Investment Performance Review Period Ending September 30, 2022

City of Sioux Falls Firefighters'



AndCo Consulting | (844) 44-ANDCO | AndCoConsulting.com

**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.

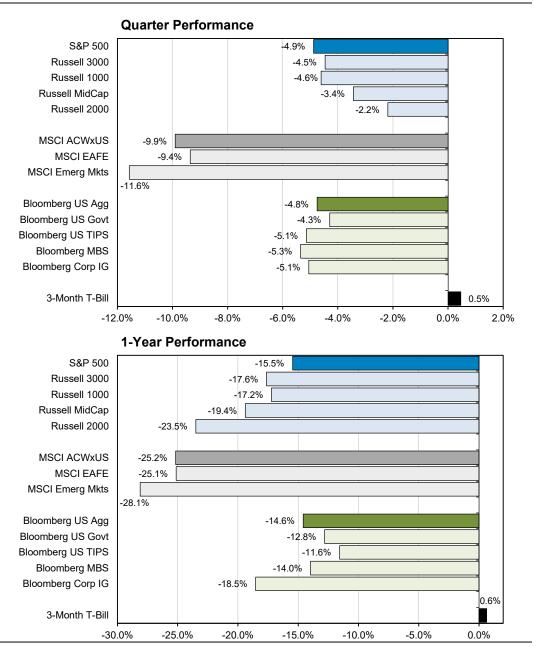
#### **Market Themes**

- 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%.

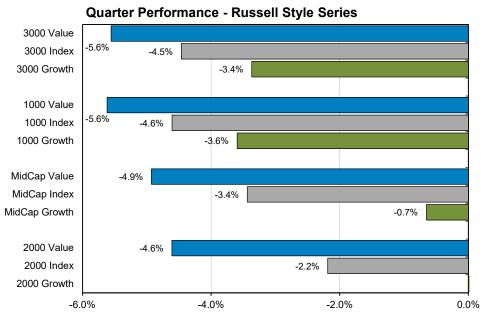
Source: Investment Metrics

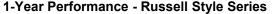


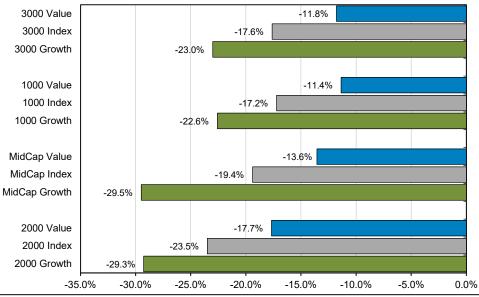
# 88

- 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%.





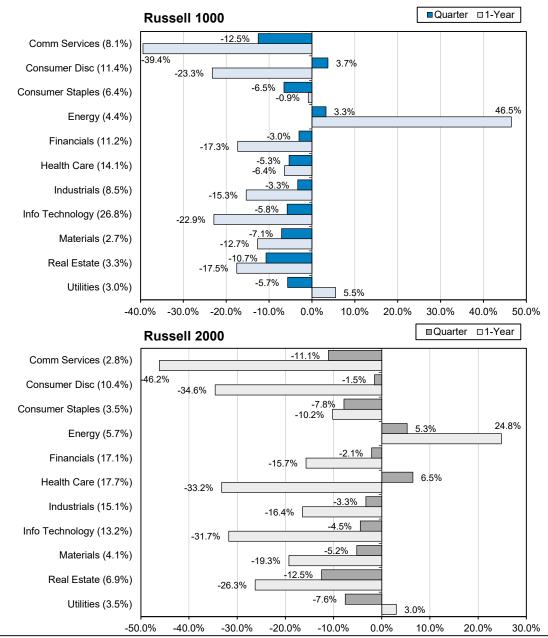


Source: Investment Metrics



- 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.

83

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

As of September 30, 2022

Top 10 Weighted Stocks					
Russell 1000	Weight	1-Qtr Return	1-Year 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	

Тор	10 Performir	ng Stocks (b	y Quarter)	
Russell 1000	1000 Weight		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

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	

Source: Morningstar Direct

Top 10 Weighted Stocks					
Russell 2000	Weight	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	

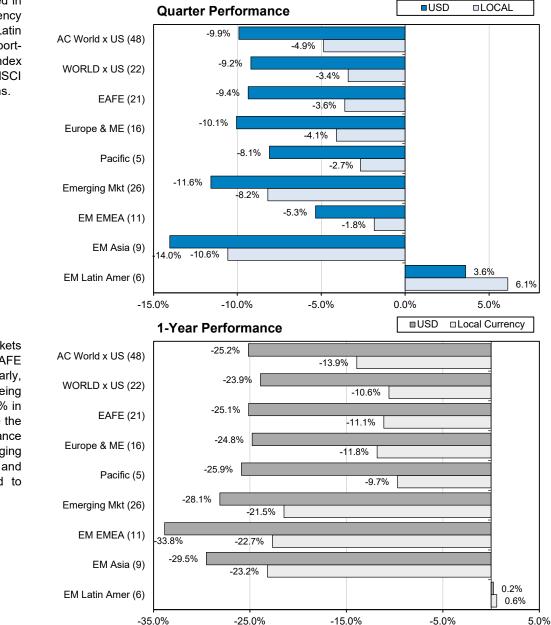
Top 10 Performing Stocks (by Quarter)					
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector	
Akero Therapeutics Inc	0.04%	260.3%	52.3%	Health Care	
Forma Therapeutics Holdings Inc	0.03%	189.6%	-14.0%	Health Care	
Velo3D Inc	0.01%	185.5%	-52.9%	Industrials	
Ventyx Biosciences Inc	0.04%	185.4%	N/A	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 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	



The Market Environment

International and Regional Market Index Performance (Country Count) As of September 30, 2022



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)

The Market Environment

## US Dollar International Index Attribution & Country Detail As of September 30, 2022

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%	-22.1%
Belgium	1.0%	0.6%	-13.2%	-27.3%
Finland	1.0%	0.6%	-7.2%	-25.0%
Norway	0.8%	0.5%	-1.2%	-25.0%
Israel			-1.9%	
Israel	0.8%	0.5%	-1.9% -5.5%	-21.8% -38.9%
Portugal	0.2%	0.1%	-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%	-25.1%
Canada		8.2%	-7.8%	-12.6%
Total Developed Countries		70.7%	-9.2%	-23.9%
China		9.2%	-22.5%	-35.4%
Taiwan		4.0%	-14.5%	-30.5%
India		4.5%	6.5%	-9.9%
Korea		3.1%	-16.4%	-40.7%
Brazil		1.7%	8.5%	4.3%
Saudi Arabia		1.4%	-0.1%	1.9%
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)

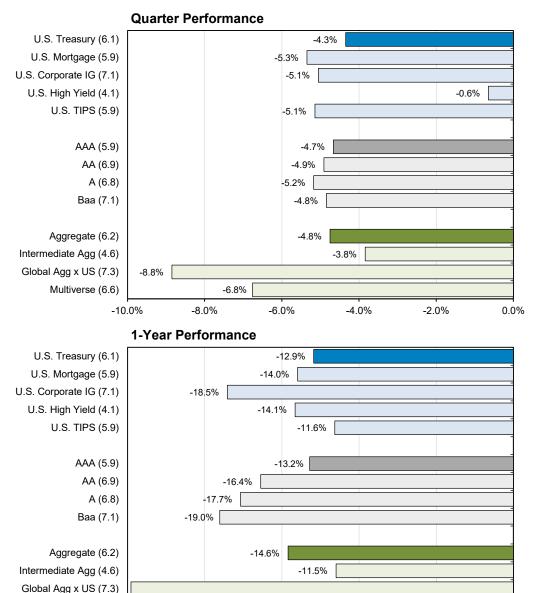
As a result of the GICS classification changes on 9/28/2018 and certain associated reporting limitations, sector performance represents backward looking performance for the prior year of each sector's current constituency, post creation of the Communication Services sector.



### The Market Environment Domestic Bond Sector & Broad/Global Bond Market Performance (Duration)

As of September 30, 2022

- 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.



-24.8%

-25.0%

Multiverse (6.6)

-20.4%

-20.0%

-15.0%

-10.0%

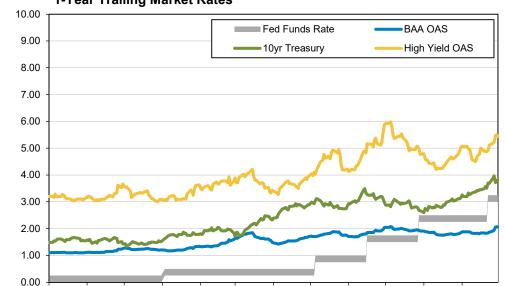
-5.0%

Source: Bloomberg

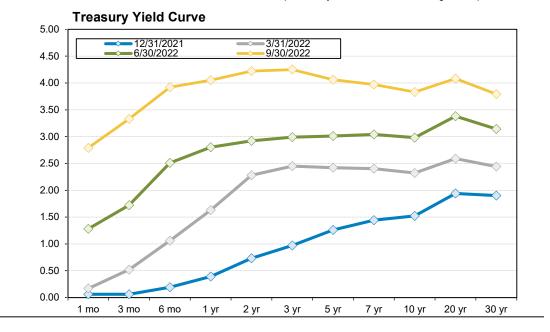


0.0%

- 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.



Oct-21 Nov-21 Dec-21 Jan-22 Feb-22 Mar-22 Apr-22 May-22 Jun-22 Jul-22 Aug-22 Sep-22



#### 1-Year Trailing Market Rates

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



## **Page Intentionally Left Blank**



### **Clients first.**



### **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 -4.67% 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 -14.74%, outperforming the Policy Index and ranking just below median. The Fund continues to perform well relative to expectations.
- 3. The Fund's largest position (29.1% 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	Net Flows	Return On	Market Value
	07/01/2022		Investment	09/30/2022
Firefighters' Total Fund	194,130,809	-85,977	-9,064,150	184,980,682
Total Domestic Equity	86,212,910	-35,378	-3,550,289	82,627,243
NTGI R1000 Index Fund	56,403,486	-	-2,589,287	53,814,199
Champlain Mid Cap	9,176,320	-20,760	-375,058	8,780,502
NTGI S&P 400	9,327,982	-	-228,834	9,099,148
T Rowe Price	5,757,412	-	-171,828	5,585,583
Summit Creek	5,547,711	-14,618	-185,282	5,347,811
Total International Equity	39,931,732	-	-3,976,341	35,955,391
Dodge & Cox International Stock	15,307,472	-	-1,636,874	13,670,597
MFS	15,716,436	-	-1,353,148	14,363,288
International Emerging Equity				
Vanguard EM	8,907,824	-	-986,318	7,921,506
Total Domestic Fixed Income	47,828,315	-18,749	-1,629,553	46,180,014
Schroder Intermediate Duration	34,236,765	-18,749	-1,013,642	33,204,374
NTGI Government / Credit	13,591,551	-	-615,911	12,975,640
Total Real Estate	20,157,834	-33,921	92,024	20,215,937
PGIM	14,003,220	-33,921	30,478	13,999,776
Principal Enhanced Property Fund, LP	6,154,614	-	61,546	6,216,160
Cash	17	2,072	8	2,097



Fiscal Year To Date				
	Market Value 01/01/2022	Net Flows	Return On Investment	Market Value 09/30/2022
Firefighters' Total Fund	231,312,311	-3,310,187	-43,021,443	184,980,682
Total Domestic Equity	110,088,444	-130,307	-27,330,894	82,627,243
NTGI R1000 Index Fund	71,319,945	-8,388	-17,497,358	53,814,199
Champlain Mid Cap	12.786.006	-71,693	-3,933,811	8,780,502
NTGI S&P 400	11,591,590	-1,366	-2,491,076	
T Rowe Price	7,165,708	-1,300	-2,491,076 -1,580,124	9,099,148 5,585,583
Summit Creek	, ,	-		
Summit Creek	7,225,195	-48,859	-1,828,524	5,347,811
Total International Equity	47,662,628	6,477	-11,713,714	35,955,391
Dodge & Cox International Stock	-	16,436,582	-2,765,984	13,670,597
Templeton	17,267,491	-16,430,104	-837,387	-
MFS	19,594,290	-	-5,231,002	14,363,288
International Emerging Equity				
Vanguard EM	10,800,847	-	-2,879,341	7,921,506
Total Domestic Fixed Income	52,571,671	-59,813	-6,331,844	46,180,014
Schroder Intermediate Duration	37,309,315	-58,027	-4,046,914	33,204,374
NTGI Government / Credit	15,262,356	-1,786	-2,284,931	12,975,640
Total Real Estate	17,992,514	-130,932	2,354,355	20,215,937
PGIM	12,513,112	-96,879	1,583,544	13,999,776
Principal Enhanced Property Fund, LP	5,479,402	-34,053	770,811	6,216,160
Cash	2,997,055	-2,995,613	654	2,097



1 Year				
	Market Value 10/01/2021	Net Flows	Return On Investment	Market Value 09/30/2022
	10/01/2021		investment	00,00,2022
Firefighters' Total Fund	220,547,249	-3,417,304	-32,149,264	184,980,682
Total Domestic Equity	105,778,427	-4,626,637	-18,524,547	82,627,243
NTGI R1000 Index Fund	69,125,262	-4,461,328	-10,849,734	53,814,199
Champlain Mid Cap	12,026,946	-97,485	-3,148,960	8,780,502
NTGI S&P 400	10,733,217	-1,496	-1,632,573	9,099,148
T Rowe Price	6,847,322	-	-1,261,739	5,585,583
Summit Creek	7,045,680	-66,327	-1,631,541	5,347,811
Total International Equity	46,588,946	6,477	-10,640,032	35,955,391
Dodge & Cox International Stock	-	16,436,582	-2,765,984	13,670,597
Templeton	17,230,330	-16,430,104	-800,226	-
MFS	18,352,519	-	-3,989,231	14,363,288
International Emerging Equity				
Vanguard EM	11,006,097	-	-3,084,591	7,921,506
Total Domestic Fixed Income	52,803,579	-80,423	-6,543,142	46,180,014
Schroder Intermediate Duration	37,567,942	-78,051	-4,285,517	33,204,374
NTGI Government / Credit	15,235,637	-2,372	-2,257,625	12,975,640
Total Real Estate	15,376,095	1,282,078	3,557,764	20,215,937
PGIM	10,415,691	1,331,012	2,253,073	13,999,776
Principal Enhanced Property Fund, LP	4,960,404	-48,934	1,304,690	6,216,160
Cash	203	1,201	693	2,097



#### Asset Allocation Total Fund

As of September 30, 2022

Asset Allocation Attributes														
	Domesti	c Equity	Internation	nal Equity	Emerging Equity		Domestic Fixed Income		Real Estate		Cash Equivalent		Total I	Fund
	(\$)	%	(\$)	%	(\$)	%	(\$)	%	(\$)	%	(\$)	%	(\$)	%
Firefighters' Total Fund	82,267	44.5	28,034	15.2	7,922	4.3	45,838	24.8	20,216	10.9	705	0.4	184,981	100.0
Total Domestic Equity	82,267	99.6	-	-	-	-	-	-	-	-	360	0.4	82,627	44.7
NTGI R1000 Index Fund	53,749	99.9	-	-	-	-	-	-	-	-	65	0.1	53,814	29.1
Champlain Mid Cap	8,583	97.8	-	-	-	-	-	-	-	-	197	2.2	8,781	4.7
NTGI S&P 400	9,099	100.0	-	-	-	-	-	-	-	-	-	-	9,099	4.9
T Rowe Price	5,586	100.0	-	-	-	-	-	-	-	-	-	-	5,586	3.0
Summit Creek	5,250	98.2	-	-	-	-	-	-	-	-	98	1.8	5,348	2.9
Total International Equity	-	-	28,034	78.0	7,922	22.0	-	-	-	-	-	-	35,955	19.4
Dodge & Cox International Stock	-	-	13,671	100.0	-	-	-	-	-	-	-	-	13,671	7.4
MFS	-	-	14,363	100.0	-	-	-	-	-	-	-	-	14,363	7.8
International Emerging Equity														
Vanguard EM	-	-	-	-	7,922	100.0	-	-	-	-	-	-	7,922	4.3
Total Domestic Fixed Income	-	-	-	-	-	-	45,838	99.3	-	-	342	0.7	46,180	25.0
Schroder Intermediate Duration	-	-	-	-	-	-	32,862	99.0	-	-	342	1.0	33,204	18.0
NTGI Government / Credit	-	-	-	-	-	-	12,976	100.0	-	-	-	-	12,976	7.0
Total Real Estate	-	-	-	-	-	-	-	-	20,216	100.0	-	-	20,216	10.9
PGIM	-	-	-	-	-	-	-	-	14,000	100.0	-	-	14,000	7.6
Principal Enhanced Property Fund, LP	-	-	-	-	-	-	-	-	6,216	100.0	-	-	6,216	3.4
Cash	-	-	-	-	-	-	-	-	-	-	2	100.0	2	0.0



Allocation

44.4

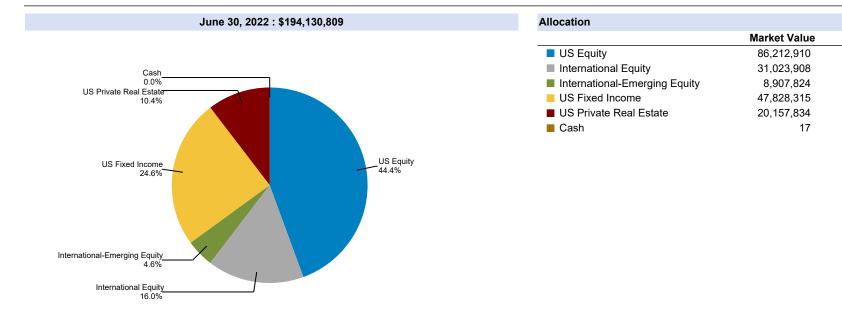
16.0

4.6

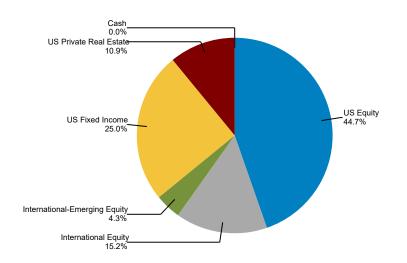
24.6

10.4

0.0



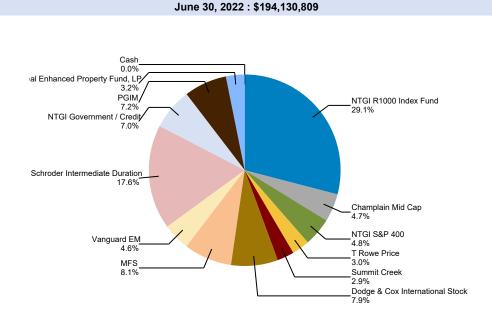
#### September 30, 2022 : \$184,980,682



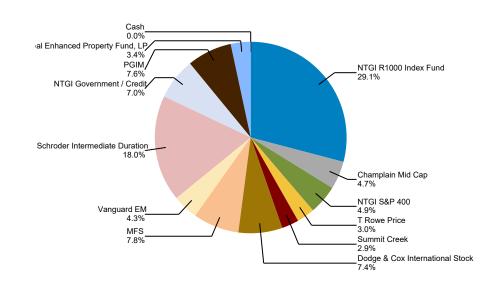
#### Allocation Market Value Allocation US Equity 82,627,243 44.7 International Equity 28,033,885 15.2 International-Emerging Equity 4.3 7,921,506 US Fixed Income 46,180,014 25.0 US Private Real Estate 20,215,937 10.9 Cash 2,097 0.0



#### Asset Allocation By Manager Total Fund As of September 30, 2022



#### September 30, 2022 : \$184,980,682



Allocation		
	Market Value	Allocation
NTGI R1000 Index Fund	56,403,486	29.1
Champlain Mid Cap	9,176,320	4.7
NTGI S&P 400	9,327,982	4.8
T Rowe Price	5,757,412	3.0
Summit Creek	5,547,711	2.9
Dodge & Cox International Stock	15,307,472	7.9
MFS	15,716,436	8.1
Vanguard EM	8,907,824	4.6
Schroder Intermediate Duration	34,236,765	17.6
NTGI Government / Credit	13,591,551	7.0
■ PGIM	14,003,220	7.2
Principal Enhanced Property Fund, LP	6,154,614	3.2
Cash	17	0.0

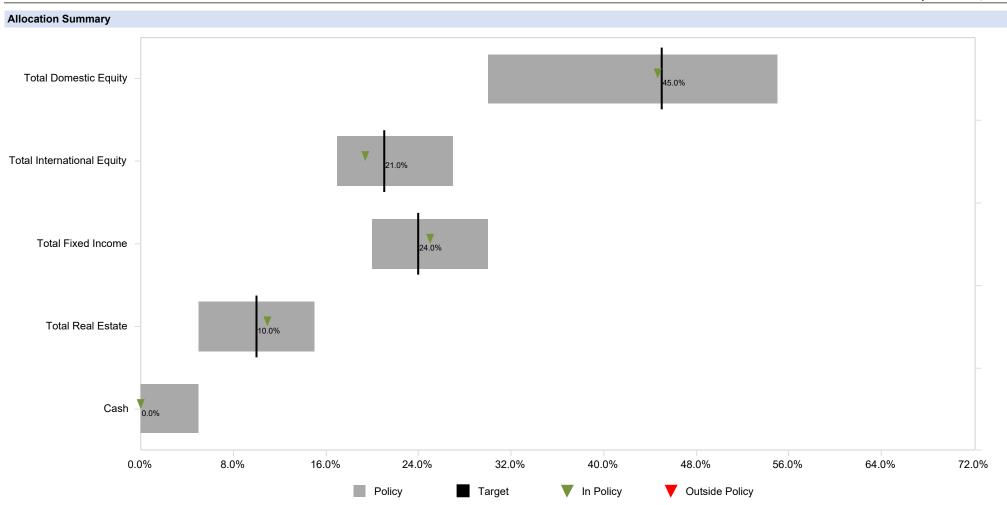
#### Allocation

	Market Value	Allocation
NTGI R1000 Index Fund	53,814,199	29.1
Champlain Mid Cap	8,780,502	4.7
NTGI S&P 400	9,099,148	4.9
T Rowe Price	5,585,583	3.0
Summit Creek	5,347,811	2.9
Dodge & Cox International Stock	13,670,597	7.4
MFS	14,363,288	7.8
Vanguard EM	7,921,506	4.3
Schroder Intermediate Duration	33,204,374	18.0
NTGI Government / Credit	12,975,640	7.0
■ PGIM	13,999,776	7.6
Principal Enhanced Property Fund, LP	6,216,160	3.4
Cash	2,097	0.0



## **Page Intentionally Left Blank**





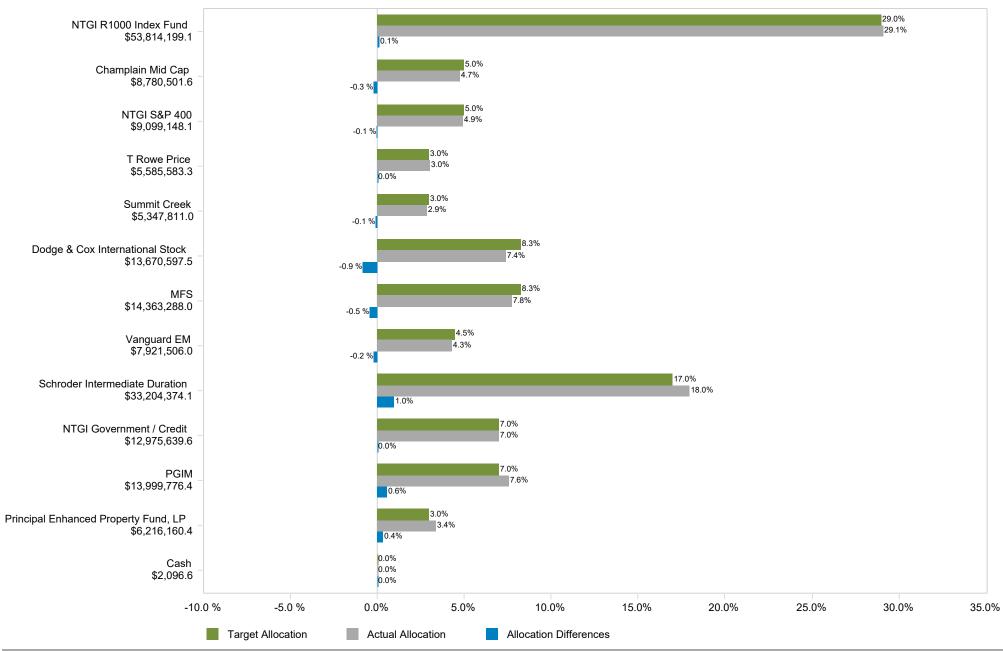
#### **Asset Allocation Compliance**

	Asset Allocation \$	Current Allocation (%)	Minimum Allocation (%)	Target Allocation (%)	Maximum Allocation (%)	Target Rebal. (\$)	Differences (%)
Firefighters' Total Fund	184,980,682	100.0		100.0		-	0.0
Total Domestic Equity	82,627,243	44.7	30.0	45.0	55.0	614,064	-0.3
Total International Equity	35,955,391	19.4	17.0	21.0	27.0	2,890,552	-1.6
Total Fixed Income	46,180,014	25.0	20.0	24.0	30.0	-1,784,650	1.0
Total Real Estate	20,215,937	10.9	5.0	10.0	15.0	-1,717,869	0.9
Cash	2,097	0.0	0.0	0.0	5.0	-2,097	0.0



#### **Asset Allocation Compliance** Asset Current Target Rebal. Differences Target Allocation Allocation (%) Allocation (%) (\$000) (%) \$ 0.0 **Firefighters' Total Fund** 184,980,682 100.0 100.0 -Total Equity 64.1 66.0 3,504,615 -1.9 118,582,634 **Total Domestic Equity** 44.7 614,064 -0.3 82,627,243 45.0 NTGI R1000 Index Fund 53,814,199 29.1 29.0 -169,801 0.1 8,780,502 4.7 468.532 -0.3 Champlain Mid Cap 5.0 4.9 -0.1 NTGI S&P 400 9,099,148 5.0 149,886 5,585,583 3.0 -36.163 0.0 T Rowe Price 3.0 Summit Creek 2.9 5,347,811 3.0 201,609 -0.1 19.4 21.0 2,890,552 -1.6 **Total International Equity** 35,955,391 -0.9 Dodge & Cox International Stock 13,670,597 7.4 8.3 1,590,309 MFS 7.8 8.3 -0.5 14,363,288 897,618 4.3 Vanguard EM 7,921,506 4.5 402,625 -0.2 **Total Fixed Income** 46,180,014 25.0 24.0 -1,784,650 1.0 **Total Domestic Fixed Income** 46,180,014 25.0 24.0 -1,784,650 1.0 Schroder Intermediate Duration 33,204,374 18.0 17.0 -1,757,658 1.0 NTGI Government / Credit 12,975,640 7.0 7.0 -26,992 0.0 **Total Real Estate** 20,215,937 10.9 10.0 -1,717,869 0.9 PGIM 13,999,776 7.6 7.0 -1,051,129 0.6 3.4 Principal Enhanced Property Fund, LP 6,216,160 3.0 -666,740 0.4 0.0 0.0 Cash 2,097 0.0 -2,097







Comparative Performance												
	Q.	ſR	FY	TD	1 YR		3 YR		5`	YR	10	YR
Firefighters' Total Fund	-4.67	(58)	-18.74	(58)	-14.74	(54)	3.85	(32)	4.93	(28)	7.49	(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	
Firefighters' Total Fund	-4.67	(18)	-18.74	(3)	-14.74	(11)	3.85	(65)	4.93	(56)	7.49	(54)
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	-4.12	(N/A)	-24.85	(N/A)	-18.55	(N/A)	6.55	(N/A)	8.04	(N/A)	10.98	(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)	-24.54	(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)	-30.87	(100)	-26.35	(100)	6.68	(38)	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)	5.86	(63)	10.10	(71)
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	-3.36	(82)	-25.39	(13)	-23.30	(23)	12.23	(7)	12.49	(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	

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

	Q.	TR	FYTD		1 YR		3	YR	5	YR	10	YR
Total International Equity	-9.96	(N/A)	-24.57	(N/A)	-22.83	(N/A)	-0.73	(N/A)	-0.41	(N/A)	3.48	(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	
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	
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	
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	-3.41	(N/A)	-12.05	(N/A)	-12.40	(N/A)	-1.85	(N/A)	0.37	(N/A)	1.76	(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	-2.96	(50)	-10.86	(85)	-11.42	(90)	-1.32	(51)	0.67	(52)	1.61	(19)
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)	-3.08	(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)	13.10	(32)	21.95	(35)	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		0.63		0.63		0.56		1.07		N/A	
90 Day U.S. Treasury Bill	0.46		0.61		0.62		0.59		1.15		0.67	



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

Comparative Performance											
	1 Year Ending Sep-2022		1 Year Ending Sep-2021		1 Year Ending Sep-2020		1 Ye End Sep-	ling	1 Year Ending Sep-2018		
Firefighters' Total Fund	-14.74	(54)	23.03	(18)	6.76	(64)	4.05	(58)	9.18	(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		
Firefighters' Total Fund	-14.74	(11)	23.03	(54)	6.76	(76)	4.05	(25)	9.18	(43)	
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	-18.55	(N/A)	35.93	(18)	9.24	(65)	3.62	(26)	17.46	(32)	
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)	30.97	(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	-26.35	(100)	39.96	(56)	17.77	(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)	43.67	(33)	-2.11	(66)	-2.44	(55)	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	-23.30	(23)	48.25	(21)	24.32	(42)	-5.50	(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	× /	

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

Comparative Performance

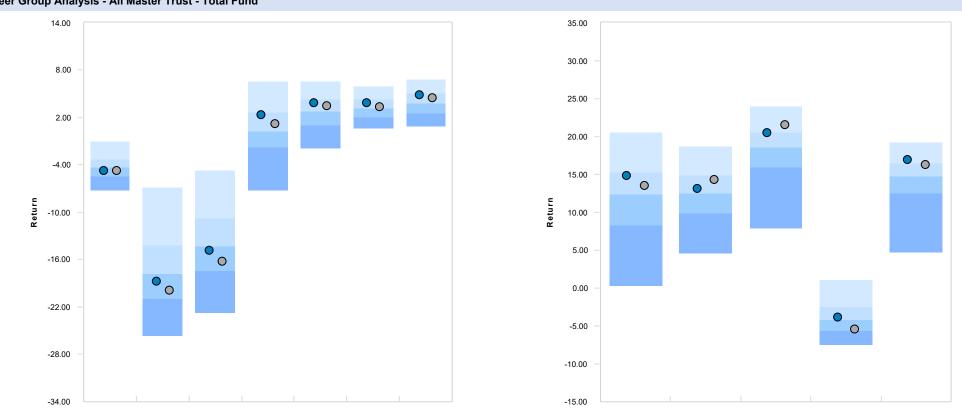
Firefighters' Total Fund

Years Ending

	1 Year Ending Sep-2022		Year Year Ending Ending Sep-2022 Sep-2021				1 Ye End Sep-2	ar ing	1 Year Ending Sep-2018		
Total International Equity	-22.83	(N/A)	25.11	(61)	1.33	(79)	-1.90	(72)	2.08	(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		
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	,	
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		
/anguard EM	-28.03	(31)	24.13	(26)	5.21	(72)	1.57	(40)	-1.77	(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	( - )	
Fotal Domestic Fixed Income	-12.40	(N/A)	-0.17	(78)	8.11	(39)	9.09	(58)	-1.22	(70)	
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	-11.42	(90)	0.28	(48)	8.20	(3)	8.30	(24)	-0.67	(79)	
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		
ITGI Government / Credit	-14.82	(68)	-1.06	(90)	8.04	(34)	11.37	(7)	-1.29	(95)	
BImbg. 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	,	
otal Real Estate	21.95	(35)	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)	16.05	(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		
rincipal 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		

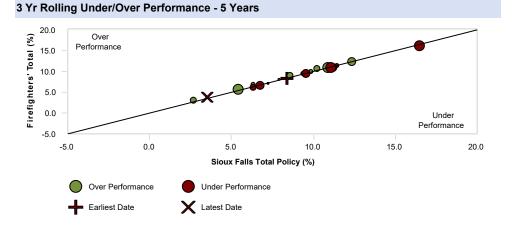
Page 27



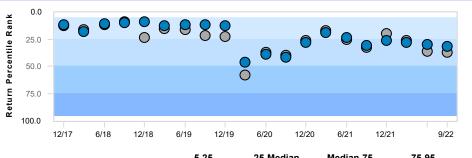


#### Peer Group Analysis - All Master Trust - Total Fund

	QTR	F	YTD		1 Y	'R	2 Y	'R	3 Y	/R	4 Y	'R	5`	YR				2	021	20	20	:	2019	2	2018		2017	
Firefighters' Total -4.6	67 (	58) 18.7	4 (5	8) 14	.74	(54)	2.42	(27)	3.85	(32)	3.90	(32)	4.93	(28)		Firefighte	rs' Total	14.8	8 (29)	13.17	(42)	20.	49 (27)	-3.8	33 (4	4) 1	7.03 (	(17)
◎ Sioux Falls Policy -4.7	74 (	60) 19.8	3 (6	6) 16	5.17	(65)	1.20	(40)	3.50	(37)	3.39	(44)	4.49	(36)		Sioux Fal	lls Policy	13.6	1 (40)	14.28	(31)	21.	60 (16)	-5.3	37 (7	2) 1	6.29 (	(27)
Median -4.3	37	17.7	8	-14	.31		0.24		2.70		3.10		3.78			Median		12.3	6	12.49		18.	56	-4.1	17	1	4.80	
Comparative Perform	ance	9																										
					En	Qtr ding -2022				E	1 Qtr inding ar-2022				1 C End Dec-2	ing		1 Q Endi Sep-2	ng			1 Q Endi Jun-2	ng				Qtr ling 2021	
Firefighters' Total					10.43	3 (61	)			-4.	84 (5	3)			4.93	(24)		0.11	(41)		:	5.41	(49)			3.74	(28)	
Sioux Falls Total Policy				-	11.56	6 (78	3)			-4.	84 (5	3)			4.56	(33)		-0.50	(79)			5.16	(58)			3.85	(26)	
All Master Trust - Total Fu	und N	/ledian			-9.73	3				-4.	73				3.93			0.00				5.36				2.78		



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

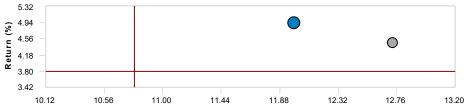


	Total Period	5-25 Count	25-Median Count	Count	75-95 Count	
Firefighters' Total	20	11 (55%)	9 (45%)	0 (0%)	0 (0%)	
Sioux Falls Policy	20	12 (60%)	7 (35%)	1 (5%)	0 (0%)	

#### Peer Group Scattergram - 3 Years



#### Peer Group Scattergram - 5 Years



Risk (Standard Deviation %)

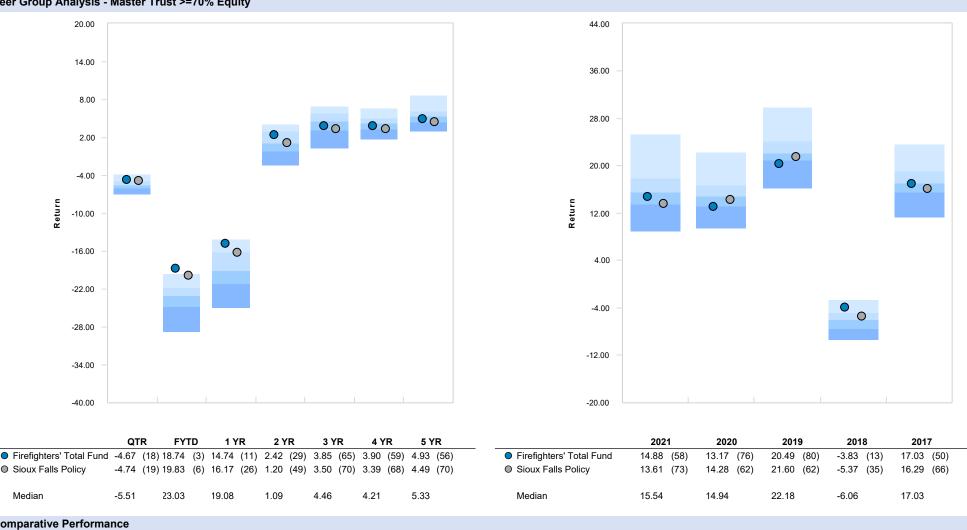
	Return	Standard Deviation		Return	Standard Deviation
Firefighters' Total	3.85	13.51	Firefighters' Total	4.93	11.99
Sioux Falls Policy	3.50	14.40	Sioux Falls Policy	4.49	12.73
Median	2.70	12.31	Median	3.78	10.79

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

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Firefighters' Total	1.58	95.81	93.52	0.51	0.14	0.30	0.93	9.58
Sioux Falls Policy	0.00	100.00	100.00	0.00	N/A	0.27	1.00	10.21

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Firefighters' Total	1.35	96.81	93.34	0.66	0.25	0.37	0.94	8.43
Sioux Falls Policy	0.00	100.00	100.00	0.00	N/A	0.32	1.00	8.97

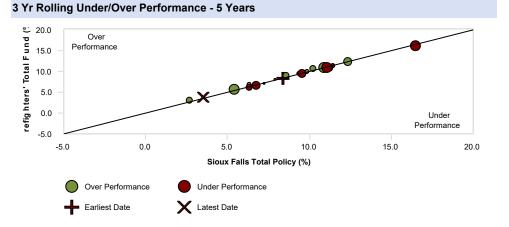




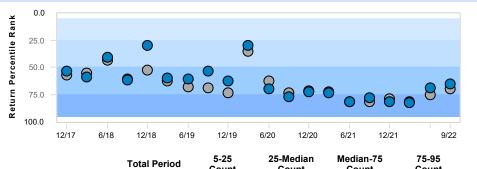
#### Peer Group Analysis - Master Trust >=70% Equity

	QIR	Fĭ	טו	1 1 1	۲.	2 I R	JY	ĸ	4 1 6	۲.	5 I K			202	1	2020		2019		2018	201	1
<ul> <li>Firefighters' Total Fund -4.</li> </ul>	67 (1	8) 18.74	(3)	14.74 (	(11)	2.42 (29)	3.85	(65)	3.90 (	(59)	4.93 (56)	Firefighters' Total F	Fund	14.88	(58)	13.17 (7	6)	20.49 (8	0) -3	.83 (13)	17.03	(50)
O Sioux Falls Policy -4.	74 (1	9) 19.83	(6)	16.17	(26)	1.20 (49)	3.50	(70)	3.39 (	(68)	4.49 (70)	Sioux Falls Policy		13.61	(73)	14.28 (6	2)	21.60 (6	2) -5	.37 (35)	16.29	(66)
Median -5.	51	23.03		19.08		1.09	4.46		4.21		5.33	Median		15.54		14.94		22.18	-6	.06	17.03	
Comparative Performance	Ð																					
				1 Qtr Ending un-2022				1 C End Mar-2	ing			1 Qtr Ending Dec-2021		Qtr ling 2021			1 Q Endi Jun-2	ing			1 Qtr Ending Mar-2021	
Firefighters' Total Fund			-10.	.43 (7)				-4.84	(29)			4.93 (59)	0.11	(18)			5.41	(86)			3.74 (62	2)
Sioux Falls Total Policy			-11.	.56 (16	5)			-4.84	(29)			4.56 (71)	-0.50	(47)			5.16	(90)			3.85 (59	))
Master Trust >=70% Equity Me	edian		-13.	18				-5.59				5.16	-0.56				6.04				4.03	





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

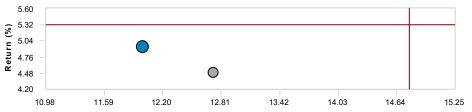


	Total Period	Count	Count	Count	Count	
Firefighters' Total Fund	20	0 (0%)	3 (15%)	12 (60%)	5 (25%)	
Sioux Falls Policy	20	0 (0%)	2 (10%)	14 (70%)	4 (20%)	

#### Peer Group Scattergram - 3 Years



#### Peer Group Scattergram - 5 Years



Risk (Standard Deviation %)

	Return	Standard Deviation		Return	Standard Deviation
Firefighters' Total Fund	3.85	13.51	Firefighters' Total Fund	4.93	11.99
Sioux Falls Policy	3.50	14.40	Sioux Falls Policy	4.49	12.73
Median	4.46	16.36	Median	5.33	14.77

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

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Firefighters' Total Fund	1.58	95.81	93.52	0.51	0.14	0.30	0.93	9.58
Sioux Falls Policy	0.00	100.00	100.00	0.00	N/A	0.27	1.00	10.21

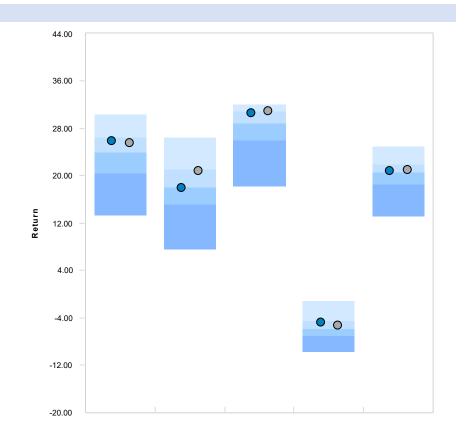
#### **Historical Statistics - 5 Years**

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Firefighters' Total Fund	1.35	96.81	93.34	0.66	0.25	0.37	0.94	8.43
Sioux Falls Policy	0.00	100.00	100.00	0.00	N/A	0.32	1.00	8.97



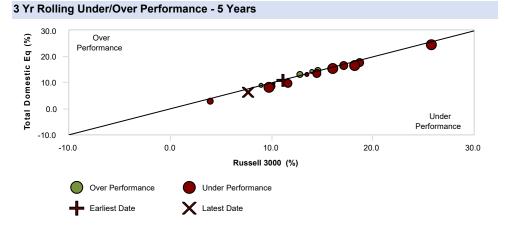
#### Peer Group Analysis - All Master Trust-US Equity Segment

No data found.



				2021	2020	2019	2018	2017
			Total Domestic Eq	25.93 (31)	18.13 (48)	30.65 (28)	-4.64 (26)	20.88 (46)
			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	-16.34 (75)	-6.30 (75)	8.38 (40)	0.68 (11)		7.69 (53)		7.18 (35)
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.

Peer Group Scattergram - 3 Years



Risk (Standard Deviation %)

#### Peer Group Scattergram - 5 Years



Risk (Standard Deviation %)

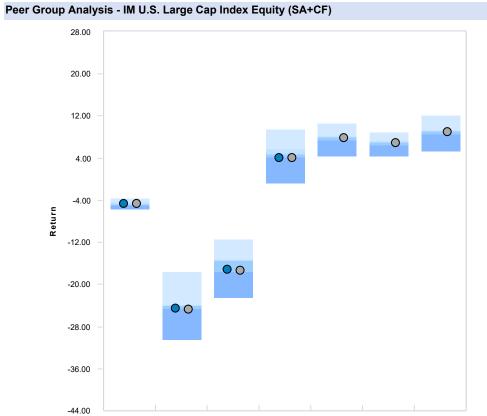
	Return	Standard Deviation		Return	Standard Deviation
Total Domestic Eq	6.55	20.70	Total Domestic Eq	8.04	18.56
Russell 3000	7.70	20.66	Russell 3000	8.62	18.46
Median	N/A	N/A	Median	N/A	N/A

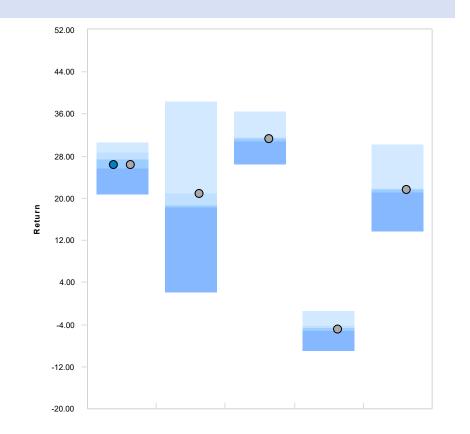
#### **Historical Statistics - 3 Years**

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Domestic Eq	2.39	96.55	99.56	-1.01	-0.45	0.38	1.00	14.32
Russell 3000	0.00	100.00	100.00	0.00	N/A	0.43	1.00	14.00
Historical Statistics	s - 5 Years							

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Domestic Eq	2.10	98.19	99.75	-0.50	-0.24	0.45	1.00	12.89
Russell 3000	0.00	100.00	100.00	0.00	N/A	0.48	1.00	12.59

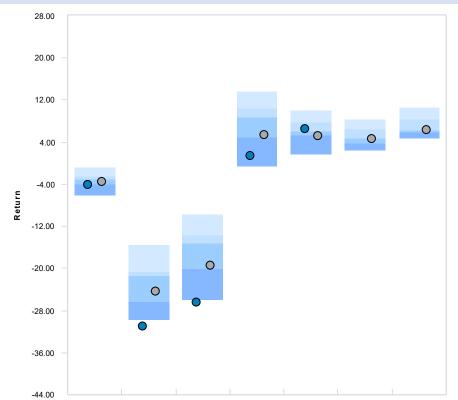


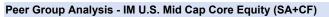


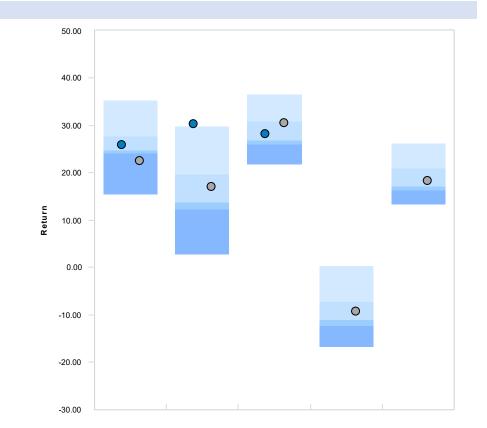


	QTR	FYT	ſD 1`	YR	2 YR	3	YR	4 YF	ર	5 Y	/R		2021		2020	201	19	2018	201	17
NTGI R1000 Index -4	4.59 (3	1) 24.53	(56) 17.16	6 (55)	4.17 (6	56) N/A	۱.	N/A		N/A		NTGI R1000 Index	26.49 (	55)	N/A	N/A		N/A	N/A	۱.
Russell 1000 Index -4	4.61 (4	3) 24.59	(72) 17.22	2 (63)	4.12 (	74) 7.95	5 (56)	6.91	(56) 9	9.00	(55)	Russell 1000 Index	26.45 (	62)	20.96 (23)	31.43	(52)	-4.78 (61)	21.69	(56)
Median -4	4.87	23.94	15.56	i	4.70	7.96	6	6.94	ç	9.02		Median	27.28		18.64	31.43		-4.64	21.76	i
Comparative Perform	ance																			
					1 Qtr Endin Jun-202	g			1 Qtr Endin Mar-20	g		1 Qtr Ending Dec-2021	1 Q Endi Sep-2	ng		1 Q Endi Jun-2	ng		1 Qtr Ending Mar-202	g
NTGI R1000 Index				-	16.63 (	58)		-5	5.12 (	(61)		9.78 (55)	0.22	(51)		8.51	(58)		5.94 (7	(72)
Russell 1000 Index				-	16.67 (	68)		-5	5.13 (	(67)		9.78 (57)	0.21	(60)		8.54	(42)		5.91 (8	(81)
IM U.S. Large Cap Index	Equity (	SA+CF)	Median	-	16.10			-4	4.64			9.78	0.23			8.53			6.18	



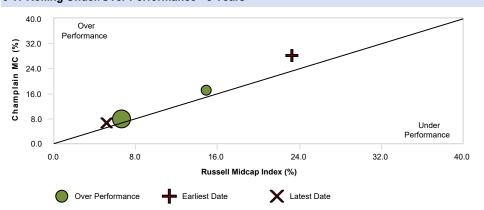






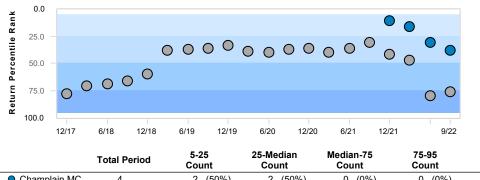
	QT	R	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR		2021	2020	2019	2018	2017
Champlain MC	-4.11	(78) 🤇	30.87 (100)	26.35 (100)	1.53 (91)	6.68 (38)	N/A	N/A	Champlain MC	26.03 (42)	30.52 (4)	28.36 (37)	N/A	N/A
Russell Midcap	-3.44	(63) 🗄	24.27 (63)	19.39 (72)	5.51 (71)	5.19 (76)	4.68 (50)	6.48 (47)	Russell Midcap	22.58 (79)	17.10 (35)	30.54 (26)	-9.06 (34)	18.52 (39)
Median	-3.12	4	21.53	15.25	8.71	6.05	4.67	6.24	Median	24.82	13.79	26.88	-11.03	17.20
Comparative Per	forma	nce												
				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		
Champlain MC				-1	19.29 (93)		-10.68	(90)	6.53 (80)	3.31 (3)	)	10.14 (5)		3.96 (93)
Russell Midcap Ind	ex			-1	16.85 (81)		-5.68	(56)	6.44 (86)	-0.93 (52	2)	7.50 (16)		8.14 (69)
IM U.S. Mid Cap Co	ore Equ	uity (SA	+CF) Media	an -1	15.40		-4.99		8.00	-0.89		4.98		11.00





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

3 Yr Rolling Percentile Ranking - 5 Years



Champlain MC	4	2	(50%)	2	(50%)	0	(0%)	0	(0%)
O Russell Midcap	20	0	(0%)	13	(65%)	4	(20%)	3	(15%)

#### Peer Group Scattergram - 3 Years

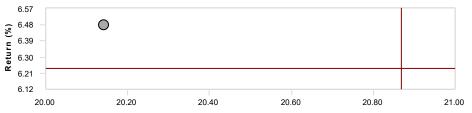


100.00

100.00

#### Peer Group Scattergram - 5 Years

N/A



Risk (Standard Deviation %)

0.36

1.00

	Return	Standard Deviation		Return	Standard Deviation
Champlain MC	6.68	21.62	Champlain MC	N/A	N/A
Russell Midcap	5.19	22.74	Russell Midcap	6.48	20.14
Median	6.05	22.72	Median	6.24	20.87

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

0.00

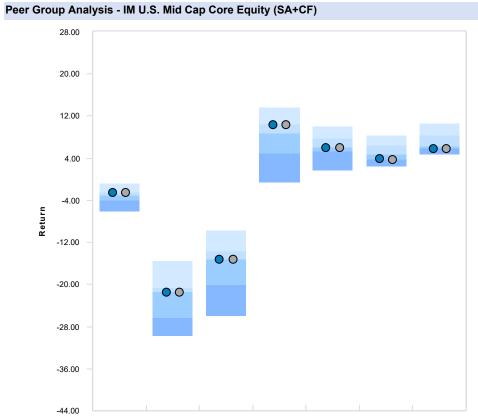
	•	Market	Market	Alpha			Beta	
Champlain MC	7.75	96.27	90.91	1.92	0.14	0.38	0.89	14.11
Russell Midcap	0.00	100.00	100.00	0.00	N/A	0.31	1.00	16.31
Historical Statistic	cs - 5 Years							
	•	Market	Market	Alpha			Beta	
Champlain MC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

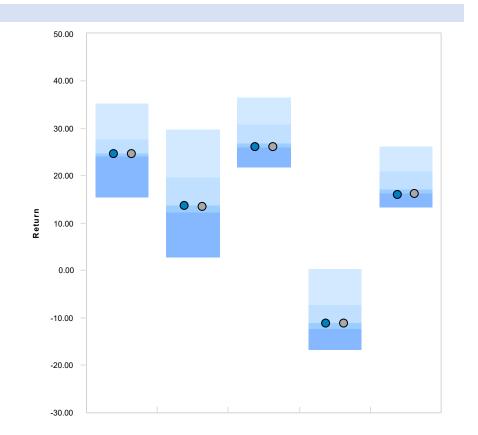
0.00



14.35

Russell Midcap

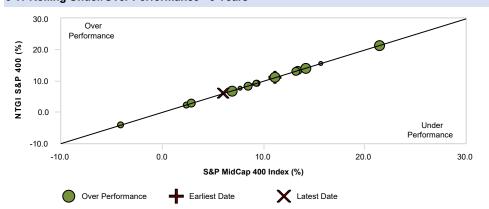




	QTR	F	YTD	1 Y	′R	2 YF	R	3 Y	'R	4 YI	R	5 ١	/R				2021		2020	201	9	2018	2	2017
NTGI S&P 400	-2.45 (	31) 21.4	9 (37)	15.21	(43)	10.37	(24)	6.05	(53)	3.86	(62)	5.86	(63)	•	NTGI Sa	&P 400	24.76 (6	64)	13.70 (55)	26.28	(61)	-11.02 (48)	16.	20 (77)
S&P MC 400 ldx	-2.46 (	37) 21.5	2 (44)	15.25	(49)	10.35	(28)	6.01	(57)	3.82	(68)	5.82	(73)	0	S&P MC	2 400 Idx	24.76 (6	62)	13.66 (58)	26.20	(71)	-11.08 (58)	16.	24 (70)
Median	-3.12	21.5	3	15.25		8.71		6.05		4.67		6.24			Median		24.82		13.79	26.88		-11.03	17.	20
Comparative Perfo	ormanc	e																						
						1 Qtr Ending Jun-202	g			E	1 Qtr Ending ar-202	g		En	Qtr ding -2021		1 Q Endi Sep-2	ing		1 C End Jun-2	ing		1 Q Endi Mar-2	ng
NTGI S&P 400					-1	5.40 (	(52)			-4.	86 (	27)		8.00	(55)		-1.76	(78)		3.64	(78)		13.46	(32)
S&P MidCap 400 Inc	dex				-1	5.42 (	(57)			-4.	88 (	41)		8.00	(56)		-1.76	(77)		3.64	(78)		13.47	(26)
IM U.S. Mid Cap Cor	re Equity	(SA+CF	) Media	in	-1	5.40				-4.	99			8.00			-0.89			4.98			11.00	

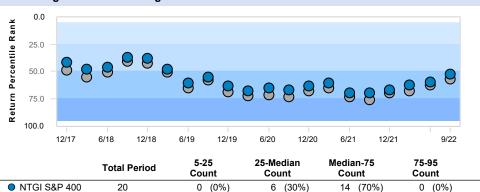


1 (5%)



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

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



0 (0%)

#### Peer Group Scattergram - 3 Years



#### Peer Group Scattergram - 5 Years

20

S&P MC 400 ldx



3 (15%)

16 (80%)

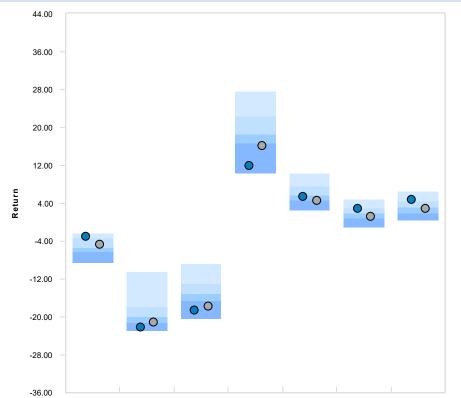
Risk (Standard Deviation %)

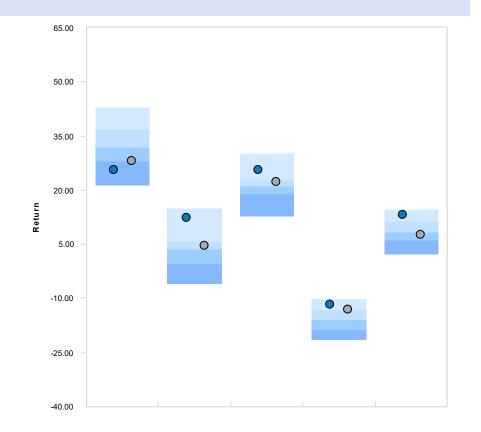
	Return	Standard Deviation		Return	Standard Deviation
NTGI S&P 400	6.05	23.43	NTGI S&P 400	5.86	21.18
S&P MC 400 ldx	6.01	23.44	S&P MC 400 ldx	5.82	21.18
Median	6.05	22.72	Median	6.24	20.87

	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	1.72	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

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
NTGI S&P 400	0.02	100.07	99.92	0.04	2.81	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



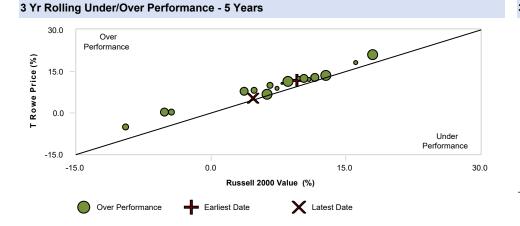




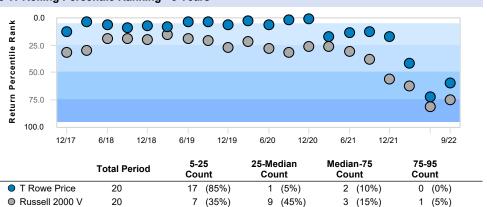
	QT	R F	TD	1 Y	′R	2 YR	र	3 YR	4 YR	5	YR			2021		2020	201	9	2018	20	17
T Rowe Price	-2.98	(15) 22.05	5 (91)	·18.43	(91) <sup>-</sup>	12.04 (	(94)	5.46 (60)	2.98 (26	6) 4.8	6 (18)	• T	Rowe Price	25.64 (9	91)	12.50 (6)	25.84	(9)	-11.48 (12)	13.36	6 (13)
Russell 2000 V	-4.61	(42) 21.12	2 (74)	·17.69	(86)	16.16 (	(80)	4.72 (75)	1.32 (64	4) 2.8	7 (57)	0 Ru	issell 2000 V	28.27 (7	73)	4.63 (35)	22.39	(28)	-12.86 (23)	7.84	4 (60)
Median	-5.41	19.93	3	-15.25		18.57		5.76	1.82	3.1	9	Me	edian	31.97		3.57	21.05		-16.08	8.46	6
Comparative Perf	forma	nce																			
						1 Qtr Ending Jun-202			1 Q Endi Mar-2	ing		1 Qt Endir Dec-20	ng		Qtr Jing •2021		1 C End Jun-2	ing		1 Qtr Endin Mar-20	g
T Rowe Price					-13	3.43 (4	41)		-7.19	(99)		4.65	(69)	1.47	(2)		5.17	(36)		12.50	(99)
Russell 2000 Value					-15	5.28 (8	83)		-2.40	(63)		4.36	(72)	-2.98	(81)		4.56	(46)		21.17	(63)
IM U.S. Small Cap	Value I	Equity (MF)	Media	n	-13	3.89			-1.70			5.80		-1.84			4.36			22.30	



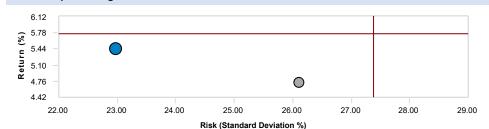
Peer Group Analysis - IM U.S. Small Cap Value Equity (MF)



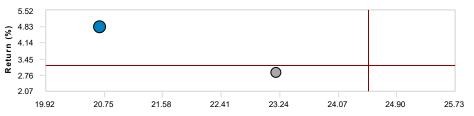
#### 3 Yr Rolling Percentile Ranking - 5 Years



#### Peer Group Scattergram - 3 Years



#### Peer Group Scattergram - 5 Years



Risk (Standard Deviation %)

	Return	Standard Deviation		Return	Standard Deviation
T Rowe Price	5.46	22.96	T Rowe Price	4.86	20.68
Russell 2000 V	4.72	26.11	Russell 2000 V	2.87	23.19
Median	5.76	27.39	Median	3.19	24.49

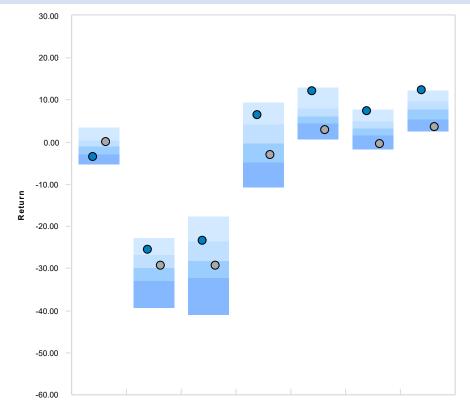
#### **Historical Statistics - 3 Years**

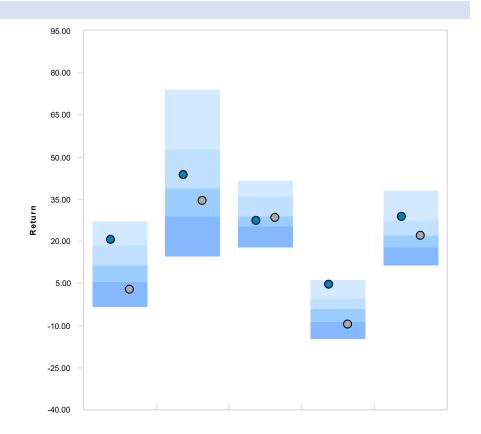
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
T Rowe Price	6.66	86.64	83.38	1.09	-0.02	0.32	0.85	16.86
Russell 2000 V	0.00	100.00	100.00	0.00	N/A	0.29	1.00	19.05

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
T Rowe Price	5.63	91.58	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



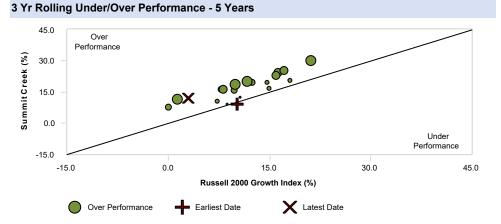
#### Peer Group Analysis - IM U.S. Small Cap Growth Equity (SA+CF+MF)



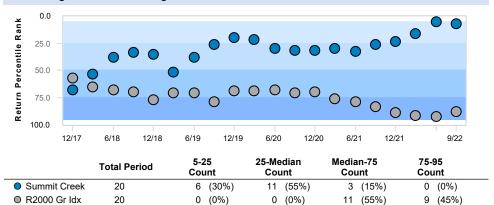


	QTR	2	FYT	D	1 Y	R	2 Y	'R	3 YF	R	4 YF	र	5 ۱	YR				202	1	20	)20		201	19		201	18	2	017	
Summit Creek	-3.36 (	(82) -	25.39	(13)	·23.30	(23)	6.63	(17)	12.23	(7)	7.50	(7) 12	2.49	(4)	Summit	Cree	ek 20	91	(19)	43.72	2 (38	5)	27.67	(56)	) 4	1.94	(8)	28.9	90 (2	20)
R2000 Gr ldx	0.24 (	(32)	29.28	(47)	·29.27	(60)	-2.91	(70)	2.94	(88) -0	0.36	(93) 3	8.60	(91)	R2000	Gr Id	x 2	83	(84)	34.63	3 (59	))	28.48	(53)	) -9	9.31	(78)	22.1	17 (5	53)
Median	-1.06	÷	29.86		·28.34		-0.28		6.00	:	3.30	7	.69		Median		11	65		38.95	5		29.01		-4	4.28		22.3	32	
Comparative Per	forma	nce																												
								Er	Qtr nding n-2022			E	1 Qt ndir ar-20	ng	1 Q Endi Dec-2	ing			1 Qt Endir Sep-2	ng			E	1 Qtr Inding In-202	g			1 C End Mar-		
Summit Creek								-12.6	2 (5)			-11.6	65	(38)	2.80	(49)	)		3.98	(4)			4.6	62 (	(59)			8.13	(33	,)
Russell 2000 Grow	th Index	x						-19.2	5 (53)	)		-12.6	63	(52)	0.01	(75)	)		-5.65	(95)			3.9	92 (	(70)			4.88	(55	)
IM U.S. Small Cap	Growth	Equi	ty (SA+	+CF+N	/F) Med	dian		-18.9	7			-12.0	60		2.76				-1.68				5.1	10				5.48		

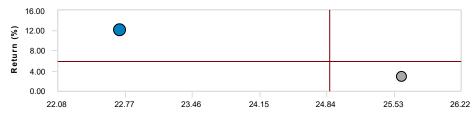




3 Yr Rolling Percentile Ranking - 5 Years



Peer Group Scattergram - 3 Years



Risk (Standard Deviation %)

Peer Group Scattergram - 5 Years



Risk (Standard Deviation %)

	Return	Standard Deviation		Return	Standard Deviation
Summit Creek	12.23	22.72	Summit Creek	12.49	21.20
R2000 Gr Idx	2.94	25.61	R2000 Gr Idx	3.60	23.26
Median	6.00	24.87	Median	7.69	22.72

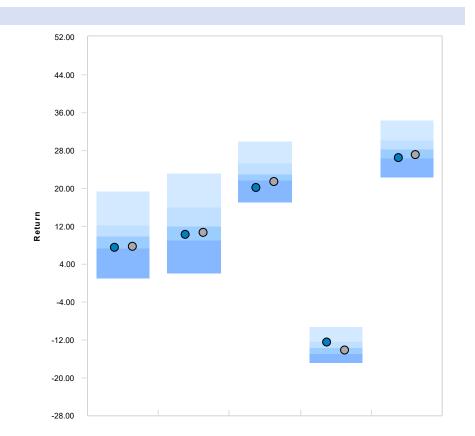
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Summit Creek	7.47	98.43	72.05	9.26	1.07	0.59	0.85	14.66
R2000 Gr Idx	0.00	100.00	100.00	0.00	N/A	0.22	1.00	17.76
Historical Statisti	cs - 5 Years							

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Summit Creek	6.36	104.07	76.13	8.91	1.23	0.61	0.88	13.86
R2000 Gr Idx	0.00	100.00	100.00	0.00	N/A	0.22	1.00	16.33



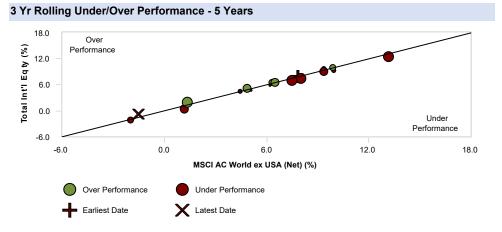
## Peer Group Analysis - All Master Trust-Intl. Equity Segment

No data found.



				2021	2020	2019	2018	2017
			Total Int'l Eqty	7.49 (75)	10.22 (68)	20.29 (84)	-12.43 (24)	26.47 (72)
			MSCIACxUSNet	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 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 Int'l Eqty	-11.32 (15)	-5.54 (36)	2.30 (39)	-3.30 (84)	)	5.07 (79)		3.41 (63)
MSCI AC World ex USA (Net)	-13.73 (52)	-5.44 (33)	1.82 (54)	-2.99 (78	)	5.48 (66)		3.49 (61)
All Master Trust-Intl. Equity Segment Median	-13.70	-6.68	1.91	-1.90		5.76		3.82





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

No data found.

#### Peer Group Scattergram - 3 Years



#### Peer Group Scattergram - 5 Years



Risk (Standard Deviation %)

	Return	Standard Deviation		Return	Standard Deviation
Total Int'l Eqty	-0.73	17.95	Total Int'l Eqty	-0.41	16.10
MSCIACxUSNet	-1.52	18.22	MSCIACxUSNet	-0.81	16.26
Median	N/A	N/A	Median	N/A	N/A

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Int'l Eqty	3.23	97.85	94.79	0.75	0.23	0.02	0.97	13.43
MSCIACxUSNet	0.00	100.00	100.00	0.00	N/A	-0.02	1.00	13.72

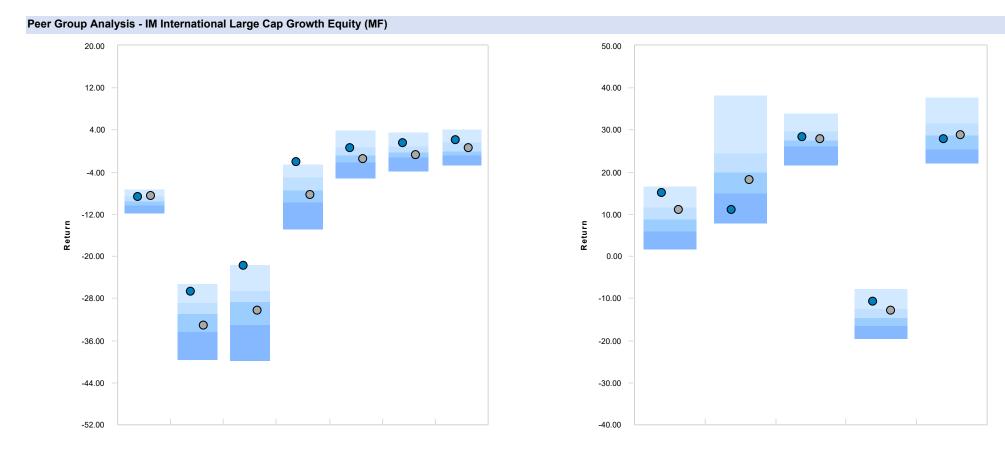
	Tracking Error	Error Capture		Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk	
Total Int'l Eqty	2.71	98.90	97.12	0.39	0.14	-0.01	0.98	11.93	
MSCIACxUSNet	0.00	100.00	100.00	0.00	N/A	-0.04	1.00	12.08	



#### Peer Group Analysis - IM International Large Cap Core Equity (MF) 14.00 50.00 40.00 8.00 2.00 30.00 0 0 0 0 0 0 -4.00 20.00 0 $\circ$ -10.00 10.00 0 0 Return Return -16.00 0.00 -22.00 -10.00 0 0 $\circ$ -28.00 -20.00 -34.00 -30.00 -40.00 -40.00

	QTR	1	FYTE	כ	1 YR	2 Y	R	3 YR	4 Y	′R	5 Y	R		2021	2020	2019	2018	2017
Dodge & Cox	·10.69 (	(86)	N/A	N	/A	N/A		N/A	N/A		N/A		Dodge & Cox	N/A	N/A	N/A	N/A	N/A
MSCI EAFE ldx	-9.29 (	(27) 2	6.76 (	(37) -24.	75 (46)	-2.51	(38) -1	.38 (60	) -1.24	(49)	-0.36	(45)	MSCI EAFE Idx	11.78 (41)	8.28 (73)	22.66 (60)	-13.36 (38)	25.62 (59)
Median	10.00	-2	7.32	-24.9	94	-3.11	-C	).93	-1.36		-0.66		Median	11.39	9.95	23.15	-14.42	26.34
Comparative Per	forman	се																
							1 Qtr Ending Jun-2022			E	1 Qtr nding ar-2022	!	1 Qtr Ending Dec-2021	1 C End Sep-2	ing	1 Qtr Ending Jun-202		1 Qtr Ending Mar-2021
Dodge & Cox							N/A			N/	/A		N/A	N/A		N/A		N/A
MSCI EAFE Index						-14	4.29 (8	2)		-5.7	79 (2	8)	2.74 (70)	-0.35	(13)	5.38 (	48)	3.60 (49)
IM International Lar	ge Cap (	Core E	quity (I	MF) Med	lian	-13	3.12			-6.7	73		3.13	-1.51		5.36		3.50

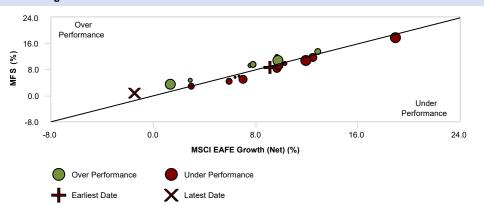




	QTR	FY	TD	1 YF	2	2 YR	3 YR	4 `	YR	5	YR		2021		2020	2019	)	2018	201	17
MFS	-8.61 (	23) 26.70	(9)	21.74 (	(5) -1.9	91 (4)	0.75 (2	24) 1.69	(14)	2.27	(15)	MFS	15.16	(9)	11.10 (89)	28.40	(37)	-10.66 (14)	28.06	(55)
MSCI EAFE(Net)	-8.50 (	19) 33.02	(67)	30.28	(61) -8.2	20 (58)	-1.49 (6	64) -0.58	(55)	0.67	(38)	MSCI EAFE(Net)	11.25	(29)	18.29 (56)	27.90	(43)	-12.83 (31)	28.86	6 (49)
Median	-9.57	30.90		28.73	-7.5	55	-0.84	-0.34		-0.14		Median	8.88		20.00	27.50		-14.67	28.61	
Comparative Perfo	ormanc	e																		
						End	Qtr Jing 2022			1 Qti Endin Mar-20	ıg	1 Qtr Ending Dec-2021		1 Q Endi Sep-2	ng		Qtr ding -2021		1 Qtr Endin Mar-20	g
MFS						-12.95	(28)		-7	7.86	(12)	6.77 (2)	-(	D.18	(19)	6.88	(31)		1.11 (	(42)
MSCI EAFE Growth	(Net)					-16.88	(76)		-11	1.94	(56)	4.09 (30)	(	0.07	(17)	7.42	(20)		-0.57	(83)
IM International Larg	e Cap Gr	owth Equi	ty (MF	) Median		-14.68			-10	0.99		3.17	-	1.61		6.34			0.74	

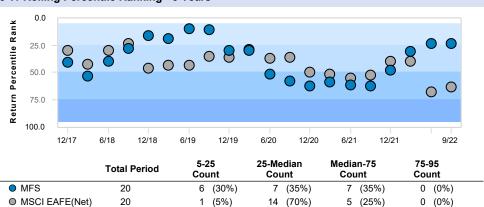


#### Performance Review MFS As of September 30, 2022



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

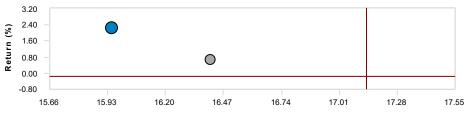
#### 3 Yr Rolling Percentile Ranking - 5 Years



Peer Group Scatterg	ram - 3 Years
---------------------	---------------



#### Peer Group Scattergram - 5 Years



Risk (Standard Deviation %)

	Return	Standard Deviation		Return	Standard Deviation
MFS	0.75	18.10	MFS	2.27	15.95
MSCI EAFE(Net)	-1.49	18.74	MSCI EAFE(Net)	0.67	16.41
Median	-0.84	19.15	Median	-0.14	17.14

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

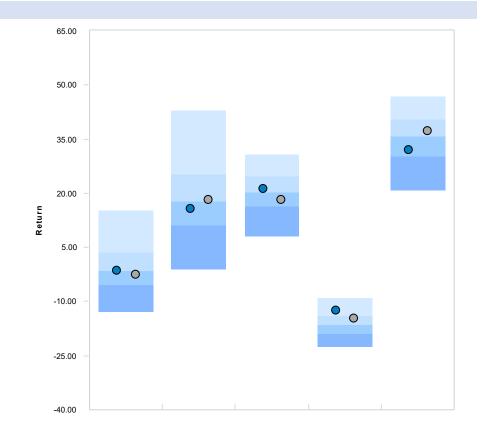
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
MFS	5.82	98.35	90.22	2.16	0.36	0.10	0.92	12.93
MSCI EAFE(Net)	0.00	100.00	100.00	0.00	N/A	-0.02	1.00	14.02

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
MFS	4.80	101.03	94.03	1.65	0.31	0.15	0.93	11.26
MSCI EAFE(Net)	0.00	100.00	100.00	0.00	N/A	0.05	1.00	12.13



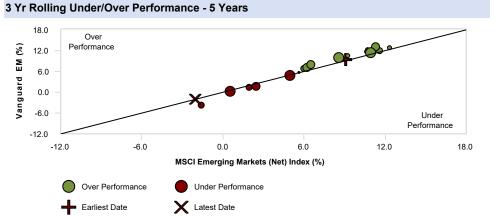
## Performance Review Vanguard EM As of September 30, 2022



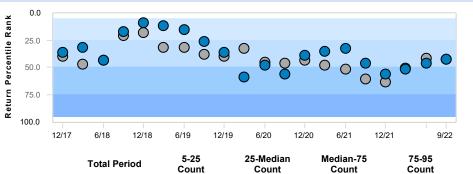


QT	ſR	FYT	D	1 YR	2	YR	3 Y	'R	4 YR		5 YR				2021		2020	201	9	2018	2	2017
Vanguard EM ·11.07	(52) ·	26.66	(27) .28	3.03 (31	) -5.48	3 (26)	-2.04	(43)	-1.15 (3	37)	-1.27 (31	1)	🕽 Vangı	uard EM	-1.27 (4	9)	15.80 (62)	21.38	(45)	-12.51 (17)	32.	00 (69)
MSCI Em-Net ·11.57	(61) ·	27.16	(31) -28	3.11 (31	) -7.82	2 (40)	-2.07	(43)	-2.05 (4	49)	-1.81 (39	9)	MSCI	Em-Net	-2.54 (5	8)	18.31 (47)	18.42	(63)	-14.57 (30)	37.	28 (43)
Median ·11.00		29.27	·29	9.88	-9.55	5	-2.54		-2.13		-2.37		Media	in	-1.62		17.66	20.17		-16.45	35.	66
Comparative Perform	nance																					
					1 Qtr Ending Jun-202				1 Qt Endir Mar-20	ng		Er	Qtr ding -2021		1 C End Sep-:	ing		End	Qtr Jing 2021		1 Q Endi Mar-2	ng
Vanguard EM				-11	1.08 (3	31)			-7.25	(30)		-1.8	6 (60)		-8.55	(63)		4.41	(64)		5.36	(21)
MSCI Emerging Markets	s (Net) I	ndex		-11	1.45 (4	40)			-6.97	(28)		-1.3	1 (53)		-8.09	(57)		5.05	(52)		2.29	(58)
IM Emerging Markets Ec	quity (M	IF) Med	ian	-11	1.91				-9.80			-1.2	C		-7.60			5.15			2.88	



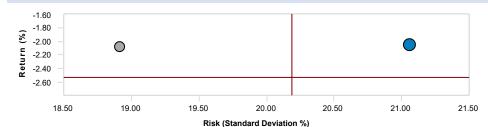


3 Yr Rolling Percentile Ranking - 5 Years



	Total Period	5-25 Count	Count	Count	Count	
Vanguard EM	20	4 (20%)	12 (60%)	4 (20%)	0 (0%)	
MSCI Em-Net	20	2 (10%)	14 (70%)	4 (20%)	0 (0%)	

Peer Group Scattergram - 3 Years



## Peer Group Scattergram - 5 Years



Risk (Standard Deviation %)

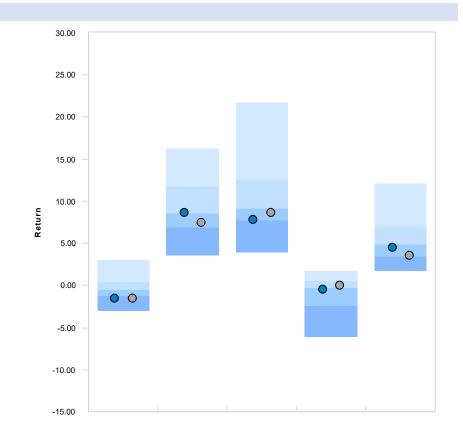
	Return	Standard Deviation		Return	Standard Deviation
Vanguard EM	-2.04	21.06	Vanguard EM	-1.27	19.04
MSCI Em-Net	-2.07	18.91	MSCI Em-Net	-1.81	17.53
Median	-2.54	20.19	Median	-2.37	18.30

	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
Historical Statisti	cs - 5 Years							
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard EM	4.18	107.73	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



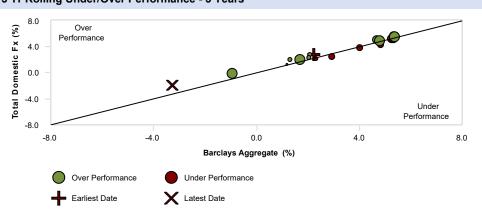
## Peer Group Analysis - All Master Trust-US Fixed Income Segment

No data found.



			2021	2020	2019	2018	2017
		Total Domestic Fx	-1.49 (81)	8.74 (48)	7.85 (73)	-0.38 (53)	4.52 (55)
		O 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
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
-3.77 (24)	-5.38 (46)	-0.40 (87)	0.11 (54	)	1.62 (77)		-2.78 (50)
-4.69 (36)	-5.93 (61)	0.01 (64)	0.05 (67	')	1.83 (73)		-3.38 (65)
-5.42	-5.47	0.22	0.14		2.49		-2.80
	Ending Jun-2022 -3.77 (24) -4.69 (36)	Ending Jun-2022         Ending Mar-2022           -3.77         (24)         -5.38         (46)           -4.69         (36)         -5.93         (61)	I Qtr         1 Qtr         1 Qtr         1 Qtr         1 Qtr         1 Qtr         Ending         Ending         Ending         Dec-2021         Dec-2021	● Total Domestic Fx         -1.49         (81)           ● Barclays Agg         -1.55         (81)           ● Barclays Agg         -1.55         (81)           Median         -0.54           I Qtr         1 Qtr         1 Qtr         1 Qtr           Ending         Ending         Ending         Ending           Jun-2022         Mar-2022         Dec-2021         Sep-2021           -3.77         (24)         -5.38         (46)         -0.40         (87)         0.11         (54)           -4.69         (36)         -5.93         (61)         0.01         (64)         0.05         (67)	Image: Construction of the second system of the s	• Total Domestic Fx         -1.49         (81)         8.74         (48)         7.85         (73)           • Barclays Agg         -1.55         (81)         7.51         (68)         8.72         (59)           Median         -0.54         8.61         9.16           I Qtr         I Qtr         I Qtr         I Qtr         Ending         Ending         Ending         Ending         Jun-2021           -3.77         (24)         -5.38         (46)         -0.40         (87)         0.11         (54)         1.62         (77)           -4.69         (36)         -5.93         (61)         0.01         (64)         0.05         (67)         1.83         (73)	<ul> <li></li></ul>



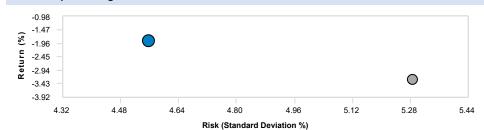


#### 3 Yr Rolling Under/Over Performance - 5 Years

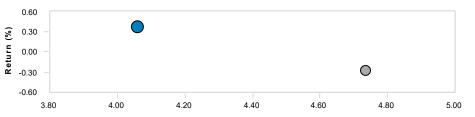
#### 3 Yr Rolling Percentile Ranking - 5 Years

No data found.

Peer Group Scattergram - 3 Years



Peer Group Scattergram - 5 Years



Risk (Standard Deviation %)

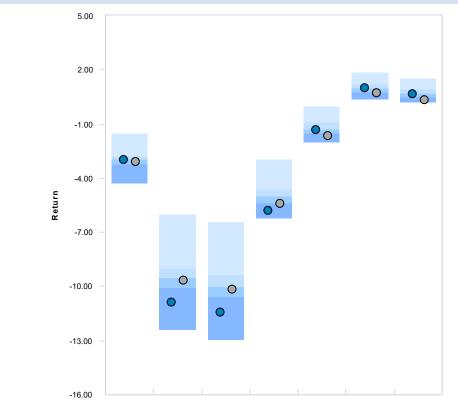
	Return	Standard Deviation		Return	Standard Deviation
Total Domestic Fx	-1.85	4.56	Total Domestic Fx	0.37	4.06
Barclays Agg	-3.26	5.29	Barclays Agg	-0.27	4.73
Median	N/A	N/A	Median	N/A	N/A

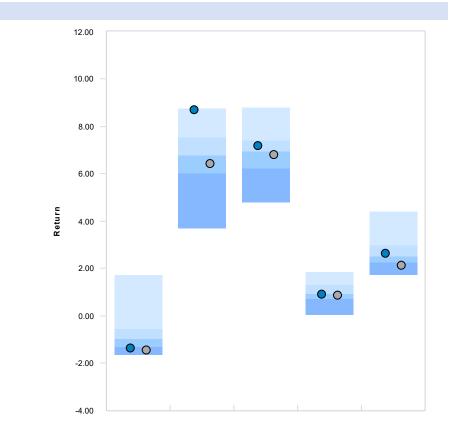
#### **Historical Statistics - 3 Years**

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Domestic Fx	1.21	98.49	82.46	0.92	1.15	-0.51	0.85	3.72
Barclays Agg	0.00	100.00	100.00	0.00	N/A	-0.70	1.00	4.59

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Domestic Fx	1.09	93.03	83.13	0.59	0.56	-0.17	0.84	3.01
Barclays Agg	0.00	100.00	100.00	0.00	N/A	-0.28	1.00	3.67



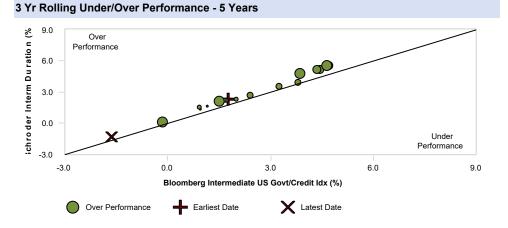




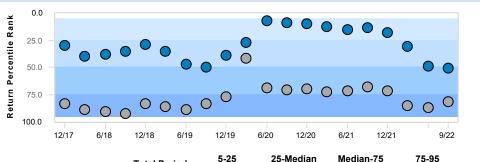
	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR		2021	2020	2019	2018	2017
Schroder Interm Duration	-2.96 (50)	10.86 (85)	11.42 (90)	-5.75 (90)	) -1.32 (51)	1.01 (47)	0.67 (52)	Schroder Interm Duration	-1.33 (79)	8.73 (6)	7.20 (38)	0.92 (51)	2.65 (42)
Barclays Interm G/C	-3.06 (66)	-9.63 (58)	10.14 (62)	-5.39 (78)	) -1.64 (82)	0.72 (76)	0.38 (85)	Barclays Interm G/C	-1.44 (86)	6.43 (67)	6.80 (59)	0.88 (58)	2.14 (83)
Median	-2.97	-9.54	10.04	-5.02	-1.31	0.98	0.68	Median	-0.96	6.80	6.93	0.94	2.53
Comparative Performanc	е												
			En	Qtr Iding 1-2022		1 Qtı Endin Mar-20	g	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	E	1 Qtr Ending un-2021		1 Qtr Ending Iar-2021
Schroder Interm Duration			-3.2	9 (88)		-5.01	(94)	-0.64 (84)	0.14 (23)	1.	22 (26)	-2	2.03 (92)
Bloomberg Intermediate US 0	Govt/Credit	ldx	-2.3	7 (36)		-4.51	(74)	-0.57 (70)	0.02 (71)	0.	98 (70)	-1	.86 (78)
IM U.S. Intermediate Duration	(SA+CF)	Median	-2.5	4		-4.34		-0.52	0.07	1	05		.60



#### Peer Group Analysis - IM U.S. Intermediate Duration (SA+CF)

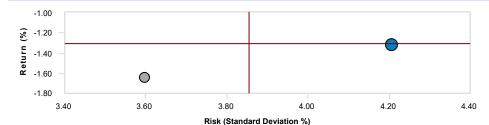


#### 3 Yr Rolling Percentile Ranking - 5 Years

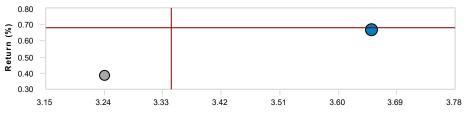


	Total Period	Count	Count	Count	Count	
Schroder Interm Duration	20	7 (35%)	12 (60%)	1 (5%)	0 (0%)	
Barclays Interm G/C	20	0 (0%)	1 (5%)	7 (35%)	12 (60%)	

#### Peer Group Scattergram - 3 Years



#### Peer Group Scattergram - 5 Years



Risk (Standard Deviation %)

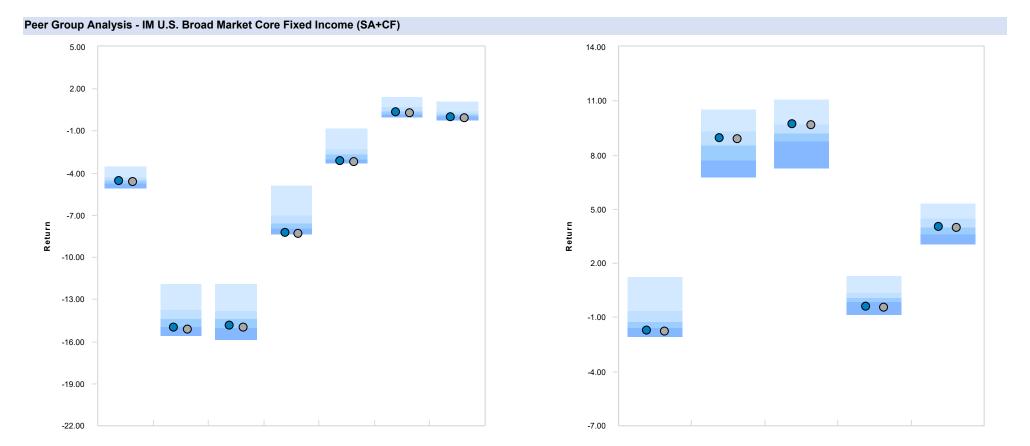
	Return	Standard Deviation		Return	Standard Deviation
Schroder Interm Duration	-1.32	4.21	Schroder Interm Duration	0.67	3.65
Barclays Interm G/C	-1.64	3.60	Barclays Interm G/C	0.38	3.24
Median	-1.31	3.85	Median	0.68	3.34

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

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Schroder Interm Duration	1.01	123.78	110.56	0.58	0.35	-0.43	1.14	3.34
Barclays Interm G/C	0.00	100.00	100.00	0.00	N/A	-0.60	1.00	3.01

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Schroder Interm Duration	0.79	114.10	108.12	0.25	0.38	-0.11	1.10	2.65
Barclays Interm G/C	0.00	100.00	100.00	0.00	N/A	-0.22	1.00	2.41

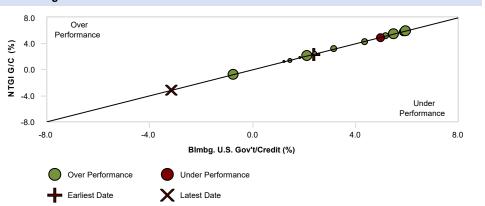




	QTR	FY	TD	1 YR		2 YR	3 YR	4 YR	5 YR		2021	2020	2019	2018	2017
NTGI G/C	-4.53 (50	) ·14.97	(79) .1	4.82 (6	68) -8	.20 (91)	-3.08 (79)	0.35 (62)	0.02 (71)	NTGI G/C	-1.71 (88)	8.96 (33)	9.76 (24)	-0.35 (88)	4.05 (49)
Barclays G/C	-4.56 (54	) .15.10	(82) -1	4.95 (7	72) -8	.30 (94)	-3.15 (85)	0.28 (66)	-0.05 (82)	Barclays G/C	-1.75 (89)	8.93 (34)	9.71 (24)	-0.42 (91)	4.00 (52)
Median	-4.54	·14.43	•1	4.38	-7	.56	-2.71	0.42	0.18	Median	-1.23	8.51	9.19	0.06	4.01
Comparative Pe	erforman	се													
							1 Qtr Ending Jun-2022		1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	Er	Qtr nding p-2021	1 Qtr Ending Jun-2021		1 Qtr Ending Mar-2021
NTGI G/C							-4.97 (63)		-6.28 (90)	0.18 (6)	0.04	4 (75)	2.60 (7	)	-4.40 (100)
Blmbg. U.S. Gov'	't/Credit						-5.03 (67)		-6.33 (93)	0.18 (6)	0.04	4 (76)	2.42 (1	3)	-4.28 (100)
IM U.S. Broad Ma	arket Core F	Fixed Inc	ome (SA	+CF) M	ledian		-4.78		-5.81	-0.04	0.10	)	1.99		-3.18

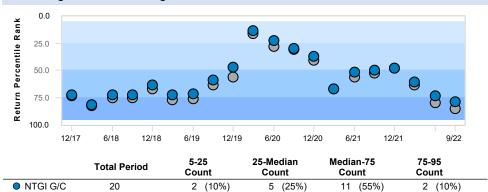


5 (25%)



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

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



1 (5%)

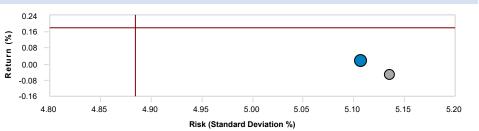
#### Peer Group Scattergram - 3 Years



#### Peer Group Scattergram - 5 Years

20

Barclays G/C



4 (20%)

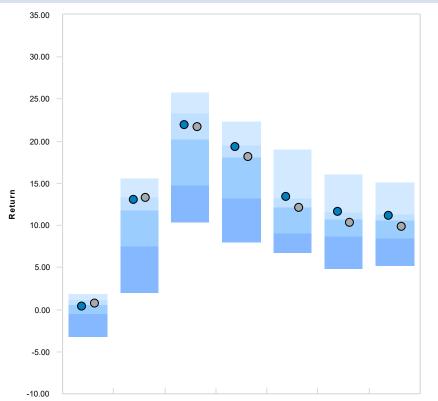
10 (50%)

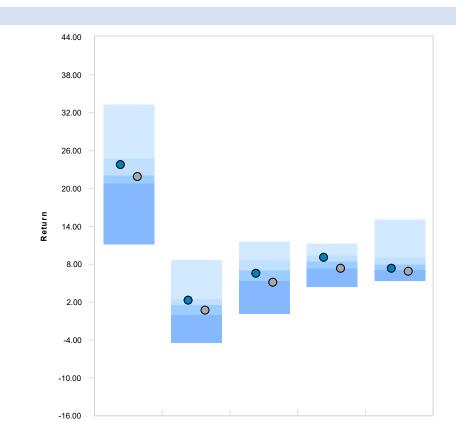
	Return	Standard Deviation		Return	Standard Deviation
NTGI G/C	-3.08	5.65	NTGI G/C	0.02	5.11
Barclays G/C	-3.15	5.67	Barclays G/C	-0.05	5.14
Median	-2.71	5.57	Median	0.18	4.88

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
NTGI G/C	0.35	99.96	99.18	0.06	0.21	-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 Statist	ics - 5 Years							

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
NTGI G/C	0.32	99.50	98.49	0.07	0.21	-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



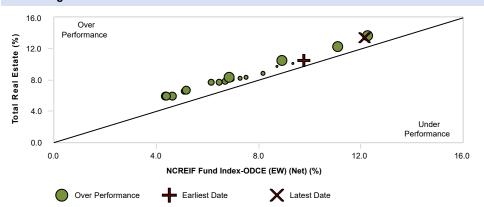




	QT	R FY	TD 1Y	(R 2.)	۲R 3۱	(R 4 Y	'R 5	YR		2021	2020	2019	2018	2017
Total Real Estate	0.46	(54) 13.10	(32) 21.95	(35) 19.34	(29) 13.40	(17) 11.66	(23) 11.16	6 (28)	Total Real Estate	23.79 (35)	2.36 (31)	6.53 (62)	9.10 (38)	7.43 (68)
O NCREIF Fund Index	0.79	(32) 13.34	(25) 21.70	(36) 18.21	(49) 12.13	(51) 10.38	(57) 9.87	' (61)	O NCREIF Fund Index	21.88 (54)	0.75 (69)	5.18 (76)	7.30 (76)	6.92 (79)
Median	0.56	11.79	20.19	18.12	12.14	10.69	10.65	5	Median	22.11	1.56	7.01	8.41	8.06
Comparative Perform	nance													
					1 Qtr Ending Jun-2022		1 Q Endi Mar-2	ng	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021		1 Qtr Ending Jun-2021		1 Qtr Ending Mar-2021
Total Real Estate					5.44 (25)		6.78	(54)	7.83 (43)	7.61 (23)		4.01 (57)		2.57 (34)
NCREIF Fund Index-OD	CE (E)	N) (Net)			4.35 (49)		7.77	(16)	7.38 (53)	6.75 (41)		4.17 (51)		2.07 (53)
IM U.S. Open End Privat	te Real	Estate (SA-	+CF) Mediar	n	4.21		6.96		7.57	6.33		4.17		2.10

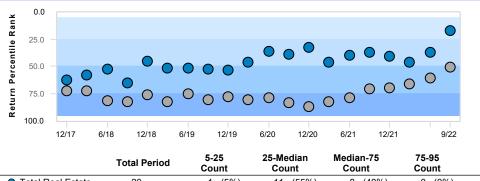


Peer Group Analysis - IM U.S. Open End Private Real Estate (SA+CF)



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

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

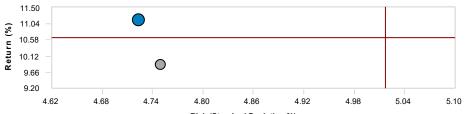


Total Real Estate	20	1	(5%)	11	(55%)	8	(40%)	0	(0%)
O NCREIF Fund Index	20	0	(0%)	0	(0%)	8	(40%)	12	(60%)

#### Peer Group Scattergram - 3 Years



#### Peer Group Scattergram - 5 Years



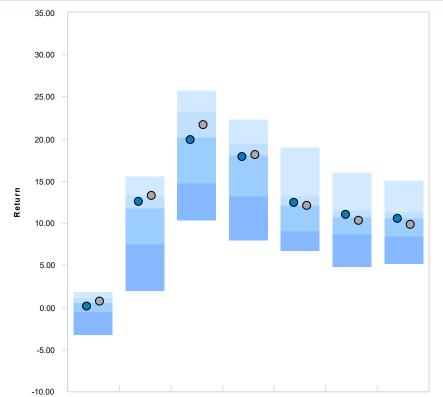
Risk (Standard Deviation %)

	Return	Standard Deviation		Return	Standard Deviation
Total Real Estate	13.40	5.83	Total Real Estate	11.16	4.72
NCREIF Fund Index	12.13	5.87	NCREIF Fund Index	9.87	4.75
Median	12.14	6.12	Median	10.65	5.02

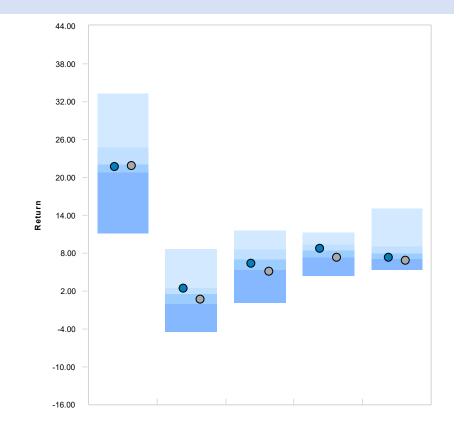
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Real Estate	1.20	108.69	82.47	0.86	0.96	1.56	1.02	0.70
NCREIF Fund Index	0.00	100.00	100.00	0.00	N/A	1.47	1.00	0.85

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Real Estate	1.03	111.50	82.47	0.85	1.16	1.49	1.04	0.54
NCREIF Fund Index	0.00	100.00	100.00	0.00	N/A	1.37	1.00	0.66



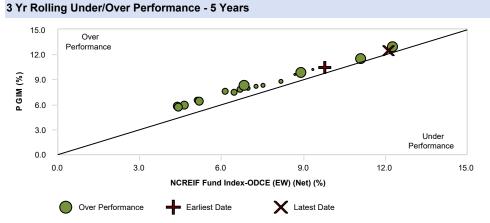




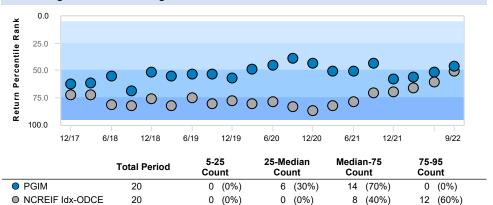


	QT	R F	YTD	1 YR	2 YR	र 3 Y	′R 4	YR	5 Y	′R				2021		2020	201	9	2018	20	17
PGIM	0.22	(57) 12.6	7 (39) 19.	91 (55)	17.97 (	(56) 12.53	(46) 11.09	(46)	) 10.63	(51)	• P	SIM		21.72 (6	2)	2.54 (24)	6.34	(66)	8.72 (41)	7.43	68)
NCREIF Idx-ODCE	0.79	(32) 13.3	4 (25) 21.	70 (36)	18.21 (	(49) 12.13	(51) 10.38	(57)	9.87	(61)	ΟN	CREIF Id	Ix-ODCE	21.88 (5	4)	0.75 (69)	5.18	(76)	7.30 (76)	6.92	. (79)
Median	0.56	11.7	9 20.	19	18.12	12.14	10.69		10.65		Μ	edian		22.11		1.56	7.01		8.41	8.06	i
Comparative Perform	nanco	9																			
						1 Qtr Ending Jun-2022			1 Qt Endir Mar-20	ng		1 Qtr Ending Dec-202	,	1 C End Sep-2	ing		1 C End Jun-2	ing		1 Qtı Endin Mar-20	ng
PGIM					5	5.58 (22)			6.49	(67)		6.43 (7	74)	7.77	(19)		3.93	(64)		2.11	(49)
NCREIF Fund Index-OI	DCE (E	EW) (Net)			4	4.35 (49)			7.77	(16)		7.38 (5	53)	6.75	(41)		4.17	(51)		2.07	(53)
IM U.S. Open End Priva	ate Rea	al Estate (	SA+CF) Me	dian	4	1.21			6.96			7.57		6.33			4.17			2.10	

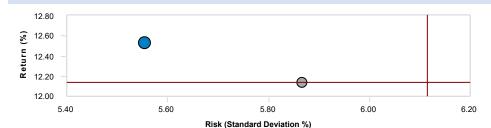




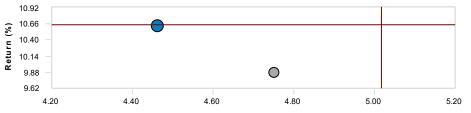
#### 3 Yr Rolling Percentile Ranking - 5 Years



#### Peer Group Scattergram - 3 Years



#### Peer Group Scattergram - 5 Years



**Risk (Standard Deviation %)** 

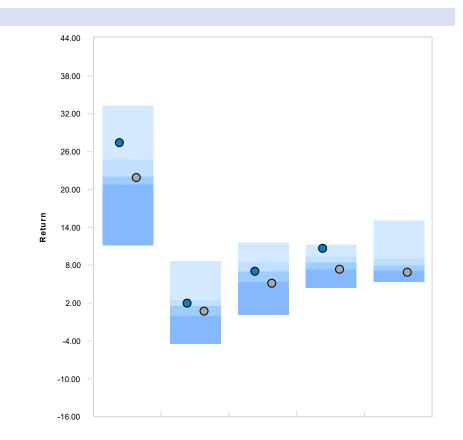
	Return	Standard Deviation		Return	Standard Deviation
PGIM	12.53	5.55	PGIM	10.63	4.46
NCREIF Idx-ODCE	12.13	5.87	NCREIF Idx-ODCE	9.87	4.75
Median	12.14	6.12	Median	10.65	5.02

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk	
PGIM	1.49	101.80	74.05	0.80	0.23	1.54	0.96	0.63	
NCREIF Idx-ODCE	0.00	100.00	100.00	0.00	N/A	1.47	1.00	0.85	
Historical Statistics - 5 Years									
		Up	Down			<b>a</b> 1		<b>-</b>	

	Tracking Error	Market Capture	Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
PGIM	1.23	106.15	74.05	0.93	0.56	1.48	0.98	0.49
NCREIF Idx-ODCE	0.00	100.00	100.00	0.00	N/A	1.37	1.00	0.66



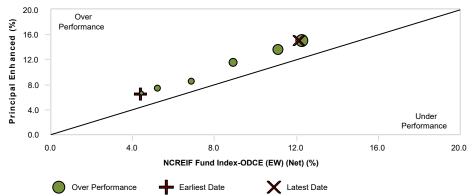




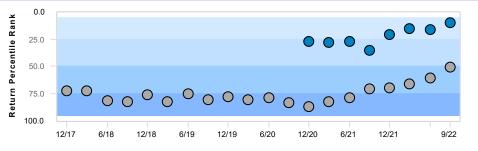
	QT	R FY	TD 1Y	(R 2`	YR 3`	YR 4`	YR	5 Y	′R		2021	2020	2019	2018	2017
Principal Enhanced	1.00	(29) 14.09	(21) 26.37	(5) 21.94	(7) 15.06	(10) 12.73	(10)	N/A		Principal Enhanced	27.38 (13)	1.93 (40)	7.03 (44)	10.75 (12)	N/A
NCREIF Fund Index	0.79	(32) 13.34	(25) 21.70	(36) 18.21	(49) 12.13	(51) 10.38	(57)	9.87	(61)	O NCREIF Fund Index	21.88 (54)	0.75 (69)	5.18 (76)	7.30 (76)	6.92 (79)
Median	0.56	11.79	20.19	18.12	12.14	10.69		10.65		Median	22.11	1.56	7.01	8.41	8.06
Comparative Perform	nance														
					1 Qtr Ending Jun-2022			1 Qt Endin Mar-20	g	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021		1 Qtr Ending Jun-2021		1 Qtr Ending Mar-2021
Principal Enhanced					5.12 (27)		7	7.46	(32)	10.76 (9)	6.44 (48)	)	4.21 (46)		3.68 (15)
NCREIF Fund Index-OD	CE (EV	N) (Net)			4.35 (49)		7	7.77	(16)	7.38 (53)	6.75 (41)	)	4.17 (51)		2.07 (53)
IM U.S. Open End Privat	te Real	Estate (SA-	+CF) Mediar	ı	4.21		6	6.96		7.57	6.33		4.17		2.10





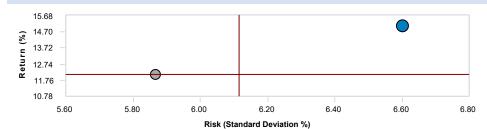


#### 3 Yr Rolling Percentile Ranking - 5 Years

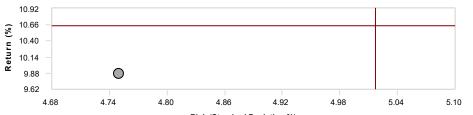


	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Principal Enhanced	8	4 (50%)	4 (50%)	0 (0%)	0 (0%)
NCREIF Fund Index	20	0 (0%)	0 (0%)	8 (40%)	12 (60%)

#### Peer Group Scattergram - 3 Years



#### Peer Group Scattergram - 5 Years



Risk (Standard Deviation %)

	Return	Standard Deviation		Return	Standard Deviation
Principal Enhanced	15.06	6.60	Principal Enhanced	N/A	N/A
NCREIF Fund Index	12.13	5.87	NCREIF Fund Index	9.87	4.75
Median	12.14	6.12	Median	10.65	5.02

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Principal Enhanced	2.38	122.15	102.82	1.14	1.14	1.56	1.13	0.87
NCREIF Fund Index	0.00	100.00	100.00	0.00	N/A	1.47	1.00	0.85
Historical Statistics	- 5 Years							
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Principal Enhanced	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NCREIF Fund Index	0.00	100.00	100.00	0.00	N/A	1.37	1.00	0.66



#### Holdings Based Analysis Champlain Mid Cap As of September 30, 2022

#### Portfolio Characteristics (Benchmark: Russell Midcap Index)

•	• •	
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$)	16,883,863,169	19,180,336,513
Median Mkt. Cap (\$)	13,017,274,560	8,605,547,245
Price/Earnings ratio	25.21	15.07
Price/Book ratio	3.75	2.78
5 Yr. EPS Growth Rate (%)	11.67	16.63
Current Yield (%)	0.90	1.80
Beta (3 Years, Monthly)	0.89	1.00
Number of Stocks	62	824

#### Top Ten Equity Holdings (Benchmark: Russell Midcap Index)

Ten Worst Performers (Benchmark: Russell Midcap Index)

	Portfolio Wt	Benchmark Wt	Active Wt	Qtr Rtrn	
Fortive Corp	3.44	0.24	3.20	7.33	
Everest Re Group Ltd	3.44	0.12	3.32	-5.80	
AMETEK Inc	3.35	0.30	3.05	3.39	
IDEX Corp	2.69	0.17	2.52	10.40	
Advance Auto Parts Inc.	2.65	0.11	2.54	-8.87	
Workday Inc	2.62	0.00	2.62	9.06	
Edwards Lifesciences Corp	2.62	0.00	2.62	-13.10	
Toro Co (The)	2.44	0.10	2.34	14.10	
Generac Holdings Inc	2.37	0.13	2.24	-15.40	
Rockwell Automation Inc.	2.36	0.29	2.07	8.40	

Portfolio Wt

1.39

1.12

0.41

1.21

1.19

0.89

1.84

2.16

1.46

2.12

Portfolio Comparison

Benchmark

Wt

0.10

0.14

0.20

0.04

0.07

0.03

0.19

0.18

0.13

0.07

Active Wt

1.29

0.98

0.21

1.17

1.12

0.86

1.65

1.98

1.33

2.05

Quarterly Rtrn

-37.09

-32.56

-22.67

-21.60

-20.32

-19.16

-19.15

-18.57

-18.00

-17.24

#### Ten Best Performers (Benchmark: Russell Midcap Index)

	Portfolio Wt	Benchmark Wt	Active Wt	Quarterly Rtrn
Nutanix Inc	1.21	0.05	1.16	42.38
Toast Inc	0.44	0.05	0.39	29.21
Asana Inc	0.88	0.00	0.88	26.45
Bath & Body Works Inc	1.00	0.09	0.91	21.70
CoStar Group Inc	2.04	0.31	1.73	15.29
Repligen Corp	0.43	0.12	0.31	15.22
Cullen/Frost Bankers Inc	0.90	0.09	0.81	14.30
Toro Co (The)	2.44	0.10	2.34	14.10
IDEX Corp	2.69	0.17	2.52	10.40
Zscaler Inc	2.02	0.16	1.86	9.94

#### Buy and Hold Sector Attribution (Benchmark: Russell Midcap Index)

Buy and nois dector Attin	button (Bench	mark. Russen m							
	Allo	cation	Perfor	mance		Attribution			Champlain Mid Cap
	Portfolio	Benchmark	Portfolio	Benchmark	Stock	Sector	Total	Market Capitalization (%)	
Communication Services	0.0	4.0	0.00	-8.12	0.00	0.19	0.19	Greater than 25000M	19.95
Consumer Discretionary	9.1	11.2	-3.56	-2.63	-0.08	-0.02	-0.10	16000M To 25000M	23.53
Consumer Staples	10.4	3.8	-3.19	-6.40	0.33	-0.20	0.13	12000M To 16000M	15.27
Energy	0.0	4.8	0.00	1.23	0.00	-0.22	-0.22	8000M To 12000M	20.02
Financials	14.2	13.6	-4.31	-1.75	-0.36	0.01	-0.35	5000M To 8000M	9.04
Health Care	24.9	10.8	-15.16	-6.71	-2.10	-0.47	-2.57	3000M To 5000M	5.93
Industrials	22.3	14.6	4.46	0.01	0.99	0.26	1.25	1000M To 3000M	3.94
Information Technology	15.9	16.4	1.52	-0.96	0.39	-0.01	0.38	Cash	2.31
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		
Total	100.0	100.0	-3.95	-3.39	-0.87	0.30	-0.56		

OKTA INC

Steris Plc

Waters Corp

**Bio-Techne Corp** 

Tradeweb Markets Inc

Catalent Inc

Church & Dwight Co Inc

**DENTSPLY SIRONA Inc** 

Tandem Diabetes Care Inc

Integra LifeSciences Holdings Corp



## **Holdings Based Analysis** Summit Creek As of September 30, 2022

#### Portfolio Characteristics (Benchmark: Russell 2000 Growth Index)

	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$)	3,897,738,644	2,912,363,855
Median Mkt. Cap (\$)	2,610,833,940	1,084,613,470
Price/Earnings ratio	27.69	14.95
Price/Book ratio	3.31	3.49
5 Yr. EPS Growth Rate (%)	29.42	21.09
Current Yield (%)	0.19	0.83
Beta (5 Years, Monthly)	0.88	1.00
Number of Stocks	52	1,121

#### 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	2.72	0.00	2.72	55.42
NAPCO Security Technologies Inc	2.24	0.08	2.16	41.23
Paylocity Holding Corp	2.85	0.00	2.85	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	1.82	0.00	1.82	15.22
Addus HomeCare Corp	3.60	0.05	3.55	14.36

#### Buy and Hold Sector Attribution (Benchmark: Russell 2000 Growth Index)

Buy and Hold Sector Attribution (Benchmark: Russell 2000 Growth Index)						Portfolio Comparison			
	Alloc	ation	Perfor	mance		Attribution			Summit Creek
	Portfolio	Benchmark	Portfolio	Benchmark	Stock	Sector	Total	Market Capitalization (%)	
<b>Communication Services</b>	2.5	2.4	-9.92	-5.91	-0.10	-0.01	-0.11	12000M To 16000M	5.05
Consumer Discretionary	14.0	10.4	-8.90	1.36	-1.44	0.03	-1.40	8000M To 12000M	4.15
Consumer Staples	0.0	4.7	0.00	-5.63	0.00	0.28	0.28	5000M To 8000M	12.46
Energy	0.0	6.1	0.00	3.84	0.00	-0.21	-0.21	3000M To 5000M	35.68
Financials	3.8	5.9	5.95	-0.66	0.25	0.02	0.27	1000M To 3000M	29.75
Health Care	22.4	22.7	-5.70	8.15	-3.10	-0.03	-3.12	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	43.1	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	1.81
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	1.6	0.0	0.00	0.00	0.00	-0.01	-0.01		
Total	100.0	100.0	-3.24	0.44	-3.54	-0.15	-3.68		



Page 63	

Benchmark							
	Portfolio Wt	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)	3.33	0.00	3.33	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	3.06	0.43	2.63	0.02			
_ittelfuse Inc	2.97	0.00	2.97	-21.59			
Box Inc	2.92	0.31	2.61	-2.98			
Qualys Inc	2.85	0.48	2.37	10.50			
Paylocity Holding Corp	2.85	0.00	2.85	38.51			

Ten Worst Performers (Benchmark: Russell 2000 Growth Index)

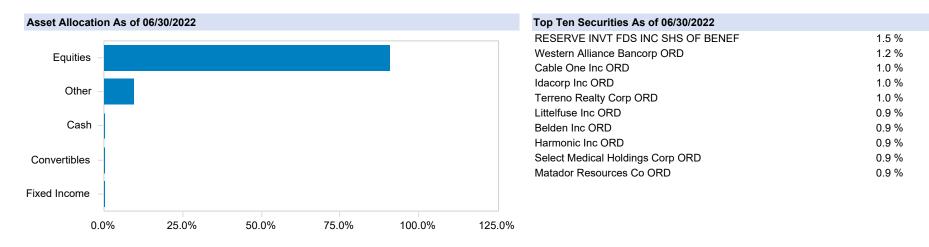
Portfolio Wt	Benchmark Wt	Active Wt	Quarterly Rtrn			
0.65	0.17	0.48	-46.50			
0.78	0.00	0.78	-46.30			
0.58	0.02	0.56	-45.89			
1.43	0.00	1.43	-45.06			
0.49	0.00	0.49	-44.01			
1.08	0.00	1.08	-38.12			
1.83	0.07	1.76	-34.73			
0.47	0.00	0.47	-34.09			
0.54	0.00	0.54	-25.66			
2.49	0.19	2.30	-25.15			
	0.65 0.78 0.58 1.43 0.49 1.08 1.83 0.47 0.54	0.65         0.17           0.78         0.00           0.58         0.02           1.43         0.00           0.49         0.00           1.83         0.07           0.47         0.00           0.54         0.00	0.65         0.17         0.48           0.78         0.00         0.78           0.58         0.02         0.56           1.43         0.00         1.43           0.49         0.00         0.49           1.08         0.00         1.08           1.83         0.07         1.76           0.47         0.00         0.47           0.54         0.00         0.54			

Fund Information	Fund	Information
------------------	------	-------------

Fund Name :	T Rowe Price Small-Cap Value Fund, Inc; Class I Shares
Fund Family :	T. Rowe Price
Ticker :	PRVIX
Inception Date :	08/28/2015
Fund Assets :	\$3,098 Million
Portfolio Turnover :	25%

Portfolio Assets :	\$11,178 Million
Portfolio Manager :	J. David Wagner
PM Tenure :	2015
Fund Style :	IM U.S. Small Cap Core Equity (MF)
Style Benchmark :	Russell 2000 Index

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.



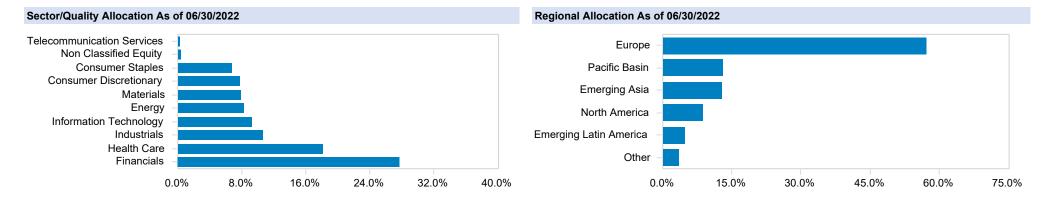




Fund Information			
Fund Name :	Dodge & Cox Funds: Dodge & Cox International Stock Fund; Class I Shares	Portfolio Assets :	\$41,797 Million
Fund Family :	Dodge & Cox Funds	Portfolio Manager :	Team Managed
Ticker :	DODFX	PM Tenure :	
Inception Date :	05/01/2001	Fund Style :	IM International Large Cap Value Equity (MF)
Fund Assets :	\$40,918 Million	Style Benchmark :	MSCI EAFE Value
Portfolio Turnover :	18%		

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.

Asset Allocation As of 06/30/2022	Top Ten Securities As of 06/30/2022		Top 5 Countries As	s of 06/30/2022	
	GSK plc ORD	4.2 %	Switzerland	15.4 %	
Equities –	Sanofi SA ORD	4.1 %	United Kingdom	15.3 %	
	Prosus NV ORD	3.8 %	Japan	11.3 %	
Crah	Novartis AG ORD	3.5 %	France	10.2 %	
Cash –	UBS Group AG ORD	3.3 %	China	6.5 %	
	Roche Holding AG	2.8 %			
Fixed Income –	Banco Santander SA ORD	Banco Santander SA ORD 2.6 %		Fund Characteristics As of 06/30/2022	
	BNP Paribas SA ORD	2.6 %	Total Securities	82	
Convertibles –	Suncor Energy Inc ORD	2.4 %	Avg. Market Cap	\$69,501 Million	
	Samsung Electronics Co Ltd	2.3 %	P/E	14.0	
Other			P/B	2.3	
Other –			Div. Yield	2.9%	
			Annual EPS	47.0	
-50.0 % 0.0% 50.0%	100.0% 150.0%		5Yr EPS	17.7	
			3Yr EPS Growth	12.3	



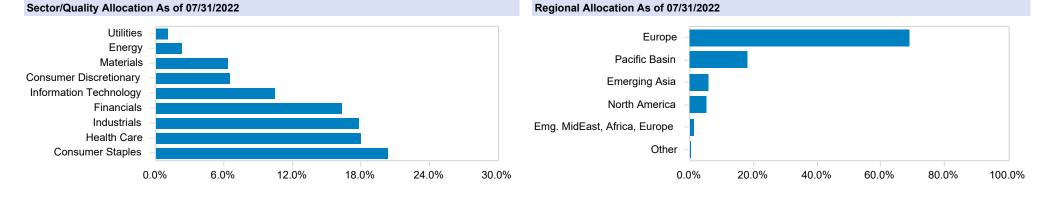


Fund Information			
Fund Name :	MFS Institutional Trust: MFS Institutional International Equity Fund	Portfolio Assets :	\$10,097 Million
Fund Family :	MFS	Portfolio Manager :	Ling/Benzinho
Ticker :	MIEIX	PM Tenure :	20092016
Inception Date :	01/31/1996	Fund Style :	IM International Large Cap Growth Equity (MF)
Fund Assets :	\$10,097 Million	Style Benchmark :	MSCI EAFE Growth
Portfolio Turnover :	13%		

....

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.

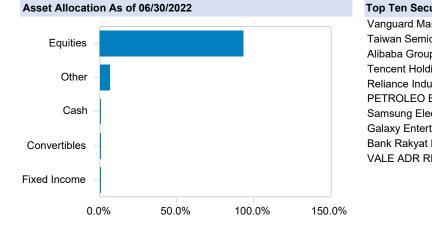
Asset Allocation As of 07/31/2022	Top Ten Securities As of 07/31/2022		Top 5 Countries As	s of 07/31/2022
	Nestle SA ORD	4.1 %	France	18.5 %
Equities –	Roche Holding AG	3.2 %	Switzerland	15.6 %
	Schneider Electric SE ORD	2.9 %	Japan	14.7 %
Cash –	L'Air Liquide Societe Anonyme pour	2.6 %	United Kingdom	11.2 %
Casil –	Novo Nordisk A/S ORD	2.6 %	Germany	9.5 %
	LVMH Moet Hennessy Louis Vuitton	2.5 %		
Convertibles –	AIA Group Ltd ORD	2.3 %	Fund Characteristi	cs As of 07/31/2022
	Capgemini SE ORD	2.2 %	Total Securities	82
Fixed Income –	Hitachi Ltd ORD	2.1 %	Avg. Market Cap	\$93,465 Million
	Compass Group PLC ORD	2.0 %	P/E	23.6
Other –			P/B	4.6
Oulei -			Div. Yield	2.5%
			Annual EPS	44.7
0.0% 50.0% 100.0% 150	.0%		5Yr EPS	11.0
			3Yr EPS Growth	11.3



## Page 66

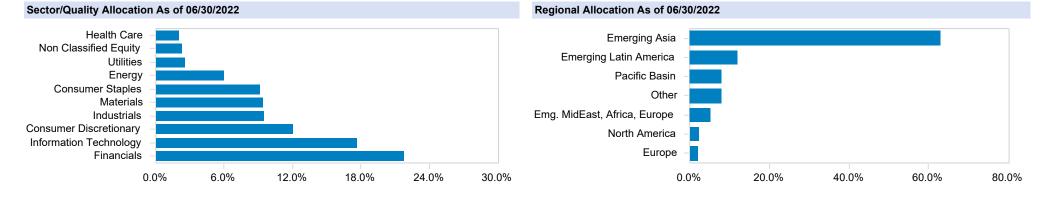
Fund Information			
Fund Name :	Vanguard Trustees' Equity Fund: Vanguard Emerging Markets Select Stock Fund; Investor Shares	Portfolio Assets :	\$732 Million
Fund Family :	Vanguard	Portfolio Manager :	Team Managed
Ticker :	VMMSX	PM Tenure :	
Inception Date :	06/14/2011	Fund Style :	IM Emerging Markets Equity (MF)
Fund Assets :	\$732 Million	Style Benchmark :	MSCI Emerging Markets Index
Portfolio Turnover :	48%		

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		Top 5 Countries A
Vanguard Market Liquidity Fund	6.7 %	China
Taiwan Semiconductor Manufacturing	5.8 %	India
Alibaba Group Holding Ltd ORD	3.6 %	Taiwan
Tencent Holdings Ltd ORD	2.7 %	Brazil
Reliance Industries Ltd ORD	2.7 %	Unidentified
PETROLEO BRASILEIRO ADR REPSTG	1.9 %	
Samsung Electronics Co Ltd ORD	1.7 %	Fund Characterist
Galaxy Entertainment Group Ltd	1.6 %	Total Securities
Bank Rakyat Indonesia (Persero)	1.5 %	Avg. Market Cap
VALE ADR REPTG ONE ORD	1.3 %	P/E
		P/B
		Div. Yield
		Annual EPS
		5Yr EPS
		3Yr EPS Growth

Top 5 Countries As o	of 06/30/2022
China	29.7 %
India	10.5 %
Taiwan	10.4 %
Brazil	9.6 %
Unidentified	6.9 %
Fund Characteristics	s 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
	45.0
5Yr EPS	15.3



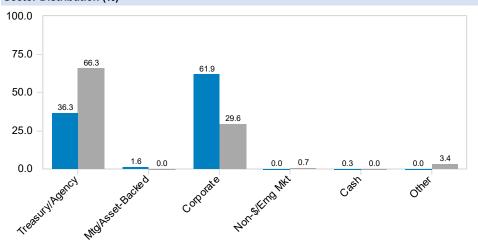
# 82

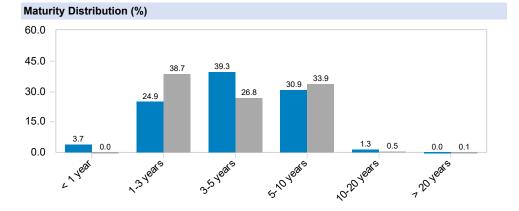
#### **Portfolio Characteristics**

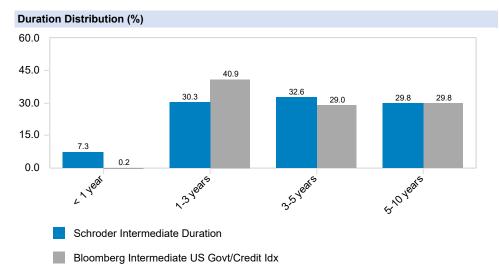
	Portfolio	Benchmark
Avg. Maturity	5.10	4.38
Avg. Quality	A+	AA
Coupon Rate (%)	2.62	2.22
Current Yield	2.85	2.39
Effective Duration	4.14	3.89

**Credit Quality Distribution (%)** 80.0 62.6 60.0 40.0 34.2 32.9 27.9 20.0 14.4 13.8 3.7 3.2 1.4 \_2.3 2.1 1.6 0.0 TIESSUN PAR BBB Agency PA P

Sector Distribution (%)







City of Sioux Falls Fee Analysis As of September 30, 2022

	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
Firefighters' Total Fund	0.41	184,980,682	761,674	
-				
Domestic Equity				
NTGI R1000 Index Fund	0.06	53,814,199	31,526	0.06 % of First \$50 M 0.04 % of Next \$50 M 0.03 % Thereafter
Champlain Mid Cap	0.85	8,780,502	74,634	0.85 % of Assets
NTGI S&P 400	0.05	9,099,148	4,550	0.05 % of First \$100 M 0.02 % Thereafter
T Rowe Price	0.72	5,585,583	40,216	0.72 % of Assets
Summit Creek	1.00	5,347,811	53,478	1.00 % of Assets
International Equity				
MFS	0.71	14,363,288	101,979	0.71 % of Assets
Dodge & Cox International Stock	0.64	13,670,597	87,492	0.64 % of Assets
Vanguard EM	0.93	7,921,506	73,670	0.93 % of Assets
Domestic Fixed Income				
NTGI Government / Credit	0.05	12,975,640	6,488	0.05 % of First \$100 M 0.02 % Thereafter
Schroder Intermediate Duration	0.22	33,204,374	73,050	0.22 % of Assets
Real Estate				
PGIM	1.00	13,999,776	139,998	1.00 % of Assets
Principal Enhanced Property Fund, LP	1.20	6,216,160	74,594	1.20 % of Assets
Cash	0.00	2,097	-	0.00 % of Assets



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

## Comparative Performance Firefighters' Total Fund Net As of September 30, 2022

omparative Performance						
	QTR	FYTD	1 YR	3 YR	5 YR	10 YR
refighters' Total Fund	-4.71	-18.87	-14.91	3.61	4.67	7.19
Sioux Falls Total Policy	-4.74	-19.83	-16.17	3.50	4.49	7.12
tal Domestic Equity	-4.16	-24.94	-18.69	6.28	7.73	10.63
Russell 3000 Index	-4.46	-24.62	-17.63	7.70	8.62	11.39
GI 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
amplain Mid Cap	-4.31	-31.33	-26.99	5.78	N/A	N/A
Russell Midcap Index	-3.44	-24.27	-19.39	5.19	6.48	10.30
GI S&P 400	-2.45	-21.50	-15.22	6.02	5.83	10.06
&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
mmit Creek	-3.60	-25.98	-24.10	11.11	11.35	N/A
Russell 2000 Growth Index	0.24	-29.28	-29.27	2.94	3.60	8.81



## Comparative Performance Firefighters' Total Fund Net

As of September 30, 2022

	QTR	FYTD	1 YR	3 YR	5 YR	10 YR
otal International Equity	-9.96	-24.57	-22.83	-0.73	-0.41	3.40
MSCI AC World ex USA (Net)	-9.91	-26.50	-25.17	-1.52	-0.81	3.01
odge & 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
FS	-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
anguard 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
otal Domestic Fixed Income	-3.45	-12.16	-12.54	-2.00	0.20	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
chroder Intermediate Duration	-3.02	-11.00	-11.62	-1.51	0.44	1.35
Bloomberg Intermediate US Govt/Credit Idx	-3.06	-9.63	-10.14	-1.64	0.38	1.00
ΓGI 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
tal Real Estate	0.29	12.36	20.86	12.29	10.06	10.49
NCREIF Fund Index-ODCE (EW) (Net)	0.79	13.34	21.70	12.13	9.87	10.26
GIM	-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
incipal 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
ish	0.49	0.63	0.63	0.56	1.07	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 Firefighters' Pension Fund

## 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

- 1. 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.
- 3. 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.



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		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%
	TOTAL	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.

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

This document may contain data provided by Bloomberg Barclays. Bloomberg Barclays Index data provided by way of Barclays Live.

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

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

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

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





**Clients first.** 

CHICAGO | CLEVELAND | DALLAS | DETROIT | ORLANDO | PITTSBURGH | RENO

AndCo Consulting | (844) 44-ANDCO | AndCoConsulting.com