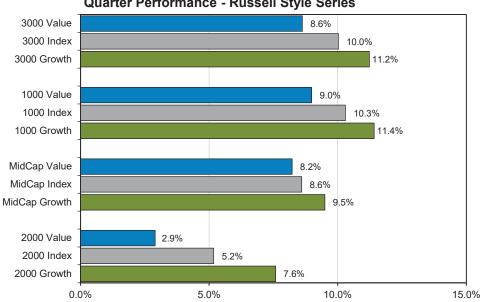
Bloomberg MBS

3-Month T-Bill

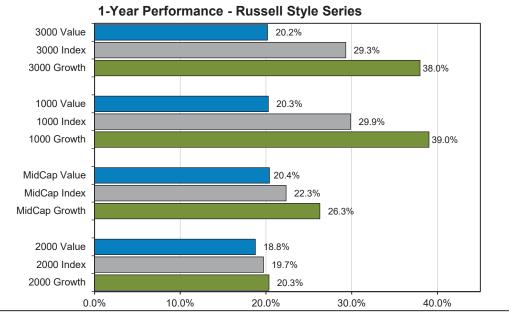
Source: Investment Metrics

- Domestic equity benchmarks were positive for the second consecutive guarter and growth style issues continued to outpace value. The best-performing area of the equity market was large-cap growth, with the Russell 1000 Growth index returning 11.4%. The worst performing area of the market was small-cap value, with the Russell 2000 Value index returning just 2.9% for the quarter. From a market capitalization perspective, large-cap stocks led their small-cap counterparts, with the Russell 1000 Index returning 10.3% and the Russell 2000 Index lagging with a lower, but still solid, 5.2%.
- The market continued its growth-led rally as growth stocks outpaced value stocks across the market-capitalization spectrum. While growth led the way during the guarter, value benchmarks largely kept pace, signaling that the rally seen in domestic equities may be broadening to other areas of the market.

- For the year, within large-cap stocks, the Russell 1000 Growth Index returned an impressive 39.0%, leading the way among style and market capitalization classifications. The weakest performing index for the year was the Russell 2000 Value, which still posted a double-digit return of 18.8%.
- The dominance of growth sectors is evident in the chart, with all growth benchmarks handily outpacing their core and value index counterparts. However, the strength of the outperformance differs meaningfully between the large cap and small cap segments of the market. The Russell 2000 Growth Index returned 20.3%, outpacing the Russell 2000 Value index return by a narrow margin of just 1.5%. However, this spread widens to 5.9% for the Russell Midcap Growth benchmarks and blows out to a span of 18.7% for the large cap benchmarks.





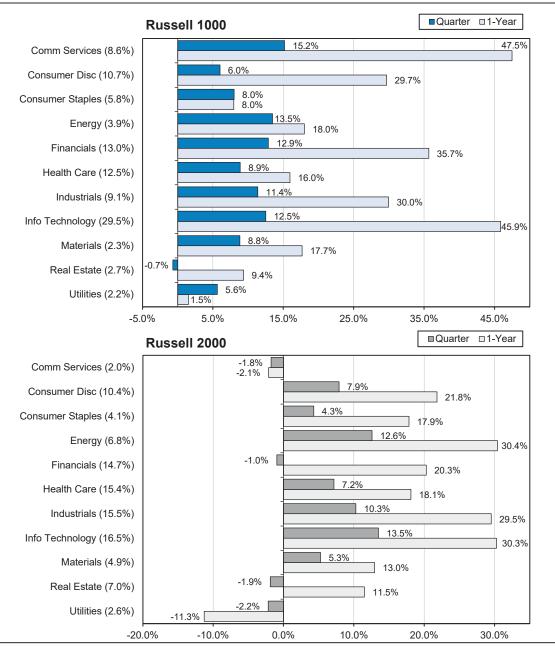


Source: Investment Metrics

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- 2023's year-end rally continued into the first quarter of 2024 and expanded its breadth across styles and market capitalizations.
- Ten of the 11 GICS economic sectors in the large-cap Russell 1000 Index moved higher during the first quarter. Five of the 11 sectors outpaced the broad index return of 10.0%. Communication services led the way at 15.2% followed by energy (up 13.5%), financials (12.9%), information technology (12.5%), and industrials (11.4%).
- For the full year, all 11 economic sectors finished in positive territory with communication services leading the way at 47.5% and information technology following in lock step at 45.9%. Of the 11 sectors, four were up at least 30.0% the past year. Utilities (up 1.5%), consumer staples (8.0%), and real estate (9.4%) were the only three sectors that did not post double-digit results over the trailing year.

- Seven small-cap economic sectors posted positive results during the quarter with six of those sectors exceeding the 5.2% return of the Russell 2000 Index. The information technology (up 13.5%), energy (12.6%), and industrials (10.3%) sectors led the way as the only three sectors to showcase double-digit performance for the quarter. Utilities (-2.2%), real estate (-1.9%), communication services (-1.8%), and financials (-1.0%) sectors all lost ground during the quarter.
- Similar to large-cap sector performance, nine of the 11 small cap sectors were positive over the trailing year. Energy posted the strongest sector results (30.4%) with the information technology (30.3%) sector not far behind. Industrials (29.5%), consumer discretionary (21.8%) and financials (20.3%) each also returned more than 20.0% for the period. Six of the 11 economic sectors fell short of the core small-cap benchmark's return of 19.7% over the trailing year. The two negative sectors for the year were utilities with a return of -11.3% and communication services, which returned -2.1%.



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	Marc	h 31	, 2024	
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Top 10 Weighted Stocks					
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector	
Microsoft Corp	6.5%	12.1%	47.1%	Information Technology	
Apple Inc	5.2%	-10.8%	4.5%	Information Technology	
NVIDIA Corp	4.5%	82.5%	225.4%	Information Technology	
Amazon.com Inc	3.4%	18.7%	74.6%	Consumer Discretionary	
Meta Platforms Inc Class A	2.2%	37.3%	129.4%	Communication Services	
Alphabet Inc Class A	1.9%	8.0%	45.5%	Communication Services	
Berkshire Hathaway Inc Class B	1.6%	17.9%	36.2%	Financials	
Alphabet Inc Class C	1.6%	8.0%	46.4%	Communication Services	
Eli Lilly and Co	1.4%	33.7%	128.4%	Health Care	
JPMorgan Chase & Co	1.2%	18.5%	58.1%	Financials	

Top 10 Weighted Stocks						
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector		
Super Micro Computer Inc	1.9%	255.3%	847.9%	Information Technology		
MicroStrategy Inc Class A	0.9%	169.9%	483.1%	Information Technology		
Comfort Systems USA Inc	0.4%	54.6%	118.7%	Industrials		
e.l.f. Beauty Inc	0.4%	35.8%	138.0%	Consumer Staples		
Light & Wonder Inc Ordinary Shares	0.3%	24.3%	70.0%	Consumer Discretionary		
Carvana Co Class A	0.3%	66.1%	798.0%	Consumer Discretionary		
Onto Innovation Inc	0.3%	18.4%	106.1%	Information Technology		
Simpson Manufacturing Co Inc	0.3%	3.8%	88.6%	Industrials		
Viking Therapeutics Inc	0.3%	340.6%	392.5%	Health Care		
Weatherford International PLC	0.3%	18.0%	94.5%	Energy		

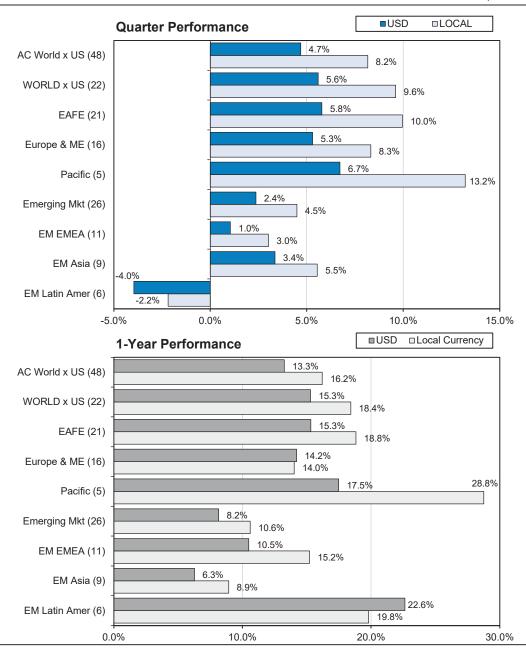
Top 10 Performing Stocks (by Quarter)						
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector		
NVIDIA Corp	4.5%	82.5%	225.4%	Information Technology		
Vistra Corp	0.1%	81.4%	197.1%	Utilities		
AppLovin Corp Ordinary Shares	0.0%	73.7%	339.5%	Information Technology		
Shockwave Medical Inc	0.0%	70.9%	50.2%	Health Care		
Vertiv Holdings Co Class A	0.1%	70.1%	471.2%	Industrials		
Cava Group Inc	0.0%	63.0%	N/A	Consumer Discretionary		
EMCOR Group Inc	0.0%	62.7%	116.2%	Industrials		
Maplebear Inc	0.0%	58.9%	N/A	Consumer Staples		
Constellation Energy Corp	0.1%	58.5%	138.0%	Utilities		
Williams-Sonoma Inc	0.0%	58.0%	167.4%	Consumer Discretionary		

Top 10 Performing Stocks (by Quarter)						
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector		
Ocean Biomedical Inc	0.0%	473.5%	-43.0%	Health Care		
Viking Therapeutics Inc	0.3%	340.6%	392.5%	Health Care		
Longboard Pharmaceuticals Inc	0.0%	258.2%	438.7%	Health Care		
Super Micro Computer Inc	1.9%	255.3%	847.9%	Information Technology		
Janux Therapeutics Inc	0.0%	250.9%	211.2%	Health Care		
Arcutis Biotherapeutics Inc	0.0%	206.8%	-9.9%	Health Care		
Veritone Inc	0.0%	190.6%	-9.8%	Information Technology		
Avidity Biosciences Inc	0.1%	182.0%	66.3%	Health Care		
Vera Therapeutics Inc Class A	0.1%	180.4%	455.7%	Health Care		
SoundHound AI Inc Ordinary Shares	0.0%	177.8%	113.4%	Information Technology		

Bottor	Bottom 10 Performing Stocks (by Quarter)				Bottom 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector	Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
New York Community Bancorp Inc	0.0%	-68.2%	-62.3%	Financials	Amylyx Pharmaceuticals Inc	0.0%	-80.7%	-90.3%	Health Care
SSR Mining Inc	0.0%	-58.7%	-70.1%	Materials	Bakkt Holdings Inc Ordinary Shares	0.0%	-79.4%	-73.3%	Financials
Rivian Automotive Inc Class A	0.0%	-53.3%	-29.3%	Consumer Discretionary	WW International Inc	0.0%	-78.9%	-55.1%	Consumer Discretionary
Agilon Health Inc	0.0%	-51.4%	-74.3%	Health Care	iRobot Corp	0.0%	-77.4%	-79.9%	Consumer Discretionary
AMC Entertainment Holdings Inc	0.0%	-39.2%	-91.6%	Communication Services	LivePerson Inc	0.0%	-73.7%	-77.4%	Information Technology
Iridium Communications Inc	0.0%	-36.1%	-57.2%	Communication Services	Office Properties Income Trust	0.0%	-72.1%	-81.1%	Real Estate
Viasat Inc	0.0%	-35.3%	-46.5%	Information Technology	Spirit Airlines Inc	0.0%	-69.6%	-69.3%	Industrials
QuidelOrtho Corp	0.0%	-35.0%	-46.2%	Health Care	2U Inc	0.0%	-68.3%	-94.3%	Consumer Discretionary
Unity Software Inc Ordinary Shares	0.0%	-34.7%	-17.7%	Information Technology	CareMax Inc Ordinary Shares	0.0%	-67.8%	-94.0%	Health Care
10x Genomics Inc Ordinary Shares	0.0%	-32.9%	-32.7%	Health Care	Presto Automation Inc	0.0%	-67.3%	-89.0%	Information Technology

Source: Morningstar Direct

- Many of the international developed- and emerging-market benchmarks posted positive performance in both USD and LCL terms for the first quarter. A strengthening of the USD during the period was a drag on domestic non-US index performance across all regions. The developed-market MSCI EAFE Index still returned a solid 5.8% in USD and 10.0% in LCL terms for the period. The MSCI Emerging Markets Index rose by 2.4% in USD and 4.5% in LCL terms.
- Latin America was the only region to post negative performance for the quarter in both USD and LCL terms. The cyclicality of demand for commodity exports in the region has resulted in greater volatility due to continued uncertainty over central bank policies and global demand.
- The heaviest weighted country in the emerging market index (China, 7.0%) continued its drag on broad index returns, returning -2.2% during the quarter. The Chinese economy grew at a rate of 5.2% in 2023, lower than its prepandemic rate of 6.0% which was a headwind for performance. Troubles in the commercial property and banking sectors have also created challenges for growth in the region.
- Much like domestic markets, trailing one-year results for international developed and emerging markets benchmarks were strong. Outside of EM Latin America, the USD showed strength over broad and regional benchmarks for the year, and as a result, LCL returns finished higher than USD performance.
- MSCI Pacific results led the way in LCL currency terms at 28.8% for the trailing year. USD returns for the region were still strong but returned a more muted 17.5% due to softening currency in the region. Due to demand for commodity exports and rising oil prices, EM Latin America was the only region where the USD weakened relative to LCL returns, resulting in higher USD returns (22.6% vs. 19.8%). The EM Asia regional benchmark was the weakest relative-performing region in the emerging market index, with the EM Asia index returning 6.3% in USD and 8.9% in LCL terms.



Source: MSCI Global Index Monitor (Returns are Net)

The Market Environment

US Dollar International Index Attribution & Country Detail

As of March 31, 2024

MSCI - EAFE	Sector Weight	Quarter Return	1-Year Return
Communication Services	4.0%	4.1%	6.6%
Consumer Discretionary	12.5%	11.1%	15.5%
Consumer Staples	8.6%	-3.1%	-5.9%
Energy	4.1%	2.2%	14.6%
Financials	19.3%	8.6%	25.8%
Health Care	12.7%	4.7%	8.6%
Industrials	16.8%	7.9%	23.1%
Information Technology	9.4%	14.3%	31.1%
Materials	7.2%	-1.1%	10.2%
Real Estate	2.3%	1.5%	13.0%
Utilities	3.1%	-5.0%	2.7%
Total	100.0%	5.8%	15.3%

MSCI - ACWIXUS	Sector Weight	Quarter Return	1-Year Return
Communication Services	5.1%	2.1%	-3.0%
Consumer Discretionary	11.8%	7.2%	8.6%
Consumer Staples	7.4%	-3.2%	-4.6%
Energy	5.5%	5.2%	21.4%
Financials	21.4%	5.9%	21.4%
Health Care	9.2%	3.7%	7.5%
Industrials	13.8%	6.9%	19.8%
Information Technology	13.4%	11.4%	29.4%
Materials	7.4%	-1.6%	4.1%
Real Estate	2.0%	-0.3%	6.8%
Utilities	3.0%	-3.0%	5.2%
Total	100.0%	4.7%	13.3%

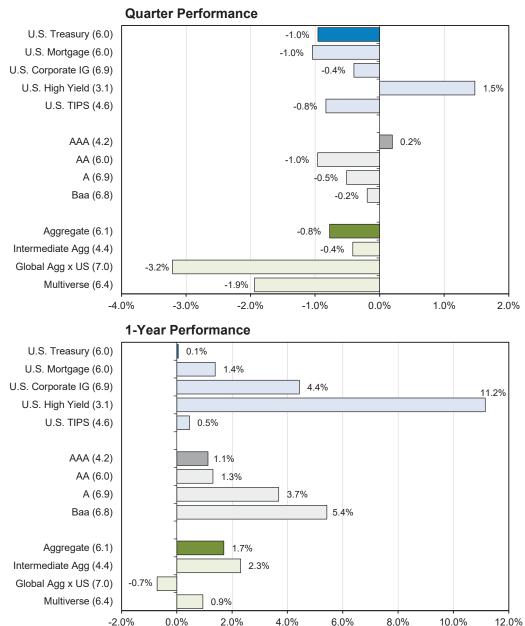
MSCI - Emerging Mkt	Sector Weight	Quarter Return	1-Year Return
Communication Services	8.6%	0.8%	-11.5%
Consumer Discretionary	12.4%	-0.5%	-5.3%
Consumer Staples	5.6%	-4.3%	-2.6%
Energy	5.3%	6.9%	36.0%
Financials	22.4%	2.3%	15.0%
Health Care	3.5%	-4.5%	-0.9%
Industrials	7.0%	1.4%	4.6%
Information Technology	23.7%	9.9%	26.7%
Materials	7.2%	-4.6%	-5.4%
Real Estate	1.5%	-6.0%	-11.3%
Utilities	2.8%	3.5%	17.9%
Total	100.0%	2.4%	8.2%

	MSCI-EAFE	MSCI-ACWIxUS	Quarter	1- Year
Country	Weight	Weight	Return	Return
Japan	23.3%	15.0%	10.2%	23.5%
Jnited Kingdom	14.6%	9.4%	1.9%	6.4%
France	12.1%	7.8%	5.7%	9.7%
Switzerland	9.3%	6.0%	-2.1%	4.9%
Germany	8.7%	5.6%	6.8%	12.0%
Australia	7.3%	4.7%	-0.5%	8.1%
Netherlands	5.2%	3.3%	15.4%	22.5%
Denmark	3.6%	2.3%	14.4%	33.0%
Sweden	3.1%	2.0%	0.2%	11.6%
taly	2.8%	1.8%	13.1%	30.6%
Spain	2.7%	1.7%	7.7%	19.6%
Hong Kong	1.8%	1.2%	-12.2%	-25.8%
Singapore	1.3%	0.9%	-0.1%	-6.1%
Finland	1.0%	0.6%	-6.0%	-12.8%
Belgium	0.9%	0.6%	1.7%	-0.2%
srael	0.7%	0.5%	12.2%	22.1%
Norway	0.6%	0.4%	-7.9%	-0.2%
reland	0.4%	0.2%	14.8%	16.9%
Portugal	0.2%	0.1%	-17.9%	-16.6%
New Zealand	0.2%	0.1%	-4.9%	-8.2%
Austria	0.2%	0.1%	0.5%	10.5%
Total EAFE Countries	100.0%	64.5%	5.8%	15.3%
Canada		7.7%	3.4%	12.3%
Total Developed Countries		71.9%	5.6%	15.3%
China		7.0%	-2.2%	-17.1%
ndia		5.0%	6.1%	36.8%
Taiwan		4.9%	12.4%	27.8%
Korea		3.5%	1.6%	14.2%
Brazil		1.4%	-7.4%	27.0%
Saudi Arabia		1.2%	4.7%	15.8%
South Africa		0.8%	-6.8%	-4.9%
Vlexico		0.8%	0.5%	17.7%
ndonesia		0.5%	2.1%	3.4%
Thailand		0.4%	-8.2%	-16.4%
Valaysia		0.4%	3.0%	3.1%
Jnited Arab Emirates		0.3%	0.4%	9.2%
Poland		0.3%	3.5%	55.3%
Qatar		0.2%	-3.6%	-1.4%
Kuwait		0.2%	8.3%	4.1%
Turkey		0.2%	14.6%	19.3%
Philippines		0.2%	6.1%	7.2%
Chile		0.1%	-4.5%	-5.9%
Greece		0.1%	6.5%	37.4%
Peru		0.1%	15.8%	46.2%
Hungary		0.1%	0.5%	47.4%
Czech Republic		0.0%	-7.7%	-7.6%
Colombia		0.0%	14.2%	48.3%
Egypt		0.0%	-29.7%	3.2%
_gypt Total Emerging Countries		27.9%	2.4%	8.2%
Total ACWIxUS Countries		100.0%	4.7%	13.3%

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 pulled back slightly to start the year with many domestic and international bond indexes finishing modestly lower during the quarter. Yields remain elevated due to the Federal Reserve's decision to maintain rates at their current levels. While market expectations are that the Fed will eventually begin cutting rates in 2024, which will be a jolt to bond holder performance as yield fall, higher yields and coupon rates on bonds also are also offer an attractive stabilizing, lower-risk benefit for bond allocations in diversified portfolios.
- The Bloomberg US Aggregate Bond Index, the bellwether US investment grade benchmark, returned a mild negative result of -0.8% for the quarter. Performance across the investment grade index's segments finished the period with similar performance with the Bloomberg US Corporate Investment Grade Index returning -0.4% and the US Mortgage Index sliding by -1.0%.
- Outside of the Aggregate index's sub-components, high-yield bonds continued to rise with a return of 1.5% as credit spreads narrowed during the quarter. US TIPS fell -0.8% for the quarter. The Bloomberg Global Aggregate ex-US Index return of -3.2% for the quarter lagged all domestic fixed-income indexes as well as the multiverse benchmark's return of -1.9%.
- Over the trailing one-year period, the Bloomberg US Aggregate Bond Index climbed 1.7%. The benchmark's sub-components also posted positive performance over the trailing 12 months with the Bloomberg US Corporate Investment Grade Index rising 4.4% and the US Mortgage Index posting a more modest 1.4% return. US TIPS, which are excluded from the aggregate index, rose 0.5% for the year. High-yield corporate bonds, which have a much shorter duration, outpaced their investment grade counterparts with the Bloomberg US High Yield Index posting and equity-like return of 11.2% for the last year.
- Performance for non-US bonds were negative for the trailing year with the Bloomberg Global Aggregate ex-US Index falling by -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.

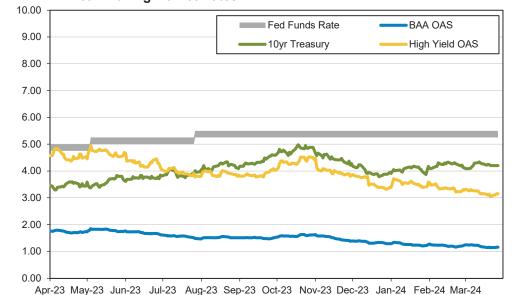


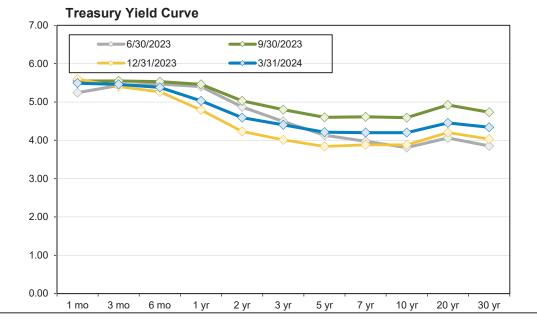
Source: Bloomberg

- The gray band across the graph illustrates the range of the current Fed Funds target rate. During the first guarter, the Federal Open Market Committee (FOMC) continued to hold the 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 and while their press releases have continued to push economic datadependent outcomes, subtle press release rewordings since last July have increased the likelihood there will be no additional rate increase in this cycle. With early April's inflation surprise, the CME FedWatch tool, which forecasts rates based on Fed Fund futures pricing, is predicting two 0.25% rate cuts for 2024, with the first occurring in September. Fed officials and market participants have expressed concern about leaving rates at their current levels for an extended period could tip the US economy into a recession, but inflation remains stubbornly elevated and higher rates are the FOMC's primary inflation-fighting tool. Additionally, the FOMC continues to remove liquidity from the market by allowing bonds held on its balance sheet to mature without reinvesting maturity proceeds.
- The yield on the US 10-year Treasury (green line of the top chart) rose modestly, opening at the at 3.88% and finishing the quarter at 4.20%. The 0.32% increase was largely attributable to sticky inflation data released throughout the quarter. The benchmark's rate peaked in October 2023, cresting at just under 5.00% before pulling back in the remainder of the year.
- The blue line in the top chart illustrates changes in 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 spread narrowed from 1.29% to 1.17%, which is equivalent to falling rates for BAA bonds. The spread measure has continued to narrow 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 yellow line in the top chart) have also continued to narrow from 3.39% at the end of 2023 to 3.15% at the end of March 2024. This narrowing provided an additional boost to high yield performance.
- The lower graph provides a snapshot of the US Treasury yield curve at the end of each of the last four quarters. If the anticipated rate cuts materialize in 2024, the yield curve will steepen into a positively sloped yield curve, which is the normal shape of the yield. Historically, a persistent inversion of the yield curve, as measured by the spread between 2 and 10-year Treasuries, has been a precursor of an economic recession within six to 24 months. As of quarter-end, the current yield curve inversion has persisted for 21 months.

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

1-Year Trailing Market Rates





#### Fed Minutes Suggest Rate Hikes Are Over, but Offer No Timetable on Cuts - WSJ

Fed meeting today: Live updates on March Fed rate decision (cnbc.com)

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)

The quarter in review: what happened in the first three months of 2024? | J.P. Morgan Asset Management (jpmorgan.com)

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

Resource Center | U.S. Department of the Treasury

The S&P 500 Clinches Best Start to Year Since 2019 - WSJ

China's Economy Limps Into 2024 - WSJ

Support Site - Global Index Lens: Index Returns - MSCI

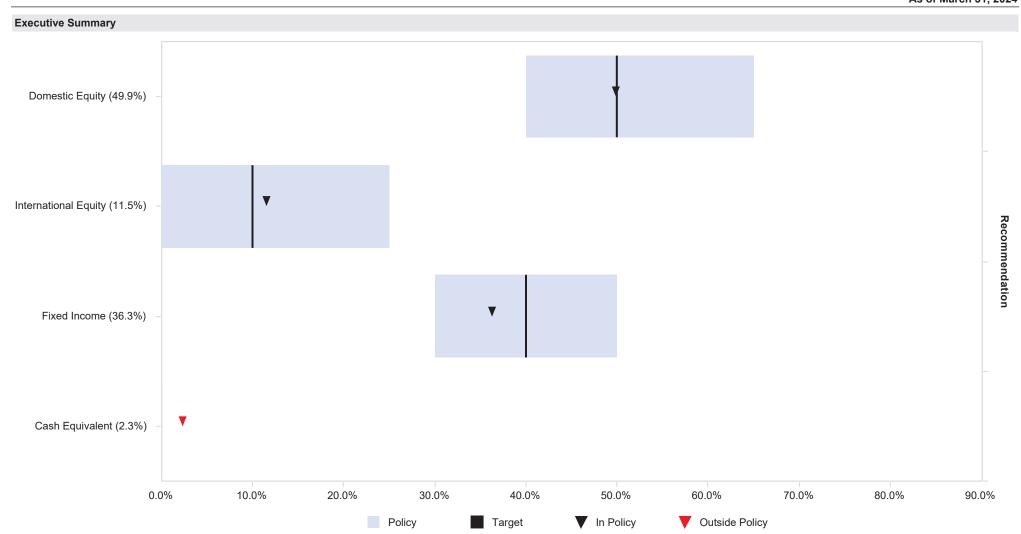
Q1 2024 CIO Review and Outlook - Matthews Asia - Commentaries - Advisor Perspectives

Treasuries Selloff Deepens as Traders Push Back First Rate Cut - Articles - Advisor Perspectives

Federal Reserve issues FOMC statement

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

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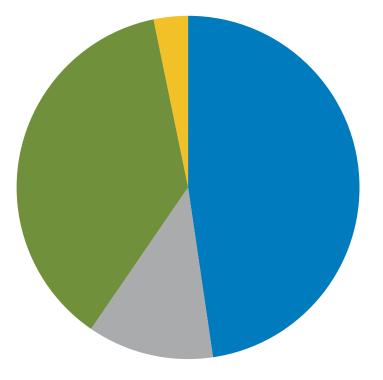


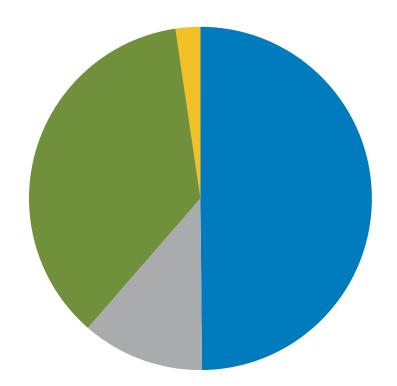
#### Asset Allocation Compliance

	Minimum	Maximum	Current	Target
	Allocation (%)	Allocation (%)	Allocation (%)	Allocation (%)
Cash Equivalent	0.0	0.0	2.3	0.0
International Equity	0.0	25.0	11.5	10.0
Fixed Income	30.0	50.0	36.3	40.0
Domestic Equity	40.0	65.0	49.9	50.0
Total Fund	N/A	N/A	100.0	100.0

Asset Allocation Summary Total Fund As of March 31, 2024

Asset Allocation By Segment as of December 31, 2023 : \$2,288,497 Asset Allocation By Segment as of March 31, 2024 : \$2,261,456





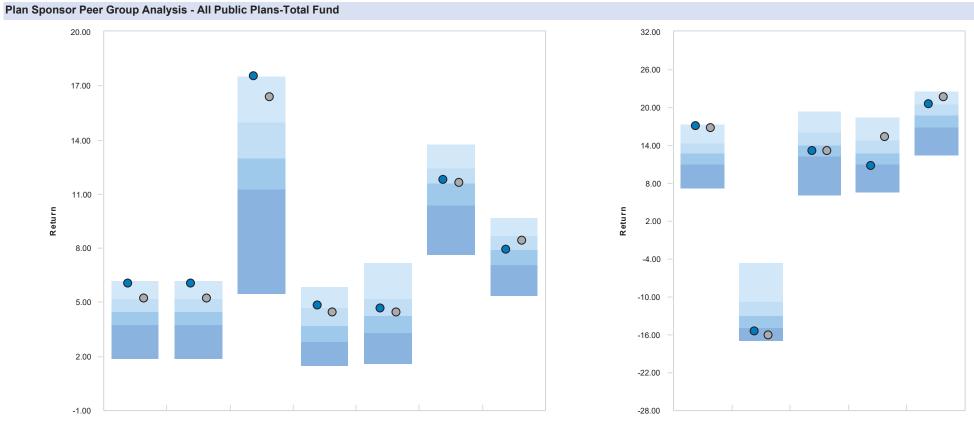
ocation					
Segments	Market Value	Allocation	Segments	Market Value	Allocation
Domestic Equity	1,090,993	47.7	Domestic Equity	1,127,368	49.9
International Equity	272,339	11.9	International Equity	261,143	11.5
Fixed Income	850,971	37.2	Fixed Income	820,046	36.3
Cash Equivalent	74,194	3.2	Cash Equivalent	52,899	2.3

Financial Reconciliation Quarter to	Financial Reconciliation Quarter to Date													
	Market Value 01/01/2024	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Market Value 03/31/2024					
Highland Capital Balanced Portfolio	2,288,497	-	-	-152,492	-2,860	-7,563	12,665	123,209	2,261,456					

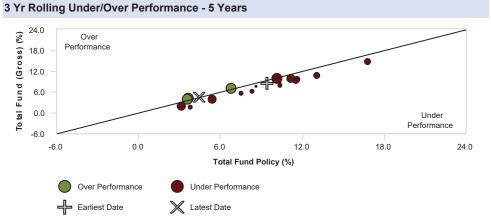
Financial Reconciliation Year to Dat	te								
	Market Value 01/01/2024	Net Transfers	Contributions	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Market Value 03/31/2024
Highland Capital Balanced Portfolio	2,288,497	-	-	-152,492	-2,860	-7,563	12,665	123,209	2,261,456

Comparative Performance Trailing Returns														
	QT	R	FY	ГD	1 Y	′R	3 Y	'R	5 Y	R	10 `	YR	Inception	Inception Date
Total Fund (Net)	5.92		5.92		17.05		4.21		7.40		6.58		6.83	03/01/1997
Total Fund Policy	5.25		5.25		16.43		4.47		8.44		7.58		7.14	
Total Fund (Gross)	6.05	(7)	6.05	(7)	17.54	(5)	4.71	(42)	7.93	(50)	7.12	(48)	7.23 (55)	03/01/1997
Total Fund Policy	5.25	(24)	5.25	(24)	16.43	(11)	4.47	(46)	8.44	(32)	7.58	(26)	7.14 (58)	
All Public Plans-Total Fund Median	4.46		4.46		13.00		4.24		7.92		7.08		7.26	
Total Domestic Equity	11.44	(40)	11.44	(40)	32.14	(29)	10.31	(65)	14.01	(64)	11.88	(77)	9.59 (62)	03/01/1997
Domestic Equity Policy	10.30	(57)	10.30	(57)	29.87	(54)	10.24	(65)	14.62	(54)	12.47	(62)	9.12 (96)	
IM U.S. Large Cap Core Equity (SA+CF) Median	10.82		10.82		30.01		11.04		14.75		12.74		9.86	
Total International Equity	5.24	(60)	5.24	(60)	17.69	(32)	3.05	(56)	7.14	(62)	3.07	(98)	4.42 (100)	10/01/2005
International Equity Policy	4.81	(68)	4.81	(68)	13.83	(57)	2.44	(64)	6.48	(72)	4.75	(83)	4.66 (100)	
IM International Core Equity (SA+CF) Median	5.74		5.74		14.58		3.51		7.68		5.72		6.09	
Total Fixed Income	-0.17	(20)	-0.17	(20)	2.33	(49)	-1.24	(11)	1.28	(22)	2.06	(45)	4.36 (78)	03/01/1997
Fixed Income Policy	-0.78	(92)	-0.78	(92)	1.70	(78)	-2.46	(85)	0.36	(95)	1.54	(96)	4.22 (93)	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	-0.47		-0.47		2.25		-2.11		0.91		2.01		4.70	

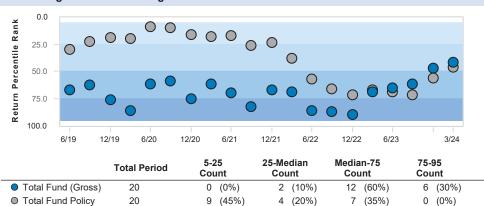
Comparative Performance Fiscal Year Returns												
	ΥT	D	202	3	202	22	202	:1	202	:0	201	9
Total Fund (Net)	5.92		16.65		-15.78		12.51		10.35		19.99	
Total Fund Policy	5.25		16.83		-16.04		13.20		15.45		21.78	
Total Fund (Gross)	6.05	(7)	17.13	(6)	-15.33	(81)	13.18	(63)	10.77	(79)	20.58	(22)
Total Fund Policy	5.25	(24)	16.83	(7)	-16.04	(89)	13.20	(63)	15.45	(19)	21.78	(10)
All Public Plans-Total Fund Median	4.46		12.69		-12.96		14.04		12.76		18.75	
Total Domestic Equity	11.44	(40)	27.21	(28)	-19.71	(85)	26.47	(59)	16.78	(53)	29.80	(55)
Domestic Equity Policy	10.30		26.53	(34)	-19.13	(76)	26.24	(62)	20.89	(29)	31.02	(38)
IM U.S. Large Cap Core Equity (SA+CF) Median	10.82		24.68		-16.54		27.74		17.65		30.06	
Total International Equity	5.24	(60)	21.38	(12)	-15.18	(37)	7.07	(87)	7.33	(76)	24.38	(48)
International Equity Policy	4.81	(68)	16.21	(61)	-15.57	(39)	8.29	(81)	11.13	(56)	22.13	(65)
IM International Core Equity (SA+CF) Median	5.74		17.08		-16.74		12.44		12.18		23.97	
Total Fixed Income	-0.17	(20)	5.70	(69)	-11.66	(12)	1.19	(5)	6.75	(96)	8.79	(69)
Fixed Income Policy	-0.78	(92)	5.53	(84)	-13.01	(54)	-1.55	(66)	7.51	(86)	8.72	(79)
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	-0.47		5.99		-12.95		-1.24		8.36		9.17	



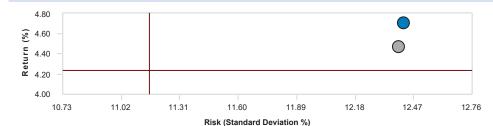
	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR		2023	2022	2021	2020	2019
<ul> <li>Total Fund (Gross)</li> </ul>	6.05 (7)	6.05 (7)	17.54 (5)	4.86 (21)	4.71 (42)	11.83 (42)	7.93 (50)	Total Fund (Gross)	17.13 (6)	-15.33 (81)	13.18 (63)	10.77 (79)	20.58 (22)
Total Fund Policy	5.25 (24)	5.25 (24)	16.43 (11)	4.47 (29)	4.47 (46)	11.68 (46)	8.44 (32)	Total Fund Policy	16.83 (7)	-16.04 (89)	13.20 (63)	15.45 (19)	21.78 (10)
Median	4.46	4.46	13.00	3.71	4.24	11.60	7.92	Median	12.69	-12.96	14.04	12.76	18.75
Comparative Perform	nance												
		End	Qtr ding -2023	E	1 Qtr inding p-2023		1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023		1 Qtr Endin Dec-20	g		1 Qtr Ending ∋p-2022
Total Fund (Gross)		8.63	(36)	-2.	86 (47)		5.04 (4)	5.68 (6)		6.41	(28)	-5.	29 (85)
Total Fund Policy		9.69	(12)	-3.	21 (65)		4.19 (15)	5.61 (8)		5.90	(43)	-5	12 (81)
All Public Plans-Total Fu	und Median	8.11		-2.	94		3.36	4.33		5.71		-4	31



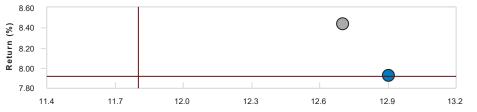
#### 3 Yr Rolling Percentile Ranking - 5 Years



#### Peer Group Scattergram - 3 Years



#### Peer Group Scattergram - 5 Years

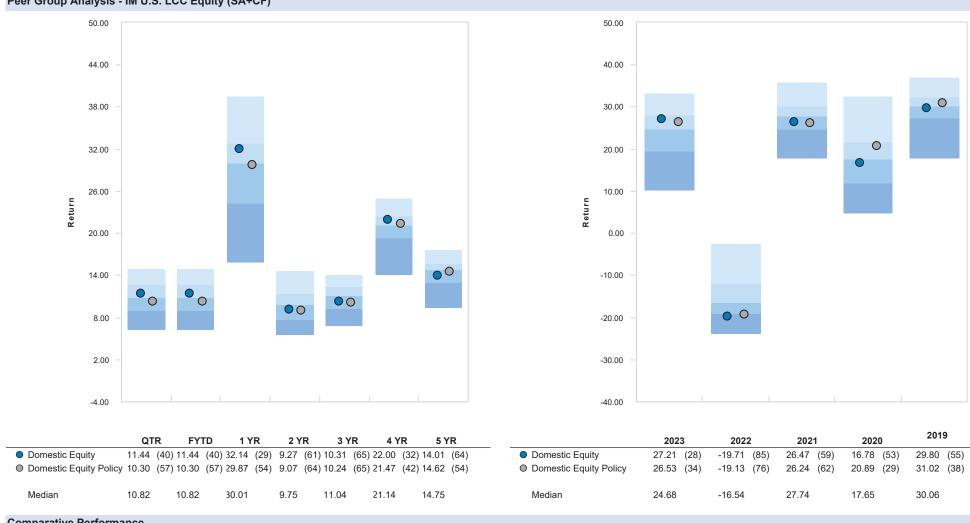


Risk (Standard Deviation %)

	Return	Standard Deviation		Return	Standard Deviation
<ul> <li>Total Fund (Gross)</li> </ul>	4.71	12.42	Total Fund (Gross)	7.93	12.90
Total Fund Policy	4.47	12.40	Total Fund Policy	8.44	12.70
Median	4.24	11.16	Median	7.92	11.80

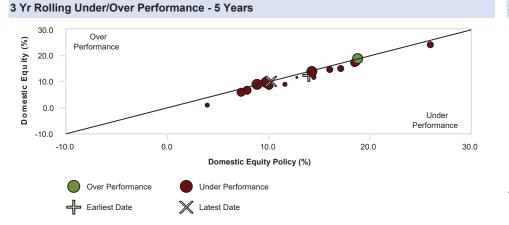
#### **Historical Statistics - 3 Years**

		Up	Down					
	Tracking Error	Market Capture	Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Fund (Gross)	1.56	100.25	98.83	0.27	0.15	0.23	0.99	8.44
Total Fund Policy	0.00	100.00	100.00	0.00	N/A	0.21	1.00	8.36
Historical Statistics	s - 5 Years							
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Fund (Gross)	1.61	99.63	102.64	-0.52	-0.28	0.50	1.01	8.60
Total Fund Policy	0.00	100.00	100.00	0.00	N/A	0.55	1.00	8.20

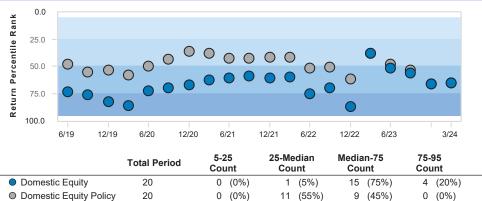


#### Peer Group Analysis - IM U.S. LCC Equity (SA+CF)

	QT	rr F	YTD	1 Y	/R	2 YF	R 3Y	/R 4	YR	5 YR			2023	2022	2021	2020	2010
Domestic Equity	11.44	(40) 11.44	4 (40)	32.14	(29)	9.27 (	(61) 10.31	(65) 22.00	) (32)	14.01 (64)		Domestic Equity	27.21 (28)	-19.71 (85)	26.47 (59)	16.78 (53)	29.80 (55)
Domestic Equity Policy	/ 10.30	(57) 10.30	0 (57)	29.87	(54)	9.07 (	(64) 10.24	(65) 21.47	' (42)	14.62 (54)		O Domestic Equity Policy	26.53 (34)	-19.13 (76)	26.24 (62)	20.89 (29)	31.02 (38)
Median	10.82	10.82	2	30.01	9	9.75	11.04	21.14	Ļ	14.75		Median	24.68	-16.54	27.74	17.65	30.06
Comparative Performa	ance																
			1 Qtr Ending Dec-202	g			En	Qtr ding -2023			1 Qtr Ending Jun-2023	1 Q End Mar-2	ing	Enc	Qtr Jing 2022	E	1 Qtr inding p-2022
Domestic Equity		12	2.04 (	(36)			-3.39	9 (77)			9.55 (18)	7.28	(32)	6.64	(81)	-3.	67 (19)
Domestic Equity Policy		11	1.96 (	(37)			-3.15	5 (67)			8.58 (37)	7.46	(28)	7.24	(71)	-4.	61 (44)
IM U.S. LCC Equity (SA+	CF)	11	1.61				-2.80	0			7.91	6.42		7.93		-4.	79



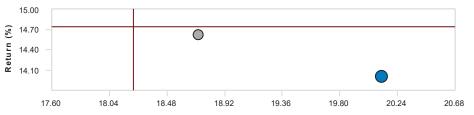
#### 3 Yr Rolling Percentile Ranking - 5 Years



#### Peer Group Scattergram - 3 Years



#### Peer Group Scattergram - 5 Years



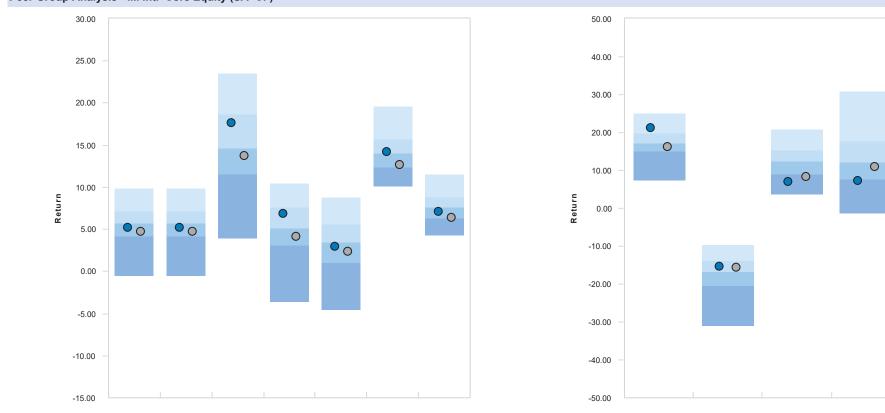
Risk (Standard Deviation %)

	Return	Standard Deviation		Return	Standard Deviation
Domestic Equity	10.31	18.15	Domestic Equity	14.01	20.12
Domestic Equity Policy	10.24	17.48	Domestic Equity Policy	14.62	18.72
Median	11.04	17.05	Median	14.75	18.23

#### **Historical Statistics - 3 Years**

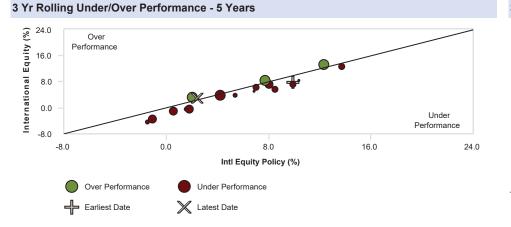
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Domestic Equity	1.84	102.89	103.60	-0.20	0.10	0.50	1.03	11.70
Domestic Equity Policy	0.00	100.00	100.00	0.00	N/A	0.50	1.00	11.28
Historical Statistics - 5	5 Years							
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Domestic Equity	3.30	103.60	107.68	-1.20	-0.07	0.66	1.06	13.29
Domestic Equity Policy	0.00	100.00	100.00	0.00	N/A	0.72	1.00	11.85

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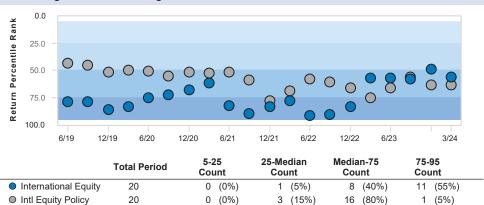


#### Peer Group Analysis - IM Intl Core Equity (SA+CF)

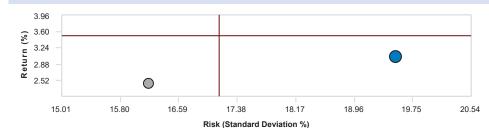
	QT	R	FY	TD	1	YR	2 \	/R	3 Y	R 4	YR	5	YR				2023	202	2	2021	2020	D	2019
International Equity	5.24	(60)	5.24	(60	) 17.6	9 (32)	6.93	(34)	3.05	(56) 14.2	9 (47)	7.14	(62)		International Equity	/ 2	21.38 (12)	-15.18	(37)	7.07 (87)	7.33	(76)	4.38 (48)
Intl Equity Policy	4.81	(68)	4.81	(68	) 13.8	3 (57)	4.23	(62)	2.44	(64) 12.6	9 (69)	6.48	(72)		Intl Equity Policy		16.21 (61)	-15.57	(39)	8.29 (81)	11.13	(56) 2	2.13 (65)
Median	5.74		5.74		14.5	В	5.11		3.51	14.0	6	7.68			Median		17.08	-16.74		12.44	12.18	2	3.97
Comparative Perform	manc	е																					
				1 C End Dec-2					En	Qtr ding -2023				1 Qtr Ending un-2023		1 Qt Endir Mar-20	ng		End	Qtr ding -2022		1 ( Enc Sep-	ing
International Equity			1	4.65	(5)				-5.41	(70)			3.	.11 (46)	)	8.55	(33)		19.21	(7)		-11.28	(89)
Intl Equity Policy				9.82	(67)				-3.68	(43)			2	.67 (58)	)	7.00	(64)		14.37	(77)		-9.80	(62)
IM Intl Core Equity (SA	+CF)		1	0.34					-4.04				3	.02		7.70			15.83			-9.42	



#### 3 Yr Rolling Percentile Ranking - 5 Years



#### Peer Group Scattergram - 3 Years



#### Peer Group Scattergram - 5 Years



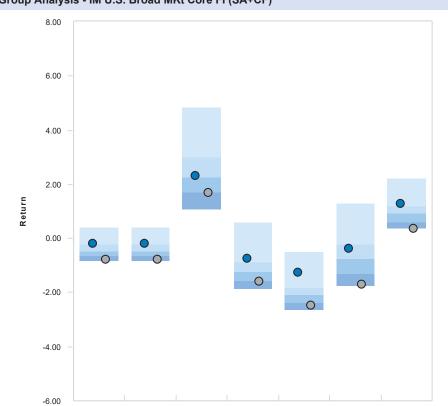
Risk (Standard Deviation %)

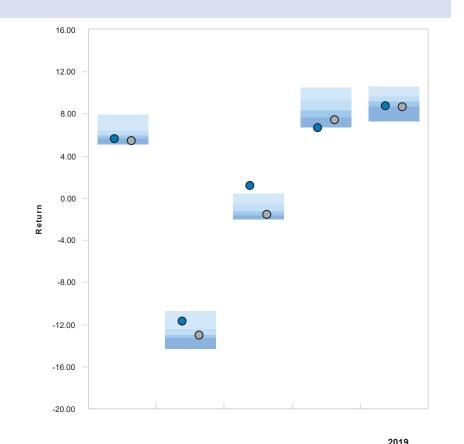
	Return	Standard Deviation		Return	Standard Deviation
International Equity	3.05	19.52	International Equity	7.14	20.75
Intl Equity Policy	2.44	16.18	Intl Equity Policy	6.48	17.42
Median	3.51	17.13	Median	7.68	18.29

#### **Historical Statistics - 3 Years**

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
International Equity	6.22	116.28	113.53	0.62	0.19	0.12	1.15	12.83
Intl Equity Policy	0.00	100.00	100.00	0.00	N/A	0.07	1.00	10.71
Historical Statistics	s - 5 Years							
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
International Equity	8.80	115.24	114.77	0.65	0.15	0.34	1.08	14.10
Intl Equity Policy	0.00	100.00	100.00	0.00	N/A	0.33	1.00	11.58

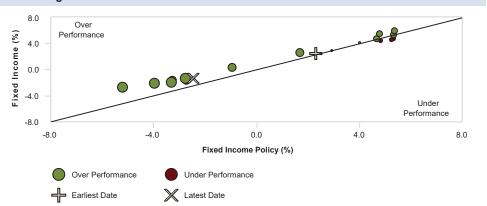
#### Page 23





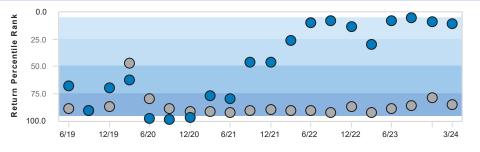
	QTR	FY	TD	1 YR	2 \	/R 3`	YR 4	YR	5 Y	R		2023	2022	2021	2020	2019
Fixed Income -	-0.17 (2	0) -0.17	(20)	2.33 (4	9) -0.72	(18) -1.24	(11) -0.37	7 (33)	1.28	(22)	Fixed Income	5.70 (69)	-11.66 (12)	1.19 (5)	6.75 (96)	8.79 (69)
Fixed Income Policy -	-0.78 (9	2) -0.78	(92)	1.70 (7	'8) -1.60	(80) -2.46	(85) -1.67	7 (93)	0.36	(95)	Income Policy	5.53 (84)	-13.01 (54)	-1.55 (66)	7.51 (86)	8.72 (79)
Median -	-0.47	-0.47		2.25	-1.24	-2.11	-0.78	3	0.91		Median	5.99	-12.95	-1.24	8.36	9.17
Comparative Performa	ance															
				1 Qtr Ending Dec-202			1 Qtr Ending Sep-202				1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023		1 Qtr Ending ec-2022		1 Qtr Ending Sep-2022
Fixed Income				4.57 (1	00)		-1.49 (4	ł)			-0.49 (23)	3.13 (59)	1.	16 (95)	-4	.34 (23)
Fixed Income Policy				6.82 (5	3)		-3.23 (7	71)			-0.84 (80)	2.96 (78)	1.	87 (43)	-4	.75 (79)
IM U.S. Broad Mkt Core F	FL (SA+C	E)		6.82			-3.13				-0.72	3.15	1	82	-4	.58

#### Peer Group Analysis - IM U.S. Broad MKt Core FI (SA+CF)



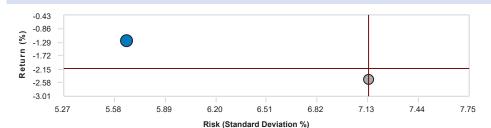
#### 3 Yr Rolling Under/Over Performance - 5 Years

#### 3 Yr Rolling Percentile Ranking - 5 Years



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count	
Fixed Income	20	7 (35%)	4 (20%)	3 (15%)	6 (30%)	
Fixed Income Policy	20	0 (0%)	1 (5%)	0 (0%)	19 (95%)	

#### Peer Group Scattergram - 3 Years



#### Peer Group Scattergram - 5 Years



Risk (Standard Deviation %)

	Return	Standard Deviation		Return	Standard Deviation
Fixed Income	-1.24	5.66	Fixed Income	1.28	4.93
Fixed Income Policy	-2.46	7.14	Fixed Income Policy	0.36	6.08
Median	-2.11	7.14	Median	0.91	6.22

#### **Historical Statistics - 3 Years**

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Fixed Income	1.96	80.67	74.02	0.65	0.58	-0.66	0.78	4.06
Fixed Income Policy	0.00	100.00	100.00	0.00	N/A	-0.68	1.00	5.14
Historical Statistics	- 5 Years							
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Fixed Income	1.71	85.49	73.35	0.97	0.49	-0.12	0.79	3.28
Fixed Income Policy	0.00	100.00	100.00	0.00	N/A	-0.24	1.00	4.12

### Benchmark History Investment Policy Benchmarks

As of March 31,2024

Total Fund Policy		Total International Equity Policy	
Allocation Mandate	Weight (%)	Allocation Mandate	Weight (%)
Mar-1997		Oct-2005	
S&P 500 Index	60.00	MSCI EAFE Index	100.00
Blmbg. U.S. Gov't/Credit	40.00		
		Apr-2010	
Oct-2004		MSCI AC World ex USA	100.00
S&P 500 Index	60.00		
Blmbg. U.S. Aggregate Index	40.00		
Oct-2005			
S&P 500 Index	55.00		
MSCI EAFE Index	5.00		
Blmbg. U.S. Aggregate Index	40.00	Total Domestic Equity Policy	
Apr-2010		Allocation Mandate	Weight (%)
Russell 3000 Index	50.00	Mar-1997	
MSCI AC World ex USA	15.00	S&P 500 Index	100.00
Blmbg. U.S. Aggregate Index	35.00		
2		Apr-2010	
Oct-2021		Russell 3000 Index	100.00
Russell 1000 Index	50.00		
MSCI AC World ex USA	10.00	Oct-2021	
Blmbg. U.S. Aggregate Index	40.00	Russell 1000 Index	100.00
Lotal Equity Policy		Total Fixed Income Policy	

	Total Fixed Income Policy	
Weight (%)	Allocation Mandate	Weight (%)
	Mar-1997	
100.00	Blmbg. U.S. Gov't/Credit	100.00
	Oct-2004	
90.00	Blmbg. U.S. Aggregate Index	100.00
10.00		
75.00		
25.00		
	100.00 90.00 10.00 75.00	Weight (%)Allocation Mandate100.00Mar-1997100.00Blmbg. U.S. Gov't/Credit0ct-2004Oct-200490.00Blmbg. U.S. Aggregate Index75.0075.00

#### Lake Worth Firefighters 2 Fee Analysis As of March 31, 2024

	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
Total Fund	0.50	2,261,456	11,307	
Highland Capital Balanced Portfolio	0.50	2,261,456	11,307	0.50 % of Assets

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.

## Lake Worth Beach Firefighters' Relief and Pension Fund

## Compliance Checklist as of March 31, 2024

Total Fund Compliance:	Yes	No	N/A				
1. The Total Plan return equaled or exceeded the 7.5% Target Return over the trailing three year period.							
2. The Total Plan return equaled or exceeded the 7.5% Target Return over the trailing five year period.		~					
3. The Total Plan return equaled or exceeded the total plan benchmark over the trailing three year period.	$\checkmark$						
4. The Total Plan return equaled or exceeded the total plan benchmark over the trailing five year period.		$\checkmark$					
5. The Total Plan return ranked within the top 40th percentile of its peer group over the trailing three year period.		$\checkmark$					
6. The Total Plan return ranked within the top 40th percentile of its peer group over the trailing five year period.		✓					
Equity Compliance:	Yes	No	N/A				
1. The domestic equity returns meet or exceed the benchmark over the trailing three year period.	✓						
2. The domestic equity returns meet or exceed the benchmark over the trailing five year period.							
3. The domestic equity returns ranked within the top 40th percentile of its peer group over the trailing three year period.							
4. The domestic equity returns ranked within the top 40th percentile of its peer group over the trailing five year period.		$\checkmark$					
5. The total foreign equity was less than 25% of the total plan assets at market.	$\checkmark$						
6. The total equity allocation was less than 70% of the total plan assets at market.	√						
Fixed Income Compliance:	Yes	No	N/A				
1. The total fixed income returns meet or exceed the benchmark over the trailing three year period.	✓						
2. The total fixed income returns meet or exceed the benchmark over the trailing five year period.	$\checkmark$						
3. The total fixed income returns ranked within the top 40th percentile of its peer group over the trailing three year period.	✓						
4. The total fixed income returns ranked within the top 40th percentile of its peer group over the trailing five year period.							
5. The average quality of the fixed portfolio was AA or better.							
6. The duration of the fixed income portfolio was within +/- 25% of the index.	√						
Manager Compliance: Highland-DF Highland-Int	Highland-Fl						
Yes No N/A Yes No N/A	Yes No N/A Yes No N/A Ye	es No	N/A				

	Yes	NO N	I/A	Yes No	N/A	Yes No	D N/A	Yes No	N/A	Yes No	D N/A
1. Manager outperformed the index over the trailing three and five	year period.	v		√		√					
2. Manager ranked within the top 40th percentile over trailing three	and five year period.	$\checkmark$		√		$\checkmark$					
3. Less than four consecutive quarters of under performance relative	ve to the benchmark.			√		$\checkmark$					
4. Three year down-market capture ratio less than the index.		✓		$\checkmark$		$\checkmark$					
5. Five year down-market capture ratio less than the index.		✓		$\checkmark$		$\checkmark$					
6. Manager reports compliance with PFIA.	$\checkmark$			√		$\checkmark$					

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.

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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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