Investment Performance Review Period Ending September 30, 2022

# **City of Sioux Falls Employees'**



**3rd Quarter 2022 Market Environment** 

#### The Economy

- Broadly, global markets declined during the 3rd quarter as inflation remained elevated, causing global central banks further drain liquidity from the market, and geopolitical risks increased as the conflict in Ukraine escalated.
- While inflation moderated slightly in the US, it showed signs of increasing, especially in Europe, where UK and German inflation reached multi-decade highs. US CPI was 8.3% in August, down from 9.1% at the end of the 2nd quarter.
- The US Federal Reserve Bank (the Fed) continued to increase interest rates during the quarter by raising 0.75% at the July and September meetings. Importantly, the Fed signaled it was committed to fight inflation by additional rate hikes if needed.
- The US labor market showed its resiliency during the quarter by adding an estimated 1.1 million jobs. As a result, the unemployment rate fell to 3.5% in September. The number of workers re-entering the workforce increased slightly during the period as wage growth remained strong.
- Real estate markets were under pressure during the quarter as rising interest rates pushed mortgages to their highest levels since 2007. As of September, the average 30-year fixed mortgage was roughly 6.7%, up from roughly 3.0% last year at the same time.

#### **Equity (Domestic and International)**

- US equities declined during the 3rd quarter as concerns regarding inflation, the path of interest rates, and a slowing global economy acted as headwinds. Small cap growth was the best performing domestic segment of the equity market relative to other US market capitalizations and styles during the period while large cap value performed the worst.
- Momentum was decidedly negative in international stocks during the 3rd quarter. The escalating conflict in Ukraine, rising inflation in Europe, and tightening monetary policy all contributed to the decline. The continued strength of the US dollar, which rose against most major developed market and emerging market currencies, also acted as a headwind. Finally, China continued its zero-tolerance policy regarding Covid-19, which led to additional restrictions.

#### **Fixed Income**

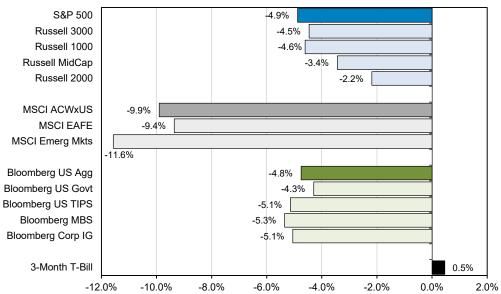
- While inflation fell slightly during the quarter, the Fed continued increasing interest rates which acted as a headwind for fixed income performance during the quarter. US interest rates moved significantly higher during the quarter with the US 10-Year Treasury bond rising 83 basis points to close at 3.80%.
- Performance across all bond market sectors was negative during the quarter, with US high yield corporate bonds and US Treasury bonds down the least.
- The combination of higher coupons and a shorter maturity profile relative to high quality government bonds was the primary driver of the relative outperformance of high yield bonds during the period.
- US Treasury bonds declined less than other investment grade bond market sectors during the quarter. During periods of increased volatility, investors have historically preferred the safety of government bonds over those with credit risk.

#### **Market Themes**

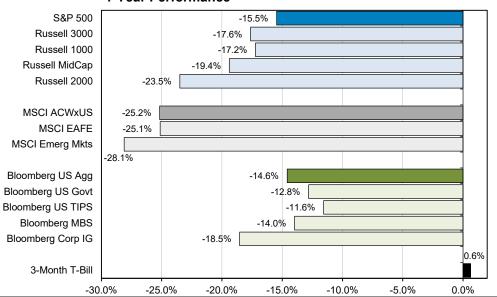
- Central banks remained hawkish during the quarter with several banks raising interest rates to fight higher inflation. The Fed, the Bank of England, and European Central Bank all raised rates during the quarter. Additionally, the Fed is currently allowing bonds to mature without reinvesting (quantitative tightening), while other banks are also considering similar actions. The outcome would be additional liquidity from the market.
- The escalating crisis in Ukraine spilled over as several gas pipelines were attacked in the Baltic Sea. The result was further disruption of energy supplies to Europe, Germany in particular. Energy costs have risen significantly since the start of the conflict which have negatively impacted economic activity in the region.
- US equity markets experienced their third consecutive quarter of negative performance during the 3rd quarter. Growth-oriented stocks outperformed value stocks as investors believe the Fed will begin slowing the rise of interest rates as economic growth declines. Historically, growth stocks have outperformed value stocks as the economy reaches the trough following a recession.
- Interest rates rose across the Treasury yield curve during the quarter as the Fed hiked interest rates by 0.75% at both the July and September meetings. The 3rd quarter marks the third consecutive quarter the bond market has suffered negative absolute returns. Long-term mortgage and investment grade corporate bonds underperformed during the quarter given their maturity profiles. High yield bonds outperformed primarily due to their shorter maturity profile and higher coupons.

- Negative momentum continued during the 3rd quarter as broad US equity markets experienced negative returns. Factors that contributed to performance included elevated inflation, tighter monetary policy, continued geopolitical events in Ukraine, and expectations of slower economic growth. For the period, the S&P 500 large cap benchmark returned -4.9%, compared to -3.4% for mid-cap and -2.2% for small cap indices.
- Like domestic equities, developed markets international equities also suffered negative results for the 3rd quarter. Europe was negatively impacted by higher-than-expected inflation, the conflict in Ukraine, uncertainty regarding energy supplies, and rising interest rates. Emerging markets were also negatively impacted by war in Ukraine and a strengthening USD. During the period, the MSCI EAFE Index returned -9.4% while the MSCI Emerging Markets Index declined by -11.6%.
- For the quarter, performance of the bond market was broadly negative due to continued concerns about inflation and the FOMC's decision to raise interest rates twice during the period. The Bloomberg (BB) US Aggregate Index returned -4.8%, for the period while Investment Grade Corporate bonds posted a return of -5.1%.
- Performance for developed equity markets was strongly negative over the trailing 1-year period. The primary drivers of return during the period were weakening global economic growth, more restrictive monetary policy from global central banks, and elevated inflation. The S&P 500 large cap stock index led equity market performance for the year with a return of -15.5%. The outlier was the MSCI ACWI ex-US index which declined by -25.2% for the year.
- Over the trailing 1-year period, international markets fell with the developed market MSCI EAFE Index returning -25.1% while the MSCI Emerging Markets Index fell by -28.1%. Global economic growth slowed throughout the year and both developed and emerging markets were negatively impacted by a strong USD and continued geopolitical concerns.
- Bond market returns disappointed over the trailing 1-year period due primarily to concerns about rising inflation and the expectation of higher future interest rates. US TIPS were the best performing sector returning -11.6% while investment grade corporate bonds was the worst, falling -18.5%.

#### **Quarter Performance**



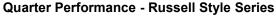
#### 1-Year Performance

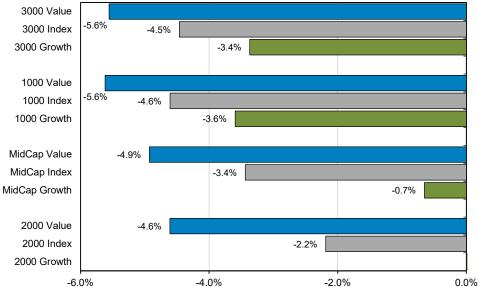


Source: Investment Metrics

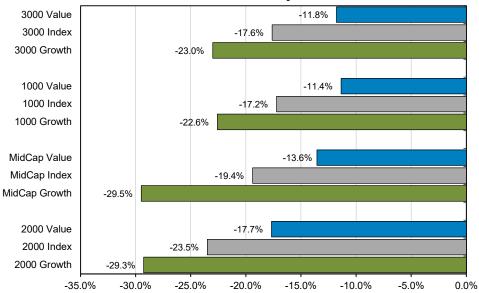
- Volatility was high during the 3rd quarter as broad US equity markets rose sharply before falling to close the period with negative results across both the style and market capitalization spectrums. Leadership switched during the quarter with small cap stocks outperforming, followed by mid and large cap issues. The Russell 2000 Index declined by -2.2% for the quarter while the Russell Mid Cap Index and the Russell 1000 Index fell by -3.4% and -4.6%, respectively.
- Performance across styles and market capitalizations was disparate during the quarter. Large, mid, and small cap growth stocks all outperformed their value counterparts. For the period, the Russell 2000 Growth Index was the best relative performing style index, posting a return of 0.0%. Large and mid cap value stocks were the laggards during the period with the Russell Large Cap Value Index and Russell Mid Cap Value Index falling by -5.6% and -4.9%, respectfully.

- Performance across all market capitalizations and styles was negative over the trailing 1-year period. Unlike the 3rd quarter, large cap stocks outperformed mid and small cap stocks for the year. The Russell 1000 Index return of -17.2% for the year, significantly outperformed both its mid and small cap growth index counterparts. The outlier during the period was the Russell 2000 Index which returned -23.5%.
- There was wide performance dispersion within across all style-based indexes. Value significantly outperformed growth over the year. Within large cap stocks, the Russell 1000 Value returned -11.4% compared to -22.6% for the Russell Large Cap Growth benchmark. The Russell Mid Cap Value Index returned -13.6% while the Russell 2000 Value Index returned -17.7% for the period. In comparison, the Russell Mid Cap Growth Index returned -29.5%, while the Russell 2000 Growth Index declined by -29.3%.





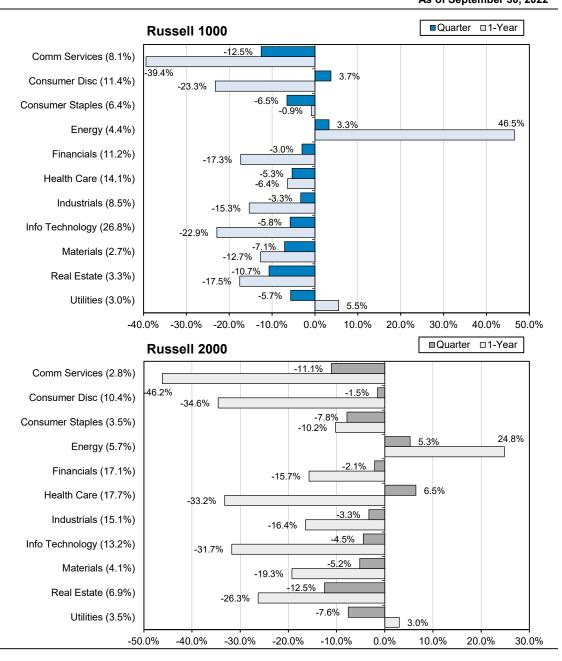
### 1-Year Performance - Russell Style Series



Source: Investment Metrics

- Economic sector performance was negative across nine of the eleven large cap economic sectors for the 3rd quarter. Four sectors outpaced the return of the broad index on a relative basis during the period.
- Consumer Discretionary (3.7%) and Energy (3.3%) were the only sectors with positive absolute performance during the period. Additionally, Financials (-3.0%) and Industrials (-3.3%) outperformed the broad index. Strong consumer demand acted as a tailwind for consumer-related stocks during the quarter. Energy continued its relative outperformance as the price of oil remained elevated.
- For the full year, six sectors exceeded the return of the broad large cap benchmark: Energy (46.5%), Utilities (5.5%), Consumer Staples (-0.9%), Health Care (-6.4%), Materials (-12.7%), and Industrials (-15.3%). The weakest economic sector performance in the Russell 1000 for the year was Communication Services which declined by returns (-39.4%).

- Small cap sector performance was also mixed during the quarter with two economic sectors posting positive performance relative to return of the broader Russell 2000 Index (-2.2%). Health Care (6.5%), and Energy (5.3%) were the best performing sectors for the period. Real Estate (-12.5%), and Communication Services (-11.1%) were the worst performing sectors for the quarter.
- For the trailing 1-year period, six of the eleven sectors outpaced the broad benchmark's return. Not surprisingly, sector performance was led by Energy (24.8%), Utilities (3.0%), Consumer Staples (-10.2%), Financials (-15.7%), and Industrials (-16.4%). The weakest sector over the full year was Communication Services (-46.2%), followed by Consumer Discretionary (-34.6%).



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.

Top 10 Weighted Stocks					
Russell 1000	Weight	Veight 1-Qtr Return		Sector	
Apple Inc	6.31%	1.22%	-1.79%	Information Technology	
Microsoft Corp	5.21%	-9.12%	-16.69%	Information Technology	
Amazon.com Inc	3.00%	6.39%	-31.20%	Consumer Discretionary	
Tesla Inc	2.02%	18.17%	2.61%	Consumer Discretionary	
Alphabet Inc Class A	1.72%	-12.22%	-28.45%	Communication Services	
Alphabet Inc Class C	1.55%	-12.09%	-27.85%	Communication Services	
Berkshire Hathaway Inc Class B	1.44%	-2.20%	-2.17%	Financials	
UnitedHealth Group Inc	1.41%	-1.36%	30.94%	Health Care	
Johnson & Johnson	1.28%	-7.35%	3.82%	Health Care	
Exxon Mobil Corp	1.09%	2.91%	55.15%	Energy	

Top 10 Weighted Stocks					
Russell 2000	1-Qtr Return	1-Year Return	Sector		
ShockWave Medical Inc	0.45%	45.5%	35.1%	Health Care	
Biohaven Pharmaceutical Holding Co	0.43%	3.7%	8.8%	Health Care	
Chart Industries Inc	0.31%	10.1%	-3.5%	Industrials	
Karuna Therapeutics Inc	0.30%	77.8%	83.9%	Health Care	
Apellis Pharmaceuticals Inc	0.28%	51.0%	107.2%	Health Care	
Murphy USA Inc	0.28%	18.2%	65.3%	Consumer Discretionary	
Texas Roadhouse Inc	0.27%	19.8%	-2.4%	Consumer Discretionary	
SouthState Corp	0.27%	3.2%	8.5%	Financials	
RBC Bearings Inc	0.27%	12.4%	-2.1%	Industrials	
EMCOR Group Inc	0.27%	12.3%	0.5%	Information Technology	

Top 10 Performing Stocks (by Quarter)					
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector	
Signify Health Inc Ordinary Shares	0.01%	111.23%	63.12%	Health Care	
First Solar Inc	0.04%	94.14%	38.56%	Information Technology	
Wolfspeed Inc	0.04%	62.90%	28.03%	Information Technology	
Penumbra Inc	0.02%	52.26%	-28.86%	Health Care	
Oak Street Health Inc Ordinary Shares	0.01%	49.15%	-42.35%	Health Care	
Sarepta Therapeutics Inc	0.03%	47.47%	19.53%	Health Care	
Constellation Energy Corp	0.08%	45.54%	N/A	Energy	
The Trade Desk Inc Class A	0.08%	42.64%	-15.01%	Information Technology	
Nutanix Inc Class A	0.01%	42.38%	-44.75%	Information Technology	
Enphase Energy Inc	0.11%	42.12%	85.02%	Energy	

Top 10 Performing Stocks (by Quarter)					
Russell 2000	Weight		1-Year Return	Sector	
Akero Therapeutics Inc	0.04%	260.3%	52.3%	Health Care	
Forma Therapeutics Holdings Inc	0.03%	189.6%	-14.0%	Health Care	
Velo3D Inc	0.01%	185.5%	-52.9%	Industrials	
Ventyx Biosciences Inc	0.04%	185.4%	N/A	Health Care	
Verve Therapeutics Inc	0.06%	124.8%	-26.9%	Health Care	
AN2 Therapeutics Inc	0.00%	124.3%	N/A	Health Care	
Prothena Corp PLC	0.10%	123.3%	-14.9%	Health Care	
Target Hospitality Corp Class A	0.02%	121.0%	238.3%	Consumer Discretionary	
1Life Healthcare Inc Ordinary Shares	0.14%	118.8%	-15.3%	Health Care	
Global Blood Therapeutics Inc	0.19%	113.1%	167.3%	Health Care	

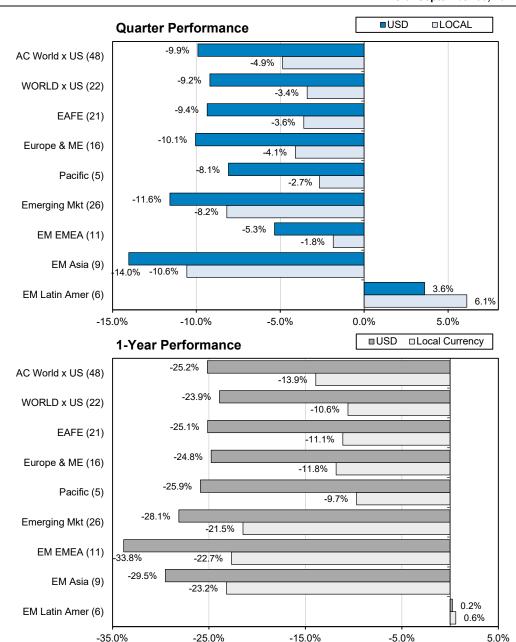
Bottom 10 Performing Stocks (by Quarter)					
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector	
Sotera Health Co Ordinary Shares	0.00%	-65.2%	-73.9%	Health Care	
Novavax Inc	0.00%	-64.6%	-91.2%	Health Care	
Spectrum Brands Holdings Inc	0.00%	-52.1%	-58.4%	Consumer Staples	
AMC Entertainment Holdings Inc	0.01%	-48.6%	-81.7%	Communication Services	
WeWork Inc	0.00%	-47.2%	N/A	Real Estate	
The Scotts Miracle Gro Co A	0.01%	-45.4%	-70.1%	Materials	
AppLovin Corp Ordinary Shares	0.01%	-43.4%	-73.1%	Information Technology	
Azenta Inc	0.01%	-40.6%	-58.1%	Health Care	
NCR Corp	0.01%	-38.9%	-51.0%	Information Technology	
Enhabit Inc Shs	0.00%	-38.9%	N/A	Health Care	

Bottom 10 Performing Stocks (by Quarter)						
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector		
Leafly Holdings Inc	0.00%	-84.9%	0.0%	Communication Services		
VistaGen Therapeutics Inc	0.00%	-82.7%	N/A	Health Care		
Faraday Future Intelligent Electric Inc	0.00%	-75.5%	N/A	Consumer Discretionary		
SelectQuote Inc Ordinary Shares	0.00%	-70.6%	-94.4%	Financials		
IronNet Inc	0.00%	-68.8%	N/A	Information Technology		
Core Scientific Inc Ord Shs - Class A	0.00%	-67.9%	N/A	Consumer Discretionary		
Rockley Photonics Holdings Ltd	0.00%	-67.4%	N/A	Information Technology		
Loyalty Ventures Inc Ordinary Shares	0.00%	-66.1%	0.0%	Communication Services		
Cryptyde Inc	0.00%	-65.9%	0.0%	Materials		
Vintage Wine Estates Inc	0.00%	-64.8%	-72.9%	Consumer Staples		

Source: Morningstar Direct

• Most developed and emerging market international equity indexes tracked in the chart posted negative returns in both US dollar (USD) and local currency (LC) terms for the 3rd quarter. The outlier during the period was the Latin America region. Higher commodity prices and demand benefited exportdriven countries like Brazil. The developed market MSCI EAFE Index returned -9.4% in USD and -3.6% in LC terms for the period, while the MSCI Emerging Markets Index declined by -11.6% in USD and -8.2% in LC terms.

The trailing 1-year results for international developed and emerging markets were broadly negative across most regions and currencies. The MSCI EAFE Index returned -25.1% in USD for the year and -11.1% in LC terms. Similarly, returns across emerging markets were broadly lower with the exception being Latin America with the MSCI Emerging Markets Index declining by -28.1% in USD and -25.1% in LC terms. Latin America regional index's return were the outlier, rising by 0.2% in USD and 0.6% in LC term. In contrast, performance in the EMEA regional benchmark significantly detracted from emerging market index performance with the EMEA Index returning -33.8% in USD and -22.7% in LC terms, respectively, due primarily to concerns related to Ukraine.



Source: MSCI Global Index Monitor (Returns are Net)

MSCI - EAFE	Sector Weight	Quarter Return	1-Year Return
Communication Services	4.8%	-13.7%	-28.6%
Consumer Discretionary	11.3%	-9.8%	-32.3%
Consumer Staples	11.3%	-7.1%	-17.3%
Energy	4.9%	-5.0%	6.0%
Financials	17.6%	-9.6%	-22.1%
Health Care	13.5%	-10.6%	-19.8%
Industrials	15.0%	-8.3%	-31.5%
Information Technology	7.9%	-8.3%	-38.9%
Materials	7.5%	-8.9%	-21.3%
Real Estate	2.8%	-13.1%	-29.1%
Utilities	3.4%	-13.3%	-20.3%
Total	100.0%	-9.4%	-25.1%

MSCI - ACWIXUS	Sector Weight	Quarter Return	1-Year Return
Communication Services	6.1%	-16.5%	-32.0%
Consumer Discretionary	11.4%	-13.0%	-32.3%
Consumer Staples	9.4%	-6.4%	-16.7%
Energy	6.2%	-6.3%	-5.0%
Financials	20.7%	-7.9%	-18.3%
Health Care	9.6%	-11.0%	-23.5%
Industrials	12.1%	-8.2%	-28.7%
Information Technology	10.8%	-12.1%	-39.3%
Materials	8.2%	-7.9%	-21.1%
Real Estate	2.4%	-14.5%	-29.8%
Utilities	3.4%	-10.9%	-16.0%
Total	100.0%	-9.9%	-25.2%

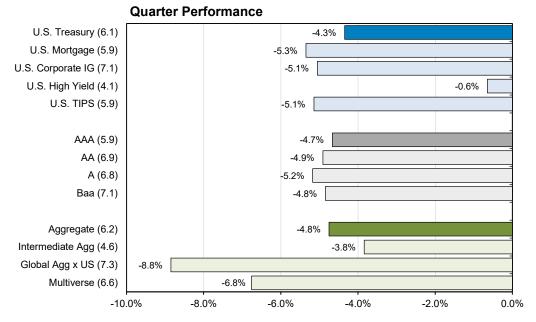
MSCI - Emerging Mkt	Sector Weight	Quarter Return	1-Year Return
Communication Services	9.7%	-19.3%	-36.2%
Consumer Discretionary	14.0%	-18.7%	-33.7%
Consumer Staples	6.6%	-4.5%	-17.8%
Energy	5.3%	-2.6%	-30.1%
Financials	22.6%	-5.1%	-14.3%
Health Care	3.9%	-13.8%	-42.8%
Industrials	5.8%	-9.9%	-20.8%
Information Technology	18.3%	-15.5%	-36.1%
Materials	8.7%	-7.4%	-26.3%
Real Estate	2.0%	-19.3%	-31.9%
Utilities	3.2%	-4.3%	-8.0%
Total	100.0%	-11.6%	-28.1%

	MSCI-EAFE	MSCI-ACWIXUS	Quarter	1- Year
Country	Weight	Weight	Return	Return
Japan	22.6%	14.1%	-7.7%	-29.3%
United Kingdom	15.5%	9.7%	-10.8%	-14.1%
France	11.3%	7.1%	-8.9%	-24.0%
Switzerland	10.7%	6.7%	-7.5%	-16.5%
Australia	8.0%	5.0%	-6.7%	-16.4%
Germany	7.6%	4.7%	-12.6%	-37.1%
Netherlands	4.1%	2.6%	-10.7%	-38.2%
Sweden	3.4%	2.1%	-8.8%	-35.7%
Hong Kong	3.0%	1.9%	-17.0%	-22.3%
Denmark	2.6%	1.7%	-12.3%	-23.5%
Spain	2.4%	1.5%	-14.1%	-25.6%
Italy	2.3%	1.4%	-8.5%	-28.5%
Singapore	1.6%	1.0%	-1.5%	-28.3%
Belgium	1.0%	0.6%	-13.2%	-27.3%
Finland	1.0%	0.6%	-7.2%	-25.0%
Norway	0.8%	0.5%	-15.3%	-20.7%
Israel	0.8%	0.5%	-1.9%	-21.8%
Ireland	0.6%	0.4%	-5.5%	-38.9%
Portugal	0.0%	0.4%	-11.0%	-12.9%
Austria	0.2%	0.1%	-15.2%	-40.9%
New Zealand	0.2%	0.1%	-8.6%	-33.4%
Total EAFE Countries	100.0%	62.5%	-9.4%	-33.4%
	100.0%	8.2%	-9.4%	-12.6%
Canada Total Developed Countries		70.7%	-7.8% -9.2%	-23.9%
China		9.2%	-9.2%	-35.4%
Taiwan		4.0%		-30.5%
India		4.5%	-14.5% 6.5%	-30.5%
Korea		3.1%	-16.4%	-40.7%
Brazil		1.7% 1.4%	8.5% -0.1%	4.3% 1.9%
Saudi Arabia				
South Africa		1.0%	-12.3%	-19.2%
Mexico		0.7%	-5.4%	-7.4%
Thailand		0.6%	-2.9%	-6.8%
Indonesia		0.6%	7.8%	14.3%
Malaysia		0.4%	-7.1%	-15.9%
United Arab Emirates		0.4%	-2.5%	5.1%
Qatar		0.4%	3.1%	12.7%
Kuwait		0.3%	-5.5%	6.4%
Philippines		0.2%	-13.6%	-26.3%
Poland		0.2%	-25.1%	-51.9%
Chile		0.2%	3.2%	0.6%
Turkey		0.1%	16.3%	3.8%
Peru		0.1%	-0.9%	3.0%
Greece		0.1%	-7.5%	-25.2%
Colombia		0.0%	-18.5%	-23.6%
Czech Republic		0.0%	-19.2%	-9.8%
Hungary		0.0%	-15.0%	-54.3%
Egypt		0.0%	-1.3%	-28.8%
Total Emerging Countries		29.3%	-11.6%	-28.1%
Total ACWIxUS Countries		100.0%	-9.9%	-25.2%

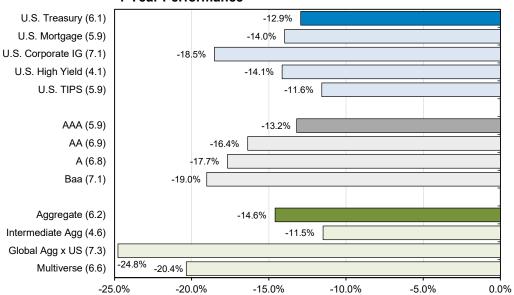
Source: Morningstar Direct, MSCI Global Index Monitor (Returns are Net in USD)

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

- Fixed income market results were broadly negative during the 3rd quarter. Investors' concerns about rising inflation, combined with expectations of higher US interest rates, detracted from performance. As a result, US Treasury yields continued to rise across the maturity curve throughout the quarter.
- The return for the BB US Aggregate Bond Index, the bellwether investment grade benchmark, was down -4.8% for the period.
- Performance across the investment grade index's segments was also negative during the period with the US Corporate Investment Grade bonds returning -5.1% and the US Mortgage index component posting a return of -5.3%.
- High yield bonds outperformed their investment grade counterparts, but still
  declined by -0.6%. US TIPS, which have delivered strong performance in
  recent periods, posted a decline of -5.1% as investors' expectations of future
  inflation declined.
- Outside of domestic markets, the BB Global Aggregate ex US Index posted a return of -8.8% for the quarter. Like domestic bonds, global bond index performance was negatively impacted by rising interest rates and a strengthening USD, which acted as a drag on domestic index returns.
- Over the trailing 1-year period, domestic investment grade benchmark performance was negative, led lower by investment grade corporate bonds (-18.5%), followed by mortgage-backed bonds (-14.0%), US Treasury bonds (-12,9%), and US TIPS (-11.6%). The bellwether Bloomberg US Aggregate Bond Index (-14.6%) declined for the year.
- Lower quality high yield corporate bonds outperformed their investment grade counterparts on a relative basis with the Bloomberg US High Yield Index returning -14.1% for the period.
- Performance for non-US bonds was broadly negative for the year with the developed market Bloomberg Global Aggregate ex US Index falling by -24.9%. The combination of rising interest rates overseas, persistent inflation, and USD strength hindered index performance for the year.

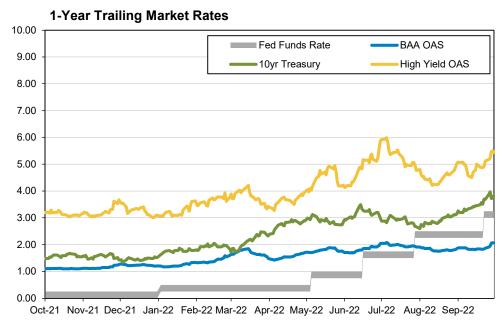


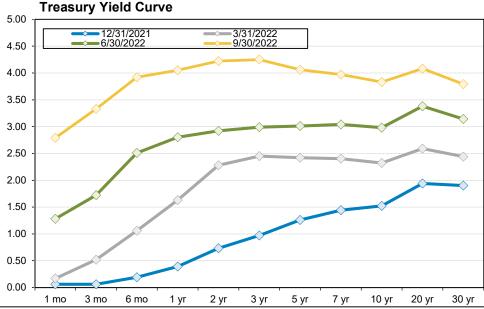
# 1-Year Performance



Source: Bloomberg

- The gray band across the graph illustrates the range of the current Fed Funds Rate. In the 3rd quarter this year, the Fed raised its target rate range from 1.75% to 3.25%. During its recent September meeting, the Federal Open Market Committee (FOMC) stated it intends to continue to remove liquidity from the market by raising interest rates and also allowing bonds held on its balance sheet to mature without reinvesting those proceeds. Importantly, the FOMC stated that it will remain vigilant in its fight against persistently higher inflation.
- The yield on the US 10-year Treasury (green line) ended the period higher as concerns over the pace of inflation, combined with the Fed's announced rate increase, drove yields higher. Interest rates continued to climb during the quarter, reaching a high of roughly 4.00% during the latter part of September 2022, before settling at 3.83% at the end of the month.
- The blue line illustrates changes in the BAA OAS (Option Adjusted Spread). This measure quantifies the additional yield premium that investors require to purchase and hold non-US Treasury investment grade issues. For the full year, the spread widened slightly from 1.10% to 2.06%. High Yield OAS was largely unchanged during the year as spreads rose from 3.17% to 5.43%. High Yield spreads reached as high as 5.80% in early July before trading lower the remainder of the quarter.
- The lower graph provides a snapshot of the US Treasury yield curve at the end of each of the last four quarters. Short-term rates continued to rise during the 3rd quarter as the FOMC continued raising rates to combat rising inflation. Both intermediate and longer-term rates were modestly higher across the curve, albeit less dramatically than short-term rates. The curve remained inverted between 2-year rates and 10-year rates. Said differently, the short-term rate was higher than the long-term rate. Historically, a persistent inversion of these two key rates has been an indication of a future recession withing 6- to 24-months.





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

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# **3Q22 EXECUTIVE SUMMARY**

# **Market Summary:**

The markets started the 3<sup>rd</sup> quarter with a brief reprieve from their downward trend in 2022. Investors anticipated the Federal Reserve was nearing the end of rate hikes; stocks and bonds both enjoyed strong returns in July. However, comments from the central bank leaders in August crushed those hopes. The Fed raised the Fed Funds rate twice by 75 basis points in July and September and indicated they would continue to pursue higher rates to reduce inflation, regardless of the impact on the economy. These actions caused the equity and fixed income markets to sell off during the second half of the quarter. The S&P 500 declined by 4.9% with small cap and growth stocks performing slightly better during the quarter. The Bloomberg US Aggregate fell 4.3% for the quarter and is down 14.6% year-to-date, suffering its worst performance in over 40 years. The international equity markets suffered larger losses due to rising energy prices and the expectation of a severe recession across Europe (MSCI EAFE NR -9.4%). Real estate continues to be the lone asset class to survive 2022, posting a slight gain for the quarter. 2022 has been a painful year for investors.

#### Conclusions/Recommendations:

- 1. The Total Fund declined -4.68% during the quarter, just above the Policy Index, and ranking just below median in the All Master Trust Universe and in the top quartile of the Master Trust >70% Equity Median. The Fund benefited from exposure to domestic small cap equities and intermediate duration fixed income.
- 2. For the year, the Total Fund returned -14.68%, outperforming the Policy Index and ranking just below median. The Fund continues to perform well relative to expectations.
- 3. The Fund's largest position (28.9% of the portfolio) in the Northern Trust Russell 1000 Index was down -4.59% for the quarter in line with the index.
- 4. T Rowe Price was the only one of the three domestic equity active managers to outperform its benchmark for the quarter. T Rowe Price benefitted from stock selection in Industrials, Business Services and Technology. Champlain's holdings in Financials and Health Care impacted performance. Summit Creek's underperformed was due to overweight in Technology and underweight to Energy.
- 5. In the international equity portfolio, only Vanguard outperformed its benchmark as a result of its exposure to Brazilian Energy and an underweight to Chinese Technology. MFS was impacted by stock selection in Utilities and Energy. Dodge & Cox's performance was impacted by Health Care, Technology and Energy.
- 6. Schroder slightly outperformed its benchmark for the quarter.
- 7. The real estate portfolio returned 0.46% for the quarter, below NCREIF ODCE Index return of 0.79%. Both funds reported flat to negative appreciation during the quarter.
- 8. At quarter end the Fund was near its allocation targets and within policy ranges.

1 Quarter				
	Market Value 07/01/2022	Net Flows	Return On Investment	Market Value 09/30/2022
Employees' Total Fund	539,539,435	-236,045	-25,259,507	514,043,883
		22.22	0.700.400	007 400 070
Total Domestic Equity	237,339,964	-96,239	-9,783,468	227,460,258
NTGI R1000 Index Fund	155,871,108	- 	-7,155,324	148,715,784
Champlain Mid Cap	25,266,895	-57,158	-1,032,422	24,177,315
NTGI S&P 400	25,564,184	-	-627,140	24,937,044
T Rowe Price	15,806,574	-	-471,743	15,334,832
Summit Creek	14,831,202	-39,081	-496,839	14,295,282
Total International Equity	111,989,385	-	-11,147,264	100,842,121
Dodge & Cox International Stock	43,345,612	-	-4,635,077	38,710,535
MFS	44,194,489	-	-3,805,042	40,389,447
International Emerging Equity				
Vanguard EM	24,449,284	-	-2,707,145	21,742,139
Total Domestic Fixed Income	134,223,861	-52,401	-4,587,172	129,584,289
Schroder Intermediate Duration	95,694,999	-52,401	-2,841,206	92,801,392
NTGI Government / Credit	38,528,862	-	-1,745,965	36,782,897
Total Real Estate	55,986,177	-93,350	258,371	56,151,198
PGIM	38,536,427	-93,350	83,874	38,526,951
Principal Enhanced Property Fund, LP	17,449,750	-	174,498	17,624,248
Cash	48	5,945	24	6,017

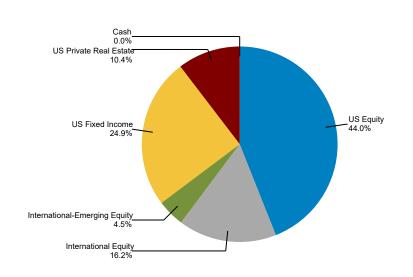
Fiscal Year To Date				
	Market Value 01/01/2022	Net Flows	Return On Investment	Market Value 09/30/2022
Employees' Total Fund	644,150,844	-10,855,218	-119,251,742	514,043,883
Total Domestic Equity	303,050,831	-354,920	-75,235,653	227,460,258
NTGI R1000 Index Fund	197,092,443	-23,180	-48,353,479	148,715,784
Champlain Mid Cap	35,200,125	-197,372	-10,825,437	24,177,315
NTGI S&P 400	31,767,806	-3,745	-6,827,018	24,937,044
T Rowe Price	19,672,954	-	-4,338,122	15,334,832
Summit Creek	19,317,503	-130,624	-4,891,598	14,295,282
Total International Equity	133,628,795	26,657	-32,813,331	100,842,121
Dodge & Cox International Stock	-	46,540,746	-7,830,211	38,710,535
Templeton	48,884,754	-46,514,089	-2,370,665	-
MFS	55,098,981	-	-14,709,534	40,389,447
International Emerging Equity				
Vanguard EM	29,645,060	-	-7,902,921	21,742,139
Total Domestic Fixed Income	147,499,724	-167,216	-17,748,220	129,584,289
Schroder Intermediate Duration	104,234,531	-162,153	-11,270,987	92,801,392
NTGI Government / Credit	43,265,193	-5,063	-6,477,233	36,782,897
Total Real Estate	49,971,063	-363,156	6,543,292	56,151,198
PGIM	34,435,695	-266,609	4,357,865	38,526,951
Principal Enhanced Property Fund, LP	15,535,368	-96,547	2,185,427	17,624,248
Cash	10,000,430	-9,996,583	2,170	6,017

1 Year				
	Market Value 10/01/2021	Net Flows	Return On Investment	Market Value 09/30/2022
Employees' Total Fund	614,248,089	-11,152,709	-89,051,498	514,043,883
Total Domestic Equity	292,051,668	-13,706,194	-50,885,216	227,460,258
NTGI R1000 Index Fund	191,892,843	-13,256,344	-29,920,714	148,715,784
Champlain Mid Cap	33,109,053	-268,375	-8,663,363	24,177,315
NTGI S&P 400	29,415,356	-4,151	-4,474,161	24,937,044
T Rowe Price	18,798,848	-	-3,464,016	15,334,832
Summit Creek	18,835,568	-177,323	-4,362,962	14,295,282
	-,,	<b>,</b> -	7 7	,, -
Total International Equity	130,595,091	26,657	-29,779,627	100,842,121
Dodge & Cox International Stock	-	46,540,746	-7,830,211	38,710,535
Templeton	48,779,551	-46,514,089	-2,265,462	-
MFS	51,607,131	-	-11,217,684	40,389,447
International Emerging Equity				
Vanguard EM	30,208,409	-	-8,466,271	21,742,139
Total Domestic Fixed Income	148,144,162	-224,834	-18,335,039	129,584,289
Schroder Intermediate Duration	104,954,722	-218,096	-11,935,233	92,801,392
NTGI Government / Credit	43,189,440	-6,737	-6,399,806	36,782,897
Total Real Estate	43,452,674	2,752,427	9,946,097	56,151,198
PGIM	29,388,786	2,891,166	6,246,999	38,526,951
Principal Enhanced Property Fund, LP	14,063,888	-138,739	3,699,098	17,624,248
Cash	4,494	-764	2,287	6,017

	Domestic	c Equity	Internation	nal Equity	Emergin	g Equity	Domesti Inco		Real E	state	Cash Eq	uivalent	Total	Fund
	(\$)	%	(\$)	%	(\$)	%	(\$)	%	(\$)	%	(\$)	%	(\$)	%
Employees' Total Fund	226,460	44.1	79,100	15.4	21,742	4.2	128,531	25.0	56,151	10.9	2,059	0.4	514,044	100.0
Total Domestic Equity	226,460	99.6	-	-	-	-	-	-	-	-	1,000	0.4	227,460	44.2
NTGI R1000 Index Fund	148,534	99.9	-	-	-	-	-	-	-	-	182	0.1	148,716	28.9
Champlain Mid Cap	23,616	97.7	-	-	-	-	-	-	-	-	562	2.3	24,177	4.7
NTGI S&P 400	24,937	100.0	-	-	-	-	-	-	-	-	-	-	24,937	4.9
T Rowe Price	15,335	100.0	-	-	-	-	-	-	-	-	-	-	15,335	3.0
Summit Creek	14,039	98.2	-	-	-	-	-	-	-	-	256	1.8	14,295	2.8
Total International Equity	-	-	79,100	78.4	21,742	21.6	-	-	-	-	-	-	100,842	19.6
Dodge & Cox International Stock	-	-	38,711	100.0	-	-	-	-	-	-	-	-	38,711	7.5
MFS	-	-	40,389	100.0	-	-	-	-	-	-	-	-	40,389	7.9
International Emerging Equity														
Vanguard EM	-	-	-	-	21,742	100.0	-	-	-	-	-	-	21,742	4.2
Total Domestic Fixed Income	-	-	-	-	-	-	128,531	99.2	-	-	1,053	0.8	129,584	25.2
Schroder Intermediate Duration	-	-	-	-	-	-	91,748	98.9	-	-	1,053	1.1	92,801	18.1
NTGI Government / Credit	-	-	-	-	-	-	36,783	100.0	-	-	-	-	36,783	7.2
Total Real Estate	-	-	-	-	-	-	-	-	56,151	100.0	-	-	56,151	10.9
PGIM	-	-	-	-	-	-	-	-	38,527	100.0	-	-	38,527	7.5
Principal Enhanced Property Fund, LP	-	-	-	-	-	-	-	-	17,624	100.0	-	-	17,624	3.4
Cash	-	-	-	-	-	-	-	-	-	-	6	100.0	6	0.0

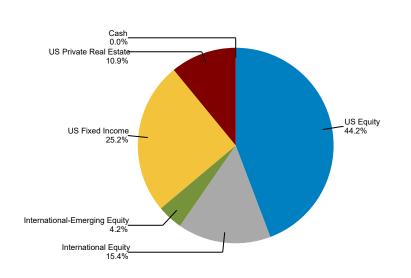
As of September 30, 2022

June 30, 2022 : \$539,539,435

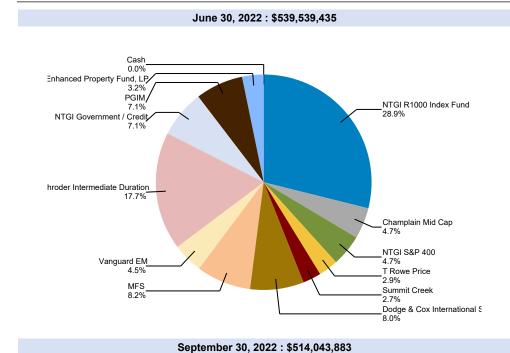


Allocation		
	Market Value	Allocation
■ US Equity	237,339,964	44.0
■ International Equity	87,540,102	16.2
■ International-Emerging Equity	24,449,284	4.5
US Fixed Income	134,223,861	24.9
■ US Private Real Estate	55,986,177	10.4
■ Cash	48	0.0

# September 30, 2022 : \$514,043,883



Allocation		
	Market Value	Allocation
■ US Equity	227,460,258	44.2
International Equity	79,099,983	15.4
International-Emerging Equity	21,742,139	4.2
US Fixed Income	129,584,289	25.2
US Private Real Estate	56,151,198	10.9
■ Cash	6,017	0.0



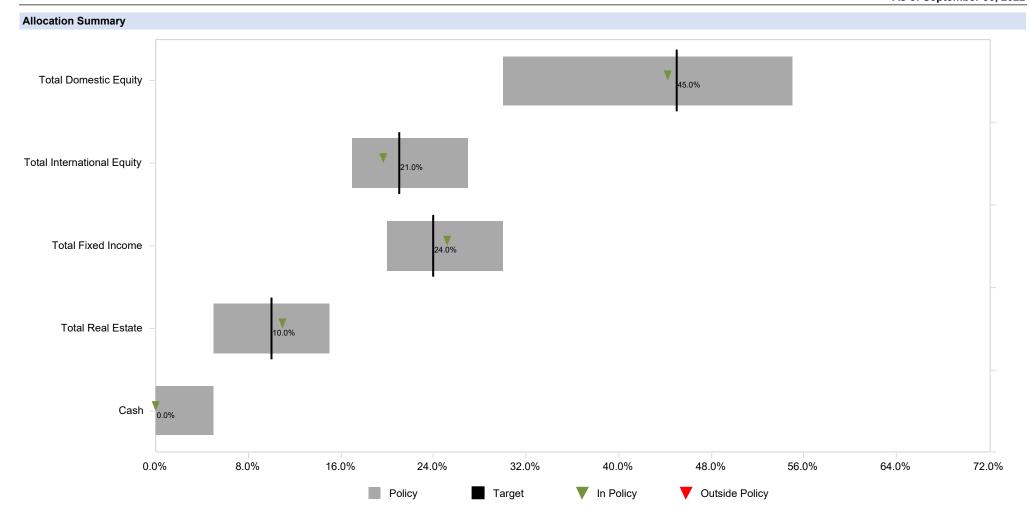
Allocation		
	Market Value	Allocation
■ NTGI R1000 Index Fund	155,871,108	28.9
■ Champlain Mid Cap	25,266,895	4.7
■ NTGI S&P 400	25,564,184	4.7
■ T Rowe Price	15,806,574	2.9
■ Summit Creek	14,831,202	2.7
■ Dodge & Cox International Stock	43,345,612	8.0
■ MFS	44,194,489	8.2
Vanguard EM	24,449,284	4.5
Schroder Intermediate Duration	95,694,999	17.7
NTGI Government / Credit	38,528,862	7.1
■ PGIM	38,536,427	7.1
Principal Enhanced Property Fund, LP	17,449,750	3.2
■ Cash	48	0.0

## Cash 0.0% Enhanced Property Fund, LP 3.4% PGIM/ NTGI R1000 Index Fund 28.9% 7.5% NTGI Government / Credit 7.2% hroder Intermediate Duration 18.1% Champlain Mid Cap NTGI S&P 400 4.9% Vanguard EM T Rowe Price 3.0% MFS Summit Creek 7.9% 2.8% Dodge & Cox International §

	Market Value	Allocation
NTGI R1000 Index Fund	148,715,784	28.9
Champlain Mid Cap	24,177,315	4.7
NTGI S&P 400	24,937,044	4.9
T Rowe Price	15,334,832	3.0
Summit Creek	14,295,282	2.8
Dodge & Cox International Stock	38,710,535	7.5
MFS	40,389,447	7.9
Vanguard EM	21,742,139	4.2
Schroder Intermediate Duration	92,801,392	18.1
NTGI Government / Credit	36,782,897	7.2
PGIM	38,526,951	7.5
Principal Enhanced Property Fund, LP	17,624,248	3.4
I Cash	6,017	0.0

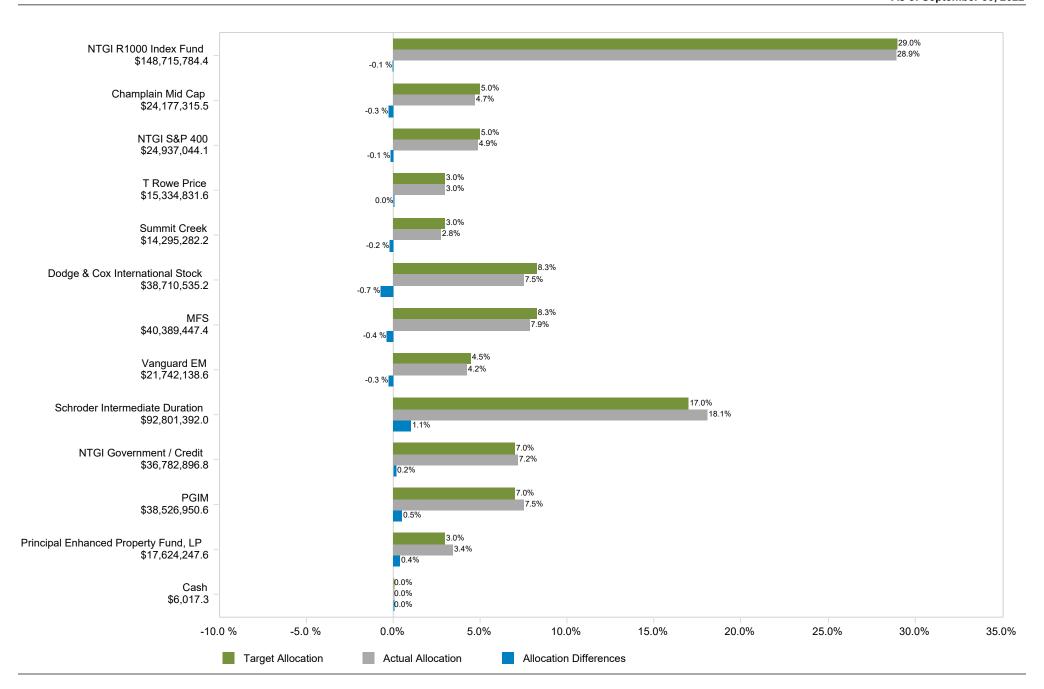
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Asset Allocation Compliand	ce						
	Asset Allocation \$	Current Allocation (%)	Minimum Allocation (%)	Target Allocation (%)	Maximum Allocation (%)	Target Rebal. (\$)	Differences (%)
Employee's Total Fund	514,043,883	100.0		100.0		-	0.0
Total Domestic Equity	227,460,258	44.2	30.0	45.0	55.0	3,859,490	-0.8
Total International Equity	100,842,121	19.6	17.0	21.0	27.0	7,107,094	-1.4
Total Fixed Income	129,584,289	25.2	20.0	24.0	30.0	-6,213,757	1.2
Total Real Estate	56,151,198	10.9	5.0	10.0	15.0	-4,746,810	0.9
Cash	6,017	0.0	0.0	0.0	5.0	-6,017	0.0

Asset Allocation Compliance					
	Asset Allocation \$	Current Allocation (%)	Target Allocation (%)	Target Rebal. (\$000)	Differences (%)
Employee's Total Fund	514,043,883	100.0	100.0	-	0.0
Total Equity	328,302,379	63.9	66.0	10,966,584	-2.1
Total Domestic Equity	227,460,258	44.2	45.0	3,859,490	-0.8
NTGI R1000 Index Fund	148,715,784	28.9	29.0	356,942	-0.1
Champlain Mid Cap	24,177,315	4.7	5.0	1,524,879	-0.3
NTGI S&P 400	24,937,044	4.9	5.0	765,150	-0.1
T Rowe Price	15,334,832	3.0	3.0	86,485	0.0
Summit Creek	14,295,282	2.8	3.0	1,126,034	-0.2
Total International Equity	100,842,121	19.6	21.0	7,107,094	-1.4
Dodge & Cox International Stock	38,710,535	7.5	8.3	3,698,085	-0.7
MFS	40,389,447	7.9	8.3	2,019,173	-0.4
Vanguard EM	21,742,139	4.2	4.5	1,389,836	-0.3
Total Fixed Income	129,584,289	25.2	24.0	-6,213,757	1.2
Total Domestic Fixed Income	129,584,289	25.2	24.0	-6,213,757	1.2
Schroder Intermediate Duration	92,801,392	18.1	17.0	-5,413,932	1.1
NTGI Government / Credit	36,782,897	7.2	7.0	-799,825	0.2
Total Real Estate	56,151,198	10.9	10.0	-4,746,810	0.9
PGIM	38,526,951	7.5	7.0	-2,543,879	0.5
Principal Enhanced Property Fund, LP	17,624,248	3.4	3.0	-2,202,931	0.4
Cash	6,017	0.0	0.0	-6,017	0.0



Comparative Performance												
	Q.	TR	FY	TD	1 `	ΥR	3 `	YR	5`	YR	10	YR
Employees' Total Fund	-4.68	(58)	-18.68	(57)	-14.68	(54)	3.84	(32)	4.92	(28)	7.50	(16)
Sioux Falls Total Policy	-4.74	(60)	-19.83	(66)	-16.17	(65)	3.50	(37)	4.49	(36)	7.12	(23)
All Master Trust - Total Fund Median	-4.37		-17.78		-14.31		2.70		3.78		5.92	
Employee's Total Fund	-4.68	(18)	-18.68	(3)	-14.68	(11)	3.84	(65)	4.92	(56)	7.50	(53)
Sioux Falls Total Policy	-4.74	(19)	-19.83	(6)	-16.17	(26)	3.50	(70)	4.49	(70)	7.12	(63)
Master Trust >=70% Equity Median	-5.51		-23.03		-19.08		4.46		5.33		7.56	
Total Domestic Equity	-4.13	(N/A)	-24.85	(N/A)	-18.54	(N/A)	6.57	(N/A)	8.05	(N/A)	10.99	(N/A)
Russell 3000 Index	-4.46	(N/A)	-24.62	(N/A)	-17.63	(N/A)	7.70	(N/A)	8.62	(N/A)	11.39	(N/A)
All Master Trust-US Equity Segment Median	N/A		N/A		N/A		N/A		N/A		N/A	
NTGI R1000 Index Fund	-4.59	(31)	-24.53	(56)	-17.16	(55)	N/A		N/A		N/A	
Russell 1000 Index	-4.61	(43)	-24.59	(72)	-17.22	(63)	7.95	(56)	9.00	(55)	11.60	(54)
IM U.S. Large Cap Index Equity (SA+CF) Median	-4.87		-23.94		-15.56		7.96		9.02		11.63	
Champlain Mid Cap	-4.11	(78)	-30.86	(100)	-26.34	(100)	6.69	(35)	N/A		N/A	
Russell Midcap Index	-3.44	(63)	-24.27	(63)	-19.39	(72)	5.19	(76)	6.48	(47)	10.30	(50)
IM U.S. Mid Cap Core Equity (SA+CF) Median	-3.12		-21.53		-15.25		6.05		6.24		10.29	
NTGI S&P 400	-2.45	(31)	-21.49	(37)	-15.21	(43)	6.05	(53)	5.88	(59)	10.11	(65)
S&P MidCap 400 Index	-2.46	(37)	-21.52	(44)	-15.25	(49)	6.01	(57)	5.82	(73)	10.04	(81)
IM U.S. Mid Cap Core Equity (SA+CF) Median	-3.12		-21.53		-15.25		6.05		6.24		10.29	
T Rowe Price	-2.98	(15)	-22.05	(91)	-18.43	(91)	5.46	(60)	4.86	(18)	9.14	(20)
Russell 2000 Value Index	-4.61	(42)	-21.12	(74)	-17.69	(86)	4.72	(75)	2.87	(57)	7.94	(47)
IM U.S. Small Cap Value Equity (MF) Median	-5.41		-19.93		-15.25		5.76		3.19		7.84	
Summit Creek	-3.37	(82)	-25.40	(13)	-23.31	(23)	12.24	(7)	12.50	(4)	N/A	
Russell 2000 Growth Index	0.24	(32)	-29.28	(47)	-29.27	(60)	2.94	(88)	3.60	(91)	8.81	(91)
IM U.S. Small Cap Growth Equity (SA+CF+MF) Median	-1.06		-29.86		-28.34		6.00		7.69		10.81	

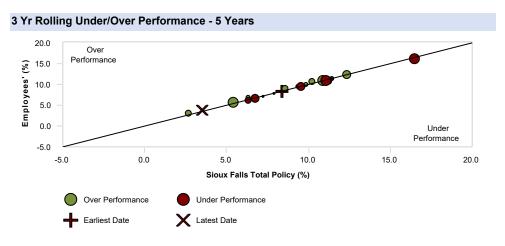
	Q.	TR	FY	TD	1 '	ΥR	3	YR	5 `	5 YR		YR
Total International Equity	-9.95	(N/A)	-24.55	(N/A)	-22.80	(N/A)	-0.71	(N/A)	-0.38	(N/A)	3.50	(N/A)
MSCI AC World ex USA (Net)	-9.91	(N/A)	-26.50	(N/A)	-25.17	(N/A)	-1.52	(N/A)	-0.81	(N/A)	3.01	(N/A)
All Master Trust-Intl. Equity Segment Median	N/A		N/A		N/A		N/A		N/A		N/A	
MFS	-8.61	(23)	-26.70	(9)	-21.74	(5)	0.75	(24)	2.27	(15)	5.57	(13)
MSCI EAFE Growth Index (Net)	-8.50	(19)	-33.02	(67)	-30.28	(61)	-1.49	(64)	0.67	(38)	4.70	(26)
IM International Large Cap Growth Equity (MF) Median	-9.57		-30.90		-28.73		-0.84		-0.14		3.89	
Dodge & Cox International Stock	-10.69	(86)	N/A		N/A		N/A		N/A		N/A	
MSCI EAFE Index	-9.29	(27)	-26.76	(37)	-24.75	(46)	-1.38	(60)	-0.36	(45)	4.15	(36)
IM International Large Cap Core Equity (MF) Median	-10.00		-27.32		-24.94		-0.93		-0.66		3.79	
Vanguard EM	-11.07	(52)	-26.66	(27)	-28.03	(31)	-2.04	(43)	-1.27	(31)	N/A	
MSCI Emerging Markets (Net) Index	-11.57	(61)	-27.16	(31)	-28.11	(31)	-2.07	(43)	-1.81	(39)	1.05	(46)
IM Emerging Markets Equity (MF) Median	-11.00		-29.27		-29.88		-2.54		-2.37		0.91	
Total Domestic Fixed Income	-3.42	(N/A)	-12.04	(N/A)	-12.39	(N/A)	-1.86	(N/A)	0.36	(N/A)	1.77	(N/A)
Blmbg. U.S. Aggregate Index	-4.75	(N/A)	-14.61	(N/A)	-14.60	(N/A)	-3.26	(N/A)	-0.27	(N/A)	0.89	(N/A)
Sioux Falls Blended Fixed Income Policy	-3.68	(N/A)	-11.90	(N/A)	-12.13	(N/A)	-2.25	(N/A)	0.21	(N/A)	1.01	(N/A)
All Master Trust-US Fixed Income Segment Median	N/A		N/A		N/A		N/A		N/A		N/A	
Schroder Intermediate Duration	-2.97	(53)	-10.82	(85)	-11.39	(89)	-1.33	(53)	0.69	(50)	1.70	(15)
Bloomberg Intermediate US Govt/Credit Idx	-3.06	(66)	-9.63	(58)	-10.14	(62)	-1.64	(82)	0.38	(85)	1.00	(88)
IM U.S. Intermediate Duration (SA+CF) Median	-2.97		-9.54		-10.04		-1.31		0.68		1.33	
NTGI Government / Credit	-4.53	(50)	-14.97	(79)	-14.82	(68)	-3.07	(79)	0.02	(71)	1.07	(83)
Blmbg. U.S. Gov't/Credit	-4.56	(54)	-15.10	(82)	-14.95	(72)	-3.15	(85)	-0.05	(82)	1.02	(86)
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	-4.54		-14.43		-14.38		-2.71		0.18		1.37	
Total Real Estate	0.46	(54)	13.11	(32)	21.97	(34)	13.40	(17)	11.16	(28)	11.52	(42)
NCREIF Fund Index-ODCE (EW) (Net)	0.79	(32)	13.34	(25)	21.70	(36)	12.13	(51)	9.87	(61)	10.26	(69)
IM U.S. Open End Private Real Estate (SA+CF) Median	0.56		11.79		20.19		12.14		10.65		11.19	
PGIM	0.22	(57)	12.67	(39)	19.91	(55)	12.53	(46)	10.63	(51)	11.25	(47)
NCREIF Fund Index-ODCE (EW) (Net)	0.79	(32)	13.34	(25)	21.70	(36)	12.13	(51)	9.87	(61)	10.26	(69)
IM U.S. Open End Private Real Estate (SA+CF) Median	0.56		11.79		20.19		12.14		10.65		11.19	
Principal Enhanced Property Fund, LP	1.00	(29)	14.09	(21)	26.37	(5)	15.06	(10)	N/A		N/A	
NCREIF Fund Index-ODCE (EW) (Net)	0.79	(32)	13.34	(25)	21.70	(36)	12.13	(51)	9.87	(61)	10.26	(69)
IM U.S. Open End Private Real Estate (SA+CF) Median	0.56		11.79		20.19		12.14		10.65		11.19	
Cash	0.49		0.65		0.66		0.61		1.10		N/A	
90 Day U.S. Treasury Bill	0.46		0.61		0.62		0.59		1.15		0.67	

Comparative Performance										
	Ye End	1 ear ding -2022	Ye End Sep-	ear ling	1 Ye End Sep-	ar ling	1 Ye End Sep∹	ar ling	Ye End Sep-	
Employees' Total Fund	-14.68	(54)	22.96	(19)	6.75	(64)	4.02	(59)	9.17	(13)
Sioux Falls Total Policy	-16.17	(65)	22.18	(24)	8.25	(45)	3.05	(77)	9.00	(14)
All Master Trust - Total Fund Median	-14.31		18.81		7.80		4.39		6.28	
Employee's Total Fund	-14.68	(11)	22.96	(54)	6.75	(76)	4.02	(25)	9.17	(44)
Sioux Falls Total Policy	-16.17	(26)	22.18	(61)	8.25	(64)	3.05	(49)	9.00	(47)
Master Trust >=70% Equity Median	-19.08		23.50		9.35		2.99		8.87	
Total Domestic Equity	-18.54	(N/A)	35.98	(17)	9.26	(65)	3.66	(25)	17.40	(33)
Russell 3000 Index	-17.63	(N/A)	31.88	(56)	15.00	(26)	2.92	(36)	17.58	(30)
All Master Trust-US Equity Segment Median	N/A		32.38		11.34		2.18		16.34	
NTGI R1000 Index Fund	-17.16	(55)	30.98	(46)	N/A		N/A		N/A	
Russell 1000 Index	-17.22	(63)	30.96	(49)	16.01	(22)	3.87	(61)	17.76	(51)
IM U.S. Large Cap Index Equity (SA+CF) Median	-15.56		30.90		15.12		3.97		17.77	
Champlain Mid Cap	-26.34	(100)	40.03	(53)	17.74	(5)	N/A		N/A	
Russell Midcap Index	-19.39	(72)	38.11	(62)	4.55	(36)	3.19	(28)	13.98	(59)
IM U.S. Mid Cap Core Equity (SA+CF) Median	-15.25		42.32		0.85		-2.40		14.19	
NTGI S&P 400	-15.21	(43)	43.68	(33)	-2.11	(67)	-2.36	(49)	14.29	(43)
S&P MidCap 400 Index	-15.25	(49)	43.68	(32)	-2.16	(75)	-2.49	(67)	14.21	(47)
IM U.S. Mid Cap Core Equity (SA+CF) Median	-15.25		42.32		0.85		-2.40		14.19	
T Rowe Price	-18.43	(91)	53.89	(91)	-6.58	(7)	-4.09	(11)	12.70	(14)
Russell 2000 Value Index	-17.69	(86)	63.92	(59)	-14.88	(40)	-8.24	(22)	9.33	(45)
IM U.S. Small Cap Value Equity (MF) Median	-15.25		66.23		-15.41		-10.36		8.73	
Summit Creek	-23.31	(23)	48.28	(21)	24.33	(42)	-5.47	(47)	34.84	(18)
Russell 2000 Growth Index	-29.27	(60)	33.27	(79)	15.71	(58)	-9.63	(72)	21.06	(73)
IM U.S. Small Cap Growth Equity (SA+CF+MF) Median	-28.34		39.19		20.44	· /	-5.73	` '	26.71	,
•										

	Ye End	1 ear ding -2022	Ye End Sep-	ear ling	1 Ye End Sep-	ar ing	1 Ye End Sep-2	ar ing	Ye End	1 ear ling 2018
Total International Equity	-22.80	(N/A)	25.09	(61)	1.35	(79)	-1.81	(71)	2.09	(59)
MSCI AC World ex USA (Net)	-25.17	(N/A)	23.92	(71)	3.00	(66)	-1.23	(61)	1.76	(66)
All Master Trust-Intl. Equity Segment Median	N/A		26.59		4.07		-0.71		2.39	
MFS	-21.74	(5)	22.93	(36)	6.28	(86)	4.56	(20)	4.65	(32)
MSCI EAFE Growth Index (Net)	-30.28	(61)	20.87	(47)	13.44	(57)	2.21	(37)	5.85	(22)
IM International Large Cap Growth Equity (MF) Median	-28.73		20.62		14.87		1.35		2.48	
Dodge & Cox International Stock	N/A		N/A		N/A		N/A		N/A	
MSCI EAFE Index	-24.75	(46)	26.29	(40)	0.93	(66)	-0.82	(28)	3.25	(20)
IM International Large Cap Core Equity (MF) Median	-24.94		25.10		3.92		-1.61		2.32	
Vanguard EM	-28.03	(31)	24.13	(26)	5.21	(72)	1.57	(40)	-1.76	(32)
MSCI Emerging Markets (Net) Index	-28.11	(31)	18.20	(59)	10.54	(49)	-2.02	(70)	-0.81	(25)
IM Emerging Markets Equity (MF) Median	-29.88		19.25		10.39		0.25		-3.86	
Total Domestic Fixed Income	-12.39	(N/A)	-0.20	(78)	8.10	(39)	9.14	(57)	-1.33	(73)
Blmbg. U.S. Aggregate Index	-14.60	(N/A)	-0.90	(88)	6.98	(56)	10.30	(37)	-1.22	(70)
Sioux Falls Blended Fixed Income Policy	-12.13	(N/A)	-0.69	(86)	7.02	(55)	9.45	(51)	-1.13	(66)
All Master Trust-US Fixed Income Segment Median	N/A		1.12		7.27		9.46		-0.55	
Schroder Intermediate Duration	-11.39	(89)	0.22	(54)	8.18	(3)	8.38	(21)	-0.62	(76)
Bloomberg Intermediate US Govt/Credit Idx	-10.14	(62)	-0.40	(88)	6.32	(58)	8.17	(39)	-0.96	(95)
IM U.S. Intermediate Duration (SA+CF) Median	-10.04		0.26		6.44		8.01		-0.37	
NTGI Government / Credit	-14.82	(68)	-1.06	(90)	8.05	(34)	11.37	(7)	-1.29	(95)
Blmbg. U.S. Gov't/Credit	-14.95	(72)	-1.13	(92)	8.03	(35)	11.32	(7)	-1.37	(96)
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	-14.38		-0.02		7.53		10.42		-0.75	
Total Real Estate	21.97	(34)	16.77	(34)	2.39	(31)	6.62	(63)	9.17	(50)
NCREIF Fund Index-ODCE (EW) (Net)	21.70	(36)	14.83	(55)	0.89	(70)	5.26	(76)	7.89	(76)
IM U.S. Open End Private Real Estate (SA+CF) Median	20.19		16.11		1.72		6.80		9.04	
PGIM	19.91	(55)	16.06	(52)	2.40	(31)	6.86	(48)	8.80	(62)
NCREIF Fund Index-ODCE (EW) (Net)	21.70	(36)	14.83	(55)	0.89	(70)	5.26	(76)	7.89	(76)
IM U.S. Open End Private Real Estate (SA+CF) Median	20.19		16.11		1.72		6.80		9.04	
Principal Enhanced Property Fund, LP	26.37	(5)	17.67	(26)	2.45	(31)	6.00	(67)	N/A	
NCREIF Fund Index-ODCE (EW) (Net)	21.70	(36)	14.83	(55)	0.89	(70)	5.26	(76)	7.89	(76)
IM U.S. Open End Private Real Estate (SA+CF) Median	20.19		16.11		1.72		6.80		9.04	

Returns for periods greater than one year are annualized. Returns are expressed as percentages.





#### 3 Yr Rolling Percentile Ranking - 5 Years Return Percentile Rank 88 25.0 50.0 75.0 100.0 6/18 6/19 12/19 6/20 12/20 6/21 12/21 9/22 12/17 12/18

	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count	
<ul><li>Employees'</li></ul>	20	11 (55%)	9 (45%)	0 (0%)	0 (0%)	
<ul> <li>Sioux Falls Policy</li> </ul>	20	12 (60%)	7 (35%)	1 (5%)	0 (0%)	

# Peer Group Scattergram - 3 Years 4.18 3.80 3.04 2.66 11.96 12.42 12.88 13.34 13.80 14.26 14.72 Risk (Standard Deviation %)

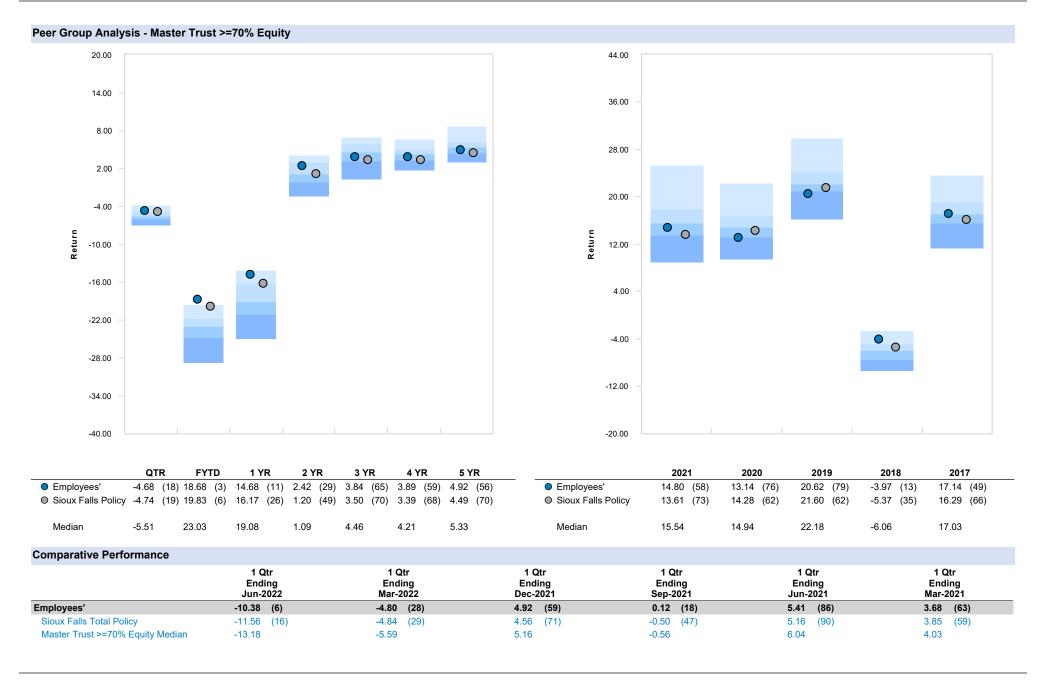
eer	Group Sca	ittergram -	rears					
5.	.32							
<b>②</b> 4.	.94 –							
Return (%)	.56 -						0	
<b>e</b> f i	.18 —						_	
<b>~</b> 3.	.80							
3.	.42							
	10.12	10.56	11.00	11.44	11.88	12.32	12.76	13.20
			F	Risk (Standard D	Deviation %)			

	Return	Standard Deviation
<ul><li>Employees'</li></ul>	3.84	13.50
<ul> <li>Sioux Falls Policy</li> </ul>	3.50	14.40
Median	2.70	12.31

Return	Standard Deviation	
4.92	12.01	
4.49	12.73	
3.78	10.79	
	4.92 4.49	Return         Deviation           4.92         12.01           4.49         12.73

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Employees'	1.60	95.66	93.35	0.51	0.13	0.30	0.93	9.57
Sioux Falls Policy	0.00	100.00	100.00	0.00	N/A	0.27	1.00	10.21
Historical Statistics	s - 5 Years							
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Employees'	1.36	96.96	93.60	0.65	0.24	0.36	0.94	8.45
Sioux Falls Policy	0.00	100.00	100.00	0.00	N/A	0.32	1.00	8.97

**Historical Statistics - 3 Years** 

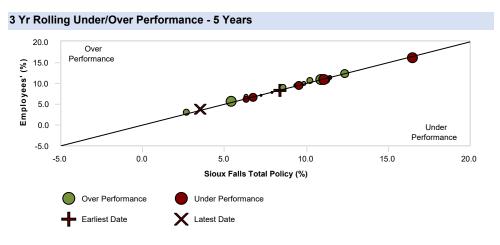


75-95

Count

5 (25%)

4 (20%)



#### 3 Yr Rolling Percentile Ranking - 5 Years 0.0 Return Percentile Rank 25.0 8 50.0 75.0 100.0 6/18 12/19 12/20 6/21 12/21 9/22 12/17 12/18 6/19 6/20

25-Median

Count

3 (15%)

2 (10%)

Median-75

Count

12 (60%)

14 (70%)

5-25

Count

0 (0%)

0 (0%)

**Total Period** 

20

20

Employees'

Sioux Falls Policy

Pee	r Gro	up Scatte	ergram - 3 Y	ears/				
	4.80							
Return (%)	4.48 4.16							
Retur	3.84	_						
Ľ	3.52 3.20			0				
		3.00	13.65	14.30	14.95	15.60	16.25	16.90
				Risk (St	andard Deviation	%)		

Pee	r Grou	p Scattere	gram - 5 Ye	ars				
urn (%)	5.60 5.32 5.04 4.76		)					
Ret	4.76 – 4.48 – 4.20	59	12.20	12.81	13.42	14.03	14.64	15.25
					tandard Deviation			

	Return	Standard Deviation
<ul><li>Employees'</li></ul>	3.84	13.50
<ul><li>Sioux Falls Policy</li></ul>	3.50	14.40
Median	4.46	16.36

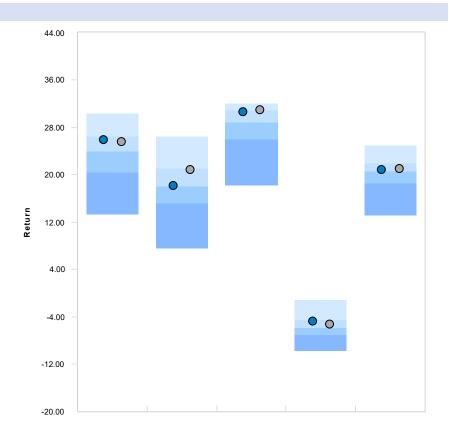
	Return	Standard Deviation
<ul><li>Employees'</li></ul>	4.92	12.01
<ul> <li>Sioux Falls Policy</li> </ul>	4.49	12.73
Median	5.33	14.77

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Employees'	1.60	95.66	93.35	0.51	0.13	0.30	0.93	9.57
Sioux Falls Policy	0.00	100.00	100.00	0.00	N/A	0.27	1.00	10.21
Historical Statistics	s - 5 Years							
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Employees'	1.36	96.96	93.60	0.65	0.24	0.36	0.94	8.45
Sioux Falls Policy	0.00	100.00	100.00	0.00	N/A	0.32	1.00	8.97

**Historical Statistics - 3 Years** 

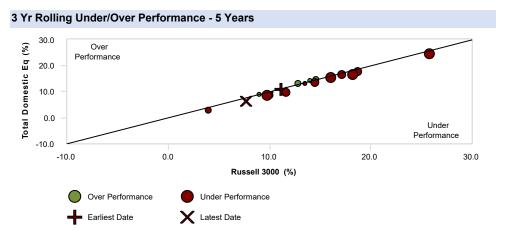
# Peer Group Analysis - All Master Trust-US Equity Segment

No data found.



	2021	2020	2019	2018	2017	
<ul><li>Total Domestic Eq</li></ul>	25.94 (31)	18.18 (46)	30.75 (27)	-4.69 (27)	20.87 (46)	
O Russell 3000	25.66 (36)	20.89 (27)	31.02 (21)	-5.24 (41)	21.13 (41)	
Median	24.00	17.99	28.78	-5.80	20.52	

Comparative Performance						
	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021
Total Domestic Eq	-16.35 (75)	-6.29 (75)	8.39 (40)	0.67 (11)	7.70 (52)	7.17 (36)
Russell 3000	-16.70 (80)	-5.28 (52)	9.28 (26)	-0.10 (44)	8.24 (33)	6.35 (58)
All Master Trust-US Equity Segment Median	-15.48	-5.23	7.45	-0.20	7.72	6.61



# 3 Yr Rolling Percentile Ranking - 5 Years

No data found.

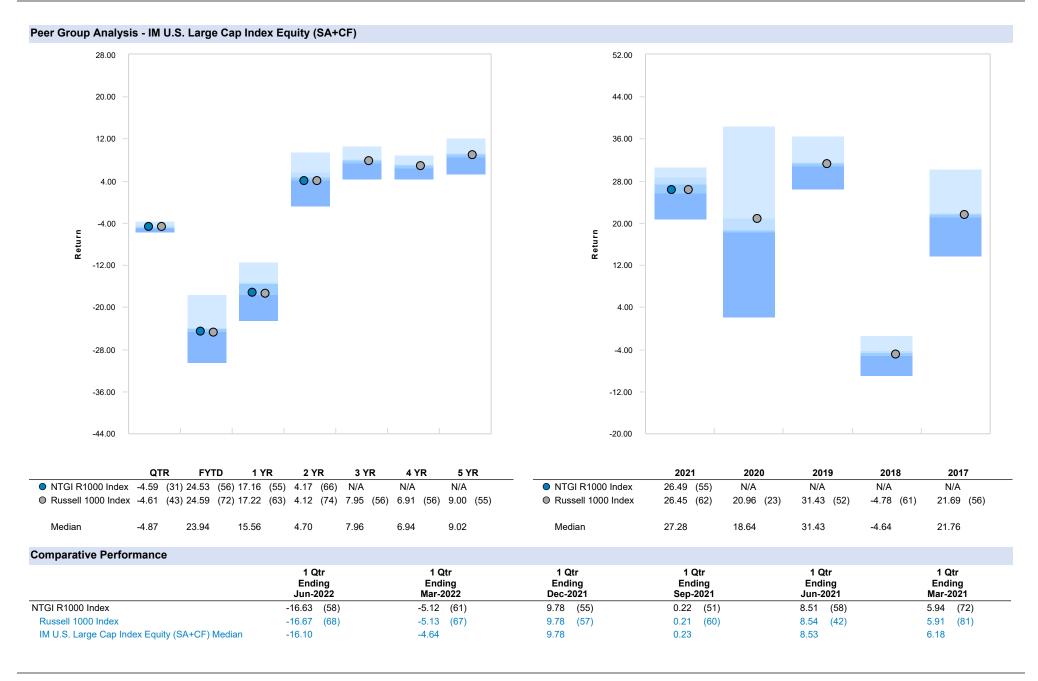


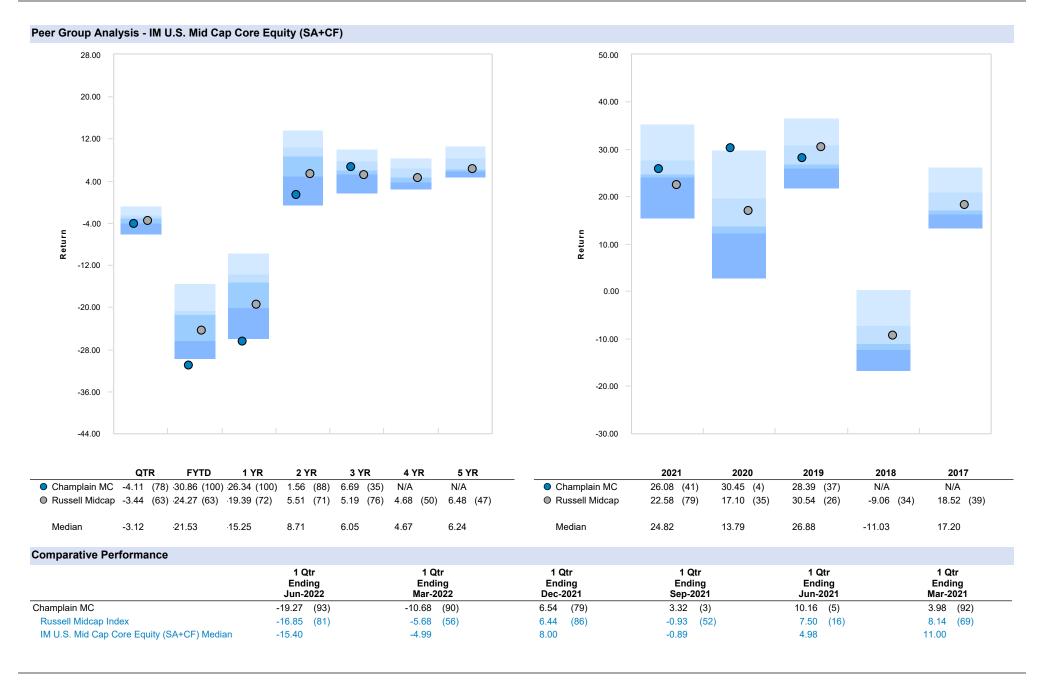
Pee	r Gro	up Scatte	rgram - 5 `	Years					
	8.80		0						
%) ".	8.60 8.40 8.20								
etur	8.20								
œ	8.00								
	7.80								
	18	8.42	18.45	18.48	18.51	18.54	18.57	18.60	18.63
				F	Risk (Standard D	Deviation %)			

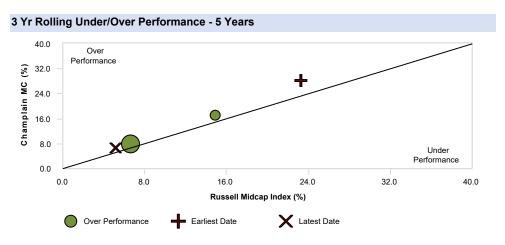
	Return	Standard Deviation		Return		
<ul><li>Total Domestic Eq</li></ul>	6.57	20.71	Total Domestic Eq	8.05	18.57	
<ul><li>Russell 3000</li></ul>	7.70	20.66	<ul><li>Russell 3000</li></ul>	8.62	18.46	
Median	N/A	N/A	Median	N/A	N/A	

Error	Market Capture	Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
2.39	96.63	99.57	-0.99	-0.43	0.38	1.00	14.33
0.00	100.00	100.00	0.00	N/A	0.43	1.00	14.00
5 Years							
Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
2.11	98.26	99.79	-0.49	-0.23	0.45	1.00	12.89
0.00	100.00	100.00	0.00	N/A	0.48	1.00	12.59
	2.39 0.00 5 Years Tracking Error	2.39 96.63 0.00 100.00  5 Years  Tracking Up Market Capture 2.11 98.26	Error         Capture         Capture           2.39         96.63         99.57           0.00         100.00         100.00           5 Years         Up Down Market Market Capture         Market Capture           2.11         98.26         99.79	Error         Capture         Capture           2.39         96.63         99.57         -0.99           0.00         100.00         100.00         0.00           5 Years           Tracking Error         Up Market Market Market Capture         Alpha Capture           2.11         98.26         99.79         -0.49	Error         Capture         Capture         Ratio           2.39         96.63         99.57         -0.99         -0.43           0.00         100.00         100.00         0.00         N/A           5 Years           Tracking Error         Up Market Capture         Down Market Market Capture         Alpha Ratio         Information Ratio           2.11         98.26         99.79         -0.49         -0.23	Error         Capture         Capture         Fatto         Ratio           2.39         96.63         99.57         -0.99         -0.43         0.38           0.00         100.00         100.00         N/A         0.43           5 Years           Tracking Error         Up Market Capture         Down Market Capture         Alpha Ratio         Information Ratio         Sharpe Ratio           2.11         98.26         99.79         -0.49         -0.23         0.45	Error         Capture         Capture         Ratio         Ratio           2.39         96.63         99.57         -0.99         -0.43         0.38         1.00           0.00         100.00         100.00         N/A         0.43         1.00           5 Years           Tracking Error         Up Market Capture         Market Capture         Alpha Ratio         Sharpe Ratio         Beta           2.11         98.26         99.79         -0.49         -0.23         0.45         1.00

**Historical Statistics - 3 Years** 







#### 3 Yr Rolling Percentile Ranking - 5 Years 0.0 Return Percentile Rank 25.0 0000000000 50.0 00 75.0 100.0 6/19 12/19 12/20 6/21 12/21 9/22 12/17 6/18 12/18 6/20 5-25 25-Median Median-75 75-95 **Total Period** Count Count Count Count Champlain MC 4 2 (50%) 2 (50%) 0 (0%) 0 (0%) Russell Midcap 20 0 (0%) 13 (65%) 4 (20%) 3 (15%)



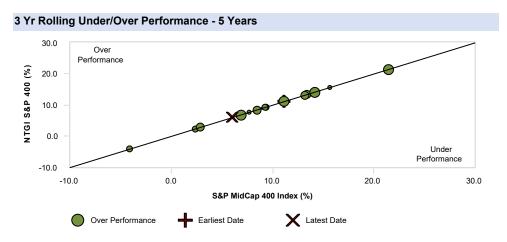
20.00	20.20	20.40	20.60	20.80	21.00
6.12					
6.21 -					
6.30 -					
6.48 - 6.39 -					
<b>€</b> 6.48 −	0				
6.57					

	Return	Standard Deviation
<ul><li>Champlain MC</li></ul>	6.69	21.65
<ul><li>Russell Midcap</li></ul>	5.19	22.74
Median	6.05	22.72

	Return	Standard Deviation
<ul><li>Champlain MC</li></ul>	N/A	N/A
<ul> <li>Russell Midcap</li> </ul>	6.48	20.14
Median	6.24	20.87

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Champlain MC	7.74	96.39	90.99	1.94	0.14	0.38	0.90	14.13
Russell Midcap	0.00	100.00	100.00	0.00	N/A	0.31	1.00	16.31
Historical Statistics - 5 Years								
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Champlain MC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Russell Midcap	0.00	100.00	100.00	0.00	N/A	0.36	1.00	14.35





#### 3 Yr Rolling Percentile Ranking - 5 Years Return Percentile Rank 25.0 50.0 75.0 100.0 6/18 9/22 12/17 12/18 6/19 6/20 12/20 6/21 12/21 12/19

	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
<ul> <li>NTGI S&amp;P 400</li> </ul>	20	0 (0%)	6 (30%)	14 (70%)	0 (0%)
S&P MC 400 ldx	20	0 (0%)	3 (15%)	16 (80%)	1 (5%)



ree	er Group Scat	tergram - 5 Y	ears				
	6.40						
(%)	6.20						
Return	6.00 -						
R	5.80 -					8	
	5.60						
	20.80	20.88	20.96	21.04	21.12	21.20	21.28
			Risk (S	tandard Deviation	%)		

	Return	Standard Deviation
<ul> <li>NTGI S&amp;P 400</li> </ul>	6.05	23.43
<ul> <li>S&amp;P MC 400 ldx</li> </ul>	6.01	23.44
Median	6.05	22.72

	Return	Standard Deviation
● NTGI S&P 400	5.88	21.18
	5.82	21.18
Median	6.24	20.87

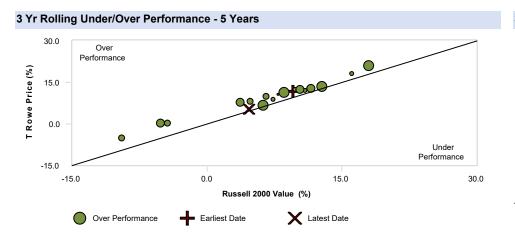
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
NTGI S&P 400	0.02	100.03	99.93	0.03	1.73	0.34	1.00	16.64
S&P MC 400 ldx	0.00	100.00	100.00	0.00	N/A	0.34	1.00	16.65
Historical Statistic	s - 5 Years							
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
NTGI S&P 400	0.04	100.13	99.92	0.06	1.48	0.32	1.00	15.18
S&P MC 400 ldx	0.00	100.00	100.00	0.00	N/A	0.32	1.00	15.19



Count

0 (0%)

1 (5%)



#### 3 Yr Rolling Percentile Ranking - 5 Years Return Percentile Rank 25.0 50.0 00 75.0 100.0 6/18 12/18 6/19 12/19 6/20 12/20 6/21 9/22 12/17 12/21 5-25 25-Median Median-75 75-95 **Total Period**

Count

1 (5%)

9 (45%)

Count

2 (10%)

3 (15%)

Count

17 (85%)

7 (35%)

Pee	r Group Sca	ttergram -	3 Years					
	6.12							
(%	5.78							
<u>.</u>	5.44 -							
Return (%)	5.10 -							
œ	4.76							
	4.42		ı					
	22.00	23.00	24.00	25.00	26.00	27.00	28.00	29.00
			ı	Risk (Standard D	Deviation %)			

Pee	r Group Sca	ttergram -	5 Years					
	5.52							
(9	4.83 -							
<u>ی</u>	4.83 - 4.14 - 3.45 -	_						
etur	3.45 -							
œ	2.76 -				$\circ$			
	2.07							
	19.92	20.75	21.58	22.41	23.24	24.07	24.90	25.73
			F	Risk (Standard I	Deviation %)			

	Return	Standard Deviation
T Rowe Price	5.46	22.96
<ul><li>Russell 2000 V</li></ul>	4.72	26.11
Median	5.76	27.39

	Return	Standard Deviation
<ul><li>T Rowe Price</li></ul>	4.86	20.68
<ul><li>Russell 2000 V</li></ul>	2.87	23.19
Median	3.19	24.49

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
T Rowe Price	6.66	86.64	83.38	1.09	-0.02	0.32	0.85	16.86
Russell 2000 V	0.00	100.00	100.00	0.00	N/A	0.29	1.00	19.05
Historical Statistic	cs - 5 Years							
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
T Rowe Price	5.63	91.59	84.93	2.11	0.24	0.28	0.87	15.23
Russell 2000 V	0.00	100.00	100.00	0.00	N/A	0.19	1.00	17.05

T Rowe Price

Russell 2000 V

20

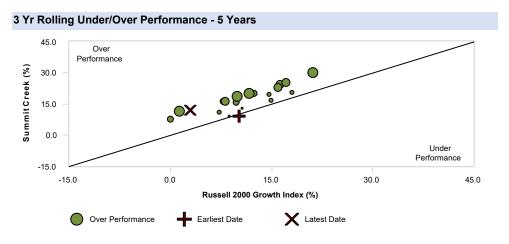
20



Count

0 (0%)

9 (45%)



#### 3 Yr Rolling Percentile Ranking - 5 Years 0.0 Return Percentile Rank 25.0 50.0 00000000000000 75.0 100.0 6/21 12/21 9/22 12/17 6/18 12/18 6/19 12/19 6/20 12/20 5-25 25-Median Median-75 75-95 **Total Period**

Count

11 (55%)

0 (0%)

Count

3 (15%)

11 (55%)

Count

6 (30%)

0 (0%)

Pee	r Group Scatt	ergram - 3 Ye	ars				
	16.00						
(%)	12.00 -						
Return (	8.00 -						
Ret	4.00 -					0	
	0.00	l l	ı				
	22.08	22.77	23.46	24.15	24.84	25.53	26.22
			Risk (St	tandard Deviation	%)		

Pee	r Group Scat	tergram - 5	Years					
	15.00							
9	12.00 -							
Return (%)	9.00 -							
etui	6.00 -							
œ	3.00 -							
	0.00							
	20.64	21.12	21.60	22.08	22.56	23.04	23.52	24.00
			F	Risk (Standard I	Deviation %)			

	Return	Standard Deviation
<ul><li>Summit Creek</li></ul>	12.24	22.74
<ul> <li>R2000 Gr Idx</li> </ul>	2.94	25.61
Median	6.00	24.87

	Return	Standard Deviation	
<ul><li>Summit Creek</li></ul>	12.50	21.21	
<ul> <li>R2000 Gr Idx</li> </ul>	3.60	23.26	
Median	7.69	22.72	

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Summit Creek	7.47	98.51	72.10	9.27	1.07	0.59	0.85	14.67
R2000 Gr Idx	0.00	100.00	100.00	0.00	N/A	0.22	1.00	17.76
Historical Statisti	cs - 5 Years							
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Summit Creek	6.36	104.13	76.15	8.93	1.23	0.61	0.88	13.87
R2000 Gr Idx	0.00	100.00	100.00	0.00	N/A	0.22	1.00	16.33

Summit Creek

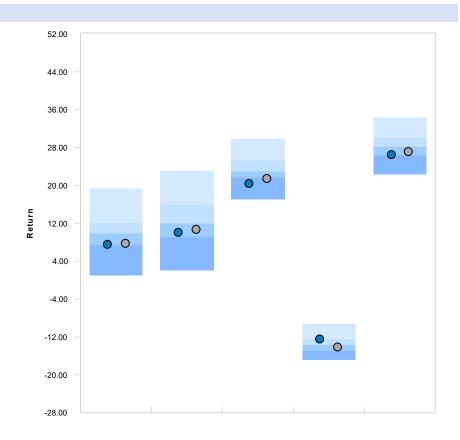
R2000 Gr ldx

20

20

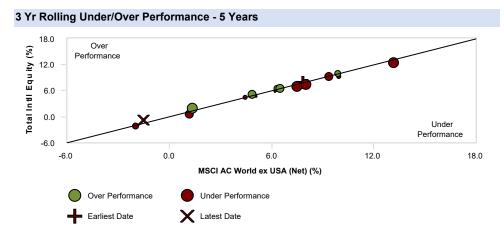
# Peer Group Analysis - All Master Trust-Intl. Equity Segment

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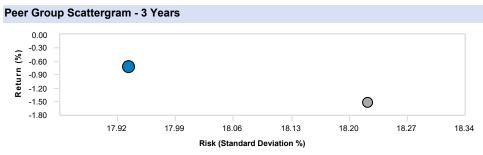
	2021	2020	2019	2018	2017	
<ul> <li>Total Intll Equity</li> </ul>	7.56 (74)	10.20 (68)	20.38 (84)	-12.42 (24)	26.50 (72)	
<ul><li>MSCIACxUSNet</li></ul>	7.82 (72)	10.65 (65)	21.51 (76)	-14.20 (61)	27.19 (63)	
Median	9.92	11.97	22.88	-13.68	28.18	

Comparative Performance						
	1 Qtr	1 Qtr	1 Qtr	1 Qtr	1 Qtr	1 Qtr
	Ending	Ending	Ending	Ending	Ending	Ending
	Jun-2022	Mar-2022	Dec-2021	Sep-2021	Jun-2021	Mar-2021
Total Intll Equity	-11.31 (15)	-5.52 (36)	2.32 (39)	-3.26 (84)	5.07 (79)	3.42 (63)
MSCI AC World ex USA (Net) All Master Trust-Intl. Equity Segment Median	-13.73 (52)	-5.44 (33)	1.82 (54)	-2.99 (78)	5.48 (66)	3.49 (61)
	-13.70	-6.68	1.91	-1.90	5.76	3.82



# 3 Yr Rolling Percentile Ranking - 5 Years

No data found.



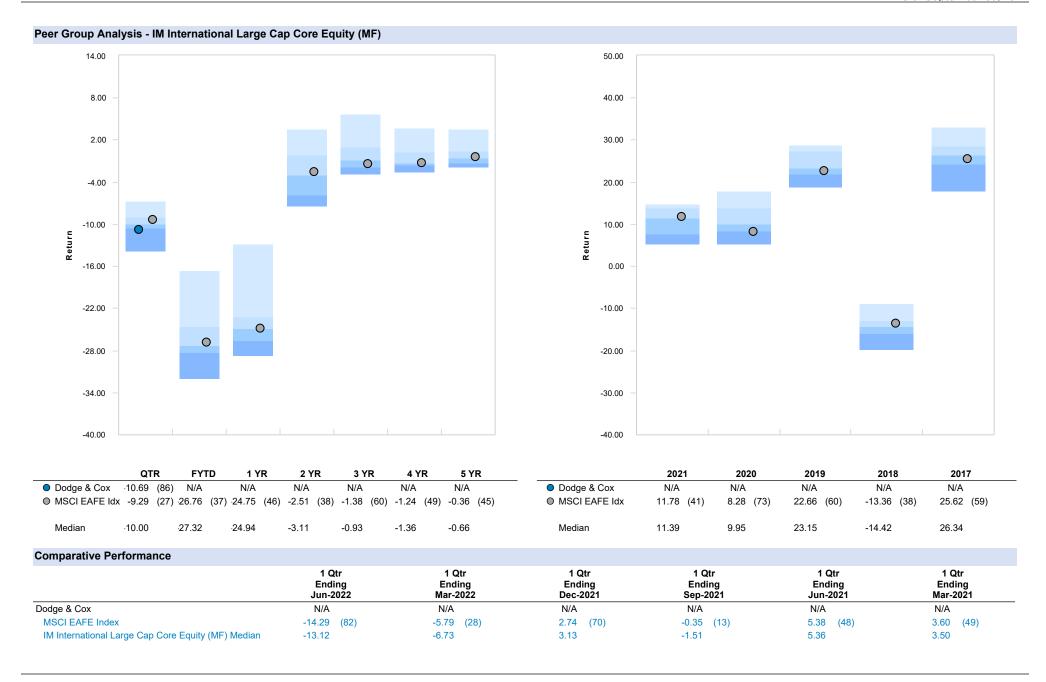
Up

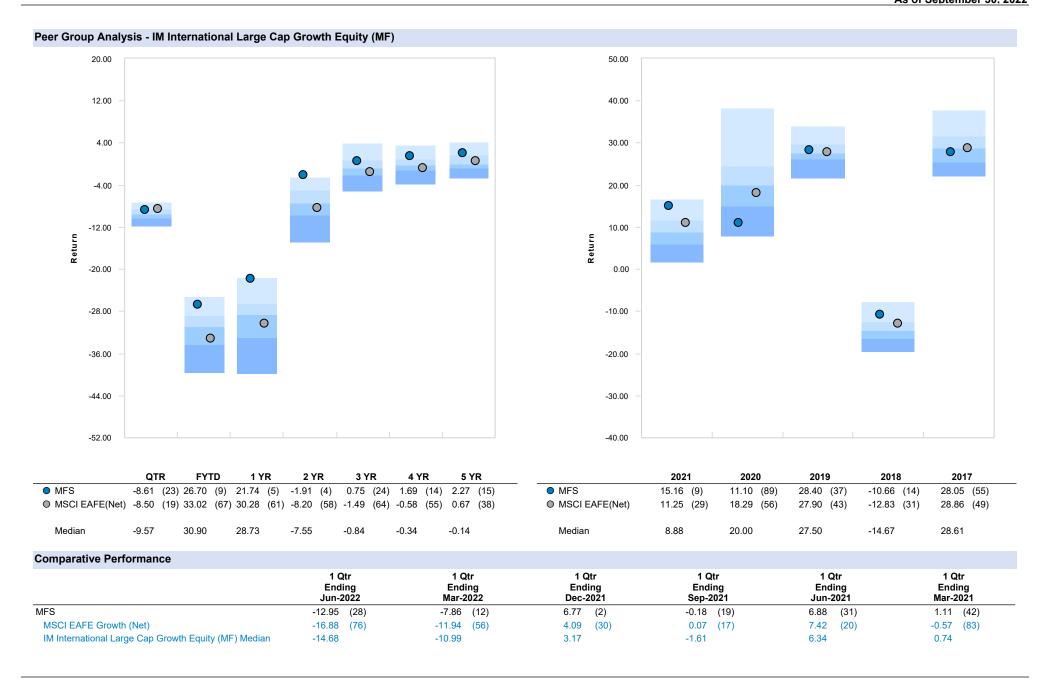
Down

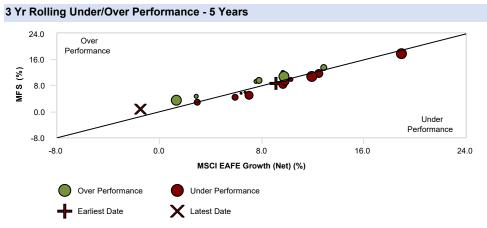
Pee	r Group Scatt	ergram - 5 Years				
Return (%)	0.00 -0.20 - -0.40 - -0.60 -					
œ	-0.80 -1.00 16.05	16.10	16.15	16.20	16.25	16.30
	10.03	10.10	Risk (Standard D		10.23	10.30

	Return	Standard Deviation		Return	Standard Deviation
<ul><li>Total Intll Equity</li></ul>	-0.71	17.93	Total Intll Equity	-0.38	16.09
<ul> <li>MSCIACxUSNet</li> </ul>	-1.52	18.22	<ul> <li>MSCIACxUSNet</li> </ul>	-0.81	16.26
Median	N/A	N/A	Median	N/A	N/A

Tracking Error	Market Capture	Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
3.22	97.88	94.74	0.77	0.24	0.02	0.97	13.41
0.00	100.00	100.00	0.00	N/A	-0.02	1.00	13.72
s - 5 Years							
Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
2.71	98.95	97.05	0.42	0.15	-0.01	0.98	11.91
	3.22 0.00 s - 5 Years Tracking Error	Error   Market	Error	Error   Market   Market   Capture   Capture	Error         Market Capture         Market Capture         Alpha         Ratio           3.22         97.88         94.74         0.77         0.24           0.00         100.00         100.00         0.00         N/A           8 - 5 Years         Tracking Error         Up Market Market Capture         Down Market Capture         Alpha         Information Ratio	Error         Market Capture         Alpha Capture         Ratio         Ratio           3.22         97.88         94.74         0.77         0.24         0.02           0.00         100.00         100.00         0.00         N/A         -0.02           5 - 5 Years         Tracking Error         Up Market Capture         Down Market Capture         Alpha Alpha Ratio         Information Ratio         Sharpe Ratio	Error         Market Capture         Market Capture         Alpha Ratio         Ratio         Beta           3.22         97.88         94.74         0.77         0.24         0.02         0.97           0.00         100.00         100.00         0.00         N/A         -0.02         1.00           8 - 5 Years         Tracking Error         Up Market Capture         Down Market Capture         Alpha Alpha Ratio         Information Ratio         Sharpe Ratio         Beta







#### 3 Yr Rolling Percentile Ranking - 5 Years Return Percentile Rank 50.0 75.0 100.0 6/18 6/19 12/21 9/22 12/17 12/18 12/19 6/20 12/20 6/21 5-25 25-Median Median-75 75-95

Total Daried

Over Performance	Under Performance		Total Period	Count	Count	Count	Count	
L Forthern Bone	V Latest Pate	<ul><li>MFS</li></ul>	20	6 (30%)	7 (35%)	7 (35%)	0 (0%)	
Earliest Date	X Latest Date	MSCI EAFE(Net)	20	1 (5%)	14 (70%)	5 (25%)	0 (0%)	
er Group Scattergram - 3 Yo	ears	Peer Group Scatte	rgram - 5 Years					

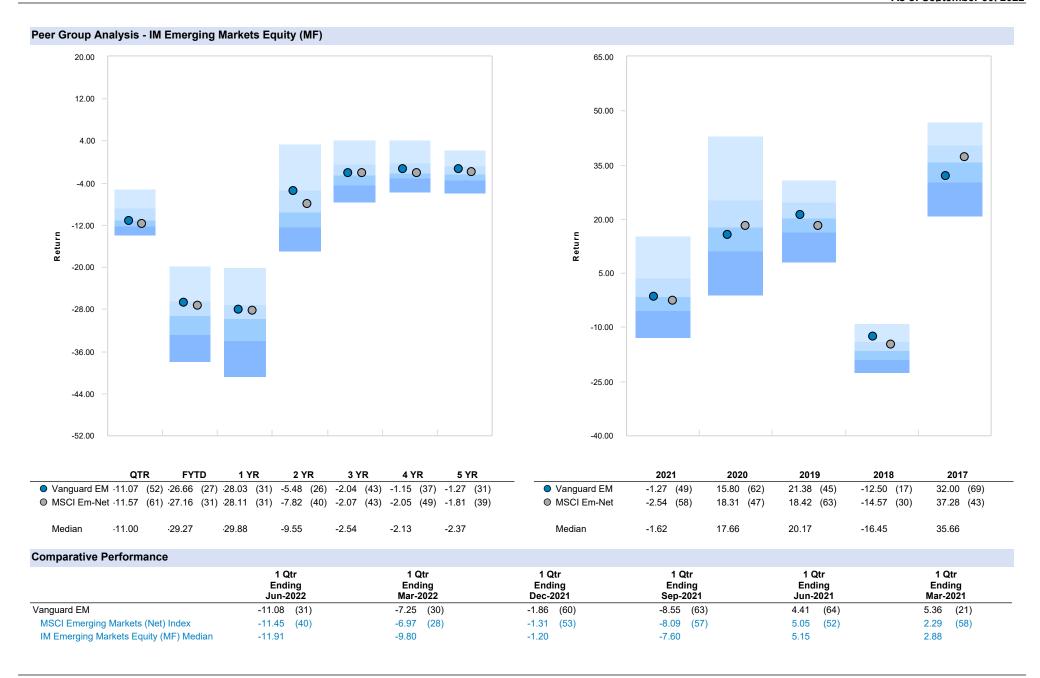
#### Peer Group Scattergram - 3 Years 1.50 0.75 Return (%) 0.00 -0.75 $\bigcirc$ -1.50 -2.25 17.76 18.00 18.24 18.48 18.72 18.96 19.20 19.44 Risk (Standard Deviation %)

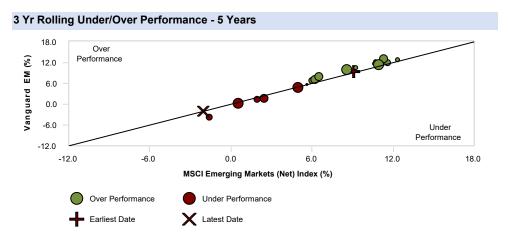
	Croup Cour	.corgrain o	Tours					
	3.20							
(%	2.40 -							
Ξ.	1.60 —							
Return (%)	0.80 -							
œ	0.00							
	-0.80							
	15.66	15.93	16.20	16.47	16.74	17.01	17.28	17.55
			F	Risk (Standard D	Deviation %)			

	Return	Standard Deviation
● MFS	0.75	18.10
<ul><li>MSCI EAFE(Net)</li></ul>	-1.49	18.74
Median	-0.84	19.15

	Return	Standard Deviation
<ul><li>MFS</li></ul>	2.27	15.95
<ul><li>MSCI EAFE(Net)</li></ul>	0.67	16.41
Median	-0.14	17.14

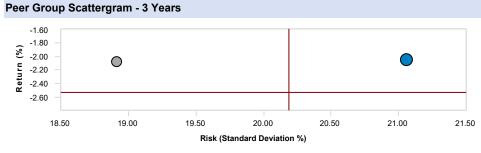
0 0 100.0							
Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
5.82	98.35	90.22	2.16	0.36	0.10	0.92	12.93
0.00	100.00	100.00	0.00	N/A	-0.02	1.00	14.02
s - 5 Years							
Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
4.80	101.03	94.03	1.65	0.31	0.15	0.93	11.26
0.00	100.00	100.00	0.00	N/A	0.05	1.00	12.13
	Tracking Error  5.82 0.00  s - 5 Years  Tracking Error  4.80	Tracking Error         Up Market Capture           5.82         98.35           0.00         100.00           s - 5 Years         Up Market Capture           4.80         101.03	Tracking Error         Up Market Capture         Down Market Capture           5.82         98.35         90.22           0.00         100.00         100.00           s - 5 Years         Up Down Market Market Capture         Market Capture           4.80         101.03         94.03	Tracking Error         Up Market Capture         Down Market Capture         Alpha           5.82         98.35         90.22         2.16           0.00         100.00         100.00         0.00           s - 5 Years         Tracking Error         Up Market Market Capture         Alpha Capture           4.80         101.03         94.03         1.65	Tracking Error         Up Market Capture         Down Market Capture         Alpha         Information Ratio           5.82         98.35         90.22         2.16         0.36           0.00         100.00         100.00         0.00         N/A           s - 5 Years         Tracking Error         Up Market Capture         Down Market Capture         Alpha Alpha Ratio         Information Ratio           4.80         101.03         94.03         1.65         0.31	Tracking Error         Up Market Capture         Down Market Capture         Alpha         Information Ratio         Sharpe Ratio           5.82         98.35         90.22         2.16         0.36         0.10           0.00         100.00         100.00         0.00         N/A         -0.02           s - 5 Years         Tracking Error         Up Market Capture         Down Market Capture         Alpha Ratio         Information Ratio         Sharpe Ratio           4.80         101.03         94.03         1.65         0.31         0.15	Tracking Error         Up Market Capture         Down Market Capture         Alpha         Information Ratio         Sharpe Ratio         Beta           5.82         98.35         90.22         2.16         0.36         0.10         0.92           0.00         100.00         100.00         0.00         N/A         -0.02         1.00           s - 5 Years         Tracking Error         Up Market Capture         Down Market Capture         Alpha Ratio         Information Ratio         Sharpe Ratio         Beta           4.80         101.03         94.03         1.65         0.31         0.15         0.93





#### 3 Yr Rolling Percentile Ranking - 5 Years 0.0 Return Percentile Rank 25.0 00 50.0 75.0 100.0 6/18 12/21 9/22 12/17 12/18 6/19 12/19 6/20 12/20 6/21

	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
<ul><li>Vanguard EM</li></ul>	20	4 (20%)	12 (60%)	4 (20%)	0 (0%)
<ul><li>MSCI Em-Net</li></ul>	20	2 (10%)	14 (70%)	4 (20%)	0 (0%)



Pee	er Group Sca	ıttergram - 5	Years					
Return (%)		C	)					
	-2.52 -2.88 17.02	17.39	17.76	18.13	18.50	18.87	19.24	19.61
				Risk (Standard I	Deviation %)			

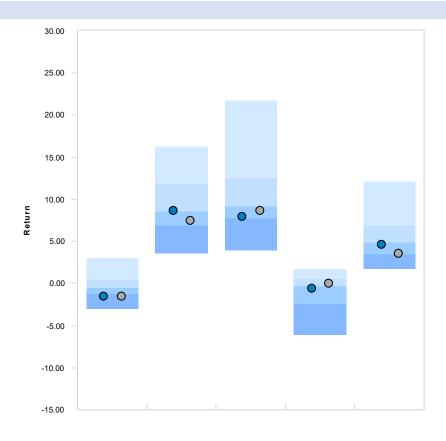
	Return	Standard Deviation
<ul><li>Vanguard EM</li></ul>	-2.04	21.06
<ul><li>MSCI Em-Net</li></ul>	-2.07	18.91
Median	-2.54	20.19

	Return	Standard Deviation
<ul><li>Vanguard EM</li></ul>	-1.27	19.04
<ul><li>MSCI Em-Net</li></ul>	-1.81	17.53
Median	-2.37	18.30

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard EM	4.91	108.60	106.49	0.53	0.10	-0.02	1.09	16.15
MSCI Em-Net	0.00	100.00	100.00	0.00	N/A	-0.04	1.00	14.14
<b>Historical Statist</b>	ics - 5 Years							
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard EM	4.18	107.74	104.06	0.86	0.20	-0.03	1.06	14.09
MSCI Em-Net	0.00	100.00	100.00	0.00	N/A	-0.08	1.00	12.83

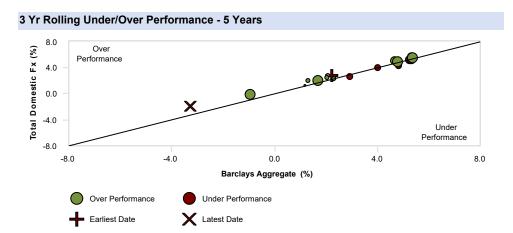
# Peer Group Analysis - All Master Trust-US Fixed Income Segment

No data found.



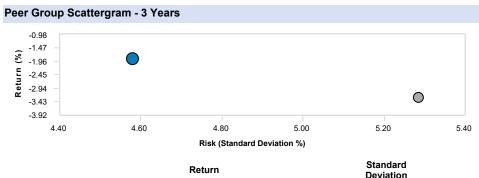
	2021	2020	2019	2018	2017	
<ul><li>Total Domestic Fx</li></ul>	-1.48 (81)	8.63 (50)	7.98 (71)	-0.51 (56)	4.66 (54)	
Barclays Agg	-1.55 (81)	7.51 (68)	8.72 (59)	0.01 (39)	3.54 (73)	
Median	-0.54	8.61	9.16	-0.30	4.94	

Comparative Performance						
	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021
Total Domestic Fx	-3.78 (24)	-5.35 (46)	-0.40 (87)	0.11 (54)	1.65 (76)	-2.81 (51)
Barclays Aggregate	-4.69 (36)	-5.93 (61)	0.01 (64)	0.05 (67)	1.83 (73)	-3.38 (65)
All Master Trust-US Fixed Income Segment Median	-5.42	-5.47	0.22	0.14	2.49	-2.80



# 3 Yr Rolling Percentile Ranking - 5 Years

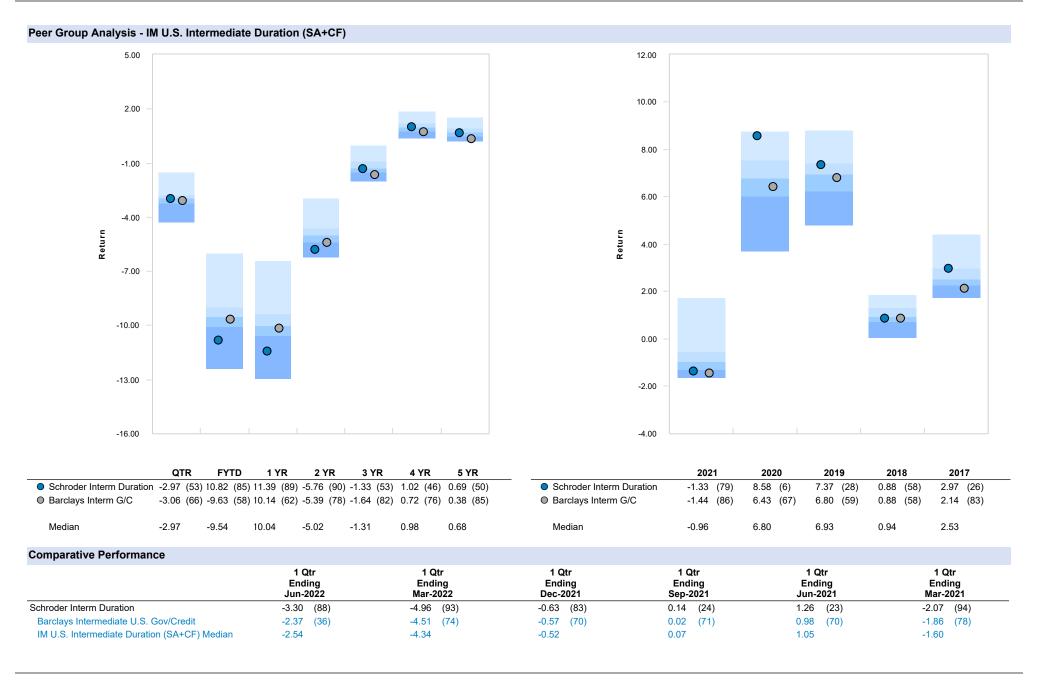
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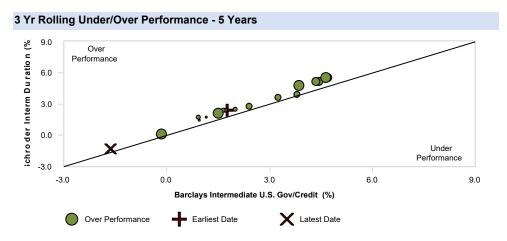


Peer	Group Sca	attergram - 5 Yea	ars				
	0.60						
(%)	0.30 -						
Return	0.00						
Ret	-0.30 —					0	
	-0.60		1		1	1	
	3.80	4.00	4.20	4.40	4.60	4.80	5.00
			Risk (S	tandard Deviation	%)		

Return	Standard Deviation		Return	Standard Deviation
-1.86	4.58	<ul><li>Total Domestic Fx</li></ul>	0.36	4.08
-3.26	5.29	<ul><li>Barclays Agg</li></ul>	-0.27	4.73
N/A	N/A	Median	N/A	N/A
	-1.86 -3.26	-1.86 4.58 -3.26 5.29	Deviation         1.86         4.58         ■ Total Domestic Fx           -3.26         5.29         ■ Barclays Agg	Deviation         Total Domestic Fx         0.36           -3.26         5.29         Barclays Agg         -0.27

Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
1.21	99.09	82.92	0.92	1.15	-0.51	0.85	3.73
0.00	100.00	100.00	0.00	N/A	-0.70	1.00	4.59
s - 5 Years							
Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
1.11	93.24	83.60	0.57	0.54	-0.17	0.84	3.03
0.00	100.00	100.00	0.00	N/A	-0.28	1.00	3.67
	1.21 0.00 s - 5 Years Tracking Error	Market   Capture	Market   Market   Capture	Market   Capture   Capture   Capture	Market   Capture   Captu	Tracking   Market   Capture   Market   Capture   Captu	Tracking   Market   Capture   Capture   Alpha   Information   Ratio   Ratio   Beta





#### 3 Yr Rolling Percentile Ranking - 5 Years 0.0 Return Percentile Rank 50.0 0000000 75.0 100.0 12/18 9/22 12/17 6/18 6/19 12/19 6/20 12/21 12/20 6/21 5-25 25-Median Median-75 75-95 **Total Period** Count Count Count Count



Pee	er Group Sca	attergram -	5 Years					
	0.80						_	
(%)	0.60							
Return	0.40	0						
	0.20	3.24	3.33	3.42	3.51	3.60	3.69	3.78
			ı	Risk (Standard I	Deviation %)			

11 (55%)

0 (0%)

7 (35%)

1 (5%)

2 (10%)

7 (35%)

0 (0%)

12 (60%)

	Return	Standard Deviation
<ul> <li>Schroder Interm Duration</li> </ul>	-1.33	4.23
<ul><li>Barclays Interm G/C</li></ul>	-1.64	3.60
Median	-1.31	3.85

	Return	Standard Deviation
<ul><li>Schroder Interm Duration</li></ul>	0.69	3.66
<ul><li>Barclays Interm G/C</li></ul>	0.38	3.24
Median	0.68	3.34

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Schroder Interm Duration	1.05	125.03	111.61	0.58	0.33	-0.43	1.15	3.35
Barclays Interm G/C	0.00	100.00	100.00	0.00	N/A	-0.60	1.00	3.01

Schroder Interm Duration

Barclays Interm G/C

20

20

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Schroder Interm Duration	0.83	114.75	108.41	0.27	0.38	-0.11	1.11	2.66
Barclays Interm G/C	0.00	100.00	100.00	0.00	N/A	-0.22	1.00	2.41

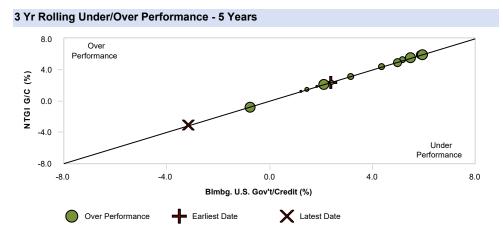


75-95

Count

2 (10%)

5 (25%)



#### 3 Yr Rolling Percentile Ranking - 5 Years 0.0 Return Percentile Rank 25.0 50.0 75.0 100.0 12/19 6/20 12/20 9/22 6/18 12/18 6/19 6/21 12/21 12/17

25-Median

Count

5 (25%)

4 (20%)

Median-75

Count

11 (55%)

10 (50%)

5-25

Count

2 (10%)

1 (5%)

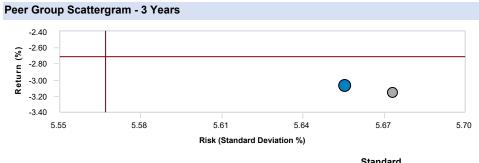
**Total Period** 

20

20

NTGI G/C

Barclays G/C

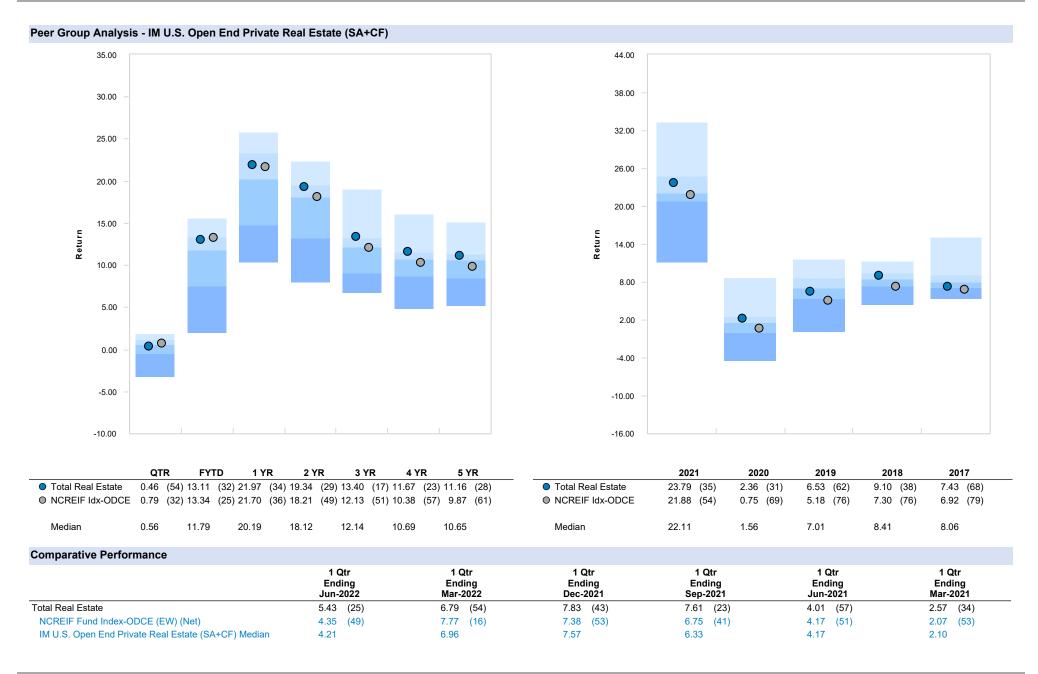


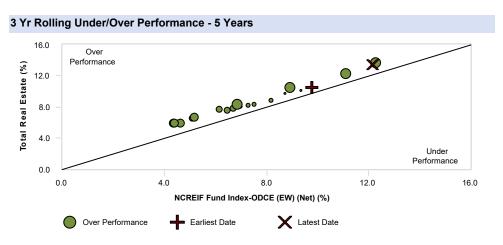
ee!	r Group Sca	ittergram	- 5 Years						
	0.24								
(%	0.16								
Return (%)	0.08								
etui	0.00 -								
œ	-0.08							0	
	-0.16								
	4.80	4.85	4.90	4.95	5.00	5.05	5.10	5.15	5.20
				Risk (Star	ndard Deviation	on %)			

	Return	Standard Deviation
<ul><li>NTGI G/C</li></ul>	-3.07	5.66
<ul><li>Barclays G/C</li></ul>	-3.15	5.67
Median	-2.71	5.57

	Return	Deviation
NTGI G/C	0.02	5.11
<ul><li>Barclays G/C</li></ul>	-0.05	5.14
Median	0.18	4.88

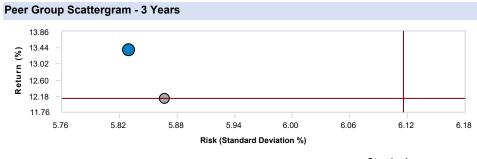
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
NTGI G/C	0.36	100.01	99.18	0.06	0.22	-0.62	0.99	4.73
Barclays G/C	0.00	100.00	100.00	0.00	N/A	-0.63	1.00	4.76
Historical Statisti	ics - 5 Years							
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
NTGI G/C	0.32	99.53	98.48	0.07	0.22	-0.20	0.99	3.79
Barclays G/C	0.00	100.00	100.00	0.00	N/A	-0.21	1.00	3.82





#### 3 Yr Rolling Percentile Ranking - 5 Years 0.0 Return Percentile Rank 25.0 50.0 75.0 100.0 12/20 6/21 12/21 9/22 6/18 6/19 12/19 6/20 12/17 12/18

	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
<ul><li>Total Real Estate</li></ul>	20	1 (5%)	11 (55%)	8 (40%)	0 (0%)
O NCREIF Idx-ODCE	20	0 (0%)	0 (0%)	8 (40%)	12 (60%)



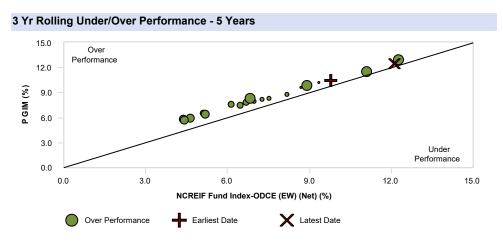
ee	r Group Sca	itergram -	o rears						
(%)	11.50 11.04 – 10.58 –								
Return	10.12 — 9.66 —		0						
	9.20	4.68	4.74	4.80	4.86	4.92	4.98	5.04	5.10
				Risk (Star	ndard Deviati	on %)			

	Return	Standard Deviation
<ul> <li>Total Real Estate</li> </ul>	13.40	5.83
<ul><li>NCREIF Idx-ODCE</li></ul>	12.13	5.87
Median	12.14	6.12

	Return	Standard Deviation	
<ul><li>Total Real Estate</li></ul>	11.16	4.72	
<ul><li>NCREIF Idx-ODCE</li></ul>	9.87	4.75	
Median	10.65	5.02	

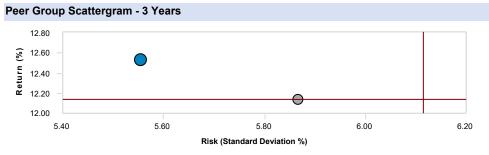
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Real Estate	1.20	108.72	82.45	0.86	0.97	1.56	1.03	0.70
NCREIF Idx-ODCE	0.00	100.00	100.00	0.00	N/A	1.47	1.00	0.85
<b>Historical Statistics</b>	- 5 Years							
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Real Estate	1.02	111.52	82.45	0.85	1.17	1.49	1.04	0.54
NCREIF Idx-ODCE	0.00	100.00	100.00	0.00	N/A	1.37	1.00	0.66





#### 3 Yr Rolling Percentile Ranking - 5 Years 0.0 Return Percentile Rank 25.0 50.0 75.0 100.0 6/18 12/20 6/21 12/21 9/22 12/17 12/18 6/19 12/19 6/20

	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count	
• PGIM	20	0 (0%)	6 (30%)	14 (70%)	0 (0%)	
<ul><li>NCREIF Idx-ODCE</li></ul>	20	0 (0%)	0 (0%)	8 (40%)	12 (60%)	



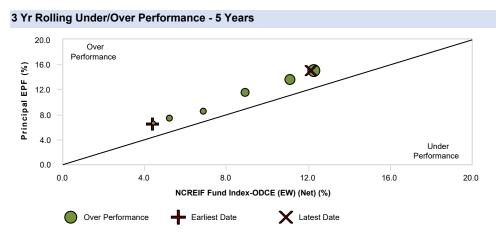
Pee	r Group Scatte	rgram - 5 Years				
(%)	10.92	•				
Return (%)	10.40 — 10.14 —					
œ	9.88 - 9.62	4.40	4.00	100	5.00	5.00
	4.20	4.40	4.60 Risk (Standard I	4.80 Deviation %)	5.00	5.20

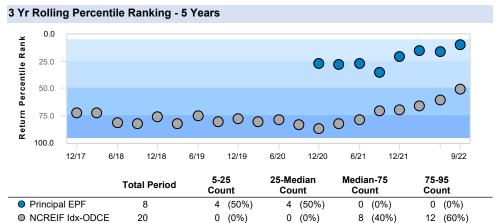
	Return	Standard Deviation
• PGIM	12.53	5.55
<ul><li>NCREIF Idx-ODCE</li></ul>	12.13	5.87
Median	12.14	6.12

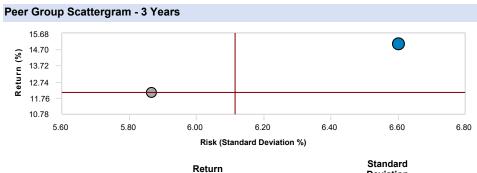
	Return	Standard Deviation
• PGIM	10.63	4.46
<ul><li>NCREIF Idx-ODCE</li></ul>	9.87	4.75
Median	10.65	5.02

o rours							
Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
1.49	101.81	74.05	0.80	0.23	1.54	0.96	0.63
0.00	100.00	100.00	0.00	N/A	1.47	1.00	0.85
s - 5 Years							
Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
1.23	106.15	74.05	0.93	0.56	1.48	0.98	0.49
0.00	100.00	100.00	0.00	N/A	1.37	1.00	0.66
	Tracking Error  1.49 0.00  5 - 5 Years  Tracking Error  1.23	Tracking Error         Up Market Capture           1.49         101.81           0.00         100.00           5 - 5 Years         Up Market Capture           1.23         106.15	Tracking Error         Up Market Capture         Down Market Capture           1.49         101.81         74.05           0.00         100.00         100.00           5 - 5 Years         Up Down Market Market Capture         Market Capture           1.23         106.15         74.05	Tracking Error         Up Market Capture         Down Market Capture         Alpha           1.49         101.81         74.05         0.80           0.00         100.00         100.00         0.00           5 - 5 Years         Tracking Error         Up Market Market Capture         Alpha Capture           1.23         106.15         74.05         0.93	Tracking Error         Up Market Capture         Down Market Capture         Alpha         Information Ratio           1.49         101.81         74.05         0.80         0.23           0.00         100.00         100.00         0.00         N/A           5 - 5 Years         Tracking Error         Up Market Capture         Down Market Capture         Alpha Alpha Ratio         Information Ratio           1.23         106.15         74.05         0.93         0.56	Tracking Error         Up Market Capture         Down Market Capture         Alpha         Information Ratio         Sharpe Ratio           1.49         101.81         74.05         0.80         0.23         1.54           0.00         100.00         100.00         0.00         N/A         1.47           5 - 5 Years         Tracking Error         Up Market Capture         Down Market Capture         Alpha Ratio         Information Ratio         Sharpe Ratio           1.23         106.15         74.05         0.93         0.56         1.48	Tracking Error         Up Market Capture         Down Market Capture         Alpha         Information Ratio         Sharpe Ratio         Beta           1.49         101.81         74.05         0.80         0.23         1.54         0.96           0.00         100.00         100.00         0.00         N/A         1.47         1.00           Free regions         Up Market Capture         Down Market Capture         Alpha Ratio         Information Ratio         Sharpe Ratio         Beta           1.23         106.15         74.05         0.93         0.56         1.48         0.98









Peer Group Scattergram - 5 Years								
	10.92							
9	10.66							
Return (%)	10.40							
etni	10.14							
œ	9.88 -	$\circ$						
	9.62							
	4.68	4.74	4.80	4.86	4.92	4.98	5.04	5.10
Risk (Standard Deviation %)								

Return	Standard Deviation
15.06	6.60
12.13	5.87
12.14	6.12
	15.06 12.13

	Return	Standard Deviation
<ul><li>Principal EPF</li></ul>	N/A	N/A
<ul><li>NCREIF Idx-ODCE</li></ul>	9.87	4.75
Median	10.65	5.02

Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
2.38	122.15	102.82	1.14	1.14	1.56	1.13	0.87
0.00	100.00	100.00	0.00	N/A	1.47	1.00	0.85
s - 5 Years							
Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
0.00	100.00	100.00	0.00	N/A	1.37	1.00	0.66
	2.38 0.00 5 - 5 Years Tracking Error	Market   Capture	Market   Market   Capture   Capture	Market   Capture   Capture   Capture	Market   Capture   Captu	Market   Capture   Captu	Fracking   Market   Capture   Capture   Alpha   Ratio   Ratio   Ratio   Ratio   Ratio

Portfolio Characteristics	(Benchmark: Ru	ıssell Midcap Inde	ex)			Top Ten Equit	v Holdings (E	Benchmark: Russ	ell Midcap Index		•
		ortfolio		Benchmark		rop ron =qui	,ge (-	Portfolio Wt	Benchmark Wt	Active Wt	Qtr Rtrn
Wtd. Avg. Mkt. Cap (\$)		78,638,434		9,180,336,513		Fortive Corp		3.44	0.24	3.20	7.33
Median Mkt. Cap (\$)	13,0	17,274,560		8,605,547,245		Everest Re Gr	oup Ltd	3.43	0.12	3.31	-5.80
Price/Earnings ratio		25.21		15.07		AMETEK Inc	•	3.35	0.30	3.05	3.39
Price/Book ratio		3.75		2.78		IDEX Corp		2.70	0.17	2.53	10.40
5 Yr. EPS Growth Rate (%)	)	11.68		16.63		Advance Auto	Parts Inc.	2.65	0.11	2.54	-8.87
Current Yield (%)	,	0.90		1.80		Workday Inc		2.63	0.00	2.63	9.06
Beta (3 Years, Monthly)		0.90		1.00		Edwards Lifeso	ciences Corp	2.61	0.00	2.61	-13.10
Number of Stocks		62		824		Toro Co (The)	·	2.44	0.10	2.34	14.10
						Generac Holdi	ngs Inc	2.38	0.13	2.25	-15.40
						Rockwell Autor	ū	2.36	0.29	2.07	8.40
Ten Best Performers (Ber	nchmark: Russe	II Midcap Index)				Ten Worst Per	formers (Ber	ıchmark: Russell	Midcap Index)		
	Portfolio Wt	Benchmark Wt	Active V	Vt Quarterly	y Rtrn			Portfoli	o Wt Benchma	rk Active Wt	Quarterly Rtrn
Nutanix Inc	1.21	0.05	1.16	42.3	38				vvt		<b>,</b>
Toast Inc	0.44	0.05	0.39	29.2		OKTA INC		1.4		1.30	-37.09
Asana Inc	0.88	0.00	0.88	26.4	15	Catalent Inc		1.1		0.98	-32.56
Bath & Body Works Inc	1.00	0.09	0.91	21.7		Church & Dwig		0.4		0.20	-22.67
CoStar Group Inc	2.04	0.31	1.73	15.2	29	Integra LifeSci	_	•		1.17	<b>-</b> 21.60
Repligen Corp	0.43	0.12	0.31	15.2		DENTSPLY SI		1.1		1.12	-20.32
Cullen/Frost Bankers Inc	0.91	0.09	0.82	14.3	30	Tandem Diabe	tes Care Inc	0.8		0.86	-19.16
Toro Co (The)	2.44	0.10	2.34	14.1	10	Steris Plc		1.8		1.64	-19.15
IDEX Corp	2.70	0.17	2.53	10.4	10	Waters Corp		2.1		1.97	-18.57
Zscaler Inc	2.02	0.16	1.86	9.9	94	Bio-Techne Co	•	1.4		1.34	-18.00
						Tradeweb Mar	kets Inc	2.1		2.05	-17.24
Buy and Hold Sector Attri								Portfolio Comp	arison		_
	Alloca		Perforn	nance		Attribution				Champlain Mid	Сар
	Portfolio	Benchmark	Portfolio	Benchmark	Stock	Sector	Total	_ Market Capitali	zation (%)		
Communication Services	0.0	4.0	0.00	-8.12	0.00	0.19	0.19	Greater than 25	M000	19.96	
Consumer Discretionary	9.1	11.2	-3.56	-2.63	-0.08	-0.02	-0.10	16000M To 250	M00	23.46	
Consumer Staples	10.4	3.8	-3.16	-6.40	0.34	-0.20	0.14	12000M To 160	M00	15.24	
Energy	0.0	4.8	0.00	1.23	0.00	-0.22	-0.22	8000M To 1200	0M	20.04	
Financials	14.2	13.6	-4.30	-1.75	-0.36	0.01	-0.35	5000M To 8000	M	9.03	
Health Care	24.9	10.8	-15.15	-6.71	-2.10	-0.47	-2.57	3000M To 5000	M	5.93	
Industrials	22.3	14.6	4.46	0.01	0.99	0.26	1.25	1000M To 3000	M	3.94	
Information Technology	15.9	16.4	1.52	-0.96	0.39	-0.01	0.38	Cash		2.39	
Materials	1.9	6.3	-7.59	-5.66	-0.04	0.10	0.06				
Real Estate	0.0	8.6	0.00	-9.01	0.00	0.48	0.48				
Utilities	0.0	6.0	0.00	-5.54	0.00	0.13	0.13				
Cash	1.4	0.0	0.00	0.00	0.00	0.05	0.05				
	100.0	100.0	-3.95	-3.39	-0.87	0.30					

	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$)	3,899,745,537	2,912,363,855
Median Mkt. Cap (\$)	2,610,833,940	1,084,613,470
Price/Earnings ratio	27.68	14.95
Price/Book ratio	3.30	3.49
5 Yr. EPS Growth Rate (%)	29.39	21.09
Current Yield (%)	0.19	0.83
Beta (5 Years, Monthly)	0.88	1.00
Number of Stocks	52	1,121

Top Ten Equity Holdings (Benchmark: Russell 2000 Growth Index)								
	Portfolio Wt	Benchmark Wt	Active Wt	Qtr Rtrn				
Addus HomeCare Corp	3.60	0.05	3.55	14.36				
WNS (Holdings) Ltd	3.37	0.00	3.37	9.65				
Descartes Systems Group Inc (The)	3.32	0.00	3.32	2.37				
Ameris Bancorp	3.16	0.00	3.16	11.65				
Driven Brands Holdings Inc	3.08	0.00	3.08	1.60				
ExlService Holdings Inc	3.08	0.43	2.65	0.02				
Littelfuse Inc	2.97	0.00	2.97	-21.59				
Box Inc	2.93	0.31	2.62	-2.98				
Qualys Inc	2.85	0.48	2.37	10.50				
Paylocity Holding Corp	2.84	0.00	2.84	38.51				
Ten Worst Performers (Benchmark: Russell 2000 Growth Index)								

Ten Best Performers (Benchmark: Russell 2000 Growth Index)								
	Portfolio Wt	Benchmark Wt	Active Wt	Quarterly Rtrn				
Arhaus Inc	1.18	0.00	1.18	56.67				
ChannelAdvisor Corp	2.71	0.00	2.71	55.42				
NAPCO Security Technologies Inc	2.23	0.08	2.15	41.23				
Paylocity Holding Corp	2.84	0.00	2.84	38.51				
Construction Partners inc	0.97	0.09	0.88	25.26				
Five Below Inc	1.39	0.00	1.39	21.37				
DoubleVerify Holdings Inc	1.47	0.00	1.47	20.64				
Evolent Health Inc	2.12	0.26	1.86	17.00				
Repligen Corp	1.81	0.00	1.81	15.22				
Addus HomeCare Corp	3.60	0.05	3.55	14.36				
Buy and Hold Sector Attribution (I	Benchmark: Ru	ssell 2000 Grow	th Index)					

Ten Worst Performers (Benchmark: Russell 2000 Growth Index)							
	Portfolio Wt	Benchmark Wt	Active Wt	Quarterly Rtrn			
Semtech Corp	0.65	0.17	0.48	-46.50			
Willdan Group Inc	0.78	0.00	0.78	-46.30			
OptimizeRX Corp	0.59	0.02	0.57	-45.89			
Repay Holdings Corp	1.43	0.00	1.43	-45.06			
Upland Software Inc	0.49	0.00	0.49	-44.01			
Certara Inc	1.09	0.00	1.09	-38.12			
TTEC Holdings Inc	1.83	0.07	1.76	-34.73			
YETI Holdings Inc	0.47	0.00	0.47	-34.09			
Thoughtworks Holding Inc	0.54	0.00	0.54	-25.66			
Dorman Products Inc	2.49	0.19	2.30	-25.15			

Buy and Hold Sector Attri	bution (Bench	mark: Russell 20	00 Growth Ind	ex)				Portfolio Comparison	
	Alloc	ation	Perfor	mance		Attribution			Summit Creek
	Portfolio	Benchmark	Portfolio	Benchmark	Stock	Sector	Total	Market Capitalization (%)	
Communication Services	2.5	2.4	-9.92	-5.91	-0.10	-0.01	-0.11	12000M To 16000M	5.07
Consumer Discretionary	14.0	10.4	-8.91	1.36	-1.44	0.03	-1.40	8000M To 12000M	4.12
Consumer Staples	0.0	4.7	0.00	-5.63	0.00	0.28	0.28	5000M To 8000M	12.45
Energy	0.0	6.1	0.00	3.84	0.00	-0.21	-0.21	3000M To 5000M	35.71
inancials	3.8	5.9	5.95	-0.66	0.25	0.02	0.27	1000M To 3000M	29.77
Health Care	22.4	22.7	-5.74	8.15	-3.11	-0.03	-3.14	500M To 1000M	8.06
Industrials	12.6	17.3	-1.96	0.09	-0.26	0.02	-0.24	200M To 500M	2.26
Information Technology	43.2	21.4	-1.05	-3.61	1.10	-0.88	0.22	Less than 200M	0.78
Materials	0.0	4.4	0.00	-1.98	0.00	0.11	0.11	Cash	1.78
Real Estate	0.0	2.9	0.00	-15.56	0.00	0.46	0.46		
Utilities	0.0	1.8	0.00	-3.13	0.00	0.06	0.06		
Cash	1.5	0.0	0.00	0.00	0.00	-0.01	-0.01		
Total	100.0	100.0	-3.26	0.44	-3.56	-0.14	-3.70		

Fund Name: T Rowe Price Small-Cap Value Fund, Inc; Class I Shares

Fund Family: T. Rowe Price

PRVIX Ticker:

08/28/2015 Inception Date:

\$3,098 Million Fund Assets:

Portfolio Turnover: 25%

Portfolio Assets: \$11,178 Million J. David Wagner Portfolio Manager :

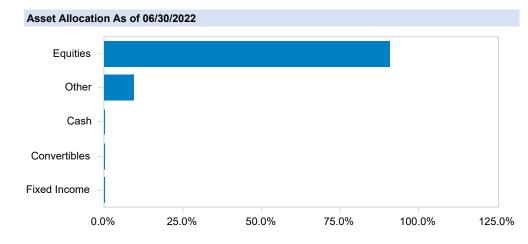
PM Tenure: 2015

Fund Style: IM U.S. Small Cap Core Equity (MF)

Style Benchmark : Russell 2000 Index

#### **Fund Investment Policy**

The Fund seeks long-term capital growth by investing primarily in the common stock of companies with relatively small market capitalizations which are believed to be undervalued and have good prospects for capital appreciation.



Top Ten Securities As of 06/30/2022	
RESERVE INVT FDS INC SHS OF BENEF	1.5 %
Western Alliance Bancorp ORD	1.2 %
Cable One Inc ORD	1.0 %
Idacorp Inc ORD	1.0 %
Terreno Realty Corp ORD	1.0 %
Littelfuse Inc ORD	0.9 %
Belden Inc ORD	0.9 %
Harmonic Inc ORD	0.9 %
Select Medical Holdings Corp ORD	0.9 %
Matador Resources Co ORD	0.9 %

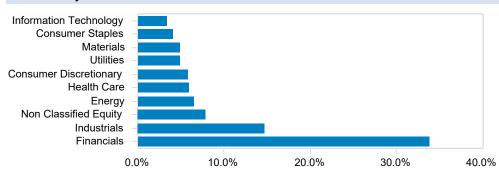
#### Fund Characteristics As of 06/30/2022

**Total Securities** 302

\$3,357 Million Avg. Market Cap

P/E 21.6 P/B 2.9 Div. Yield 2.1% Annual EPS 40.2 5Yr EPS 16.5 3Yr EPS Growth 15.5

# Sector/Quality Allocation As of 03/31/2022



Fund Name: Dodge & Cox Funds: Dodge & Cox International Stock Fund; Class I Shares

Fund Family: Dodge & Cox Funds

Ticker: DODFX

Inception Date: 05/01/2001

Fund Assets: \$40,918 Million

Portfolio Turnover: 18%

Portfolio Assets: \$41,797 Million
Portfolio Manager: Team Managed

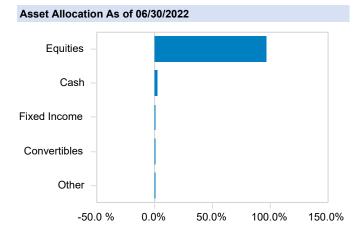
PM Tenure:

Fund Style: IM International Large Cap Value Equity (MF)

Style Benchmark: MSCI EAFE Value

#### **Fund Investment Policy**

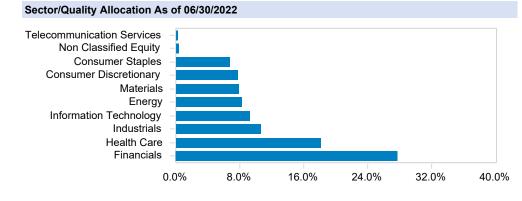
The Fund seeks long-term growth of principal and income by investing primarily in a diversified portfolio of equity securities issued by non-U.S. companies from at least three different foreign countries, including emerging markets.

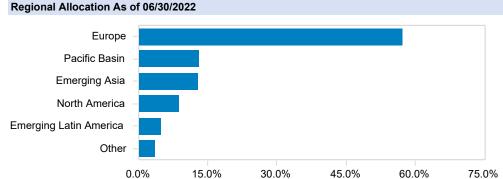


Top Ten Securities As of 06/30/2022	2
GSK plc ORD	4.2 %
Sanofi SA ORD	4.1 %
Prosus NV ORD	3.8 %
Novartis AG ORD	3.5 %
UBS Group AG ORD	3.3 %
Roche Holding AG	2.8 %
Banco Santander SA ORD	2.6 %
BNP Paribas SA ORD	2.6 %
Suncor Energy Inc ORD	2.4 %
Samsung Electronics Co Ltd	2.3 %

Top 5 Countries As	of 06/30/2022
Switzerland	15.4 %
United Kingdom	15.3 %
Japan	11.3 %
France	10.2 %
China	6.5 %
Fund Characteristic	s As of 06/30/2022
Total Securities	82
Avg. Market Cap	\$69,501 Million
P/E	14.0
P/B	2.3
Div. Yield	2.9%
Annual EPS	47.0
5Yr EPS	17.7

12.3





3Yr EPS Growth

Fund Name : MFS Institutional Trust: MFS Institutional International Equity Fund

Fund Family : MFS Ticker : MIEIX

Inception Date: 01/31/1996
Fund Assets: \$10,097 Million

Portfolio Turnover: 13%

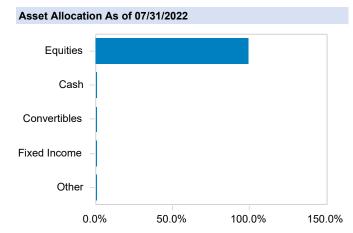
Portfolio Assets: \$10,097 Million
Portfolio Manager: Ling/Benzinho
PM Tenure: 2009--2016

Fund Style: IM International Large Cap Growth Equity (MF)

Style Benchmark: MSCI EAFE Growth

#### **Fund Investment Policy**

The Fund seeks capital appreciation. The Fund normally invests at least 80% of its net assets in non-U.S. equity securities. The Fund uses a bottom-up investment approach. Stocks are selected primarily based on fundamental analysis of issuers and their potential.



Top Ten Securities As of 07/31/2022	
Nestle SA ORD	4.1 %
Roche Holding AG	3.2 %
Schneider Electric SE ORD	2.9 %
L'Air Liquide Societe Anonyme pour	2.6 %
Novo Nordisk A/S ORD	2.6 %
LVMH Moet Hennessy Louis Vuitton	2.5 %
AIA Group Ltd ORD	2.3 %
Capgemini SE ORD	2.2 %
Hitachi Ltd ORD	2.1 %
Compass Group PLC ORD	2.0 %

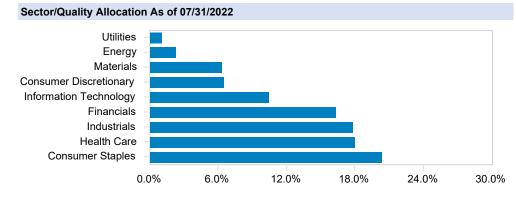
Top 5 Countries As	of 07/31/2022
France	18.5 %
Switzerland	15.6 %
Japan	14.7 %
United Kingdom	11.2 %
Germany	9.5 %
Fund Characteristic	s As of 07/31/2022
<b>Total Securities</b>	82
Avg. Market Cap	\$93,465 Million
P/E	23.6
P/B	4.6

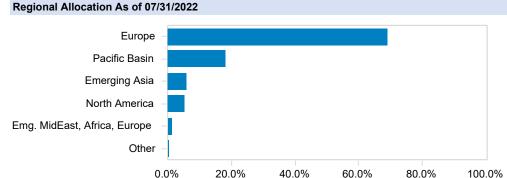
2.5%

44.7

11.0

11.3





Div. Yield

5Yr EPS

**Annual EPS** 

3Yr EPS Growth

Fund Name: Vanguard Trustees' Equity Fund: Vanguard Emerging Markets Select Stock Fund;

Investor Shares

Vanguard

Fund Family:

**VMMSX** Ticker:

06/14/2011 Inception Date: Fund Assets: \$732 Million

Portfolio Turnover: 48%

\$732 Million Portfolio Assets:

Portfolio Manager: Team Managed

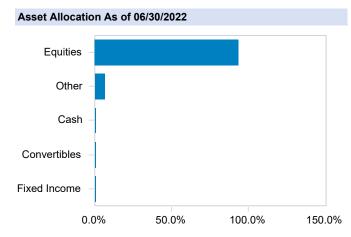
PM Tenure:

Fund Style: IM Emerging Markets Equity (MF)

Style Benchmark: MSCI Emerging Markets Index

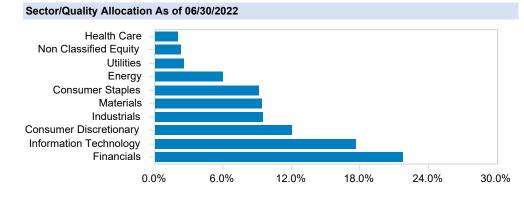
#### **Fund Investment Policy**

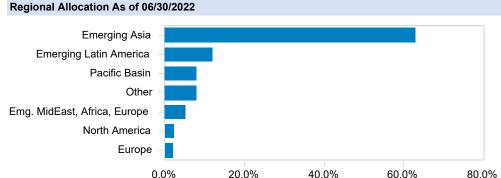
The Fund seeks long-term capital appreciation. The Fund invests in small-, mid-, and large-capitalization companies and is expected to diversify its assets among companies located in emerging markets around the world. The Fund invests at least 80% of its assets in common stocks of companies located in emerging markets.



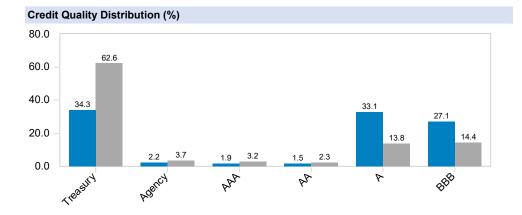
Top Ten Securities As of 06/30/2022	
Vanguard Market Liquidity Fund	6.7 %
Taiwan Semiconductor Manufacturing	5.8 %
Alibaba Group Holding Ltd ORD	3.6 %
Tencent Holdings Ltd ORD	2.7 %
Reliance Industries Ltd ORD	2.7 %
PETROLEO BRASILEIRO ADR REPSTG	1.9 %
Samsung Electronics Co Ltd ORD	1.7 %
Galaxy Entertainment Group Ltd	1.6 %
Bank Rakyat Indonesia (Persero)	1.5 %
VALE ADR REPTG ONE ORD	1.3 %

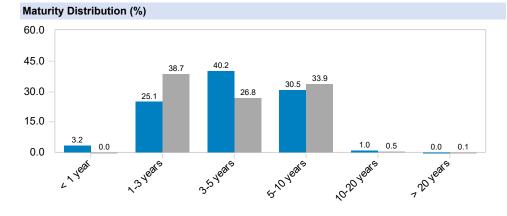
Top 5 Countries As	of 06/30/2022	
China	29.7 %	
India	10.5 %	
Taiwan	10.4 %	
Brazil	9.6 %	
Unidentified	6.9 %	
Fund Characteristic	cs As of 06/30/2022	
Total Securities	341	
Avg. Market Cap	\$87,406 Million	
P/E	19.1	
P/B	3.0	
Div. Yield	4.1%	
Annual EPS	39.4	
5Yr EPS	15.3	
3Yr EPS Growth	18.7	

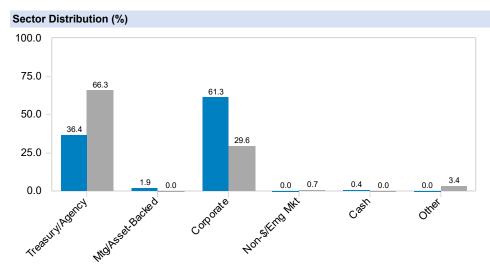


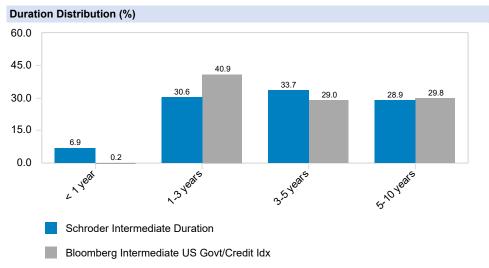


Portfolio Characteristics		
	Portfolio	Benchmark
Avg. Maturity	5.14	4.38
Avg. Quality	A+	AA
Coupon Rate (%)	2.58	2.22
Current Yield	2.81	2.39
Effective Duration	4.13	3.89









	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
Employee's Total Fund	0.41	514,043,883	2,091,983	
Domestic Equity				
NTGI R1000 Index Fund	0.04	148,715,784	64,615	0.06 % of First \$50 M 0.04 % of Next \$50 M 0.03 % Thereafter
Champlain Mid Cap	0.85	24,177,315	205,507	0.85 % of Assets
NTGI S&P 400	0.05	24,937,044	12,469	0.05 % of First \$100 M 0.02 % Thereafter
T Rowe Price	0.72	15,334,832	110,411	0.72 % of Assets
Summit Creek	1.00	14,295,282	142,953	1.00 % of Assets
International Equity				
Dodge & Cox International Stock	0.64	38,710,535	247,747	0.64 % of Assets
MFS	0.71	40,389,447	286,765	0.71 % of Assets
Vanguard EM	0.93	21,742,139	202,202	0.93 % of Assets
Domestic Fixed Income				
NTGI Government / Credit	0.05	36,782,897	18,391	0.05 % of First \$100 M 0.02 % Thereafter
Schroder Intermediate Duration	0.22	92,801,392	204,163	0.22 % of Assets
Real Estate				
PGIM	1.00	38,526,951	385,270	1.00 % of Assets
Principal Enhanced Property Fund, LP	1.20	17,624,248	211,491	1.20 % of Assets
Cash	0.00	6,017	•	0.00 % of Assets

<sup>\*</sup> Principal Enhanced Property Fund fee is 1.2% of assets plus 15% of excess over 11% IRR

Comparative Performance						
	QTR	FYTD	1 YR	3 YR	5 YR	10 YR
Employees' Total Fund	-4.73	-18.81	-14.86	3.60	4.65	7.19
Sioux Falls Total Policy	-4.74	-19.83	-16.17	3.50	4.49	7.12
otal Domestic Equity	-4.16	-24.94	-18.68	6.30	7.74	10.64
Russell 3000 Index	-4.46	-24.62	-17.63	7.70	8.62	11.39
NTGI R1000 Index Fund	-4.59	-24.55	-17.17	N/A	N/A	N/A
Russell 1000 Index	-4.61	-24.59	-17.22	7.95	9.00	11.60
Champlain Mid Cap	-4.31	-31.31	-26.98	5.79	N/A	N/A
Russell Midcap Index	-3.44	-24.27	-19.39	5.19	6.48	10.30
ITGI S&P 400	-2.45	-21.50	-15.22	6.02	5.85	10.07
S&P MidCap 400 Index	-2.46	-21.52	-15.25	6.01	5.82	10.04
Rowe Price	-2.98	-22.05	-18.43	5.46	4.86	9.03
Russell 2000 Value Index	-4.61	-21.12	-17.69	4.72	2.87	7.94
Summit Creek	-3.61	-26.00	-24.10	11.12	11.36	N/A
Russell 2000 Growth Index	0.24	-29.28	-29.27	2.94	3.60	8.81

	QTR	FYTD	1 YR	3 YR	5 YR	10 YR
Total International Equity	-9.95	-24.55	-22.80	-0.71	-0.38	3.41
MSCI AC World ex USA (Net)	-9.91	-26.50	-25.17	-1.52	-0.81	3.01
Dodge & Cox International Stock	-10.69	N/A	N/A	N/A	N/A	N/A
MSCI EAFE Index	-9.29	-26.76	-24.75	-1.38	-0.36	4.15
MFS	-8.61	-26.70	-21.74	0.75	2.27	5.47
MSCI EAFE Growth Index (Net)	-8.50	-33.02	-30.28	-1.49	0.67	4.70
Vanguard EM	-11.07	-26.66	-28.03	-2.04	-1.27	N/A
MSCI Emerging Markets (Net) Index	-11.57	-27.16	-28.11	-2.07	-1.81	1.05
Total Domestic Fixed Income	-3.46	-12.15	-12.53	-2.02	0.18	1.56
Blmbg. U.S. Aggregate Index	-4.75	-14.61	-14.60	-3.26	-0.27	0.89
Sioux Falls Blended Fixed Income Policy	-3.68	-11.90	-12.13	-2.25	0.21	1.01
Schroder Intermediate Duration	-3.02	-10.97	-11.58	-1.54	0.45	1.44
Bloomberg Intermediate US Govt/Credit Idx	-3.06	-9.63	-10.14	-1.64	0.38	1.00
NTGI Government / Credit	-4.53	-14.98	-14.83	-3.10	-0.01	1.04
Blmbg. U.S. Gov't/Credit	-4.56	-15.10	-14.95	-3.15	-0.05	1.02
Total Real Estate	0.29	12.37	20.87	12.29	10.06	10.49
NCREIF Fund Index-ODCE (EW) (Net)	0.79	13.34	21.70	12.13	9.87	10.26
PGIM	-0.02	11.88	18.80	11.47	9.57	10.24
NCREIF Fund Index-ODCE (VW)	0.52	13.08	22.09	12.37	10.24	10.92
Principal Enhanced Property Fund, LP	1.00	13.45	25.32	13.84	N/A	N/A
NCREIF Fund Index-ODCE (EW) (Net)	0.79	13.34	21.70	12.13	9.87	10.26
Cash	0.49	0.65	0.66	0.61	1.10	N/A
90 Day U.S. Treasury Bill	0.46	0.61	0.62	0.59	1.15	0.67

# Statement of Investment Policies and Objectives

# City of Sioux Falls Employee's Retirement System

## Introduction

This investment policy is intended to allow for sufficient flexibility in money management to ensure the capture of investment opportunities, yet provide broad parameters that will ensure prudence and care in the execution of the investment program. It is the goal of the Board of Trustees to act with due care, skill, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims. These policies will provide the necessary guidance for the actions of the Board of Trustees, treasurer, investment consultant, and investment managers.

# **Objectives**

- To meet the long-term investment requirements of the Retirement System in providing adequate retirement benefits to plan members and beneficiaries through the prudent investment of assets—investments designed to adequately fund the plan's liabilities and provide diversification so as to optimize the rate of return while maintaining a prudent level of risk.
- 2. Achieve a rate of return on investments that meets or exceeds the established actuarial rate of return assumption over a five-year time frame.
- To provide a sufficient degree of flexibility in managing the Fund assets to meet the changing needs of the employee and their beneficiaries and adapt to changing economic environments.

# **Philosophy**

The Board of Trustees will determine appropriate risk exposure to the Retirement System by establishing a target asset allocation and allocation ranges. These target allocations shall be based upon asset/liability and asset allocation modeling to ensure that the plan has assumed the appropriate amount of risk for the return necessary to meet and/or exceed the objectives listed above.

All investments will be made based on optimizing plan returns without regard to social, political, or other non-economic concerns of individual companies, industries, countries, or areas.

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In addition to the guidelines and procedures set forth herein, all applicable statutes shall be rigorously adhered to. In particular, investments will conform to all City, State, and Federal statutes governing investment and operations of the Retirement System.

# **Distinction of Responsibilities**

The Board of Trustees believes that it is their responsibility to establish the overall investment policy, including setting the asset allocation targets and ranges, approving investment manager policies, and making decisions regarding manager selection and retention for the Retirement System. The Board of Trustees authorizes the treasurer to manage the day-to-day operations of the investment program working with the investment consultant, investment managers, and custodial bank as appropriate.

Responsibilities of the treasurer, investment consultant, and investment managers include:

The treasurer is authorized to manage the day-to-day investment operations of the Retirement System. This includes, but is not limited to, overseeing the activities of the investment consultant and custodial bank, reviewing manager performance, and rebalancing the allocations to target ranges. The treasurer is responsible for reporting changes in the investment program to the Board of Trustees on a timely basis.

The investment consultant shall be responsible for providing performance analytics, making recommendations regarding specific managers and investment allocations, providing timely research and information relative to adverse conditions regarding a specific manager, recommending changes in investment managers and asset classes, and making presentations to the Boards as necessary.

The investment managers are responsible for making strategic decisions within their assigned mandates concerning the appropriate mix of equities and/or fixed income, and the prices at which securities are bought and sold.

#### **Prohibitions**

Investment managers are prohibited from using any securities whose effect would be to leverage the portfolio or whose expected returns are significantly unlike those expected from their appropriate asset class.

## Diversification

The Retirement System's assets will be well diversified to reduce the risks of large losses. To achieve this diversification, the following policies have been adopted:

- Each asset class, such as stocks and bonds, will be broadly diversified to be similar to the market for the asset class.
- Equity portfolio holdings will include diversifying alternative investments such as equity real estate.
- Short term fixed income investments, defined as fixed income issues
  maturing in less than one year, will be managed to add value. Credit risk
  will be avoided in these investments since the intent is to dampen overall
  volatility.
- Multiple managers will be employed. Target allocations among the managers will be established by the Board of Trustees to maintain both diversification and policy guidelines. The treasurer shall maintain manager allocations within reasonable tolerances of their investment targets.

Target allocations and ranges are outlined in Exhibit A

## **Rebalanced to Targets**

The Board of Trustees recognizes that the Fund may become out of balance with respect to specific target ranges. The treasurer shall rebalance to target ranges from time to time as is necessary to maintain the target range equilibrium as specified. From time to time the Board of Trustees may authorize the treasurer to remain outside of target ranges based on current market conditions.

# **Control and Review Procedures**

# Liquidity

It is expected that in the normal course of business, it will be necessary to liquidate a portion of the assets to fund benefit payments. The treasurer shall direct the liquidation of assets necessary to maintain the necessary liquidity for the payment of benefits and administrative costs.

# **Policy Review**

The various policies and objectives of the Retirement System will be reviewed periodically. These reviews will focus on the continued feasibility of the objectives, and the continued appropriateness of the investment policies for achieving the objectives. Although this statement will be reviewed on a consistent basis, it is not anticipated that objectives and policies will be altered frequently.

## Performance Review

It is expected that the total Fund will at least perform in the top one-half of plans with similar risk over a complete market cycle, not to exceed five years. Risk will be measured as volatility or standard deviation of returns. Progress toward achieving performance objectives will be reviewed from time to time by the Board. These reviews will focus on adherence to policy and the opportunities available in the investment markets. Particular attention will be directed to reviewing performance relative to the risks; this will be achieved by comparing performance to plans with similar risk. It is believed that the performance expectation set forth in the Statement of Investment Policy is reasonable and consistent in the long run. Adherence to policy means conforming to the asset allocation, diversification, and risk guidelines set forth in the policy statement.

In regard to the individual managers, their performance and adherence to policy will also be reviewed quarterly. Each manager will have individualized policies and objectives as established by the Board and agreed to by the manager. Manager reviews will focus on adherence to policy, progress toward achievement of objectives, and performance relative to opportunities. Each manager is expected to perform in at least the top one-half of managers with a similar style over a market cycle not to exceed five years.

#### **Measurement Standards**

The Board of Trustees retains its rights to terminate managers for any number of reasons. The following factors are specific circumstances that, notwithstanding overriding factors of retention, may result in termination:

- A significant change in the organizational structure, management style, or personnel of the organization which contributes to a lack of confidence that the manager can produce acceptable results in the future.
- Failure to achieve acceptable performance relative to the respective index and to managers with a similar style set forth in the individual manager policy

#### Communication

The Board, treasurer, investment consultant, and the investment managers recognize that frequent communication between the parties is a keystone to appropriate management of the Fund. The Board will report promptly to the investment manager significant changes in its assessment of the income requirements, risk taking capabilities, or other vital characteristics of the Fund.

Recognizing the dynamic nature of the capital markets, it is the obligation of the investment managers to report to the Board any suggestions or alterations in their guidelines considered desirable for the achievement of satisfactory investment results. Revisions will be considered from time to time.

The investment managers (or consultant or custodian, where appropriate) are obligated to provide the necessary reports either in person or in writing to the treasurer and/or Board of Trustees that are necessary to make timely and well-informed decisions regarding the investment of the Retirement System's assets.

# **Security Transactions**

The investment managers shall execute all trades in the best interest of plan participants utilizing high quality brokerage firms and achieving the best execution.

# **Proxy Voting**

The Board of Trustees endorses the Department of Labor position that proxies are assets of the plan, and has adopted the following policy. The Board of Trustees have delegated the right to vote common stock shares to the separate account investment fund managers. All proxies must be voted in the long-term, economic interest of the Plan participants. Each investment fund manager is required to send a copy of its written proxy policy and guidelines to the Trustees and to submit quarterly reports on its proxy voting activities. Proxy votes of securities held in pooled funds or mutual funds are not required to be reported to either the Board of Trustees or Pension Investment Committee

# Sioux Falls Investment Policy Statement Exhibit A

# **Asset Allocation by Manager Styles**

Asset Class	Min	Target	Max
Domestic Equity*	30%	46%	55%
US Broad Market Index	25%	30%	35%
US Midcap Equity	5%	10%	15%
US Small Cap Equity	1%	6%	10%
International Equity	17%	22%	27%
Broad ACWI x-US Core	12%	16.5%	20%
Emerging Markets Equity	2%	5.5%	9%
Total Fixed Income	20%	25%	30%
US Core Intermediate Fixed Income	10%	17.5%	25%
US Government / Credit Fixed Income	2%	7.5%	12%
Real Estate	2%	7%	12%
Open Ended Core Real Estate (Private)	2%	5%	10%
Open Ended Real Estate Value Add /Opportunistic	0%	2%	5%
Short Term/Cash	0%	0%	5%
то	TAL	100%	

**Active Return** 

- Arithmetic difference between the manager's performance and the designated benchmark return over a specified time period.

Alpha

- A measure of the difference between a portfolio's actual performance and its expected return based on its level of risk as determined by beta. It determines the portfolio's non-systemic return, or its historical performance not explained by movements of the market.

Beta

- A measure of the sensitivity of a portfolio to the movements in the market. It is a measure of the portfolio's systematic risk.

Consistency

- The percentage of quarters that a product achieved a rate of return higher than that of its benchmark. Higher consistency indicates the manager has contributed more to the product's performance.

Distributed to Paid In (DPI)

- The ratio of money distributed to Limited Partners by the fund, relative to contributions. It is calculated by dividing cumulative distributions by paid in capital. This multiple shows the investor how much money they got back. It is a good measure for evaluating a fund later in its life because there are more distributions to measure against.

**Down Market Capture** 

- The ratio of average portfolio performance over the designated benchmark during periods of negative returns. A lower value indicates better product performance

**Downside Risk** 

- A measure similar to standard deviation that utilizes only the negative movements of the return series. It is calculated by taking the standard deviation of the negative quarterly set of returns. A higher factor is indicative of a riskier product.

**Excess Return** 

- Arithmetic difference between the manager's performance and the risk-free return over a specified time period.

**Excess Risk** 

- A measure of the standard deviation of a portfolio's performance relative to the risk free return.

Information Ratio

- This calculates the value-added contribution of the manager and is derived by dividing the active rate of return of the portfolio by the tracking error. The higher the Information Ratio, the more the manager has added value to the portfolio.

**Public Market Equivalent (PME)** 

- Designs a set of analyses used in the Private Equity Industry to evaluate the performance of a Private Equity Fund against a public benchmark or index.

R-Squared

- The percentage of a portfolio's performance that can be explained by the behavior of the appropriate benchmark. A high R-Squared means the portfolio's performance has historically moved in the same direction as the appropriate benchmark.

Return

- Compounded rate of return for the period.

**Sharpe Ratio** 

- Represents the excess rate of return over the risk free return divided by the standard deviation of the excess return. The result is an absolute rate of return per unit of risk. A higher value demonstrates better historical risk-adjusted performance.

**Standard Deviation** 

- A statistical measure of the range of a portfolio's performance. It represents the variability of returns around the average return over a specified time period.

Total Value to Paid In (TVPI)

- The ratio of the current value of remaining investments within a fund, plus the total value of all distributions to date, relative to the total amount of capital paid into the fund to date. It is a good measure of performance before the end of a fund's life

**Tracking Error** 

- This is a measure of the standard deviation of a portfolio's returns in relation to the performance of its designated market benchmark.

**Treynor Ratio** 

- Similar to Sharpe ratio but utilizes beta rather than excess risk as determined by standard deviation. It is calculated by taking the excess rate of return above the risk free rate divided by beta to derive the absolute rate of return per unit of risk. A higher value indicates a product has achieved better historical risk-adjusted performance.

**Up Market Capture** 

- The ratio of average portfolio performance over the designated benchmark during periods of positive returns. A higher value indicates better product performance.

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

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

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

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

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