Southfield Employees Retirement System

Investment Performance Review Period Ending December 31, 2024

MARINER

4th Quarter 2024 Market Environment

The Economy

- The US Federal Reserve (the Fed) continued to loosen its policy stance during the quarter with two fed funds rate cuts totaling 0.50%, bringing the year-end rate to a range of 4.25%-4.50%. While the Fed conveyed a degree of confidence that the fight against inflation is progressing in its December press release, Fed Chairman Jerome Powell signaled in his post-meeting press conference that the pace and timing of future rate cuts is unclear. The Fed's December "Dot Plot" now projects only two quarter-point rate cuts in 2025, down from four anticipated cuts in September's plot.
- Growth in the US labor market continued during the fourth quarter. US payrolls grew by 256,000 in December, up from the previous month's total of 212,000, and well above the 155,000 projected. If strength in the labor market continues, this data could support a slower pace Fed action in the form of policy rate reductions in 2025.

Equity (Domestic and International)

- US equity results were modestly higher for the quarter. Markets also saw a return to the narrowly focused technology and communication services company exuberance which has dominated domestic performance in recent years. The S&P 500 Index rose 2.4% for the quarter with the small-cap Russell 2000 Index managing just a 0.3% rise. The rotation away from large cap growth stocks during the third quarter seemed to reverse as the Russell 1000 Growth Index once again outpaced the Russell 1000 Value Index by a large margin.
- Large-cap equity benchmarks continue to represent a heavy concentration among a limited number of stocks. As of quarter end, the weight of the top 10 stocks in the S&P 500 Index exceeded 35%.
- Most international stocks faltered during the fourth quarter and US Dollar (USD) denominated results were further exacerbated by a strengthening USD. The USD performance of international stocks fell short of local currency (LCL) returns in most regions for the quarter, albeit to varying degrees.

Fixed Income

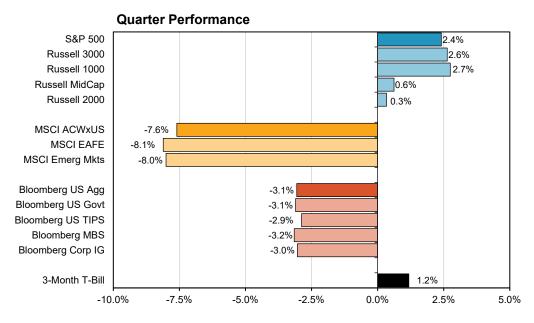
- Fixed-income markets traded lower during the quarter on the back of the Fed's ongoing policy actions. Short term Treasury yields fell while longer term yields rose, leading to a slight steepening in the yield curve. The yield on the bellwether 10-year Treasury advanced by 0.84% during the quarter, closing the year at a yield of 4.58%. The inverse relationship between prices and yields resulted in the Bloomberg US Aggregate Bond Index posting a -3.1% loss for the quarter.
- High-yield bonds outpaced the Bloomberg US Aggregate Bond Index for the quarter, largely due to higher coupons, a shorter duration profile, and a small narrowing of the option-adjusted spread (OAS) for the Bloomberg US High-Yield Index.
- Global bonds fell during the quarter, with the Bloomberg Global Aggregate ex-US returning -6.8% in USD terms. Like international equity results, global bond performance was dragged down by a strengthening USD during the quarter.

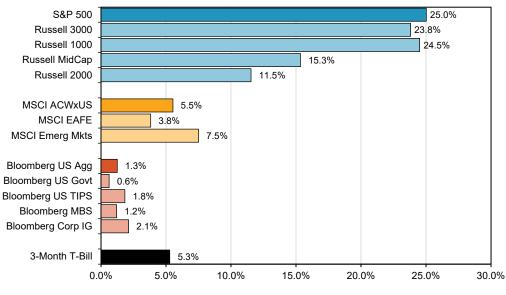
Market Themes

- Strength in the US Dollar during the quarter led to relative weakness in international markets. Many of the major currencies depreciated relative to the US Dollar as the year came to a close. Latin America saw the most significant decline during the period while the Pacific region was the only region to post positive LCL returns.
- The AI trade that has taken shape for much of the past two years continued in 2024 with the communication services and information technology sectors each posting gains of more than 35% for the year. This phenomenon contributed to narrow market leadership particularly within the large-cap segment of the market. The concentration in the large-cap indexes helped the S&P 500 post its second straight year of greater than a 20% return, further widening the performance gap between large and smaller capitalization benchmarks.
- Ongoing military conflicts in Ukraine and the Middle East, coupled with global economic uncertainty, continue to act as headwinds for international market results, further complicated by an advancing USD.
- The results of the most recent US presidential election appeared to please domestic equity markets in anticipation of the new administration supporting loosened regulations and pro-growth policies. As we move into the new year, equity markets will need to digest the anticipated effects of proposed tax legislation changes, a new view on foreign policy, and potential trade tariffs by the new administration.

- Domestic equity markets continued to climb higher during the quarter. Largecap stocks returned to the forefront, outpacing small-cap stocks. The S&P 500 rose 2.4% during the quarter versus a muted gain of 0.3% for the Russell 2000 Index. The broad capitalization Russell 3000 Index, which benefited from strength in mid- and large-cap names, returned 2.6% for the quarter.
- International developed market equities reversed course and soured during the fourth quarter with the USD performance of the broad benchmarks each trading lower than (LCL) currency performance. The broad MSCI ACWI ex US Index delivered a disappointing -7.6% for the quarter but was down less than both the MSCI EAFE and MSCI EM indexes. The broad index was aided by Canada, which is not included in the EAFE or EM indexes. International developed market (DM) equities narrowly fell behind emerging market (EM) equities, returning -8.1% and -8.0%, respectively for the quarter. Negative performance for the international indexes was broad-based and not localized to any specific region.
- Broad market fixed-income benchmarks displayed a poor finish to the year as many of the core indexes succumbed to a steepening of the yield curve and the prospect of fewer rate cuts in 2025. The Bloomberg US Aggregate Index returned -3.1% for the quarter. The TIPS market, which is not part of the Aggregate Index, was also negative, posting a return of -2.9% for the quarter. While the performance differentials were small, the Mortgage-Backed Securities Index lagged other domestic bond market segments with a benchmark return of -3.2% for the quarter.
- Domestic equity indexes finished the year by adding to their already strong returns over the trailing one-year period. The S&P 500 Index gained 25.0% for the year and the Russell 1000 Index returned 24.5%. The weakest performing capitalization range of domestic equities for the year was the small-cap Russell 2000 Index, which still managed a double-digit climb over the last 12 months, returning a solid 11.5%.
- Domestic bond indexes' results were mixed throughout the year but still managed to deliver positive annual results. While the performance spread was narrow, investment-grade corporate bonds led bond index results for the year, returning a muted 2.1%. The government bond index lagged for the year, but was also positive, posting a return of 0.6%.
- International equity markets also delivered positive results for the trailing oneyear period. The MSCI EM Index was the best international performer, returning 7.5%, while the MSCI EAFE and MSCI ACWI ex US indexes posted returns of 3.8% and 5.5%, respectively.

Source: Investment Metrics

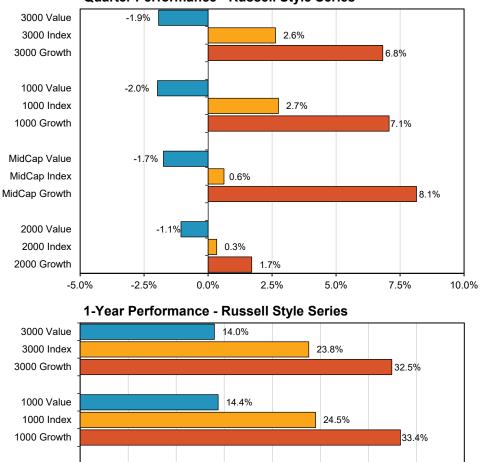




1-Year Performance

- Domestic equity benchmarks exhibited a return to their long-run trend of growth style companies vastly outperforming value during the fourth quarter. This theme was relatively consistent across the capitalization spectrum with growth benchmarks dominating performance results while value benchmarks each posted negative returns for the quarter.
- The broadest disparity between growth and value was visible in the mid-cap index. The Russell Mid Cap Value Index return of -1.7% trailed the Russell Mid Cap Growth Index return of 8.1%, a performance span of nearly 10%. The Russell Mid Cap Growth Index was also the best performing segment of the equity market during the quarter. Conversely, the worst performing segment of the market was large cap value which returned a disappointing -2.0% during the fourth quarter.

- This quarter's ascension of the growth indexes widened their performance gaps relative to the value indexes for the trailing year. The Russell 1000 Growth Index amassed a staggering 33.4% for the year, leading the way among style and market capitalization index performance. Much of the year's 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 and the headlines 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 climbed 8.1%.
- The strength of growth sectors is also evident in the trailing one-year period with the chart on the right showing growth benchmarks at all capitalization ranges outpacing their value counterparts. The performance gap between the Russell 1000 Growth Index and the Russell 1000 Value Index was nearly 20% and the gaps for mid- and small-cap indexes were narrower, but still wide.



13.1%

11.5%

15.0%

8.1%

10.0%

5.0%

15.3%

15.2%

20.0%

22.1%

25.0%

30.0%

35.0%

40.0%

MidCap Value

MidCap Index

MidCap Growth

2000 Value

2000 Index

2000 Growth

0.0%

Quarter Performance - Russell Style Series

Source: Investment Metrics

- ■Quarter ■1-Year Russell 1000 9.0% Comm Services (8.8%) 39.8% 12.9% Consumer Disc (10.6%) 28.8% -3.0% Consumer Staples (5.6%) 14.7% -0.6% Energy (3.5%) 7.5% 7.9% Financials (13.9%) 31.4% -9.9% Health Care (11.0%) 2.9% -2.2% Industrials (9.5%) 17.3% 5.8% Info Technology (29.7%) 35.9% -11.4% Materials (2.5%) 0.2% -7.8% Real Estate (2.6%) 5.1% -5.2% Utilities (2.4%) 24.8% -20.0% -10.0% 0.0% 20.0% 30.0% 40.0% 10.0% ■Quarter ■1-Year Russell 2000 0.5% Comm Services (2.7%) 12.2% -1.6% Consumer Disc (9.9%) 6.2% 5.5% Consumer Staples (2.7%) 17.9% -2.7% Energy (5.2%) -4.1% 3.5% Financials (18.5%) 15.4% 7.6% Health Care (17.1%) 1.9% 4.1% Industrials (17.4%) 17.0% 9.9% Info Technology (12.7%) 21.6% -4.7% Materials (4.5%) 4.0% -6.1% Real Estate (6.2%) 5.5% -4.6% Utilities (2.8%) 2.8% -5.0% 0.0% 5.0% 10.0% 15.0% 20.0% -10.0% 25.0%
- Economic sector performance delivered mixed results in the fourth quarter as just four of the 11 economic sectors moved higher in the large-cap index. While performance during the year could be characterized by broader participation in the domestic equity markets, this was not the case during the fourth quarter as only the communication services, consumer discretionary, financials, and information technology sectors managed to post positive returns. Within the large cap index, consumer discretionary stocks led the way, collectively returning 12.9% for the quarter while the materials sector struggled, falling -11.4% during the period.
- Full year results during 2024 showcased strong performance across the economic sector classifications. Communication services narrowly outpaced information technology for the year, posting returns of 39.8% and 35.9%, respectively, with financials coming in third with a return of 31.4%. While all sectors posted positive returns for the year, the broad index's strong performance during 2024 was largely driven by three of the five most heavily weighted index sectors.
- Similar to the large cap benchmark, just five of the 11 small-cap economic sectors gained value during the quarter. Communication services, consumer staples, financials, industrials, and information technology led the way with information technology as the best performing sector during the quarter. Health care faltered as the worst-performing sector with a return of -7.6% during the quarter, followed closely by real estate, which finished the quarter with a return of -6.1%.
- Despite their struggles during the most recent quarter, small-cap stocks delivered strong results for the year. Ten small-cap sectors advanced higher during the trailing one-year period, making energy the lone negative performer over the period. The sector's -2.7% return during the fourth quarter pushed the sector's performance to -4.1% for the trailing year. Information technology (up 21.6%) was the only sector to cross the 20% return threshold, but four others also amassed double digit positive returns for the calendar year.

Source: Morningstar Direct

As a result of the GICS classification changes on 9/28/2018 and certain associated reporting limitations, sector performance represents backward looking performance for the prior year of each sector's current constituency, post creation of the Communication Services sector.

The Market Environment Top 10 Index Weights & Quarterly Performance for the Russell 1000 & 2000

As of December 31, 2024

	Top 10 W	eighted Stoo	:ks	
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Apple Inc	6.6%	7.6%	30.7%	Information Technology
NVIDIA Corp	5.8%	10.6%	171.2%	Information Technology
Microsoft Corp	5.8%	-1.8%	12.9%	Information Technology
Amazon.com Inc	3.8%	17.7%	44.4%	Consumer Discretionary
Meta Platforms Inc Class A	2.4%	2.4%	66.0%	Communication Services
Tesla Inc	2.1%	54.4%	62.5%	Consumer Discretionary
Alphabet Inc Class A	2.1%	14.3%	36.0%	Communication Services
Broadcom Inc	2.0%	34.7%	110.4%	Information Technology
Alphabet Inc Class C	1.7%	14.0%	35.6%	Communication Services
Berkshire Hathaway Inc Class B	1.5%	-1.5%	27.1%	Financials

Top 10 Weighted Stocks								
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector				
FTAI Aviation Ltd	0.5%	8.6%	214.7%	Industrials				
Sprouts Farmers Market Inc	0.5%	15.1%	164.1%	Consumer Staples				
Insmed Inc	0.4%	-5.4%	122.8%	Health Care				
Vaxcyte Inc Ordinary Shares	0.4%	-28.4%	30.4%	Health Care				
Credo Technology Group Holding Ltd	0.4%	118.2%	245.2%	Information Technology				
Applied Industrial Technologies Inc	0.3%	7.5%	39.7%	Industrials				
Mueller Industries Inc	0.3%	7.4%	70.5%	Industrials				
Rocket Lab USA Inc	0.3%	161.8%	360.6%	Industrials				
Fluor Corp	0.3%	3.4%	25.9%	Industrials				
IonQ Inc Class A	0.3%	377.9%	237.1%	Information Technology				

Top 10 Performing Stocks (by Quarter)							
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector			
Astera Labs Inc	0.0%	152.8%	N/A	Information Technology			
AppLovin Corp Ordinary Shares	0.2%	148.1%	712.6%	Information Technology			
Trump Media & Technology Group	0.0%	112.2%	N/A	Communication Services			
Palantir Technologies Inc Ordinary	0.3%	103.3%	340.5%	Information Technology			
SoFi Technologies Inc Ordinary Shares	0.0%	95.9%	54.8%	Financials			
Amer Sports Inc	0.0%	75.3%	N/A	Consumer Discretionary			
MicroStrategy Inc	0.1%	71.8%	358.5%	Information Technology			
United Airlines Holdings Inc	0.1%	70.2%	135.3%	Industrials			
New Fortress Energy Inc	0.0%	66.3%	-59.3%	Utilities			
Twilio Inc Class A	0.0%	65.7%	42.5%	Information Technology			

	0.070	00.170	12.070	internation reenheiegy				
Botto	Bottom 10 Performing Stocks (by Quarter)							
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector	Russe			
Capri Holdings Ltd	0.0%	-50.4%	-58.1%	Consumer Discretionary	Q32 B			
Celanese Corp Class A	0.0%	-48.8%	-54.6%	Materials	Cassa			
Rocket Companies Inc Ordinary	0.0%	-41.3%	-22.2%	Financials	Applie			
Enphase Energy Inc	0.0%	-39.2%	-48.0%	Information Technology	Perspe			
Moderna Inc	0.0%	-37.8%	-58.2%	Health Care	Keros			
Acadia Healthcare Co Inc	0.0%	-37.5%	-49.0%	Health Care	Bioage			
Viking Therapeutics Inc	0.0%	-36.4%	116.2%	Health Care	Inovio			
10x Genomics Inc Ordinary	0.0%	-36.4%	-74.3%	Health Care	PACS			
Monolithic Power Systems Inc	0.1%	-35.9%	-5.6%	Information Technology	Shattu			
The AES Corp	0.0%	-35.1%	-30.3%	Utilities	Sunno			

Source: Morningstar Direct

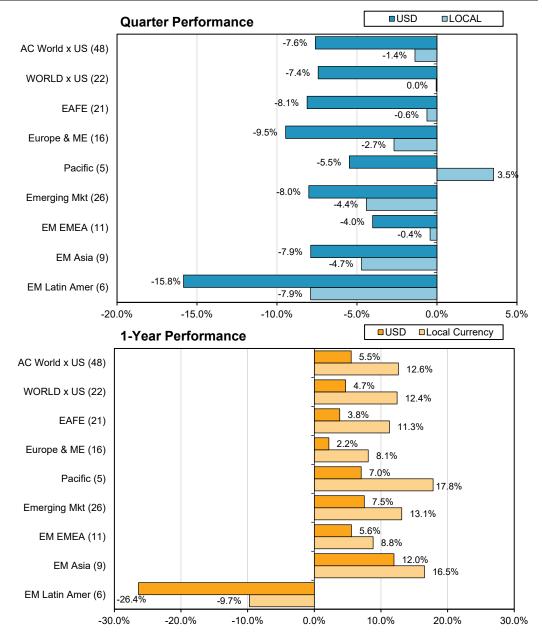
Top 10 Performing Stocks (by Quarter)								
Russell 2000	Weight		1-Year Return	Sector				
Rigetti Computing Inc	0.1%	1848.7%	1449.4%	Information Technology				
D-Wave Quantum Inc.	0.0%	754.6%	854.4%	Information Technology				
Scholar Rock Holding Corp	0.1%	439.6%	129.9%	Health Care				
IonQ Inc Class A	0.3%	377.9%	237.1%	Information Technology				
SoundHound AI Inc Ordinary Shares	0.2%	325.8%	835.8%	Information Technology				
Kodiak Sciences Inc	0.0%	281.2%	227.3%	Health Care				
The RealReal Inc	0.0%	248.1%	443.8%	Consumer Discretionary				
SES AI Corp	0.0%	242.3%	19.7%	Industrials				
Poseida Therapeutics Inc Ordinary	0.0%	235.7%	185.7%	Health Care				
Archer Aviation Inc Class A	0.1%	221.8%	58.8%	Industrials				

Bottom 10 Performing Stocks (by Quarter)							
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector			
Q32 Bio Inc	0.0%	-92.3%	0.0%	Health Care			
Cassava Sciences Inc	0.0%	-92.0%	-89.5%	Health Care			
Applied Therapeutics Inc	0.0%	-89.9%	-74.4%	Health Care			
Perspective Therapeutics Inc	0.0%	-76.1%	-20.6%	Health Care			
Keros Therapeutics Inc	0.0%	-72.7%	-60.2%	Health Care			
Bioage Labs Inc	0.0%	-72.2%	N/A	Health Care			
Inovio Pharmaceuticals Inc	0.0%	-68.3%	-70.1%	Health Care			
PACS Group Inc	0.0%	-67.2%	N/A	Health Care			
Shattuck Labs Inc Ordinary Shares	0.0%	-65.3%	-83.0%	Health Care			
Sunnova Energy International Inc	0.0%	-64.8%	-77.5%	Utilities			

- Results in USD terms among the headline international equity indexes were sharply lower during the quarter. The strengthening USD relative to many major currencies during the quarter was a substantial headwind for the USD performance of non-US regional benchmarks' returns. The developed-market MSCI EAFE Index returned a muted -0.6% in LCL terms but fell -8.1% in USD terms. The MSCI ACWI ex-US Index pulled back -7.6% in USD and -1.4% in LCL terms for the guarter.
- Latin America continued to lag other regions during the quarter in USD terms, posting an outsized loss of -15.8%. Weakening currencies in the region put added pressure on realized performance for US investors. The MSCI Pacific benchmark was the only regional benchmark to deliver positive performance in LCL terms with a return of 3.5%, but USD strength led to a -5.5% decline in USD terms for the quarter. Regional LCL currency performance was disparate for the quarter, with some regional indexes remaining relatively flat over the final three months of the year.
- Full year results by country show Taiwan and Malaysia as the biggest winners during the year in USD terms. These two countries advanced 34.4% and 20.8%, respectively. China was not far behind with the largest economy in the emerging market world climbing 19.4% in USD terms for the year despite declining 7.7% during the fourth quarter. Much of the broad-based MSCI Emerging Market Index's returns are attributable to the health of the dominant Chinese economy, which came under pressure during the year due to troubles in the manufacturing and commercial property sectors.
- Much like domestic markets, trailing one-year results for international developed and emerging markets benchmarks were strongly positive. Higher LCL versus USD returns for most international benchmarks demonstrate the USD's relative strength over the trailing one-year period, which represents a drag on results for US investors.
- Most broad and regional indexes were positive for the trailing 12 months in both USD and LCL terms. The exception to these positive results is the EM Latin America index, where negative LCL performance was exacerbated by the region's currency weakness, which led to a more severe 26.4% return in USD terms. The MSCI Pacific Index led the way with a return of 17.8% in LCL terms for the trailing year, but US investor returns were dampened to just 7.0% in USD terms.

Source: MSCI Global Index Monitor (Returns are Net)

The Market Environment International and Regional Market Index Performance (Country Count)



The Market Environment US Dollar International Index Attribution & Country Detail As of December 31, 2024

MSCI - EAFE	Sector Weight	Quarter Return	1-Year Return
Communication Services	4.8%	-4.7%	11.2%
Consumer Discretionary	11.3%	-4.3%	1.4%
Consumer Staples	8.3%	-12.6%	-7.9%
Energy	3.5%	-8.3%	-10.5%
Financials	21.9%	-2.3%	20.9%
Health Care	12.4%	-14.1%	-1.5%
Industrials	17.8%	-6.4%	9.6%
Information Technology	8.8%	-7.2%	3.8%
Materials	6.1%	-17.8%	-12.9%
Real Estate	2.0%	-13.4%	-3.9%
Utilities	3.2%	-12.8%	-4.1%
Total	100.0%	-8.1%	3.8%

MSCI - ACWIXUS	Sector Weight	Quarter Return	1-Year Return
Communication Services	5.9%	-6.8%	12.4%
Consumer Discretionary	11.2%	-8.1%	4.6%
Consumer Staples	7.0%	-12.4%	-7.8%
Energy	5.0%	-7.9%	-3.5%
Financials	23.7%	-2.8%	17.5%
Health Care	8.8%	-13.9%	-1.4%
Industrials	14.0%	-7.1%	7.5%
Information Technology	13.5%	-1.8%	13.3%
Materials	6.3%	-17.2%	-12.6%
Real Estate	1.8%	-11.5%	-1.7%
Utilities	3.0%	-12.8%	-2.0%
Total	100.0%	-7.6%	5.5%

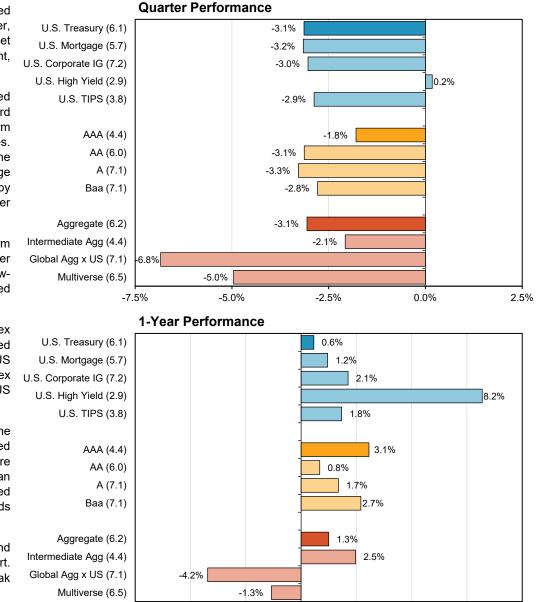
MSCI - Emerging Mkt	CI - Emerging Mkt Sector Weight		1-Year Return	
Communication Services	9.4%	-8.1%	15.9%	
Consumer Discretionary	13.1%	-14.5%	11.8%	
Consumer Staples	4.8%	-13.9%	-11.1%	
Energy	4.6%	-14.5%	-5.9%	
Financials	23.7%	-5.0%	11.0%	
Health Care	3.5%	-11.7%	-0.9%	
Industrials	6.6%	-10.9%	0.6%	
Information Technology	24.3%	1.1%	20.4%	
Materials	5.7%	-18.6%	-19.6%	
Real Estate	1.7%	-6.5%	3.8%	
Utilities	2.7%	-14.1%	3.3%	
Total	100.0%	-8.0%	7.5%	

	MSCI-EAFE	MSCI-ACWIxUS	Quarter	1- Year
Country	Weight	Weight	Return	Return
Japan	23.2%	14.5%	-3.6%	8.3%
United Kingdom	14.9%	9.3%	-6.8%	7.5%
France	11.1%	6.9%	-10.3%	-5.3%
Switzerland	9.6%	6.0%	-11.3%	-2.0%
Germany	9.2%	5.8%	-5.7%	10.2%
Australia	7.4%	4.6%	-11.4%	1.2%
Netherlands	4.6%	2.9%	-12.4%	1.4%
Sweden	3.6%	2.2%	-14.0%	-3.7%
Denmark	2.9%	1.8%	-21.5%	-12.9%
Italy	2.8%	1.7%	-6.7%	11.3%
Spain	2.8%	1.7%	-9.2%	9.8%
Hong Kong	2.0%	1.2%	-9.8%	0.1%
Singapore	1.7%	1.0%	3.2%	32.3%
Belgium	1.0%	0.6%	-8.3%	8.5%
Finland	1.0%	0.6%	-13.1%	-7.3%
srael	1.0%	0.6%	14.1%	38.3%
Norway	0.6%	0.4%	-5.4%	-4.3%
reland	0.3%	0.2%	-12.6%	14.0%
New Zealand	0.2%	0.1%	-6.0%	-1.5%
Austria	0.2%	0.1%	1.1%	18.3%
Portugal	0.2%	0.1%	-22.7%	-25.2%
Total EAFE Countries	100.0%	62.3%	-8.1%	3.8%
Canada		8.1%	-1.8%	11.9%
Total Developed Countries		70.4%	-7.4%	4.7%
China		8.2%	-7.7%	19.4%
Taiwan		5.8%	3.3%	34.4%
ndia		5.8%	-11.3%	11.2%
Korea		2.7%	-19.2%	-23.4%
Saudi Arabia		1.2%	-1.5%	0.6%
Brazil		1.2%	-19.4%	-29.8%
South Africa		0.9%	-12.1%	6.7%
Mexico		0.5%	-10.6%	-27.1%
Valaysia		0.5%	-6.9%	20.8%
Indonesia		0.4%	-15.6%	-13.0%
Thailand		0.4%	-10.1%	1.3%
United Arab Emirates		0.4%	9.0%	19.6%
Qatar		0.3%	-0.2%	6.1%
Poland		0.2%	-11.5%	-6.7%
Kuwait		0.2%	1.2%	10.5%
Furkey		0.2%	-3.2%	17.8%
Philippines		0.2%	-13.9%	-0.7%
Greece		0.1%	-6.2%	8.9%
Chile		0.1%	-6.8%	-7.5%
Peru		0.1%	-9.1%	15.8%
Hungary		0.1%	-2.3%	14.0%
Czech Republic		0.0%	0.9%	4.0%
Colombia		0.0%	-0.2%	7.9%
Egypt		0.0%	-9.0%	-31.2%
Total Emerging Countries		29.7%	-8.0%	7.5%
Total ACWIxUS Countries		100.0%	-7.6%	5.5%

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 declined during the fourth quarter despite two additional 0.25% rate cuts by the Fed. Although the Fed's action moved short-term rates lower, longer-term yields advanced during the quarter, leading to a modest steepening of the Treasury Yield Curve. The Fed's target range is now set at 4.25%-4.50% at year-end, down a full percentage point, including the first 0.50% cut in September of 2024.
- While the Fed's first rate cut in September was initially celebrated by fixed income investors and boosted the levels of the indexes during the third quarter, many of the core indexes fell during the fourth quarter as longer-term yields advanced and worked against the Fed's short-term rate declines. Performance across the investment-grade index's segments declined with the Treasury, Mortgage-Backed and Corporate IG indexes falling in a tight range around -3.0%. Higher quality issues performed better, as BBB issues fell by -2.8%, while AAA issues fell a smaller -1.8% due in large part to their lower duration (4.4 vs. 7.1 years).
- High Yield bonds outperformed investment grade issues as longer-term yields climbed. This was primarily due to the high-yield benchmark's lower duration and higher coupon income. Despite their lower credit quality, belowinvestment grade issues returned just 0.2% for the quarter, but still outpaced all other broad-based investment-grade fixed income indexes.
- Over the trailing one-year period, the Bloomberg US Aggregate Bond Index posted a return of 1.3%. The benchmark's sub-components also posted positive performance over the trailing 12 months with the Bloomberg US Corporate Investment Grade Index rising 2.1% and the US Mortgage Index returning 1.2%. US TIPS, which are excluded from the Bloomberg US Aggregate Bond Index, returned 1.8% for the trailing year.
- Results were mixed across credit qualities of investment grade issues. The performance of AAA issues was aided by their lower duration and returned 3.1% while AA issues returned only 0.8% for the year. High yield bonds were also the best performing segment of the market for the year, returning an outsized 8.2%, more than double any other segment of the domestic fixed income market. Results in high yield were spurred by stable credit spreads and higher coupon income.
- The Bloomberg Global Aggregate ex-US Index finished both the quarter and the year significantly weaker than its domestic benchmark counterpart. Strength in the USD was a primary driver in the international index's weak -6.8% fourth quarter performance and its -4.2% return for the calendar year.



-7.5%

-5.0%

-2.5%

0.0%

2.5%

5.0%

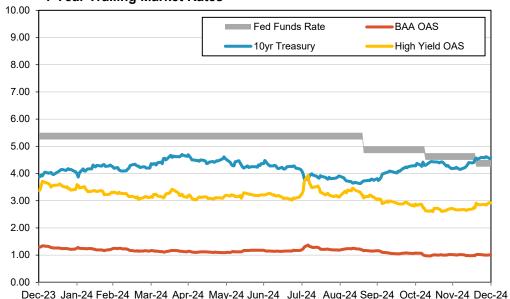
7.5%

10.0%

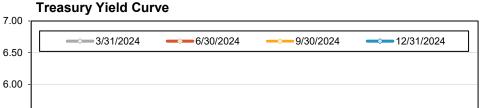
Source: Bloomberg

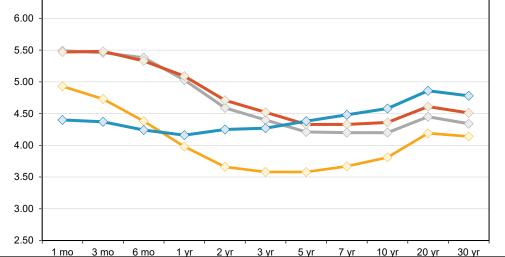
The Market Environment Market Rate & Yield Curve Comparison As of December 31, 2024

- The gray band across the graph illustrates the fed funds target rate range over the last 12 months. During the fourth quarter, the Federal Open Market Committee (FOMC) cut its policy rates by 0.50% with two successive 0.25% cuts in November and December. The target policy range now stands at 4.25-4.50%, a level not seen since January of 2023. With inflation declining and unemployment remaining largely stable, the Fed has pivoted from its restrictive monetary policy stance. The most recent FOMC press release continued to emphasize economic data-dependent outcomes while placing greater 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 90% probability of no rate decrease at the FOMC January 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.
- The yield on the US 10-year Treasury (blue line of the top chart) rose 0.84% during the quarter. The bellwether benchmark rate opened the quarter at a yield of 3.74% and finished December at a yield of 4.58%, which is its highest level since May 2024.
- 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 experienced a slight decline, beginning October at 1.13% and finishing December at 1.02%. High-yield OAS spreads (represented by the yellow line in the top chart) also remained relatively stable, despite a sharp spike in early August spurred by an unwinding of the yen carry trade. The high-yield OAS fell by 0.11% over the quarter from 3.03% to 2.92%. 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 November 2022, the quarter-end yield on the 30-year Treasury was higher than the one-month Treasury. Furthermore, the spread between the two-year yield and the 10-year yield continued to widen during the quarter, growing from 0.15% in October to 0.30% at year end. The yield curve had been inverted for much of the last two years. This 2-10-year yield curve inversion is a common heuristic used to foretell a pending recession.









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 Limps Into 2024 - WSJ Support Site - Global Index Lens: Index Returns - MSCI

Federal Reserve issues FOMC statement

The Fed - Meeting calendars and information (federalreserve.gov)

The Federal Reserve's latest dot plot, explained - and what it says about interest rates | Bankrate

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)

The Fed's dot plot shows only two rate cuts in 2025, fewer than previously projected

Page Intentionally Left Blank



4Q 2024 EXECUTIVE SUMMARY

Market Summary:

The fourth quarter of 2024 saw a mixed performance across global stock and bond markets. Rising global interest rates, driven by persistent inflationary pressures and concerns about the pace of economic growth, weighed heavily on bond markets (Bloomberg US Aggregate -3.06%). US equities continued their strong run, driven by robust corporate earnings and optimism surrounding the new administration's policies; however, international markets experienced greater volatility. Within the US equity market, large-cap stocks outperformed their smaller-cap counterparts. The S&P 500 Index experienced a modest but positive return (2.41%), driven by strong performances from technology and consumer discretionary sectors. In contrast, the Russell 2000 Index, which tracks small-cap US equities, exhibited more subdued growth, facing challenges from rising interest rates and concerns about slowing economic growth (0.33%). International and emerging markets, particularly those heavily reliant on commodity exports, faced headwinds due to a slowdown in global demand particularly from China (MSCI EAFE -8.11%; MSCI EM -8.01%).

Conclusions/Recommendations:

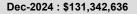
- 1. The Total Fund declined 0.54% (preliminary return) during the quarter, ranking in the top half of the Public Fund universe and performing in line with the Policy Index. (Note: Marathon Distressed, Metropolitan, PCCP, TerraCap, PA/Apogem, and Sturbridge have not yet reported their 4Q 2024 results about 8% of the portfolio.)
- 2. The Total Fund returned 11.73% over the past year, exceeding the Policy Index by 42 basis points and ranking in the top third of the peer group. Longer-term, the Fund has ranked in the top decile of the public fund universe and out performed the Policy Index.
- 3. Deroy & Devereaux posted a positive 1.12% for the quarter, out performing the Russell 2500 Value Index by 1.38% and ranking in the top quartile of their universe. The manager benefited from strong stock selection within the Industrials, Energy and Financials sectors. The manager exceeds performance expectations.
- 4. LSV protected on the downside, out performing the MSCI EAFE Index by 1.35% during a difficult quarter for international stocks. The out performance is partially attributed to the portfolio's value bias, as international value stocks out performed their growth counterparts. Longer-term, LSV exceeds performance expectations.
- 5. AEW posted a positive return this quarter and ranked near the median fund in the peer group; this was AEW's first positive result in two years. The real estate market appears to be stabilizing after multiple quarters of losses associated with higher rates and declining office values. Longer-term, AEW exceeds performance expectations.
- 6. At quarter end the Fund was in compliance with all target allocations (IPS and Act 314). (See additional comments and recommendations on the Asset/Manager Summary handout.)

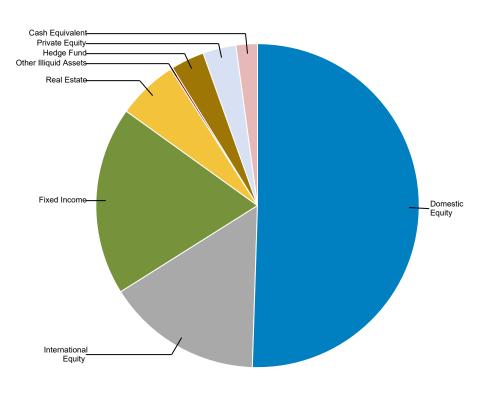
Southfield Employees Retirement System Total Fund Asset Allocation Compliance Summary December 31, 2024

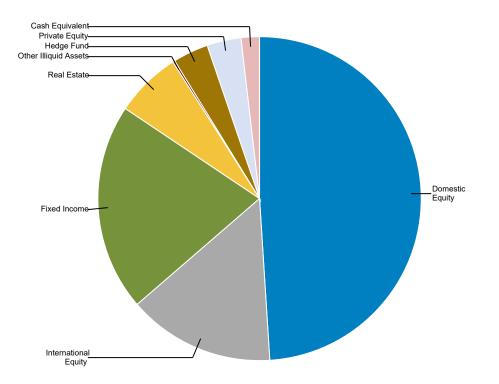
Total Portfolio Compliance Summary							
	December 31, 2024	Current	Target	Range	Act 314	Compliance	Compliance
	Market Value \$	Allocation %	Allocation %	Allocation %	Limit %	within Ranges	w/314 Limits
Total Portfolio (excluding Unfunded Commitments)	131,342,636.12	100.0%	100.0%				

Total Equity (14)	83,621,843.47	63.7%	65.0%	40.0% - 80.0%	70.0%	YES	YES
Domestic Equity (14)	64,341,304.07	49.0%	50.0%	40.0% - 60.0%	70.0%	YES	YES
International Equity (14)	10 200 520 40	14.7%	15.0%	0.0% - 20.0%	70.0%	YES	YES
International Equity (14)	19,280,539.40	14.7%	15.0%	0.0% - 20.0%	70.0%	TES	TES
Total US Fixed Income (17 & 17.1.a.iii)	22,118,473.99	16.8%	17.0%	15.0% - 30.0%	100.0%	YES	YES
US Investment Grade Fixed Income (17)	18,784,659.56	14.3%	17.0%	7.0% - 27.0%	100.0%	YES	YES
US Non-Investment Grade Fixed Income (17.1.a.iii)	3,333,814.43	2.5%	0.0%	0.0% - 10.0%	100.0%	YES	YES
Total Real Estate (18 & 19)	8,668,313.56	6.6%	8.0%	0.0% - 15.0%	20.0%	YES	YES
Alternative Investments (20d)	14,514,602.33	11.1%	10.0%	0.0% - 15.0%	20.0%	YES	YES
Short Term/Cash Reserves	2,419,402.77	1.8%	0.0%	0.0% - 10.0%	N/A	YES	YES

Sep-2024 : \$133,675,675







llocation			Allocation		
	Market Value	Allocation		Market Value	Allocation
Domestic Equity	67,522,383	50.5	Domestic Equity	64,341,304	49.0
International Equity	20,790,861	15.6	International Equity	19,280,539	14.7
Fixed Income	25,185,244	18.8	Fixed Income	27,216,054	20.7
Real Estate	8,090,292	6.1	Real Estate	8,668,314	6.6
Other Illiquid Assets	299,258	0.2	Other Illiquid Assets	277,659	0.2
Hedge Fund	4,472,203	3.3	Hedge Fund	4,657,786	3.5
Private Equity	4,443,450	3.3	Private Equity	4,481,577	3.4
Cash Equivalent	2,871,984	2.1	Cash Equivalent	2,419,403	1.8

	Market Value	Net	Contributions	Distributions	Management	Other	Return On	Market Value
Total Domestic Equity	10/01/2024 67,522,383	Transfers -4,198,096		-	Fees -71,171	Expenses -1,955	Investment 1,090,143	12/31/2024 64,341,304
Fidelity 500 Index Institutional (FXAIX)	30,430,782	-2,698,158		-	-/ 1, 1/ 1	-1,955	744,079	28,476,702
Champlain MC Equity	11,912,508	-2,030,130		_	-25,313	-670	196,021	12,082,608
Reinhart Sm/Mid Cap PMV	12,285,715		_	_	-23,033	-623	-74,920	12,187,138
Deroy & Devereaux SMID Cap Value	12,893,378	-1,500,000	-	-	-22,825	-661	224,963	11,594,855
Derby & Devereaux Sivild Cap value	12,095,576	-1,500,000	-	-	-22,025	-001	224,903	11,394,035
Total International Equity	20,790,861	31	-	-	-18,455	-489	-1,491,409	19,280,539
LSV International LCV	10,816,839	-	-	-	-	-	-726,765	10,090,073
WCM Focused Growth International	9,974,022	31	-	-	-18,455	-489	-764,643	9,190,466
Total Fixed Income	25,185,244	2,552,025	-	-	-14,361	-954	-505,899	27,216,054
Pacific Fixed Income	19,435,916	1	-	-	-14,361	-954	-635,942	18,784,660
Bloomfield Fund V Series A	132,772	-55,842	-	-	-	-	29,091	106,021
Bloomfield Fund V Series B	1,198,193	-236,598	-	-	-	-	37,287	998,882
Bloomfield Fund V Series C	738,611	1,277,116	-	-	-	-	33,244	2,048,972
Bloomfield Fund V Series D	-	116,872	-	-	-	-	-668	116,204
Marathon Distressed Credit Fund LP	2,127,025	-299,524	-	-	-	-	-	1,827,501
Marathon Dislocation Fund, L.P.	1,552,726	1,750,000	-	-	-	-	31,088	3,333,814
Total Real Estate	8,090,292	547,314	-	-	-15,056	-	45,763	8,668,314
AEW Core Property Trust	5,429,201	-	-	-	-15,056	-	45,763	5,459,908
Metropolitan Real Estate V	428,252	-	-	-	-	-	-	428,252
PCCP Equity VIII	1,658,349	-112,686	-	-	-	-	-	1,545,663
TerraCap Partners IV	574,490	-	-	-	-	-	-	574,490
TerraCap Partners VI	-	660,000	-	-	-	-	-	660,000
Total Timber Funds	299,258	-	-	-	-	-	-21,599	277,659
RMK Timberland Intl Fund	299,258	-	-	-	-	-	-21,599	277,659
Total Hedge Fund of Funds	4,472,203	-	-	-	-	-	185,584	4,657,786
Magnitude Institutional	4,472,203	-	-	-	-	-	185,584	4,657,786
Total Other Assets	4,443,450	50,981	-	-	-7,500	-5,355	-	4,481,577
PA/Apogem Sec Fund VI	3,043,443	50,981	-	-	-7,500	-5,355	-	3,081,570
Sturbridge Diversified III	1,400,007	-	-	-	-	-	-	1,400,007
Cash Account	2,871,984	1,047,745	1,872,158	-3,296,517	-	-78,520	2,553	2,419,403
Total Fund	133,675,675	-	1,872,158	-3,296,517	-126,543	-87,273	-694,864	131,342,636

*Other expenses represent any professional fees outside of the management fee (custody, consultant, attorney, and admin).

Asset Allocation & Performance

Southfield Employees Retirement System

	Allocatio	on			Performance(%)		
	Market Value	%	QTR	1 YR	3 YR	5 YR	10 YR
- /	\$						
Total Fund	131,342,636	100.0	-0.54 (36)	11.73 (29)	4.84 (3)	8.68 (5)	8.10 (8)
Total Fund Policy			-0.60	11.31	3.17	7.26	7.38
Difference			0.07	0.42	1.67	1.42	0.71
All Public Plans-Total Fund Median			-0.88	10.88	2.70	6.95	6.99
Total Domestic Equity	64,341,304	49.0	1.50 (46)	18.42 (40)	7.04 (42)	11.95 (46)	10.38 (55)
Total Domestic Equity Policy			1.31	18.23	5.81	11.48	10.70
Difference			0.19	0.19	1.23	0.48	-0.32
IM U.S. Equity (SA+CF) Median			0.95	16.14	6.00	11.40	10.77
Total International Equity	19,280,539	14.7	-7.18 (47)	6.21 (44)	1.50 (49)	6.61 (28)	8.18 (15)
Total International Equity Policy			-7.50	6.09	0.92	4.28	4.97
Difference			0.33	0.12	0.58	2.33	3.21
IM International Equity (SA+CF) Median			-7.33	5.45	1.36	5.16	6.14
Total Fixed Income	27,216,054	20.7	-1.93 (4)	3.98 (5)	0.93 (2)	2.40 (2)	3.60 (3)
Total Fixed Income Policy			-3.06	1.25	-2.41	-0.33	1.35
Difference			1.13	2.73	3.34	2.73	2.25
IM U.S. Broad Market Core Fixed Income (SA+CF) Median			-2.99	1.91	-2.01	0.24	1.85
Total Real Estate	8,668,314	6.6	0.53 (71)	-1.85 (70)	-3.85 (74)	2.38 (62)	5.64 (63)
Total Real Estate Policy	-,,		1.16	-1.43	-3.41	1.51	4.82
Difference			-0.63	-0.42	-0.44	0.87	0.81
IM U.S. Open End Private Real Estate (SA+CF) Median			0.97	-1.35	-2.28	2.99	6.17
Total Hedge Fund of Funds	4,657,786	3.5	4.15	13.96	9.23	8.60	N/A
HFRI FOF: Diversified Index	1,007,700	0.0	2.49	9.12	3.67	5.48	3.88
Difference			1.66	4.85	5.56	3.12	N/A
Total Timber Funds	277,659	0.2	0.00	-22.82	-8.94	-13.70	-6.55
Total Timber Policy	,000	•	9.34	14.11	13.23	9.54	7.09
Difference			-9.34	-36.94	-22.17	-23.24	-13.64

Asset Allocation & Performance

Southfield Employees Retirement System

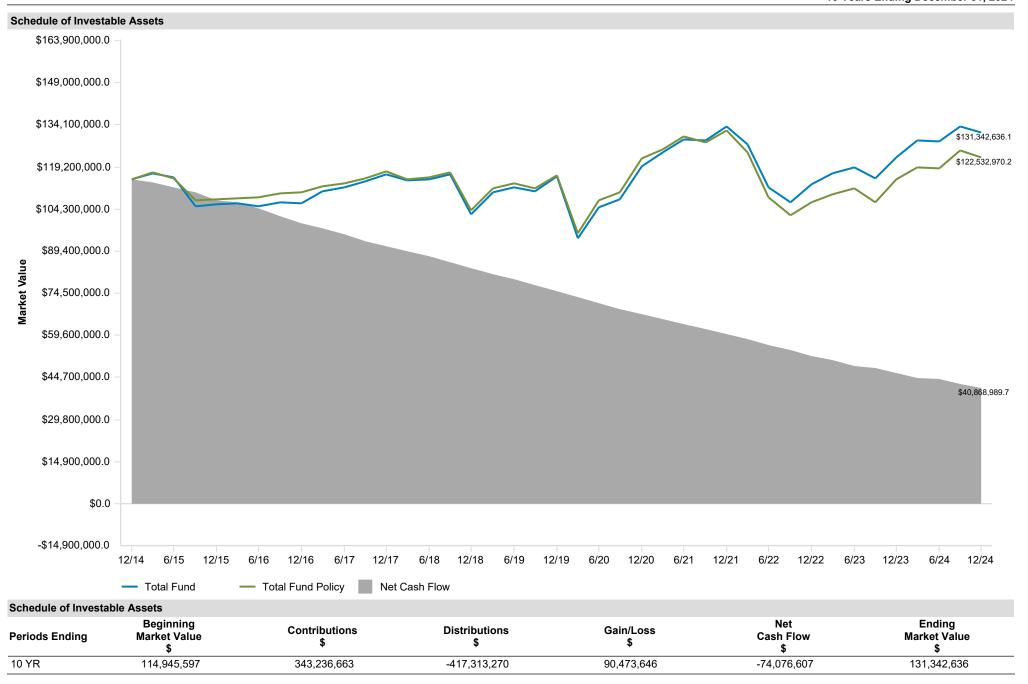
	Allocatio	n			Performance(%)		
	Market Value \$	%	QTR	1 YR	3 YR	5 YR	10 YR
Total Domestic Equity	64,341,304	49.0	1.50 (46)	18.42 (40)	7.04 (42)	11.95 (46)	10.38 (55)
Total Domestic Equity Policy			1.31	18.23	5.81	11.48	10.70
Difference			0.19	0.19	1.23	0.48	-0.32
IM U.S. Equity (SA+CF) Median			0.95	16.14	6.00	11.40	10.77
Fidelity 500 Index Institutional (FXAIX)	28,476,702	21.7	2.41 (28)	N/A	N/A	N/A	N/A
S&P 500 Index			2.41	25.02	8.94	14.53	13.10
Difference			0.00	N/A	N/A	N/A	N/A
Large Blend Median			2.05	23.25	7.87	13.40	11.89
Champlain MC Equity	12,082,608	9.2	1.64 (18)	7.14 (93)	-2.43 (96)	8.65 (89)	N/A
Russell Midcap Index			0.62	15.34	3.79	9.92	9.63
Difference			1.02	-8.20	-6.21	-1.28	N/A
IM U.S. Mid Cap Core Equity (SA+CF) Median			0.34	13.93	4.88	10.38	9.86
Reinhart Sm/Mid Cap PMV	12,187,138	9.3	-0.61 (67)	15.81 (30)	12.07 (2)	N/A	N/A
Russell 2500 Index			0.62	11.99	2.39	8.77	8.85
Difference			-1.23	3.81	9.68	N/A	N/A
IM U.S. SMID Cap Equity (SA+CF) Median			0.36	12.91	2.69	10.22	9.86
Deroy & Devereaux SMID Cap Value	11,594,855	8.8	1.12 (18)	17.65 (9)	N/A	N/A	N/A
Russell 2500 Value Index			-0.26	10.98	3.81	8.44	7.81
Difference			1.38	6.67	N/A	N/A	N/A
IM U.S. SMID Cap Value Equity (SA+CF) Median			-0.77	11.39	4.90	9.70	9.00
Fotal International Equity	19,280,539	14.7	-7.18 (47)	6.21 (44)	1.50 (49)	6.61 (28)	8.18 (15)
Total International Equity Policy			-7.50	6.09	0.92	4.28	4.97
Difference			0.33	0.12	0.58	2.33	3.21
IM International Equity (SA+CF) Median			-7.33	5.45	1.36	5.16	6.14
_SV International LCV	10,090,073	7.7	-6.72 (31)	5.07 (52)	5.72 (28)	5.35 (50)	5.93 (51)
MSCI EAFE Index			-8.06	4.35	2.17	5.24	5.71
Difference			1.35	0.73	3.56	0.11	0.22
IM International Large Cap Value Equity (SA+CF) Median			-7.87	5.18	3.94	5.34	5.94

Asset Allocation & Performance

Southfield Employees Retirement System

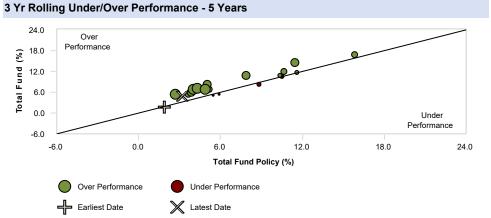
	Allocatio	n			Performance(%)			
	Market Value \$	%	QTR	1 YR	3 YR	5 YR	10 YR	
WCM Focused Growth International	9,190,466	7.0	-7.68 (66)	7.72 (32)	-2.94 (56)	7.51 (21)	10.61 (4)	
MSCI EAFE (Net) Index	0,100,100		-8.11	3.82	1.65	4.73	5.20	
Difference			0.44	3.90	-4.59	2.78	5.41	
IM International Growth Equity (SA+CF) Median			-7.01	4.01	-2.61	5.02	7.19	
Total Fixed Income	27,216,054	20.7	-1.93 (4)	3.98 (5)	0.93 (2)	2.40 (2)	3.60 (3)	
Total Fixed Income Policy			-3.06	1.25	-2.41	-0.33	1.35	
Difference			1.13	2.73	3.34	2.73	2.25	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median			-2.99	1.91	-2.01	0.24	1.85	
Pacific Fixed Income	18,784,660	14.3	-3.27 (95)	1.34 (89)	-2.11 (60)	0.09 (71)	1.72 (66	
Blmbg. U.S. Aggregate Index			-3.06	1.25	-2.41	-0.33	1.35	
Difference			-0.21	0.09	0.30	0.41	0.37	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median			-2.99	1.91	-2.01	0.24	1.85	
otal Real Estate	8,668,314	6.6	0.53 (71)	-1.85 (70)	-3.85 (74)	2.38 (62)	5.64 (63	
Total Real Estate Policy			1.16	-1.43	-3.41	1.51	4.82	
Difference			-0.63	-0.42	-0.44	0.87	0.81	
IM U.S. Open End Private Real Estate (SA+CF) Median			0.97	-1.35	-2.28	2.99	6.17	
EW Core Property Trust	5,459,908	4.2	0.84 (55)	-0.04 (35)	-0.41 (19)	4.12 (17)	6.44 (37	
NCREIF Fund Index-ODCE (VW)			1.16	-1.43	-2.32	2.87	5.88	
Difference			-0.32	1.40	1.91	1.25	0.56	
IM U.S. Open End Private Real Estate (SA+CF) Median			0.97	-1.35	-2.28	2.99	6.17	
otal Hedge Fund of Funds	4,657,786	3.5	4.15	13.96	9.23	8.60	N/A	
HFRI FOF: Diversified Index			2.49	9.12	3.67	5.48	3.88	
Difference			1.66	4.85	5.56	3.12	N/A	
Agnitude Institutional	4,657,786	3.5	4.15	13.96	10.17	10.00	N/A	
HFRI FOF: Diversified Index			2.49	9.12	3.67	5.48	3.88	
Difference			1.66	4.85	6.50	4.52	N/A	
Cash/Sec Lit	2,419,403	1.8						

Comparative Performance - IRR								
	QTR	FYTD	1 YR	3 YR	5 YR	7 YR	Since Inception Ending Dec-2024	Inception Date
Bloomfield Fund V Series A	28.80	39.14	18.23	6.25	10.74	N/A	10.34	02/14/2019
Bloomfield Fund V Series B	3.34	5.81	7.30	8.37	N/A	N/A	8.18	04/22/2021
Bloomfield Fund V Series C	1.81	4.72	8.71	N/A	N/A	N/A	8.85	03/31/2023
Bloomfield Fund V Series D	N/A	N/A	N/A	N/A	N/A	N/A	-0.53	11/06/2024
Marathon Distressed Credit Fund LP	0.00	10.44	17.34	4.60	N/A	N/A	10.19	01/04/2021
Marathon Dislocation Fund, L.P.	1.19	4.02	N/A	N/A	N/A	N/A	4.29	06/03/2024
Metropolitan Real Estate V	0.00	0.00	-3.62	-1.67	0.19	1.34	6.61	11/30/2011
PCCP Equity VIII	0.00	3.96	8.15	4.09	11.39	N/A	10.31	07/23/2019
RMK Timberland Intl Fund	-7.22	-8.79	-27.59	-11.73	-14.85	-10.37	-9.22	11/21/2012
TerraCap Partners IV	0.00	-9.11	-31.25	-30.73	-13.05	N/A	-7.99	07/03/2019
TerraCap Partners VI	N/A	N/A	N/A	N/A	N/A	N/A	0.00	12/02/2024
PA/Apogem Sec Fund VI	-0.42	2.22	10.99	N/A	N/A	N/A	41.70	08/02/2022
Sturbridge Diversified III	0.00	0.00	-2.49	N/A	N/A	N/A	24.32	12/27/2022

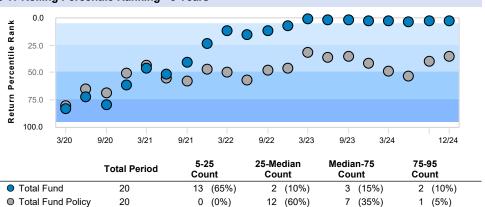


Plan Sponsor Peer Group Analysis - All Public Plans-Total Fund 20.00 32.00 26.00 17.00 • • 20.00 14.00 \circ • • • • \circ \circ 0 14.00 0 11.00 0 8.00 \circ igodol8.00 Return Return 0 2.00 \circ 0 5.00 0 \mathbf{O} -4.00 0 2.00 igodol-10.00 0 \circ \circ -1.00 -16.00 -4.00 -22.00 -7.00 -28.00

	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR		2023	2022	2021	2020	2019
Total Fund	-0.54 (36)	4.87 (32)	11.73 (29)	12.97 (31)	4.84 (3)	8.03 (3)	8.68 (5)	Total Fund	14.23 (35)	-9.70 (13)	18.20 (7)	11.31 (71)	21.54 (12)
Total Fund Policy	-0.60 (39)	5.88 (5)	11.31 (37)	12.59 (39)	3.17 (35)	5.80 (39)	7.26 (36)	Total Fund Policy	13.88 (41)	-13.37 (46)	14.10 (45)	13.32 (45)	20.11 (36)
Median	-0.88	4.42	10.88	11.98	2.70	5.37	6.95	Median	13.28	-13.81	13.81	12.96	19.17
Comparative Perfor	mance												
		Er	Qtr nding p-2024		1 Qtr Ending un-2024		1 Qtr Ending Mar-2024	1 Qtr Ending Dec-2023		1 Qt Endir Sep-20	ng		1 Qtr Ending un-2023
Total Fund		5.4	4 (50)	-0	.03 (94)		6.58 (7)	7.95 (57)		-2.38	(30)	3.	45 (40)
Total Fund Policy		6.5	2 (7)	0	.14 (91)		4.98 (44)	9.39 (23)		-3.44	(81)	3.	63 (29)
All Public Plans-Total	Fund Median	5.4	4	1	.16		4.87	8.17		-2.95		3.	28



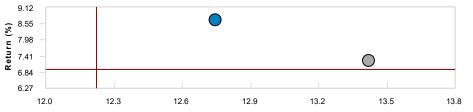
3 Yr Rolling Percentile Ranking - 5 Years



Peer Group Scattergram - 3 Years



Peer Group Scattergram - 5 Years

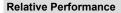


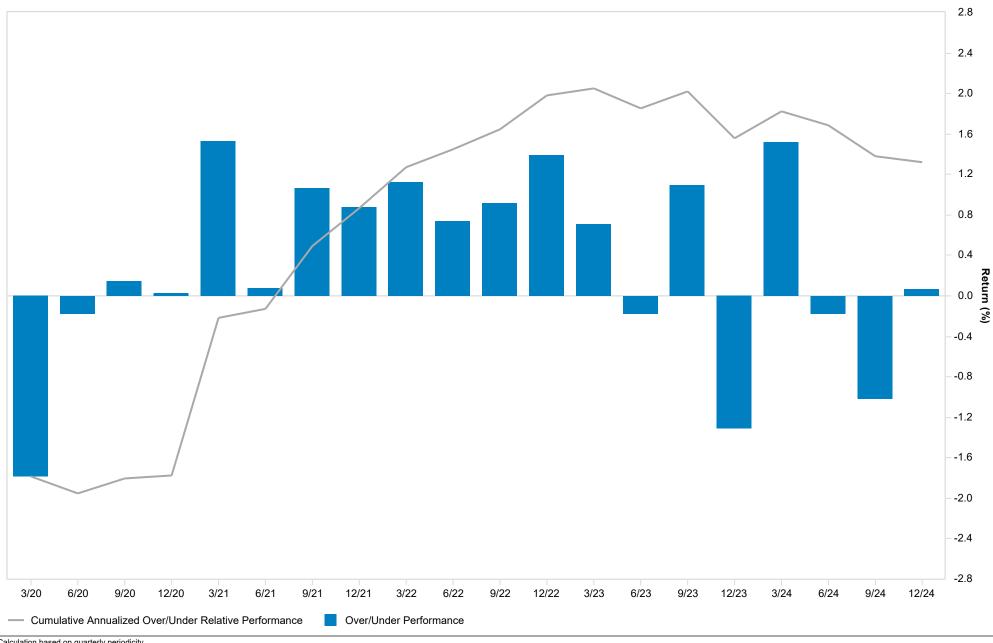
Risk (Standard Deviation %)

	Return	Standard Deviation		Return	Standard Deviation
Total Fund	4.84	11.75	Total Fund	8.68	12.74
Total Fund Policy	3.17	13.14	Total Fund Policy	7.26	13.42
Median	2.70	11.68	Median	6.95	12.22

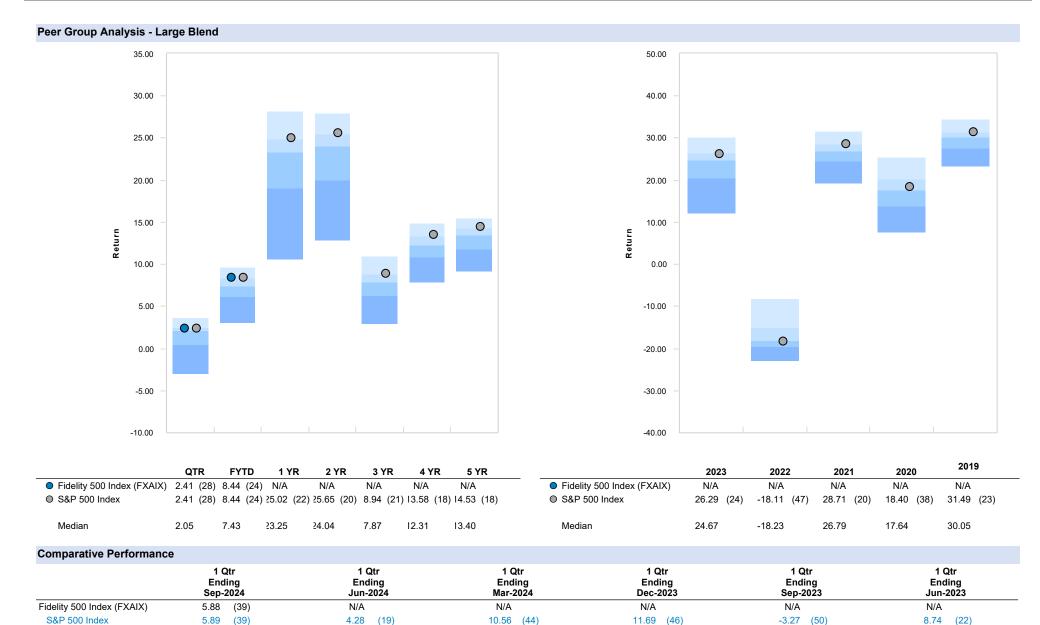
Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Fund	2.15	93.34	83.63	1.91	0.67	0.14	0.89	7.45
Total Fund Policy	0.00	100.00	100.00	0.00	N/A	0.01	1.00	8.63
Historical Statistics	s - 5 Years							
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Fund	2.00	98.89	90.16	1.73	0.62	0.53	0.94	8.23
Total Fund Policy	0.00	100.00	100.00	0.00	N/A	0.41	1.00	8.70





Page Intentionally Left Blank



10.47

11.64

-3.28

8.07

Large Blend Median

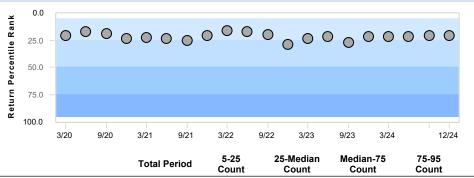
5.76

3.27

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

No data found.

3 Yr Rolling Percentile Ranking - 5 Years



	rotar r erioù	Count	Count	Count	Count	
Fidelity 500 Index (FXAIX)	0	0	0	0	0	
S&P 500 Index	20	18 (90%)	2 (10%)	0 (0%)	0 (0%)	

Peer Group Scattergram - 3 Years



Risk (Standard Deviation %)

Peer Group Scattergram - 5 Years



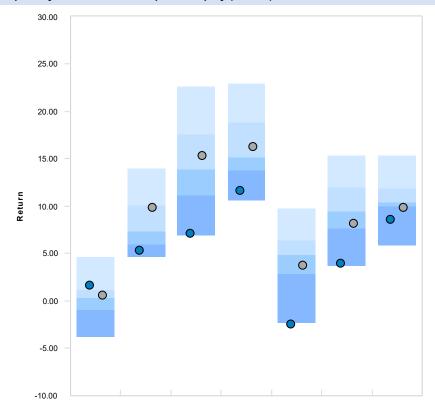
Risk (Standard Deviation %)

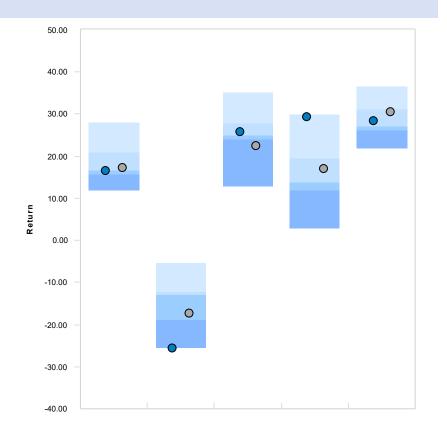
	Return	Standard Deviation		Return	Standard Deviation
 Fidelity 500 Index (FXAIX) 	N/A	N/A	 Fidelity 500 Index (FXAIX) 	N/A	N/A
S&P 500 Index	8.94	17.15	S&P 500 Index	14.53	18.06
Median	7.87	17.13	Median	13.40	18.06

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Fidelity 500 Index (FXAIX)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S&P 500 Index	0.00	100.00	100.00	0.00	N/A	0.37	1.00	11.16
Historical Statistics - 5 Y	ears							
	Tracking	Up	Down		Information	Sharpe		Downside

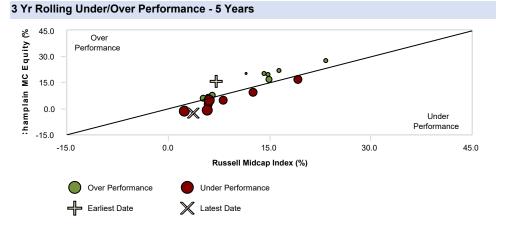
	Error	Market Capture	Market Capture	Alpha	Ratio	Sharpe Ratio	Beta	Risk
Fidelity 500 Index (FXAIX)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S&P 500 Index	0.00	100.00	100.00	0.00	N/A	0.71	1.00	11.30



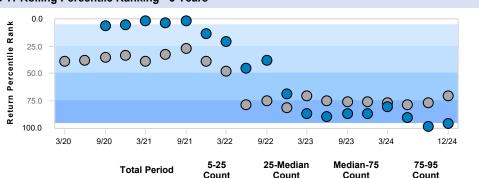


	QTR	FYTD	1)	(R 2	YR	3 YR	4 YR	5	YR			2023	202	2	2021	2020	2019
Champlain MC Equity	1.64 (18)	5.37 (8	36) 7.14	(93) 11.72	2 (91)	-2.43 (96)	4.00 (93) 8.65	5 (89)	O Ch	amplain MC Equity	16.49 (52)	-25.57	(95)	25.92 (45)	29.41 (6)	28.35 (38
O Russell Midcap Index	0.62 (30)	9.89 (2	26) 15.34	(37) 16.28	8 (36)	3.79 (71)	8.20 (69) 9.92	2 (77)	© Ru	ssell Midcap Index	17.23 (41)	-17.32	(70)	22.58 (79)	17.10 (35)	30.54 (27
Median	0.34	7.32	13.93	15.20	C	4.88	9.53	10.38	3	Me	dian	16.50	-13.10		24.80	13.76	27.08
Comparative Performa	ince																
				1 Qtr Ending Sep-202	g		1 Qt Endii Jun-20	ng		1 Qi Endi Mar-2	ng	1 Qtr Ending Dec-2023		:	1 Qtr Ending Sep-2023		1 Qtr Ending Jun-2023
Champlain MC Equity				3.67 ((97)		-7.50	(100)		9.92	(60)	12.09 (42)		_	6.13 (98)	4	4.77 (64)
Russell Midcap Index				9.21 (26)		-3.35	(32)		8.60	(78)	12.82 (29)		-	4.68 (72)	4	4.76 (66)
IM U.S. Mid Cap Core Eq	uity (SA+CF) Median		7.66			-3.46			9.96		11.97		-	4.19	4	4.85

Peer Group Analysis - IM U.S. Mid Cap Core Equity (SA+CF)



3 Yr Rolling Percentile Ranking - 5 Years

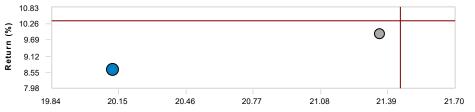


	Total Periou	Count	Count	Count	Count	
Champlain MC Equity	18	7 (39%)	2 (11%)	1 (6%)	8 (44%)	
Russell Midcap Index	20	0 (0%)	9 (45%)	4 (20%)	7 (35%)	

Peer Group Scattergram - 3 Years



Peer Group Scattergram - 5 Years

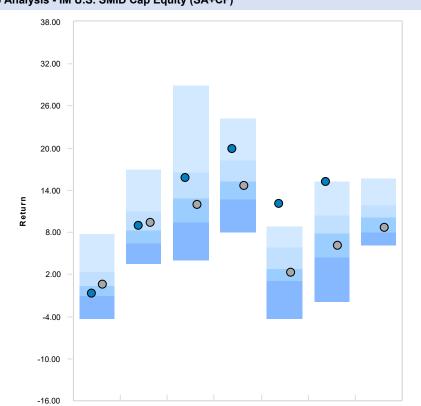


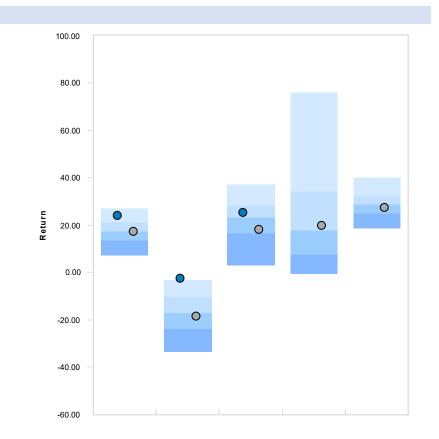
Risk (Standard Deviation %)

	Return	Standard Deviation		Return	Standard Deviation
Champlain MC Equity	-2.43	19.16	Champlain MC Equity	8.65	20.12
Russell Midcap Index	3.79	19.96	Russell Midcap Index	9.92	21.35
Median	4.88	19.84	Median	10.38	21.45

Historical Statistics - 3 Years

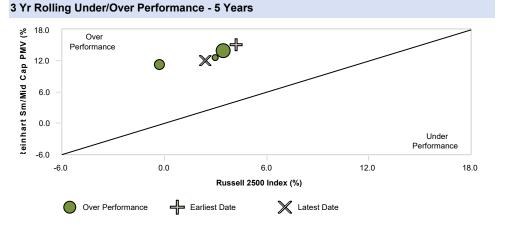
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Champlain MC Equity	7.23	74.45	92.85	-5.58	-0.88	-0.23	0.90	13.25
Russell Midcap Index	0.00	100.00	100.00	0.00	N/A	0.09	1.00	12.89
Historical Statistics -	5 Years							
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Champlain MC Equity	7.46	87.96	88.18	-0.09	-0.20	0.39	0.88	12.55
Russell Midcap Index	0.00	100.00	100.00	0.00	N/A	0.44	1.00	14.05



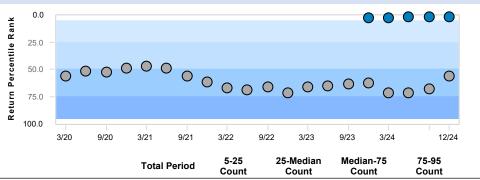


	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR		2023	2022	2021	2020	2019
Reinhart Sm/Mid Cap PMV -0.	61 (67)	8.98 (43)	15.81 (30) 20.00 (19) 12.07 (2)	15.30 (5)	N/A	Reinhart Sm/Mid Cap PMV	24.35 (17)	-2.25 (4)	25.57 (38)	N/A	N/A
Russell 2500 Index 0.	62 (48)	9.42 (39)	11.99 (56) 14.68 (54) 2.39 (56)	6.13 (66)	8.77 (71)	Russell 2500 Index	17.42 (50)	-18.37 (58)	18.18 (71)	19.99 (46)	27.77 (61)
Median 0.	.36	8.28	12.91	15.22	2.69	7.93	10.22	Median	17.39	-16.86	23.26	17.81	28.93
Comparative Performance													
			1 Qtr Ending Sep-202	9		1 Qtr Ending Jun-2024			1 Qtr Ending Dec-2023	Er	Qtr iding o-2023		1 Qtr Ending un-2023
Reinhart Sm/Mid Cap PMV			9.65 (23)		-1.02 (11))	7.36 (57) 15	5.40 (5)	-2.5	3 (18)	4.	83 (48)
Russell 2500 Index			8.75 (39)		-4.27 (65))	6.92 (66) 13	3.35 (27)	-4.7	8 (56)	5.	22 (45)
IM U.S. SMID Cap Equity (SA+CF) Median		8.24			-3.60		7.66 11	.87	-4.5	0	4.	65

Peer Group Analysis - IM U.S. SMID Cap Equity (SA+CF)

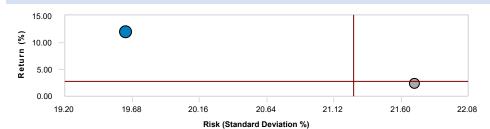


3 Yr Rolling Percentile Ranking - 5 Years



		Count	Count	Count	Count	
Reinhart Sm/Mid Cap PMV	5	5 (100%)	0 (0%)	0 (0%)	0 (0%)	
Russell 2500 Index	20	0 (0%)	3 (15%)	17 (85%)	0 (0%)	

Peer Group Scattergram - 3 Years



100.00

100.00

0.00

Peer Group Scattergram - 5 Years

N/A



Risk (Standard Deviation %)

0.37

1.00

15.29

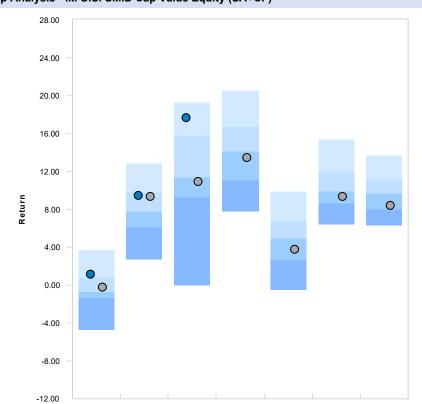
	Return	Standard Deviation		Return	Standard Deviation
Reinhart Sm/Mid Cap PMV	12.07	19.63	Reinhart Sm/Mid Cap PMV	N/A	N/A
Russell 2500 Index	2.39	21.70	Russell 2500 Index	8.77	23.21
Median	2.69	21.26	Median	10.22	22.98

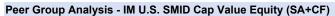
Historical Statistics - 3 Years

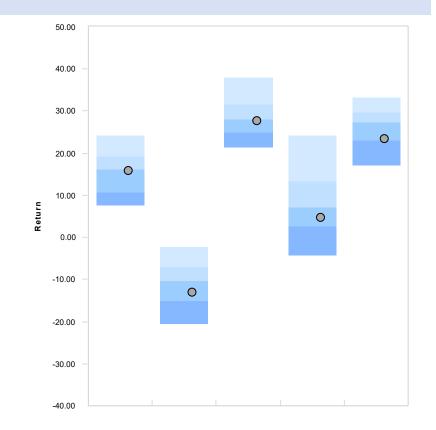
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Reinhart Sm/Mid Cap PMV	6.62	99.20	69.88	9.69	1.31	0.49	0.86	10.82
Russell 2500 Index	0.00	100.00	100.00	0.00	N/A	0.04	1.00	13.97
Historical Statistics - 5 Ye	ars							
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Reinhart Sm/Mid Cap PMV	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

0.00

Russell 2500 Index





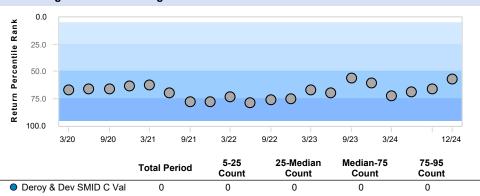


	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR		2023	2022	2021	2020	2019
Deroy & Dev SMID C Val	1.12 (18)	9.48 (31)	17.65 (9)	N/A	N/A	N/A	N/A	Deroy & Dev SMID C Val	N/A	N/A	N/A	N/A	N/A
Russell 2500 Value Index	-0.26 (40)	9.34 (33)	10.98 (54)) 13.45 (52)	3.81 (57)	9.35 (60)	8.44 (71)	Russell 2500 Value Index	15.98 (51)	-13.08 (68)	27.78 (52)	4.88 (61)	23.56 (69
Median	-0.77	7.76	11.39	14.07	4.90	9.86	9.70	Median	16.04	-10.29	28.03	7.07	27.19
Comparative Performanc	е												
				1 Qtr Ending Sep-2024		1 Q Endi Jun-2	ng	1 Qtr Ending Mar-2024	1 Qtr Ending Dec-2023		1 Qtr Ending ep-2023		1 Qtr Ending Jun-2023
Deroy & Dev SMID C Val			8	.27 (60)		-1.25	(11)	8.83 (32)	11.57 (49)	-4	.90 (71)	1	.99 (91)
Russell 2500 Value Index			9	.63 (23)		-4.31	(61)	6.07 (69)	13.76 (24)	-3	.66 (55)	4	.37 (53)
IM U.S. SMID Cap Value Equ	ity (SA+CF) Median	8	.79		-3.82		7.67	11.37	-3	.37	4	.48

3 Yr Rolling Under/Over Performance - 5 Years

No data found.

3 Yr Rolling Percentile Ranking - 5 Years



Russell 2500 Value Index 20 0 (0%) 0 (0%) 16 (80%) 4 (20%)

Peer Group Scattergram - 3 Years



100.00

Peer Group Scattergram - 5 Years

N/A



Risk (Standard Deviation %)

0.36

1.00

16.30

	Return	Standard Deviation		Return	Standard Deviation
Deroy & Dev SMID C Val	N/A	N/A	Deroy & Dev SMID C Val	N/A	N/A
Russell 2500 Value Index	3.81	21.63	Russell 2500 Value Index	8.44	24.09
Median	4.90	20.22	Median	9.70	23.02

Historical Statistics - 3 Years

Russell 2500 Value Index

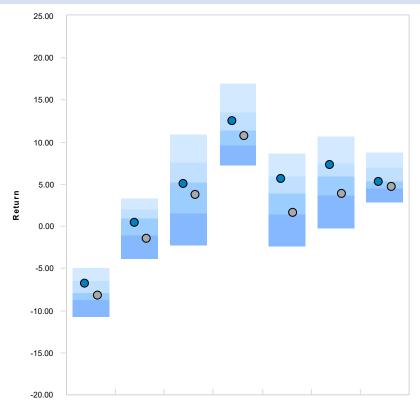
0.00

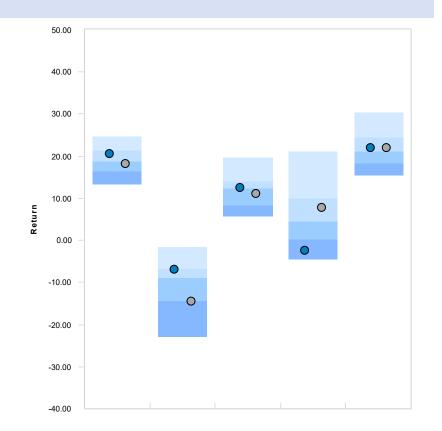
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Deroy & Dev SMID C Val	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Russell 2500 Value Index	0.00	100.00	100.00	0.00	N/A	0.10	1.00	13.70
Historical Statistics - 5 Y	/ears							
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Deroy & Dev SMID C Val	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

0.00

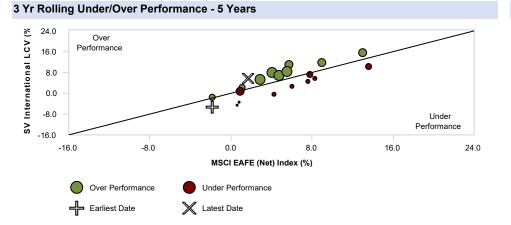
100.00



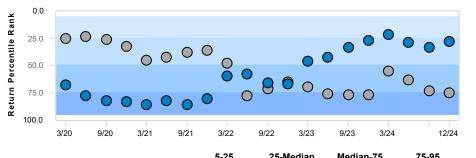




	QTR	FYTD	1 YI	R 2 YI	R 3 YR	4 YR	5 YR		2023	2022	2021	2020	2019
LSV International LCV	-6.72 (31)	0.45 (59)	5.07	(52) 12.61	(36) 5.72 (28	8) 7.37 (2	8) 5.35 (50)	LSV International LCV	20.69 (33)	-6.82 (24)	12.48 (48)	-2.39 (88)	22.10 (40)
MSCI EAFE (Net) Index	-8.11 (55)	-1.44 (78)	3.82	(67) 10.80	(59) 1.65 (7	5) 3.97 (7	3) 4.73 (68)	MSCI EAFE (Net) Index	18.24 (59)	-14.45 (76)	11.26 (59)	7.82 (30)	22.01 (43)
Median	-7.87	0.95	5.18	11.39	3.94	5.96	5.34	Median	18.77	-8.99	12.36	4.44	21.12
Comparative Performan	ice												
					1 Qtr Ending sep-2024		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
LSV International LCV				7	.68 (66)		-0.55 (71)	5.18 (32)	8.37 (70)		1.05 (11)		2.41 (76)
MSCI EAFE (Net) Index				7	.26 (73)		-0.42 (69)	5.78 (23)	10.42 (21)		-4.11 (76)		2.95 (58)
IM International Large Cap	Value Equit	y (SA+CF) I	Nedian	8	.73		0.38	3.95	8.85		-2.16		3.17



3 Yr Rolling Percentile Ranking - 5 Years



	Total Period	5-25 Count	25-Median Count	Count	75-95 Count	
LSV International LCV	20	1 (5%)	7 (35%)	5 (25%)	7 (35%)	
MSCI EAFE (Net) Index	20	2 (10%)	7 (35%)	7 (35%)	4 (20%)	

Peer Group Scattergram - 3 Years



Peer Group Scattergram - 5 Years



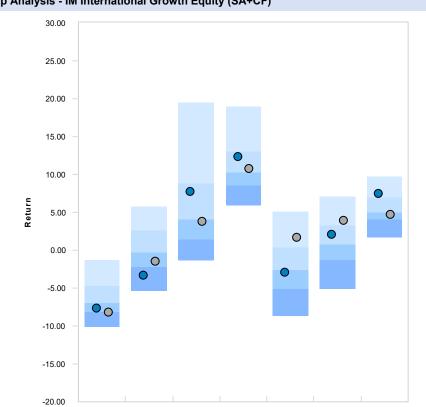
Risk (Standard Deviation %)

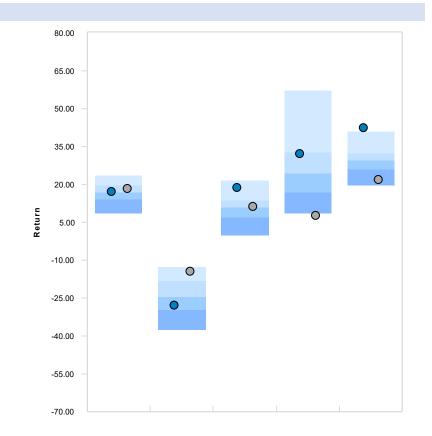
	Return	Standard Deviation		Return	Standard Deviation
LSV International LCV	5.72	15.61	LSV International LCV	5.35	18.78
MSCI EAFE (Net) Index	1.65	16.61	MSCI EAFE (Net) Index	4.73	17.70
Median	3.94	16.74	Median	5.34	18.67

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
LSV International LCV	4.89	98.17	80.83	4.17	0.77	0.19	0.90	10.14
MSCI EAFE (Net) Index	0.00	100.00	100.00	0.00	N/A	-0.05	1.00	11.16
Historical Statistics - 5	Years							

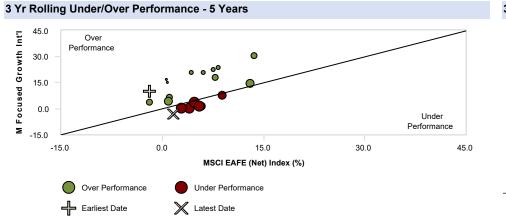
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
LSV International LCV	5.06	101.03	97.55	0.67	0.16	0.24	1.02	12.84
MSCI EAFE (Net) Index	0.00	100.00	100.00	0.00	N/A	0.21	1.00	11.77



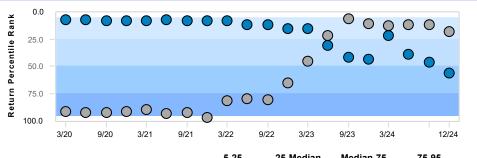


	QTR	FYTD	1 YR	R 2 YI	R 3 Y	R 4	YR	5 YR			2023	2022	2021	2020	2019
WCM Focused Growth Int'l	-7.68 (66)	-3.30 (84)	7.72 (3	32) 12.37 ((34) -2.94	(56) 2.10	(35)	7.51 (21)	• W0	M Focused Growth Int'l	17.22 (44)	-27.59 (64)	18.85 (12)	32.17 (27)	42.33 (5)
MSCI EAFE (Net) Index	-8.11 (75)	-1.44 (64)	3.82 (5	53) 10.80 ((47) 1.65	(18) 3.97	(18)	4.73 (53)	O MS	CI EAFE (Net) Index	18.24 (37)	-14.45 (10)	11.26 (46)	7.82 (97)	22.01 (89
Median	-7.01	-0.23	4.01	10.21	-2.61	0.82		5.02	Ме	dian	16.70	-24.57	10.90	24.27	29.37
Comparative Performance															
				1 Qtr Ending Sep-2024			1 Qtr Ending un-202	9	1 Q Endi Mar-2	ng	1 Qtr Ending Dec-2023	E	1 Qtr nding p-2023		1 Qtr Ending un-2023
WCM Focused Growth Int'l			4	.73 (86)		-0	.91 (56)	12.42	(6)	12.15 (47)	-9.	02 (75)	4	.22 (18)
MSCI EAFE (Net) Index			7	. 26 (44)		-0	.42 (47)	5.78	(43)	10.42 (72)	-4.	11 (17)	2	.95 (46)
IM International Growth Equity	(SA+CF) N	/ledian	6	5.83		-0	.60		5.21	,	11.72	-7.	20	2	.80

Peer Group Analysis - IM International Growth Equity (SA+CF)

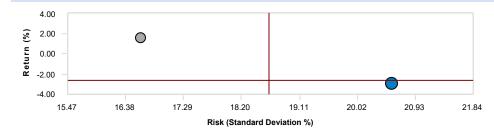


3 Yr Rolling Percentile Ranking - 5 Years

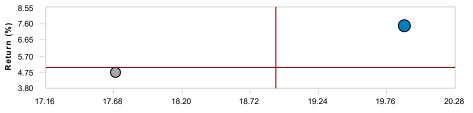


	Total Period	5-25 Count	25-Median Count	Count	Count
WCM Focused Growth Int'l	20	14 (70%)	5 (25%)	1 (5%)	0 (0%)
MSCI EAFE (Net) Index	20	7 (35%)	1 (5%)	1 (5%)	11 (55%)

Peer Group Scattergram - 3 Years



Peer Group Scattergram - 5 Years



Risk (Standard Deviation %)

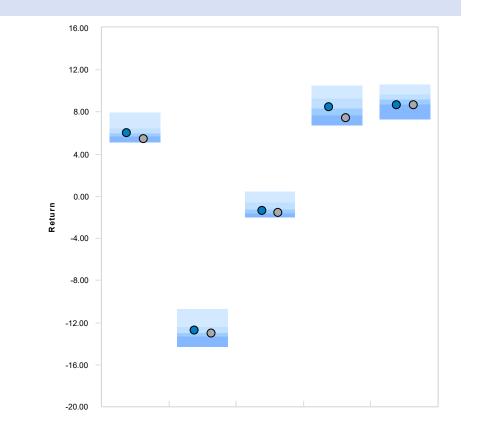
	Return	Standard Deviation		Return	Standard Deviation
WCM Focused Growth Int'l	-2.94	20.55	WCM Focused Growth Int'l	7.51	19.90
MSCI EAFE (Net) Index	1.65	16.61	MSCI EAFE (Net) Index	4.73	17.70
Median	-2.61	18.62	Median	5.02	18.92

Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
WCM Focused Growth Int'l	9.18	102.71	120.54	-4.13	-0.42	-0.23	1.11	14.60
MSCI EAFE (Net) Index	0.00	100.00	100.00	0.00	N/A	-0.05	1.00	11.16
Historical Statistics - 5 Ye	ears							
	Tracking	Up	Down		Information	Sharpe		Downside

	Error	Market Capture	Market Capture	Alpha	Ratio	Ratio	Beta	Risk
WCM Focused Growth Int'l	8.85	111.14	100.10	3.06	0.35	0.34	1.01	13.14
MSCI EAFE (Net) Index	0.00	100.00	100.00	0.00	N/A	0.21	1.00	11.77

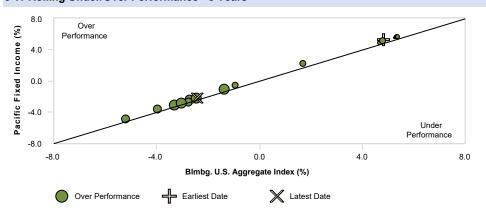
8.00 6.00 -4.00 -2.00 -0.00 --2.00 --2.00 -4.00 --2.00 --2.00 --4.00 -



	QT	R	FY	TD	1 Y	′R	2 Y	′R	3 YR	4	′R	5 Y	R		2023	2022	2021	2020	2019
Pacific Fixed Income	-3.27	(95)	1.98	(84)	1.34	(89)	3.66	(70) -2.	11 (60) -1.92	(64)	0.09	(71)	Pacific Fixed Income	6.03 (50)	-12.69 (36)	-1.37 (58)	8.55 (46)	8.70 (81)
Blmbg US Agg	-3.06	(74)	1.98	(85)	1.25	(93)	3.37	(92) -2.	41 (93	6) -2.19	(95)	-0.33	(98)	Blmbg US Agg	5.53 (85)	-13.01 (54)	-1.55 (66)	7.51 (86)	8.72 (79)
Median	-2.99		2.16		1.91		3.96	-2.	01	-1.76		0.24		Median	5.98	-12.95	-1.24	8.34	9.17
Comparative Perform	nance																		
								1 Q Endi Sep-2	ng			1 C End Jun-2	ing	1 Qtr Ending Mar-2024	1 Qtr Endin Dec-20	g	1 Qtr Ending Sep-2023		1 Qtr Ending Jun-2023
Pacific Fixed Income								5.43	(19)			0.18	(67)	-0.80 (94)	7.01	(31)	-3.25 (76)		-0.42 (17)
Blmbg. U.S. Aggregate I	ndex							5.20	(69)			0.07	(94)	-0.78 (92)	6.82	(53)	-3.23 (71)		-0.84 (80)
IM U.S. Broad Market Co	ore Fixe	ed Inc	ome (S	SA+CI	F) Med	lian		5.24				0.26		-0.48	6.82		-3.14		-0.72

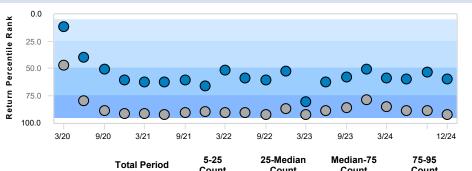
Peer Group Analysis - IM U.S. Broad Market Core Fixed Income (SA+CF)

-6.00



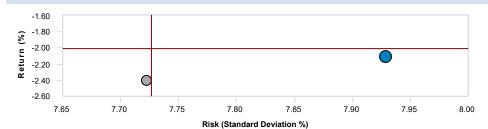
3 Yr Rolling Under/Over Performance - 5 Years

3 Yr Rolling Percentile Ranking - 5 Years



	Total Period	Count	Count	Count	Count	
Pacific Fixed Income	20	1 (5%)	1 (5%)	17 (85%)	1 (5%)	
Blmbg US Agg	20	0 (0%)	1 (5%)	0 (0%)	19 (95%)	

Peer Group Scattergram - 3 Years



Peer Group Scattergram - 5 Years

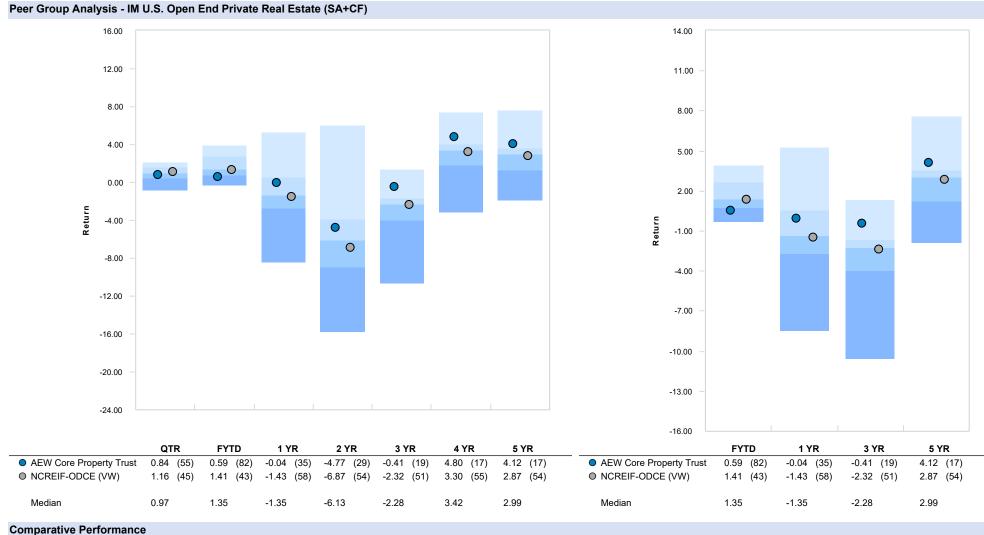


Risk (Standard Deviation %)

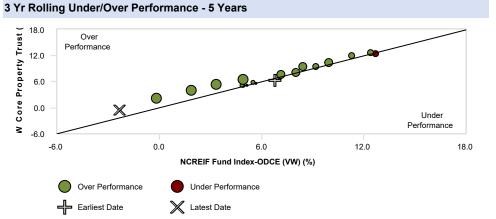
	Return	Standard Deviation		Return	Standard Deviation
Pacific Fixed Income	-2.11	7.93	Pacific Fixed Income	0.09	6.50
Blmbg US Agg	-2.41	7.72	Blmbg US Agg	-0.33	6.37
Median	-2.01	7.73	Median	0.24	6.51

Historical Statistics - 3 Years

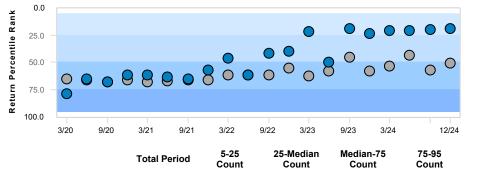
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Pacific Fixed Income	1.07	101.84	98.93	0.36	0.30	-0.73	1.02	5.63
Blmbg US Agg	0.00	100.00	100.00	0.00	N/A	-0.79	1.00	5.59
Historical Statistics -	- 5 Years							
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Pacific Fixed Income	0.92	101.58	96.78	0.42	0.46	-0.33	1.01	4.48
Blmbg US Agg	0.00	100.00	100.00	0.00	N/A	-0.41	1.00	4.47



	1 Qtr Ending Sep-2024	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
AEW Core Property Trust	-0.25 (87)	0.08 (25)	-0.71 (16)	-1.82 (26)	-0.83 (16)	-3.26 (73)
NCREIF Fund Index-ODCE (VW)	0.25 (53)	-0.45 (40)	-2.37 (65)	-4.83 (65)	-1.90 (42)	-2.68 (68)
IM U.S. Open End Private Real Estate (SA+CF) Median	0.26	-0.69	-2.10	-4.20	-2.37	-2.02



3 Yr Rolling Percentile Ranking - 5 Years



		Count	Count	Count	Count	
AEW Core Property Trust	20	7 (35%)	4 (20%)	8 (40%)	1 (5%)	
NCREIF-ODCE (VW)	20	0 (0%)	2 (10%)	18 (90%)	0 (0%)	

Peer Group Scattergram - 3 Years



98.05

100.00

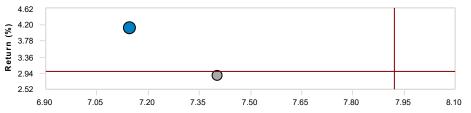
69.31

100.00

Peer Group Scattergram - 5 Years

0.50

N/A



Risk (Standard Deviation %)

0.23

0.08

0.91

1.00

3.31

3.92

	Return	Standard Deviation		Return	Standard Deviation
AEW Core Property Trust	-0.41	6.90	AEW Core Property Trust	4.12	7.15
NCREIF-ODCE (VW)	-2.32	7.07	NCREIF-ODCE (VW)	2.87	7.40
Median	-2.28	7.51	Median	2.99	7.92

Historical Statistics - 3 Years

AEW Core Property Trust

NCREIF-ODCE (VW)

2.42

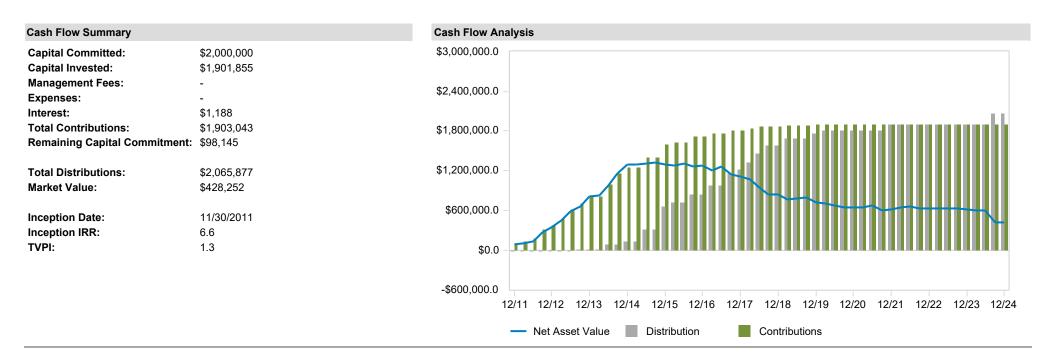
0.00

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
AEW Core Property Trust	2.46	104.62	74.88	1.75	0.78	-0.53	0.92	4.24
NCREIF-ODCE (VW)	0.00	100.00	100.00	0.00	N/A	-0.76	1.00	4.99
listorical Statistics - 5	/ears							
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk

1.48

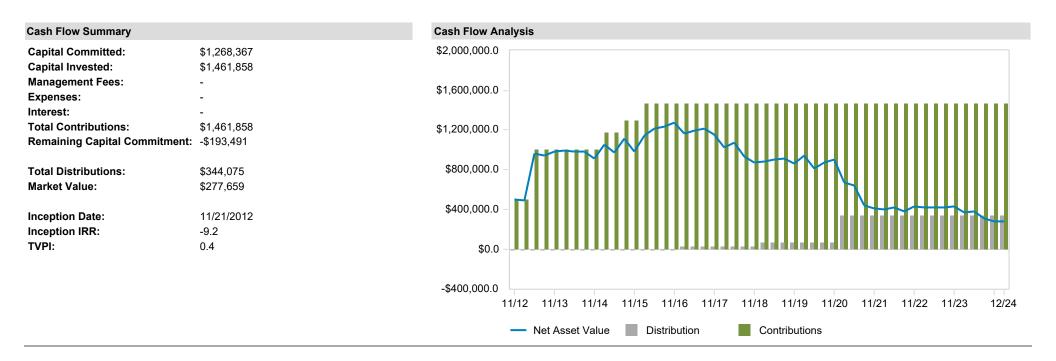
0.00

Fund Information			
Type of Fund:	Fund Of Funds	Vintage Year:	2008
Strategy Type:	Real Estate	Management Fee:	1%
Target IRR:	9%	Inception:	03/19/2008
General Partner:	MREP6, LLC		
Investment Strategy:	Private Equity Real Estate value add/opportunistic multi-manager		



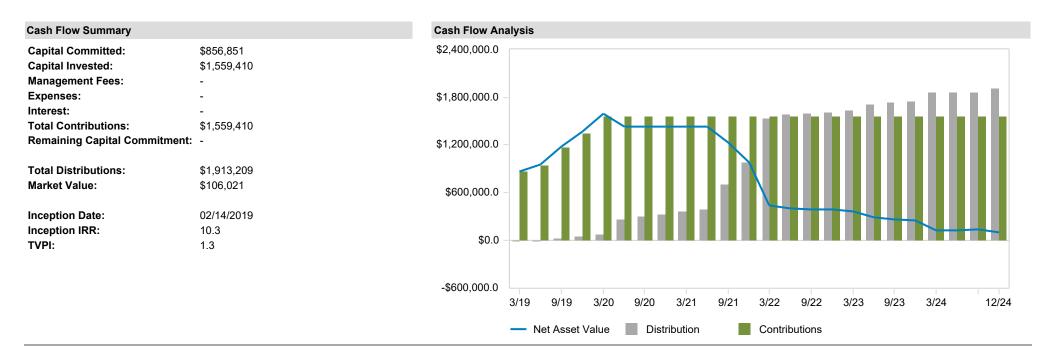
Fund Information			
Type of Fund:	Partnership	Vintage Year:	2011
Strategy Type:	Timber	Management Fee:	1.25% of NAV
Target IRR:		Inception:	09/07/2011
General Partner:			

Investment Strategy: A portfolio of timberland investments in South America, Eastern/Central Europe, and South Africa through tax efficient investment vehicles and to maximize returns through a portfolio diversified by geography, end-products and end-markets



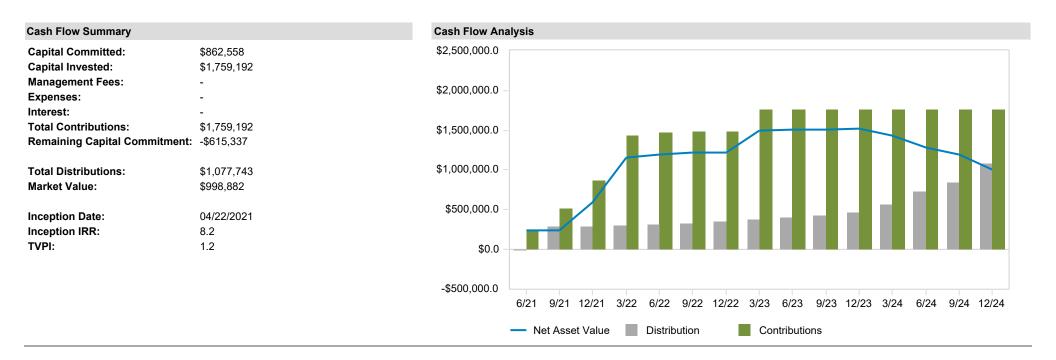
Fund Information			
Type of Fund:	Direct	Vintage Year:	2018
Strategy Type:	Real Estate - Debt	Management Fee:	1.5%
Target IRR:	8.5% (Series A only)	Inception:	11/16/2018
General Partner:	Bloomfield Capital Partners V 11C		

Investment Strategy: The investment strategy of each Series of the Fund will have a primary focus on private credit and specialty finance assets (which is expected to include real estate debt and other general debt and debt-related investments) with short to intermediate-term durations and often contractual cash flows. The Managing Member's goal is to preserve invested capital, and generate returns that have a low correlation to traditional public markets (although there can be no assurances that this goal will be realized). The Fund will target middle market opportunities in real estate debt and other general debt and debt-related transactions (including REO properties, and preferred equity, that would include debt-like characteristics). The Fund generally will not invest in traditional leveraged common equity positions in real estate; however, the Fund may acquire REO and similar non-traditional properties and may also take incidental or pledged equity positions in connection with certain loans in order to obtain supplemental collateral to enhance the strength of the primary credit investment, and/or to expedite any requisite foreclosure process with such loan for the benefit of the Fund. The primary focus of private credit and specialty finance assets (including real estate debt and other general debt and debtrelated investments) will be to capitalize on gap, transitional, bridge, special situation and opportunistic financings that are time sensitive, complex, and that the Managing Member believes offer attractive risk-adjusted returns. Each Series of the Fund may also variously co-invest in opportunities originated by other investors where the overall investment opportunity is of the same or similar nature as the Series typically invests.

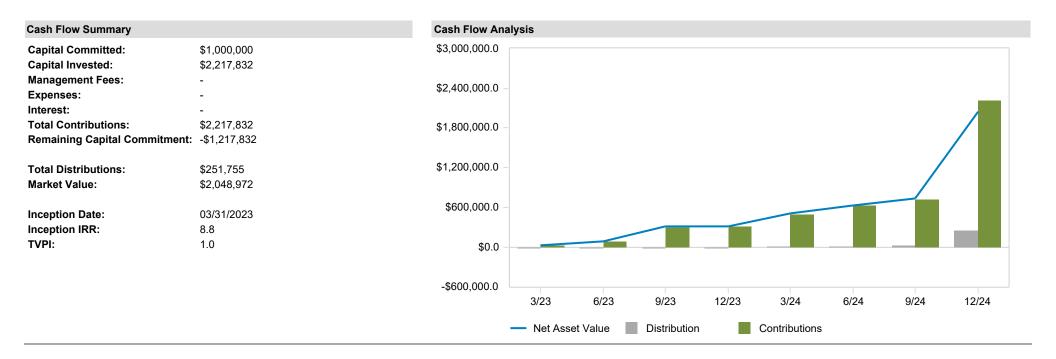


Fund Information			
Type of Fund:	Direct	Vintage Year:	2018
Strategy Type:	Real Estate - Debt	Management Fee:	1.5%
Target IRR:	8.5% (Series A only)	Inception:	11/16/2018
General Partner:	Bloomfield Capital Partners V. LLC		

Investment Strategy: The investment strategy of each Series of the Fund will have a primary focus on private credit and specialty finance assets (which is expected to include real estate debt and other general debt and debt-related investments) with short to intermediate-term durations and often contractual cash flows. The Managing Member's goal is to preserve invested capital, and generate returns that have a low correlation to traditional public markets (although there can be no assurances that this goal will be realized). The Fund will target middle market opportunities in real estate debt and other general debt and debt-related transactions (including REO properties, and preferred equity, that would include debt-like characteristics). The Fund generally will not invest in traditional leveraged common equity positions in real estate; however, the Fund may acquire REO and similar non-traditional properties and may also take incidental or pledged equity positions in connection with certain loans in order to obtain supplemental collateral to enhance the strength of the primary credit investment, and/or to expedite any requisite foreclosure process with such loan for the benefit of the Fund. The primary focus of private credit and specialty finance assets (including real estate debt and other general debt and debtrelated investments) will be to capitalize on gap, transitional, bridge, special situation and opportunistic financings that are time sensitive, complex, and that the Managing Member believes offer attractive risk-adjusted returns. Each Series of the Fund may also variously co-invest in opportunities originated by other investors where the overall investment opportunity is of the same or similar nature as the Series typically invests.

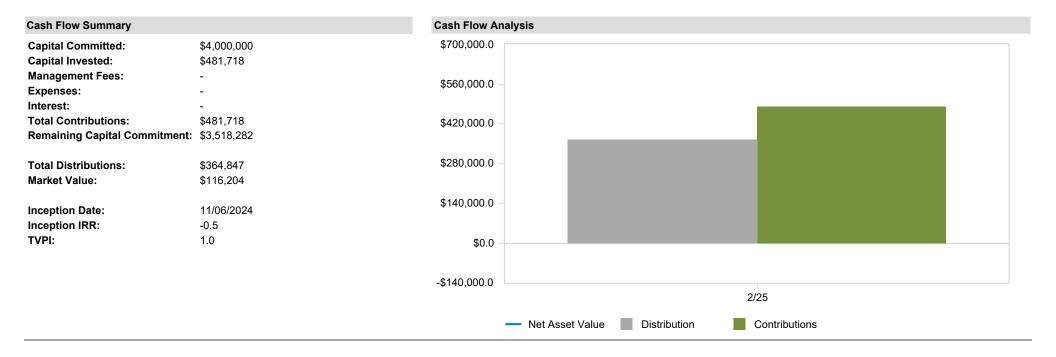


Fund Information			
Type of Fund:	Direct	Vintage Year:	2021
Strategy Type:	Real Estate - Debt	Management Fee:	1.5% on capital commitments of \$10 million or more; 1.75% on capital commitments less than \$10 million
Target IRR:	7.5% cumulative but non-compounding annual rate of return on Capital Contributio	Inception:	04/01/2021
General Partner:	Bloomfield Capital Partners V, LLC		
Investment Strategy:	debt and debt-related investments) with short to intermediate-term durations and returns that have a low correlation to traditional public markets (although there ca estate debt and other general debt and debt-related transactions (including REO invest in traditional leveraged common equity positions in real estate; however, th equity positions in connection with certain loans in order to obtain supplemental of foreclosure process with such loan for the benefit of the Fund. The primary focus related investments) will be to capitalize on gap, transitional, bridge, special situa	often contractual cash f in be no assurances tha properties, and preferre the Fund may acquire RE collateral to enhance the of private credit and spo tion and opportunistic fil	EO and similar non-traditional properties and may also take incidental or pledged



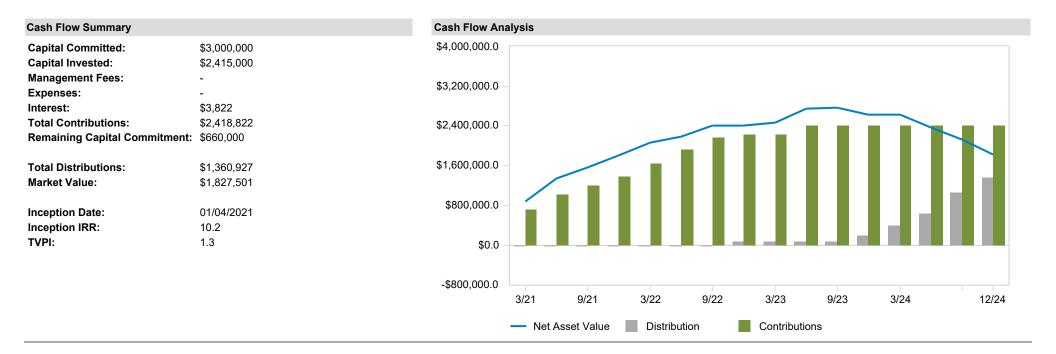
Fund Information			
Type of Fund:	Value Add	Vintage Year:	2025
Strategy Type:	Debt	Management Fee:	1.75% on unlevered invested capital (commitments under \$10 million)/1.5% on unlevered invested capital (commitments >= \$10 million)
Target IRR:	7.5%	Inception:	01/31/2025
General Partner:	Bloomfield Capital Partners V, LLC		
Investment Strategy	: BCIFV-D will have a primary focus on real estate private credit and specialty fina	nce assets such as note	es, loans, bonds, debentures, receivables, judgements, charge-offs, liens (including

tax liens), pledges, lines of credit, and unsecured loans with short to intermediate-term durations and often with contractual cash flows. BCIFV-D will seek to capitalize on opportunities that include i) the origination of real estate debt and other general debt and debt related securities and instruments that are typically characterized as gap, transitional or opportunities, partnership buyouts, or balance sheet restructuring; ii) acquisitions of loans, notes, mortgages, deeds of trust, municipal bonds, commercial mortgage-backed securities, and other instruments secured by various types of commercial real estate or real estate-related assets; iii) secondary-market acquisitions of mixed private credit and specialty finance instruments such as notes, loans, bonds, debentures, receivables, judgements, charge-offs, liens, pledges, lines of credit, and unsecured loans; iv) other opportunistic and value-oriented real estate debt and other general debt and debt-like one-off or platform investments that the general partner believes represents discrepancies from, or discounts to, intrinsic value.



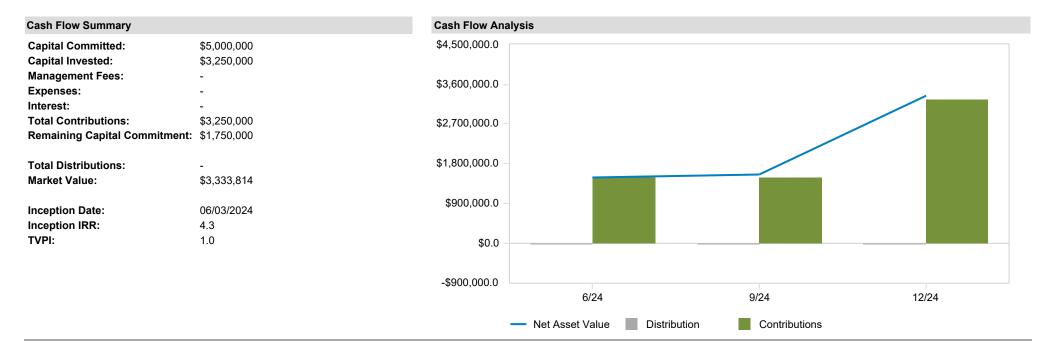
Fund Information			
Type of Fund:	Fund Of Funds	Vintage Year:	2019
Strategy Type:	Distressed	Management Fee:	1.75% for Subscription Size <\$10 million; 1.50% for Subscription Size >\$10 million to <\$25 million; 1.25% for Subscription Size >\$25 million to <\$100 million; 1.00% for Subscription Size >\$100 million
Target IRR:	Incentive Fee 20% with 8% hurdle	Inception:	12/03/2019
General Partner:	Marathon Asset Management, LP		
			and an early set of the second s

Investment Strategy: Marathon will look to construct a portfolio of distressed, dislocated, and restructuring corporate credit opportunities in complex situations with attractive risk-adjusted return characteristics. Core holdings of the Fund will include bankruptcy reorganizations, liquidations, rescue lending, distressed exchanges, debtor-in-possession financings, and dislocated credit.



Fund Information			
Type of Fund:	Opportunistic	Vintage Year:	2024
Strategy Type:	Credit	Management Fee:	0.75%
Target IRR:	Incentive Fee 15% with 8% hurdle	Inception:	03/31/2024
General Partner:	Marathon Asset Management, LP		
Investment Strategy:	The fund will invest in high yielding, dislocated CMBS securities (Collateralized M strategy funds since Q2 2010. The team analyzes all tranches of the CMBS mark tranche.		ties). Marathon has been investing in this space for separate accounts and multi- ify areas of stress and then evaluates each individual property within the assessed

The opportunity is being created due to the decline in real estate values, maturing mortgage debt, and rating downgrades. Many CMBS holders such as insurance companies, mutual funds, and banks are forced to sell securities when they are downgraded. The forced selling allows Marathon to purchase securities with yields of 8% or better and capital appreciation potential.



Fund Information			
Type of Fund:	Direct	Vintage Year:	2018
Strategy Type:	Opportunistic Real Estate	Management Fee:	During the investment period, an amount equal to the product of 1/4 of 1.5% and such limited partner's Capital Commitment; after the termination of the investment period, an amount equal to 1/4 of 1.5% and such limited partner's Net Equity Inv
Target IRR:	9.00%	Inception:	04/06/2018
General Partner:	PCCP Equity VIII GP, LLC		
Investment Strategy	The objective of the Fund is to create a portfolio of equity interests in U.S. middle partner. By focusing on middle-market assets with transitional characteristics (i.e.		

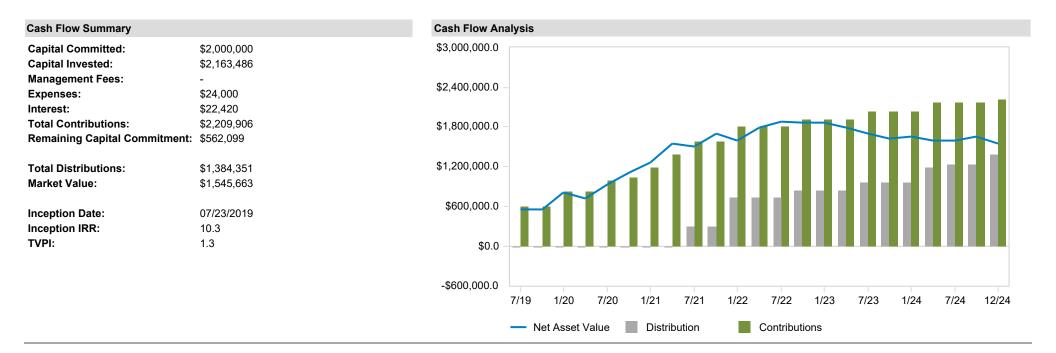
than that experienced by many larger opportunistic funds that require sizeable investments. Additionally, the Fund will target opportunities with the following investment characteristics with a focus on adding value and selling to buyers of stabilized real estate:

• Physical repositioning, rehabilitation and redevelopment;

• Recapitalizing impaired financial structures, particularly in complex situations;

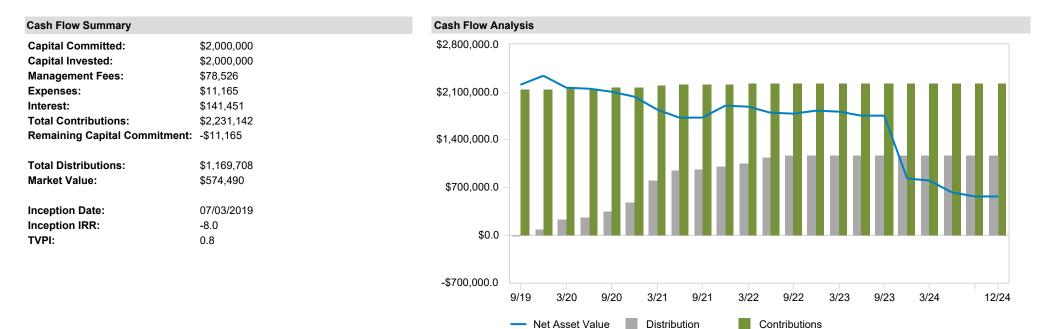
• Discounted purchases of inefficiently marketed or distressed situations; and

• Executing on select opportunistic development or build-to-suit opportunities.



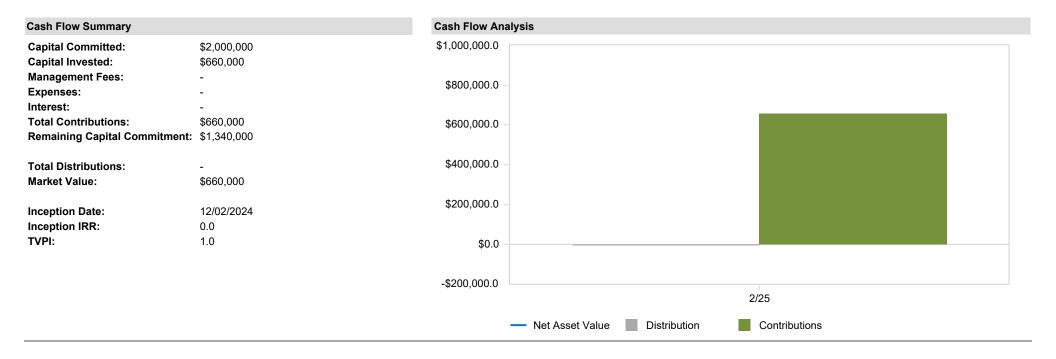
Fund Information			
Type of Fund:	Partnership	Vintage Year:	2017
Strategy Type:	Value-Add Real Estate	Management Fee:	1.50%
Target IRR:	8.00% + carried interest 30% to GP, 70% to investor after gross return of 15%	Inception:	11/01/2016
General Partner:	TerraCap GP IV, LLC		
Investment Strategy:	TerraCap Management, LLC is a commercial real estate investment management	nt company focused on v	value-add real estate acquisitions in the Southern United States. TerraCap considers
	thematic factors such as business formation, employment growth and population		
		ap's principals aim to dive	ersify the firm's real estate portfolio across geographies and asset classes, including
	office, flex, multifamily, and hospitality.		
	The Fund's investment strategy is to make investments in income producing real	I estate assets for which	TerraCap seeks to achieve gross compound annual levered returns on Invested

Capital of fifteen percent (15%) to nineteen percent (19%) Net IRRs over rolling three (3) to seven (7) year periods. TerraCap expects to engage in activities that improve income producing assets the Fund plans to acquire, such as completing deferred maintenance, renovations, new signage, tenant improvements, leasing, or repositioning.



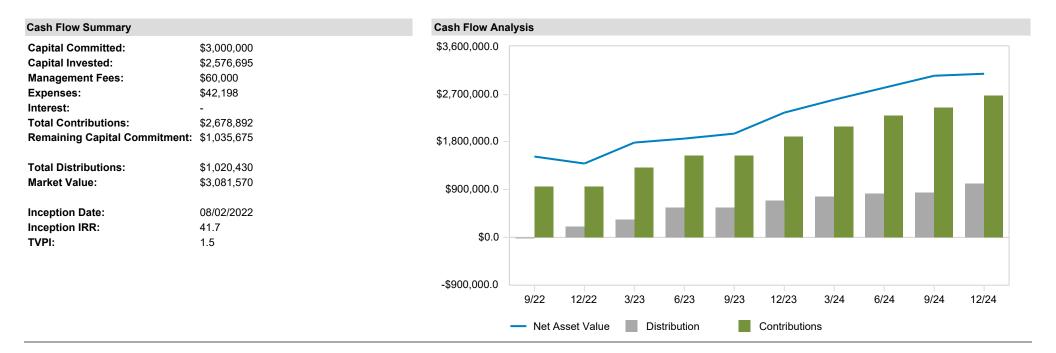
Fund Information			
Type of Fund:	Partnership	Vintage Year:	2024
Strategy Type:	Value-Add Real Estate	Management Fee:	1.5% on Committed Capital During the Investment Period; 1.5% on Invested Capital thereafter
Target IRR: General Partner:	8%	Inception:	01/01/2024

Investment Strategy: TerraCap Management, LLC considers thematic factors such as business formation, employment growth and population growth, corporate relocations, GDP growth and in migration on a market-by-market basis, as most metros and submarkets have different economic-based industries and therefore move through their economic cycles differently. The Investment Manager makes moderate strategic overweighting or underweighting to markets, depending on the specific economic drivers influencing supply and demand. The Investment Manager intends to invest the Fund's assets so that no economic industry base will be allowed to dominate any property or the portfolio's performance.



Fund Information			
Type of Fund:	Secondary	Vintage Year:	2020
Strategy Type:	Secondaries	Management Fee:	Investment Period: 1.25% per annum, based on the value of closed investments
Target IRR:	10%; incentive: 10% on net gains in excess of the 10% preferred return, payble o	Inception:	12/31/2019
General Partner:	PASF IV (GP), LLC		
Investment Strategy:	PASF IV seeks to create a diversified portfolio of (i) private equity limited partners		
	investments that generate attractive risk adjusted returns. PA, through PASF IV, w		
	relationships to source, underwrite and execute attractive secondary investments	and co-investments. It i	s expected that the Fund will be diversified across vintage year, investment

strategy, industry, geography and fund sponsor.

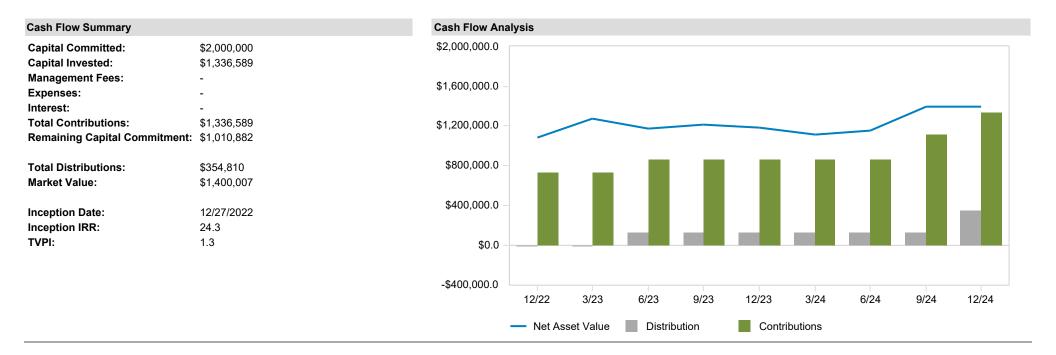


Fund Information			
Type of Fund:	Secondary	Vintage Year:	2021
Strategy Type:	Secondaries	Management Fee:	1.25%
Target IRR:	7.00%	Inception:	12/03/2021
General Partner:	SDPE III GP. LP		

Investment Strategy: The investment strategy provides investors with attractive risk-adjusted returns through the construction of a highly diversified portfolio of secondary investments by participating in segments of the secondary market deemed less competitive.

> The primary focus is on the purchase of Fund-of-Funds and Secondary Funds ("Pooled Funds"). Each Pooled Fund typically owns diversified portfolios of underlying private equity funds. In addition, they pursue "Tail-End" transactions, which involves the purchase of private equity fund interests toward the end of their fund lives and close to their liquidation point. Pooled Funds and Tail-End transactions together comprise our Niche Fund transactions.

> Management seeks to provide investors with a highly diversified private equity portfolio, acquired at a discount to Net Asset Value and expect the portfolio to be diversified across underlying funds, geographies, vintages, strategies, industries, and portfolio companies.



Benchmark History Investment Policy Benchmarks As of December 31, 2024

Total Fund Policy Allocation Mandate Jan-1985 S&P 500 Index S&P MidCap 400 Index Russell 2000 Index MSCI EAFE (Net) Index	Weight (%) 20.50 16.00 14.00 15.00 30.00	Total Domestic Equity Policy Allocation Mandate Jan-1985 S&P 500 Index S&P 500 Index S&P MidCap 400 Index Russell 2000 Index Russell 2000 Index	Weight (%) 40.00 32.00 28.00
S&P 500 Index S&P MidCap 400 Index Russell 2000 Index	16.00 14.00 15.00	S&P 500 Index S&P MidCap 400 Index Russell 2000 Index	32.00
S&P MidCap 400 Index Russell 2000 Index	16.00 14.00 15.00	S&P MidCap 400 Index Russell 2000 Index	32.00
Russell 2000 Index	14.00 15.00	Russell 2000 Index	
	15.00		28.00
MSCI EAFE (Net) Index			20.00
	30.00		
Blmbg. U.S. Aggregate Index		Oct-2022	
NCREIF Fund Index-ODCE (VW)	4.50	S&P 500 Index	44.00
		S&P MidCap 400 Index	28.00
lan-2017		Russell 2000 Index	28.00
S&P 500 Index	20.00		
Russell Midcap Index	14.00		
Russell 2000 Index	14.00		
MSCI EAFE (Net) Index	15.50	Total Fixed Income Policy	
Blmbg. U.S. Aggregate Index	20.00	Allocation Mandate	Weight (%)
Blmbg. Global Multiverse	2.00	Jan-1976	
NCREIF Fund Index-ODCE (VW)	6.00	Blmbg. U.S. Aggregate Index	100.00
IFRI FOF: Diversified Index	5.00		
NCREIF Timberland Index (Monthly)	3.50	Total Real Estate Policy	
Law 2020		Allocation Mandate	Weight (%)
	20.00	Jan-1978	
S&P 500 Index	20.00 14.00	NCREIF Property Index	100.00
Russell Midcap Index			
Russell 2000 Index	14.00	Oct-2022	
MSCI EAFE (Net) Index	15.50	NCREIF Fund Index-ODCE (VW)	100.00
Blmbg. U.S. Aggregate Index	22.00	Total Timber Policy	
VCREIF Fund Index-ODCE (VW)	6.00	Allocation Mandate	Weight (%)
HFRI FOF: Diversified Index	5.00		Weight (70)
NCREIF Timberland Index (Monthly)	3.50	Apr-1987	100.00
Oct-2022		NCREIF Timberland Index	100.00
S&P 500 Index	22.00		
Russell Midcap Index	14.00		
Russell 2000 Index	14.00		
MSCI AC World ex USA	15.00	Total International Equity Policy	
Bimbg. U.S. Aggregate Index	17.00	Allocation Mandate	Weight (%)
NCREIF Fund Index-ODCE (VW)	8.00	Jan-1970	
HFRI FOF: Diversified Index	4.00	MSCI EAFE (Net) Index	100.00
Blmbg. Global High Yield	4.00	0.4 0000	
Russell Microcap Index	2.00	Oct-2022 MSCI AC World ex USA	100.00

Plan Disclosures:

- All composite returns (except Timber and Real Estate) prior to March 31, 2015 was obtained from prior consultant.
- Though there was no changes made to any of the composites (except Timber and Real Estate) from 3/31/2015 and back to inception, and are shown as reported by prior consultant, there are changes made to individual portfolios.
- AEW Core Property- obtained all historical statements and built history.
- Bloomfield Capital Income Fund- obtained all historical statements and built history.
- Metropolitan Real Estate VI- obtained all historical statements and built history.
- RMK Timberland Intl Fund- obtained all historical statements and built history.
- After rebuilding history for all Real Estate Funds and all Timber funds, recalculated composite returns for each composite.

Southfield Employees Retirement System Fee Analysis As of December 31, 2024

	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
Fidelity 500 Index Institutional	0.02	28,476,702	4,272	0.02 % of Assets
Champlain MC Equity	0.85	12,082,608	102,702	0.85 % of Assets
Reinhart Sm/Mid Cap PMV	0.75	12,187,138	91,404	0.75 % of Assets
Deroy & Devereaux SMID Cap Value	0.97	11,594,855	112,759	1.00 % of First \$10 M 0.80 % of Next \$15 M 0.65 % Thereafter
Total Domestic Equity	0.48	64,341,304	311,136	
WCM Focused Growth International	0.75	9,190,466	68,928	0.75 % of Assets
LSV International LCV	0.75	10,090,073	75,676	0.75 % of First \$25 M 0.65 % of Next \$25 M 0.55 % of Next \$50 M 0.45 % Thereafter
Total International Equity	0.75	19,280,539	144,604	
Pacific Fixed Income	0.30	18,784,660	56,354	0.30 % of Assets
Bloomfield Fund V Series A	1.50	106,021	1,590	1.50 % of Assets
Bloomfield Fund V Series B	1.50	998,882	14,983	1.50 % of Assets
Bloomfield Fund V Series C	1.50	2,048,972	30,735	1.50 % of Assets
Bloomfield Fund V Series D	1.50	116,204	1,743	1.50 % of Assets
Marathon Distressed Credit Fund LP	1.00	1,827,501	18,275	1.00 % of Assets
Marathon Dislocation Fund, L.P.	0.75	3,333,814	25,004	0.75 % of Assets
Total Fixed Income	0.55	27,216,054	148,684	
AEW Core Property Trust	1.25	5,459,908	68,249	1.25 % of Assets
Metropolitan Real Estate V	1.00	428,252	4,283	1.00 % of Assets
PCCP Equity VIII	1.00	1,545,663	15,457	1.00 % of Assets
TerraCap Partners IV	1.50	574,490	8,617	1.50 % of Assets
TerraCap Partners VI	1.50	660,000	9,900	1.50 % of Assets
Total Real Estate	1.23	8,668,314	106,505	
Magnitude Institutional	1.00	4,657,786	46,578	1.00 % of Assets
Total Hedge Fund of Funds	1.00	4,657,786	46,578	
RMK Timberland Intl Fund	1.25	277,659	3,471	1.25 % of Assets
Total Timber Funds	1.25	277,659	3,471	
		,	- /	

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
PA/Apogem Sec Fund VI	1.25	3,081,570	38,520	1.25 % of Assets
Sturbridge Diversified III	1.25	1,400,007	17,500	1.25 % of Assets
Total Other Assets	1.25	4,481,577	56,020	
Cash/Sec Lit		2,419,403	-	
Total Fund	0.62	131,342,636	816,998	

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.

Active Return	- Arithmetic difference between the manager's performance and the designated benchmark return over a specified time period.
Alpha	- A measure of the difference between a portfolio's actual performance and its expected return based on its level of risk as determined by beta. It determines the portfolio's non-systemic return, or its historical performance not explained by movements of the market.
Beta	- A measure of the sensitivity of a portfolio to the movements in the market. It is a measure of the portfolio's systematic risk.
Consistency	- The percentage of quarters that a product achieved a rate of return higher than that of its benchmark. Higher consistency indicates the manager has contributed more to the product's performance.
Distributed to Paid In (DPI)	- The ratio of money distributed to Limited Partners by the fund, relative to contributions. It is calculated by dividing cumulative distributions by paid in capital. This multiple shows the investor how much money they got back. It is a good measure for evaluating a fund later in its life because there are more distributions to measure against.
Down Market Capture	- The ratio of average portfolio performance over the designated benchmark during periods of negative returns. A lower value indicates better product performance
Downside Risk	- A measure similar to standard deviation that utilizes only the negative movements of the return series. It is calculated by taking the standard deviation of the negative quarterly set of returns. A higher factor is indicative of a riskier product.
Excess Return	- Arithmetic difference between the manager's performance and the risk-free return over a specified time period.
Excess Risk	- A measure of the standard deviation of a portfolio's performance relative to the risk free return.
Information Ratio	- This calculates the value-added contribution of the manager and is derived by dividing the active rate of return of the portfolio by the tracking error. The higher the Information Ratio, the more the manager has added value to the portfolio.
Public Market Equivalent (PME)	- Designs a set of analyses used in the Private Equity Industry to evaluate the performance of a Private Equity Fund against a public benchmark or index.
R-Squared	- The percentage of a portfolio's performance that can be explained by the behavior of the appropriate benchmark. A high R-Squared means the portfolio's performance has historically moved in the same direction as the appropriate benchmark.
Return	- Compounded rate of return for the period.
Sharpe Ratio	- Represents the excess rate of return over the risk free return divided by the standard deviation of the excess return. The result is an absolute rate of return per unit of risk. A higher value demonstrates better historical risk-adjusted performance.
Standard Deviation	- A statistical measure of the range of a portfolio's performance. It represents the variability of returns around the average return over a specified time period.
Total Value to Paid In (TVPI)	- The ratio of the current value of remaining investments within a fund, plus the total value of all distributions to date, relative to the total amount of capital paid into the fund to date. It is a good measure of performance before the end of a fund's life
Tracking Error	- This is a measure of the standard deviation of a portfolio's returns in relation to the performance of its designated market benchmark.
Treynor Ratio	- Similar to Sharpe ratio but utilizes beta rather than excess risk as determined by standard deviation. It is calculated by taking the excess rate of return above the risk free rate divided by beta to derive the absolute rate of return per unit of risk. A higher value indicates a product has achieved better historical risk-adjusted performance.
Up Market Capture	- The ratio of average portfolio performance over the designated benchmark during periods of positive returns. A higher value indicates better product performance.

Mariner Institutional compiled this report for the sole use of the client for which it was prepared. Mariner Institutional is responsible for evaluating the performance results of the Total Fund along with the investment advisors by comparing their performance with indices and other related peer universe data that is deemed appropriate. Mariner Institutional uses the results from this evaluation to make observations and recommendations to the client.

Mariner Institutional uses time-weighted calculations which are founded on standards recommended by the CFA Institute. The calculations and values shown are based on information that is received from custodians. Mariner Institutional analyzes transactions as indicated on the custodian statements and reviews the custodial market values of the portfolio. As a result, this provides Mariner Institutional with a reasonable basis that the investment information presented is free from material misstatement. This methodology of evaluating and measuring performance provides Mariner Institutional with a practical foundation for our observations and recommendations. Nothing came to our attention that would cause Mariner Institutional to believe that the information presented is significantly misstated.

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

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

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

This document may contain data provided by Bloomberg.

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

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

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

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

*IMPORTANT DISCLOSURE INFORMATION RE GREENWICH QUALITY LEADER AWARD

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

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

MARINER

Access to a wealth of knowledge and solutions.