Investment Performance Review Period Ending September 30, 2022

# **Alachua County**



**3rd Quarter 2022 Market Environment** 



### The Economy

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

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

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

#### **Fixed Income**

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

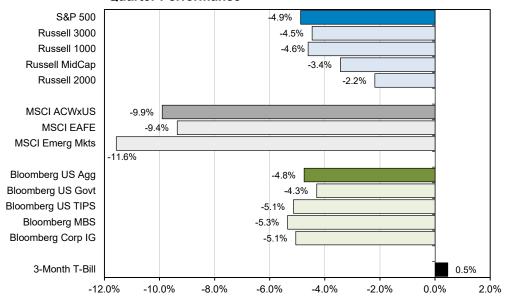
#### **Market Themes**

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

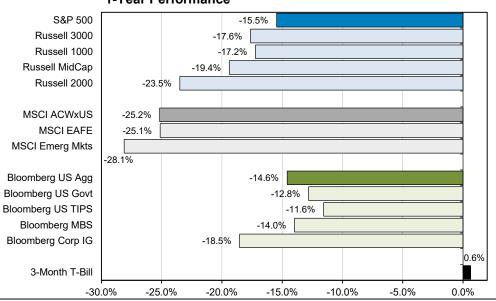


- Negative momentum continued during the 3rd quarter as broad US equity markets experienced negative returns. Factors that contributed to performance included elevated inflation, tighter monetary policy, continued geopolitical events in Ukraine, and expectations of slower economic growth. For the period,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

#### **Quarter Performance**



#### 1-Year Performance



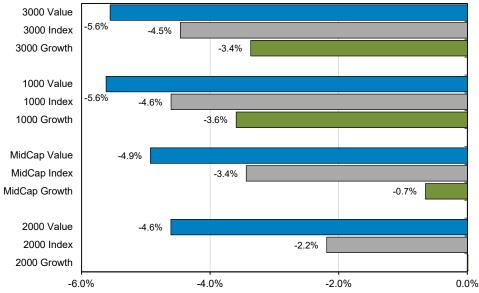
Source: Investment Metrics



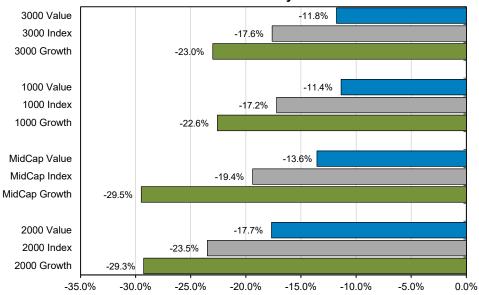
- Volatility was high during the 3rd quarter as broad US equity markets rose sharply before falling to close the period with negative results across both the style and market capitalization spectrums. Leadership switched during the quarter with small cap stocks outperforming, followed by mid and large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

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

# **Quarter Performance - Russell Style Series**



## 1-Year Performance - Russell Style Series

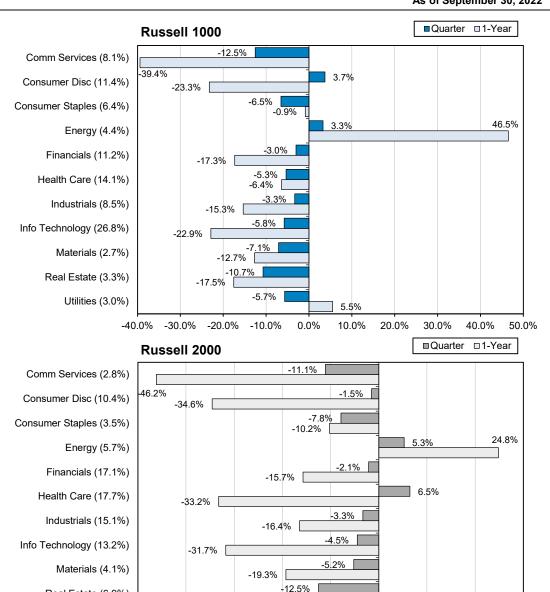


Source: Investment Metrics



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

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



-26.3%

-30.0%

-7.6%

-20.0%

-10.0%

3.0%

10.0%

20.0%

0.0%

Real Estate (6.9%)

Utilities (3.5%)

-50.0%

-40.0%



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.



30.0%

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

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

Top 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-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 1000	Weight	1-Qtr Return	1-Year Return	Sector	
Sotera Health Co Ordinary Shares	0.00%	-65.2%	-73.9%	Health Care	
Novavax Inc	0.00%	-64.6%	-91.2%	Health Care	
Spectrum Brands Holdings Inc	0.00%	-52.1%	-58.4%	Consumer Staples	
AMC Entertainment Holdings Inc	0.01%	-48.6%	-81.7%	Communication Services	
WeWork Inc	0.00%	-47.2%	N/A	Real Estate	
The Scotts Miracle Gro Co A	0.01%	-45.4%	-70.1%	Materials	
AppLovin Corp Ordinary Shares	0.01%	-43.4%	-73.1%	Information Technology	
Azenta Inc	0.01%	-40.6%	-58.1%	Health Care	
NCR Corp	0.01%	-38.9%	-51.0%	Information Technology	
Enhabit Inc Shs	0.00%	-38.9%	N/A	Health Care	

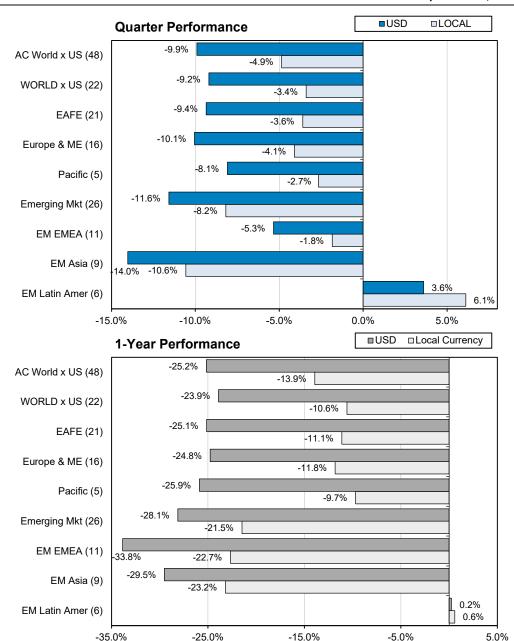
Bottom 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Leafly Holdings Inc	0.00%	-84.9%	0.0%	Communication Services
VistaGen Therapeutics Inc	0.00%	-82.7%	N/A	Health Care
Faraday Future Intelligent Electric Inc	0.00%	-75.5%	N/A	Consumer Discretionary
SelectQuote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

Source: Morningstar Direct



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

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



Source: MSCI Global Index Monitor (Returns are Net)



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

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

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

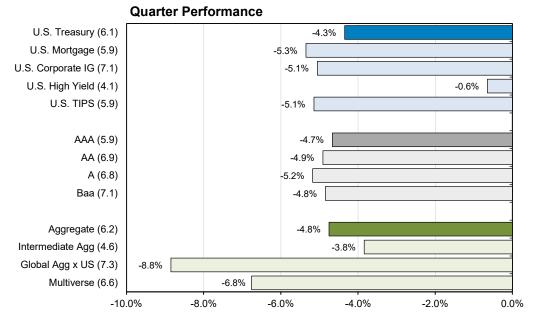
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Country	MSCI-EAFE	MSCI-ACWIxUS Weight	Quarter Return	1- Year	
Country Japan	Weight 22.6%	14.1%	-7.7%	Return -29.3%	
United Kingdom	15.5%	9.7%	-10.8%	-14.1%	
France	11.3%	7.1%	-8.9%	-24.0%	
Switzerland	10.7%	6.7%	-7.5%	-16.5%	
Australia	8.0%	5.0%	-6.7%	-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%	-0.0%	-35.7%	
Denmark		1.7%	-17.0%		
Spain	2.6%	1.7%	-12.3% -14.1%	-23.5% -25.6%	
Italy	2.4%	1.4%	-14.1%	-28.5%	
Singapore	1.6%	1.4%	-8.5% -1.5%	-28.5% -22.1%	
Belgium	1.0%	0.6%	-13.2%	-22.1%	
Finland Norway	1.0%	0.6%	-7.2% -15.3%	-25.0% -20.7%	
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Israel	0.8%	0.5%	-1.9%	-21.8%	
Ireland	0.6%	0.4%	-5.5%	-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)

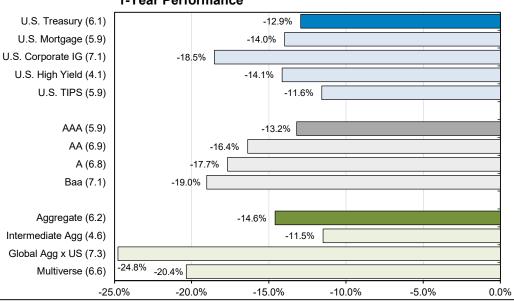
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- Fixed income market results were broadly negative during the 3rd quarter. Investors' concerns about rising inflation, combined with expectations of higher US interest rates, detracted from performance. As a result, US Treasury yields continued to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



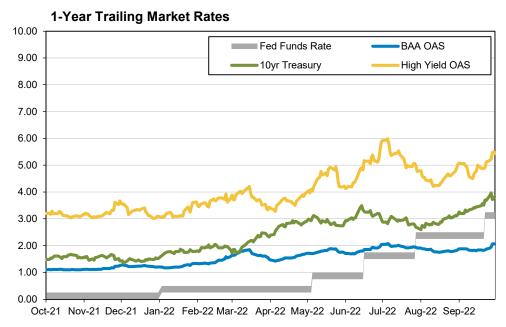
#### 1-Year Performance

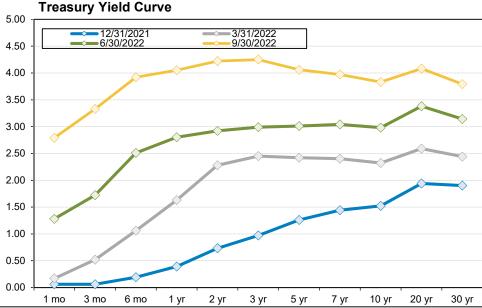


Source: Bloomberg



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





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



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# Alachua County Financial Reconciliation All Plans

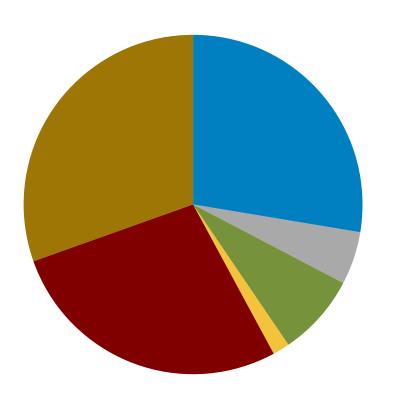
Quarter To Date Ending September 30, 2022

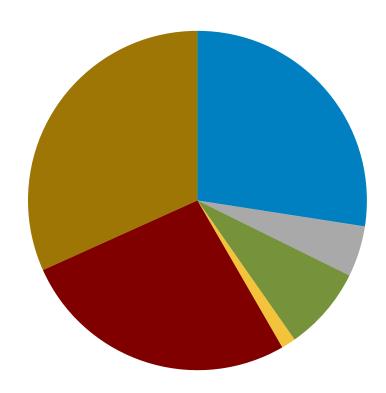
Financial Reconciliation			
	Market Value 07/01/2022	Market Value 09/30/2022	Change %
Total 457 County Board Of Commissioners	38,945,228	37,571,226	-3.53
Total 457 Library District	7,604,464	7,352,431	-3.31
Total 457 Circuit Court	4,908,855	4,671,691	-4.83
Total 401(a) County Board of Commissioners	1,865,528	1,796,600	-3.69
Total 401(a) Library District	178,550	179,409	0.48
Total 401(a) FPDP Plan	766,664	735,324	-4.09
<b>Total Alachua County DC Plans</b>	54,269,289	52,306,682	-



Asset Allocation By Segment as of June 30, 2022 : \$38,945,228

Asset Allocation By Segment as of September 30, 2022 : \$37,571,226



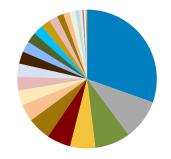


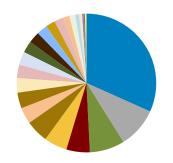
llocation Allocation					
Segments	Market Value	Allocation	Segments	Market Value	Allocation
Domestic Equity	10,756,822	27.6	■ Domestic Equity	10,312,990	27.4
■ International Equity	1,962,722	5.0	International Equity	1,818,469	4.8
■ Domestic Fixed Income	3,050,498	7.8	Domestic Fixed Income	3,005,904	8.0
Cash Equivalent	628,250	1.6	Cash Equivalent	512,347	1.4
■ Balanced	10,692,983	27.5	Balanced	10,000,427	26.6
■ Stable Value	11,853,952	30.4	■ Stable Value	11,921,089	31.7



Asset Allocation By Manager as of June 30, 2022 : \$38,945,228

Asset Allocation By Manager as of September 30, 2022 : \$37,571,226



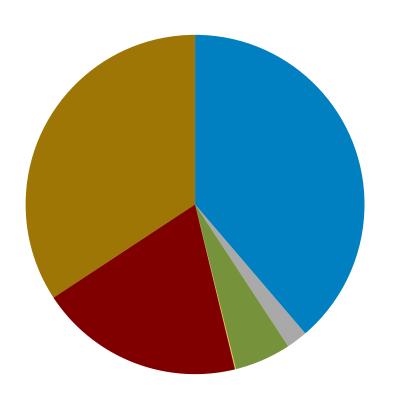


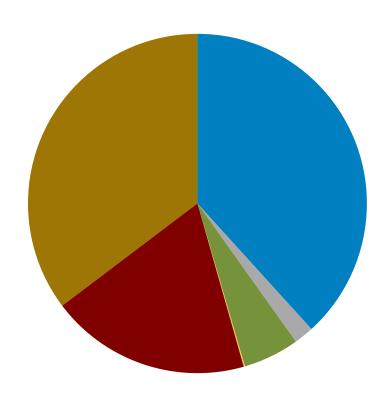
llocation			Allocation		
	Market Value	Allocation		Market Value	Allocation
■ MissionSquare PLUS Fund R10	11,853,952	30.4	■ MissionSquare PLUS Fund R10	11,921,089	31.7
■ Vanguard 500 Index Admiral (VFIAX)	3,684,488	9.5	Vanguard 500 Index Admiral (VFIAX)	3,527,267	9.4
■ T. Rowe Price Instl LC Core Growth (TPLGX)	3,194,110	8.2	■ T. Rowe Price Instl LC Core Growth (TPLGX)	3,044,292	8.1
Vanguard Target Retirement 2030 (VTHRX)	2,269,737	5.8	■ Vanguard Target Retirement 2025 (VTTVX)	2,037,599	5.4
■ Vanguard Target Retirement 2025 (VTTVX)	2,156,512	5.5	Vanguard Target Retirement 2030 (VTHRX)	2,013,432	5.4
■ Dodge & Cox Income (DODIX)	2,095,156	5.4	Dodge & Cox Income (DODIX)	1,978,005	5.3
Vanguard Mid-Cap Index Admiral (VIMAX)	1,558,391	4.0	Vanguard Mid-Cap Index Admiral (VIMAX)	1,428,034	3.8
Vanguard Target Retirement 2035 (VTTHX)	1,337,058	3.4	Vanguard Target Retirement Income (VTINX)	1,382,290	3.7
Vanguard Target Retirement 2020 (VTWNX)	1,262,903	3.2	Vanguard Target Retirement 2035 (VTTHX)	1,271,750	3.4
Vanguard Small-Cap Index Admiral (VSMAX)	1,188,322	3.1	Vanguard Target Retirement 2020 (VTWNX)	1,175,795	3.1
■ American Funds EuroPacific Growth R6 (RERGX)	1,118,659	2.9	Vanguard Small-Cap Index Admiral (VSMAX)	1,164,515	3.1
■ Vanguard Target Retirement 2040 (VFORX)	975,158	2.5	■ Vanguard Total Bond Index Adm (VBTLX)	1,027,899	2.7
■ Vanguard Total Bond Index Adm (VBTLX)	955,342	2.5	American Funds EuroPacific Growth R6 (RERGX)	988,547	2.6
■ Vanguard Target Retirement 2015 (VTXVX)	902,591	2.3	Vanguard Target Retirement 2040 (VFORX)	937,943	2.5
■ Vanguard Total Intl Stock Index (VTIAX)	844,063	2.2	Vanguard Total Intl Stock Index (VTIAX)	829,922	2.2
■ MFS Value R6 (MEIKX)	788,953	2.0	■ MFS Value R6 (MEIKX)	795,968	2.1
■ Vanguard Target Retirement Income (VTINX)	588,451	1.5	Vanguard Target Retirement 2045 (VTIVX)	551,841	1.5
■ Vanguard Target Retirement 2045 (VTIVX)	563,796	1.4	MSQ Cash Management R5	512,347	1.4
MSQ Cash Management R5	546,403	1.4	■ Vanguard Target Retirement 2050 (VFIFX)	344,435	0.9
■ Vanguard Target Retirement 2050 (VFIFX)	352,306	0.9	Conestoga Small Cap Instl (CCALX)	255,084	0.7
Conestoga Small Cap Instl (CCALX)	267,869	0.7	Vanguard Target Retirement 2055 (VFFVX)	147,069	0.4
■ Vanguard Target Retirement 2055 (VFFVX)	141,896	0.4	Allspring Sp Small Cap Value R6 (ESPRX)	97,830	0.3
Vanguard Target Retirement 2060 (VTTSX)	85,845	0.2	Vanguard Target Retirement 2060 (VTTSX)	84,872	0.2
Self Directed Brokerage Account	81,847	0.2	MSQ Retirement IncomeAdvantage R5	53,401	0.1
■ Allspring Sp Small Cap Value R6 (ESPRX)	74,688	0.2	Self Directed Brokerage Account	-	0.0
MSQ Retirement IncomeAdvantage R5	56,729	0.1	Vanguard Target Retirement 2015 (VTXVX)	-	0.0



Asset Allocation By Segment as of June 30, 2022 : \$7,604,464

Asset Allocation By Segment as of September 30, 2022 : \$7,352,431



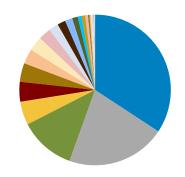


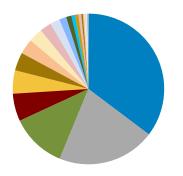
cation			Allocation		
Segments	Segments Market Value		Segments	Market Value	Allocation
■ Domestic Equity	2,945,437	38.7	■ Domestic Equity	2,812,736	38.3
International Equity	153,238	2.0	International Equity	138,562	1.9
■ Domestic Fixed Income	408,288	5.4	Domestic Fixed Income	392,318	5.3
Cash Equivalent	7,514	0.1	Cash Equivalent	9,235	0.1
■ Balanced	1,484,711	19.5	Balanced	1,404,614	19.1
■ Stable Value	2,605,277	34.3	Stable Value	2,594,967	35.3



Asset Allocation By Manager as of June 30, 2022 : \$7,604,464

Asset Allocation By Manager as of September 30, 2022 : \$7,352,431



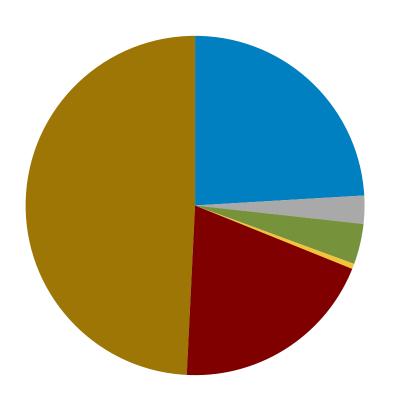


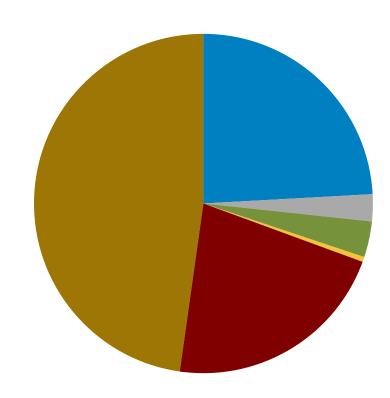
llocation			Allocation		
	Market Value	Allocation		Market Value	Allocation
■ MissionSquare PLUS Fund R10	2,605,277	34.3	■ MissionSquare PLUS Fund R10	2,594,967	35.3
Vanguard 500 Index Admiral (VFIAX)	1,612,834	21.2	Vanguard 500 Index Admiral (VFIAX)	1,536,887	20.9
■ T. Rowe Price InstI LC Core Growth (TPLGX)	912,214	12.0	■ T. Rowe Price Instl LC Core Growth (TPLGX)	873,654	11.9
Dodge & Cox Income (DODIX)	381,330	5.0	Vanguard Target Retirement Income (VTINX)	435,337	5.9
■ Vanguard Target Retirement Income (VTINX)	325,146	4.3	Dodge & Cox Income (DODIX)	366,620	5.0
■ MSQ Retirement IncomeAdvantage R5	304,753	4.0	MSQ Retirement IncomeAdvantage R5	286,732	3.9
Vanguard Target Retirement 2020 (VTWNX)	242,741	3.2	Vanguard Target Retirement 2020 (VTWNX)	238,205	3.2
MFS Value R6 (MEIKX)	233,854	3.1	MFS Value R6 (MEIKX)	223,542	3.0
■ Vanguard Target Retirement 2035 (VTTHX)	202,440	2.7	Vanguard Target Retirement 2035 (VTTHX)	181,886	2.5
Vanguard Mid-Cap Index Admiral (VIMAX)	157,109	2.1	Vanguard Mid-Cap Index Admiral (VIMAX)	150,571	2.0
■ Vanguard Target Retirement 2015 (VTXVX)	133,516	1.8	Vanguard Target Retirement 2025 (VTTVX)	113,041	1.5
Vanguard Target Retirement 2025 (VTTVX)	119,624	1.6	American Funds EuroPacific Growth R6 (RERGX)	82,917	1.1
■ American Funds EuroPacific Growth R6 (RERGX)	91,469	1.2	Vanguard Total Intl Stock Index (VTIAX)	55,644	0.8
■ Vanguard Total Intl Stock Index (VTIAX)	61,768	0.8	Vanguard Target Retirement 2050 (VFIFX)	54,742	0.7
■ Vanguard Target Retirement 2050 (VFIFX)	57,381	0.8	Vanguard Target Retirement 2040 (VFORX)	44,314	0.6
■ Vanguard Target Retirement 2040 (VFORX)	47,212	0.6	Vanguard Total Bond Index Adm (VBTLX)	25,698	0.3
■ Vanguard Total Bond Index Adm (VBTLX)	26,957	0.4	Vanguard Target Retirement 2030 (VTHRX)	22,771	0.3
■ Vanguard Target Retirement 2030 (VTHRX)	23,092	0.3	Vanguard Target Retirement 2045 (VTIVX)	14,172	0.2
■ Vanguard Target Retirement 2045 (VTIVX)	14,477	0.2	Vanguard Target Retirement 2060 (VTTSX)	13,414	0.2
Vanguard Target Retirement 2060 (VTTSX)	14,329	0.2	Conestoga Small Cap Instl (CCALX)	11,658	0.2
Conestoga Small Cap Instl (CCALX)	12,009	0.2	MSQ Cash Management R5	9,235	0.1
Allspring Sp Small Cap Value R6 (ESPRX)	9,364	0.1	Allspring Sp Small Cap Value R6 (ESPRX)	8,585	0.1
Vanguard Small-Cap Index Admiral (VSMAX)	8,053	0.1	Vanguard Small-Cap Index Admiral (VSMAX)	7,840	0.1
MSQ Cash Management R5	7,514	0.1	■ Vanguard Target Retirement 2055 (VFFVX)	-	0.0
■ Vanguard Target Retirement 2055 (VFFVX)	-	0.0	■ Vanguard Target Retirement 2015 (VTXVX)	-	0.0



Asset Allocation By Segment as of June 30, 2022 : \$4,908,855

Asset Allocation By Segment as of September 30, 2022 : \$4,671,691



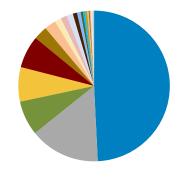


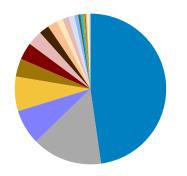
ocation			Allocation		
Segments	Segments Market Value		Segments	Market Value	Allocation
■ Domestic Equity	1,180,692	24.1	■ Domestic Equity	1,126,650	24.1
International Equity	131,761	2.7	International Equity	120,293	2.6
■ Domestic Fixed Income	189,534	3.9	Domestic Fixed Income	159,672	3.4
Cash Equivalent	24,389	0.5	Cash Equivalent	22,310	0.5
■ Balanced	966,523	19.7	Balanced	1,011,235	21.6
■ Stable Value	2,415,956	49.2	Stable Value	2,231,532	47.8



Asset Allocation By Manager as of June 30, 2022 : \$4,908,855

Asset Allocation By Manager as of September 30, 2022 : \$4,671,691



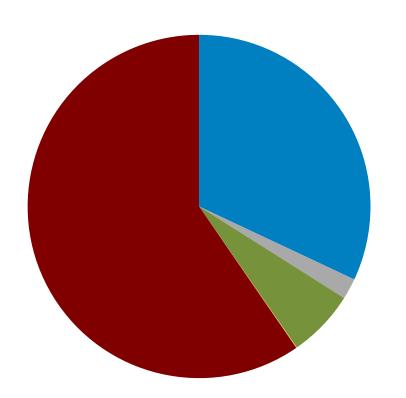


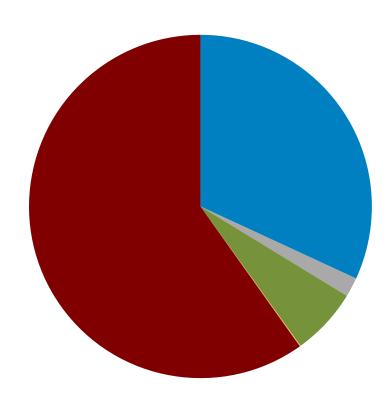
llocation			Allocation		
	Market Value	Allocation		Market Value	Allocation
■ MissionSquare PLUS Fund R10	2,415,956	49.2	■ MissionSquare PLUS Fund R10	2,231,532	47.8
■ Vanguard 500 Index Admiral (VFIAX)	736,866	15.0	Vanguard 500 Index Admiral (VFIAX)	700,083	15.0
■ Vanguard Target Retirement 2015 (VTXVX)	363,986	7.4	Vanguard Target Retirement Income (VTINX)	350,479	7.5
T. Rowe Price Instl LC Core Growth (TPLGX)	362,397	7.4	T. Rowe Price Instl LC Core Growth (TPLGX)	345,272	7.4
■ Vanguard Target Retirement 2020 (VTWNX)	340,921	6.9	Vanguard Target Retirement 2030 (VTHRX)	181,488	3.9
■ Vanguard Target Retirement 2030 (VTHRX)	143,899	2.9	Vanguard Target Retirement 2020 (VTWNX)	171,367	3.7
Dodge & Cox Income (DODIX)	120,250	2.4	Vanguard Target Retirement 2025 (VTTVX)	150,132	3.2
Vanguard Total Bond Index Adm (VBTLX)	69,284	1.4	■ MSQ Retirement IncomeAdvantage R5	100,660	2.2
American Funds EuroPacific Growth R6 (RERGX)	66,503	1.4	Dodge & Cox Income (DODIX)	97,980	2.1
Vanguard Total Intl Stock Index (VTIAX)	65,258	1.3	Vanguard Total Bond Index Adm (VBTLX)	61,692	1.3
■ MSQ Retirement IncomeAdvantage R5	44,413	0.9	American Funds EuroPacific Growth R6 (RERGX)	61,318	1.3
■ MFS Value R6 (MEIKX)	37,908	8.0	Vanguard Total Intl Stock Index (VTIAX)	58,975	1.3
■ MSQ Cash Management R5	24,389	0.5	MFS Value R6 (MEIKX)	37,278	0.8
Vanguard Target Retirement 2050 (VFIFX)	22,989	0.5	■ MSQ Cash Management R5	22,310	0.5
■ Vanguard Mid-Cap Index Admiral (VIMAX)	21,072	0.4	Vanguard Target Retirement 2050 (VFIFX)	22,096	0.5
■ Vanguard Target Retirement 2025 (VTTVX)	15,321	0.3	Vanguard Mid-Cap Index Admiral (VIMAX)	19,242	0.4
■ Vanguard Target Retirement 2040 (VFORX)	12,829	0.3	Vanguard Target Retirement 2040 (VFORX)	12,349	0.3
Vanguard Small-Cap Index Admiral (VSMAX)	12,096	0.2	Vanguard Small-Cap Index Admiral (VSMAX)	12,266	0.3
■ Vanguard Target Retirement 2035 (VTTHX)	11,713	0.2	Vanguard Target Retirement 2035 (VTTHX)	11,910	0.3
Conestoga Small Cap Instl (CCALX)	8,023	0.2	Vanguard Target Retirement 2045 (VTIVX)	9,862	0.2
Vanguard Target Retirement 2045 (VTIVX)	5,729	0.1	Conestoga Small Cap Instl (CCALX)	7,835	0.2
Vanguard Target Retirement Income (VTINX)	3,871	0.1	Allspring Sp Small Cap Value R6 (ESPRX)	4,675	0.1
Allspring Sp Small Cap Value R6 (ESPRX)	2,330	0.0	Vanguard Target Retirement 2060 (VTTSX)	892	0.0
Vanguard Target Retirement 2060 (VTTSX)	853	0.0	Vanguard Target Retirement 2055 (VFFVX)	-	0.0
■ Vanguard Target Retirement 2055 (VFFVX)	-	0.0	Vanguard Target Retirement 2015 (VTXVX)	-	0.0



Asset Allocation By Segment as of June 30, 2022 : \$1,865,528

Asset Allocation By Segment as of September 30, 2022 : \$1,796,600



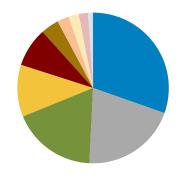


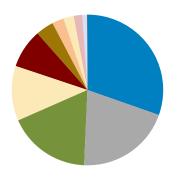
ocation					
Segments	s Market Value Allocation		Segments	Market Value	Allocation
■ Domestic Equity	596,672	32.0	■ Domestic Equity	572,918	31.9
International Equity	36,793	2.0	International Equity	32,914	1.8
■ Domestic Fixed Income	119,151	6.4	Domestic Fixed Income	114,061	6.3
Cash Equivalent	1,186	0.1	Cash Equivalent	1,572	0.1
■ Balanced	1,111,726	59.6	■ Balanced	1,075,135	59.8



Asset Allocation By Manager as of June 30, 2022 : \$1,865,528

Asset Allocation By Manager as of September 30, 2022 : \$1,796,600



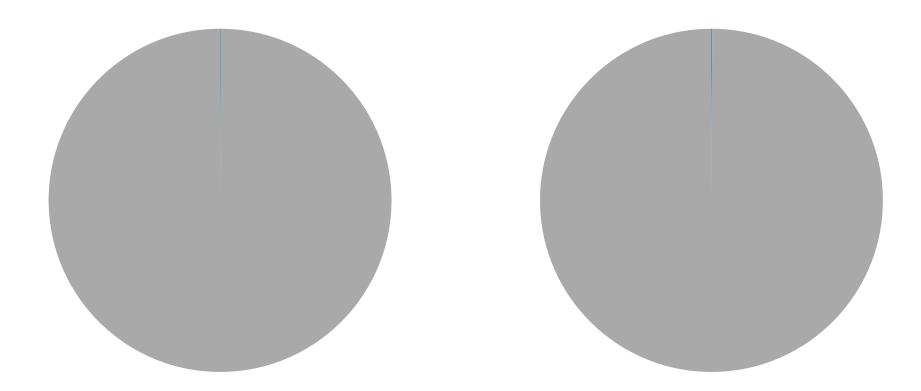


Allocation			Allocation		
	Market Value	Allocation		Market Value	Allocation
■ Vanguard Target Retirement 2020 (VTWNX)	567,003	30.4	■ Vanguard Target Retirement 2020 (VTWNX)	545,988	30.4
Vanguard 500 Index Admiral (VFIAX)	380,233	20.4	Vanguard 500 Index Admiral (VFIAX)	364,975	20.3
Vanguard Target Retirement 2025 (VTTVX)	336,559	18.0	Vanguard Target Retirement 2025 (VTTVX)	317,610	17.7
Vanguard Target Retirement 2015 (VTXVX)	208,163	11.2	Vanguard Target Retirement Income (VTINX)	211,537	11.8
■ Vanguard Mid-Cap Index Admiral (VIMAX)	156,549	8.4	Vanguard Mid-Cap Index Admiral (VIMAX)	150,010	8.3
■ Dodge & Cox Income (DODIX)	72,166	3.9	Dodge & Cox Income (DODIX)	69,271	3.9
Vanguard Total Bond Index Adm (VBTLX)	46,985	2.5	Vanguard Total Bond Index Adm (VBTLX)	44,790	2.5
Vanguard Small-Cap Index Admiral (VSMAX)	40,612	2.2	Vanguard Small-Cap Index Admiral (VSMAX)	39,537	2.2
Vanguard Total Intl Stock Index (VTIAX)	36,793	2.0	Vanguard Total Intl Stock Index (VTIAX)	32,914	1.8
MFS Value R6 (MEIKX)	19,279	1.0	■ MFS Value R6 (MEIKX)	18,395	1.0
■ MSQ Cash Management R5	1,186	0.1	■ MSQ Cash Management R5	1,572	0.1
T. Rowe Price Instl LC Core Growth (TPLGX)	-	0.0	T. Rowe Price Instl LC Core Growth (TPLGX)	-	0.0
■ Allspring Sp Small Cap Value R6 (ESPRX)	-	0.0	Allspring Sp Small Cap Value R6 (ESPRX)	-	0.0
Conestoga Small Cap Instl (CCALX)	-	0.0	Conestoga Small Cap Instl (CCALX)	-	0.0
American Funds EuroPacific Growth R6 (RERGX)	-	0.0	American Funds EuroPacific Growth R6 (RERGX)	-	0.0
■ Vanguard Target Retirement 2030 (VTHRX)	-	0.0	Vanguard Target Retirement 2030 (VTHRX)	-	0.0
■ Vanguard Target Retirement 2035 (VTTHX)	-	0.0	Vanguard Target Retirement 2035 (VTTHX)	-	0.0
Vanguard Target Retirement 2040 (VFORX)	-	0.0	Vanguard Target Retirement 2040 (VFORX)	-	0.0
■ Vanguard Target Retirement 2045 (VTIVX)	-	0.0	■ Vanguard Target Retirement 2045 (VTIVX)	-	0.0
■ Vanguard Target Retirement 2050 (VFIFX)	-	0.0	Vanguard Target Retirement 2050 (VFIFX)	-	0.0
Vanguard Target Retirement 2055 (VFFVX)	-	0.0	Vanguard Target Retirement 2055 (VFFVX)	-	0.0
■ Vanguard Target Retirement 2060 (VTTSX)	-	0.0	■ Vanguard Target Retirement 2060 (VTTSX)	-	0.0
Vanguard Target Retirement Income (VTINX)	-	0.0	MSQ Retirement IncomeAdvantage R5	-	0.0
MSQ Retirement IncomeAdvantage R5	-	0.0	■ MissionSquare PLUS Fund R10	-	0.0
■ MissionSquare PLUS Fund R10	-	0.0	Vanguard Target Retirement 2015 (VTXVX)	-	0.0



Asset Allocation By Segment as of June 30, 2022 : \$178,550

Asset Allocation By Segment as of September 30, 2022 : \$179,409

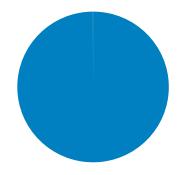


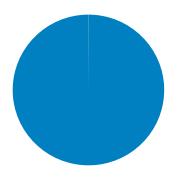
Allocation	Allocation							
Segments	Market Value	Allocation	Segments	Market Value	Allocation			
Cash Equivalent	84	0.0	Cash Equivalent	119	0.1			
Stable Value	178,466	100.0	Stable Value	179,291	99.9			



Asset Allocation By Manager as of June 30, 2022 : \$178,550





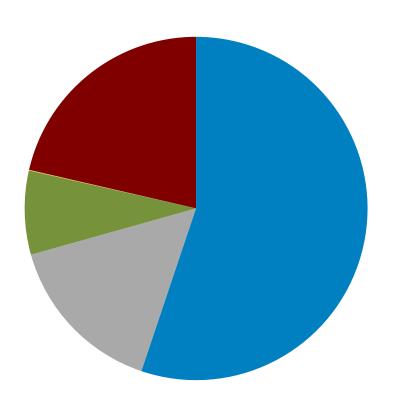


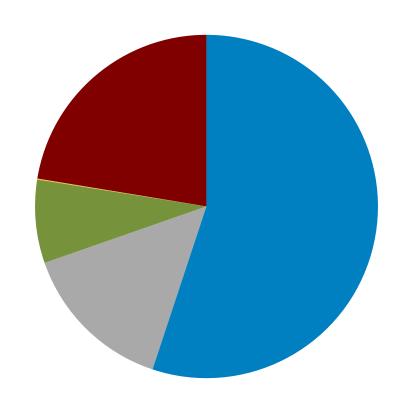
Allocation			Allocation		
	Market Value	Allocation		Market Value	Allocation
■ MissionSquare PLUS Fund R10	178,466	100.0	■ MissionSquare PLUS Fund R10	179,291	99.9
■ MSQ Cash Management R5	84	0.0	MSQ Cash Management R5	119	0.1
■ MFS Value R6 (MEIKX)	-	0.0	■ MFS Value R6 (MEIKX)	-	0.0
Vanguard 500 Index Admiral (VFIAX)	-	0.0	Vanguard 500 Index Admiral (VFIAX)	-	0.0
■ T. Rowe Price Instl LC Core Growth (TPLGX)	-	0.0	■ T. Rowe Price Instl LC Core Growth (TPLGX)	-	0.0
■ Vanguard Mid-Cap Index Admiral (VIMAX)	-	0.0	Vanguard Mid-Cap Index Admiral (VIMAX)	-	0.0
Allspring Sp Small Cap Value R6 (ESPRX)	-	0.0	Allspring Sp Small Cap Value R6 (ESPRX)	-	0.0
Vanguard Small-Cap Index Admiral (VSMAX)	-	0.0	Vanguard Small-Cap Index Admiral (VSMAX)	-	0.0
Conestoga Small Cap Instl (CCALX)	-	0.0	Conestoga Small Cap Instl (CCALX)	-	0.0
American Funds EuroPacific Growth R6 (RERGX)	-	0.0	American Funds EuroPacific Growth R6 (RERGX)	-	0.0
■ Vanguard Total Intl Stock Index (VTIAX)	-	0.0	■ Vanguard Total Intl Stock Index (VTIAX)	-	0.0
Vanguard Target Retirement 2015 (VTXVX)	-	0.0	Vanguard Target Retirement 2020 (VTWNX)	-	0.0
■ Vanguard Target Retirement 2020 (VTWNX)	-	0.0	Vanguard Target Retirement 2025 (VTTVX)	-	0.0
Vanguard Target Retirement 2025 (VTTVX)	-	0.0	Vanguard Target Retirement 2030 (VTHRX)	-	0.0
■ Vanguard Target Retirement 2030 (VTHRX)	-	0.0	Vanguard Target Retirement 2035 (VTTHX)	-	0.0
Vanguard Target Retirement 2035 (VTTHX)	-	0.0	Vanguard Target Retirement 2040 (VFORX)	-	0.0
■ Vanguard Target Retirement 2040 (VFORX)	-	0.0	Vanguard Target Retirement 2045 (VTIVX)	-	0.0
Vanguard Target Retirement 2045 (VTIVX)	-	0.0	Vanguard Target Retirement 2050 (VFIFX)	-	0.0
Vanguard Target Retirement 2050 (VFIFX)	-	0.0	Vanguard Target Retirement 2055 (VFFVX)	-	0.0
Vanguard Target Retirement 2055 (VFFVX)	-	0.0	Vanguard Target Retirement 2060 (VTTSX)	-	0.0
Vanguard Target Retirement 2060 (VTTSX)	-	0.0	Vanguard Target Retirement Income (VTINX)	-	0.0
Vanguard Target Retirement Income (VTINX)	-	0.0	MSQ Retirement IncomeAdvantage R5	-	0.0
MSQ Retirement IncomeAdvantage R5	-	0.0	Dodge & Cox Income (DODIX)	-	0.0
Dodge & Cox Income (DODIX)	-	0.0	Vanguard Total Bond Index Adm (VBTLX)	-	0.0
■ Vanguard Total Bond Index Adm (VBTLX)	-	0.0	Vanguard Target Retirement 2015 (VTXVX)	-	0.0



Asset Allocation By Segment as of June 30, 2022 : \$766,664

Asset Allocation By Segment as of September 30, 2022 : \$735,324

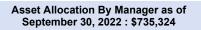


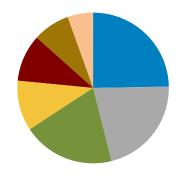


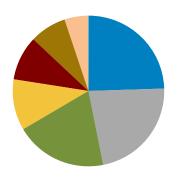
ocation					
Segments	egments Market Value Allocation		Segments	Market Value	Allocation
■ Domestic Equity	422,935	55.2	■ Domestic Equity	405,114	55.1
International Equity	118,749	15.5	International Equity	107,140	14.6
■ Domestic Fixed Income	60,495	7.9	Domestic Fixed Income	57,668	7.8
Cash Equivalent	509	0.1	Cash Equivalent	669	0.1
■ Stable Value	163,975	21.4	■ Stable Value	164,733	22.4



Asset Allocation By Manager as of June 30, 2022 : \$766,664







Allocation			Allocation		
	Market Value	Allocation		Market Value	Allocation
■ Vanguard 500 Index Admiral (VFIAX)	189,394	24.7	■ Vanguard 500 Index Admiral (VFIAX)	180,059	24.5
■ MissionSquare PLUS Fund R10	163,975	21.4	■ MissionSquare PLUS Fund R10	164,733	22.4
■ Vanguard Mid-Cap Index Admiral (VIMAX)	150,686	19.7	Vanguard Mid-Cap Index Admiral (VIMAX)	144,392	19.6
Vanguard Small-Cap Index Admiral (VSMAX)	82,856	10.8	Vanguard Small-Cap Index Admiral (VSMAX)	80,663	11.0
■ American Funds EuroPacific Growth R6 (RERGX)	77,414	10.1	American Funds EuroPacific Growth R6 (RERGX)	70,163	9.5
Vanguard Total Bond Index Adm (VBTLX)	60,495	7.9	Vanguard Total Bond Index Adm (VBTLX)	57,668	7.8
Vanguard Total Intl Stock Index (VTIAX)	41,335	5.4	Vanguard Total Intl Stock Index (VTIAX)	36,977	5.0
MSQ Cash Management R5	509	0.1	MSQ Cash Management R5	669	0.1
■ MFS Value R6 (MEIKX)	-	0.0	■ MFS Value R6 (MEIKX)	-	0.0
T. Rowe Price Instl LC Core Growth (TPLGX)	-	0.0	T. Rowe Price Instl LC Core Growth (TPLGX)	-	0.0
■ Allspring Sp Small Cap Value R6 (ESPRX)	-	0.0	■ Allspring Sp Small Cap Value R6 (ESPRX)	-	0.0
Conestoga Small Cap Instl (CCALX)	-	0.0	Conestoga Small Cap Instl (CCALX)	-	0.0
■ Vanguard Target Retirement 2015 (VTXVX)	-	0.0	Vanguard Target Retirement 2020 (VTWNX)	-	0.0
Vanguard Target Retirement 2020 (VTWNX)	-	0.0	Vanguard Target Retirement 2025 (VTTVX)	-	0.0
■ Vanguard Target Retirement 2025 (VTTVX)	-	0.0	Vanguard Target Retirement 2030 (VTHRX)	-	0.0
Vanguard Target Retirement 2030 (VTHRX)	-	0.0	Vanguard Target Retirement 2035 (VTTHX)	-	0.0
■ Vanguard Target Retirement 2035 (VTTHX)	-	0.0	Vanguard Target Retirement 2040 (VFORX)	-	0.0
Vanguard Target Retirement 2040 (VFORX)	-	0.0	Vanguard Target Retirement 2045 (VTIVX)	-	0.0
Vanguard Target Retirement 2045 (VTIVX)	-	0.0	Vanguard Target Retirement 2050 (VFIFX)	-	0.0
Vanguard Target Retirement 2050 (VFIFX)	-	0.0	Vanguard Target Retirement 2055 (VFFVX)	-	0.0
Vanguard Target Retirement 2055 (VFFVX)	-	0.0	Vanguard Target Retirement 2060 (VTTSX)	-	0.0
Vanguard Target Retirement 2060 (VTTSX)	-	0.0	Vanguard Target Retirement Income (VTINX)	-	0.0
Vanguard Target Retirement Income (VTINX)	-	0.0	MSQ Retirement IncomeAdvantage R5	-	0.0
■ MSQ Retirement IncomeAdvantage R5	-	0.0	■ Dodge & Cox Income (DODIX)	-	0.0
■ Dodge & Cox Income (DODIX)	-	0.0	■ Vanguard Target Retirement 2015 (VTXVX)	-	0.0



Fund	Manager Tenure	Style	Asset Level (millions)	Expense Ratio	Category Median Exp Ratio	*Consec Return	utive Qtr & Rank	3 & 5 Return	Year > Index	Ra	Year ank %-tile	3 & 5 Sharp < 50th		Positive 3 Alp	
MFS Value R6 (MEIKX)	16.4	US Equity Large Cap Value	57,388.5	45 bps	80 bps	YES	YES	Yes	Yes	58 (3)	55 (3)	54 (2)	51 (3)	0.91	0.91
T. Rowe Price Instl LC Core Growth (TPLGX)	1.0	US Equity Large Cap Growth	3,517.3	57 bps	80 bps	YES	YES	NO (5)	NO (5)	93 (5)	84 (3)	93 (5)	86 (3)	-7.07 (5)	-4.49 (4)
Allspring Sp Small Cap Value R6 (ESPRX)	20.8	US Equity Small Cap	5,016.4	81 bps	105 bps	YES	YES	NO (1)	Yes	94 (3)	44	95 (2)	46	-1.46 (1)	0.63
Conestoga Small Cap Instl (CCALX)	20.0	US Equity Small Cap	3,155.1	90 bps	105 bps	YES	YES	NO (1)	Yes	79 (5)	48	79 (2)	45	0.24	3.01
American Funds EuroPacific Growth R6 (RERGX)	21.3	Global Equity Large Cap	124,746.8	46 bps	92 bps	YES	YES	Yes	Yes	58 (4)	52 (2)	55 (4)	50 (4)	0.59	0.79
Dodge & Cox Income (DODIX)	33.8	US Fixed Income	57,112.9	41 bps	57 bps	YES	YES	Yes	Yes	6	3	5	3	1.52	0.93

Index Funds	Manager Tenure	Style	Asset Level (millions)	Expense Ratio	Category Median Exp Ratio	3 & 5 Trackin <50th	g Error
Vanguard 500 Index Admiral (VFIAX)	6.5	US Equity Large Cap Blend	260,837.6	4 bps	80 bps	1	1
Vanguard Mid-Cap Index Admiral (VIMAX)	24.4	US Equity Mid Cap	49,520.2	5 bps	95 bps	1	1
Vanguard Small-Cap Index Admiral (VSMAX)	6.5	US Equity Small Cap	40,702.3	5 bps	105 bps	1	1
Vanguard Total Intl Stock Index (VTIAX)	14.2	Global Equity Large Cap	44,530.6	11 bps	92 bps	1	1
Vanguard Total Bond Index Adm (VBTLX)	9.7	US Fixed Income	80,151.3	5 bps	57 bps	2	3

Target Date Funds	Manager Tenure	Style	Asset Level (millions)	Expense Ratio	Category Median Exp Ratio	*Consec Return	utive Qtr & Rank		Year nk %-tile		Year e Ratio %-tile
Vanguard Target Retirement Income (VTINX)	9.7	Target Date	36,518.2	8 bps	59 bps	YES	YES	70 (5)	55 (5)	76 (2)	53 (1)
Vanguard Target Retirement 2020 (VTWNX)	9.7	Target Date	39,834.8	8 bps	55 bps	YES	YES	43	28	43	26
Vanguard Target Retirement 2025 (VTTVX)	9.7	Target Date	69,386.4	8 bps	60 bps	YES	YES	41	29	41	31
Vanguard Target Retirement 2030 (VTHRX)	9.7	Target Date	72,115.5	8 bps	60 bps	YES	YES	47	36	47	32
Vanguard Target Retirement 2035 (VTTHX)	9.7	Target Date	70,250.0	8 bps	63 bps	YES	YES	49	39	49	38
Vanguard Target Retirement 2040 (VFORX)	9.7	Target Date	60,363.3	8 bps	64 bps	YES	YES	44	34	42	30
Vanguard Target Retirement 2045 (VTIVX)	9.7	Target Date	55,921.3	8 bps	65 bps	YES	YES	30	25	30	24
Vanguard Target Retirement 2050 (VFIFX)	9.7	Target Date	44,736.2	8 bps	65 bps	YES	YES	32	26	31	23
Vanguard Target Retirement 2055 (VFFVX)	9.7	Target Date	27,570.0	8 bps	65 bps	YES	YES	33	30	32	26
Vanguard Target Retirement 2060 (VTTSX)	9.7	Target Date	13,679.6	8 bps	65 bps	YES	YES	36	33	35	31

Fund meets criteria

Fund does not currently meet criteria

Fund has not met criteria for more than 4 quarters

\*Less than 4 consecutive quarterly returns below the index and peer rankings below the 75th percentile
"More than 4 quarters" evaluation criteria excludes Index Funds

Comparative Performance				_		_				-		-		\/B
	QT	R	YT	D	1 Y	'R	3 `	YR	5 \	/R	7 \	/R	10	YR
Domestic Equity Funds														
MFS Value R6 (MEIKX)	-4.55	(21)	-17.08	(54)	-9.95	(56)	5.07	(58)	5.97	(55)	8.84	(41)	9.97	(26)
Russell 1000 Value Index	-5.62	(52)	-17.75	(60)	-11.36	(67)	4.36	(74)	5.29	(74)	8.15	(64)	9.17	(54)
IM U.S. Large Cap Value Equity (MF) Median	-5.57		-16.74		-9.58		5.34		6.09		8.58		9.29	
T. Rowe Price Instl LC Core Growth (TPLGX)	-4.64	(58)	-37.27	(86)	-34.66	(88)	2.89	(93)	7.23	(84)	10.48	(64)	12.06	(36)
Russell 1000 Growth Index	-3.60	(26)	-30.66	(25)	-22.59	(20)	10.67	(8)	12.16	(8)	13.74	(7)	13.70	(7)
IM U.S. Large Cap Growth Equity (MF) Median	-4.41		-33.10		-27.73		7.08		9.29		10.99		11.66	
Vanguard 500 Index Admiral (VFIAX)	-4.89	(42)	-23.89	(40)	-15.51	(32)	8.12	(25)	9.20	(27)	11.37	(15)	11.66	(16)
S&P 500 Index	-4.88	(42)	-23.87	(40)	-15.47	(31)	8.16	(24)	9.24	(26)	11.40	(15)	11.70	(15)
IM U.S. Large Cap Core Equity (MF) Median	-5.16		-24.48		-17.11		7.23		8.43		10.39		10.78	
Vanguard Mid-Cap Index Admiral (VIMAX)	-4.14	(43)	-25.43	(93)	-19.48	(91)	5.47	(37)	6.64	(19)	8.69	(20)	10.45	(13)
Vanguard Spliced Mid Cap Index	-4.14	(43)	-25.42	(93)	-19.47	(91)	5.48	(36)	6.66	(19)	8.71	(19)	10.48	(12)
IM U.S. Mid Cap Core Equity (MF) Median	-4.32		-20.76		-14.07		4.68		5.27		7.43		8.80	
Allspring Sp Small Cap Value R6 (ESPRX)	-8.42	(95)	-22.66	(93)	-17.29	(83)	2.99	(94)	3.42	(44)	7.61	(31)	N/A	
Russell 2000 Value Index	-4.61	(42)	-21.12	(74)	-17.69	(86)	4.72	(75)	2.87	(57)	7.42	(35)	7.94	(47)
IM U.S. Small Cap Value Equity (MF) Median	-5.41		-19.93		-15.25		5.76		3.19		6.86		7.84	
Conestoga Small Cap Instl (CCALX)	-4.23	(87)	-32.04	(67)	-28.62	(43)	2.86	(79)	6.25	(48)	11.12	(10)	N/A	
Russell 2000 Growth Index	0.24	(24)	-29.28	(40)	-29.27	(54)	2.94	(78)	3.60	(79)	7.12	(71)	8.81	(65)
IM U.S. Small Cap Growth Equity (MF) Median	-1.36		-30.40		-29.12		4.73		5.95		8.51		9.31	
Vanguard Small-Cap Index Admiral (VSMAX)	-2.61	(24)	-23.70	(62)	-20.74	(75)	4.98	(45)	5.37	(15)	8.34	(20)	9.57	(18)
Vanguard Spliced Small Cap Index	-2.63	(24)	-23.71	(62)	-20.75	(75)	4.96	(46)	5.35	(15)	8.32	(21)	9.55	(19)
IM U.S. Small Cap Core Equity (MF) Median	-4.48		-23.02		-18.44		4.60		3.57		6.98		8.28	
International Equity Funds														
American Funds EuroPacific Growth R6 (RERGX)	-9.33	(39)	-32.09	(58)	-32.85	(73)	-1.24	(58)	-0.23	(52)	3.75	(36)	4.52	(29)
MSCI AC World ex USA (Net)	-9.91	(67)	-26.50	(9)	-25.17	(10)	-1.52	(64)	-0.81	(73)	3.29	(48)	3.01	(77)
IM International Large Cap Growth Equity (MF) Median	-9.57		-30.90		-28.73		-0.84		-0.14		3.19		3.89	
Vanguard Total Intl Stock Index (VTIAX)	-10.51	(53)	-26.76	(31)	-25.21	(29)	-1.18	(38)	-0.70	(34)	3.39	(36)	3.31	(45)
Vanguard Spliced International Index (Net)	-9.91	(41)	-26.50	(29)	-25.17	(29)	-1.52	(44)	-0.81	(36)	3.29	(39)	3.01	(52)
IM International Equity (MF) Median	-10.39		-28.99		-28.15		-1.90		-1.50		2.85		3.09	



	Q	ΓR	YT	D	1 Y	'R	3 `	YR	5 \	<b>Y</b> R	7 `	<b>r</b>	10	YR
Fixed Income Funds														
Dodge & Cox Income (DODIX)	-3.99	(10)	-13.26	(8)	-13.63	(8)	-1.74	(6)	0.67	(3)	1.84	(1)	1.91	(1)
Blmbg. U.S. Aggregate Index	-4.75	(60)	-14.61	(28)	-14.60	(24)	-3.26	(55)	-0.27	(44)	0.54	(55)	0.89	(51)
IM U.S. Broad Market Core Fixed Income (MF) Median	-4.67		-15.17		-15.29		-3.22		-0.33		0.58		0.90	
Vanguard Total Bond Index Adm (VBTLX)	-4.65	(48)	-14.59	(27)	-14.66	(27)	-3.27	(56)	-0.26	(42)	0.54	(55)	0.85	(55)
Blmbg. U.S. Aggregate Float Adjusted	-4.68	(51)	-14.65	(30)	-14.61	(24)	-3.22	(51)	-0.23	(39)	0.59	(50)	0.91	(49)
IM U.S. Broad Market Core Fixed Income (MF) Median	-4.67		-15.17		-15.29		-3.22		-0.33		0.58		0.90	
MissionSquare PLUS Fund R10	0.50	(10)	1.42	(9)	1.88	(9)	2.05	(12)	2.16	(12)	2.12	(12)	2.14	(10)
Ryan 3 Yr GIC Master Index	0.37	(66)	1.04	(52)	1.41	(48)	1.91	(17)	1.98	(22)	1.82	(44)	1.60	(51)
IM U.S. GIC/Stable Value (SA+CF) Median	0.39		1.06		1.38		1.67		1.81		1.75		1.64	
MSQ Cash Management R5	0.41	(68)	0.49	(68)	0.49	(67)	0.37	(64)	0.84	(60)	0.65	(59)	0.45	(61)
90 Day U.S. Treasury Bill	0.46	(43)	0.61	(35)	0.62	(32)	0.59	(5)	1.15	(7)	0.94	(9)	0.67	(9)
IM U.S. Taxable Money Market (MF) Median	0.45		0.55		0.55		0.42		0.90		0.69		0.49	
Target Date Funds														
Vanguard Target Retirement Income (VTINX)	-4.64	(6)	-15.89	(27)	-14.19	(50)	-0.02	(70)	1.96	(55)	3.21	(70)	3.31	(61)
Vanguard Target Income Composite Index	-4.56	(3)	-15.77	(25)	-14.03	(48)	0.33	(63)	2.23	(44)	3.46	(67)	3.54	(55)
IM Retirement Income (MF) Median	-5.87		-17.04		-14.23		0.80		2.14		3.91		3.86	
Vanguard Target Retirement 2020 (VTWNX)	-5.12	(51)	-18.21	(43)	-15.83	(37)	1.17	(43)	2.91	(28)	4.91	(24)	5.46	(21)
Vanguard Target 2020 Composite Index	-4.93	(39)	-17.97	(37)	-15.53	(29)	1.62	(22)	3.26	(8)	5.24	(5)	5.74	(8)
IM Mixed-Asset Target 2020 (MF) Median	-5.12		-18.70		-16.29		0.99		2.61		4.56		4.93	
Vanguard Target Retirement 2025 (VTTVX)	-5.59	(65)	-20.35	(66)	-17.53	(65)	1.40	(41)	3.15	(29)	5.39	(23)	5.96	(19)
Vanguard Target 2025 Composite Index	-5.32	(55)	-19.95	(49)	-17.09	(46)	1.97	(18)	3.58	(8)	5.78	(7)	6.29	(8)
IM Mixed-Asset Target 2025 (MF) Median	-5.23		-19.99		-17.19		1.11		2.82		4.86		5.20	
Vanguard Target Retirement 2030 (VTHRX)	-5.93	(71)	-21.60	(53)	-18.42	(59)	1.82	(47)	3.43	(36)	5.86	(33)	6.46	(27)
Vanguard Target 2030 Composite Index	<b>-</b> 5.58	(50)	-21.16	(44)	-17.96	(46)	2.39	(20)	3.87	(14)	6.26	(12)	6.79	(9)
IM Mixed-Asset Target 2030 (MF) Median	-5.59		-21.54		-18.17		1.67		3.24		5.49		5.86	
Vanguard Target Retirement 2035 (VTTHX)	-6.09	(62)	-22.40	(35)	-18.87	(46)	2.39	(49)	3.78	(39)	6.39	(35)	6.99	(25)
Vanguard Target 2035 Composite Index	-5.75	(40)	-22.01	(30)	-18.48	(32)	2.94	(25)	4.22	(18)	6.78	(18)	7.32	(9)
IM Mixed-Asset Target 2035 (MF) Median	-5.87		-22.90		-19.06		2.36		3.62		6.12		6.38	
Vanguard Target Retirement 2040 (VFORX)	-6.33	(62)	-23.27	(27)	-19.42	(31)	2.91	(44)	4.11	(34)	6.89	(28)	7.40	(21)
Vanguard Target 2040 Composite Index	-5.93	(42)	-22.86	(22)	-19.01	(22)	3.47	(20)	4.55	(13)	7.29	(12)	7.75	(10)
IM Mixed-Asset Target 2040 (MF) Median	-6.13		-24.21		-19.89		2.71		3.89		6.48		6.81	



# Comparative Performance Trailing Returns As of September 30, 2022

	QT	ΓR	YT	D.	1 \	′R	3 \	/R	5 `	ΥR	7 \	/R	10	YR
Vanguard Target Retirement 2045 (VTIVX)	-6.51	(61)	-24.10	(29)	-19.93	(37)	3.46	(30)	4.42	(25)	7.20	(21)	7.61	(16)
Vanguard Target 2045 Composite Index	-6.11	(35)	-23.71	(25)	-19.55	(23)	3.99	(11)	4.85	(11)	7.60	(9)	7.96	(8)
IM Mixed-Asset Target 2045 (MF) Median	-6.40		-24.94		-20.31		3.02		4.08		6.66		6.93	
Vanguard Target Retirement 2050 (VFIFX)	-6.64	(62)	-24.43	(28)	-20.18	(38)	3.41	(32)	4.39	(26)	7.18	(25)	7.60	(21)
Vanguard Target 2050 Composite Index	-6.21	(38)	-24.04	(24)	-19.81	(26)	3.97	(8)	4.84	(11)	7.59	(9)	7.95	(10)
IM Mixed-Asset Target 2050 (MF) Median	-6.47		-25.19		-20.67		3.08		4.09		6.70		7.02	
Vanguard Target Retirement 2055 (VFFVX)	-6.63	(60)	-24.44	(28)	-20.17	(38)	3.40	(33)	4.38	(30)	7.17	(28)	7.58	(27)
Vanguard Target 2055 Composite Index	-6.21	(35)	-24.04	(22)	-19.81	(25)	3.97	(9)	4.84	(10)	7.59	(7)	7.95	(11)
IM Mixed-Asset Target 2055 (MF) Median	-6.51		-25.14		-20.79		3.11		4.11		6.74		7.13	
Vanguard Target Retirement 2060 (VTTSX)	-6.64	(63)	-24.44	(24)	-20.16	(37)	3.40	(36)	4.38	(33)	7.17	(42)	7.58	(N/A)
Vanguard Target 2060 Composite Index	-6.21	(37)	-24.04	(18)	-19.81	(27)	3.97	(10)	4.84	(12)	7.59	(12)	7.95	(N/A)
IM Mixed-Asset Target 2060 (MF) Median	-6.45		-25.12		-20.84		3.19		4.20		7.09		N/A	
Balanced Funds														
MSQ Retirement IncomeAdvantage R5	-5.67	(51)	-20.97	(46)	-17.28	(51)	1.53	(68)	2.73	(73)	4.48	(72)	4.70	(78)
Retirement Income Advantage	-5.65	(51)	-21.10	(48)	-17.08	(49)	2.42	(55)	3.97	(46)	N/A		N/A	
IM U.S. Balanced (SA+CF) Median	-5.61		-21.50		-17.26		2.74		3.84		5.98		6.21	



Asset Class	2060+	2055	2050	2045	2040	2035	2030	2025	2020	2015	Retirement
Equity Range											
Maximum	100%	100%	100%	95%	95%	90%	85%	75%	65%	55%	45%
Minimum	50%	50%	50%	45%	45%	40%	35%	25%	15%	10%	5%
Fixed Income Range											
Maximum	20%	20%	30%	35%	40%	50%	55%	65%	70%	75%	85%
Minimum	0%	0%	0%	5%	5%	10%	15%	20%	25%	35%	45%
Cash Range											
Maximum	20%	20%	30%	30%	30%	30%	30%	30%	35%	35%	35%
Minimum	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other Range											
Maximum	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
Minimum	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Target Date Universe	60	51	53	50	52	51	49	55	54	37	39

#### Morningstar Definitions:

- 1. Cash The percentage of the fund's assets in cash. This figure is calculated separately for the short and long positions of the portfolio, and the sum of the asset allocation of each will not necessarily equal 100%.
- 2. Other The percentage of the fund's assets in other instruments. This figure is calculated separately for the short and long positions of the portfolio, and the sum of the asset allocation of each will not necessarily equal 100%.
- 3. Target Date Universe Based on the number of unique glide paths in the Morningstar Target Date Universe. Only one share class is selected to represent the fund manager.



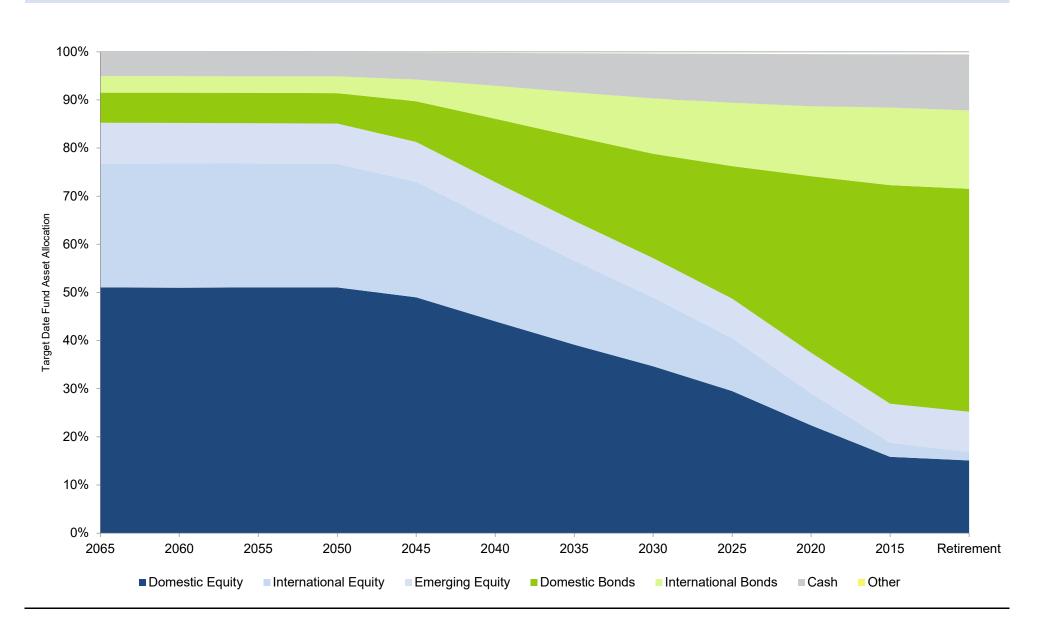
51% 5 26% 20	<b>5% 85°</b> 1% 51° 6% 26°			73%	65%	57%	409/			Retirement
51% 5 26% 20	1% 519			73%	65%	57%	400/			
26% 20		6 51%				31 /0	49%	37%	27%	25%
	60/ 260		49%	44%	39%	35%	29%	22%	16%	15%
8% 8	070 201	6 26%	24%	21%	17%	14%	11%	7%	3%	2%
	8% 8%	8%	8%	8%	8%	8%	8%	8%	8%	8%
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										63%
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3% 3	3%	3%	5%	7%	9%	11%	13%	15%	16%	16%
5% 5	5% 5%	5%	6%	7%	8%	9%	10%	11%	11%	12%
0% 0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
00% 10	00% 100	% 100%	100%	100%	100%	100%	100%	100%	99%	99%
e :	6% 6 3% 3 55% 5	6% 6% 6% 6% 3% 3% 3% 5% 5% 5% 5% 5% 6%	6% 6% 6% 6% 6% 3% 3% 3% 3% 3% 3% 0% 0% 0% 0% 0%	6%       6%       6%       8%         3%       3%       3%       5%         5%       5%       5%       6%         0%       0%       0%       0%       0%	6%       6%       6%       8%       13%         3%       3%       3%       5%       7%         5%       5%       5%       6%       7%         0%       0%       0%       0%       0%       0%	6%       6%       6%       8%       13%       17%         3%       3%       3%       5%       7%       9%         5%       5%       5%       6%       7%       8%         0%       0%       0%       0%       0%       0%	6% 6% 6% 6% 8% 13% 17% 22% 3% 3% 3% 5% 7% 9% 11% 5% 5% 5% 6% 7% 8% 9% 0% 0% 0% 0% 0% 0% 0%	6%       6%       6%       8%       13%       17%       22%       28%         3%       3%       3%       5%       7%       9%       11%       13%         5%       5%       5%       6%       7%       8%       9%       10%         0%       0%       0%       0%       0%       0%       0%       0%	6%       6%       6%       6%       8%       13%       17%       22%       28%       37%         3%       3%       3%       5%       7%       9%       11%       13%       15%         5%       5%       5%       6%       7%       8%       9%       10%       11%         0%       0%       0%       0%       0%       0%       0%       0%       0%	6%       6%       6%       8%       13%       17%       22%       28%       37%       45%         3%       3%       3%       5%       7%       9%       11%       13%       15%       16%         5%       5%       5%       6%       7%       8%       9%       10%       11%       11%         0%       0%       0%       0%       0%       0%       0%       0%       0%       0%

Terminal Equity Date: 7 years after Retirement
Active/Passive/Blend Allocation: Passive

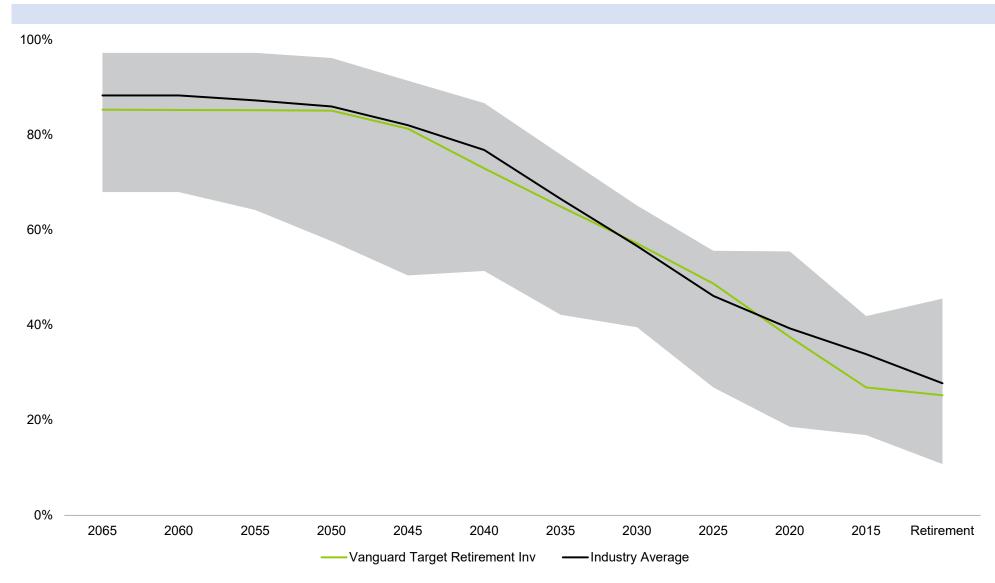
#### Morningstar Definitions:

- 1. Cash The percentage of the fund's assets in cash. This figure is calculated separately for the short and long positions of the portfolio, and the sum of the asset allocation of each will not necessarily equal 100%.
- 2. Other The percentage of the fund's assets in other instruments. This figure is calculated separately for the short and long positions of the portfolio, and the sum of the asset allocation of each will not necessarily equal 100%.









<sup>1.</sup> Industry Range (Gray Bar) - Represents the equity allocation range of the Target Date Funds in the universe.



<sup>2.</sup> Industry Average - The average equity allocation of the investments included in the universe.

# **Manager Performance Review**



## **Mutual Fund Info from Lipper**

Product Name: MFS Value;R6 (MEIKX)

Fund Family : MFS
Ticker : MEIKX

Peer Group: IM U.S. Large Cap Value Equity (MF)

Benchmark: Russell 1000 Value Index

 Fund Inception :
 05/01/2006

 Portfolio Manager :
 Chitkara/Cannan

 Total Assets :
 \$20,674 Million

 Total Assets Date :
 08/31/2022

 Gross Expense :
 0.45%

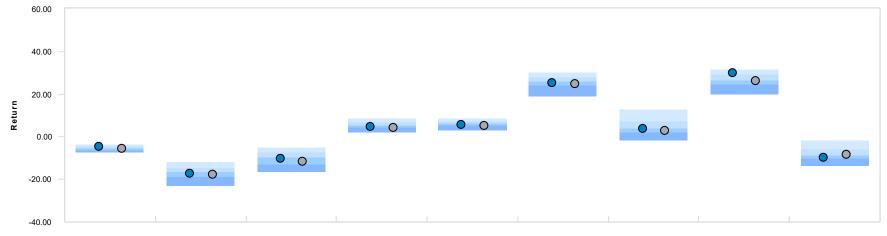
 Net Expense :
 0.45%

 Turnover :
 8%

#### **Summary Description**

The Fund seeks capital appreciation and reasonable income. The Fund invests, under normal market conditions, at least 65% of its net assets in equity securities of companies which the adviser believes are undervalued in the market relative to their long term potential.

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



	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018
<ul><li>MFS Value R6 (MEIKX)</li></ul>	-4.55 (21)	-17.08 (55)	-9.95 (56)	5.07 (58)	5.97 (55)	25.55 (57)	4.03 (48)	30.18 (17)	-9.78 (72)
<ul><li>Russell 1000 Value Index</li></ul>	-5.62 (52)	-17.75 (60)	-11.36 (67)	4.36 (74)	5.29 (74)	25.16 (63)	2.80 (61)	26.54 (50)	-8.27 (45)
Median	-5.57	-16.74	-9.58	5.34	6.09	25.96	3.82	26.50	-8.61

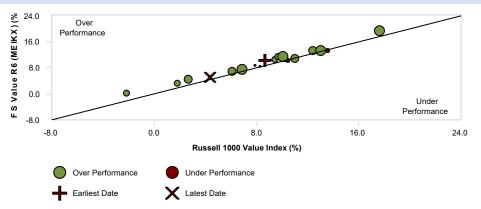
**Comparative Performance** 

	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
MFS Value R6 (MEIKX)	-9.88 (17)	-3.61 (89)	8.60 (39)	0.67 (7)	5.66 (41)	8.69 (73)
Russell 1000 Value Index	-12.21 (63)	-0.74 (57)	7.77 (63)	-0.78 (68)	5.21 (57)	11.26 (42)
IM U.S. Large Cap Value Equity (MF) Median	-11.35	-0.58	8.32	-0.43	5.39	10.70

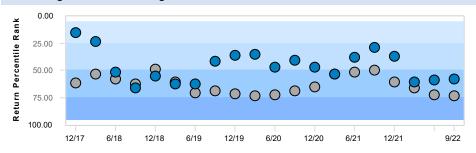


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# 3 Yr Rolling Under/Over Performance - 5 Years

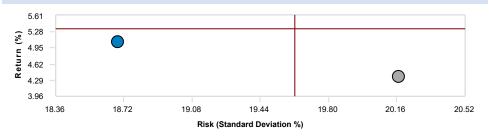


# 3 Yr Rolling Percentile Ranking - 5 Years

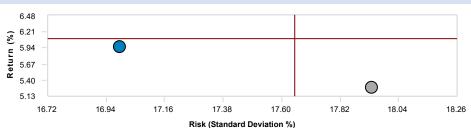


	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count	
<ul><li>MFS Value R6 (MEIKX)</li></ul>	20	2 (10%)	9 (45%)	9 (45%)	0 (0%)	
Russell 1000 Value Index	20	0 (0%)	2 (10%)	18 (90%)	0 (0%)	

## Peer Group Scattergram - 3 Years



Peer	Group	Scattergram	- 5 Years	
------	-------	-------------	-----------	--



	Return	Standard Deviation
<ul> <li>MFS Value R6 (MEIKX)</li> </ul>	5.07	18.69
<ul> <li>Russell 1000 Value Index</li> </ul>	4.36	20.17
Median	5.34	19.62

	Return	Deviation		
<ul><li>MFS Value R6 (MEIKX)</li></ul>	5.97	16.99		
<ul> <li>Russell 1000 Value Index</li> </ul>	5.29	17.94		
Median	6.09	17.65		

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

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
MFS Value R6 (MEIKX)	3.16	98.58	96.64	0.91	0.12	0.33	0.92	13.11
Russell 1000 Value Index	0.00	100.00	100.00	0.00	N/A	0.28	1.00	14.45

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

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
MFS Value R6 (MEIKX)	2.94	99.26	96.73	0.91	0.16	0.36	0.94	11.87
Russell 1000 Value Index	0.00	100.00	100.00	0.00	N/A	0.31	1.00	12.81



Product Name : T Rowe Price I LC Cor Gr (TPLGX)

Fund Family : T. Rowe Price Ticker : TPLGX

Peer Group: IM U.S. Large Cap Growth Equity (MF)

Benchmark: Russell 1000 Growth Index

 Fund Inception:
 09/30/2003

 Portfolio Manager:
 Paul D. Greene II

 Total Assets:
 \$4,073 Million

 Total Assets Date:
 08/31/2022

 Gross Expense:
 0.57%

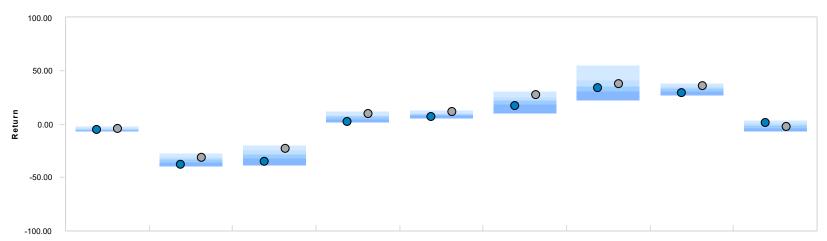
 Net Expense:
 0.57%

 Turnover:
 40%

### **Summary Description**

The Fund seeks to provide long-term capital growth through investments in the common stocks of large-cap growth companies. The Fund will normally invest substantially all of its net assets in large-cap companies.

### Peer Group Analysis - IM U.S. Large Cap Growth Equity (MF)

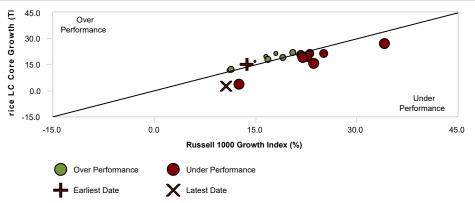


	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018	
<ul> <li>T. Rowe Price LC Core Growth (TPLGX)</li> </ul>	-4.64 (58)	-37.27 (86)	-34.66 (88)	2.89 (93)	7.23 (84)	17.89 (78)	34.69 (54)	30.15 (80)	2.17 (16)	
<ul><li>Russell 1000 Growth Index</li></ul>	-3.60 (26)	-30.66 (25)	-22.59 (20)	10.67 (8)	12.16 (8)	27.60 (17)	38.49 (34)	36.39 (19)	-1.51 (54)	
Median	-4.41	-33.10	-27.73	7.08	9.29	22.39	35.62	33.26	-1.22	

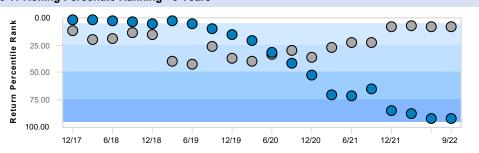
	1 Q Endi Jun-2	ng	1 Q Endi Mar-2	ng	1 Q Endi Dec-2	ng	1 C End Sep-2	ing	1 Q Endi Jun-2	ng	1 G End Mar-2	ling
T. Rowe Price LC Core Growth (TPLGX)	-24.98	(88)	-12.32	(72)	4.16	(88)	0.42	(53)	12.02	(31)	0.61	(64)
Russell 1000 Growth Index	-20.92	(40)	-9.04	(18)	11.64	(11)	1.16	(23)	11.93	(33)	0.94	(58)
IM U.S. Large Cap Growth Equity (MF) Median	-21.94		-10.62		7.91		0.46		11.34		1.22	



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



### 3 Yr Rolling Percentile Ranking - 5 Years

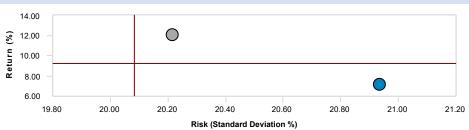


	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count	
<ul> <li>T. Rowe Price LC Core Growth (TPLGX)</li> </ul>	20	10 (50%)	2 (10%)	4 (20%)	4 (20%)	
Russell 1000 Growth Index	20	11 (55%)	9 (45%)	0 (0%)	0 (0%)	

### Peer Group Scattergram - 3 Years



### Peer Group Scattergram - 5 Years



Return	Deviation
2.89	23.36
10.67	22.81
7.08	22.63
	2.89 10.67

Return	Deviation
7.23	20.94
12.16	20.21
9.29	20.08
	7.23 12.16

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

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
T. Rowe Price LC Core Growth (TPLGX)	3.83	86.91	107.04	-7.07	-1.87	0.21	1.01	16.17
Russell 1000 Growth Index	0.00	100.00	100.00	0.00	N/A	0.53	1.00	14.52

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

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
T. Rowe Price LC Core Growth (TPLGX)	4.16	90.79	104.75	-4.49	-1.05	0.38	1.02	14.05
Russell 1000 Growth Index	0.00	100.00	100.00	0.00	N/A	0.61	1.00	12.97



Product Name : Allspring:Sp SCV;R6 (ESPRX)

Fund Family : Allspring Ticker : ESPRX

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

Benchmark: Russell 2000 Value Index

Fund Inception: 10/31/2014

Portfolio Manager: Tringas/VanCronkhite/Martin

 Total Assets :
 \$1,588 Million

 Total Assets Date :
 08/31/2022

 Gross Expense :
 0.85%

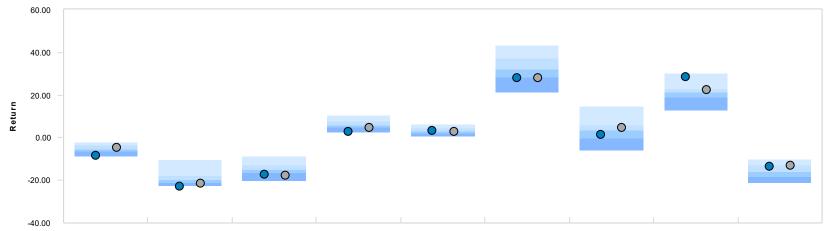
 Net Expense :
 0.85%

 Turnover :
 28%

### **Summary Description**

The Fund seeks to produce growth of capital by investing primarily in common stocks of small U.S. companies.

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



	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018
<ul><li>Wells Fargo Sp SC Value R6 (ESPRX)</li></ul>	-8.42 (95)	-22.66 (93)	-17.29 (83)	2.99 (94)	3.42 (44)	28.27 (73)	1.57 (64)	28.61 (7)	-13.36 (27)
<ul><li>Russell 2000 Value Index</li></ul>	-4.61 (42)	-21.12 (74)	-17.69 (86)	4.72 (75)	2.87 (57)	28.27 (73)	4.63 (35)	22.39 (28)	-12.86 (23)
Median	-5.41	-19.93	-15.25	5.76	3.19	31.97	3.57	21.05	-16.08

	ormance

	1 Qtr Ending Jun-202		1 Q Endi Mar-2	ng	1 G End Dec-2	ing	1 Q Endi Sep-2	ing	1 Q Endi Jun-2	ing	1 G End Mar-2	ling
Wells Fargo Sp SC Value R6 (ESPRX)	-12.01 (1	16)	-4.02	(93)	6.94	(31)	-2.74	(78)	3.17	(75)	19.53	(79)
Russell 2000 Value Index	-15.28 (8	83)	-2.40	(63)	4.36	(72)	-2.98	(81)	4.56	(46)	21.17	(63)
IM U.S. Small Cap Value Equity (MF) Median	-13.89		-1.70		5.80		-1.84		4.36		22.30	

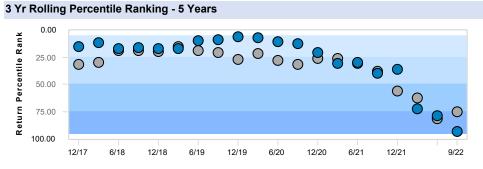


### 3 Yr Rolling Under/Over Performance - 5 Years 30.0 rgo Sp SC Value R6 (ES Over Performance -X-S-S-S-S 20.0 10.0 0.0 Under Performance -20.0 -10.0 0.0 10.0 20.0 30.0 Russell 2000 Value Index (%)

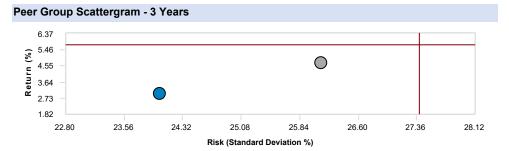
Under Performance

Over Performance

Earliest Date



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
<ul> <li>Wells Fargo Sp SC Value R6 (ESPRX)</li> </ul>	20	13 (65%)	4 (20%)	1 (5%)	2 (10%)
<ul><li>Russell 2000 Value Index</li></ul>	20	7 (35%)	9 (45%)	3 (15%)	1 (5%)



ee	r Group Sca	ttergram -	Years					
	3.60							
(%	3.40 -							
<u>ئ</u> ب	3.20							
etur	3.40 - 3.20 - 3.00 -							
œ	2.80 -				$\circ$			
	2.60		ı					
	20.40	21.08	21.76	22.44	23.12	23.80	24.48	25.16
			F	Risk (Standard [	Deviation %)			

	Return	Standard Deviation
<ul> <li>Wells Fargo Sp SC Value R6 (ESPRX)</li> </ul>	2.99	24.02
<ul><li>Russell 2000 Value Index</li></ul>	4.72	26.11
Median	5.76	27.39

	Return	Standard Deviation
<ul> <li>Wells Fargo Sp SC Value R6 (ESPRX)</li> </ul>	3.42	21.51
<ul> <li>Russell 2000 Value Index</li> </ul>	2.87	23.19
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
Wells Fargo Sp SC Value R6 (ESPRX)	4.54	89.83	94.42	-1.46	-0.49	0.22	0.91	17.87
Russell 2000 Value Index	0.00	100.00	100.00	0.00	N/A	0.29	1.00	19.05
Historical Statistics - 5 Years								
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Wells Fargo Sp SC Value R6 (ESPRX)	4.25	94.49	92.86	0.63	0.03	0.21	0.91	15.93
Russell 2000 Value Index	0.00	100.00	100.00	0.00	N/A	0.19	1.00	17.05



Product Name : Conestoga Small Cap;Inst (CCALX)
Fund Family : Conestoga Capital Advisors

Ticker: CCALX

Peer Group: IM U.S. Small Cap Growth Equity (MF)

Benchmark: Russell 2000 Growth Index

 Fund Inception:
 08/14/2014

 Portfolio Manager:
 Mitchell/Monahan

 Total Assets:
 \$2,579 Million

 Total Assets Date:
 08/31/2022

 Gross Expense:
 0.98%

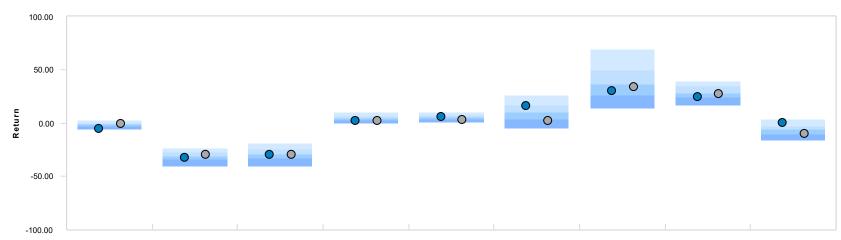
 Net Expense:
 0.90%

 Turnover:
 19%

### **Summary Description**

The Fund seeks long-term growth of capital by investing primarily in the equity securities of small capitalization companies, defined as companies with market capitalizations of up to \$2.5 billion at the time of purchase.

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



	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018
<ul> <li>Conestoga Small Cap Instl (CCALX)</li> </ul>	-4.23 (87)	-32.04 (67)	-28.62 (43)	2.86 (79)	6.25 (48)	16.37 (27)	30.59 (64)	25.42 (63)	0.81 (12)
<ul><li>Russell 2000 Growth Index</li></ul>	0.24 (24)	-29.28 (40)	-29.27 (54)	2.94 (78)	3.60 (79)	2.83 (82)	34.63 (56)	28.48 (47)	-9.31 (73)
Median	-1.36	-30.40	-29.12	4.73	5.95	10.53	36.55	27.69	-5.57

	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
Conestoga Small Cap Instl (CCALX)	-16.23 (20)	-15.28 (72)	5.02 (25)	4.02 (2)	3.44 (72)	2.97 (69)
Russell 2000 Growth Index	-19.25 (52)	-12.63 (47)	0.01 (73)	-5.65 (91)	3.92 (64)	4.88 (52)
IM U.S. Small Cap Growth Equity (MF) Median	-19.15	-12.81	2.47	-1.97	4.71	5.17



### 3 Yr Rolling Under/Over Performance - 5 Years 30.0 stoga Small Cap Instl (CCAL Over Performance 20.0 10.0 0.0 Under Performance -10.0 0.0 10.0 20.0 30.0 Russell 2000 Growth Index (%)

X Latest Date

### 3 Yr Rolling Percentile Ranking - 5 Years Return Percentile Rank 25.00 50.00 75.00 100.00 6/18 12/21 9/22 12/17 12/20 6/21 12/18 6/19 12/19 6/20

	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
<ul> <li>Conestoga Small Cap Instl (CCALX)</li> </ul>	20	10 (50%)	4 (20%)	5 (25%)	1 (5%)
<ul> <li>Russell 2000 Growth Index</li> </ul>	20	0 (0%)	4 (20%)	12 (60%)	4 (20%)

## Peer Group Scattergram - 3 Years 5.49 4.88 4.27 3.66 3.05 2.44 21.12 22.00 22.88 23.76 24.64 25.52 26.40 Risk (Standard Deviation %)

**Earliest Date** 

Over Performance

Peer Group Sca	attergram -	5 Years					
7.36 <b>6</b> .44		)					
<u> </u>							
4.60							
3.68						$\bigcirc$	
2.76	20.15	20.80	21 45	22 10	22 75	23 40	24.05

	Return	Standard Deviation
<ul> <li>Conestoga Small Cap Instl (CCALX)</li> </ul>	2.86	21.86
<ul> <li>Russell 2000 Growth Index</li> </ul>	2.94	25.61
Median	4.73	24.82

Return Deviation	
<ul> <li>Conestoga Small Cap Instl (CCALX)</li> <li>6.25</li> <li>20.40</li> </ul>	
<ul> <li>Russell 2000 Growth Index</li> <li>3.60</li> <li>23.26</li> </ul>	
Median 5.95 22.63	

Risk (Standard Deviation %)

Historical Statistics - 3 Years								
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Conestoga Small Cap Instl (CCALX)	8.63	81.16	80.47	0.24	-0.11	0.21	0.81	15.60
Russell 2000 Growth Index	0.00	100.00	100.00	0.00	N/A	0.22	1.00	17.76
Historical Statistics - 5 Years								
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Conestoga Small Cap Instl (CCALX)	7.68	91.34	82.27	3.01	0.25	0.34	0.83	14.24
Russell 2000 Growth Index	0.00	100.00	100.00	0.00	N/A	0.22	1.00	16.33



Product Name : American Funds EuPc;R6 (RERGX)
Fund Family : Capital Group/American Funds

Ticker: RERGX

Peer Group: IM International Large Cap Growth Equity (MF)

Benchmark: MSCI AC World ex USA (Net)

 Fund Inception:
 05/01/2009

 Portfolio Manager:
 Team Managed

 Total Assets:
 \$65,422 Million

 Total Assets Date:
 08/31/2022

 Gross Expense:
 0.46%

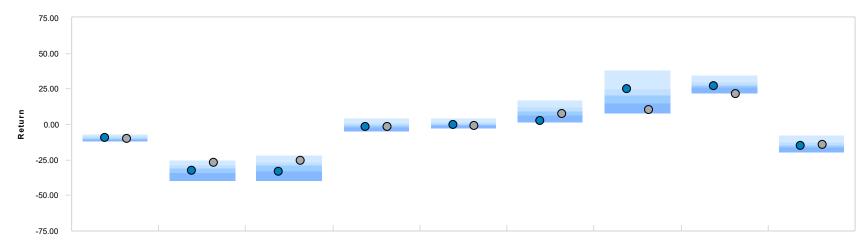
 Net Expense:
 0.46%

 Turnover:
 29%

### **Summary Description**

The Fund seeks to provide long-term growth of capital by investing in companies based outside the United States. The Fund Invests in companies based chiefly in Europe and the Pacific Basin, ranging from small firms to large corporations.

### Peer Group Analysis - IM International Large Cap Growth Equity (MF)

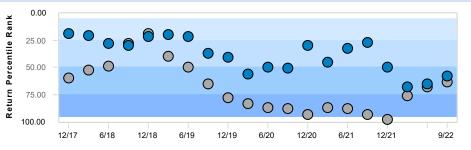


	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018	
<ul><li>EuroPacific Growth R6 (RERGX)</li></ul>	-9.33 (39)	-32.09 (58)	-32.85 (73)	-1.24 (58)	-0.23 (52)	2.84 (86)	25.27 (17)	27.40 (54)	-14.91 (54)	
MSCI AC World ex USA (Net)	-9.91 (67)	-26.50 (9)	-25.17 (10)	-1.52 (64)	-0.81 (73)	7.82 (61)	10.65 (90)	21.51 (96)	-14.20 (44)	
Median	-9.57	-30.90	-28.73	-0.84	-0.14	8.88	20.00	27.50	-14.67	

	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
EuroPacific Growth R6 (RERGX)	-14.65 (49)	-12.24 (59)	-1.13 (92)	-2.35 (57)	6.97 (25)	-0.43 (79)
MSCI AC World ex USA (Net)	-13.73 (32)	-5.44 (5)	1.82 (74)	-2.99 (68)	5.48 (67)	3.49 (13)
IM International Large Cap Growth Equity (MF) Median	-14.68	-10.99	3.17	-1.61	6.34	0.74

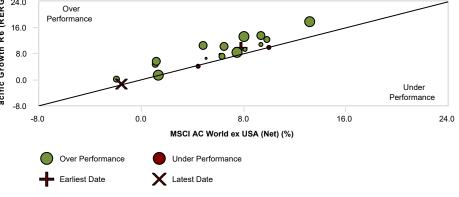


### 3 Yr Rolling Under/Over Performance - 5 Years 24.0 **B C Growth Re (RERG** 0.0 0.0 0.0 0.0 0.0 Over Performance Under Performance



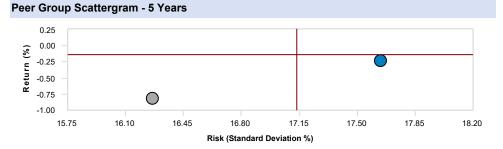
3 Yr Rolling Percentile Ranking - 5 Years

	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
<ul><li>EuroPacific Growth R6 (RERGX)</li></ul>	20	5 (25%)	10 (50%)	5 (25%)	0 (0%)
<ul> <li>MSCI AC World ex USA (Net)</li> </ul>	20	1 (5%)	4 (20%)	5 (25%)	10 (50%)



### Peer Group Scattergram - 3 Years -0.30 -0.60 Return (%) -0.90 -1.20 $\bigcirc$ -1.50 -1.80 17.63 18.04 18.45 18.86 19.27 19.68 20.09 20.50 Risk (Standard Deviation %)

	Return	Standard Deviation
<ul><li>EuroPacific Growth R6 (RERGX)</li></ul>	-1.24	19.93
<ul><li>MSCI AC World ex USA (Net)</li></ul>	-1.52	18.22
Median	-0.84	19.15



	Return	Standard Deviation
<ul><li>EuroPacific Growth R6 (RERGX)</li></ul>	-0.23	17.64
<ul><li>MSCI AC World ex USA (Net)</li></ul>	-0.81	16.26
Median	-0.14	17.14

		Up	Down					
	Tracking Error	Market Capture	Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
EuroPacific Growth R6 (RERGX)	4.84	110.18	107.80	0.59	0.12	0.01	1.06	14.57
MSCI AC World ex USA (Net)	0.00	100.00	100.00	0.00	N/A	-0.02	1.00	13.72
Historical Statistics - 5 Years								
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
EuroPacific Growth R6 (RERGX)	4.16	107.31	103.73	0.79	0.20	0.01	1.06	12.75
MSCI AC World ex USA (Net)	0.00	100.00	100.00	0.00	N/A	-0.04	1.00	12.08



Product Name : Dodge & Cox Income;I (DODIX)

Fund Family: Dodge & Cox Funds

Ticker: DODIX

Peer Group: IM U.S. Broad Market Core Fixed Income (MF)

Benchmark : Blmbg. U.S. Aggregate Index

 Fund Inception:
 01/03/1989

 Portfolio Manager:
 Team Managed

 Total Assets:
 \$59,837 Million

 Total Assets Date:
 07/31/2022

 Gross Expense:
 0.41%

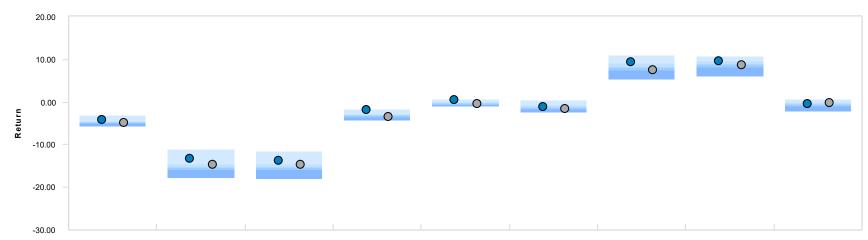
 Net Expense:
 0.41%

 Turnover:
 91%

### **Summary Description**

The Fund seeks a high and stable rate of current income, consistent with long-term preservation of capital. A secondary objective is to take advantage of opportunities to realize capital appreciation.

### Peer Group Analysis - IM U.S. Broad Market Core Fixed Income (MF)

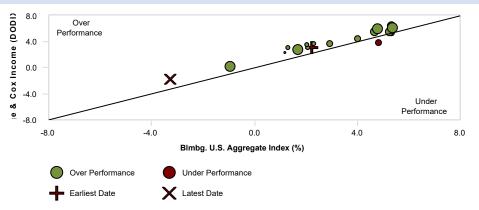


	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018
<ul><li>Dodge &amp; Cox Income (DODIX)</li></ul>	-3.99 (10)	-13.26 (8)	-13.63 (8)	-1.74 (6)	0.67 (3)	-0.91 (29)	9.45 (17)	9.73 (19)	-0.31 (33)
<ul><li>Blmbg. U.S. Aggregate Index</li></ul>	-4.75 (60)	-14.61 (28)	-14.60 (24)	-3.26 (55)	-0.27 (44)	-1.55 (60)	7.51 (73)	8.72 (53)	0.01 (18)
Median	-4.67	-15.17	-15.29	-3.22	-0.33	-1.33	8.15	8.76	-0.62

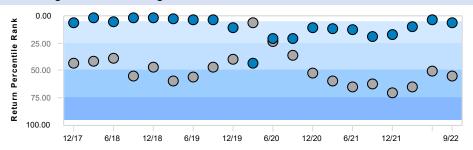
Comparative Performance						
	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021
Dodge & Cox Income (DODIX)	-4.70 (16)	-5.20 (10)	-0.43 (85)	0.10 (34)	1.98 (45)	-2.52 (21)
Blmbg. U.S. Aggregate Index	-4.69 (15)	-5.93 (47)	0.01 (21)	0.05 (45)	1.83 (64)	-3.38 (73)
IM U.S. Broad Market Core Fixed Income (MF) Median	-5.35	-5.98	-0.14	0.03	1.94	-3.07



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

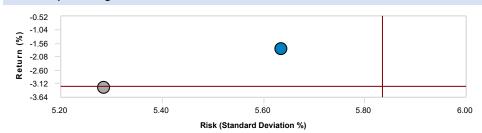


### 3 Yr Rolling Percentile Ranking - 5 Years



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
<ul><li>Dodge &amp; Cox Income (DODIX)</li></ul>	20	19 (95%)	1 (5%)	0 (0%)	0 (0%)
<ul> <li>Blmbg, U.S. Aggregate Index</li> </ul>	20	2 (10%)	7 (35%)	11 (55%)	0 (0%)

### Peer Group Scattergram - 3 Years



Peer Group	Scattergram - 5	rears
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Return	Standard Deviation
-1.74	5.63
-3.26	5.29
-3.22	5.84
	-1.74 -3.26

	Return	Deviation
<ul><li>Dodge &amp; Cox Income (DODIX)</li></ul>	0.67	4.69
<ul> <li>Blmbg. U.S. Aggregate Index</li> </ul>	-0.27	4.73
Median	-0.33	5.05

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

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Dodge & Cox Income (DODIX)	2.22	121.55	94.88	1.52	0.71	-0.38	0.98	4.51
Blmbg. U.S. Aggregate Index	0.00	100.00	100.00	0.00	N/A	-0.70	1.00	4.59

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

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Dodge & Cox Income (DODIX)	2.05	101.61	86.16	0.93	0.46	-0.08	0.90	3.53
Blmbg. U.S. Aggregate Index	0.00	100.00	100.00	0.00	N/A	-0.28	1.00	3.67



Product Name: Vanguard 500 ldx;Adm (VFIAX)

Fund Family : Vanguard Ticker : VFIAX

Peer Group: IM U.S. Large Cap Core Equity (MF)

 Benchmark :
 S&P 500 Index

 Fund Inception :
 11/13/2000

 Portfolio Manager :
 Butler/Louie

 Total Assets :
 \$395,580 Million

 Total Assets Date :
 07/31/2022

 Gross Expense :
 0.04%

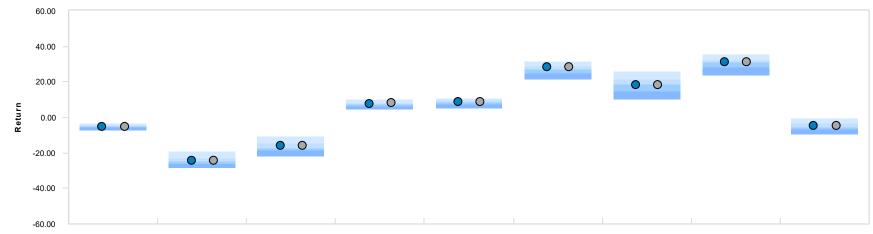
 Net Expense :
 0.04%

 Turnover :
 2%

### **Summary Description**

The Fund seeks to track the performance of its benchmark index, the S&P 500. The Fund employs an indexing investment approach. The Fund attempts to replicate the target index by investing all of its assets in the stocks that make up the Index with the same approximate weightings as the Index.

### Peer Group Analysis - IM U.S. Large Cap Core Equity (MF)



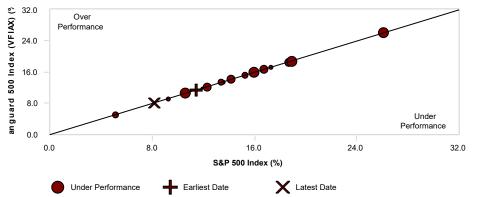
	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018	
<ul><li>Vanguard 500 Index (VFIAX)</li></ul>	-4.89 (42)	-23.89 (40)	-15.51 (32)	8.12 (25)	9.20 (27)	28.66 (26)	18.37 (51)	31.46 (37)	-4.43 (32)	
S&P 500 Index	-4.88 (42)	-23.87 (40)	-15.47 (31)	8.16 (24)	9.24 (26)	28.71 (25)	18.40 (50)	31.49 (36)	-4.38 (32)	
Median	-5.16	-24.48	-17.11	7.23	8.43	26.95	18.39	30.64	-5.45	

	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
Vanguard 500 Index (VFIAX)	-16.11 (58)	-4.61 (27)	11.02 (29)	0.57 (33)	8.54 (41)	6.18 (49)
S&P 500 Index	-16.10 (58)	-4.60 (26)	11.03 (29)	0.58 (32)	8.55 (40)	6.17 (49)
IM U.S. Large Cap Core Equity (MF) Median	-15.79	-5.62	10.18	0.26	8.32	6.11

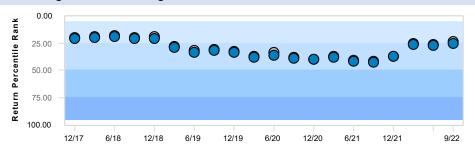


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### 3 Yr Rolling Under/Over Performance - 5 Years



### 3 Yr Rolling Percentile Ranking - 5 Years



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count	
<ul><li>Vanguard 500 Index (VFIAX)</li></ul>	20	6 (30%)	14 (70%)	0 (0%)	0 (0%)	
<ul> <li>S&amp;P 500 Index</li> </ul>	20	7 (35%)	13 (65%)	0 (0%)	0 (0%)	

### Peer Group Scattergram - 3 Years



### Peer Group Scattergram - 5 Years



	Return	Standard Deviation	
<ul><li>Vanguard 500 Index (VFIAX)</li></ul>	8.12	20.02	
<ul> <li>S&amp;P 500 Index</li> </ul>	8.16	20.02	
Median	7.23	19.81	

	Return	Standard Deviation
<ul><li>Vanguard 500 Index (VFIAX)</li></ul>	9.20	17.92
<ul> <li>S&amp;P 500 Index</li> </ul>	9.24	17.92
Median	8.43	17.73

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

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard 500 Index (VFIAX)	0.01	99.95	100.07	-0.04	-3.36	0.46	1.00	13.50
S&P 500 Index	0.00	100.00	100.00	0.00	N/A	0.46	1.00	13.49

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

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard 500 Index (VFIAX)	0.01	99.94	100.07	-0.03	-3.68	0.52	1.00	12.15
S&P 500 Index	0.00	100.00	100.00	0.00	N/A	0.52	1.00	12.15



Product Name: Vanguard Md-Cp I;Adm (VIMAX)

Fund Family : Vanguard Ticker : VIMAX

Peer Group : IM U.S. Mid Cap Core Equity (MF)
Benchmark : Vanguard Spliced Mid Cap Index

 Fund Inception:
 11/12/2001

 Portfolio Manager:
 Butler/Khan

 Total Assets:
 \$54,589 Million

 Total Assets Date:
 07/31/2022

 Gross Expense:
 0.05%

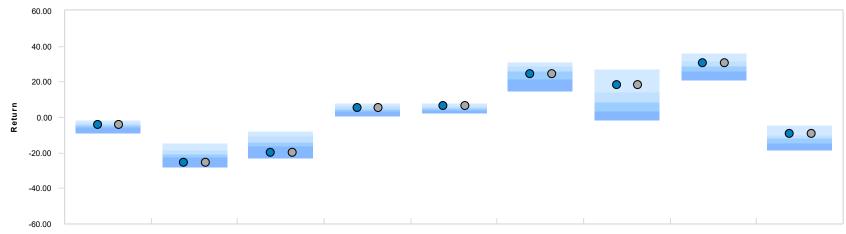
 Net Expense:
 0.05%

 Turnover:
 16%

### **Summary Description**

The Fund seeks to track the performance of a benchmark index that measures the investment return of mid-capitalization stocks.

### Peer Group Analysis - IM U.S. Mid Cap Core Equity (MF)



	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018
<ul><li>Vanguard Mid-Cap Index (VIMAX)</li></ul>	-4.14 (43)	-25.43 (93)	-19.48 (91)	5.47 (37)	6.64 (19)	24.51 (60)	18.24 (15)	31.03 (27)	-9.23 (22)
<ul><li>Vanguard Spliced Mid Cap Index</li></ul>	-4.14 (43)	-25.42 (93)	-19.47 (91)	5.48 (36)	6.66 (19)	24.52 (60)	18.24 (15)	31.09 (27)	-9.22 (22)
Median	-4.32	-20.76	-14.07	4.68	5.27	25.73	8.44	28.59	-11.64

Compar	ativo	Dorf	orman	~~
Combai	auve	ren	omman	ue

	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
Vanguard Mid-Cap Index (VIMAX)	-16.96 (93)	-6.32 (83)	7.97 (59)	0.00 (19)	7.58 (2)	7.18 (88)
Vanguard Spliced Mid Cap Index	-16.95 (93)	-6.31 (82)	7.98 (59)	0.01 (19)	7.59 (2)	7.18 (88)
IM U.S. Mid Cap Core Equity (MF) Median	-13.63	-4.08	8.20	-0.87	5.14	10.47



## 3 Yr Rolling Under/Over Performance - 5 Years Over Performance 10.0 10.0 10.0 Vanguard Spliced Mid Cap Index (%)

### 3 Yr Rolling Percentile Ranking - 5 Years Return Percentile Rank 0 0 50.00 75.00 100.00 12/17 6/18 6/20 12/20 6/21 12/21 9/22 12/18 6/19 12/19 5-25 25-Median Median-75 75-95

	Vanguard Spliced Mid	l Cap Index (%)		Total Period	Count	Count	Count	Count	
Under Performance	Earliest Date	X Latest Date	<ul><li>Vanguard Mid-Cap Index (VIMAX</li><li>Vanguard Spliced Mid Cap Index</li></ul>		13 (65%) 13 (65%)	7 (35%) 7 (35%)	0 (0%) 0 (0%)	0 (0%) 0 (0%)	

## Peer Group Scattergram - 3 Years 5.67 5.40 5.13 4.86 4.59 4.32 22.20 22.24 22.28 22.32 22.36 22.40 22.44 22.48 Risk (Standard Deviation %)

			Risk (Standard D	Neviation %)			
19.68	19.72	19.76	19.80	19.84	19.88	19.92	19.96
4.60							
3.00							
ž - 00							
5.52							
6.44 - 5.98 - 5.52 - 5.06							
€ 6.44						,	
6.90							
er Group Sc	attorgram .						

	Return	Standard Deviation
<ul> <li>Vanguard Mid-Cap Index (VIMAX)</li> </ul>	5.47	22.41
<ul> <li>Vanguard Spliced Mid Cap Index</li> </ul>	5.48	22.42
Median	4.68	22.26

	Return	Standard Deviation
<ul><li>Vanguard Mid-Cap Index (VIMAX)</li></ul>	6.64	19.89
<ul><li>Vanguard Spliced Mid Cap Index</li></ul>	6.66	19.89
Median	5.27	19.74

Historical Statistics - 3 Years								
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Mid-Cap Index (VIMAX)	0.03	99.97	100.01	-0.01	-0.49	0.32	1.00	15.96
Vanguard Spliced Mid Cap Index	0.00	100.00	100.00	0.00	N/A	0.32	1.00	15.97
Historical Statistics - 5 Years								
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Mid-Cap Index (VIMAX)	0.02	99.97	100.04	-0.02	-0.77	0.37	1.00	14.09
Vanguard Spliced Mid Cap Index	0.00	100.00	100.00	0.00	N/A	0.37	1.00	14.10



Product Name: Vanguard S-C Id;Adm (VSMAX)

Fund Family : Vanguard Ticker : VSMAX

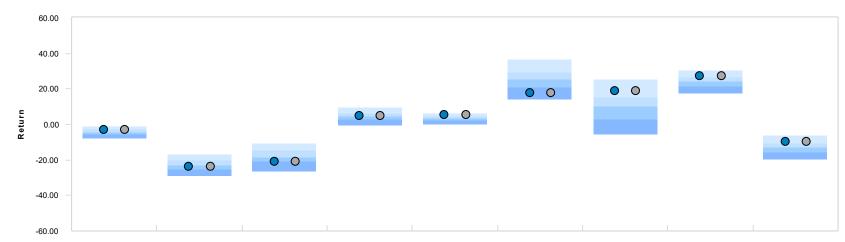
Peer Group: IM U.S. Small Cap Core Equity (MF)
Benchmark: Vanguard Spliced Small Cap Index

Fund Inception: 11/13/2000
Portfolio Manager: Coleman/O'Reilly
Total Assets: \$47,449 Million
Total Assets Date: 07/31/2022
Gross Expense: 0.05%
Net Expense: 0.05%
Turnover: 17%

### **Summary Description**

The Fund seeks to track the performance of a benchmark index that measures the investment return of small-capitalization stocks.

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



	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018	
<ul> <li>Vanguard Small-Cap Index (VSMAX)</li> </ul>	-2.61 (24)	-23.70 (62)	-20.74 (75)	4.98 (45)	5.37 (15)	17.73 (84)	19.11 (17)	27.37 (16)	-9.31 (18)	
Vanguard Spliced Small Cap Index	-2.63 (24)	-23.71 (62)	-20.75 (75)	4.96 (46)	5.35 (15)	17.71 (84)	19.07 (17)	27.35 (17)	-9.33 (18)	
Median	-4.48	-23.02	-18.44	4.60	3.57	25.12	9.89	23.94	-12.71	

	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
Vanguard Small-Cap Index (VSMAX)	-16.88 (79)	-5.74 (54)	3.87 (82)	-2.62 (57)	5.60 (17)	10.22 (95)
Vanguard Spliced Small Cap Index	-16.88 (79)	-5.74 (53)	3.87 (82)	-2.62 (57)	5.59 (17)	10.21 (95)
IM U.S. Small Cap Core Equity (MF) Median	-14.56	-5.65	5.94	-2.38	4.05	15.68



1 (5%)

1 (5%)

0 (0%)

0 (0%)

### 3 Yr Rolling Under/Over Performance - 5 Years 30.0 uard Small-Cap Index (VSMA) Over Performance 20.0 10.0 0.0 Under Performance -10.0 0.0 10.0 20.0 30.0 Vanguard Spliced Small Cap Index (%)

### 3 Yr Rolling Percentile Ranking - 5 Years Return Percentile Rank 25.00 50.00 75.00 100.00 12/17 6/18 12/18 12/19 12/20 6/21 12/21 9/22 6/19 6/20 5-25 25-Median Median-75 75-95 **Total Period** Count Count Count Count

20

20

Vanguard Small-Cap Index (VSMAX)

Vanguard Spliced Small Cap Index

Peer C	Group Scattergra	m - 3 Years			
(%) t	20 00 - 80 -				
••	60				
4.	24.20	24.40	24.60	24.80	25.00

Earliest Date

Over Performance

X Latest Date

ee	er Group Scat	tergram - 5 Ye	ears				
Return (%)	5.90	0					
	4.72 -						
	4.13 -						
œ	3.54						
	2.95	21.80	22.00	22.20	22.40	22.60	22.80
	21.00	21.00				22.00	22.60
			Risk (S	tandard Deviation	%)		

13 (65%)

13 (65%)

6 (30%)

6 (30%)

	Return	Standard Deviation
<ul> <li>Vanguard Small-Cap Index (VSMAX)</li> </ul>	4.98	24.30
<ul> <li>Vanguard Spliced Small Cap Index</li> </ul>	4.96	24.30
Median	4.60	24.88

Risk (Standard Deviation %)

	Return	Standard Deviation	
<ul><li>Vanguard Small-Cap Index (VSMAX)</li></ul>	5.37	21.82	
<ul> <li>Vanguard Spliced Small Cap Index</li> </ul>	5.35	21.83	
Median	3.57	22.57	

			_					
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Small-Cap Index (VSMAX)	0.02	100.04	99.96	0.03	1.00	0.30	1.00	17.43
Vanguard Spliced Small Cap Index	0.00	100.00	100.00	0.00	N/A	0.30	1.00	17.43
Historical Statistics - 5 Years								
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Small-Cap Index (VSMAX)	0.02	100.05	99.99	0.02	0.66	0.30	1.00	15.65
Vanguard Spliced Small Cap Index	0.00	100.00	100.00	0.00	N/A	0.30	1.00	15.65



Product Name: Vanguard Tot I S;Adm (VTIAX)

Fund Family : Vanguard Ticker : VTIAX

Peer Group: IM International Equity (MF)

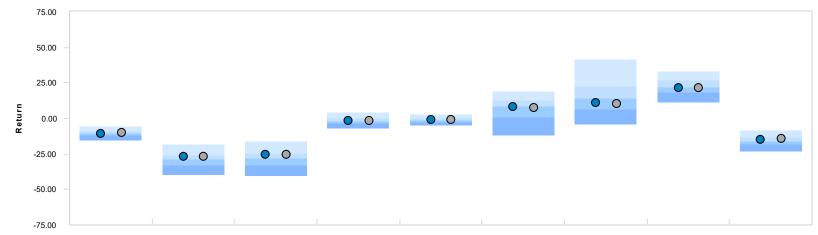
Benchmark: Vanguard Spliced International Index (Net)

Fund Inception: 11/29/2010
Portfolio Manager: Perre/Franquin
Total Assets: \$67,332 Million
Total Assets Date: 07/31/2022
Gross Expense: 0.11%
Net Expense: 0.11%
Turnover: 8%

### **Summary Description**

The Fund seeks to track the performance of a benchmark index that measures the investment return of stocks issued by companies located in developed and emerging markets, excluding the United States.

### Peer Group Analysis - IM International Equity (MF)



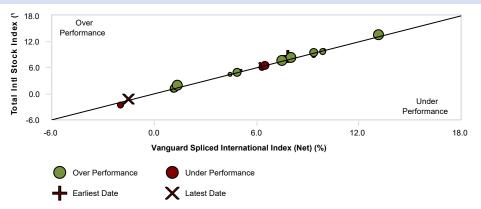
	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018	
<ul> <li>Vanguard Total Intl Stock Index (VTIAX)</li> </ul>	-10.51 (53)	-26.76 (31)	-25.21 (29)	-1.18 (38)	-0.70 (34)	8.62 (50)	11.28 (57)	21.51 (56)	-14.43 (34)	
<ul><li>Vanguard Spliced International Index (Net)</li></ul>	-9.91 (41)	-26.50 (29)	-25.17 (29)	-1.52 (44)	-0.81 (36)	7.82 (53)	10.65 (58)	21.52 (56)	-14.20 (32)	
Median	-10.39	-28.99	-28.15	-1.90	-1.50	8.50	13.71	22.06	-15.98	

_			
Comi	parative	DARTAR	manca

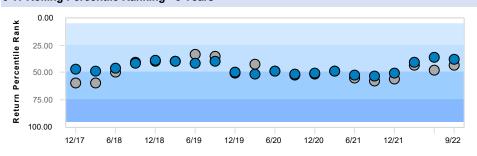
	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021
Vanguard Total Intl Stock Index (VTIAX)	-12.86 (47)	-6.08 (29)	2.11 (42)	-3.00 (57)	5.52 (45)	3.94 (41)
Vanguard Spliced International Index (Net)	-13.73 (59)	-5.44 (24)	1.82 (45)	-2.99 (57)	5.48 (46)	3.49 (46)
IM International Equity (MF) Median	-13.08	-8.77	1.29	-2.46	5.30	3.23



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

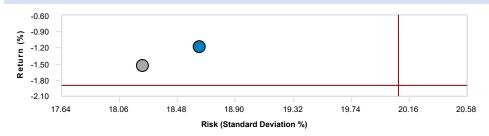


### 3 Yr Rolling Percentile Ranking - 5 Years

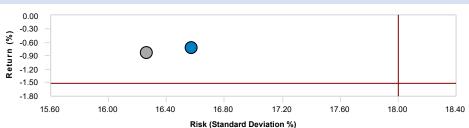


	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count	
<ul> <li>Vanguard Total Intl Stock Index (VTIAX)</li> </ul>	20	0 (0%)	14 (70%)	6 (30%)	0 (0%)	
<ul> <li>Vanguard Spliced International Index (Net)</li> </ul>	20	0 (0%)	12 (60%)	8 (40%)	0 (0%)	

### Peer Group Scattergram - 3 Years



### Peer Group Scattergram - 5 Years



Return	Standard Deviation
-1.18	18.64
-1.52	18.22
-1.90	20.08
	-1.18 -1.52

Return	Deviation
-0.70	16.57
-0.81	16.26
-1.50	18.00
	-0.70 -0.81

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

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Total Intl Stock Index (VTIAX)	2.01	102.98	101.22	0.43	0.22	0.00	1.02	14.13
Vanguard Spliced International Index (Net)	0.00	100.00	100.00	0.00	N/A	-0.02	1.00	13.72

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

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Total Intl Stock Index (VTIAX)	1.79	101.38	100.62	0.16	0.10	-0.03	1.01	12.42
Vanguard Spliced International Index (Net)	0.00	100.00	100.00	0.00	N/A	-0.04	1.00	12.08



Product Name: Vanguard Tot Bd;Adm (VBTLX)

Fund Family : Vanguard Ticker : VBTLX

Peer Group: IM U.S. Broad Market Core Fixed Income (MF)

Benchmark: Blmbg. U.S. Aggregate Float Adjusted

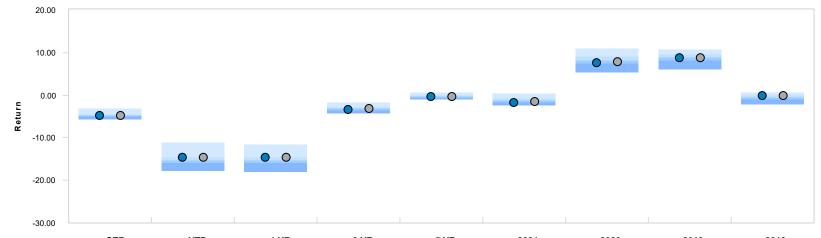
Fund Inception: 11/12/2001

Portfolio Manager: Joshua C. Barrickman
Total Assets: \$102,651 Million
Total Assets Date: 07/31/2022
Gross Expense: 0.05%
Net Expense: 0.05%
Turnover: 69%

### **Summary Description**

The Fund seeks to track the performance of a broad, market-weighted bond index.

### Peer Group Analysis - IM U.S. Broad Market Core Fixed Income (MF)



	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018	
<ul><li>Vanguard Total Bond Index Adm (VBTLX)</li></ul>	-4.65 (48)	-14.59 (27)	-14.66 (27)	-3.27 (56)	-0.26 (42)	-1.67 (66)	7.72 (65)	8.71 (53)	-0.03 (20)	
Blmbg. U.S. Aggregate Float Adjusted	-4.68 (51)	-14.65 (30)	-14.61 (24)	-3.22 (51)	-0.23 (39)	-1.58 (62)	7.75 (64)	8.87 (48)	-0.08 (21)	
Median	-4.67	-15.17	-15.29	-3.22	-0.33	-1.33	8.15	8.76	-0.62	

	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
Vanguard Total Bond Index Adm (VBTLX)	-4.71 (18)	-5.99 (52)	-0.09 (40)	0.11 (30)	2.00 (44)	-3.61 (88)
Blmbg. U.S. Aggregate Float Adjusted	-4.73 (19)	-6.01 (54)	0.05 (19)	0.05 (46)	1.96 (50)	-3.56 (86)
IM U.S. Broad Market Core Fixed Income (MF) Median	-5.35	-5.98	-0.14	0.03	1.94	-3.07



### 3 Yr Rolling Under/Over Performance - 5 Years d Total Bond Index Adm (VB Over Performance 0.0 Under Performance -3.0 0.0 3.0 6.0 9.0 -6.0 Blmbg. U.S. Aggregate Float Adjusted (%) X Latest Date Earliest Date Under Performance

### 3 Yr Rolling Percentile Ranking - 5 Years Return Percentile Rank 25.00 50.00 75.00 100.00 6/18 12/21 9/22 12/17 12/18 6/19 12/19 6/20 12/20 6/21

	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count	
<ul><li>Vanguard Total Bond Index Adm (VBTLX)</li></ul>	20	2 (10%)	7 (35%)	11 (55%)	0 (0%)	
<ul> <li>Blmbg. U.S. Aggregate Float Adjusted</li> </ul>	20	2 (10%)	9 (45%)	9 (45%)	0 (0%)	

Peer Group Scattergram - 5 Years

4.74

4.80

4.68

### Peer Group Scattergram - 3 Years -3.15 -3.18 Return (%) -3.21 $\bigcirc$ -3.24 -3.27 -3.30 5.20 5.30 5.40 5.50 5.60 5.70 5.80 5.90 6.00 Risk (Standard Deviation %)

### -0.16 -0.20 --0.24 --0.32 --0.36

4.86

	Return	Standard Deviation
<ul><li>Vanguard Total Bond Index Adm (VBTLX)</li></ul>	-3.27	5.31
<ul> <li>Blmbg. U.S. Aggregate Float Adjusted</li> </ul>	-3.22	5.32
Median	-3.22	5.84

	Return	Standard Deviation
<ul><li>Vanguard Total Bond Index Adm (VBTLX)</li></ul>	-0.26	4.77
<ul> <li>Blmbg. U.S. Aggregate Float Adjusted</li> </ul>	-0.23	4.77
Median	-0.33	5.05

4.92

Risk (Standard Deviation %)

4.98

5.04

5.10

5.16

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Total Bond Index Adm (VBTLX)	0.26	100.03	100.61	-0.06	-0.19	-0.70	1.00	4.60
Blmbg. U.S. Aggregate Float Adjusted	0.00	100.00	100.00	0.00	N/A	-0.69	1.00	4.59
Historical Statistics - 5 Years								
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Total Bond Index Adm (VBTLX)	0.26	99.21	99.67	-0.03	-0.11	-0.27	1.00	3.67
Blmbg. U.S. Aggregate Float Adjusted	0.00	100.00	100.00	0.00	N/A	-0.27	1.00	3.67



Product Name: Vanguard Tgt Ret2020;Inv (VTWNX)

Fund Family : Vanguard Ticker : VTWNX

Peer Group : IM Mixed-Asset Target 2020 (MF)
Benchmark : Vanguard Target 2020 Composite Index

 Fund Inception:
 06/07/2006

 Portfolio Manager:
 Team Managed

 Total Assets:
 \$45,022 Million

 Total Assets Date:
 07/31/2022

 Gross Expense:
 0.08%

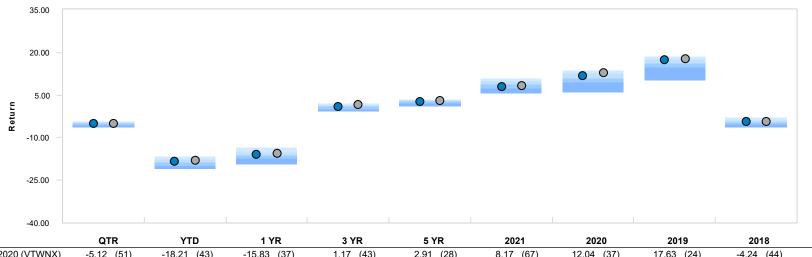
 Net Expense:
 0.08%

 Turnover:
 5%

### **Summary Description**

The Fund seeks to provide capital appreciation and current income consistent with its current asset allocation. The Fund invests in other Vanguard mutual funds according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2020.

### Peer Group Analysis - IM Mixed-Asset Target 2020 (MF)



	QIR	YID	1 YR	3 YR	5 YR	2021	2020	2019	2018
<ul> <li>Vanguard Target Retirement 2020 (VTWNX)</li> </ul>	-5.12 (51)	-18.21 (43)	-15.83 (37)	1.17 (43)	2.91 (28)	8.17 (67)	12.04 (37)	17.63 (24)	-4.24 (44)
<ul> <li>Vanguard Target 2020 Composite Index</li> </ul>	-4.93 (39)	-17.97 (37)	-15.53 (29)	1.62 (22)	3.26 (8)	8.43 (60)	12.85 (21)	17.87 (20)	-4.13 (40)
Median	-5.12	-18.70	-16.29	0.99	2.61	8.70	10.90	15.97	-4.52

Compara	ative I	Perfo	rmance

	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
Vanguard Target Retirement 2020 (VTWNX)	-9.20 (38)	-5.06 (42)	2.91 (50)	-0.41 (40)	4.20 (53)	1.28 (64)
Vanguard Target 2020 Composite Index	-9.30 (42)	-4.87 (36)	2.97 (47)	-0.29 (29)	4.22 (52)	1.33 (61)
IM Mixed-Asset Target 2020 (MF) Median	-9.48	-5.30	2.88	-0.47	4.27	1.66



### 3 Yr Rolling Under/Over Performance - 5 Years 15.0 d Target Retirement 2020 (VT) Over Performance 10.0 5.0 0.0 Under Performance -5.0 0.0 5.0 10.0 15.0 Vanguard Target 2020 Composite Index (%)

## 3 Yr Rolling Percentile Ranking - 5 Years 0.00 25.00 75.00 100.00

	Total Period	5-25 Count	25-Median I Count	Median-75 Count	75-95 Count
<ul> <li>Vanguard Target Retirement 2020 (VTWNX)</li> </ul>	20	13 (65%)	7 (35%)	0 (0%)	0 (0%)
<ul> <li>Vanguard Target 2020 Composite Index</li> </ul>	20	19 (95%)	1 (5%)	0 (0%)	0 (0%)

12/19

6/20

12/20

6/21

12/21

9/22

## Peer Group Scattergram - 3 Years 1.80 1.50 1.20 0.90 0.60 10.72 10.76 10.80 10.84 10.88 10.92 10.96 Risk (Standard Deviation %)

X Latest Date

Earliest Date

Under Performance

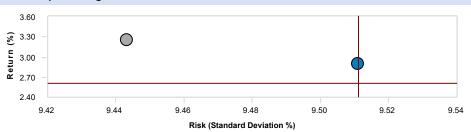
Peer Group Scattergram - 5	Years
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12/17

6/18

12/18

6/19



	Return	Standard Deviation
<ul><li>Vanguard Target Retirement 2020 (VTWNX)</li></ul>	1.17	10.83
<ul><li>Vanguard Target 2020 Composite Index</li></ul>	1.62	10.74
Median	0.99	10.91

	Return	Deviation	
<ul><li>Vanguard Target Retirement 2020 (VTWNX)</li></ul>	2.91	9.51	
<ul> <li>Vanguard Target 2020 Composite Index</li> </ul>	3.26	9.44	
Median	2.61	9.51	

Historical Statistics - 3 Years								
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Target Retirement 2020 (VTWNX)	0.53	99.13	102.20	-0.45	-0.82	0.11	1.01	8.00
Vanguard Target 2020 Composite Index	0.00	100.00	100.00	0.00	N/A	0.15	1.00	7.80
Historical Statistics - 5 Years								
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Target Retirement 2020 (VTWNX)	0.45	98.64	101.31	-0.36	-0.75	0.23	1.01	6.85
Vanguard Target 2020 Composite Index	0.00	100.00	100.00	0.00	N/A	0.26	1.00	6.70



Product Name: Vanguard Tgt Ret2025;Inv (VTTVX)

Fund Family : Vanguard Ticker : VTTVX

Peer Group : IM Mixed-Asset Target 2025 (MF)
Benchmark : Vanguard Target 2025 Composite Index

 Fund Inception:
 10/27/2003

 Portfolio Manager:
 Team Managed

 Total Assets:
 \$78,282 Million

 Total Assets Date:
 07/31/2022

 Gross Expense:
 0.08%

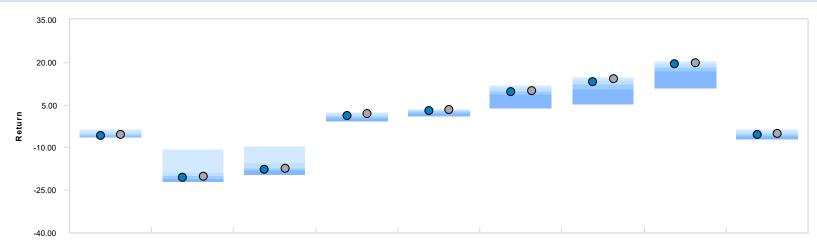
 Net Expense:
 0.08%

 Turnover:
 7%

### **Summary Description**

The Fund seeks to provide capital appreciation and current income consistent with its current asset allocation. The Fund invests in other Vanguard mutual funds according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2025.

### Peer Group Analysis - IM Mixed-Asset Target 2025 (MF)



	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018
<ul> <li>Vanguard Target Retirement 2025 (VTTVX)</li> </ul>	-5.59 (65)	-20.35 (66)	-17.53 (65)	1.40 (41)	3.15 (29)	9.80 (46)	13.30 (33)	19.63 (18)	-5.15 (47)
<ul><li>Vanguard Target 2025 Composite Index</li></ul>	-5.32 (55)	-19.95 (49)	-17.09 (46)	1.97 (18)	3.58 (8)	10.09 (37)	14.19 (15)	19.93 (12)	-5.00 (43)
Median	-5.23	-19.99	-17.19	1.11	2.82	9.70	12.13	18.18	-5.23

	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
Vanguard Target Retirement 2025 (VTTVX)	-10.72 (70)	-5.51 (52)	3.55 (38)	-0.65 (60)	4.79 (40)	1.86 (45)
Vanguard Target 2025 Composite Index	-10.81 (71)	-5.21 (40)	3.58 (35)	-0.50 (42)	4.83 (35)	1.90 (43)
IM Mixed-Asset Target 2025 (MF) Median	-10.28	-5.48	3.37	-0.57	4.59	1.80



### 3 Yr Rolling Under/Over Performance - 5 Years 20.0 d Target Retirement 2025 (VT Over Performance 15.0 5.0 0.0 Under Performance 0.0 10.0 15.0 20.0 -5.0 5.0 Vanguard Target 2025 Composite Index (%) Earliest Date X Latest Date Under Performance

### 3 Yr Rolling Percentile Ranking - 5 Years Return Percentile Rank 25.00 50.00 75.00 100.00 6/18 12/20 6/21 12/21 9/22 12/17 12/18 6/19 12/19 6/20 Total 5-25 25-Median Median-75 75-95 Period Count Count Count Count Vanguard Target Retirement 2025 (VTTVX) 20 15 (75%) 5 (25%) 0 (0%) 0 (0%) Vanguard Target 2025 Composite Index 20 20 (100% 0 (0%) 0 (0%) 0 (0%)



Pee	r Group Sca	attergram - 5 Y	ears				
(%	3.75				0		
Return (%)	3.25 – 3.00 –						
œ	2.75 – 2.50		ı	ı	ı	ı	
		10.71	10.80	10.89	10.98	11.07	11.16
			Risk (S	tandard Deviation	%)		

	Return	Standard Deviation
<ul> <li>Vanguard Target Retirement 2025 (VTTVX)</li> </ul>	1.40	12.60
<ul> <li>Vanguard Target 2025 Composite Index</li> </ul>	1.97	12.49
Median	1.11	12.18

	Return	Standard Deviation
<ul> <li>Vanguard Target Retirement 2025 (VTTVX)</li> </ul>	3.15	11.08
<ul> <li>Vanguard Target 2025 Composite Index</li> </ul>	3.58	10.99
Median	2.82	10.71

Historical Statistics - 3 Years								
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Target Retirement 2025 (VTTVX)	0.66	98.73	102.01	-0.57	-0.83	0.13	1.01	9.27
Vanguard Target 2025 Composite Index	0.00	100.00	100.00	0.00	N/A	0.17	1.00	9.03
Historical Statistics - 5 Years								
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Target Retirement 2025 (VTTVX)	0.55	98.61	101.37	-0.44	-0.74	0.23	1.01	7.98
Vanguard Target 2025 Composite Index	0.00	100.00	100.00	0.00	N/A	0.27	1.00	7.80



Product Name: Vanguard Tgt Ret2030;Inv (VTHRX)

Fund Family : Vanguard Ticker : VTHRX

Peer Group : IM Mixed-Asset Target 2030 (MF)
Benchmark : Vanguard Target 2030 Composite Index

 Fund Inception:
 06/07/2006

 Portfolio Manager:
 Team Managed

 Total Assets:
 \$81,041 Million

 Total Assets Date:
 07/31/2022

 Gross Expense:
 0.08%

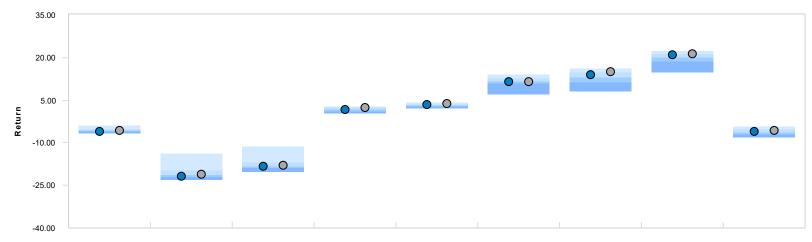
 Net Expense:
 0.08%

 Turnover:
 12%

### **Summary Description**

The Fund seeks to provide capital appreciation and current income consistent with its current asset allocation. The Fund invests in other Vanguard mutual funds according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2030.

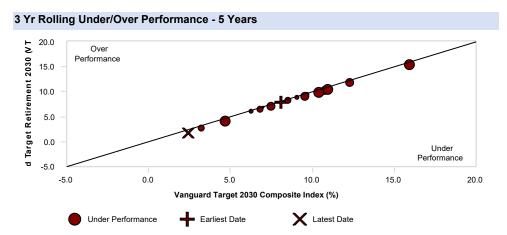
### Peer Group Analysis - IM Mixed-Asset Target 2030 (MF)



	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018
<ul> <li>Vanguard Target Retirement 2030 (VTHRX)</li> </ul>	-5.93 (71)	-21.60 (53)	-18.42 (59)	1.82 (47)	3.43 (36)	11.38 (52)	14.10 (36)	21.07 (32)	-5.86 (39)
<ul> <li>Vanguard Target 2030 Composite Index</li> </ul>	-5.58 (50)	-21.16 (44)	-17.96 (46)	2.39 (20)	3.87 (14)	11.66 (44)	14.98 (18)	21.34 (26)	-5.72 (35)
Median	-5.59	-21.54	-18.17	1.67	3.24	11.44	12.86	20.08	-6.32

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
Vanguard Target Retirement 2030 (VTHRX)	-11.67 (66)	-5.65 (41)	4.06 (43)	-0.78 (54)	5.25 (48)	2.49 (63)
Vanguard Target 2030 Composite Index	-11.82 (72)	-5.31 (26)	4.06 (44)	-0.62 (38)	5.29 (43)	2.54 (60)
IM Mixed-Asset Target 2030 (MF) Median	-11.36	-5.74	3.99	-0.74	5.21	2.65





### 3 Yr Rolling Percentile Ranking - 5 Years Return Percentile Rank 25.00 50.00 75.00 100.00 6/18 6/21 12/21 9/22 12/17 12/18 6/19 12/19 6/20 12/20

	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count	
<ul> <li>Vanguard Target Retirement 2030 (VTHRX)</li> </ul>	20	10 (50%)	10 (50%)	0 (0%)	0 (0%)	
<ul><li>Vanguard Target 2030 Composite Index</li></ul>	20	19 (95%)	1 (5%)	0 (0%)	0 (0%)	

## Peer Group Scattergram - 3 Years 2.70 2.40 2.10 1.80 1.80 13.83 13.86 13.89 13.92 13.95 Risk (Standard Deviation %)

Pee	r Group Scatte	ergram - 5 Years				
	4.20					
(%)	3.90 -					
Return	3.60					
æ	3.30 -					
	3.00	1		ı	ı	
	12.15	12.18	12.21	12.24	12.27	12.30
			Risk (Standard D	Deviation %)		

	Return	Standard Deviation
<ul> <li>Vanguard Target Retirement 2030 (VTHRX)</li> </ul>	1.82	13.91
<ul> <li>Vanguard Target 2030 Composite Index</li> </ul>	2.39	13.80
Median	1.67	13.92

	Return	Deviation	
<ul> <li>Vanguard Target Retirement 2030 (VTHRX)</li> </ul>	3.43	12.27	-
<ul> <li>Vanguard Target 2030 Composite Index</li> </ul>	3.87	12.18	
Median	3.24	12.23	

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Target Retirement 2030 (VTHRX)	0.69	99.01	101.96	-0.57	-0.78	0.16	1.01	10.17
Vanguard Target 2030 Composite Index	0.00	100.00	100.00	0.00	N/A	0.20	1.00	9.94
Historical Statistics - 5 Years								
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Target Retirement 2030 (VTHRX)	0.59	98.77	101.29	-0.44	-0.71	0.24	1.01	8.82
Vanguard Target 2030 Composite Index	0.00	100.00	100.00	0.00	N/A	0.28	1.00	8.64



Product Name: Vanguard Tgt Ret2035;Inv (VTTHX)

Fund Family : Vanguard Ticker : VTTHX

Peer Group : IM Mixed-Asset Target 2035 (MF)
Benchmark : Vanguard Target 2035 Composite Index

 Fund Inception:
 10/27/2003

 Portfolio Manager:
 Team Managed

 Total Assets:
 \$79,028 Million

 Total Assets Date:
 07/31/2022

 Gross Expense:
 0.08%

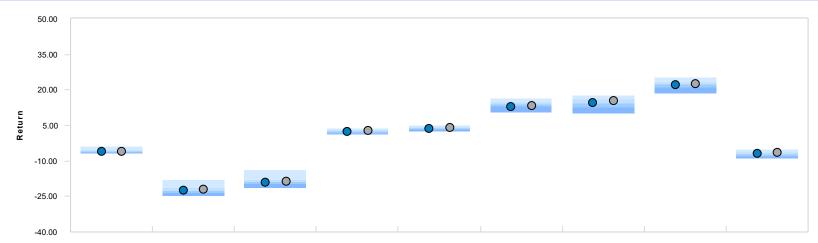
 Net Expense:
 0.08%

 Turnover:
 6%

### **Summary Description**

The Fund seeks to provide capital appreciation and current income consistent with its current asset allocation. The Fund invests in other Vanguard mutual funds according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2035.

### Peer Group Analysis - IM Mixed-Asset Target 2035 (MF)



	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018	
<ul> <li>Vanguard Target Retirement 2035 (VTTHX)</li> </ul>	-6.09 (62)	-22.40 (35)	-18.87 (46)	2.39 (49)	3.78 (39)	12.96 (76)	14.79 (43)	22.44 (45)	-6.58 (33)	
<ul> <li>Vanguard Target 2035 Composite Index</li> </ul>	-5.75 (40)	-22.01 (30)	-18.48 (32)	2.94 (25)	4.22 (18)	13.24 (68)	15.67 (27)	22.76 (36)	-6.46 (30)	
Median	-5.87	-22.90	-19.06	2.36	3.62	13.84	14.15	22.26	-7.26	

	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
Vanguard Target Retirement 2035 (VTTHX)	-12.41 (39)	-5.66 (25)	4.55 (59)	-0.87 (47)	5.65 (64)	3.17 (77)
Vanguard Target 2035 Composite Index	-12.62 (51)	-5.29 (14)	4.52 (59)	-0.70 (32)	5.73 (58)	3.19 (76)
IM Mixed-Asset Target 2035 (MF) Median	-12.61	-6.09	4.72	-0.91	5.80	3.60



### 3 Yr Rolling Under/Over Performance - 5 Years 20.0 d Target Retirement 2035 (VT Over Performance 15.0 5.0 0.0 Under Performance -5.0 0.0 5.0 10.0 15.0 20.0 Vanguard Target 2035 Composite Index (%)

## 3 Yr Rolling Percentile Ranking - 5 Years 25.00 25.00 75.00 12/17 6/18 12/18 6/19 12/19 6/20 12/20 6/21 12/21 9/22

	Total	5-25 25-Median		Median-75	75-95
	Period	Count	Count	Count	Count
<ul> <li>Vanguard Target Retirement 2035 (VTTHX)</li> </ul>	20	4 (20%)	15 (75%)	1 (5%)	0 (0%)
<ul> <li>Vanguard Target 2035 Composite Index</li> </ul>	20	15 (75%)	5 (25%)	0 (0%)	0 (0%)

## Peer Group Scattergram - 3 Years 3.20 3.00 2.80 2.60 2.40 2.20 14.80 15.00 15.20 15.40 15.60 15.80 Risk (Standard Deviation %)

X Latest Date

Earliest Date

Under Performance

	13.20	13.30	13.40	13.50	13.60	13.70	13.80	13.90
	3.40							
	3.60							
et et	3.80							
5	0.00							
<u>و</u>	4.00							
9	4.20 - 4.00 - 3.80 -							
	4.40	_						

	Return	Standard Deviation
<ul> <li>Vanguard Target Retirement 2035 (VTTHX)</li> </ul>	2.39	15.14
<ul> <li>Vanguard Target 2035 Composite Index</li> </ul>	2.94	15.04
Median	2.36	15.57

Return	Standard Deviation
3.78	13.41
4.22	13.33
3.62	13.76
	3.78 4.22

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Target Retirement 2035 (VTTHX)	0.72	99.21	101.81	-0.54	-0.73	0.19	1.01	10.98
Vanguard Target 2035 Composite Index	0.00	100.00	100.00	0.00	N/A	0.23	1.00	10.77
Historical Statistics - 5 Years								
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Target Retirement 2035 (VTTHX)	0.62	98.91	101.17	-0.43	-0.65	0.26	1.00	9.61
Vanguard Target 2035 Composite Index	0.00	100.00	100.00	0.00	N/A	0.29	1.00	9.44



Product Name: Vanguard Tgt Ret2040;Inv (VFORX)

Fund Family : Vanguard Ticker : VFORX

Peer Group : IM Mixed-Asset Target 2040 (MF)
Benchmark : Vanguard Target 2040 Composite Index

 Fund Inception:
 06/07/2006

 Portfolio Manager:
 Team Managed

 Total Assets:
 \$68,097 Million

 Total Assets Date:
 07/31/2022

 Gross Expense:
 0.08%

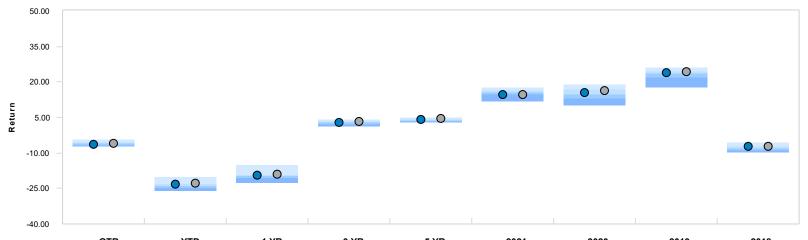
 Net Expense:
 0.08%

 Turnover:
 5%

### **Summary Description**

The Fund seeks to provide capital appreciation and current income consistent with its current asset allocation. The Fund invests in other Vanguard mutual funds according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2040.

### Peer Group Analysis - IM Mixed-Asset Target 2040 (MF)

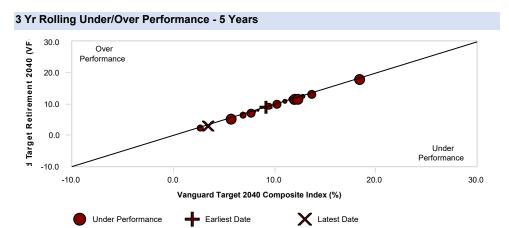


	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018	
<ul> <li>Vanguard Target Retirement 2040 (VFORX)</li> </ul>	-6.33 (62)	-23.27 (27)	-19.42 (31)	2.91 (44)	4.11 (34)	14.56 (79)	15.47 (39)	23.86 (44)	-7.32 (33)	
Vanguard Target 2040 Composite Index	-5.93 (42)	-22.86 (22)	-19.01 (22)	3.47 (20)	4.55 (13)	14.84 (72)	16.31 (30)	24.19 (36)	-7.22 (30)	
Median	-6.13	-24.21	-19.89	2.71	3.89	15.67	14.74	23.63	-7.97	

	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
Vanguard Target Retirement 2040 (VFORX)	-13.17 (31)	-5.66 (24)	5.02 (60)	-0.98 (47)	6.11 (60)	3.82 (77)
Vanguard Target 2040 Composite Index	-13.43 (42)	-5.27 (12)	4.99 (61)	-0.78 (30)	6.17 (56)	3.84 (76)
IM Mixed-Asset Target 2040 (MF) Median	-13.69	-6.25	5.21	-1.03	6.25	4.42

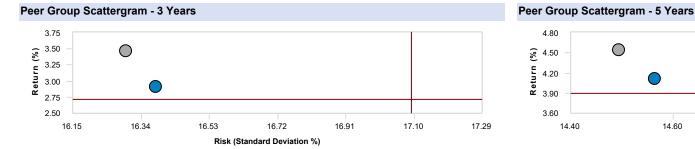


15.00



### 3 Yr Rolling Percentile Ranking - 5 Years Return Percentile Rank 25.00 50.00 75.00 100.00 12/17 6/18 6/21 12/21 9/22 12/18 6/19 12/19 6/20 12/20

	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count	
<ul> <li>Vanguard Target Retirement 2040 (VFORX)</li> </ul>	20	9 (45%)	10 (50%)	1 (5%)	0 (0%)	Ī
<ul> <li>Vanguard Target 2040 Composite Index</li> </ul>	20	16 (80%)	4 (20%)	0 (0%)	0 (0%)	



		-	_			
	4.80					
(%)	4.50 -		$\circ$			
_						
R	4.20 – 3.90 –					
	3.60					

14.80

Risk (Standard Deviation %)

14.60

	Return	Standard Deviation
<ul><li>Vanguard Target Retirement 2040 (VFORX)</li></ul>	2.91	16.38
<ul> <li>Vanguard Target 2040 Composite Index</li> </ul>	3.47	16.30
Median	2.71	17.09

	Return	Deviation
<ul> <li>Vanguard Target Retirement 2040 (VFORX)</li> </ul>	4.11	14.56
<ul> <li>Vanguard Target 2040 Composite Index</li> </ul>	4.55	14.49
Median	3.89	15.07
<ul> <li>Vanguard Target 2040 Composite Index</li> </ul>	4.55	14.49

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
/anguard Target Retirement 2040 (VFORX)	0.75	99.28	101.71	-0.54	-0.70	0.22	1.00	11.81
Vanguard Target 2040 Composite Index	0.00	100.00	100.00	0.00	N/A	0.25	1.00	11.61
Historical Statistics - 5 Years								
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Target Retirement 2040 (VFORX)	0.65	99.01	101.08	-0.43	-0.63	0.27	1.00	10.40
Vanguard Target 2040 Composite Index	0.00	100.00	100.00	0.00	N/A	0.30	1.00	10.24

14.40



15.20

Product Name: Vanguard Tgt Ret2045;Inv (VTIVX)

Fund Family : Vanguard Ticker : VTIVX

Peer Group : IM Mixed-Asset Target 2045 (MF)
Benchmark : Vanguard Target 2045 Composite Index

 Fund Inception:
 10/27/2003

 Portfolio Manager:
 Team Managed

 Total Assets:
 \$63,229 Million

 Total Assets Date:
 07/31/2022

 Gross Expense:
 0.08%

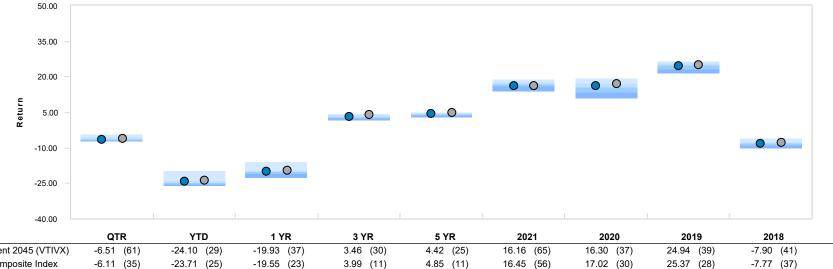
 Net Expense:
 0.08%

 Turnover:
 4%

### **Summary Description**

The Fund seeks to provide capital appreciation and current income consistent with its current asset allocation. The Fund invests in other Vanguard mutual funds according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2045.

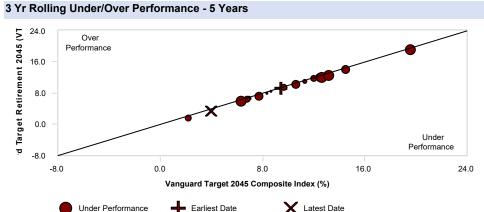
### Peer Group Analysis - IM Mixed-Asset Target 2045 (MF)



O Vanguard Target 2045 Composite Index	-6.11 (35)	-23.71 (25)	-19.55 (23)	3.99 (11)	4.85 (11)	16.45 (56)	17.02 (30)	25.37 (28)	-7.77 (37)

	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
Vanguard Target Retirement 2045 (VTIVX)	-13.93 (31)	-5.67 (24)	5.49 (58)	-1.08 (45)	6.55 (47)	4.47 (72)
Vanguard Target 2045 Composite Index	-14.22 (47)	-5.26 (9)	5.45 (60)	-0.87 (28)	6.61 (40)	4.49 (70)
IM Mixed-Asset Target 2045 (MF) Median	-14.30	-6.26	5.74	-1.14	6.52	4.96





### 3 Yr Rolling Percentile Ranking - 5 Years Return Percentile Rank 50.00 75.00 100.00 6/18 6/21 12/21 9/22 12/17 12/18 6/19 12/19 6/20 12/20 Total 5-25 25-Median Median-75 75-95

	Vanguard Target 2045 Cor	mposite Index (%)		Period	Count	Count	Count	Count	
Under Derfermense	<b>A</b> 11 - 12 - 13 - 13 - 13 - 13 - 13 - 13 -	<ul> <li>Vanguard Target Retirement 2045 (VTIVX)</li> </ul>	20	10 (50%)	10 (50%)	0 (0%)	0 (0%)		
Under Performance	Under Performance + Earliest Date X Latest Date		<ul><li>Vanguard Target 2045 Composite Index</li></ul>	20	18 (90%)	2 (10%)	0 (0%)	0 (0%)	

### Peer Group Scattergram - 3 Years 4.16 3.84 3.52 3.20 2.88 2.56 17.60 17.80 17.40 18.00 18.20 Risk (Standard Deviation %)

Pee	er Group Scat	tergram - 5 Y	ears				
Return (%)	4.42 - 4.16 -	0	•				
	3.90 L	15.54	15.61	15.68	15.75	15.82	15.89
			Risk (S	tandard Deviation	%)		

	Return	Standard Deviation
<ul> <li>Vanguard Target Retirement 2045 (VTIVX)</li> </ul>	3.46	17.63
<ul> <li>Vanguard Target 2045 Composite Index</li> </ul>	3.99	17.55
Median	3.02	18.01

	Return	Standard Deviation
<ul> <li>Vanguard Target Retirement 2045 (VTIVX)</li> </ul>	4.42	15.63
<ul> <li>Vanguard Target 2045 Composite Index</li> </ul>	4.85	15.56
Median	4.08	15.83

Historical Statistics - 3 Years								
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Target Retirement 2045 (VTIVX)	0.78	99.50	101.66	-0.51	-0.64	0.25	1.00	12.62
Vanguard Target 2045 Composite Index	0.00	100.00	100.00	0.00	N/A	0.28	1.00	12.44
Historical Statistics - 5 Years								
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Target Retirement 2045 (VTIVX)	0.67	99.15	101.08	-0.42	-0.60	0.28	1.00	11.13
Vanguard Target 2045 Composite Index	0.00	100.00	100.00	0.00	N/A	0.31	1.00	10.98



Product Name : Vanguard Tgt Ret2050;Inv (VFIFX)

Fund Family : Vanguard Ticker : VFIFX

Peer Group : IM Mixed-Asset Target 2050 (MF)
Benchmark : Vanguard Target 2050 Composite Index

 Fund Inception:
 06/07/2006

 Portfolio Manager:
 Team Managed

 Total Assets:
 \$50,423 Million

 Total Assets Date:
 07/31/2022

 Gross Expense:
 0.08%

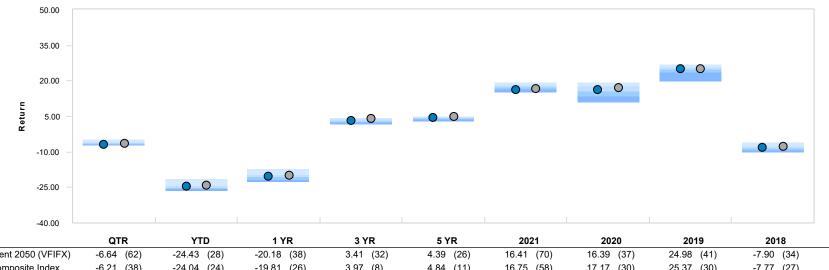
 Net Expense:
 0.08%

 Turnover:
 4%

### **Summary Description**

The Fund seeks to provide capital appreciation and current income consistent with its current asset allocation. The Fund invests in other Vanguard mutual funds according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2050.

### Peer Group Analysis - IM Mixed-Asset Target 2050 (MF)



	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018	
<ul> <li>Vanguard Target Retirement 2050 (VFIFX)</li> </ul>	-6.64 (62)	-24.43 (28)	-20.18 (38)	3.41 (32)	4.39 (26)	16.41 (70)	16.39 (37)	24.98 (41)	-7.90 (34)	
<ul> <li>Vanguard Target 2050 Composite Index</li> </ul>	-6.21 (38)	-24.04 (24)	-19.81 (26)	3.97 (8)	4.84 (11)	16.75 (58)	17.17 (30)	25.37 (30)	-7.77 (27)	
Median	-6.47	-25.19	-20.67	3.08	4.09	16.99	15.54	24.67	-8.54	

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- 11	Comb	arative	Perto	rmance

	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
Vanguard Target Retirement 2050 (VFIFX)	-14.21 (33)	-5.65 (23)	5.63 (63)	-1.11 (43)	6.61 (53)	4.53 (79)
Vanguard Target 2050 Composite Index	-14.53 (48)	-5.25 (10)	5.58 (64)	-0.89 (24)	6.69 (45)	4.58 (76)
IM Mixed-Asset Target 2050 (MF) Median	-14.62	-6.32	5.88	-1.17	6.63	5.11



### 3 Yr Rolling Under/Over Performance - 5 Years 24.0 d Target Retirement 2050 (VF Over Performance 16.0 8.0 0.0 Under Performance -8.0 -8.0 0.0 8.0 16.0 24.0 Vanguard Target 2050 Composite Index (%) Earliest Date X Latest Date Under Performance

### 3 Yr Rolling Percentile Ranking - 5 Years Return Percentile Rank 25.00 50.00 75.00 100.00 6/18 6/21 12/21 9/22 12/17 12/18 6/19 12/19 6/20 12/20 Total 5-25 25-Median Median-75 75-95 Period Count Count Count Count

20

20

7 (35%)

18 (90%)

12 (60%)

2 (10%)

1 (5%)

0 (0%)

0 (0%)

0 (0%)

Vanguard Target Retirement 2050 (VFIFX)

Vanguard Target 2050 Composite Index

## Peer Group Scattergram - 3 Years 4.35 4.06 3.77 3.48 3.19 2.90 17.60 17.80 18.00 18.20 18.40 Risk (Standard Deviation %)

Pee	r Grou	ıp Scattergram - 🤄	5 Years				
(%)	5.10 4.80 —	0					
Return	4.50 -						
~	4.20 -						
	3.90		1	1	1	1	
		15.68	15.75	15.82	15.89	15.96	16.03
			Risk (S	Standard Deviation	%)		

	Return	Standard Deviation
<ul> <li>Vanguard Target Retirement 2050 (VFIFX)</li> </ul>	3.41	17.76
<ul> <li>Vanguard Target 2050 Composite Index</li> </ul>	3.97	17.71
Median	3.08	18.17

	Return	Standard Deviation
<ul> <li>Vanguard Target Retirement 2050 (VFIFX)</li> </ul>	4.39	15.73
<ul> <li>Vanguard Target 2050 Composite Index</li> </ul>	4.84	15.68
Median	4.09	15.95

Historical Statistics - 3 Years								
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Target Retirement 2050 (VFIFX)	0.79	99.28	101.50	-0.53	-0.67	0.24	1.00	12.74
Vanguard Target 2050 Composite Index	0.00	100.00	100.00	0.00	N/A	0.27	1.00	12.58
Historical Statistics - 5 Years								
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Target Retirement 2050 (VFIFX)	0.68	99.08	101.05	-0.43	-0.61	0.28	1.00	11.21
Vanguard Target 2050 Composite Index	0.00	100.00	100.00	0.00	N/A	0.31	1.00	11.07



Product Name: Vanguard Tgt Ret2055;Inv (VFFVX)

Fund Family : Vanguard Ticker : VFFVX

Peer Group : IM Mixed-Asset Target 2055 (MF)
Benchmark : Vanguard Target 2055 Composite Index

 Fund Inception:
 08/18/2010

 Portfolio Manager:
 Team Managed

 Total Assets:
 \$30,788 Million

 Total Assets Date:
 07/31/2022

 Gross Expense:
 0.08%

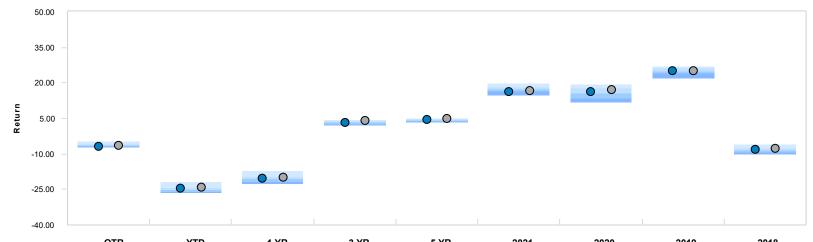
 Net Expense:
 0.08%

 Turnover:
 6%

### **Summary Description**

The Fund seeks to provide capital appreciation and current income consistent with its current asset allocation. The Fund invests in other Vanguard mutual funds according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2055.

### Peer Group Analysis - IM Mixed-Asset Target 2055 (MF)



	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018	
<ul> <li>Vanguard Target Retirement 2055 (VFFVX)</li> </ul>	-6.63 (60)	-24.44 (28)	-20.17 (38)	3.40 (33)	4.38 (30)	16.44 (74)	16.32 (40)	24.98 (45)	-7.89 (35)	
<ul> <li>Vanguard Target 2055 Composite Index</li> </ul>	-6.21 (35)	-24.04 (22)	-19.81 (25)	3.97 (9)	4.84 (10)	16.75 (62)	17.17 (31)	25.37 (33)	-7.77 (30)	
Median	-6.51	-25.14	-20.79	3.11	4.11	17.18	15.65	24.84	-8.48	

	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
Vanguard Target Retirement 2055 (VFFVX)	-14.19 (28)	-5.69 (22)	5.65 (67)	-1.11 (41)	6.61 (55)	4.54 (81)
Vanguard Target 2055 Composite Index	-14.53 (46)	-5.25 (10)	5.58 (70)	-0.89 (21)	6.69 (49)	4.58 (79)
IM Mixed-Asset Target 2055 (MF) Median	-14.63	-6.33	5.90	-1.23	6.67	5.21



# 3 Yr Rolling Under/Over Performance - 5 Years 24.0 Over Performance 8.0 -8.0 Vanguard Target 2055 Composite Index (%) Under Performance Under Performance Latest Date

### 3 Yr Rolling Percentile Ranking - 5 Years Return Percentile Rank 50.00 75.00 100.00 6/18 6/20 12/20 6/21 12/21 9/22 12/17 12/18 6/19 12/19 Total 5-25 25-Median Median-75 75-95

Period

20

20

Vanguard Target Retirement 2055 (VFFVX)

O Vanguard Target 2055 Composite Index

Count

4 (20%)

17 (85%)

Count

15 (75%)

3 (15%)

Count

1 (5%)

0 (0%)

Count

0 (0%)

0 (0%)

Pee	er Group Scatte	ergram - 3 Years			
Return (%)	4.20 3.92 - 3.64 - 3.36 - 3.08 -	•			
	2.80	17.80 Ris	18.00 k (Standard Deviation %)	18.20	18.40

Peer C	Group Sca	ttergram - 5 Yo	ears				
<b>%</b> 4.	.10 .80 –	0					
<b>a</b> 4.	.20 –	45.70	45.00	45.00	10.00	16.10	16.20
	15.60	15.70	15.80	15.90	16.00	16.10	16.20
			Risk (S	tandard Deviation	%)		

	Return	Standard Deviation
<ul><li>Vanguard Target Retirement 2055 (VFFVX)</li></ul>	3.40	17.77
<ul> <li>Vanguard Target 2055 Composite Index</li> </ul>	3.97	17.71
Median	3.11	18.18

	Return	Standard Deviation
<ul> <li>Vanguard Target Retirement 2055 (VFFVX)</li> </ul>	4.38	15.72
<ul> <li>Vanguard Target 2055 Composite Index</li> </ul>	4.84	15.68
Median	4.11	16.09

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Target Retirement 2055 (VFFVX)	0.78	99.27	101.51	-0.54	-0.68	0.24	1.00	12.75
Vanguard Target 2055 Composite Index	0.00	100.00	100.00	0.00	N/A	0.27	1.00	12.58
Historical Statistics - 5 Years								
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Target Retirement 2055 (VFFVX)	0.68	98.96	100.96	-0.44	-0.63	0.28	1.00	11.21
Vanguard Target 2055 Composite Index	0.00	100.00	100.00	0.00	N/A	0.31	1.00	11.07



#### **Mutual Fund Info from Lipper**

Product Name : Vanguard Tgt Ret2060;Inv (VTTSX)

Fund Family : Vanguard Ticker : VTTSX

Peer Group : IM Mixed-Asset Target 2060 (MF)
Benchmark : Vanguard Target 2060 Composite Index

 Fund Inception:
 01/19/2012

 Portfolio Manager:
 Team Managed

 Total Assets:
 \$15,064 Million

 Total Assets Date:
 07/31/2022

 Gross Expense:
 0.08%

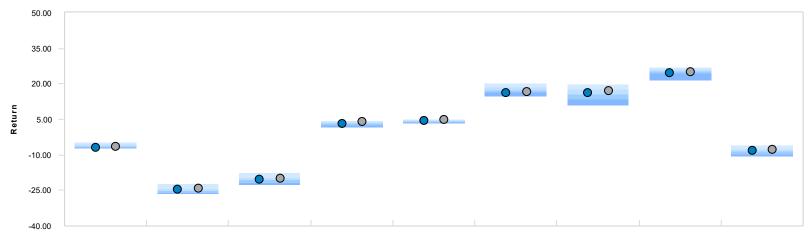
 Net Expense:
 0.08%

 Turnover:
 8%

#### **Summary Description**

The Fund seeks to provide capital appreciation and current income consistent with its current asset allocation. The Fund invests in other Vanguard mutual funds according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2060.

#### Peer Group Analysis - IM Mixed-Asset Target 2060 (MF)



	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018	
<ul> <li>Vanguard Target Retirement 2060 (VTTSX)</li> </ul>	-6.64 (63)	-24.44 (24)	-20.16 (37)	3.40 (36)	4.38 (33)	16.44 (76)	16.32 (41)	24.96 (57)	-7.89 (34)	
<ul> <li>Vanguard Target 2060 Composite Index</li> </ul>	-6.21 (37)	-24.04 (18)	-19.81 (27)	3.97 (10)	4.84 (12)	16.75 (68)	17.17 (34)	25.37 (41)	-7.77 (29)	
Median	-6 45	-25 12	-20 84	3 19	4 20	17 25	15 70	25 07	-8 49	

**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
Vanguard Target Retirement 2060 (VTTSX)	-14.19 (28)	-5.68 (22)	5.66 (67)	-1.11 (36)	6.61 (59)	4.54 (81)
Vanguard Target 2060 Composite Index	-14.53 (44)	-5.25 (11)	5.58 (69)	-0.89 (22)	6.69 (51)	4.58 (81)
IM Mixed-Asset Target 2060 (MF) Median	-14.68	-6.33	5.96	-1.23	6.69	5.28



# 3 Yr Rolling Under/Over Performance - 5 Years 24.0 Over Performance 8.0 -8.0 Under Performance -8.0 Vanguard Target 2060 Composite Index (%)

#### 3 Yr Rolling Percentile Ranking - 5 Years 0.00 Return Percentile Rank 25.00 50.00 75.00 100.00 6/18 12/20 6/21 12/21 9/22 12/17 12/18 6/19 12/19 6/20

-6.0	0.0	0.0	10.0	24.0		Total	5-25	25-Median I	Median-75	75-95	
	Vanguard Target 20	60 Composite Index (%)				Period	Count	Count	Count	Count	
•		<b>V</b>			<ul> <li>Vanguard Target Retirement 2060 (VTTSX)</li> </ul>	20	1 (5%)	16 (80%)	3 (15%)	0 (0%)	
Under Peri	Under Performance	Latest L	X Latest Date		<ul> <li>Vanguard Target 2060 Composite Index</li> </ul>	20	9 (45%)	11 (55%)	0 (0%)	0 (0%)	

# Peer Group Scattergram - 3 Years 4.16 3.90 3.64 3.38 3.12 2.86 17.60 17.80 18.00 18.20 18.40 18.60 Risk (Standard Deviation %)

Peer Grou	ıp Scattergram -	5 Years			
5.10					
<b>3</b> 4.80 -					
4.50 -					
<b>4</b> .20 –					
3.90					
15.	.60	15.80	16.00	16.20	16.40
		Ri	sk (Standard Deviation %)		

	Return	Standard Deviation
<ul> <li>Vanguard Target Retirement 2060 (VTTSX)</li> </ul>	3.40	17.74
<ul> <li>Vanguard Target 2060 Composite Index</li> </ul>	3.97	17.71
Median	3.19	18.34

	Return	Standard Deviation
<ul> <li>Vanguard Target Retirement 2060 (VTTSX)</li> </ul>	4.38	15.71
<ul> <li>Vanguard Target 2060 Composite Index</li> </ul>	4.84	15.68
Median	4.20	16.13

Historical Statistics - 3 Years								
Thistorical Statistics - 5 Tears		l Im	Davim					
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Target Retirement 2060 (VTTSX)	0.79	99.14	101.39	-0.54	-0.68	0.24	1.00	12.74
Vanguard Target 2060 Composite Index	0.00	100.00	100.00	0.00	N/A	0.27	1.00	12.58
Historical Statistics - 5 Years								
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Vanguard Target Retirement 2060 (VTTSX)	0.68	98.94	100.95	-0.44	-0.63	0.28	1.00	11.21
Vanguard Target 2060 Composite Index	0.00	100.00	100.00	0.00	N/A	0.31	1.00	11.07



#### **Mutual Fund Info from Lipper**

Product Name: Vanguard Tgt Ret Inc;Inv (VTINX)

Fund Family : Vanguard Ticker : VTINX

Peer Group: IM Retirement Income (MF)

Benchmark: Vanguard Target Income Composite Index

 Fund Inception:
 10/27/2003

 Portfolio Manager:
 Team Managed

 Total Assets:
 \$40,742 Million

 Total Assets Date:
 07/31/2022

 Gross Expense:
 0.08%

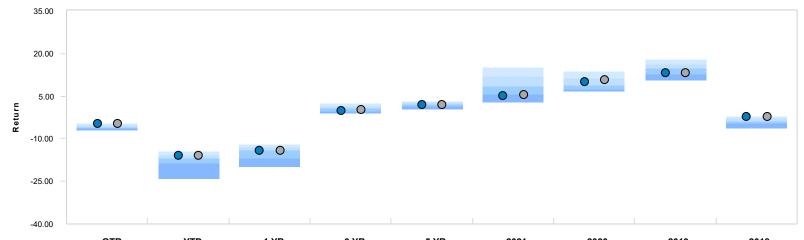
 Net Expense:
 0.08%

 Turnover:
 6%

#### **Summary Description**

The Fund seeks to provide current income and some capital appreciation. The Fund invests in other Vanguard mutual funds according to an asset allocation strategy designed for investors currently in retirement.

#### Peer Group Analysis - IM Retirement Income (MF)



	QTR	YTD	1 YR	3 YR	5 YR	2021	2020	2019	2018	
<ul> <li>Vanguard Target Retirement Income (VTINX)</li> </ul>	-4.64 (6)	-15.89 (27)	-14.19 (50)	-0.02 (70)	1.96 (55)	5.25 (82)	10.02 (35)	13.16 (70)	-1.99 (6)	
Vanguard Target Income Composite Index	-4.56 (3)	-15.77 (25)	-14.03 (48)	0.33 (63)	2.23 (44)	5.44 (78)	10.70 (32)	13.41 (65)	-1.97 (5)	
Median	-5.87	-17.04	-14.23	0.80	2.14	8.19	8.70	14.57	-3.78	

**Comparative Performance** 

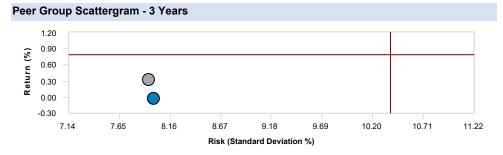
	1 Qtr Ending Jun-2022	1 Qtr Ending Mar-2022	1 Qtr Ending Dec-2021	1 Qtr Ending Sep-2021	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021
Vanguard Target Retirement Income (VTINX)	-7.37 (29)	-4.77 (62)	2.01 (77)	-0.13 (3)	3.23 (84)	0.08 (81)
Vanguard Target Income Composite Index	-7.51 (29)	-4.58 (60)	2.06 (76)	-0.04 (1)	3.22 (84)	0.11 (81)
IM Retirement Income (MF) Median	-8.57	-4.28	2.69	-0.48	4.02	1.51



# 3 Yr Rolling Under/Over Performance - 5 Years 12.0 Over Performance 4.0 -4.0 Under Performance 4.0 Vanguard Target Income Composite Index (%)

#### 3 Yr Rolling Percentile Ranking - 5 Years Return Percentile Rank 25.00 50.00 75.00 100.00 9/22 12/17 6/18 12/19 6/20 12/20 6/21 12/21 12/18 6/19

	Total 5-25		25-Median I	75-95	
	Period	Count	Count	Count	Count
<ul> <li>Vanguard Target Retirement Income (VTINX)</li> </ul>	20	4 (20%)	0 (0%)	12 (60%)	4 (20%)
<ul> <li>Vanguard Target Income Composite Index</li> </ul>	20	4 (20%)	1 (5%)	15 (75%	0 (0%)



Earliest Date

Under Performance

X Latest Date

Pee	r Group Sc	attergram	- 5 Years						
(%)	2.30	C	)						
Return	2.10 -								
R	2.00								
	1.90 6.15	6.56	6.97	7.38	7.79	8.20	8.61	9.02	9.43
	0.13	0.50	0.91		ndard Deviation		0.01	3.02	9.43

	Return	Standard Deviation
<ul> <li>Vanguard Target Retirement Income (VTINX)</li> </ul>	-0.02	7.99
<ul> <li>Vanguard Target Income Composite Index</li> </ul>	0.33	7.94
Median	0.80	10.37

	Return	Deviation	
<ul> <li>Vanguard Target Retirement Income (VTINX)</li> </ul>	1.96	6.76	
<ul> <li>Vanguard Target Income Composite Index</li> </ul>	2.23	6.73	
Median	2.14	8.89	

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
/anguard Target Retirement Income (VTINX)	0.38	98.84	102.13	-0.35	-0.92	-0.04	1.00	6.10
Vanguard Target Income Composite Index	0.00	100.00	100.00	0.00	N/A	0.01	1.00	5.98
listorical Statistics - 5 Years								
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
/anguard Target Retirement Income (VTINX)	0.33	98.75	101.71	-0.26	-0.78	0.15	1.00	4.98
/anguard Target Income Composite Index	0.00	100.00	100.00	0.00	N/A	0.19	1.00	4.88



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	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
Domestic Equity Funds				
MFS Value R6 (MEIKX)	0.45	795,968	3,582	0.45 % of Assets
Vanguard 500 Index Admiral (VFIAX)	0.04	3,527,267	1,411	0.04 % of Assets
T. Rowe Price Instl LC Core Growth (TPLGX)	0.56	3,044,292	17,048	0.56 % of Assets
Vanguard Mid-Cap Index Admiral (VIMAX)	0.05	1,428,034	714	0.05 % of Assets
Allspring Sp Small Cap Value R6 (ESPRX)	0.85	97,830	832	0.85 % of Assets
Vanguard Small-Cap Index Admiral (VSMAX)	0.05	1,164,515	582	0.05 % of Assets
Conestoga Small Cap Instl (CCALX)	0.90	255,084	2,296	0.90 % of Assets
International Equity Funds				
American Funds EuroPacific Growth R6 (RERGX)	0.46	988,547	4,547	0.46 % of Assets
Vanguard Total Intl Stock Index (VTIAX)	0.11	829,922	913	0.11 % of Assets
Target Date Funds				
Vanguard Target Retirement 2020 (VTWNX)	0.08	1,175,795	941	0.08 % of Assets
Vanguard Target Retirement 2025 (VTTVX)	0.08	2,037,599	1,630	0.08 % of Assets
Vanguard Target Retirement 2030 (VTHRX)	0.08	2,013,432	1,611	0.08 % of Assets
Vanguard Target Retirement 2035 (VTTHX)	0.08	1,271,750	1,017	0.08 % of Assets
Vanguard Target Retirement 2040 (VFORX)	0.08	937,943	750	0.08 % of Assets
Vanguard Target Retirement 2045 (VTIVX)	0.08	551,841	441	0.08 % of Assets
Vanguard Target Retirement 2050 (VFIFX)	0.08	344,435	276	0.08 % of Assets
Vanguard Target Retirement 2055 (VFFVX)	0.08	147,069	118	0.08 % of Assets
Vanguard Target Retirement 2060 (VTTSX)	0.08	84,872	68	0.08 % of Assets
Vanguard Target Retirement Income (VTINX)	0.08	1,382,290	1,106	0.08 % of Assets
Balanced Funds				
MSQ Retirement IncomeAdvantage R5	1.67	53,401	892	1.67 % of Assets
Fixed Income Funds				
Dodge & Cox Income (DODIX)	0.41	1,978,005	8,110	0.41 % of Assets
Vanguard Total Bond Index Adm (VBTLX)	0.05	1,027,899	514	0.05 % of Assets
MissionSquare PLUS Fund R10	0.52	11,921,089	61,990	0.52 % of Assets
MSQ Cash Management R5	0.43	512,347	2,203	0.43 % of Assets
Total 457 County Board Of Commissioners	0.30	37,571,226	113,591	



	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
Domestic Equity Funds				
MFS Value R6 (MEIKX)	0.45	223,542	1,006	0.45 % of Assets
Vanguard 500 Index Admiral (VFIAX)	0.04	1,536,887	615	0.04 % of Assets
T. Rowe Price Instl LC Core Growth (TPLGX)	0.56	873,654	4,892	0.56 % of Assets
Vanguard Mid-Cap Index Admiral (VIMAX)	0.05	150,571	75	0.05 % of Assets
Allspring Sp Small Cap Value R6 (ESPRX)	0.85	8,585	73	0.85 % of Assets
√anguard Small-Cap Index Admiral (VSMAX)	0.05	7,840	4	0.05 % of Assets
Conestoga Small Cap Instl (CCALX)	0.90	11,658	105	0.90 % of Assets
nternational Equity Funds				
American Funds EuroPacific Growth R6 (RERGX)	0.46	82,917	381	0.46 % of Assets
Vanguard Total Intl Stock Index (VTIAX)	0.11	55,644	61	0.11 % of Assets
arget Date Funds				
/anguard Target Retirement 2020 (VTWNX)	0.08	238,205	191	0.08 % of Assets
/anguard Target Retirement 2025 (VTTVX)	0.08	113,041	90	0.08 % of Assets
/anguard Target Retirement 2030 (VTHRX)	0.08	22,771	18	0.08 % of Assets
/anguard Target Retirement 2035 (VTTHX)	0.08	181,886	146	0.08 % of Assets
/anguard Target Retirement 2040 (VFORX)	0.08	44,314	35	0.08 % of Assets
/anguard Target Retirement 2045 (VTIVX)	0.08	14,172	11	0.08 % of Assets
/anguard Target Retirement 2050 (VFIFX)	0.08	54,742	44	0.08 % of Assets
/anguard Target Retirement 2055 (VFFVX)	0.08	-	-	0.08 % of Assets
/anguard Target Retirement 2060 (VTTSX)	0.08	13,414	11	0.08 % of Assets
/anguard Target Retirement Income (VTINX)	0.08	435,337	348	0.08 % of Assets
Balanced Funds				
MSQ Retirement IncomeAdvantage R5	1.67	286,732	4,788	1.67 % of Assets
ixed Income Funds				
Dodge & Cox Income (DODIX)	0.41	366,620	1,503	0.41 % of Assets
/anguard Total Bond Index Adm (VBTLX)	0.05	25,698	13	0.05 % of Assets
/lissionSquare PLUS Fund R10	0.52	2,594,967	13,494	0.52 % of Assets
/ISQ Cash Management R5	0.43	9,235	40	0.43 % of Assets
otal 457 Library District	0.38	7,352,431	27,945	



	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
Domestic Equity Funds				
MFS Value R6 (MEIKX)	0.45	37,278	168	0.45 % of Assets
Vanguard 500 Index Admiral (VFIAX)	0.04	700,083	280	0.04 % of Assets
Г. Rowe Price Instl LC Core Growth (TPLGX)	0.56	345,272	1,934	0.56 % of Assets
/anguard Mid-Cap Index Admiral (VIMAX)	0.05	19,242	10	0.05 % of Assets
Allspring Sp Small Cap Value R6 (ESPRX)	0.85	4,675	40	0.85 % of Assets
/anguard Small-Cap Index Admiral (VSMAX)	0.05	12,266	6	0.05 % of Assets
Conestoga Small Cap Instl (CCALX)	0.90	7,835	71	0.90 % of Assets
nternational Equity Funds				
American Funds EuroPacific Growth R6 (RERGX)	0.46	61,318	282	0.46 % of Assets
/anguard Total Intl Stock Index (VTIAX)	0.11	58,975	65	0.11 % of Assets
arget Date Funds				
/anguard Target Retirement 2020 (VTWNX)	0.08	171,367	137	0.08 % of Assets
/anguard Target Retirement 2025 (VTTVX)	0.08	150,132	120	0.08 % of Assets
/anguard Target Retirement 2030 (VTHRX)	0.08	181,488	145	0.08 % of Assets
/anguard Target Retirement 2035 (VTTHX)	0.08	11,910	10	0.08 % of Assets
/anguard Target Retirement 2040 (VFORX)	0.08	12,349	10	0.08 % of Assets
/anguard Target Retirement 2045 (VTIVX)	0.08	9,862	8	0.08 % of Assets
/anguard Target Retirement 2050 (VFIFX)	0.08	22,096	18	0.08 % of Assets
anguard Target Retirement 2055 (VFFVX)	0.08	-	-	0.08 % of Assets
/anguard Target Retirement 2060 (VTTSX)	0.08	892	1	0.08 % of Assets
anguard Target Retirement Income (VTINX)	0.08	350,479	280	0.08 % of Assets
Balanced Funds				
MSQ Retirement IncomeAdvantage R5	1.67	100,660	1,681	1.67 % of Assets
ixed Income Funds				
Oodge & Cox Income (DODIX)	0.41	97,980	402	0.41 % of Assets
anguard Total Bond Index Adm (VBTLX)	0.05	61,692	31	0.05 % of Assets
lissionSquare PLUS Fund R10	0.52	2,231,532	11,604	0.52 % of Assets
ISQ Cash Management R5	0.43	22,310	96	0.43 % of Assets
otal 457 Circuit Court	0.37	4,671,691	17,396	



	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
Domestic Equity Funds				
MFS Value R6 (MEIKX)	0.45	18,395	83	0.45 % of Assets
Vanguard 500 Index Admiral (VFIAX)	0.04	364,975	146	0.04 % of Assets
T. Rowe Price Instl LC Core Growth (TPLGX)	0.56	-	-	0.56 % of Assets
Vanguard Mid-Cap Index Admiral (VIMAX)	0.05	150,010	75	0.05 % of Assets
Allspring Sp Small Cap Value R6 (ESPRX)	0.85	-	-	0.85 % of Assets
Vanguard Small-Cap Index Admiral (VSMAX)	0.05	39,537	20	0.05 % of Assets
Conestoga Small Cap Instl (CCALX)	0.90	-	-	0.90 % of Assets
International Equity Funds				
American Funds EuroPacific Growth R6 (RERGX)	0.46	-	-	0.46 % of Assets
Vanguard Total Intl Stock Index (VTIAX)	0.11	32,914	36	0.11 % of Assets
Target Date Funds				
Vanguard Target Retirement 2020 (VTWNX)	0.08	545,988	437	0.08 % of Assets
Vanguard Target Retirement 2025 (VTTVX)	0.08	317,610	254	0.08 % of Assets
Vanguard Target Retirement 2030 (VTHRX)	0.08	-	-	0.08 % of Assets
Vanguard Target Retirement 2035 (VTTHX)	0.08	-	-	0.08 % of Assets
Vanguard Target Retirement 2040 (VFORX)	0.08	-	-	0.08 % of Assets
Vanguard Target Retirement 2045 (VTIVX)	0.08	-	-	0.08 % of Assets
Vanguard Target Retirement 2050 (VFIFX)	0.08	-	-	0.08 % of Assets
Vanguard Target Retirement 2055 (VFFVX)	0.08	-	-	0.08 % of Assets
Vanguard Target Retirement 2060 (VTTSX)	0.08	-	-	0.08 % of Assets
Vanguard Target Retirement Income (VTINX)	0.08	211,537	169	0.08 % of Assets
Balanced Funds				
MSQ Retirement IncomeAdvantage R5	1.67	-	-	1.67 % of Assets
Fixed Income Funds				
Dodge & Cox Income (DODIX)	0.41	69,271	284	0.41 % of Assets
Vanguard Total Bond Index Adm (VBTLX)	0.05	44,790	22	0.05 % of Assets
MissionSquare PLUS Fund R10	0.52	-	-	0.52 % of Assets
MSQ Cash Management R5	0.43	1,572	7	0.43 % of Assets
Total 401(a) County Board of Commissioners	0.09	1,796,600	1,533	



				As of September 30, 202
	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
Domestic Equity Funds				
MFS Value R6 (MEIKX)	0.45	-	-	0.45 % of Assets
Vanguard 500 Index Admiral (VFIAX)	0.04	-	-	0.04 % of Assets
T. Rowe Price Instl LC Core Growth (TPLGX)	0.56	-	-	0.56 % of Assets
Vanguard Mid-Cap Index Admiral (VIMAX)	0.05	-	-	0.05 % of Assets
Allspring Sp Small Cap Value R6 (ESPRX)	0.85	-	-	0.85 % of Assets
Vanguard Small-Cap Index Admiral (VSMAX)	0.05	-	-	0.05 % of Assets
Conestoga Small Cap Instl (CCALX)	0.90	-	-	0.90 % of Assets
International Equity Funds				
American Funds EuroPacific Growth R6 (RERGX)	0.46	-	-	0.46 % of Assets
Vanguard Total Intl Stock Index (VTIAX)	0.11	-	-	0.11 % of Assets
Target Date Funds				
Vanguard Target Retirement 2020 (VTWNX)	0.08	-	-	0.08 % of Assets
Vanguard Target Retirement 2025 (VTTVX)	0.08	-	-	0.08 % of Assets
Vanguard Target Retirement 2030 (VTHRX)	0.08	-	-	0.08 % of Assets
Vanguard Target Retirement 2035 (VTTHX)	0.08	-	-	0.08 % of Assets
Vanguard Target Retirement 2040 (VFORX)	0.08	-	-	0.08 % of Assets
Vanguard Target Retirement 2045 (VTIVX)	0.08	-	-	0.08 % of Assets
Vanguard Target Retirement 2050 (VFIFX)	0.08	-	-	0.08 % of Assets
Vanguard Target Retirement 2055 (VFFVX)	0.08	-	-	0.08 % of Assets
Vanguard Target Retirement 2060 (VTTSX)	0.08	-	-	0.08 % of Assets
Vanguard Target Retirement Income (VTINX)	0.08	-	-	0.08 % of Assets
Balanced Funds				
MSQ Retirement IncomeAdvantage R5	1.67	-	-	1.67 % of Assets
Fixed Income Funds				
Dodge & Cox Income (DODIX)	0.41	-	-	0.41 % of Assets
Vanguard Total Bond Index Adm (VBTLX)	0.05	-	-	0.05 % of Assets
MissionSquare PLUS Fund R10	0.52	179,291	932	0.52 % of Assets
MSQ Cash Management R5	0.43	119	1	0.43 % of Assets
Total 401(a) Library District	0.52	179,409	933	



				7 to 01 coptombol co
	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
Domestic Equity Funds				
MFS Value R6 (MEIKX)	0.45	-	-	0.45 % of Assets
Vanguard 500 Index Admiral (VFIAX)	0.04	180,059	72	0.04 % of Assets
T. Rowe Price Instl LC Core Growth (TPLGX)	0.56	-	-	0.56 % of Assets
Vanguard Mid-Cap Index Admiral (VIMAX)	0.05	144,392	72	0.05 % of Assets
Allspring Sp Small Cap Value R6 (ESPRX)	0.85	-	-	0.85 % of Assets
Vanguard Small-Cap Index Admiral (VSMAX)	0.05	80,663	40	0.05 % of Assets
Conestoga Small Cap Instl (CCALX)	0.90	-	-	0.90 % of Assets
International Equity Funds				
American Funds EuroPacific Growth R6 (RERGX)	0.46	70,163	323	0.46 % of Assets
Vanguard Total Intl Stock Index (VTIAX)	0.11	36,977	41	0.11 % of Assets
Target Date Funds				
Vanguard Target Retirement 2020 (VTWNX)	0.08	-	-	0.08 % of Assets
Vanguard Target Retirement 2025 (VTTVX)	0.08	-	-	0.08 % of Assets
Vanguard Target Retirement 2030 (VTHRX)	0.08	-	-	0.08 % of Assets
Vanguard Target Retirement 2035 (VTTHX)	0.08	-	-	0.08 % of Assets
Vanguard Target Retirement 2040 (VFORX)	0.08	-	-	0.08 % of Assets
Vanguard Target Retirement 2045 (VTIVX)	0.08	-	-	0.08 % of Assets
Vanguard Target Retirement 2050 (VFIFX)	0.08	-	-	0.08 % of Assets
Vanguard Target Retirement 2055 (VFFVX)	0.08	-	-	0.08 % of Assets
Vanguard Target Retirement 2060 (VTTSX)	0.08	-	-	0.08 % of Assets
Vanguard Target Retirement Income (VTINX)	0.08	-	-	0.08 % of Assets
Balanced Funds				
MSQ Retirement IncomeAdvantage R5	1.67	-	-	1.67 % of Assets
Fixed Income Funds				
Dodge & Cox Income (DODIX)	0.41	-	-	0.41 % of Assets
Vanguard Total Bond Index Adm (VBTLX)	0.05	57,668	29	0.05 % of Assets
MissionSquare PLUS Fund R10	0.52	164,733	857	0.52 % of Assets
MSQ Cash Management R5	0.43	669	3	0.43 % of Assets
Total 401(a) FPDP Plan	0.20	735,324	1,436	



# Plan Sponsor

- Usually, the employer
- Online account usage
- May delegate responsibilities to a Board/Committee, including the designation 'Named Fiduciary'
- Retirement readiness

## **Plan Administrator**

- Oversee Plan operations; commonly supported by a third-party administrator (TPA)
- May be a single individual or designated Board/Committee
- May delegate to TPA serving as a fiduciary 3(16) plan administrator, but retains fiduciary responsibility
- Prepare and provide participant notices such as blackouts, terminations, fee disclosures and benefit statements
- Maintain qualified status of the Plan through amendments, restatements and filing required reports
- Administer loans, hardship distributions, payroll changes and other participant events

# Plan Trustee

- May be a single individual, a designated Board/Committee, or a third-party serving in either a directed or discretionary manner
- Safekeep Plan assets
- May delegate to a 3(21) advisor and/or 3(38) investment manager but retains fiduciary responsibility
- Prudently select and monitor service providers
- Ensure expenses paid by the Plan are reasonable and pursue monies owed to the Plan
- Follow participant directions consistent with Plan guidelines



### **Advisor**

- Plan consultant
- Assist in education
- Assist with Plan conversions
- Assist in the addition and monitoring of other service providers
- Coordinate with various service providers

# **Investment Advisor (3(21))**

- Render investment advice for a fee, on a regular basis, that will serve as the primary basis of committee investment decisions
- Assist with drafting, maintaining and executing the investment policy statement
- Advise on fund menus and provides ongoing monitoring
- Recommend changes in accordance with the investment policy statement
- No administrative responsibilities

# **Investment Manager (3(38))**

- "Discretionary" fiduciary
- Power to manage, acquire and dispose of Plan assets
- Assist with drafting, maintaining and executing the investment policy statement
- Determine the fund menu.
- Authority to change investment options in accordance with the investment policy statement



### **Attorney**

- Provide interpretations on retirement plan provisions
- Create legal Plan documents, summary plan descriptions (when applicable) and other forms
- Prepare forms required for plan qualification purposes
- IRS and DOL audit support
- Consulted during plan level changes

# **Independent Auditor**

- Offer an opinion on Plan assets
- Audit financial statements / payroll information
- Assist in the confirmation of Plan sponsor tax status
- Coordinate with TPAs and Recordkeepers on compliance issues found in audit

# Recordkeeper

- Handling and processing of participant "money-in" and "money-out" transactions
- Invest / track participant fund positions according to participant elections
- Create required notices and report to participants and the Plan Sponsor
- Provide participants with account access and updating system with daily investment pricing

# **Third Party Administrator**

- Services commonly performed by the recordkeeper
- Determine participant eligibility
- Perform nondiscrimination testing and top-heavy testing required
- Monitor limits (compensation, deferral, deductions) and annual additions/catchups
- Assure Plan operation is in compliance with Plan documents ad regulations
- Preparing participant notices and disclosures



Quarterly	1 <sup>st</sup> Quarter	2 <sup>nd</sup> Quarter	3 <sup>rd</sup> Quarter	4 <sup>th</sup> Quarter
Follow procedures, including documentation of all meetings and decisions	✓	✓	✓	
Review of plan investments and compliance with investment policy statement	✓	✓	✓	
Fiduciary education	✓	✓	✓	
Periodically				
Investment policy statement review				
Review QDIA selection				
Plan fee analysis				
Plan recordkeeping & administration services review				
Employee education review			✓	
Review of ancillary products, if applicable (self-directed brokerage, in plan annuity, managed accounts, etc.)	✓			
Other Projects				



Active	Return
--------	--------

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

#### Alpha

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

#### Beta

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

#### Consistency

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

#### Distributed to Paid In (DPI)

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

#### **Down Market Capture**

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

#### **Downside Risk**

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

#### **Excess Return**

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

#### Excess Risk

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

#### Information Ratio

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

#### **Public Market Equivalent (PME)**

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

#### R-Squared

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

#### Return

- Compounded rate of return for the period.

#### Sharpe Ratio

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

#### **Standard Deviation**

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

#### Total Value to Paid In (TVPI)

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

#### **Tracking Error**

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

#### **Treynor Ratio**

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

#### **Up Market Capture**

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



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