



SAN BERNARDINO COUNTY
Full-Time and Part-Time Retirement and RMT Plans
September 30, 2022 Performance Report

Rasch Cousineau
Senior Consultant
rcousineau@hyasgroup.com

Geoff Hildreth
Performance Analyst
ghildreth@hyasgroup.com

TABLE OF CONTENTS

Section 1	Market Overview
Section 2	Full-Time Plan Reviews Combined Full-Time Plans San Bernardino County 457 Deferred Compensation Plan San Bernardino County 401(a) Defined Contribution Plan San Bernardino County 401(k) Defined Contribution Plan San Bernardino County Retirement Medical Trust
Section 3	Part-Time Plan Review San Bernardino County PST Deferred Compensation Retirement Plan
Section 4	Fund Performance
Section 5	Full-Time Plan Fee Review Combined Full-Time Plans San Bernardino County 457 Deferred Compensation Plan San Bernardino County 401(a) Defined Contribution Plan San Bernardino County 401(k) Defined Contribution Plan San Bernardino County Retirement Medical Trust
Section 6	Part-Time Plan Fee Review San Bernardino County PST Deferred Compensation Retirement Plan
Section 7	Fund Attribution

Section 1



THE NOMINALLY OBSCURE MOLODOVSKY EFFECT

The Molodovsky Effect (ME) is typically not the first topic of conversation at financial planning sessions though the subject is relevant at this economic juncture. Stemming from Nicholas Molodovsky's 1953 article in the Financial Analysts Journal, the ME is the observation that price-to-earnings ratios of stocks (P/E) tend to increase in economic downturns. The supporting intuition is simple: if earnings drop more than prices during a recession, a P/E ratio may increase, leaving stocks more expensive than they started. Logical as this sounds, it may counter other market intuition, such as that stocks tend to fare well when they are cheap but they also fare well when the economy is recovering. How could stocks start out expensive but still provide above-average returns? Either way, is the ME still valid?¹

The disconnect notwithstanding, the ME observations have continued to hold accurate. To wit, US Large Cap Stocks have tended to provide above-average returns when the P/E was below-average. This same category of stocks has also averaged 9.9% for the first two years coming out of recessions since 1953 versus their average of 7.3% for the entire period. As for the ME's real-time accuracy, the P/E of the S&P Large Cap Composite Index has increased in nine of the eleven recessions from 1953 to present by an average of 12% (by 52% if you include the great financial crisis). What reconciles these seemingly conflicting tendencies? Likely the combination of improving sentiment bolstered by reduced borrowing costs found at the end of recessions. Earnings have tended to grow well above their long-term averages for the two years coming out of recessions while long-term interest rates tend to stay relatively low. The resulting combination of improving stock fundamentals which compare more favorably to bond yields can serve as a market tailwind. It is also worth considering that the stock market, as a forward-looking mechanism, tends to move ahead of improvement in the broader economy. As such, the P/E ratio tends to bottom before the end of a recession even though earnings have not, meaning that some of the ratio's increase relative to the ME may reflect increasing optimism.²

If the United States is currently in recession, the ME will get another chance to demonstrate its validity. Regardless of this, the market and economic history orbiting the ME is of greater practical insight to investors than the phenomenon itself; namely that market timing around recessions is a challenging endeavor. There is no rule around how long it takes for the National Bureau of Economic Research to declare a recession (it once took twenty-one months) or that it must be declared before it is over. Timing one's market exposure around such announcements could lead to selling after recessionary fears have been priced in or re-entering the market long after a rebound. Moving this subject to the present, the S&P 500 Index returned -23.9% for the first three quarters of 2022. Whether or not the stock market will end the year lower or if a recession will be declared by then, investors may note that valuations ended the third quarter at levels more in line with longer-term averages. Investors with an adequate time horizon and risk-tolerance may see this as reason enough to look beyond near-term recessionary fears.³

¹ Sources: "A Theory of Price Earnings Ratios", Financial Analysts Journal, 1953; P/E ratio refers to the price of the S&P Composite Index divided by the trailing twelve months of nominal earnings, derived from data from Robert J. Shiller.

² Sources: Robert J. Shiller S&P Data. St. Louis Federal Reserve, Standard and Poors, Morningstar.

³ Sources: National Bureau of Economic Research, JP Morgan.

GLOBAL ECONOMIC LANDSCAPE

- ▶ In October 2022, the International Monetary Fund lowered its global growth expectations for 2023 to 2.7%, down from 2.9% in July; its lowest since 2001. Within this was the expectation that over a third of the global economy will see two quarters of contraction while larger ones such as the United States, China, and the European Union will stall. These growth scenarios include a battery of negative scenarios including persistently high inflation, aggressive monetary policies, energy shortages in Europe, the war in Ukraine, and financial market fragility.⁴
- ▶ Treasury yields continued their climb throughout the third quarter of 2022 with the 10-year rising from 2.98% to 3.83%. The Federal Reserve's release of its economic projections on September 21, which forecast a federal funds rate of 4.6% for 2023, added fuel to the run-up. In contrast, market-based indicators of rate expectations (such as the fed fund futures) are pricing in moderately lower rates than what the Fed is expecting for the next several quarters.⁵
- ▶ US job openings fell by over one million in August 2022, their largest drop since April 2020 and eliciting speculation that the labor market may indeed be cooling. In agreement with economists' views that job openings may continue to decrease, some equity sector analysts have reported that companies may be closing out non-essential job openings, reducing the demand for labor and contrasting the Fed's view that an "extraordinarily" tight job market may tolerate additional rate increases.⁶
- ▶ September's inflation reading showed that the core Consumer Price Index increased 6.6% for the trailing year, its highest reading since 1982. Despite this high reading, forward-looking inflation expectations remain muted. Five-year inflation expectations implied from the US Treasury market ended the quarter at 2.14%, down from 2022's high of 3.59%. Part of the explanation for this divergence may be because corporations currently sit on high inventory levels. The extent to which this overstock crimps corporate demand and induces write-downs and discounted selling may work against inflation.⁷

GLOBAL FINANCIAL MARKETS

- ▶ Bond markets continued their collective slump, with the Bloomberg US and Global Aggregate Bond indexes returning -4.75% and -6.94% respectively for the third quarter. In partial offset, rising yields work against duration, leaving bonds marginally less sensitive to future rate increases. The durations of the US and international bond markets are 7% and 11% lower than they stood on September 30, 2021.⁸
- ▶ Going into the third quarter, a variety of leading indicators continue to bode ominously for the US stock market. A composite of consumer confidence, housing starts, manufacturing, and credit spreads, all of which tend to lead earnings growth in the S&P 500 suggest a year-over-

⁴ Source: International Monetary Fund, World Economic Outlook, "Countering the Cost-of-Living Crisis", October 2022.

⁵ Sources: Federal Reserve "Summary of Economic Projections", September 2022, and Morgan Stanley's "GIC Weekly" October 10, 2022.

⁶ Sources: Bloomberg "US Job Openings Drop to 10.1 Million, Lowest Since June 2021", October 4, 2022, and Morgan Stanley's "Job Gains Start to Fade", October 4, 2022.

⁷ Source: Morgan Stanley's "Monthly Perspectives", October 2022, Morgan Stanley's "Daily Positioning", October 13, 2022, and data from St. Louis Federal Reserve.

⁸ Source: JP Morgan's "Guide to the Markets", September 30, 2022.

This report is being provided for informational purposes only. The information and opinions presented in this report do not constitute investment advice and have been obtained from sources believed by Hyas Group to be reliable. Hyas Group makes no representation as to their accuracy or completeness. All opinions expressed herein are subject to change.

©Morgan Stanley, 2022

year earnings decline. Similarly, measures of corporate profitability such as the difference between final demand and wages as well as producer versus consumer prices imply that operating margins are likely to decline in the coming quarters.⁹

- ▶ Thirty-year mortgage rates ended the third quarter at 6.70%, rising by 1.00% over the three-month period to their highest level since 2007. Mortgage-backed securities ended the quarter trading at spreads well above their longer-term averages. The extent to which these valuations attract institutional investors may offset the upward price pressure stemming from monetary policy.¹⁰
- ▶ Exchange rates continued to exhibit extreme movements through the third quarter, with currency volatility at its highest in ten years, the US Dollar at its highest valuation in two decades, and the British Pound approaching a near all-time low. Many investors continue to be net long the US Dollar and decelerating global growth coupled with a still-tightening Federal Reserve may provide a further tailwind for the greenback.¹¹

Disclosure: The views and opinions expressed in this commentary are those of the portfolio manager at the time of this writing and do not necessarily represent those of Hyas Group, Morgan Stanley, its affiliates or its other employees. Of course, these views may change without notice in response to changing circumstances and market conditions. Furthermore, this commentary contains forward looking statements and there can be no guarantee that they will come to pass. Historical data shown represents past performance and does not guarantee comparable future results. The information and statistical data contained herein have been obtained from sources that are believed to be reliable but in no way are guaranteed by Hyas Group as to accuracy or completeness.

It is not an offer to buy or sell or a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. This material does not provide individually tailored investment advice and has been prepared without regard to the individual financial circumstances and objectives of persons who receive it. The indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment.

For further information please contact Tom Breaden (tbreaden@hyasgroup.com).
Hyas Group, 9755 SW Barnes Road, Suite 660, Portland, Oregon 97225; 503-634-1500

⁹ Source: Morgan Stanley's "Monthly Perspectives", October 2022.

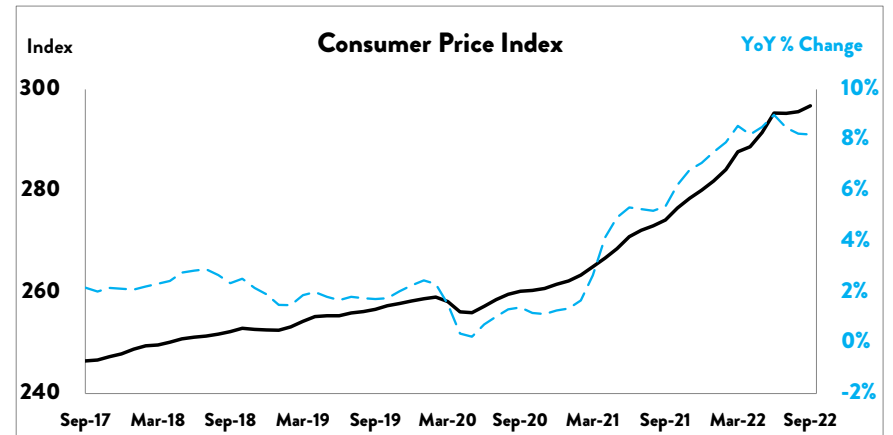
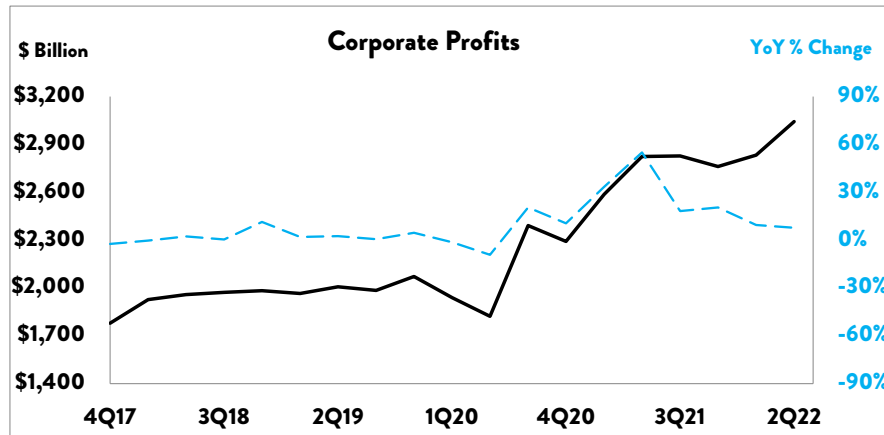
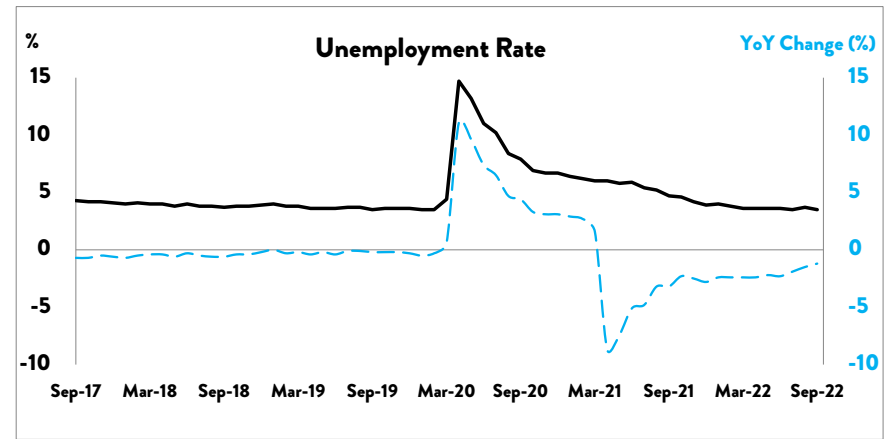
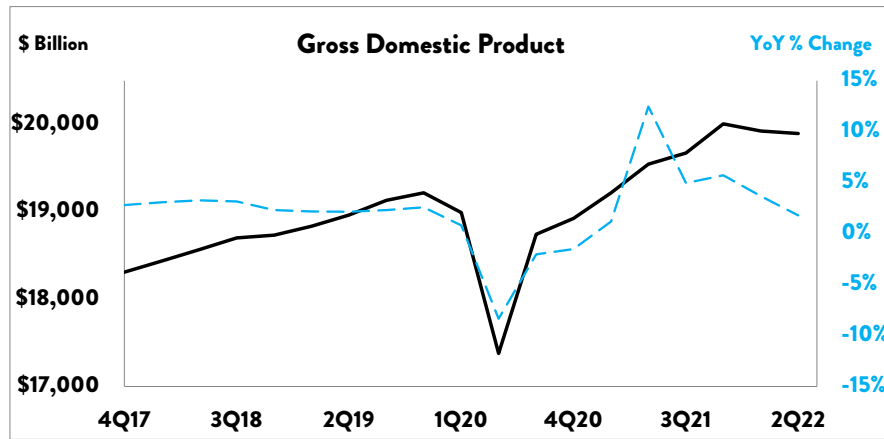
¹⁰ Sources: Data from St. Louis Federal Reserve, and Morgan Stanley's, "GIC Weekly", October 3, 2022.

¹¹ Source: Morgan Stanley's "Global Insights", October 12, 2022.

This report is being provided for informational purposes only. The information and opinions presented in this report do not constitute investment advice and have been obtained from sources believed by Hyas Group to be reliable. Hyas Group makes no representation as to their accuracy or completeness. All opinions expressed herein are subject to change.

©Morgan Stanley, 2022 CRC 5048623-10/22

3Q2022 Economic Data



Key: — Economic Series - - - Year-Over-Year Change

Labor Market Statistics (Monthly)					
Category	Recent	5-Yr High	5-Yr Low	5-Yr Avg.	Date
Jobs Added/Lost Monthly	263,000	4,505,000	-20,493,000	100,100	Sep-22
Unemployment Rate	3.5%	14.7%	3.5%	4.9%	Sep-22
Median Unemployment Length (Weeks)	8.8	22.2	4.0	11.2	Sep-22
Average Hourly Earnings	\$32.46	\$32.46	\$26.49	\$29.14	Sep-22

Source: Federal Reserve Bank of St. Louis and Bureau of Labor Statistics

Other Prices and Indexes (Monthly)					
Category	Recent	5-Yr High	5-Yr Low	% Off Peak	Date
Gas: Price per Gallon	\$3.65	\$4.84	\$1.80	-24.6%	Sep-22
Spot Oil	\$84.26	\$114.84	\$16.55	-26.6%	Sep-22
Case-Shiller Home Price Index	314.8	316.2	201.0	56.6%*	Jul-22
Medical Care CPI	557.4	557.4	477.7	16.7%*	Sep-22

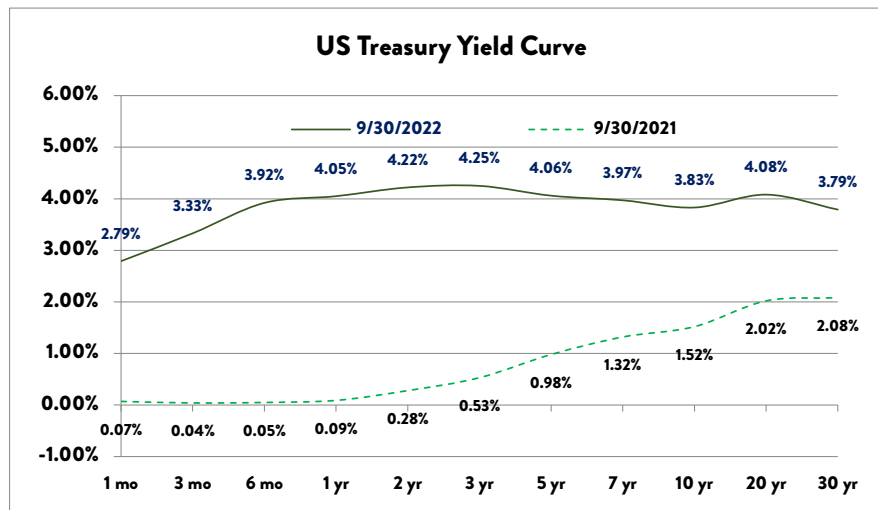
*% Off Low

Morningstar data as of 9/30/2022

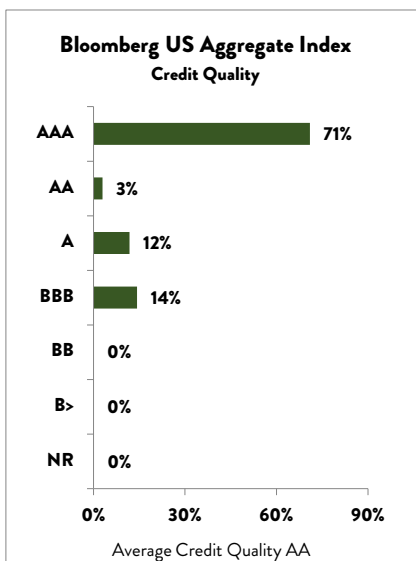
3Q2022 Bond Market Data

Index	QTR	YTD	1 yr.	3 yrs.	5 yrs.	10 yrs.
90-Day T-Bill	0.67%	1.02%	1.04%	0.61%	1.16%	0.69%
Bloomberg US Aggregate	-4.75%	-14.61%	-14.60%	-3.26%	-0.27%	0.89%
Bloomberg Short US Treasury	0.28%	0.13%	0.11%	0.54%	1.13%	0.72%
Bloomberg Int. US Treasury	-3.08%	-8.70%	-9.23%	-1.72%	0.17%	0.59%
Bloomberg Long US Treasury	-9.63%	-28.84%	-26.65%	-8.51%	-1.62%	0.59%
Bloomberg US TIPS	-5.14%	-13.61%	-11.57%	0.79%	1.95%	0.98%
Bloomberg US Credit	-4.95%	-18.07%	-17.89%	-3.61%	-0.05%	1.58%
Bloomberg US Mortgage-Backed	-5.35%	-13.66%	-13.98%	-3.67%	-0.92%	0.51%
Bloomberg US Asset-Backed	-1.34%	-5.06%	-5.61%	-0.24%	1.02%	1.17%
Bloomberg US 20-Yr Municipal	-4.38%	-15.44%	-14.43%	-2.51%	0.69%	2.22%
Bloomberg US High Yield	-0.65%	-14.74%	-14.14%	-0.45%	1.57%	3.94%
Bloomberg Global	-6.94%	-19.89%	-20.43%	-5.74%	-2.32%	-0.93%
Bloomberg International	-8.85%	-23.88%	-24.77%	-7.78%	-4.03%	-2.39%
Bloomberg Emerging Market	-4.06%	-20.50%	-20.92%	-5.26%	-1.56%	1.39%

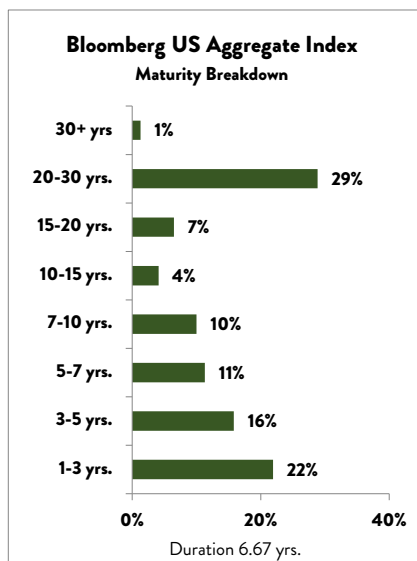
Source: Morningstar



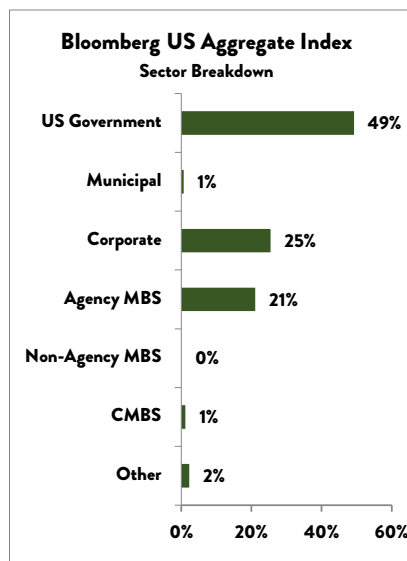
Source: Department of US Treasury



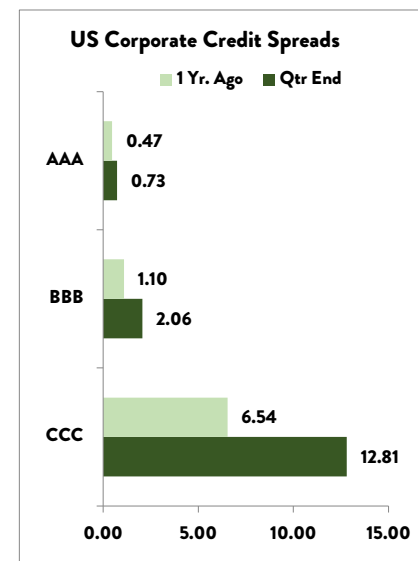
Source: Morningstar



Source: Morningstar



Source: Morningstar



Source: Federal Reserve / Bank of America

3Q2022 US Equity Market Data

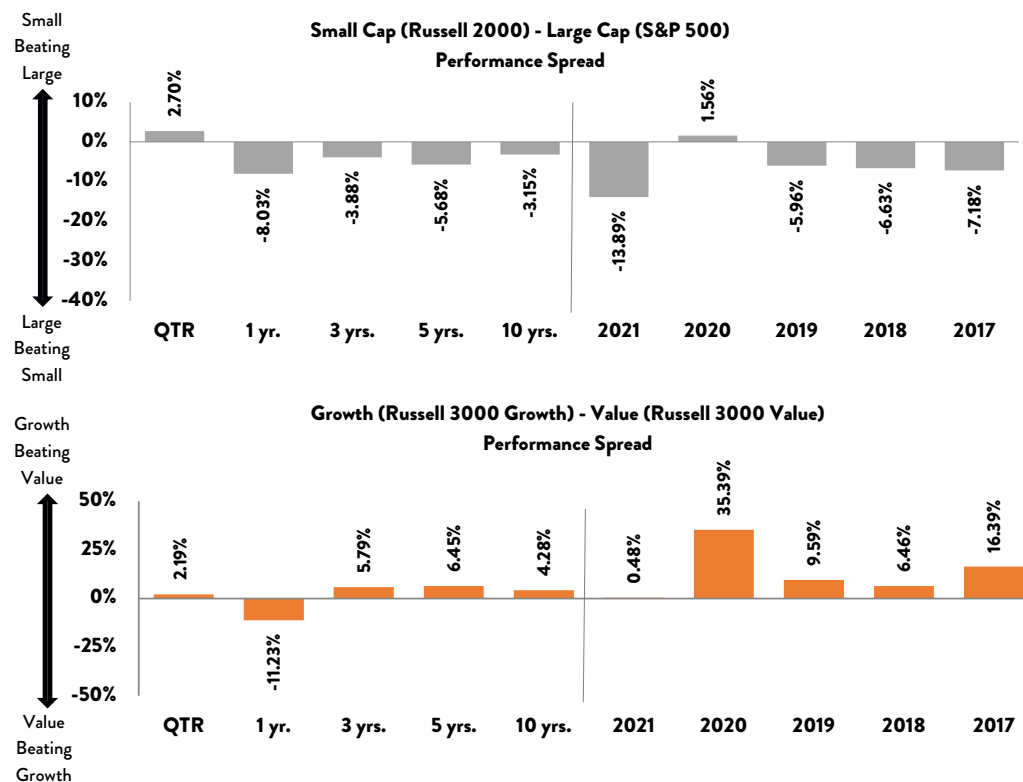
Sectors Weights/Returns (ranked by quarter performance)

	Wgt.	Sector	QTR	YTD	1 yr.
S&P 500 Index	12%	Consumer Discretionary	4.36%	-29.89%	-20.89%
	5%	Energy	2.35%	34.94%	45.70%
	11%	Financials	-3.10%	-21.25%	-17.65%
	8%	Industrials	-4.72%	-20.72%	-13.87%
	15%	Health Care	-5.18%	-13.08%	-3.37%
	3%	Utilities	-5.99%	-6.51%	5.58%
	26%	Information Technology	-6.21%	-31.44%	-20.00%
	7%	Consumer Staples	-6.62%	-11.83%	-0.09%
	3%	Materials	-7.13%	-23.74%	-12.15%
	3%	Real Estate	-11.03%	-28.85%	-16.37%
8%	Communication Services	-12.72%	-39.04%	-39.05%	
S&P Midcap 400 Index	5%	Energy	5.53%	23.70%	27.20%
	19%	Industrials	1.31%	-21.52%	-12.40%
	16%	Financials	0.54%	-11.51%	-5.29%
	4%	Consumer Staples	-1.92%	-11.07%	-4.47%
	12%	Information Technology	-2.15%	-27.28%	-21.28%
	14%	Consumer Discretionary	-2.90%	-30.87%	-27.99%
	2%	Communication Services	-3.60%	-23.68%	-25.77%
	10%	Health Care	-5.05%	-24.02%	-23.00%
	7%	Materials	-6.21%	-20.22%	-9.35%
	4%	Utilities	-9.61%	-10.55%	-0.60%
8%	Real Estate	-9.67%	-29.00%	-18.94%	
S&P Smallcap 600 Index	5%	Energy	-2.12%	22.78%	13.30%
	19%	Financials	-2.59%	-19.80%	-15.46%
	13%	Health Care	-4.04%	-26.68%	-27.95%
	6%	Materials	-4.10%	-15.78%	-10.58%
	13%	Consumer Discretionary	-4.20%	-34.92%	-32.49%
	16%	Industrials	-4.43%	-20.99%	-13.40%
	13%	Information Technology	-4.44%	-28.17%	-20.33%
	5%	Consumer Staples	-7.35%	-14.79%	-5.79%
	2%	Utilities	-8.47%	-12.86%	2.95%
	2%	Communication Services	-10.54%	-32.30%	-34.70%
8%	Real Estate	-14.51%	-35.32%	-29.66%	

Source: Morningstar

Index Performance Data

Index	QTR	YTD	1 yr.	Annualized		
				3 yrs.	5 yrs.	10 yrs.
S&P 500	-4.88%	-23.87%	-15.47%	8.16%	9.24%	11.70%
Russell 1000 Value	-5.62%	-17.75%	-11.36%	4.36%	5.29%	9.17%
Russell 1000 Growth	-3.60%	-30.66%	-22.59%	10.67%	12.17%	13.70%
Russell Mid Cap	-3.44%	-24.27%	-19.39%	5.19%	6.48%	10.30%
Russell Mid Cap Value	-4.93%	-20.36%	-13.56%	4.50%	4.76%	9.44%
Russell Mid Cap Growth	-0.65%	-31.45%	-29.50%	4.26%	7.62%	10.85%
Russell 2000	-2.19%	-25.10%	-23.50%	4.29%	3.55%	8.55%
Russell 2000 Value	-4.61%	-21.12%	-17.69%	4.72%	2.87%	7.94%
Russell 2000 Growth	0.24%	-29.28%	-29.27%	2.94%	3.60%	8.81%
Russell 3000	-4.46%	-24.62%	-17.63%	7.70%	8.62%	11.39%
DJ US Select REIT	-10.37%	-29.32%	-17.15%	-3.29%	1.95%	5.49%



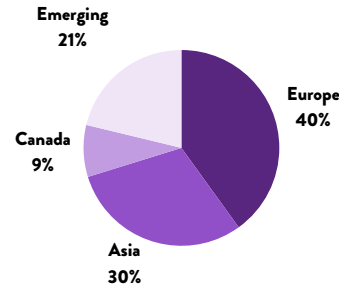
3Q2022 International Market Data

Index Performance Data (net)

Index (US\$)	QTR	YTD	1 yr.	3 yrs.	5 yrs.	10 yrs.
MSCI ACWI ex-US	-9.91%	-26.50%	-25.17%	-1.52%	-0.81%	3.01%
MSCI EAFE	-9.36%	-27.09%	-25.13%	-1.83%	-0.84%	3.67%
Europe	-10.15%	-28.83%	-24.80%	-1.72%	-1.24%	3.45%
United Kingdom	-10.76%	-18.65%	-14.08%	-1.73%	-1.06%	1.88%
Germany	-12.59%	-37.66%	-37.15%	-6.97%	-6.68%	1.25%
France	-8.88%	-29.07%	-24.03%	-1.45%	-0.36%	5.11%
Pacific	-8.09%	-23.80%	-25.87%	-2.15%	-0.16%	4.11%
Japan	-7.67%	-26.38%	-29.30%	-2.65%	-0.63%	4.84%
Hong Kong	-16.97%	-19.39%	-22.25%	-4.18%	-2.34%	3.60%
Australia	-6.74%	-18.09%	-16.37%	0.54%	2.40%	3.15%
Canada	-7.94%	-18.89%	-13.06%	4.12%	3.44%	3.00%
MSCI EM	-11.57%	-27.16%	-28.11%	-2.07%	-1.81%	1.05%
MSCI EM Latin America	3.61%	3.02%	0.24%	-3.39%	-2.64%	-2.28%
MSCI EM Asia	-14.03%	-28.82%	-29.51%	-0.81%	-1.07%	3.08%
MSCI EM Eur/Mid East	-2.60%	-36.13%	-38.07%	-7.42%	-3.51%	-3.54%
MSCI ACWI Value ex-US	-10.44%	-21.00%	-20.02%	-2.15%	-2.12%	1.87%
MSCI ACWI Growth ex-US	-9.37%	-31.84%	-30.22%	-1.38%	0.18%	3.95%
MSCI ACWI Sm Cap ex-US	-8.37%	-29.37%	-28.93%	0.38%	-0.56%	4.44%

Regional Exposure

MSCI ACWI ex-USA

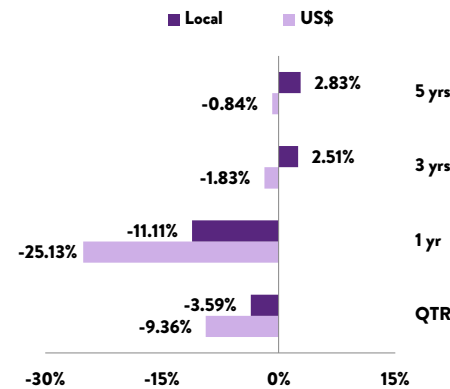


Top 10 Countries (MSCI AC World ex-USA)

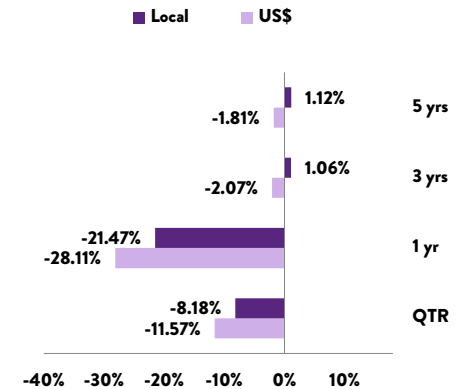
Japan	14%
UK	10%
China	9%
Canada	8%
France	7%
Switzerland	7%
Australia	5%
Germany	5%
India	4%
Taiwan	4%

Source: Morningstar

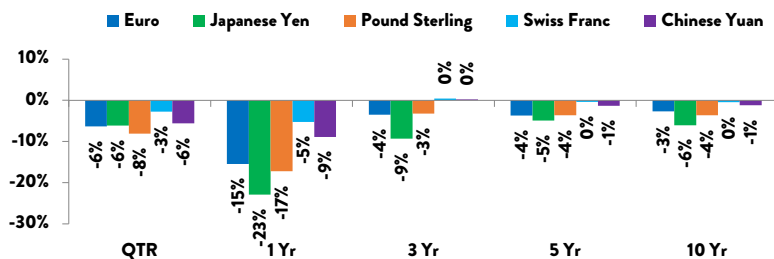
MSCI EAFE Index Return



MSCI Emerging Index Return



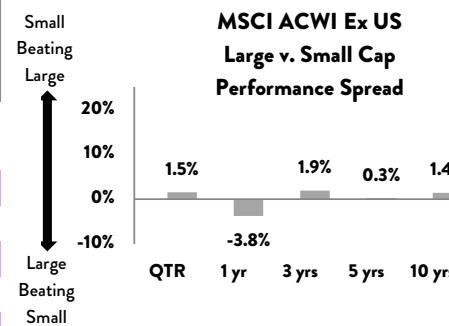
Foreign Currency v. US\$ Returns



Exchange Rates	QTR	2Q22	1Q22	4Q21	3Q21	2Q21
Japanese Yen	144.71	135.69	121.44	115.17	111.50	111.05
Euro	1.02	0.96	0.90	0.88	0.86	0.84
British Pound	0.90	0.82	0.76	0.74	0.74	0.72
Swiss Franc	0.98	0.96	0.92	0.91	0.93	0.93
Chinese Yuan	7.11	6.70	6.34	6.37	6.44	6.46

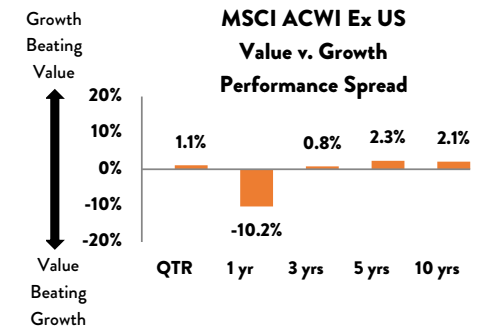
Source: Federal Reserve Bank of St. Louis

MSCI ACWI Ex US Large v. Small Cap Performance Spread



Performance Source: Morningstar

MSCI ACWI Ex US Value v. Growth Performance Spread



Historical Market Returns

Ranked by Performance

2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	YTD	3Q22
Emerging Markets 39.42%	US Bonds 5.24%	Emerging Markets 78.51%	Small Cap 26.85%	Core Real Estate 14.96%	Emerging Markets 18.22%	Small Cap 38.82%	Large Cap 13.68%	Core Real Estate 13.95%	Small Cap 21.30%	Emerging Markets 37.28%	Core Real Estate 7.36%	Large Cap 31.49%	Small Cap 19.96%	Large Cap 28.71%	Commod. 13.57%	Cash 0.67%
Intl 16.65%	Global Bonds 4.79%	High Yield 58.21%	Mid Cap 25.48%	TIPS 13.56%	Mid Cap 17.28%	Mid Cap 34.76%	Mid Cap 13.21%	Large Cap 1.38%	High Yield 17.12%	Intl 27.19%	Cash 1.69%	Mid Cap 30.54%	Large Cap 18.40%	Commod. 27.11%	Core Real Estate 12.40%	Core Real Estate 0.35%
Commod. 16.23%	Cash 1.39%	Intl 41.45%	Emerging Markets 18.88%	US Bonds 7.84%	Intl 16.83%	Large Cap 32.39%	Core Real Estate 11.44%	US Bonds 0.55%	Mid Cap 13.79%	Large Cap 21.83%	US Bonds 0.01%	Small Cap 25.52%	Emerging Markets 18.31%	Mid Cap 22.58%	Cash 1.02%	High Yield -0.65%
Core Real Estate 14.84%	TIPS -2.35%	Mid Cap 40.48%	Commod. 16.83%	Global Bonds 5.64%	Small Cap 16.35%	Intl 15.29%	US Bonds 5.97%	Cash 0.03%	Large Cap 11.95%	Mid Cap 18.52%	Global Bonds -1.20%	Intl 21.51%	Mid Cap 17.10%	Core Real Estate 21.06%	TIPS -13.61%	Small Cap -2.19%
TIPS 11.64%	Core Real Estate -10.70%	Small Cap 27.17%	Core Real Estate 15.26%	High Yield 4.98%	Large Cap 16.00%	Global Balanced 14.46%	Small Cap 4.89%	TIPS -1.43%	Commod. 11.76	Global Balanced 15.87%	TIPS -1.26%	Global Balanced 18.86%	Global Balanced 13.93%	Small Cap 14.82%	US Bonds -14.61%	Mid Cap -3.44%
Global Bonds 9.48%	Global Balanced -24.51%	Large Cap 26.46%	High Yield 15.12%	Large Cap 2.11%	High Yield 15.81%	Core Real Estate 12.95%	TIPS 3.64%	Global Balanced -1.45%	Emerging Markets 11.18%	Small Cap 14.65%	High Yield -2.08%	Emerging Markets 18.42%	TIPS 10.99%	Global Balanced 10.94%	High Yield -14.74%	Commod. -4.11%
Global Balanced 9.07%	High Yield -26.16%	Global Balanced 20.49%	Large Cap 15.06%	Cash 0.06%	Global Balanced 11.06%	High Yield 7.44%	Global Balanced 3.17%	Mid Cap -2.43%	Core Real Estate 7.76%	High Yield 7.50%	Large Cap -4.38%	High Yield 14.32%	Intl 10.65%	Intl 7.82%	Global Bonds -19.89%	US Bonds -4.75%
US Bonds 6.97%	Small Cap -33.79%	Commod. 18.91%	Intl 11.15%	Global Balanced -0.97%	Core Real Estate 9.76%	Cash 0.07%	High Yield 2.45%	Global Bonds -3.15%	Global Balanced 5.38%	Global Bonds 7.39%	Global Balanced -5.30%	US Bonds 8.72%	Global Bonds 9.20%	TIPS 5.96%	Global Balanced -22.23%	Large Cap -4.88%
Mid Cap 5.60%	Commod. -35.65%	TIPS 11.41%	Global Balanced 9.40%	Mid Cap -1.55%	TIPS 6.98%	US Bonds -2.02%	Global Bonds 0.59%	Small Cap -4.41%	TIPS 4.68%	Core Real Estate 6.66%	Mid Cap -9.06%	TIPS 8.43%	US Bonds 7.51%	High Yield 5.28%	Large Cap -23.87%	TIPS -5.14%
Large Cap 5.49%	Large Cap -37.00%	Global Bonds 6.93%	US Bonds 6.54%	Small Cap -4.18%	Global Bonds 4.32%	Global Bonds -2.60%	Cash 0.04%	High Yield -4.46%	Intl 4.50%	US Bonds 3.54%	Small Cap -11.01%	Commod. 7.69%	High Yield 7.11%	Cash 0.05%	Mid Cap -24.27%	Global Balanced -6.11%
Cash 4.44%	Mid Cap -41.46%	US Bonds 5.93%	TIPS 6.31%	Commod. -13.32%	US Bonds 4.21%	Emerging Markets -2.60%	Emerging Markets -2.18%	Intl -5.66%	US Bonds 2.65%	TIPS 3.01%	Commod. -11.25%	Global Bonds 6.84%	Cash 0.37%	US Bonds -1.54%	Small Cap -25.10%	Global Bonds -6.94%
High Yield 1.87%	Intl -45.53%	Cash 0.16%	Global Bonds 5.54%	Intl -13.71%	Cash 0.08%	TIPS -8.61%	Intl -3.86%	Emerging Markets -14.90%	Global Bonds 2.09%	Commod. 1.70%	Intl -14.20%	Core Real Estate 4.41%	Core Real Estate 0.35%	Emerging Markets -2.54%	Intl -26.50%	Intl -9.91%
Small Cap -1.57%	Emerging Markets -53.33%	Core Real Estate -30.40%	Cash 0.15%	Emerging Markets -18.42%	Commod. -1.06%	Commod. -9.52%	Commod. -17.00%	Commod. -24.60%	Cash 0.25%	Cash 0.71%	Emerging Markets -14.58%	Cash 2.30%	Commod. -3.12%	Global Bonds -4.71%	Emerging Markets -27.16%	Emerging Markets -11.57%

Global Balanced is composed of 60% MSCI World Stock Index, 35% BBgBarc Global Aggregate Bond Index, and 5% US 90-Day T-Bills.

Source: Morningstar; Core Real Estate Source: NCREIF

Section 2

SAN BERNARDINO COUNTY

Full-Time Plans - Combined

PLAN ASSET ALLOCATION

Third Quarter 2022

Fixed Income	Ticker	Assets	%
Stabilizer	-	\$277,632,990	21.1%
Voya Fixed Account	-	\$85,597,897	6.5%
Voya Government Money Market A	VYAXX	\$12,765	0.0%
Sterling Capital Total Return Bond R6	STRDX	\$29,548,833	2.2%
Fidelity US Bond Index	FXNAX	\$9,134,810	0.7%
Fidelity Intermediate Treasury Bond Index	FUAMX	\$1,636,221	0.1%
Total		\$403,563,516	30.7%

Large Cap	Ticker	Assets	%
Fidelity 500 Index	FXAIX	\$134,842,433	10.3%
Hartford Core Equity R6	HAITX	\$120,690,922	9.2%
Total		\$255,533,356	19.4%

Mid Cap	Ticker	Assets	%
Fidelity Mid Cap Index	FSMDX	\$65,273,311	5.0%
Baron Growth Instl	BGRIX	\$39,498,297	3.0%
Total		\$104,771,608	8.0%

Small Cap	Ticker	Assets	%
Hartford Schroders US Small Cap Opps SDR	SCURX	\$10,067,241	0.8%
Fidelity Small Cap Index	FSSNX	\$40,011,464	3.0%
Total		\$50,078,705	3.8%

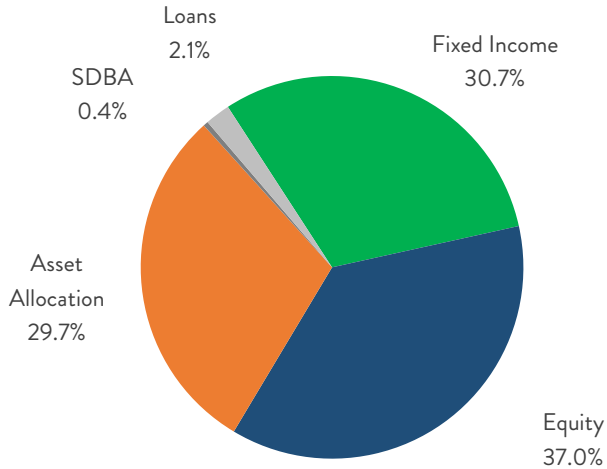
International	Ticker	Assets	%
MFS International Diversification R6	MDIZX	\$46,788,860	3.6%
Fidelity Total International Index	FTIHX	\$29,807,630	2.3%
Total		\$76,596,490	5.8%

Asset Allocation	Ticker	Assets	%
Conservative Allocation Portfolio	-	\$38,991,081	3.0%
Moderate Allocation Portfolio	-	\$79,537,609	6.1%
Aggressive Allocation Portfolio	-	\$57,730,780	4.4%
Vanguard Target Retirement Income	VTINX	\$6,913,113	0.5%
Vanguard Target Retirement 2020	VTWNX	\$29,804,483	2.3%
Vanguard Target Retirement 2025	VTTVX	\$3,075,010	0.2%
Vanguard Target Retirement 2030	VTHRXX	\$61,970,214	4.7%
Vanguard Target Retirement 2035	VTHHX	\$2,882,556	0.2%
Vanguard Target Retirement 2040	VFORX	\$60,100,555	4.6%
Vanguard Target Retirement 2045	VTIVX	\$2,108,250	0.2%
Vanguard Target Retirement 2050	VFIFX	\$43,964,220	3.3%
Vanguard Target Retirement 2055	VFFVX	\$1,525,296	0.1%
Vanguard Target Retirement 2060	VTTSX	\$1,328,416	0.1%
Vanguard Target Retirement 2065	VLXVX	\$763,493	0.1%
Vanguard Target Retirement 2070	VSVNX	\$1,984	0.0%
Total		\$390,697,061	29.7%

Miscellaneous	Ticker	Assets	%
Self-Directed Brokerage Account	-	\$5,520,460	0.4%
Participant Loans	-	\$27,753,800	2.1%
Total		\$33,274,260	2.5%

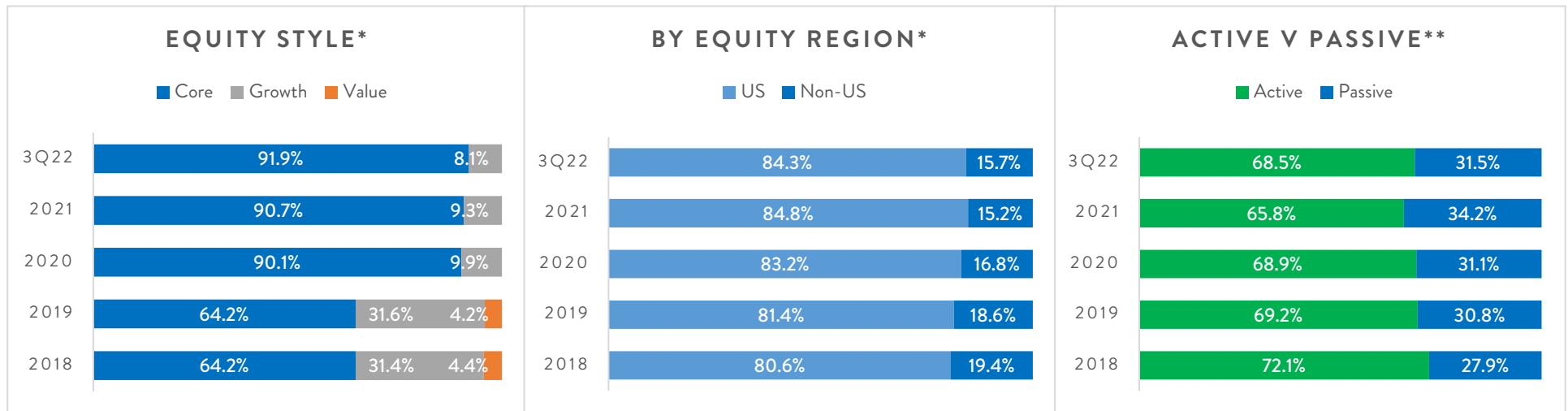
TOTAL PLAN ASSETS

\$1,314,514,996



HISTORICAL PLAN ALLOCATION

Asset Class	3Q22	2021	2020	2019	2018	2017	2016	2015
Fixed Income	30.7%	25.7%	29.1%	29.9%	33.8%	N/A	N/A	N/A
Large Cap	19.4%	21.9%	20.4%	20.2%	19.0%	N/A	N/A	N/A
Mid Cap	8.0%	9.7%	9.3%	8.5%	4.9%	N/A	N/A	N/A
Small Cap	3.8%	4.2%	4.1%	4.3%	6.7%	N/A	N/A	N/A
International	5.8%	6.4%	6.8%	7.5%	7.3%	N/A	N/A	N/A
Asset Allocation	29.7%	29.9%	27.9%	26.7%	25.0%	N/A	N/A	N/A
SDBA	0.4%	0.4%	0.3%	0.2%	0.2%	N/A	N/A	N/A
Loans	2.1%	1.8%	2.2%	2.7%	3.0%	N/A	N/A	N/A



*Excludes Fixed Income, Asset Allocation, SDBA, and Loan assets

**Excludes Asset Allocation, SDBA, and Loan assets

SAN BERNARDINO COUNTY

Full-Time Plans - Combined

PLAN ASSET ALLOCATION

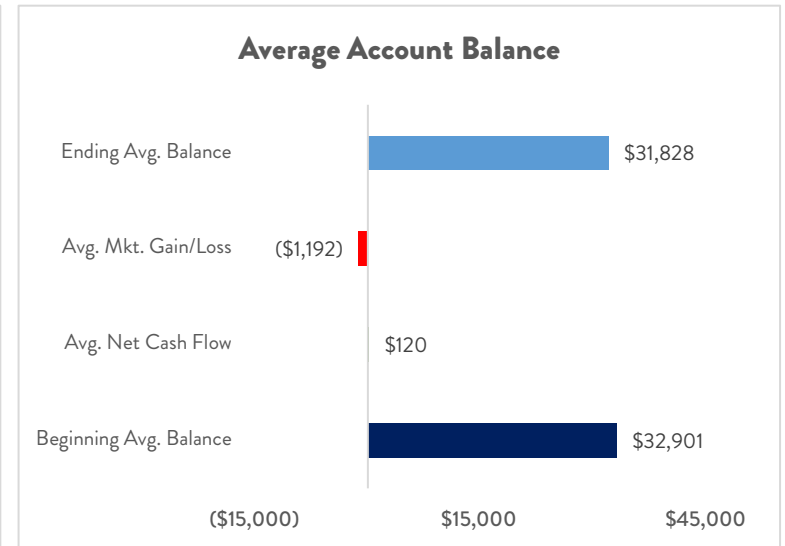
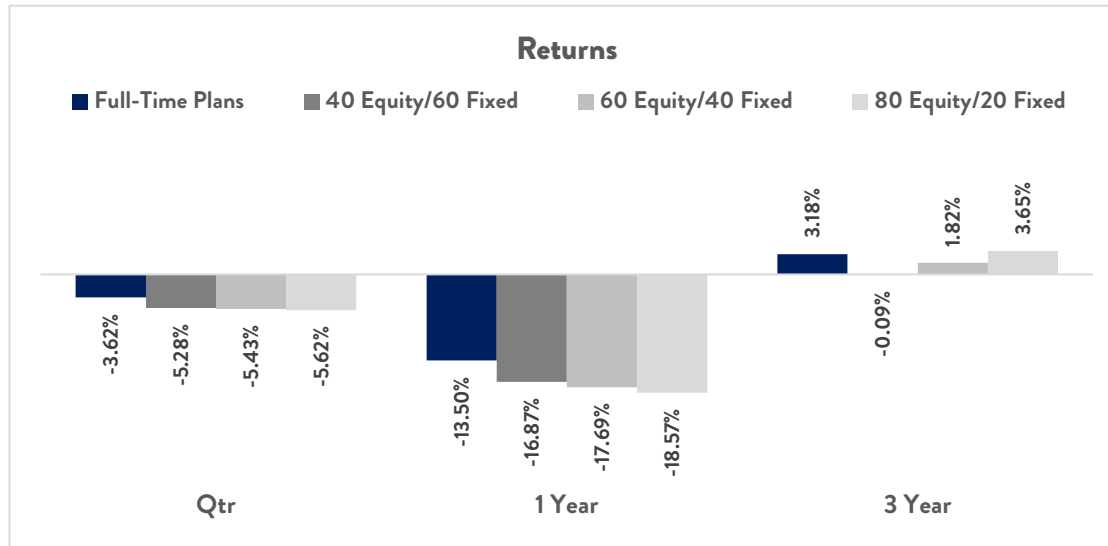
Third Quarter 2022

PLAN LEVEL CASH FLOWS

	Beginning Value	Cash Flow (+)	Cash Flow (-)	Transfer	Market Gain/Loss	Ending Value
Fixed Income	\$404,957,783	\$8,198,404	(\$7,991,686)	(\$1,101,550)	(\$499,436)	\$403,563,516
Large Cap	\$267,973,094	\$3,517,230	(\$4,382,107)	\$679,600	(\$12,254,461)	\$255,533,356
Mid Cap	\$108,903,374	\$1,747,694	(\$1,773,933)	(\$1,170,834)	(\$2,934,693)	\$104,771,608
Small Cap	\$51,581,303	\$1,081,870	(\$547,748)	(\$506,913)	(\$1,529,808)	\$50,078,705
International	\$83,970,093	\$1,522,048	(\$1,252,567)	\$638,411	(\$8,281,495)	\$76,596,490
Asset Allocation	\$407,059,372	\$10,927,093	(\$6,213,127)	\$1,490,253	(\$22,566,530)	\$390,697,061
SDBA	\$5,689,637	\$0	\$0	(\$28,966)	(\$140,210)	\$5,520,460
Total	\$1,330,134,657	\$26,994,340	(\$22,161,168)	\$0	(\$48,206,633)	\$1,286,761,196

HISTORICAL PLAN CASH FLOWS

	Beginning Value	Net Cash Flow	Market Gain/Loss	Ending Value
3Q22	\$1,330,134,657	\$4,833,172	(\$48,206,633)	\$1,286,761,196
YTD	\$1,532,878,892	\$20,504,282	(\$266,621,977)	\$1,286,761,196
2021	\$1,338,628,506	\$24,876,764	\$169,373,622	\$1,532,878,892
2020	\$1,169,929,608	\$27,232,766	\$141,466,131	\$1,338,628,506
2019	\$971,095,953	\$24,227,438	\$174,606,217	\$1,169,929,608
2018	N/A	N/A	N/A	\$971,095,953
2017	N/A	N/A	N/A	N/A



Equity Indices: Russell 3000, MSCI ACWI ex USA; Fixed Indices: US Treasury 3 Mo T-Bill, Bloomberg Global Aggregate Bond (rebalanced quarterly)

This page left blank intentionally.

SAN BERNARDINO COUNTY

457 Deferred Compensation Plan

PLAN ASSET ALLOCATION

Third Quarter 2022

Fixed Income	Ticker	Assets	%
Stabilizer	-	\$226,108,498	24.4%
Sterling Capital Total Return Bond R6	STRDX	\$24,970,947	2.7%
Fidelity US Bond Index	FXNAX	\$8,318,136	0.9%
Fidelity Intermediate Treasury Bond Index	FUAMX	\$1,124,091	0.1%
Total		\$260,521,672	28.2%

Large Cap	Ticker	Assets	%
Fidelity 500 Index	FXAIX	\$108,175,495	11.7%
Hartford Core Equity R6	HAITX	\$95,201,917	10.3%
Total		\$203,377,411	22.0%

Mid Cap	Ticker	Assets	%
Fidelity Mid Cap Index	FSMDX	\$50,700,936	5.5%
Baron Growth Instl	BGRIX	\$31,244,921	3.4%
Total		\$81,945,858	8.9%

Small Cap	Ticker	Assets	%
Hartford Schroders US Small Cap Opps SDR	SCURX	\$8,460,764	0.9%
Fidelity Small Cap Index	FSSNX	\$31,854,625	3.4%
Total		\$40,315,389	4.4%

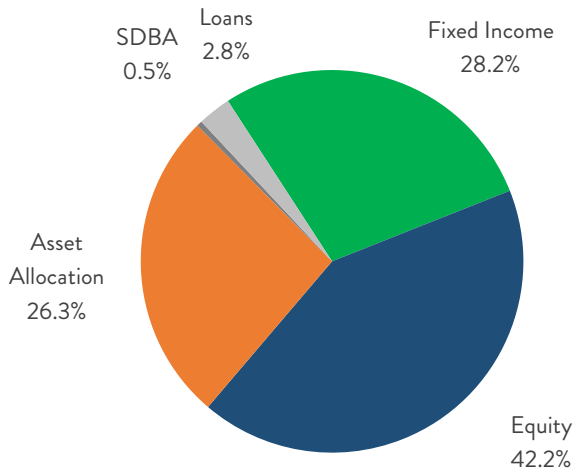
International	Ticker	Assets	%
MFS International Diversification R6	MDIZX	\$39,460,815	4.3%
Fidelity Total International Index	FTIHX	\$25,866,270	2.8%
Total		\$65,327,085	7.1%

Asset Allocation	Ticker	Assets	%
Conservative Allocation Portfolio	-	\$26,975,269	2.9%
Moderate Allocation Portfolio	-	\$59,959,762	6.5%
Aggressive Allocation Portfolio	-	\$45,500,278	4.9%
Vanguard Target Retirement Income	VTINX	\$4,759,198	0.5%
Vanguard Target Retirement 2020	VTWNX	\$11,337,642	1.2%
Vanguard Target Retirement 2025	VTTVX	\$2,284,163	0.2%
Vanguard Target Retirement 2030	VTHRX	\$23,779,772	2.6%
Vanguard Target Retirement 2035	VTTHX	\$1,872,349	0.2%
Vanguard Target Retirement 2040	VFORX	\$29,910,888	3.2%
Vanguard Target Retirement 2045	VTIVX	\$1,383,594	0.1%
Vanguard Target Retirement 2050	VFIFX	\$33,138,164	3.6%
Vanguard Target Retirement 2055	VFFVX	\$1,026,255	0.1%
Vanguard Target Retirement 2060	VTTSX	\$1,106,013	0.1%
Vanguard Target Retirement 2065	VLVX	\$674,234	0.1%
Vanguard Target Retirement 2070	VSVNX	\$1,984	0.0%
Total		\$243,709,564	26.3%

Miscellaneous	Ticker	Assets	%
Self-Directed Brokerage Account	-	\$4,339,123	0.5%
Participant Loans	-	\$25,939,179	2.8%
Total		\$30,278,302	3.3%

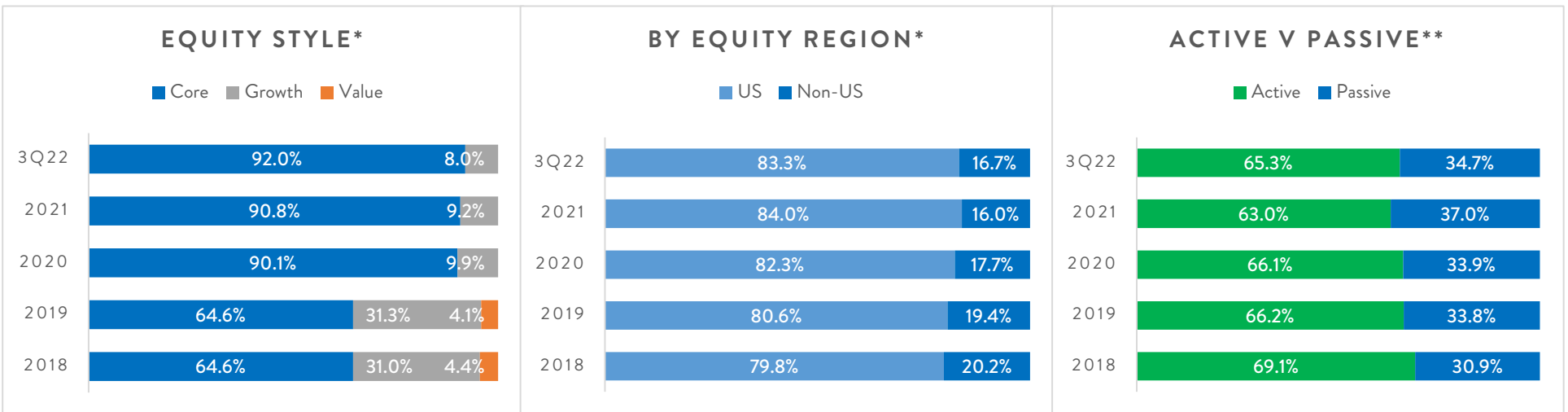
TOTAL PLAN ASSETS

\$925,475,281



HISTORICAL PLAN ALLOCATION

Asset Class	3Q22	2021	2020	2019	2018	2017	2016	2015
Fixed Income	28.2%	23.2%	26.4%	26.5%	30.2%	N/A	N/A	N/A
Large Cap	22.0%	24.5%	22.7%	22.6%	21.4%	N/A	N/A	N/A
Mid Cap	8.9%	10.8%	10.4%	9.5%	8.3%	N/A	N/A	N/A
Small Cap	4.4%	4.7%	4.6%	4.9%	4.7%	N/A	N/A	N/A
International	7.1%	7.6%	8.1%	8.9%	8.7%	N/A	N/A	N/A
Asset Allocation	26.3%	26.4%	24.6%	24.0%	22.5%	N/A	N/A	N/A
SDBA	0.5%	0.4%	0.3%	0.2%	0.3%	N/A	N/A	N/A
Loans	2.8%	2.4%	2.8%	3.5%	3.9%	N/A	N/A	N/A



*Excludes Fixed Income, Asset Allocation, SDBA, and Loan assets

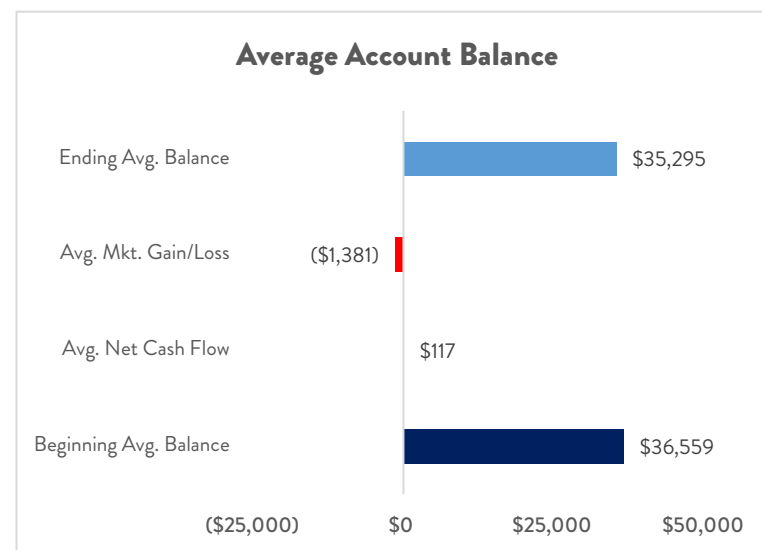
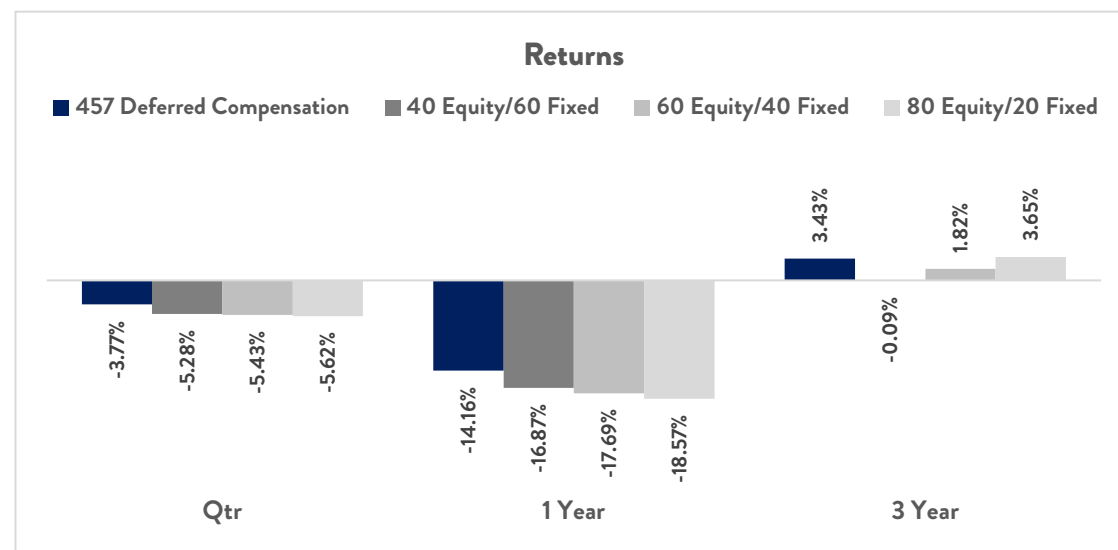
**Excludes Asset Allocation, SDBA, and Loan assets

PLAN LEVEL CASH FLOWS

	Beginning Value	Cash Flow (+)	Cash Flow (-)	Transfer	Market Gain/Loss	Ending Value
Fixed Income	\$261,919,799	\$2,684,444	(\$5,457,549)	\$2,084,696	(\$709,718)	\$260,521,672
Large Cap	\$212,638,738	\$2,830,631	(\$2,958,412)	\$660,278	(\$9,793,824)	\$203,377,411
Mid Cap	\$85,375,217	\$1,378,845	(\$1,436,561)	(\$1,065,245)	(\$2,306,397)	\$81,945,858
Small Cap	\$41,553,331	\$854,915	(\$443,931)	(\$402,165)	(\$1,246,762)	\$40,315,389
International	\$71,350,831	\$1,292,223	(\$972,496)	\$728,012	(\$7,071,484)	\$65,327,085
Asset Allocation	\$254,442,517	\$8,946,106	(\$3,742,817)	(\$2,002,794)	(\$13,933,447)	\$243,709,564
SDBA	\$4,465,607	\$0	\$0	(\$2,781)	(\$123,703)	\$4,339,123
Total	\$931,746,039	\$17,987,164	(\$15,011,767)	\$0	(\$35,185,335)	\$899,536,102

HISTORICAL PLAN CASH FLOWS

	Beginning Value	Net Cash Flow	Market Gain/Loss	Ending Value
3Q22	\$931,746,039	\$2,975,397	(\$35,185,335)	\$899,536,102
YTD	\$1,089,028,791	\$8,472,349	(\$197,965,038)	\$899,536,102
2021	\$953,622,721	\$8,355,915	\$127,050,156	\$1,089,028,791
2020	\$834,788,633	\$12,696,826	\$106,137,261	\$953,622,721
2019	\$691,312,582	\$10,850,129	\$132,625,923	\$834,788,633
2018	N/A	N/A	N/A	\$691,312,582
2017	N/A	N/A	N/A	N/A



Equity Indices: Russell 3000, MSCI ACWI ex USA; Fixed Indices: US Treasury 3 Mo T-Bill, Bloomberg Global

Aggregate Bond (rebalanced quarterly)

This page left blank intentionally.

SAN BERNARDINO COUNTY

401(a) Defined Contribution Plan

PLAN ASSET ALLOCATION

Third Quarter 2022

Fixed Income	Ticker	Assets	%
Stabilizer	-	\$2,429,373	7.2%
Sterling Capital Total Return Bond R6	STRDX	\$220,002	0.7%
Fidelity US Bond Index	FXNAX	\$16,695	0.0%
Fidelity Intermediate Treasury Bond Index	FUAMX	\$25,958	0.1%
Total		\$2,692,027	8.0%

Large Cap	Ticker	Assets	%
Fidelity 500 Index	FXAIX	\$1,205,163	3.6%
Hartford Core Equity R6	HAITX	\$574,714	1.7%
Total		\$1,779,876	5.3%

Mid Cap	Ticker	Assets	%
Fidelity Mid Cap Index	FSMDX	\$510,885	1.5%
Baron Growth Instl	BGRIX	\$375,008	1.1%
Total		\$885,892	2.6%

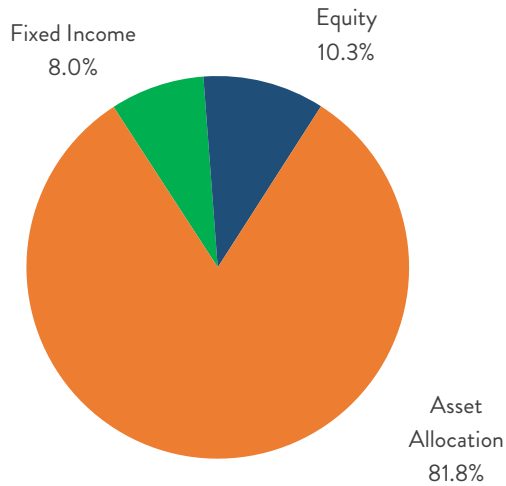
Small Cap	Ticker	Assets	%
Hartford Schroders US Small Cap Opps SDR	SCURX	\$140,570	0.4%
Fidelity Small Cap Index	FSSNX	\$317,094	0.9%
Total		\$457,664	1.4%

International	Ticker	Assets	%
MFS International Diversification R6	MDIZX	\$152,105	0.5%
Fidelity Total International Index	FTIHX	\$195,613	0.6%
Total		\$347,718	1.0%

Asset Allocation	Ticker	Assets	%
Conservative Allocation Portfolio	-	\$885,604	2.6%
Moderate Allocation Portfolio	-	\$1,247,642	3.7%
Aggressive Allocation Portfolio	-	\$1,058,920	3.1%
Vanguard Target Retirement Income	VTINX	\$693,733	2.1%
Vanguard Target Retirement 2020	VTWNX	\$3,652,293	10.8%
Vanguard Target Retirement 2025	VTTVX	\$307,502	0.9%
Vanguard Target Retirement 2030	VTHRX	\$7,581,047	22.4%
Vanguard Target Retirement 2035	VTTHX	\$497,329	1.5%
Vanguard Target Retirement 2040	VFORX	\$7,325,799	21.7%
Vanguard Target Retirement 2045	VTIVX	\$540,276	1.6%
Vanguard Target Retirement 2050	VFIFX	\$3,206,543	9.5%
Vanguard Target Retirement 2055	VFFVX	\$426,141	1.3%
Vanguard Target Retirement 2060	VTTSX	\$184,636	0.5%
Vanguard Target Retirement 2065	VLXVX	\$18,109	0.1%
Vanguard Target Retirement 2070	VSVNX	\$0	0.0%
Total		\$27,625,574	81.8%

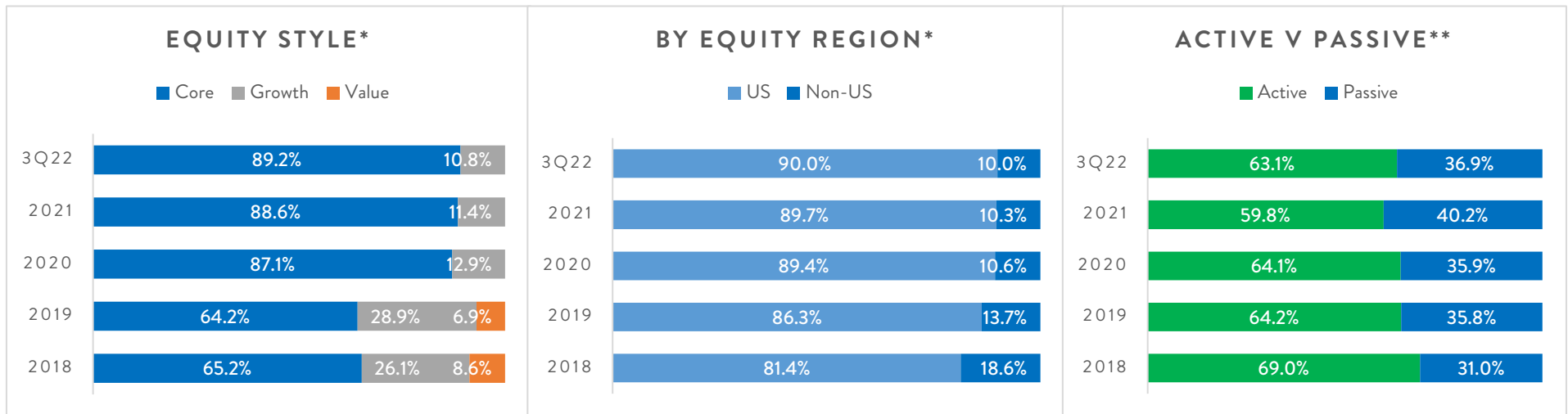
TOTAL PLAN ASSETS

\$33,788,752



HISTORICAL PLAN ALLOCATION

Asset Class	3Q22	2021	2020	2019	2018	2017	2016	2015
Fixed Income	8.0%	6.2%	7.3%	6.7%	8.7%	N/A	N/A	N/A
Large Cap	5.3%	5.5%	5.2%	4.9%	4.3%	N/A	N/A	N/A
Mid Cap	2.6%	2.8%	3.0%	2.6%	2.0%	N/A	N/A	N/A
Small Cap	1.4%	1.5%	1.3%	1.4%	1.2%	N/A	N/A	N/A
International	1.0%	1.1%	1.1%	1.4%	1.7%	N/A	N/A	N/A
Asset Allocation	81.8%	82.9%	82.0%	83.1%	82.0%	N/A	N/A	N/A



*Excludes Fixed Income and Asset Allocation assets

**Excludes Asset Allocation assets

SAN BERNARDINO COUNTY

401(a) Defined Contribution Plan

PLAN ASSET ALLOCATION

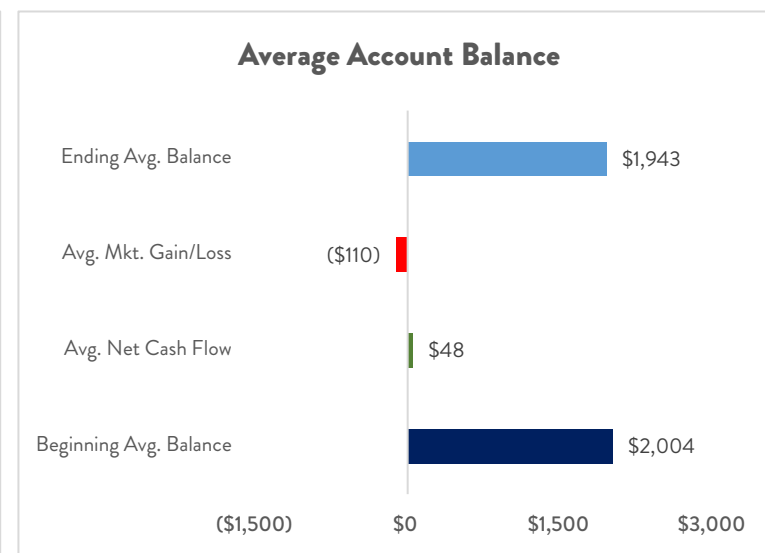
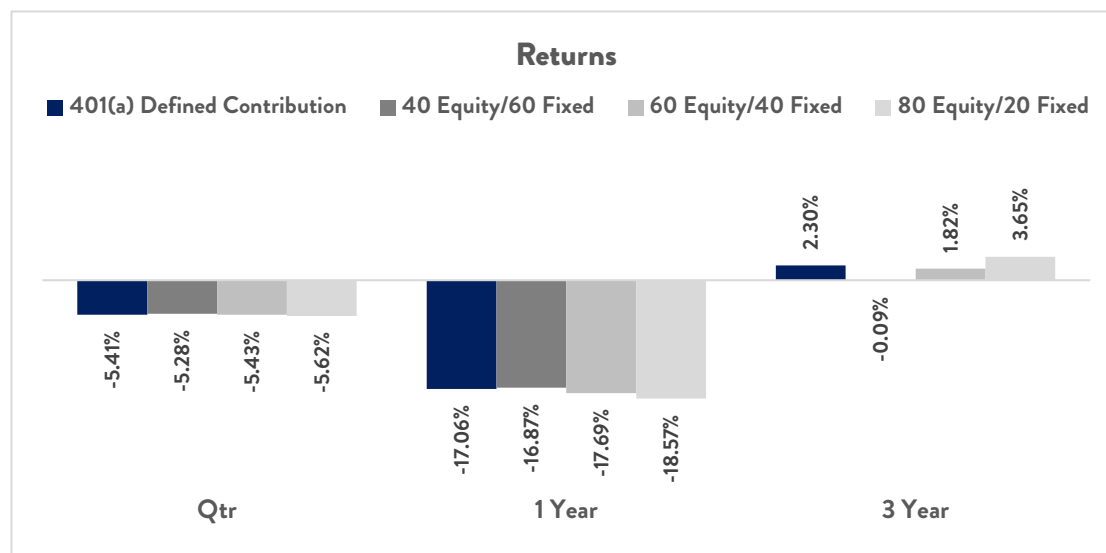
Third Quarter 2022

PLAN LEVEL CASH FLOWS

	Beginning Value	Cash Flow (+)	Cash Flow (-)	Transfer	Market Gain/Loss	Ending Value
Fixed Income	\$2,580,513	\$48,289	(\$53,947)	\$119,647	(\$2,475)	\$2,692,027
Large Cap	\$1,846,786	\$55,466	(\$12,414)	(\$20,645)	(\$89,316)	\$1,779,876
Mid Cap	\$892,114	\$30,086	(\$10,282)	(\$413)	(\$25,614)	\$885,892
Small Cap	\$468,343	\$18,151	(\$6,263)	(\$6,564)	(\$16,002)	\$457,664
International	\$381,712	\$10,188	(\$4,473)	(\$1,145)	(\$38,563)	\$347,718
Asset Allocation	\$28,685,180	\$1,016,597	(\$250,020)	(\$90,879)	(\$1,735,304)	\$27,625,574
Total	\$34,854,648	\$1,178,777	(\$337,399)	\$0	(\$1,907,273)	\$33,788,752

HISTORICAL PLAN CASH FLOWS

	Beginning Value	Net Cash Flow	Market Gain/Loss	Ending Value
3Q22	\$34,854,648	\$841,378	(\$1,907,273)	\$33,788,752
YTD	\$39,612,962	\$2,590,034	(\$8,414,244)	\$33,788,752
2021	\$32,088,454	\$3,377,484	\$4,147,025	\$39,612,962
2020	\$24,643,848	\$3,622,525	\$3,822,081	\$32,088,454
2019	\$18,802,415	\$1,890,811	\$3,950,623	\$24,643,848
2018	N/A	N/A	N/A	\$18,802,415



Equity Indices: Russell 3000, MSCI ACWI ex USA; Fixed Indices: US Treasury 3 Mo T-Bill, Bloomberg Global Aggregate Bond (rebalanced quarterly)

This page left blank intentionally.

SAN BERNARDINO COUNTY

401(k) Defined Contribution Plan

PLAN ASSET ALLOCATION

Third Quarter 2022

Fixed Income	Ticker	Assets	%
Stabilizer	-	\$49,095,120	27.8%
Sterling Capital Total Return Bond R6	STRDX	\$3,718,748	2.1%
Fidelity US Bond Index	FXNAX	\$757,502	0.4%
Fidelity Intermediate Treasury Bond Index	FUAMX	\$404,567	0.2%
Total		\$53,975,936	30.5%

Large Cap	Ticker	Assets	%
Fidelity 500 Index	FXAIX	\$22,396,093	12.7%
Hartford Core Equity R6	HAITX	\$21,740,315	12.3%
Total		\$44,136,408	24.9%

Mid Cap	Ticker	Assets	%
Fidelity Mid Cap Index	FSMDX	\$11,809,917	6.7%
Baron Growth Instl	BGRIX	\$6,076,662	3.4%
Total		\$17,886,579	10.1%

Small Cap	Ticker	Assets	%
Hartford Schroders US Small Cap Opps SDR	SCURX	\$1,177,221	0.7%
Fidelity Small Cap Index	FSSNX	\$6,592,179	3.7%
Total		\$7,769,400	4.4%

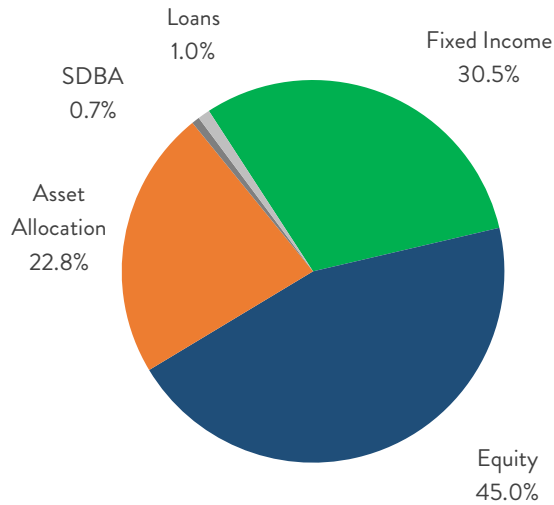
International	Ticker	Assets	%
MFS International Diversification R6	MDIZX	\$6,517,713	3.7%
Fidelity Total International Index	FTIHX	\$3,349,997	1.9%
Total		\$9,867,710	5.6%

Asset Allocation	Ticker	Assets	%
Conservative Allocation Portfolio	-	\$9,228,634	5.2%
Moderate Allocation Portfolio	-	\$14,560,528	8.2%
Aggressive Allocation Portfolio	-	\$6,225,861	3.5%
Vanguard Target Retirement Income	VTINX	\$108,685	0.1%
Vanguard Target Retirement 2020	VTWNX	\$1,560,549	0.9%
Vanguard Target Retirement 2025	VTTVX	\$213,386	0.1%
Vanguard Target Retirement 2030	VTHRX	\$3,533,234	2.0%
Vanguard Target Retirement 2035	VTTHX	\$403,493	0.2%
Vanguard Target Retirement 2040	VFORX	\$2,486,043	1.4%
Vanguard Target Retirement 2045	VTIVX	\$174,956	0.1%
Vanguard Target Retirement 2050	VFIFX	\$1,652,672	0.9%
Vanguard Target Retirement 2055	VFFVX	\$52,233	0.0%
Vanguard Target Retirement 2060	VTTSX	\$7,817	0.0%
Vanguard Target Retirement 2065	VLXVX	\$60,879	0.0%
Vanguard Target Retirement 2070	VSVNX	\$0	0.0%
Total		\$40,268,971	22.8%

Miscellaneous	Ticker	Assets	%
Self-Directed Brokerage Account	-	\$1,181,337	0.7%
Participant Loans	-	\$1,814,621	1.0%
Total		\$2,995,958	1.7%

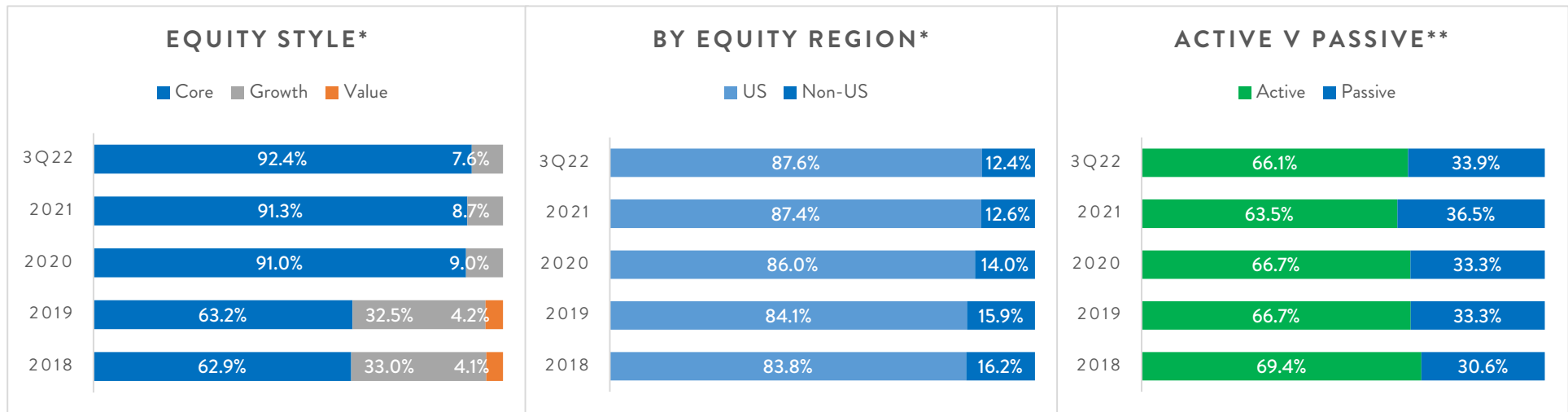
TOTAL PLAN ASSETS

\$176,900,965



HISTORICAL PLAN ALLOCATION

Asset Class	3Q22	2021	2020	2019	2018	2017	2016	2015
Fixed Income	30.5%	25.3%	29.0%	29.7%	32.9%	N/A	N/A	N/A
Large Cap	24.9%	27.7%	25.5%	24.8%	23.1%	N/A	N/A	N/A
Mid Cap	10.1%	11.6%	10.3%	9.6%	8.7%	N/A	N/A	N/A
Small Cap	4.4%	4.8%	4.4%	4.8%	4.5%	N/A	N/A	N/A
International	5.6%	6.3%	6.6%	7.4%	7.0%	N/A	N/A	N/A
Asset Allocation	22.8%	22.9%	22.5%	22.1%	22.1%	N/A	N/A	N/A
SDBA	0.7%	0.6%	0.6%	0.3%	0.3%	N/A	N/A	N/A
Loans	1.0%	0.8%	1.1%	1.3%	1.4%	N/A	N/A	N/A



*Excludes Fixed Income, Asset Allocation, SDBA, and Loan assets

**Excludes Asset Allocation, SDBA, and Loan assets

SAN BERNARDINO COUNTY

401(k) Defined Contribution Plan

PLAN ASSET ALLOCATION

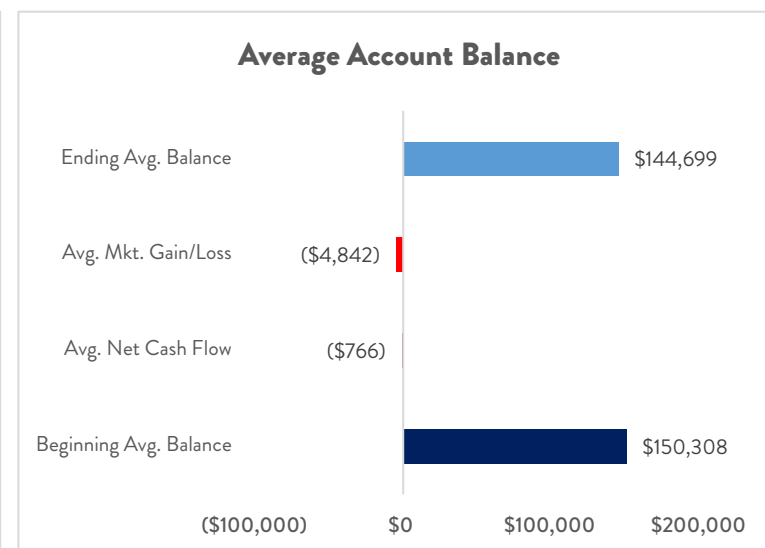
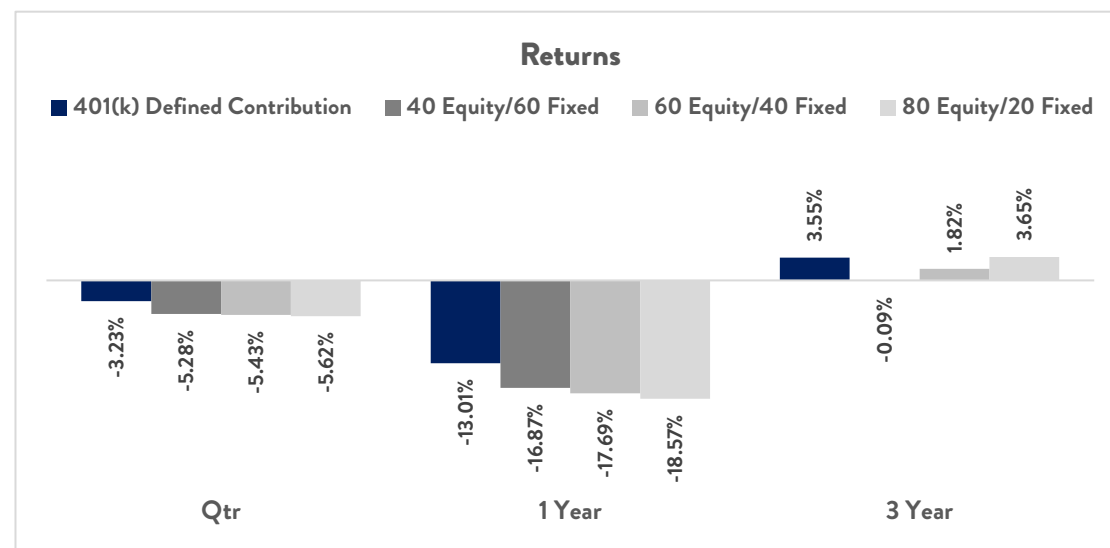
Third Quarter 2022

PLAN LEVEL CASH FLOWS

	Beginning Value	Cash Flow (+)	Cash Flow (-)	Transfer	Market Gain/Loss	Ending Value
Fixed Income	\$53,657,038	\$496,285	(\$794,634)	\$647,864	(\$30,616)	\$53,975,936
Large Cap	\$47,098,684	\$631,133	(\$1,305,315)	(\$222,128)	(\$2,065,966)	\$44,136,408
Mid Cap	\$18,488,882	\$338,089	(\$269,294)	(\$176,211)	(\$494,886)	\$17,886,579
Small Cap	\$7,980,746	\$208,804	(\$75,894)	(\$122,736)	(\$221,518)	\$7,769,400
International	\$11,068,215	\$219,637	(\$259,344)	(\$103,302)	(\$1,057,496)	\$9,867,710
Asset Allocation	\$42,354,791	\$964,390	(\$1,080,999)	\$2,699	(\$1,971,909)	\$40,268,971
SDBA	\$1,224,030	\$0	\$0	(\$26,186)	(\$16,507)	\$1,181,337
Total	\$181,872,385	\$2,858,338	(\$3,785,480)	\$0	(\$5,858,899)	\$175,086,344

HISTORICAL PLAN CASH FLOWS

	Beginning Value	Net Cash Flow	Market Gain/Loss	Ending Value
3Q22	\$181,872,385	(\$927,143)	(\$5,858,899)	\$175,086,344
YTD	\$211,583,102	(\$299,126)	(\$36,197,633)	\$175,086,344
2021	\$185,633,441	\$1,030,998	\$24,918,663	\$211,583,102
2020	\$163,277,656	\$2,858,713	\$19,497,072	\$185,633,441
2019	\$136,406,428	\$1,816,408	\$25,054,820	\$163,277,656
2018	N/A	N/A	N/A	\$136,406,428
2017	N/A	N/A	N/A	N/A



Equity Indices: Russell 3000, MSCI ACWI ex USA; Fixed Indices: US Treasury 3 Mo T-Bill, Bloomberg Global Aggregate Bond (rebalanced quarterly)

This page left blank intentionally.

SAN BERNARDINO COUNTY

Retirement Medical Trust

PLAN ASSET ALLOCATION

Third Quarter 2022

Fixed Income	Ticker	Assets	%
Voya Fixed Account	-	\$85,597,897	48.0%
Voya Government Money Market A	VYAXX	\$12,765	0.0%
Sterling Capital Total Return Bond R6	STRDX	\$639,137	0.4%
Fidelity US Bond Index	FXNAX	\$42,478	0.0%
Fidelity Intermediate Treasury Bond Index	FUAMX	\$81,604	0.0%
Total		\$86,373,881	48.4%

Large Cap	Ticker	Assets	%
Fidelity 500 Index	FXAIX	\$3,065,683	1.7%
Hartford Core Equity R6	HAITX	\$3,173,976	1.8%
Total		\$6,239,659	3.5%

Mid Cap	Ticker	Assets	%
Fidelity Mid Cap Index	FSMDX	\$2,251,573	1.3%
Baron Growth Instl	BGRIX	\$1,801,706	1.0%
Total		\$4,053,279	2.3%

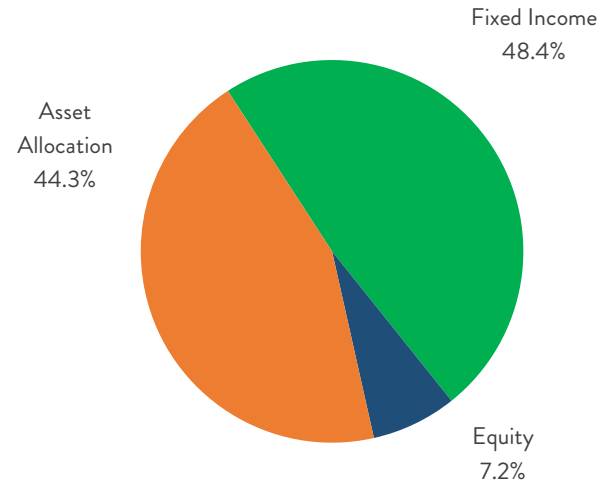
Small Cap	Ticker	Assets	%
Hartford Schroders US Small Cap Opps SDR	SCURX	\$288,686	0.2%
Fidelity Small Cap Index	FSSNX	\$1,247,565	0.7%
Total		\$1,536,252	0.9%

International	Ticker	Assets	%
MFS International Diversification R6	MDIZX	\$658,227	0.4%
Fidelity Total International Index	FTIHX	\$395,750	0.2%
Total		\$1,053,976	0.6%

Asset Allocation	Ticker	Assets	%
Conservative Allocation Portfolio	-	\$1,901,574	1.1%
Moderate Allocation Portfolio	-	\$3,769,677	2.1%
Aggressive Allocation Portfolio	-	\$4,945,722	2.8%
Vanguard Target Retirement Income	VTINX	\$1,351,496	0.8%
Vanguard Target Retirement 2020	VTWNX	\$13,253,998	7.4%
Vanguard Target Retirement 2025	VTTVX	\$269,959	0.2%
Vanguard Target Retirement 2030	VTHRX	\$27,076,161	15.2%
Vanguard Target Retirement 2035	VTTHX	\$109,385	0.1%
Vanguard Target Retirement 2040	VFORX	\$20,377,826	11.4%
Vanguard Target Retirement 2045	VTIVX	\$9,425	0.0%
Vanguard Target Retirement 2050	VFIFX	\$5,966,842	3.3%
Vanguard Target Retirement 2055	VFFVX	\$20,667	0.0%
Vanguard Target Retirement 2060	VTTSX	\$29,950	0.0%
Vanguard Target Retirement 2065	VLXVX	\$10,270	0.0%
Vanguard Target Retirement 2070	VSVNX	\$0	0.0%
Total		\$79,092,952	44.3%

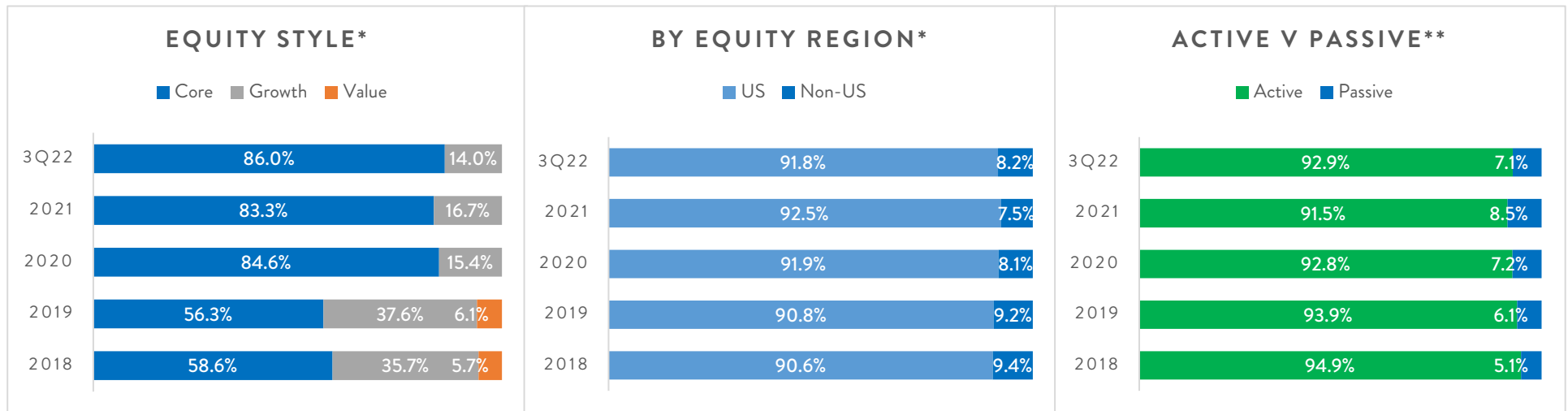
TOTAL PLAN ASSETS

\$178,349,998



HISTORICAL PLAN ALLOCATION

Asset Class	3Q22	2021	2020	2019	2018	2017	2016	2015
Fixed Income	48.4%	44.6%	49.4%	54.2%	59.5%	N/A	N/A	N/A
Large Cap	3.5%	4.1%	3.7%	3.3%	2.8%	N/A	N/A	N/A
Mid Cap	2.3%	3.0%	2.7%	2.4%	2.0%	N/A	N/A	N/A
Small Cap	0.9%	0.9%	0.8%	0.9%	0.7%	N/A	N/A	N/A
International	0.6%	0.6%	0.6%	0.7%	0.6%	N/A	N/A	N/A
Asset Allocation	44.3%	46.8%	42.7%	38.6%	34.3%	N/A	N/A	N/A



*Excludes Fixed Income and Asset Allocation assets

**Excludes Asset Allocation assets

SAN BERNARDINO COUNTY

Retirement Medical Trust

PLAN ASSET ALLOCATION

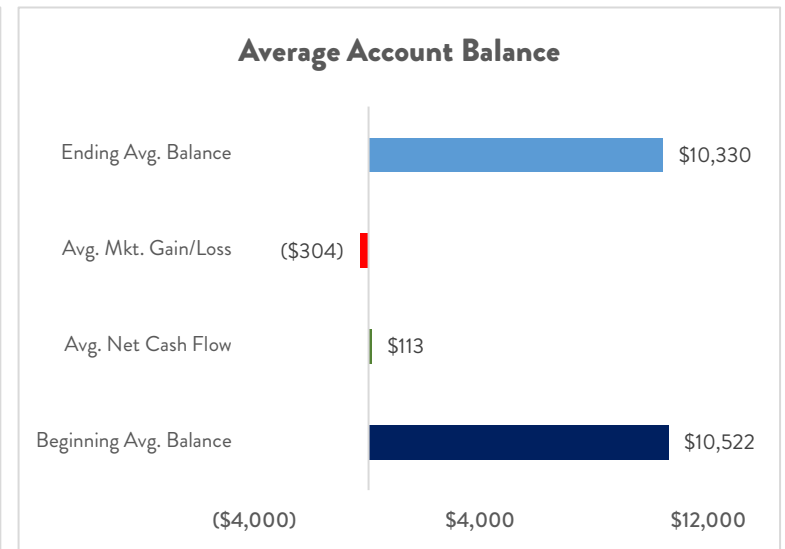
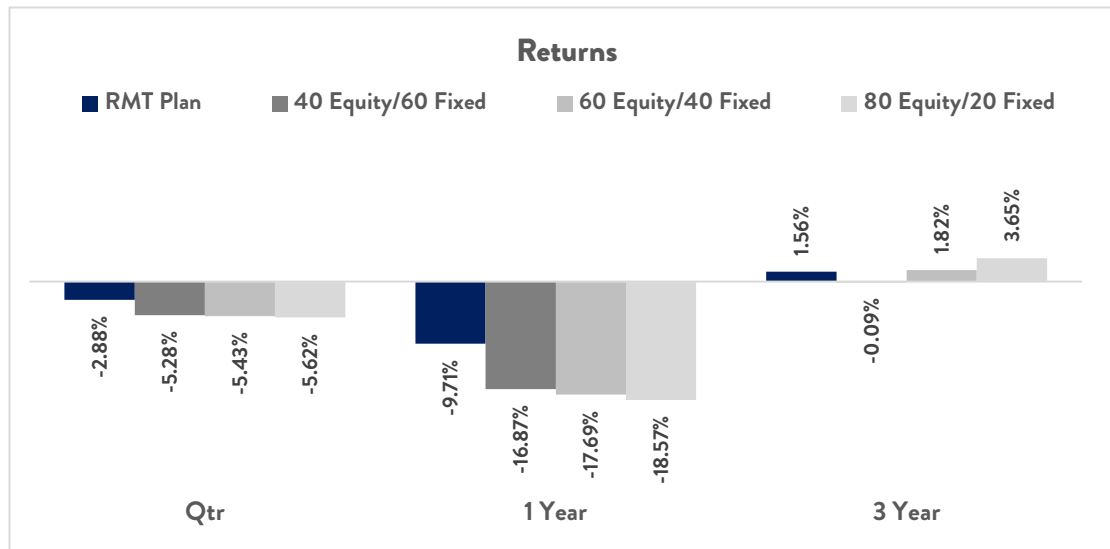
Third Quarter 2022

PLAN LEVEL CASH FLOWS

	Beginning Value	Cash Flow (+)	Cash Flow (-)	Transfer	Market Gain/Loss	Ending Value
Fixed Income	\$86,800,433	\$4,969,386	(\$1,685,555)	(\$3,953,756)	\$243,372	\$86,373,881
Large Cap	\$6,388,886	\$0	(\$105,966)	\$262,095	(\$305,355)	\$6,239,659
Mid Cap	\$4,147,161	\$675	(\$57,796)	\$71,036	(\$107,796)	\$4,053,279
Small Cap	\$1,578,884	\$0	(\$21,660)	\$24,553	(\$45,525)	\$1,536,252
International	\$1,169,336	\$0	(\$16,254)	\$14,846	(\$113,952)	\$1,053,976
Asset Allocation	\$81,576,883	\$0	(\$1,139,290)	\$3,581,227	(\$4,925,869)	\$79,092,952
Total	\$181,661,584	\$4,970,061	(\$3,026,521)	\$0	(\$5,255,126)	\$178,349,998

HISTORICAL PLAN CASH FLOWS

	Beginning Value	Net Cash Flow	Market Gain/Loss	Ending Value
3Q22	\$181,661,584	\$1,943,540	(\$5,255,126)	\$178,349,998
YTD	\$192,654,036	\$9,741,024	(\$24,045,062)	\$178,349,998
2021	\$167,283,890	\$12,112,368	\$13,257,779	\$192,654,036
2020	\$147,219,470	\$8,054,702	\$12,009,718	\$167,283,890
2019	\$124,574,529	\$9,670,091	\$12,974,851	\$147,219,470
2018	N/A	N/A	N/A	\$124,574,529



Equity Indices: Russell 3000, MSCI ACWI ex USA; Fixed Indices: US Treasury 3 Mo T-Bill, Bloomberg Global Aggregate Bond (rebalanced quarterly)

This page left blank intentionally.

Section 3

SAN BERNARDINO COUNTY

PST Deferred Compensation Retirement Plan

PLAN ASSET ALLOCATION

Third Quarter 2022

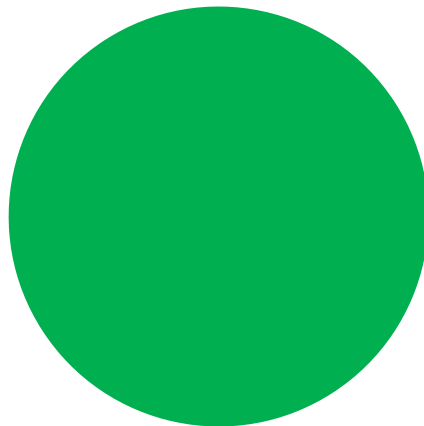
Fixed Income	Ticker	Assets	%
Stabilizer	-	\$46,026,768	100.0%
Total		\$46,026,768	100.0%

HISTORICAL PLAN CASH FLOWS

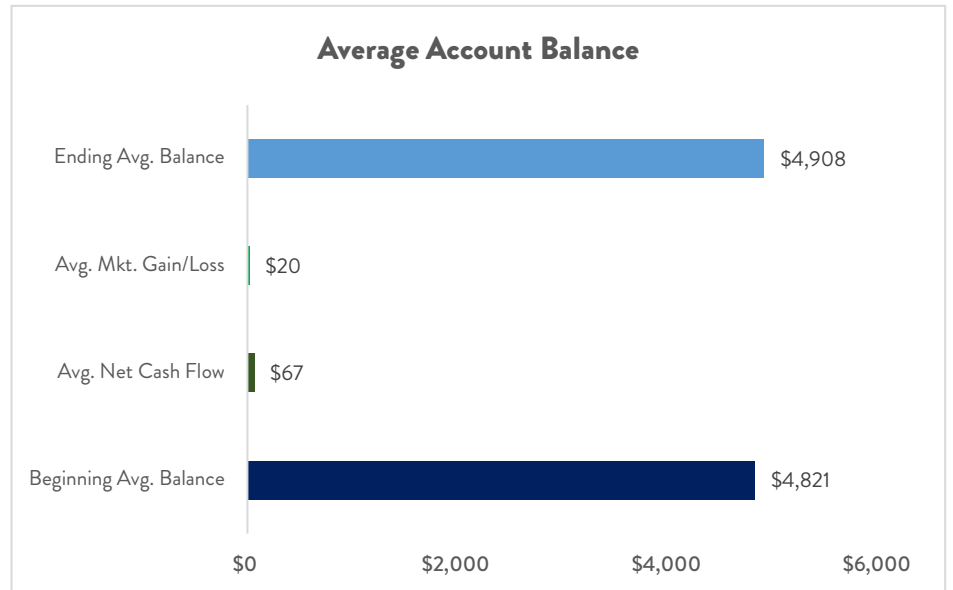
	Beginning Value	Net Cash Flow	Market Gain/Loss	Ending Value
3Q22	\$45,215,217	\$624,791	\$186,761	\$46,026,768
YTD	\$43,987,776	\$1,498,476	\$540,516	\$46,026,768
2021	\$40,555,917	\$2,736,548	\$695,312	\$43,987,776
2020	\$37,906,246	\$1,699,237	\$950,434	\$40,555,917
2019	\$36,665,327	\$292,121	\$948,798	\$37,906,246
2018	N/A	N/A	N/A	\$36,665,327

TOTAL PLAN ASSETS \$46,026,768

Fixed Income
100.0%



Average Account Balance



This page left blank intentionally.

Section 4

Proposed Investment Policy Status

Key: Ⓟ Pass / ● Fail

	Performance Factors	Qualitative Factors	On-Watch Information	Notes
Stabilizer	Ⓟ	Ⓟ	-	
Voya Fixed Account	●	Ⓟ	-	Trailing Benchmark and Peer Group for 5 year period.
Voya Government Money Market A	Ⓟ	Ⓟ	-	
Sterling Capital Total Return Bond R6	Ⓟ	Ⓟ	-	
Fidelity US Bond Index	Ⓟ	Ⓟ	-	
Fidelity Intermediate Treasury Bond Index	Ⓟ	Ⓟ	-	
Fidelity 500 Index	Ⓟ	Ⓟ	-	
Hartford Core Equity R6	Ⓟ	Ⓟ	-	
Fidelity Mid Cap Index	Ⓟ	Ⓟ	-	
Baron Growth Instl	Ⓟ	Ⓟ	-	
Hartford Schroders US Small Cap Opps SDR	Ⓟ	Ⓟ	-	
Fidelity Small Cap Index	Ⓟ	Ⓟ	-	
MFS International Diversification R6	Ⓟ	Ⓟ	-	
Fidelity Total International Index	Ⓟ	Ⓟ	-	
Conservative Allocation Portfolio	Ⓟ	Ⓟ	-	
Moderate Allocation Portfolio	Ⓟ	Ⓟ	3Q21 (Performance)	Performance in compliance as of 2Q22.
Aggressive Allocation Portfolio	●	Ⓟ	4Q21 (Performance)	Trailing Benchmark and Peer Group for 5 year period.
Vanguard Target Retirement Income	Ⓟ	Ⓟ	-	
Vanguard Target Retirement 2020	Ⓟ	Ⓟ	-	
Vanguard Target Retirement 2025	Ⓟ	Ⓟ	-	Target date suite to be mapped to CIT version of funds.
Vanguard Target Retirement 2030	Ⓟ	Ⓟ	-	
Vanguard Target Retirement 2035	Ⓟ	Ⓟ	-	

Key: Ⓟ Pass / ● Fail

	Performance Factors	Qualitative Factors	On-Watch Information	Notes
Vanguard Target Retirement 2040	Ⓟ	Ⓟ	-	
Vanguard Target Retirement 2045	Ⓟ	Ⓟ	-	
Vanguard Target Retirement 2050	Ⓟ	Ⓟ	-	
Vanguard Target Retirement 2055	Ⓟ	Ⓟ	-	Target date suite to be mapped to CIT version of funds.
Vanguard Target Retirement 2060	Ⓟ	Ⓟ	-	
Vanguard Target Retirement 2065	●	Ⓟ	-	Trailing Benchmark and Peer Group for 5 year period.
Vanguard Target Retirement 2070	Ⓟ	Ⓟ	-	

SAN BERNARDINO COUNTY

All Plans - Combined

PERFORMANCE REVIEW

Third Quarter 2022

	QTR	YTD	1Yr	Annualized			2021	2020	2019	2018	2017	2016
				3Yr	5Yr	10Yr						
Stabilizer	0.41	1.21	1.61	1.98	2.20	2.27	1.64	2.42	2.59	2.50	N/A	N/A
5 Yr Constant Maturity US Treasury Yield	0.80	1.99	2.29	1.26	1.72	1.59	0.85	0.54	1.96	2.75	1.91	1.44
+/- Index	(0.39)	(0.78)	(0.68)	0.72	0.48	0.68	0.79	1.88	0.63	(0.25)	-	-
US Stable Value	57	39	37	18	10	7	24	4	7	6	N/A	N/A
Voya Fixed Account	0.30	0.90	1.25	1.47	1.68	2.01	1.50	1.40	1.85	1.90	N/A	N/A
5 Yr Constant Maturity US Treasury Yield	0.80	1.99	2.29	1.26	1.72	1.59	0.85	0.54	1.96	2.75	1.91	1.44
+/- Index	(0.50)	(1.09)	(1.04)	0.21	(0.04)	0.42	0.65	0.86	(0.11)	(0.85)	-	-
US Stable Value	87	76	69	65	59	17	36	86	82	42	N/A	N/A
Voya Government Money Market A	0.48	0.57	0.57	0.42	0.89	0.47	0.10	0.27	1.88	1.51	0.26	0.08
US 90 Day T-Bill	0.66	1.01	1.02	0.60	1.14	0.68	0.04	0.36	2.06	1.94	0.93	0.32
+/- Index	(0.18)	(0.44)	(0.45)	(0.18)	(0.25)	(0.21)	0.06	(0.09)	(0.18)	(0.43)	(0.67)	(0.24)
US Money Market - Taxable	20	37	37	39	43	46	2	52	45	44	77	41
Sterling Capital Total Return Bond R6	-4.42	-14.50	-14.72	-2.54	0.29	1.46	-1.12	9.35	9.37	-0.27	4.33	3.75
Bloomberg US Aggregate Bond Index	-4.75	-14.61	-14.60	-3.26	-0.27	0.89	-1.54	7.51	8.72	0.01	3.54	2.65
+/- Index	0.33	0.11	(0.12)	0.72	0.56	0.57	0.42	1.84	0.65	(0.28)	0.79	1.10
US Fund Intermediate Core Bond	20	32	35	15	9	7	28	15	18	42	10	12
Fidelity US Bond Index	-4.69	-14.47	-14.57	-3.24	-0.28	0.85	-1.79	7.80	8.48	0.01	3.50	2.52
Bloomberg US Aggregate Bond Index	-4.75	-14.61	-14.60	-3.26	-0.27	0.89	-1.54	7.51	8.72	0.01	3.54	2.65
+/- Index	0.06	0.14	0.03	0.02	(0.01)	(0.04)	(0.25)	0.29	(0.23)	0.00	(0.04)	(0.13)
US Fund Intermediate Core Bond	44	31	28	49	41	47	65	50	48	26	43	55

SAN BERNARDINO COUNTY

All Plans - Combined

PERFORMANCE REVIEW

Third Quarter 2022

	QTR	YTD	1Yr	Annualized			2021	2020	2019	2018	2017	2016
				3Yr	5Yr	10Yr						
Fidelity Intermediate Treasury Bond Index	-4.79	-13.51	-13.71	-3.20	-0.21	0.53	-3.00	9.10	7.25	1.23	2.20	0.97
Bloomberg US Treasury 5-10 Year Index	-4.86	-13.60	-13.80	-3.18	-0.19	0.60	-2.97	9.09	7.48	1.22	2.17	1.18
+/- Index	0.07	0.09	0.09	(0.02)	(0.02)	(0.07)	(0.03)	0.01	(0.23)	0.01	0.03	(0.21)
US Fund Intermediate Government	29	67	61	36	18	24	92	8	1	2	16	59
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Fidelity 500 Index	-4.89	-23.88	-15.49	8.15	9.23	11.69	28.69	18.40	31.47	-4.40	21.81	11.97
S&P 500 Index	-4.88	-23.87	-15.47	8.16	9.24	11.70	28.71	18.40	31.49	-4.38	21.83	11.96
+/- Index	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)	0.00	(0.01)	(0.02)	(0.02)	0.01
US Fund Large Blend	44	46	36	20	15	11	21	33	22	22	32	27
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Hartford Core Equity R6	-4.14	-23.97	-16.18	6.98	9.78	12.34	24.62	18.49	33.89	-1.55	22.17	5.75
S&P 500 Index	-4.88	-23.87	-15.47	8.16	9.24	11.70	28.71	18.40	31.49	-4.38	21.83	11.96
+/- Index	0.74	(0.10)	(0.71)	(1.18)	0.54	0.64	(4.09)	0.09	2.40	2.83	0.34	(6.21)
US Fund Large Blend	17	49	49	53	7	2	72	31	5	5	28	91
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Fidelity Mid Cap Index	-3.42	-24.26	-19.38	5.19	6.48	10.29	22.56	17.11	30.51	-9.05	18.47	13.86
Russell Mid Cap Index	-3.44	-24.27	-19.39	5.19	6.48	10.30	22.58	17.10	30.54	-9.06	18.52	13.80
+/- Index	0.02	0.01	0.01	0.00	0.00	(0.01)	(0.02)	0.01	(0.03)	0.01	(0.05)	0.07
US Fund Mid-Cap Blend	39	69	72	51	27	18	66	24	24	25	26	57
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Baron Growth Instl	-1.61	-30.67	-26.12	6.39	9.81	11.31	20.15	33.05	40.50	-2.67	27.35	6.31
Russell Mid Cap Growth Index	-0.65	-31.45	-29.50	4.26	7.62	10.85	12.73	35.59	35.47	-4.75	25.27	7.33
+/- Index	(0.96)	0.78	3.38	2.13	2.19	0.46	7.42	(2.53)	5.03	2.08	2.09	(1.02)
US Fund Mid-Cap Growth	42	37	21	25	12	24	16	61	8	28	32	41

SAN BERNARDINO COUNTY

All Plans - Combined

PERFORMANCE REVIEW

Third Quarter 2022

	QTR	YTD	1Yr	Annualized			2021	2020	2019	2018	2017	2016
				3Yr	5Yr	10Yr						
Hartford Schroders US Small Cap Opps SDR	-6.04	-24.27	-19.03	3.26	4.30	9.10	22.98	8.14	32.06	-10.72	14.81	19.49
Russell 2000 Index	-2.19	-25.10	-23.50	4.29	3.55	8.55	14.82	19.96	25.52	-11.01	14.65	21.31
+/- Index	(3.85)	0.83	4.47	(1.03)	0.75	0.55	8.16	(11.82)	6.53	0.29	0.16	(1.82)
US Fund Small Blend	89	56	43	69	37	30	51	67	3	32	27	69
Fidelity Small Cap Index	-2.08	-24.96	-23.39	4.35	3.65	8.71	14.71	19.99	25.71	-10.88	14.85	21.63
Russell 2000 Index	-2.19	-25.10	-23.50	4.29	3.55	8.55	14.82	19.96	25.52	-11.01	14.65	21.31
+/- Index	0.11	0.14	0.11	0.06	0.10	0.16	(0.11)	0.03	0.18	0.14	0.20	0.32
US Fund Small Blend	13	65	84	51	51	44	89	12	36	34	26	46
MFS International Diversification R6	-9.35	-27.68	-25.34	-0.54	1.35	4.79	7.78	15.43	26.09	-10.92	30.25	2.47
MSCI ACWI Ex-USA (Net) Index	-9.91	-26.50	-25.17	-1.52	-0.81	3.01	7.82	10.65	21.51	-14.20	27.19	4.50
+/- Index	0.56	(1.18)	(0.17)	0.98	2.16	1.78	(0.04)	4.78	4.58	3.27	3.05	(2.03)
US Fund Foreign Large Blend	19	43	32	25	7	7	70	20	20	9	9	28
Fidelity Total International Index	-10.45	-27.06	-25.59	-1.42	-0.83	-	8.47	11.07	21.48	-14.38	27.63	-
MSCI ACWI Ex-USA IMI (Net) Index	-9.69	-26.92	-25.72	-1.27	-0.78	3.19	8.53	11.12	21.63	-14.76	27.81	4.41
+/- Index	(0.76)	(0.14)	0.13	(0.15)	(0.05)	-	(0.06)	(0.04)	(0.16)	0.37	(0.18)	-
US Fund Foreign Large Blend	54	30	38	41	41	-	65	42	62	39	27	-
Conservative Allocation Portfolio	-1.70	-7.19	-5.17	3.24	3.39	4.55	6.71	7.74	9.55	-0.82	N/A	N/A
Dow Jones Moderately Conservative Index	-5.50	-18.84	-17.52	-1.02	1.21	3.20	4.76	10.08	14.14	-3.15	10.91	5.65
+/- Index	3.80	11.65	12.35	4.26	2.18	1.35	1.95	(2.34)	(4.59)	2.33	-	-
US Fund Allocation--30% to 50% Equity	2	1	2	3	5	20	81	62	100	1	N/A	N/A

SAN BERNARDINO COUNTY

All Plans - Combined

PERFORMANCE REVIEW

Third Quarter 2022

	QTR	YTD	1Yr	Annualized			2021	2020	2019	2018	2017	2016
				3Yr	5Yr	10Yr						
Moderate Allocation Portfolio	-4.80	-17.99	-14.85	2.18	3.02	5.93	11.27	10.15	18.64	-6.01	N/A	N/A
Dow Jones Moderate Index	-5.48	-20.38	-18.11	1.01	2.70	5.12	9.40	12.24	18.60	-5.21	15.15	7.67
+/- Index	0.68	2.39	3.26	1.17	0.32	0.81	1.87	(2.09)	0.04	(0.80)	-	-
US Fund Allocation--50% to 70% Equity	40	25	34	55	62	46	76	71	66	56	N/A	N/A
Aggressive Allocation Portfolio	-6.26	-22.90	-19.02	2.36	3.30	6.80	14.78	12.42	23.80	-8.33	N/A	N/A
Dow Jones Moderately Aggressive Index	-5.48	-22.03	-18.88	2.82	3.95	6.79	14.05	14.14	22.84	-7.33	19.08	9.31
+/- Index	(0.78)	(0.87)	(0.14)	(0.46)	(0.65)	0.01	0.73	(1.72)	0.96	(1.00)	-	-
US Fund Allocation--70% to 85% Equity	74	58	65	67	66	36	66	60	26	59	N/A	N/A
Vanguard Target Retirement Income	-4.64	-15.89	-14.19	-0.02	1.96	3.31	5.25	10.02	13.16	-1.99	8.47	5.25
Vanguard Retirement Income Index	-4.56	-15.77	-14.04	0.33	2.22	3.54	5.43	10.70	13.40	-1.98	8.67	5.35
+/- Index	(0.08)	(0.12)	(0.15)	(0.35)	(0.26)	(0.23)	(0.18)	(0.68)	(0.24)	(0.01)	(0.19)	(0.10)
US Fund Target-Date Retirement	51	45	44	25	24	29	64	30	48	18	50	30
Vanguard Target Retirement 2020	-5.12	-18.21	-15.83	1.17	2.91	5.46	8.17	12.04	17.63	-4.24	14.08	6.95
Vanguard Retirement 2020 Index	-4.93	-17.97	-15.53	1.62	3.26	5.74	8.43	12.86	17.87	-4.14	14.22	7.17
+/- Index	(0.19)	(0.24)	(0.30)	(0.45)	(0.35)	(0.28)	(0.26)	(0.82)	(0.24)	(0.10)	(0.14)	(0.22)
US Fund Target-Date 2020	48	40	36	39	26	21	62	41	32	47	23	30
Vanguard Target Retirement 2025	-5.59	-20.35	-17.53	1.40	3.15	5.96	9.80	13.30	19.63	-5.15	15.94	7.48
Vanguard Retirement 2025 Index	-5.32	-19.95	-17.09	1.97	3.58	6.29	10.10	14.19	19.93	-5.01	16.08	7.66
+/- Index	(0.27)	(0.40)	(0.44)	(0.57)	(0.43)	(0.33)	(0.30)	(0.89)	(0.30)	(0.14)	(0.14)	(0.18)
US Fund Target-Date 2025	59	62	61	38	27	21	47	34	20	48	22	21

SAN BERNARDINO COUNTY

All Plans - Combined

PERFORMANCE REVIEW

Third Quarter 2022

	QTR	YTD	1Yr	Annualized			2021	2020	2019	2018	2017	2016
				3Yr	5Yr	10Yr						
Vanguard Target Retirement 2030	-5.93	-21.60	-18.42	1.82	3.43	6.46	11.38	14.10	21.07	-5.86	17.52	7.85
Vanguard Retirement 2030 Index	-5.58	-21.16	-17.96	2.39	3.86	6.78	11.65	14.96	21.33	-5.74	17.65	8.11
+/- Index	(0.35)	(0.44)	(0.46)	(0.57)	(0.43)	(0.32)	(0.27)	(0.86)	(0.26)	(0.12)	(0.13)	(0.26)
US Fund Target-Date 2030	65	48	55	46	36	27	54	35	37	39	37	27
Vanguard Target Retirement 2035	-6.09	-22.40	-18.87	2.39	3.78	6.99	12.96	14.79	22.44	-6.58	19.12	8.26
Vanguard Retirement 2035 Index	-5.75	-22.00	-18.48	2.94	4.22	7.31	13.24	15.67	22.76	-6.48	19.24	8.55
+/- Index	(0.34)	(0.40)	(0.39)	(0.55)	(0.44)	(0.32)	(0.28)	(0.87)	(0.33)	(0.10)	(0.12)	(0.29)
US Fund Target-Date 2035	58	32	42	47	38	27	78	38	49	31	40	32
Vanguard Target Retirement 2040	-6.33	-23.27	-19.42	2.91	4.11	7.40	14.56	15.47	23.86	-7.32	20.71	8.73
Vanguard Retirement 2040 Index	-5.93	-22.86	-19.01	3.47	4.55	7.75	14.85	16.31	24.19	-7.22	20.87	8.98
+/- Index	(0.40)	(0.41)	(0.41)	(0.56)	(0.44)	(0.35)	(0.29)	(0.83)	(0.33)	(0.11)	(0.16)	(0.25)
US Fund Target-Date 2040	57	27	32	43	35	21	80	39	49	35	30	23
Vanguard Target Retirement 2045	-6.51	-24.10	-19.93	3.46	4.42	7.61	16.16	16.30	24.94	-7.90	21.42	8.87
Vanguard Retirement 2045 Index	-6.11	-23.70	-19.54	3.99	4.85	7.96	16.45	17.03	25.36	-7.77	21.54	9.13
+/- Index	(0.40)	(0.40)	(0.39)	(0.53)	(0.43)	(0.35)	(0.29)	(0.73)	(0.42)	(0.13)	(0.11)	(0.26)
US Fund Target-Date 2045	58	28	36	28	23	18	65	34	40	41	24	26
Vanguard Target Retirement 2050	-6.64	-24.43	-20.18	3.41	4.39	7.60	16.41	16.39	24.98	-7.90	21.39	8.85
Vanguard Retirement 2050 Index	-6.21	-24.05	-19.81	3.97	4.84	7.95	16.77	17.18	25.36	-7.77	21.54	9.13
+/- Index	(0.43)	(0.38)	(0.37)	(0.56)	(0.45)	(0.35)	(0.36)	(0.79)	(0.38)	(0.13)	(0.14)	(0.28)
US Fund Target-Date 2050	59	27	37	30	25	20	70	35	45	37	31	27

SAN BERNARDINO COUNTY

All Plans - Combined

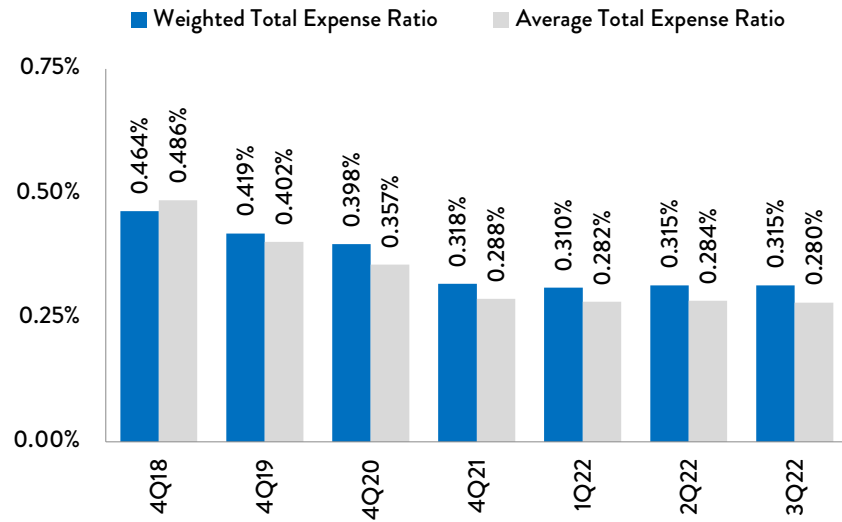
PERFORMANCE REVIEW

Third Quarter 2022

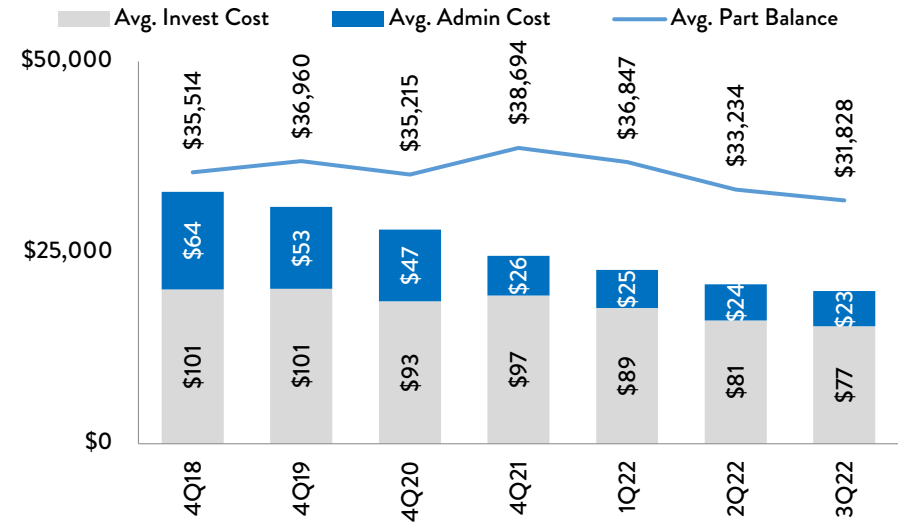
	QTR	YTD	1Yr	Annualized			2021	2020	2019	2018	2017	2016
				3Yr	5Yr	10Yr						
Vanguard Target Retirement 2055	-6.63	-24.44	-20.17	3.40	4.38	7.58	16.44	16.32	24.98	-7.89	21.38	8.88
Vanguard Retirement 2055 Index	-6.21	-24.05	-19.81	3.97	4.84	7.95	16.77	17.18	25.36	-7.77	21.54	9.13
+/- Index	(0.42)	(0.39)	(0.36)	(0.57)	(0.46)	(0.37)	(0.33)	(0.86)	(0.38)	(0.12)	(0.16)	(0.25)
US Fund Target-Date 2055	59	27	37	33	28	28	75	40	47	35	39	26
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Vanguard Target Retirement 2060	-6.64	-24.44	-20.16	3.40	4.38	7.58	16.44	16.32	24.96	-7.87	21.36	8.84
Vanguard Retirement 2060 Index	-6.21	-24.05	-19.81	3.97	4.84	7.95	16.77	17.18	25.36	-7.77	21.54	9.13
+/- Index	(0.43)	(0.39)	(0.35)	(0.57)	(0.46)	(0.37)	(0.33)	(0.85)	(0.40)	(0.10)	(0.18)	(0.28)
US Fund Target-Date 2060	61	24	35	36	30	50	77	41	56	30	43	23
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Vanguard Target Retirement 2065	-6.60	-24.38	-20.10	3.38	4.36	-	16.46	16.17	24.96	-7.95	-	-
Vanguard Retirement 2065 Index	-6.21	-24.05	-19.81	3.97	4.84	-	16.77	17.18	25.36	-7.77	-	-
+/- Index	(0.39)	(0.33)	(0.29)	(0.59)	(0.48)	-	(0.31)	(1.00)	(0.39)	(0.18)	-	-
US Fund Target-Date 2065+	52	22	24	46	60	-	67	56	59	12	-	-
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Vanguard Target Retirement 2070	-6.57	-	-	-	-	-	-	-	-	-	-	-
Vanguard Retirement 2070 Index	-6.21	-	-	-	-	-	-	-	-	-	-	-
+/- Index	(0.36)	-	-	-	-	-	-	-	-	-	-	-
US Fund Target-Date 2065+	50	-	-	-	-	-	-	-	-	-	-	-

Section 5

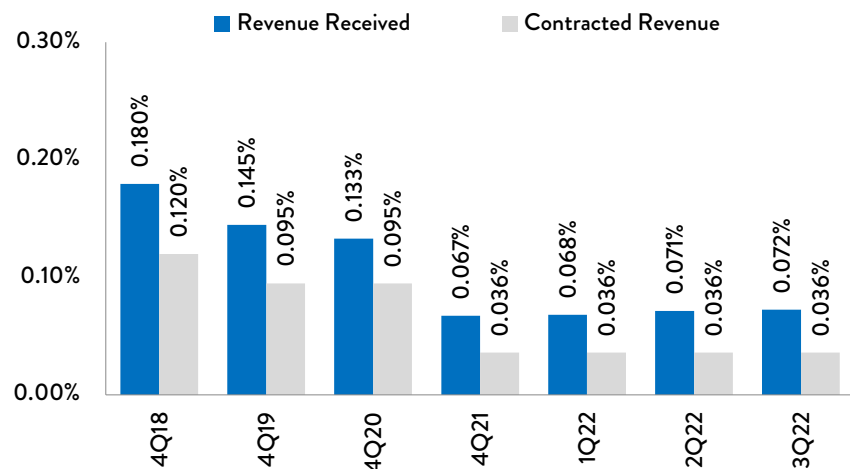
Annualized Plan Cost (%)



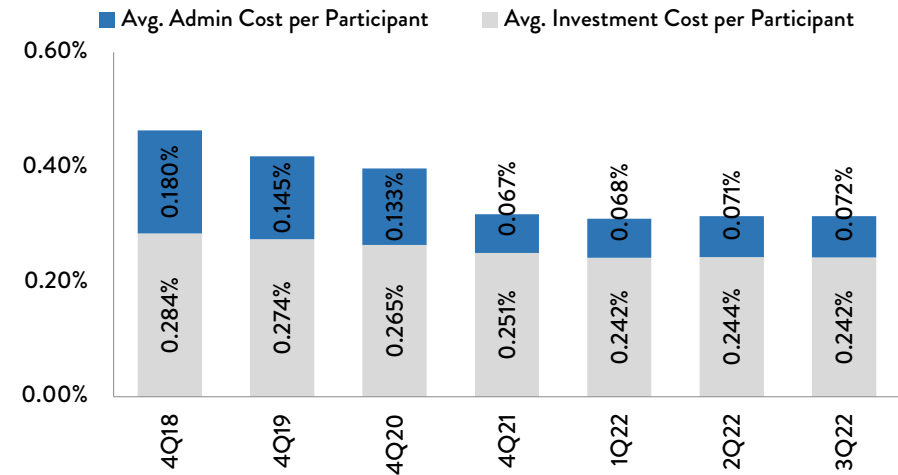
Average Participant Balance and Cost (\$)



Annualized Contracted Revenue v. Revenue Received* (as a % of total assets)



Annualized Investment Cost Summary (as a % of total assets)



*Revenue received is 0.072% annually on all assets excluding SDBA. Contracted revenue is 0.036% annually on all assets excluding SDBA.

SAN BERNARDINO COUNTY

Full-Time Plans - Combined

PLAN FEE ANALYSIS

Third Quarter 2022

Annualized

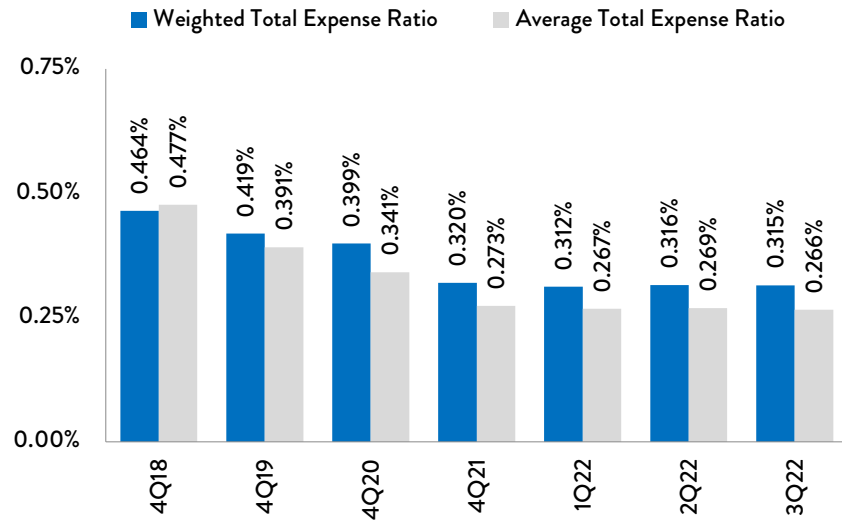
Fund	Ticker	Quarter End Assets	Net Expense Ratio	Admin Fee	Est. Total Invest. Cost	Est. Total Admin. Cost
Stabilizer	-	\$277,632,990	0.34%	0.072%	\$943,952	\$201,148
Voya Fixed Account**	-	\$85,597,897	0.41%	0.072%	\$350,951	\$62,016
Voya Government Money Market A	VYAXX	\$12,765	0.40%	0.072%	\$51	\$9
Sterling Capital Total Return Bond R6	STRDX	\$29,548,833	0.35%	0.072%	\$103,421	\$21,408
Fidelity US Bond Index	FXNAX	\$9,134,810	0.03%	0.072%	\$2,284	\$6,618
Fidelity Intermediate Treasury Bond Index	FUAMX	\$1,636,221	0.03%	0.072%	\$491	\$1,185
Fidelity 500 Index	FXAIX	\$134,842,433	0.02%	0.072%	\$20,226	\$97,695
Hartford Core Equity R6	HAITX	\$120,690,922	0.36%	0.072%	\$434,487	\$87,442
Fidelity Mid Cap Index	FSMDX	\$65,273,311	0.03%	0.072%	\$16,318	\$47,291
Baron Growth Instl*	BGRIX	\$39,498,297	0.88%	0.072%	\$347,585	\$28,617
Hartford Schroders US Small Cap Opps SDR	SCURX	\$10,067,241	0.95%	0.072%	\$95,639	\$7,294
Fidelity Small Cap Index	FSSNX	\$40,011,464	0.03%	0.072%	\$10,003	\$28,989
MFS International Diversification R6	MDIZX	\$46,788,860	0.72%	0.072%	\$336,880	\$33,899
Fidelity Total International Index	FTIHX	\$29,807,630	0.06%	0.072%	\$17,885	\$21,596
Conservative Allocation Portfolio	-	\$38,991,081	0.25%	0.072%	\$97,478	\$28,249
Moderate Allocation Portfolio*	-	\$79,537,609	0.14%	0.072%	\$111,353	\$57,626
Aggressive Allocation Portfolio*	-	\$57,730,780	0.08%	0.072%	\$46,185	\$41,826
Vanguard Target Retirement Income	VTINX	\$6,913,113	0.08%	0.072%	\$5,530	\$5,009
Vanguard Target Retirement 2020	VTWNX	\$29,804,483	0.08%	0.072%	\$23,844	\$21,594
Vanguard Target Retirement 2025	VTTVX	\$3,075,010	0.08%	0.072%	\$2,460	\$2,228
Vanguard Target Retirement 2030	VTHRX	\$61,970,214	0.08%	0.072%	\$49,576	\$44,898
Vanguard Target Retirement 2035	VTHX	\$2,882,556	0.08%	0.072%	\$2,306	\$2,088
Vanguard Target Retirement 2040	VFORX	\$60,100,555	0.08%	0.072%	\$48,080	\$43,543
Vanguard Target Retirement 2045	VTIVX	\$2,108,250	0.08%	0.072%	\$1,687	\$1,527
Vanguard Target Retirement 2050	VFIFX	\$43,964,220	0.08%	0.072%	\$35,171	\$31,852
Vanguard Target Retirement 2055	VFFVX	\$1,525,296	0.08%	0.072%	\$1,220	\$1,105
Vanguard Target Retirement 2060	VTTSX	\$1,328,416	0.08%	0.072%	\$1,063	\$962
Vanguard Target Retirement 2065	VLVX	\$763,493	0.08%	0.072%	\$611	\$553
Vanguard Target Retirement 2070	VSVNX	\$1,984	0.08%	0.072%	\$2	\$1
Self-Directed Brokerage Account	-	\$5,520,460	-	0.000%	-	\$0
TOTAL		\$1,286,761,196			\$3,106,738	\$928,271

Plan Administration Cost	Quarter	Annualized
Contracted Revenue to Voya (3.6 bps excluding SDBA - est):	\$115,312	\$461,247
Additional Administrative Allowance (\$505,000 pro-rated - est):	\$116,756	\$467,024
Total Plan Administration Cost (7.1 bps excluding SDBA - est):	\$232,068	\$928,271

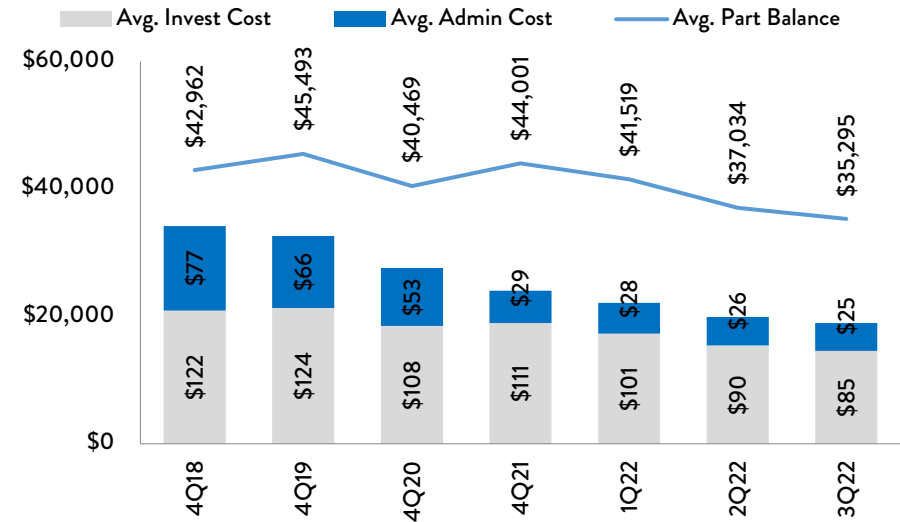
*Revenue derived from funds credited to participant accounts in which they are held. For fee reporting purposes, the credit has been used to offset the reported fund expense ratio.

**No explicit expense ratio given for Voya Fixed Account. An expense ratio of 0.41% is assumed for reporting purposes.

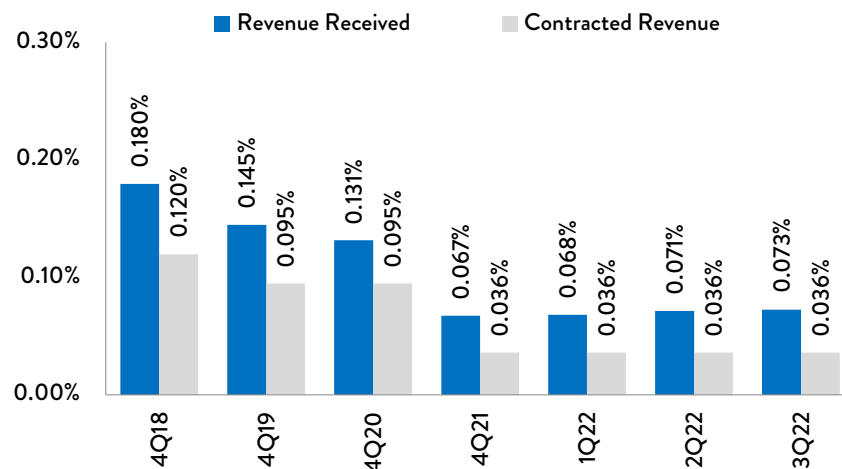
Annualized Plan Cost (%)



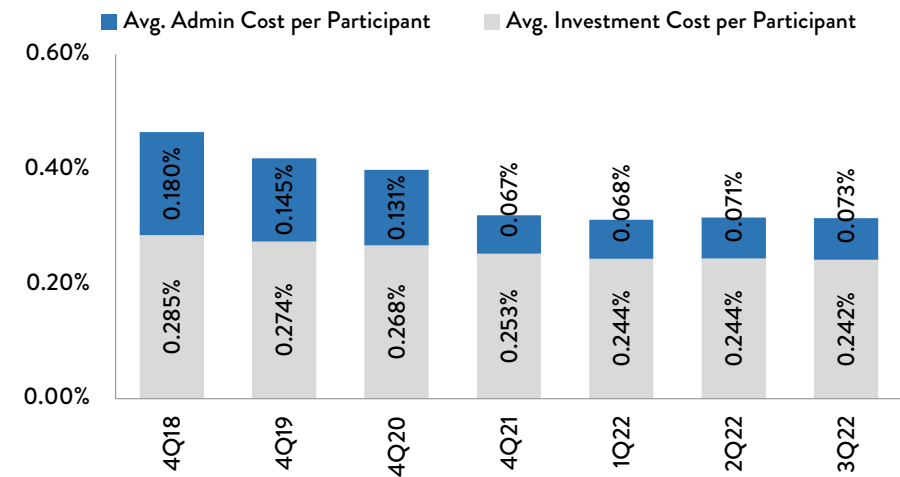
Average Participant Balance and Cost (\$)



Annualized Contracted Revenue v. Revenue Received* (as a % of total assets)



Annualized Investment Cost Summary (as a % of total assets)



*Revenue received is 0.073% annually on all assets excluding SDBA. Contracted revenue is 0.036% annually on all assets excluding SDBA.

SAN BERNARDINO COUNTY

457 Deferred Compensation Plan

PLAN FEE ANALYSIS

Third Quarter 2022

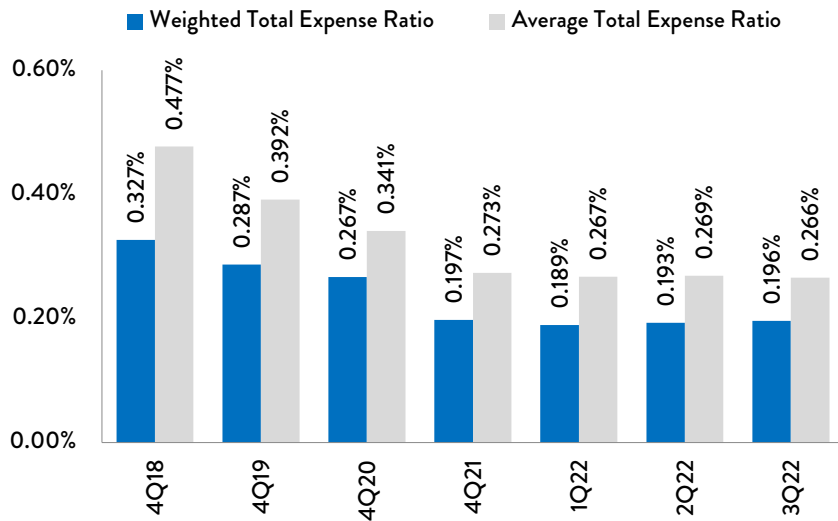
Annualized

Fund	Ticker	Quarter End Assets	Net Expense Ratio	Admin Fee	Est. Total Invest. Cost	Est. Total Admin. Cost
Stabilizer	-	\$226,108,498	0.34%	0.073%	\$768,769	\$164,015
Sterling Capital Total Return Bond R6	STRDX	\$24,970,947	0.35%	0.073%	\$87,398	\$18,113
Fidelity US Bond Index	FXNAX	\$8,318,136	0.03%	0.073%	\$2,080	\$6,034
Fidelity Intermediate Treasury Bond Index	FUAMX	\$1,124,091	0.03%	0.073%	\$337	\$815
Fidelity 500 Index	FXAIX	\$108,175,495	0.02%	0.073%	\$16,226	\$78,469
Hartford Core Equity R6	HAITX	\$95,201,917	0.36%	0.073%	\$342,727	\$69,058
Fidelity Mid Cap Index	FSMDX	\$50,700,936	0.03%	0.073%	\$12,675	\$36,778
Baron Growth Instl*	BGRIX	\$31,244,921	0.88%	0.073%	\$274,955	\$22,664
Hartford Schroders US Small Cap Opps SDR	SCURX	\$8,460,764	0.95%	0.073%	\$80,377	\$6,137
Fidelity Small Cap Index	FSSNX	\$31,854,625	0.03%	0.073%	\$7,964	\$23,107
MFS International Diversification R6	MDIZX	\$39,460,815	0.72%	0.073%	\$284,118	\$28,624
Fidelity Total International Index	FTIHX	\$25,866,270	0.06%	0.073%	\$15,520	\$18,763
Conservative Allocation Portfolio	-	\$26,975,269	0.25%	0.073%	\$67,438	\$19,567
Moderate Allocation Portfolio*	-	\$59,959,762	0.14%	0.073%	\$83,944	\$43,494
Aggressive Allocation Portfolio*	-	\$45,500,278	0.08%	0.073%	\$36,400	\$33,005
Vanguard Target Retirement Income	VTINX	\$4,759,198	0.08%	0.073%	\$3,807	\$3,452
Vanguard Target Retirement 2020	VTWNX	\$11,337,642	0.08%	0.073%	\$9,070	\$8,224
Vanguard Target Retirement 2025	VTTVX	\$2,284,163	0.08%	0.073%	\$1,827	\$1,657
Vanguard Target Retirement 2030	VTHRX	\$23,779,772	0.08%	0.073%	\$19,024	\$17,249
Vanguard Target Retirement 2035	VTHHX	\$1,872,349	0.08%	0.073%	\$1,498	\$1,358
Vanguard Target Retirement 2040	VFORX	\$29,910,888	0.08%	0.073%	\$23,929	\$21,697
Vanguard Target Retirement 2045	VTIVX	\$1,383,594	0.08%	0.073%	\$1,107	\$1,004
Vanguard Target Retirement 2050	VFIFX	\$33,138,164	0.08%	0.073%	\$26,511	\$24,038
Vanguard Target Retirement 2055	VFFVX	\$1,026,255	0.08%	0.073%	\$821	\$744
Vanguard Target Retirement 2060	VTTSX	\$1,106,013	0.08%	0.073%	\$885	\$802
Vanguard Target Retirement 2065	VLXVX	\$674,234	0.08%	0.073%	\$539	\$489
Vanguard Target Retirement 2070	VSVNX	\$1,984	0.08%	0.073%	\$2	\$1
Self-Directed Brokerage Account	-	\$4,339,123	-	0.000%	-	\$0
TOTAL		\$899,536,102			\$2,169,948	\$649,359

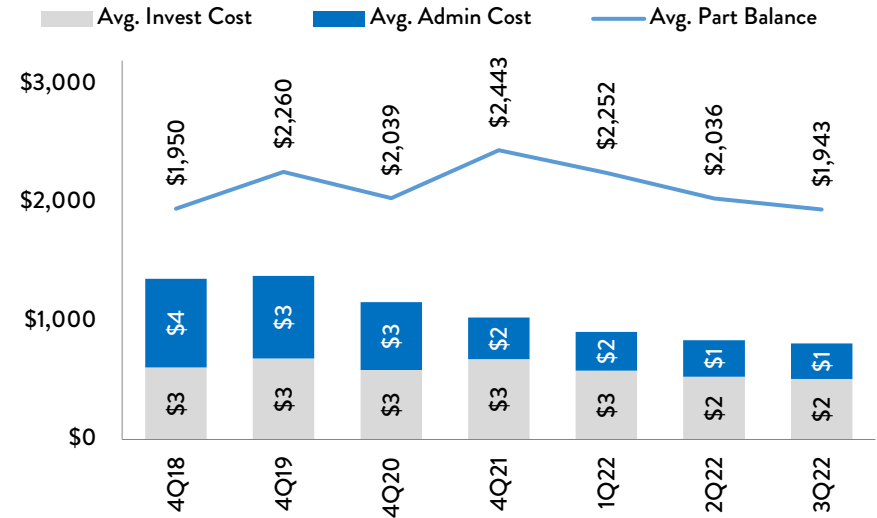
Plan Administration Cost	Quarter	Annualized
Plan Generated Revenue (est):	\$162,340	\$649,359
Contracted Revenue (est):	\$80,568	\$322,271
Net Excess/(Deficit) (est):	\$81,772	\$327,089

*Revenue derived from funds credited to participant accounts in which they are held. For fee reporting purposes, the credit has been used to offset the reported fund expense ratio.

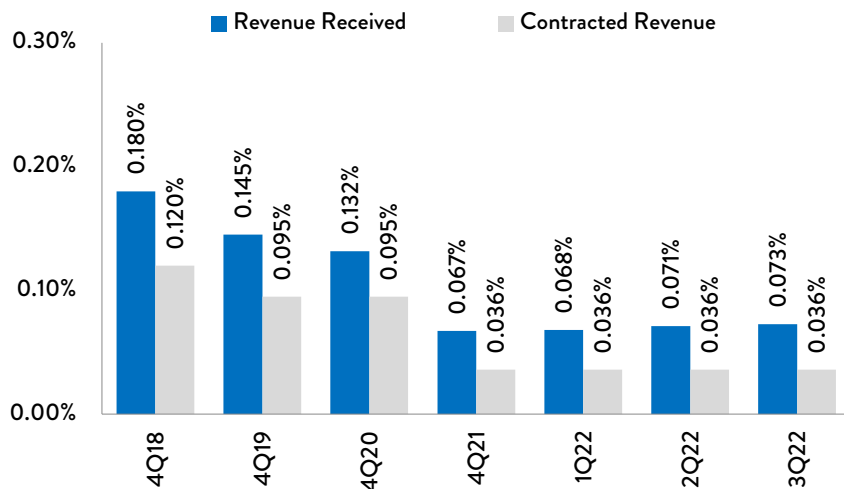
Annualized Plan Cost (%)



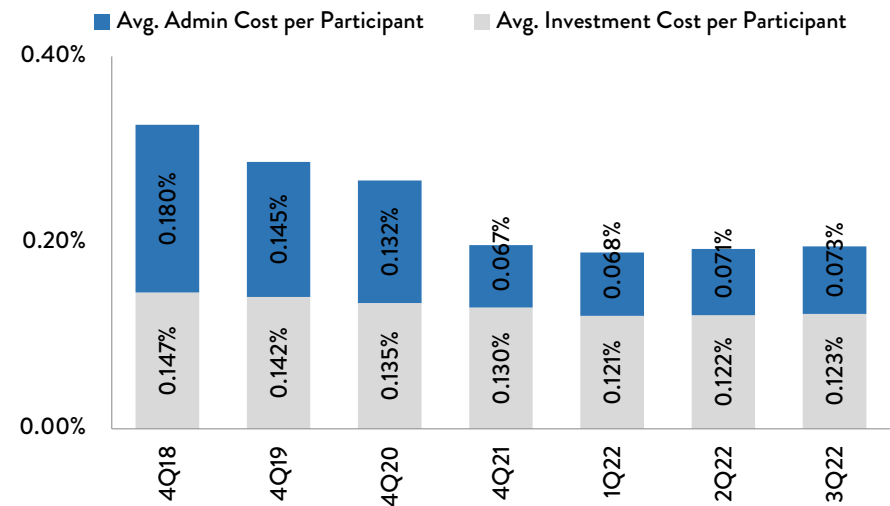
Average Participant Balance and Cost (\$)



Annualized Contracted Revenue v. Revenue Received* (as a % of total assets)



Annualized Investment Cost Summary (as a % of total assets)



*Revenue received is 0.073% annually on all assets excluding SDBA. Contracted revenue is 0.036% annually on all assets excluding SDBA.

SAN BERNARDINO COUNTY

401(a) Defined Contribution Plan

PLAN FEE ANALYSIS

Third Quarter 2022

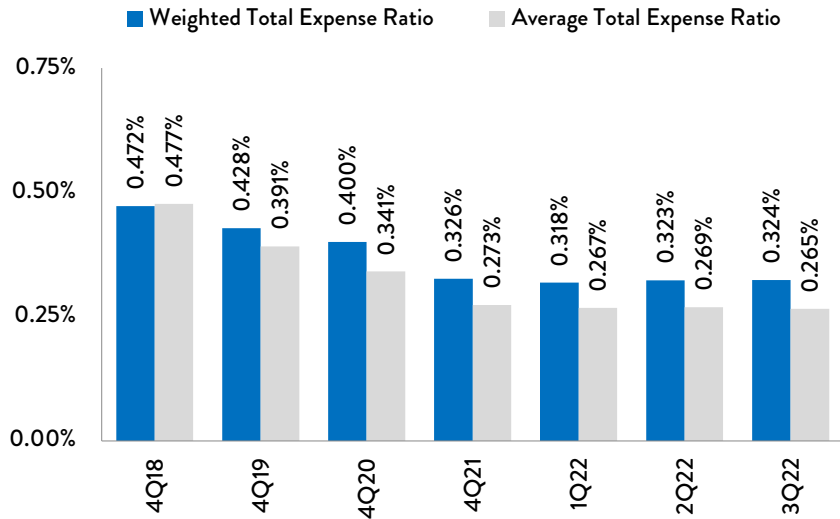
Annualized

Fund	Ticker	Quarter End Assets	Net Expense Ratio	Admin Fee	Est. Total Invest. Cost	Est. Total Admin. Cost
Stabilizer	-	\$2,429,373	0.34%	0.073%	\$8,260	\$1,764
Sterling Capital Total Return Bond R6	STRDX	\$220,002	0.35%	0.073%	\$770	\$160
Fidelity US Bond Index	FXNAX	\$16,695	0.03%	0.073%	\$4	\$12
Fidelity Intermediate Treasury Bond Index	FUAMX	\$25,958	0.03%	0.073%	\$8	\$19
Fidelity 500 Index	FXAIX	\$1,205,163	0.02%	0.073%	\$181	\$875
Hartford Core Equity R6	HAITX	\$574,714	0.36%	0.073%	\$2,069	\$417
Fidelity Mid Cap Index	FSMDX	\$510,885	0.03%	0.073%	\$128	\$371
Baron Growth Instl*	BGRIX	\$375,008	0.88%	0.073%	\$3,300	\$272
Hartford Schroders US Small Cap Opps SDR	SCURX	\$140,570	0.95%	0.073%	\$1,335	\$102
Fidelity Small Cap Index	FSSNX	\$317,094	0.03%	0.073%	\$79	\$230
MFS International Diversification R6	MDIZX	\$152,105	0.72%	0.073%	\$1,095	\$110
Fidelity Total International Index	FTIHX	\$195,613	0.06%	0.073%	\$117	\$142
Conservative Allocation Portfolio	-	\$885,604	0.25%	0.073%	\$2,214	\$643
Moderate Allocation Portfolio*	-	\$1,247,642	0.14%	0.073%	\$1,747	\$906
Aggressive Allocation Portfolio*	-	\$1,058,920	0.08%	0.073%	\$847	\$769
Vanguard Target Retirement Income	VTINX	\$693,733	0.08%	0.073%	\$555	\$504
Vanguard Target Retirement 2020	VTWNX	\$3,652,293	0.08%	0.073%	\$2,922	\$2,652
Vanguard Target Retirement 2025	VTVX	\$307,502	0.08%	0.073%	\$246	\$223
Vanguard Target Retirement 2030	VTHR	\$7,581,047	0.08%	0.073%	\$6,065	\$5,505
Vanguard Target Retirement 2035	VTHX	\$497,329	0.08%	0.073%	\$398	\$361
Vanguard Target Retirement 2040	VFORX	\$7,325,799	0.08%	0.073%	\$5,861	\$5,320
Vanguard Target Retirement 2045	VTIVX	\$540,276	0.08%	0.073%	\$432	\$392
Vanguard Target Retirement 2050	VFIFX	\$3,206,543	0.08%	0.073%	\$2,565	\$2,329
Vanguard Target Retirement 2055	VFFVX	\$426,141	0.08%	0.073%	\$341	\$309
Vanguard Target Retirement 2060	VTTX	\$184,636	0.08%	0.073%	\$148	\$134
Vanguard Target Retirement 2065	VLXVX	\$18,109	0.08%	0.073%	\$14	\$13
Vanguard Target Retirement 2070	VSVNX	\$0	0.08%	0.073%	\$0	\$0
TOTAL		\$33,788,752			\$41,701	\$24,536

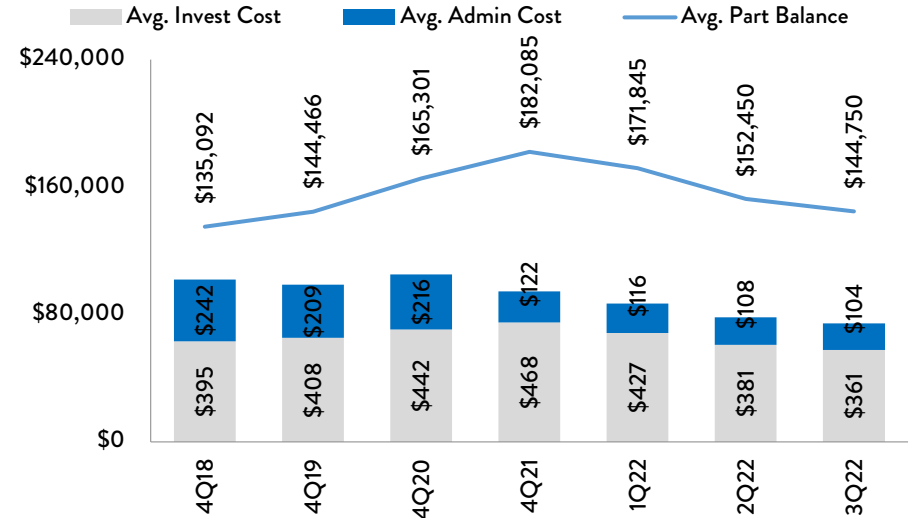
Plan Administration Cost	Quarter	Annualized
Plan Generated Revenue (est):	\$6,134	\$24,536
Contracted Revenue (est):	\$3,041	\$12,164
Net Excess/(Deficit) (est):	\$3,093	\$12,373

*Revenue derived from funds credited to participant accounts in which they are held. For fee reporting purposes, the credit has been used to offset the reported fund expense ratio.

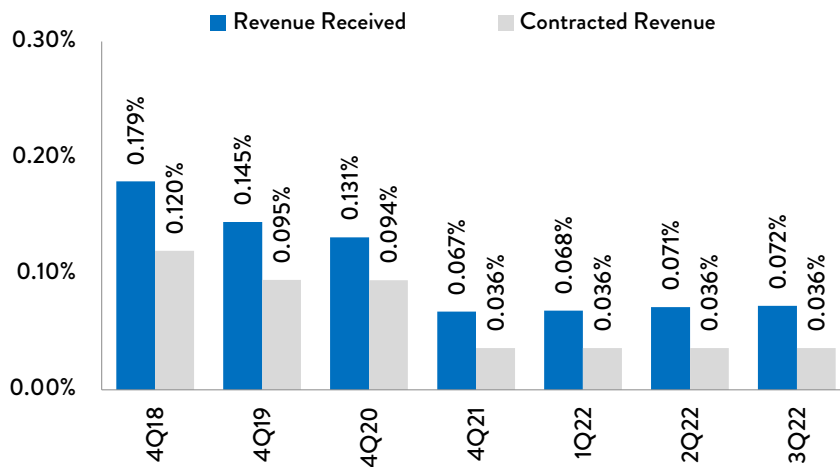
Annualized Plan Cost (%)



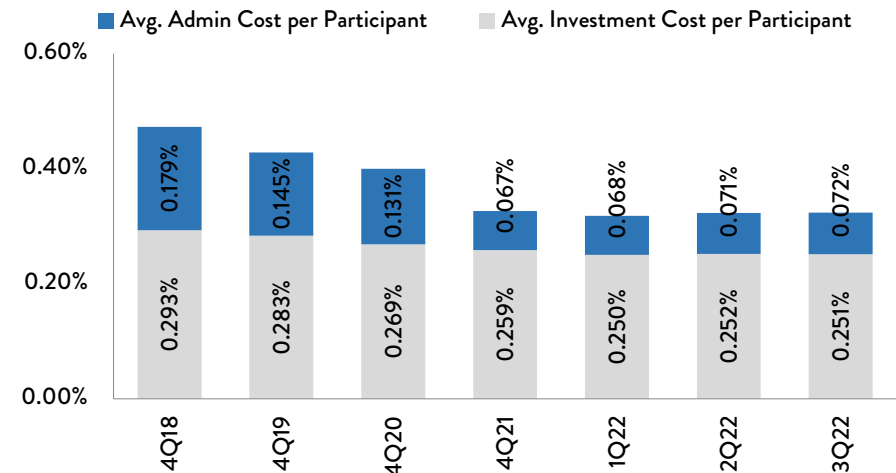
Average Participant Balance and Cost (\$)



Annualized Contracted Revenue v. Revenue Received* (as a % of total assets)



Annualized Investment Cost Summary (as a % of total assets)



*Revenue received is 0.072% annually on all assets excluding SDBA. Contracted revenue is 0.036% annually on all assets excluding SDBA.

SAN BERNARDINO COUNTY
401(k) Defined Contribution Plan

PLAN FEE ANALYSIS
Third Quarter 2022

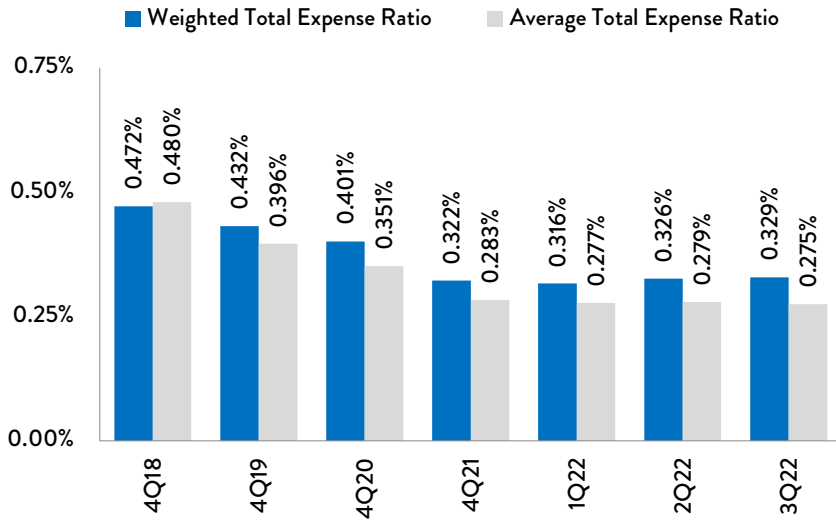
Annualized

Fund	Ticker	Quarter End Assets	Net Expense Ratio	Admin Fee	Est. Total Invest. Cost	Est. Total Admin. Cost
Stabilizer	-	\$49,095,120	0.34%	0.072%	\$166,923	\$35,574
Sterling Capital Total Return Bond R6	STRDX	\$3,718,748	0.35%	0.072%	\$13,016	\$2,695
Fidelity US Bond Index	FXNAX	\$757,502	0.03%	0.072%	\$189	\$549
Fidelity Intermediate Treasury Bond Index	FUAMX	\$404,567	0.03%	0.072%	\$121	\$293
Fidelity 500 Index	FXAIX	\$22,396,093	0.02%	0.072%	\$3,359	\$16,228
Hartford Core Equity R6	HAITX	\$21,740,315	0.36%	0.072%	\$78,265	\$15,753
Fidelity Mid Cap Index	FSMDX	\$11,809,917	0.03%	0.072%	\$2,952	\$8,557
Baron Growth Instl*	BGRIX	\$6,076,662	0.88%	0.072%	\$53,475	\$4,403
Hartford Schroders US Small Cap Opps SDR	SCURX	\$1,177,221	0.95%	0.072%	\$11,184	\$853
Fidelity Small Cap Index	FSSNX	\$6,592,179	0.03%	0.072%	\$1,648	\$4,777
MFS International Diversification R6	MDIZX	\$6,517,713	0.72%	0.072%	\$46,928	\$4,723
Fidelity Total International Index	FTIHX	\$3,349,997	0.06%	0.072%	\$2,010	\$2,427
Conservative Allocation Portfolio	-	\$9,228,634	0.25%	0.072%	\$23,072	\$6,687
Moderate Allocation Portfolio*	-	\$14,560,528	0.14%	0.072%	\$20,385	\$10,551
Aggressive Allocation Portfolio*	-	\$6,225,861	0.08%	0.072%	\$4,981	\$4,511
Vanguard Target Retirement Income	VTINX	\$108,685	0.08%	0.072%	\$87	\$79
Vanguard Target Retirement 2020	VTW NX	\$1,560,549	0.08%	0.072%	\$1,248	\$1,131
Vanguard Target Retirement 2025	VTTVX	\$213,386	0.08%	0.072%	\$171	\$155
Vanguard Target Retirement 2030	VTHR X	\$3,533,234	0.08%	0.072%	\$2,827	\$2,560
Vanguard Target Retirement 2035	VTT HX	\$403,493	0.08%	0.072%	\$323	\$292
Vanguard Target Retirement 2040	VFOR X	\$2,486,043	0.08%	0.072%	\$1,989	\$1,801
Vanguard Target Retirement 2045	VTIV X	\$174,956	0.08%	0.072%	\$140	\$127
Vanguard Target Retirement 2050	VFIF X	\$1,652,672	0.08%	0.072%	\$1,322	\$1,198
Vanguard Target Retirement 2055	VFFV X	\$52,233	0.08%	0.072%	\$42	\$38
Vanguard Target Retirement 2060	VTT S X	\$7,817	0.08%	0.072%	\$6	\$6
Vanguard Target Retirement 2065	VLXV X	\$60,879	0.08%	0.072%	\$49	\$44
Vanguard Target Retirement 2070	VSVN X	\$60,879	0.08%	0.072%	\$49	\$44
Self-Directed Brokerage Account	-	\$1,181,337	-	0.000%	-	\$0
TOTAL		\$175,147,223			\$436,759	\$126,056

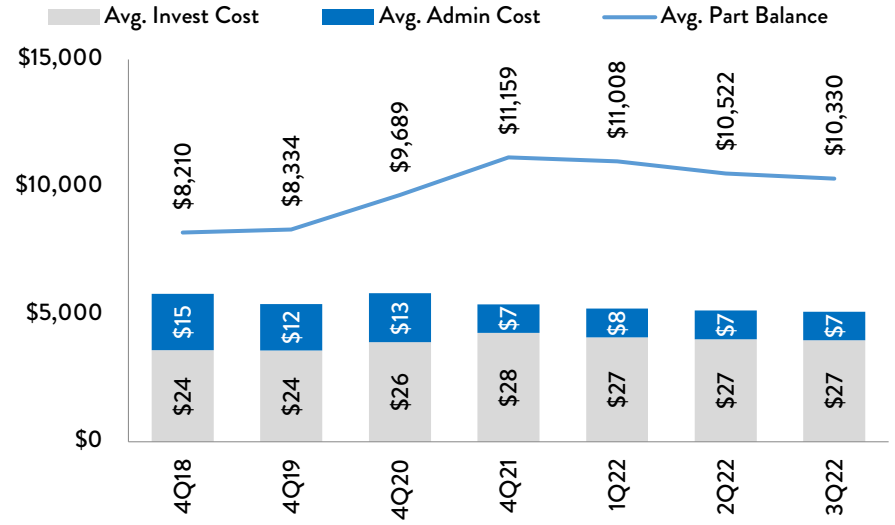
Plan Administration Cost	Quarter	Annualized
Plan Generated Revenue (est):	\$31,514	\$126,056
Contracted Revenue (est):	\$15,657	\$62,628
Net Excess/(Deficit) (est):	\$15,857	\$63,428

*Revenue derived from funds credited to participant accounts in which they are held. For fee reporting purposes, the credit has been used to offset the reported fund expense ratio.

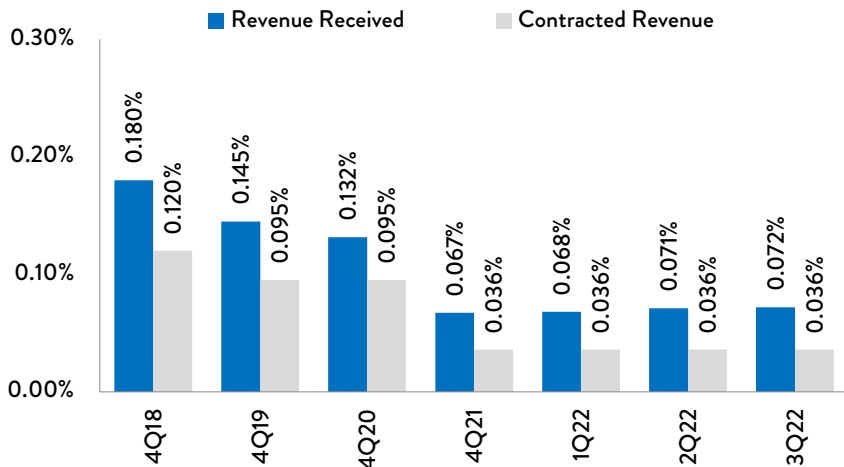
Annualized Plan Cost (%)



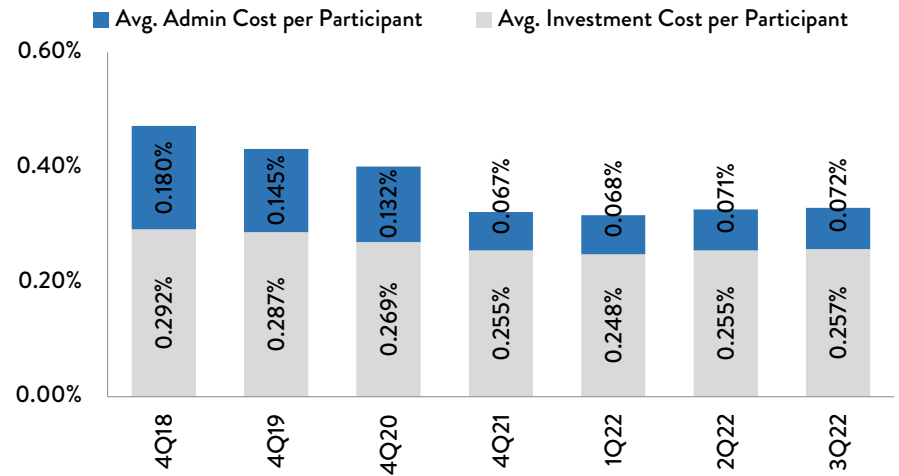
Average Participant Balance and Cost (\$)



Annualized Contracted Revenue v. Revenue Received* (as a % of total assets)



Annualized Investment Cost Summary (as a % of total assets)



*Revenue received is 0.072% annually on all assets excluding SDBA. Contracted revenue is 0.036% annually on all assets excluding SDBA.

SAN BERNARDINO COUNTY

Retirement Medical Trust

PLAN FEE ANALYSIS

Third Quarter 2022

Annualized

Fund	Ticker	Quarter End Assets	Net Expense Ratio	Admin Fee	Est. Total Invest. Cost	Est. Total Admin. Cost
Voya Fixed Account**	-	\$85,597,897	0.41%	0.072%	\$350,951	\$61,596
Voya Government Money Market A	VYAXX	\$12,765	0.40%	0.072%	\$51	\$9
Sterling Capital Total Return Bond R6	STRDX	\$639,137	0.35%	0.072%	\$2,237	\$460
Fidelity US Bond Index	FXNAX	\$42,478	0.03%	0.072%	\$11	\$31
Fidelity Intermediate Treasury Bond Index	FUAMX	\$81,604	0.03%	0.072%	\$24	\$59
Fidelity 500 Index	FXAIX	\$3,065,683	0.02%	0.072%	\$460	\$2,206
Hartford Core Equity R6	HAITX	\$3,173,976	0.36%	0.072%	\$11,426	\$2,284
Fidelity Mid Cap Index	FSMDX	\$2,251,573	0.03%	0.072%	\$563	\$1,620
Baron Growth Instl*	BGRIX	\$1,801,706	0.88%	0.072%	\$15,855	\$1,297
Hartford Schroders US Small Cap Opps SDR	SCURX	\$288,686	0.95%	0.072%	\$2,743	\$208
Fidelity Small Cap Index	FSSNX	\$1,247,565	0.03%	0.072%	\$312	\$898
MFS International Diversification R6	MDIZX	\$658,227	0.72%	0.072%	\$4,739	\$474
Fidelity Total International Index	FTIHX	\$395,750	0.06%	0.072%	\$237	\$285
Conservative Allocation Portfolio	-	\$1,901,574	0.25%	0.072%	\$4,754	\$1,368
Moderate Allocation Portfolio*	-	\$3,769,677	0.14%	0.072%	\$5,278	\$2,713
Aggressive Allocation Portfolio*	-	\$4,945,722	0.08%	0.072%	\$3,957	\$3,559
Vanguard Target Retirement Income	VTINX	\$1,351,496	0.08%	0.072%	\$1,081	\$973
Vanguard Target Retirement 2020	VTWNX	\$13,253,998	0.08%	0.072%	\$10,603	\$9,538
Vanguard Target Retirement 2025	VTTVX	\$269,959	0.08%	0.072%	\$216	\$194
Vanguard Target Retirement 2030	VTHRX	\$27,076,161	0.08%	0.072%	\$21,661	\$19,484
Vanguard Target Retirement 2035	VTTHX	\$109,385	0.08%	0.072%	\$88	\$79
Vanguard Target Retirement 2040	VFORX	\$20,377,826	0.08%	0.072%	\$16,302	\$14,664
Vanguard Target Retirement 2045	VTIVX	\$9,425	0.08%	0.072%	\$8	\$7
Vanguard Target Retirement 2050	VFIFX	\$5,966,842	0.08%	0.072%	\$4,773	\$4,294
Vanguard Target Retirement 2055	VFFVX	\$20,667	0.08%	0.072%	\$17	\$15
Vanguard Target Retirement 2060	VTTSX	\$29,950	0.08%	0.072%	\$24	\$22
Vanguard Target Retirement 2065	VLXVX	\$10,270	0.08%	0.072%	\$8	\$7
Vanguard Target Retirement 2070	VSVNX	\$0	0.08%	0.072%	\$0	\$0
TOTAL		\$178,349,998			\$458,379	\$128,341

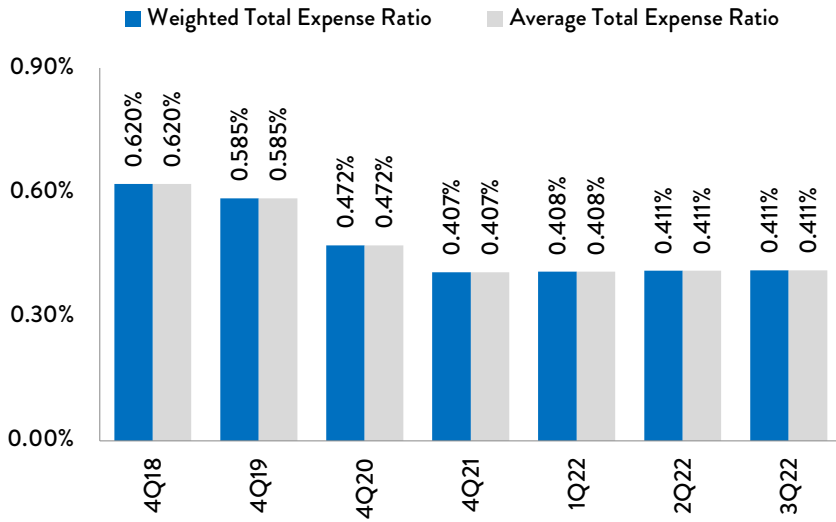
Plan Administration Cost	Quarter	Annualized
Plan Generated Revenue (est):	\$32,085	\$128,341
Contracted Revenue (est):	\$16,051	\$64,206
Net Excess/(Deficit) (est):	\$16,034	\$64,135

*Revenue derived from funds credited to participant accounts in which they are held. For fee reporting purposes, the credit has been used to offset the reported fund expense ratio.

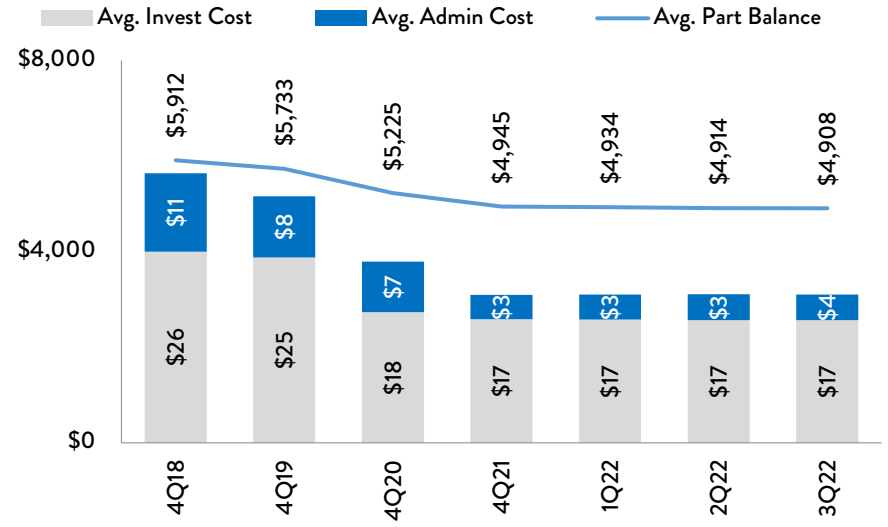
**No explicit expense ratio given for the Voya Fixed Account. An expense ratio of 0.41% is assumed for reporting purposes.

Section 6

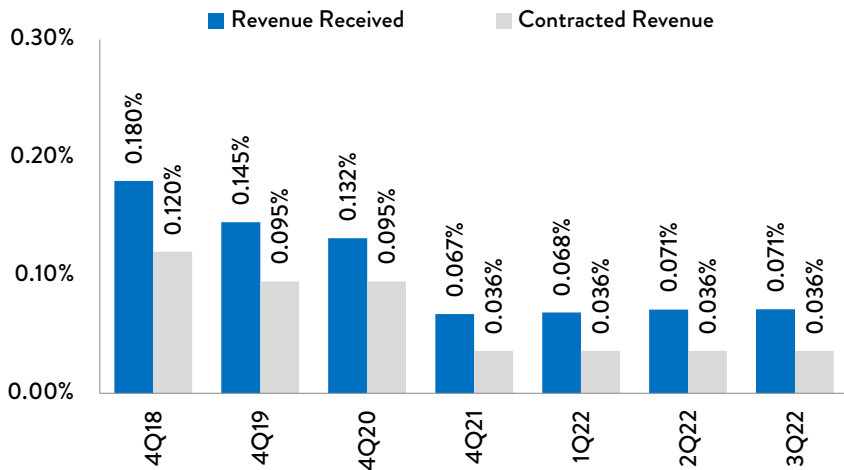
Annualized Plan Cost (%)



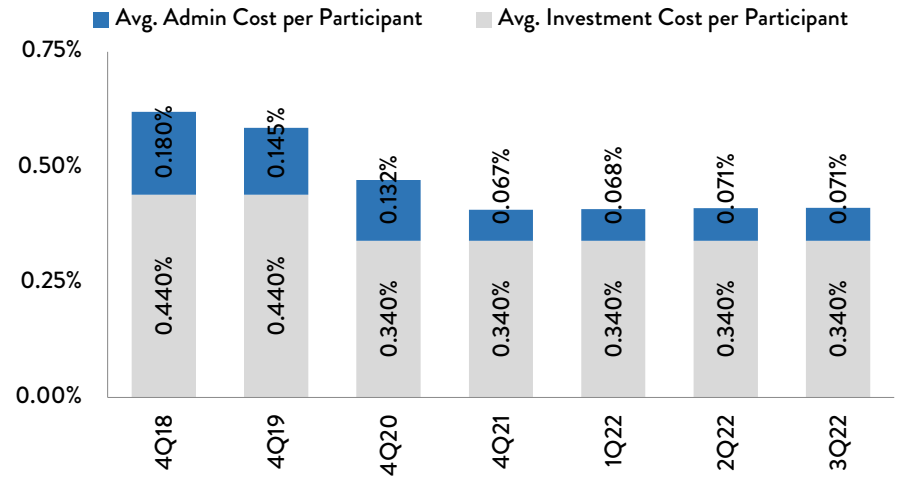
Average Participant Balance and Cost (\$)



Annualized Contracted Revenue v. Revenue Received* (as a % of total assets)



Annualized Investment Cost Summary (as a % of total assets)



SAN BERNARDINO COUNTY
PST Deferred Compensation Retirement Plan

PLAN FEE ANALYSIS
Third Quarter 2022

Annualized

Fund	Ticker	Quarter End Assets	Net Expense Ratio	Admin Fee	Est. Total Invest. Cost	Est. Total Admin. Cost
Stabilizer	-	\$46,026,768	0.34%	0.071%	\$156,491	\$32,831
TOTAL		\$46,026,768			\$156,491	\$32,831

Plan Administration Cost	Quarter	Annualized
Plan Generated Revenue (est):	\$8,208	\$32,831
Contracted Revenue (est):	\$4,142	\$16,570
Net Excess/(Deficit) (est):	\$4,065	\$16,261

Section 7

Aggressive Allocation Portfolio

Lifestyle Portfolios are multi-asset type investment options that are intended to be managed in accordance with a plan participant's retirement time horizon, long-term return expectations and overall tolerance for risk of principal loss. Since the asset allocation decision is the most important factor in determining investment returns over time, these types of funds provide three "packaged," diversified investment choices for those seeking assistance in making the asset allocation decision. Lifestyle Portfolios are constructed to provide different long-term investment return and risk characteristics that are determined by their underlying sub-funds. The sub-funds are actively managed U.S. Stock, International Stock and U.S. Bond Funds that are also available as "stand-alone" investment funds.

Asset Class: **Asset Allocation**
Category: **Lifestyle**

retirement program. More information is included in the enrollment material.

accompany this Lifestyle Portfolio description.

FUND FACTS

Inception Date: **October 1, 2004**

Investment advisory fee for period ended June 30, 2022: **0.08%**

12b-1 fee: **0.00%**

Other expenses: **0.04%**

Total fund annual expenses without waivers or reductions for period ended June 30, 2022: **0.12%**

Total waivers, recoupments, and reductions: **-0.02%**

Net fund annual expenses after waivers or reductions for period ended June 30, 2022: **0.10%**

Turnover rate: **14%**

If offered through a retirement program, additional fees and expenses may be charged under that program.

Important Information

Category is interpreted by Voya® using Fund Company and/or Morningstar category information.

Investment advisory fee reflects a weighted blend of fees charged by the underlying investment options within the Lifestyle Portfolio, based upon the percentage allocations designated by San Bernardino and detailed within the Strategy section.

This Portfolio is not a registered investment company, and interests in the Portfolio have not been registered with the Securities and Exchange Commission. It is only available to participants in the San Bernardino qualified retirement program. Only eligible participants in the plan may invest in the Portfolio.

You can obtain copies of free prospectuses for the underlying funds which contain additional information on the charges and expenses for the funds at any time by calling your local Voya representative. Other fees and expenses may be charged under your

Each sub-fund description must accompany this Lifestyle Portfolio description.

Investment Objective

The investment objective of the Aggressive Allocation Portfolio is to provide long-term growth of capital with income as a minor consideration. Eighty-five percent (85%) of the total fund assets are allocated to equities and fifteen percent (15%) are allocated to fixed income securities. It is the most aggressive of the three Lifestyle funds in terms of its potential for the greatest investment return as well as the greatest risk. It is most suitable for participants who are able to remain invested for ten or more years, or who are comfortable with the higher short-term fluctuations that are characteristic of investing in equity markets.

Principal Risks
All equity (both U.S. and International) and fixed income investments exhibit certain risk characteristics that include the potential for loss of principal value. Generally, the probability of loss of principal is greater with investment funds that also provide the greatest potential for investment return. International stocks do carry additional risks that relate to currency and political uncertainty. The risks of Lifestyle Portfolios are based on the proportionate risk characteristics of the underlying sub-funds described above.

Strategy

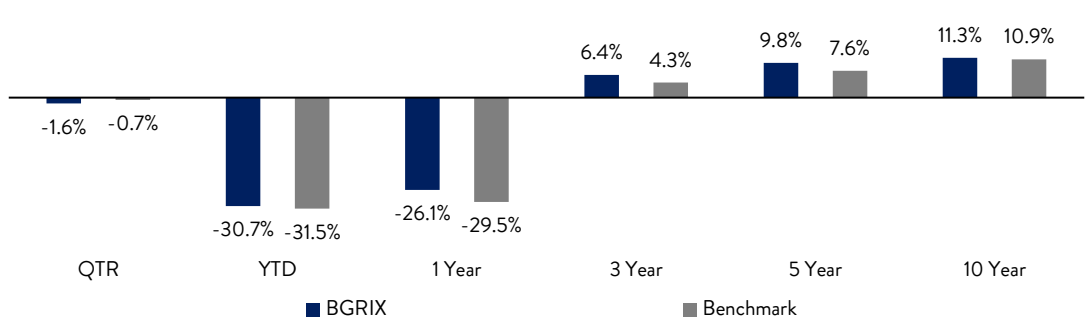
The strategy for the Aggressive Allocation Portfolio is to invest in a combination of active and passive investments in the following proportions:
--- 20% in the Sterling Capital Total Return Bond Fund - Class R6 Shares which seeks a high level of current income and a competitive total return.
--- 35% in the Fidelity® 500 Index Fund which seeks to provide investment results that correspond to the total return performance of common stocks publicly traded in the United States.
--- 8% in the Fidelity® Mid Cap Index Fund which seeks to provide investment results that correspond to the total return of stocks of mid-capitalization United States companies.
--- 5% in the Fidelity® Small Cap Index Fund which seeks to provide investment results that correspond to the total return of stocks of small-capitalization United States companies.
--- 32% in the Fidelity® Total International Index Fund which seeks to provide investment results that correspond to the total return of foreign developed and emerging stock markets.

Each sub-fund description contains more detailed information regarding the sub-funds' Investment Advisers, Portfolio Managers, Investment Objectives, Strategies and Principal Risks, and must

Product Details

Name	Baron Growth Instl
Ticker	BGRIX
Expense Ratio	1.030%
Morningstar Category	US Fund Mid-Cap Growth
Benchmark	Russell Mid Cap Growth TR USD
Inception Date	5/29/2009
Longest Tenured Manager	Ronald Baron
Longest Manager Tenure	27.83 Years
Fund Size	\$6,258,337,754

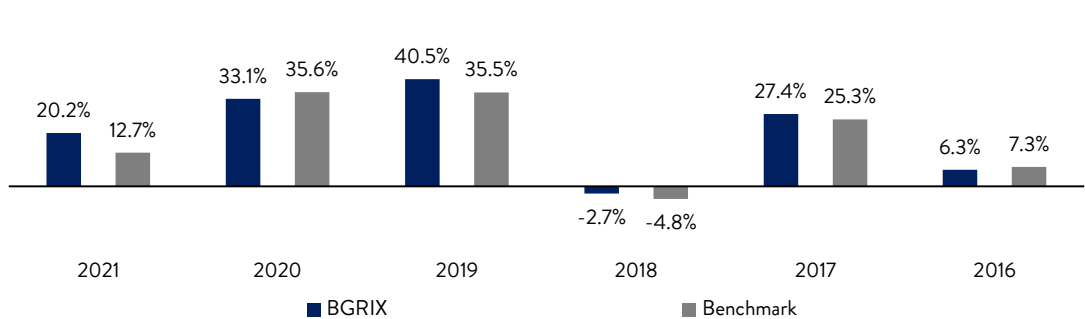
Trailing Performance



Fund Characteristics

	BGRIX	+/- Category
% Assets in Top 10 Holdings	62.66%	38.37%
Average Market Cap (mil)	\$11,551	-\$2,862
P/E Ratio (TTM)	24.47	0.29
P/B Ratio (TTM)	3.68	0.04
Est. Dividend Yield	1.17%	0.36%

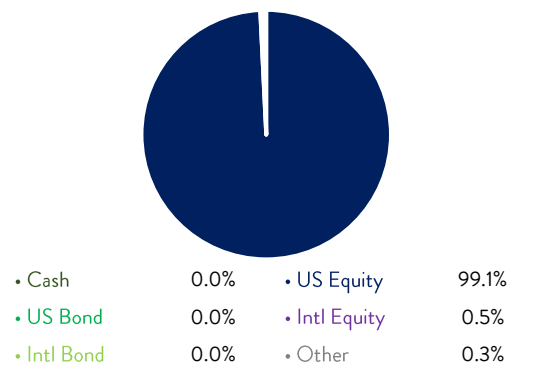
Annual Performance



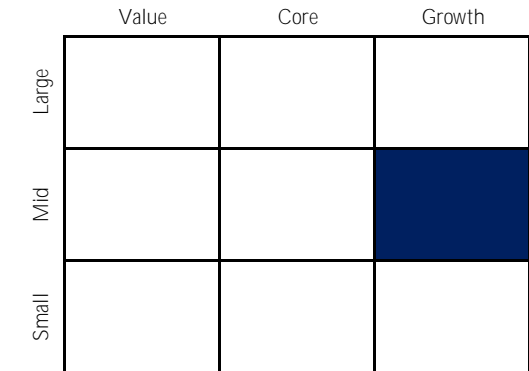
Sector Allocations

	BGRIX	Category	+/- Category
Materials	0.0%	2.5%	-2.5%
Communication Services	5.6%	3.3%	2.3%
Consumer Discretionary	19.3%	12.7%	6.6%
Consumer Staples	0.0%	2.5%	-2.5%
Healthcare	10.2%	20.2%	-10.0%
Industrials	1.2%	14.5%	-13.3%
Real Estate	12.4%	3.5%	8.9%
Technology	12.5%	27.2%	-14.7%
Energy	0.0%	3.0%	-3.0%
Financial Services	38.7%	9.8%	28.9%
Utilities	0.0%	0.7%	-0.7%
Other	0.0%	0.0%	0.0%

Asset Allocation



Morningstar Style Box



Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• BGRIX	-1.61%	-30.67%	-26.12%	6.39%	9.81%	11.31%
• Benchmark	-0.65%	-31.45%	-29.50%	4.26%	7.62%	10.85%
+/- Benchmark	-0.96%	0.78%	3.37%	2.13%	2.19%	0.45%
Peer Group Rank	43	38	22	25	12	24

5-Year Quarterly Performance	3Q22	2Q22	1Q22	4Q21
• BGRIX	-1.61%	-18.69%	-13.33%	6.56%
• Benchmark	-0.65%	-21.07%	-12.58%	2.85%
+/- Benchmark	-0.96%	2.38%	-0.75%	3.71%

Annual Performance	2021	2020	2019	2018	2017	2016
• BGRIX	20.15%	33.05%	40.50%	-2.67%	27.35%	6.31%
• Benchmark	12.73%	35.59%	35.47%	-4.75%	25.27%	7.33%
+/- Benchmark	7.42%	-2.53%	5.03%	2.08%	2.09%	-1.02%
Peer Group Rank	15	62	8	28	31	43

5-Year Quarterly Performance	3Q21	2Q21	1Q21	4Q20
• BGRIX	3.63%	7.80%	0.94%	21.10%
• Benchmark	-0.76%	11.07%	-0.57%	19.02%
+/- Benchmark	4.39%	-3.27%	1.50%	2.08%

Rolling 5-Year Performance	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021	07/2016 - 06/2021
• BGRIX	9.81%	10.87%	16.93%	22.73%	21.16%	20.92%
• Benchmark	7.62%	8.88%	15.10%	19.83%	19.27%	20.52%
+/- Benchmark	2.19%	1.99%	1.82%	2.90%	1.90%	0.39%
Peer Group Rank	12	15	21	18	26	37

5-Year Quarterly Performance	3Q20	2Q20	1Q20	4Q19
• BGRIX	10.95%	27.46%	-22.30%	8.65%
• Benchmark	9.37%	30.26%	-20.04%	8.17%
+/- Benchmark	1.57%	-2.81%	-2.26%	0.48%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	2.28	0.00	2.17	0.00	0.59	0.00
Beta	1.00	1.00	1.02	1.00	1.00	1.00
Standard Deviation	25.04	24.18	22.51	21.45	17.70	16.95
Sharpe Ratio	0.35	0.26	0.48	0.39	0.66	0.65
Information Ratio	0.34	-	0.39	-	0.09	-
Treynor Ratio	5.75	3.63	8.48	6.43	10.62	10.14
Upside Capture Ratio	109.00	100.00	109.19	100.00	102.60	100.00
Downside Capture Ratio	103.07	100.00	103.34	100.00	101.66	100.00

5-Year Quarterly Performance	3Q19	2Q19	1Q19	4Q18
• BGRIX	-0.69%	7.03%	21.67%	-18.53%
• Benchmark	-0.67%	5.40%	19.62%	-15.99%
+/- Benchmark	-0.02%	1.62%	2.05%	-2.54%

5-Year Quarterly Performance	3Q18	2Q18	1Q18	4Q17
• BGRIX	7.94%	8.01%	2.47%	5.35%
• Benchmark	7.57%	3.16%	2.17%	6.81%
+/- Benchmark	0.36%	4.85%	0.30%	-1.45%

All data and information on this fact sheet is taken from sources believed to be accurate but is not guaranteed to be accurate, complete, or correct.

Baron Growth Instl (USD)

Morningstar Analyst Rating™ Overall Morningstar Rating™ Standard Index **Category Index** **Morningstar Cat**
Silver **★★★★** **US Fund Mid-Cap Growth** **Russell Mid Cap Growth TR USD** **US Fund Mid-Cap Growth**
 08-07-2022 532 US Fund Mid-Cap Growth S&P 500 TR USD

Performance 09-30-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-22.30	27.46	10.95	21.10	33.05
2021	0.94	7.80	3.63	6.56	20.15
2022	-13.33	-18.69	-1.61	—	-30.67
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-26.12	6.39	9.81	11.31	13.10
Std 09-30-2022	-26.12	—	9.81	11.31	13.10
Total Return	-26.12	6.39	9.81	11.31	13.10
+/- Std Index	-10.65	-1.77	0.58	-0.40	—
+/- Cat Index	3.37	2.13	2.19	0.45	—
% Rank Cat	31	27	13	22	—
No. in Cat	582	532	491	379	—

7-day Yield Subsidized Unsubsidized
 30-day SEC Yield — —

Performance Disclosure
 The overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate, thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-992-2786 or visit www.barontfunds.com.

Fees and Expenses

Sales Charges
Front-End Load % **NA**
Deferred Load % **NA**

Fund Expenses

Management Fees % 1.00
 12b1 Expense % 0.00
Net Expense Ratio % **1.03**
Gross Expense Ratio % **1.03**
Risk and Return Profile

	3 Yr	5 Yr	10 Yr
Morningstar Rating™	532 funds	491 funds	379 funds
	3★	4★	4★
Morningstar Risk	+Avg	+Avg	+Avg
Morningstar Return	+Avg	+Avg	+Avg

Standard Deviation 25.04 22.51 17.70
 Mean 6.39 9.81 11.31
 Sharpe Ratio 0.35 0.48 0.66

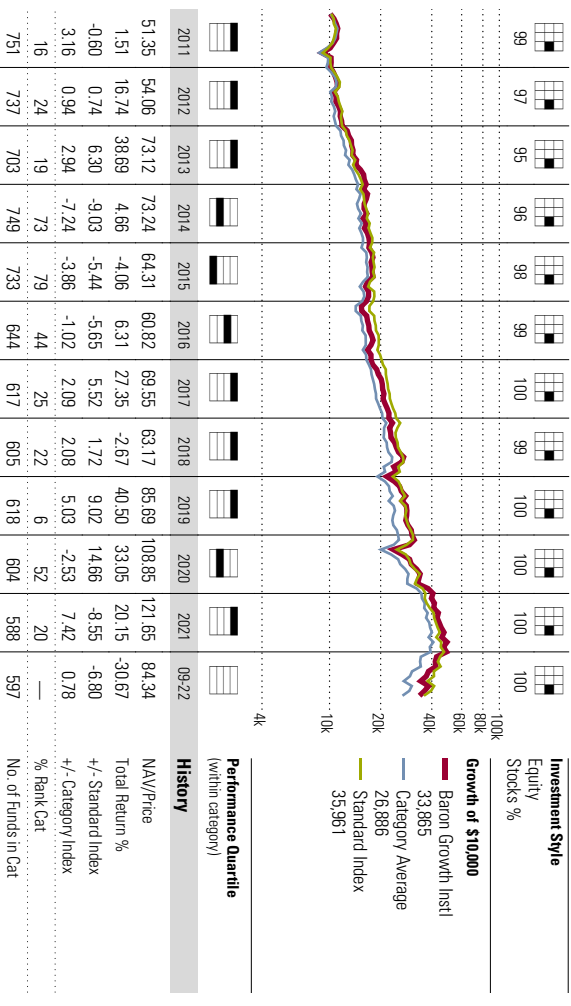
MPI Statistics	Standard Index	Best Fit Index
Alpha	-1.81	0.39
Beta	1.13	1.05
R-Squared	84.89	95.63
12-Month Yield	—	—
Potential Cap Gains Exp	84.33%	—

Operations

Family: Baron Capital Group, Inc.
 Manager: Multiple
 Tenure: 27.8 Years
 Objective: Growth

Base Currency: USD
 Ticker: BGRX
 ISIN: US0682787041
 Minimum Initial Purchase: \$1 mil

Purchase Constraints: A
 Incept: 05-29-2009
 Type: MF
 Total Assets: \$6,258.34 mil



Portfolio Analysis 09-30-2022			
Asset Allocation %	Net %	Long %	Short %
Cash	0.00	0.00	0.00
US Stocks	99.06	99.06	0.00
Non-US Stocks	0.48	0.48	0.00
Bonds	0.00	0.00	0.00
Other/Not Cstfd	0.46	0.46	0.00
Total	100.00	100.00	0.00

Equity Style	Portfolio Statistics	Port Index	Rel Index	Rel Cat
Value	P/E Ratio TTM	24.5	1.36	1.01
Brand	P/C Ratio TTM	16.1	1.18	0.84
Growth	P/B Ratio TTM	3.7	1.09	1.01
Large	Geo Avg Mkt Cap	11551	0.07	0.80
Mid				
Small				

Fixed-Income Style			
Ltd	Med	Ext	Bond %

Credit Quality Breakdown —

	AAA	AA	A	BBB	BB	B	Below B	NR
AAA	—	—	—	—	—	—	—	—
AA	—	—	—	—	—	—	—	—
A	—	—	—	—	—	—	—	—
BBB	—	—	—	—	—	—	—	—
BB	—	—	—	—	—	—	—	—
B	—	—	—	—	—	—	—	—
Below B	—	—	—	—	—	—	—	—
NR	—	—	—	—	—	—	—	—

Regional Exposure	Stocks %	Rel Std Index
Americas	99.5	1.01
Greater Europe	0.5	0.49
Greater Asia	0.0	0.00

Share Cng	Share Holdings	Amount	1% Turnover Ratio	Net Assets %
since 06-2022	42 Total Stocks, 0 Total Fixed-Income.			
⊖	2 mil MSCI Inc			10.40
⊖	1 mil FactSet Research Systems Inc			7.63
⊖	2 mil Vail Resorts Inc			6.86
⊖	2 mil Gartner Inc			6.71
⊖	9 mil Arch Capital Group Ltd			6.60
⊖	5 mil CoStar Group Inc			5.84
⊖	8 mil Iridium Communications Inc			5.57
⊖	3 mil Choice Hotels International Inc			5.18
⊖	1 mil Kinsale Capital Group Inc			4.06
⊖	5 mil Gaming and Leisure Properties Inc			3.80
⊖	1 mil Ansys Inc			3.53
⊖	775,000 Bio-Techne Corp			3.50
⊖	945,000 Morningstar Inc			3.19
⊖	2 mil Primera Inc			2.98
⊖	567,500 IDEXX Laboratories Inc			2.94

Sector Weightings	Stocks %	Rel Std Index
⬆️ Cyclical	70.4	2.37
Basic Materials	0.0	0.00
Consumer Cyclical	19.3	1.69
Financial Services	38.7	2.95
Real Estate	12.4	4.29
⬆️ Sensitive	19.4	0.43
Communication Services	5.6	0.69
Energy	0.0	0.00
Industrials	1.2	0.15
Technology	12.5	0.53
⬆️ Defensive	10.2	0.40
Consumer Defensive	0.0	0.00
Healthcare	10.2	0.67
Utilities	0.0	0.00

©2022 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted, in whole or in part, to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc., including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be predated or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.

Conservative Allocation Portfolio

Lifestyle Portfolios are multi-asset type investment options that are intended to be managed in accordance with a plan participant's retirement time horizon, long-term return expectations and overall tolerance for risk of principal loss. Since the asset allocation decision is the most important factor in determining investment returns over time, these types of funds provide three "packaged," diversified investment choices for those seeking assistance in making the asset allocation decision. Lifestyle Portfolios are constructed to provide different long-term investment return and risk characteristics that are determined by their underlying sub-funds. The sub-funds are actively managed U.S. Stock, International Stock and U.S. Bond Funds that are also available as "stand-alone" investment funds.

Asset Class: **Asset Allocation**
Category: **Lifestyle**

Information is included in the enrollment material.

Strategies and Principal Risks, and must accompany this Lifestyle Portfolio description.

FUND FACTS

Inception Date: **October 1, 2004**

Investment advisory fee for period ended June 30, 2022: **0.01%**

12b-1 fee: **0.00%**

Other expenses: **0.24%**

Total fund annual expenses without waivers or reductions for period ended June 30, 2022: **0.25%**

Total waivers, recoupments, and reductions: **0.00%**

Net fund annual expenses after waivers or reductions for period ended June 30, 2022: **0.25%**

Turnover rate: **2%**

If offered through a retirement program, additional fees and expenses may be charged under that program.

Important Information

Category is interpreted by **Voya®** using Fund Company and/or Morningstar category information.

Investment advisory fee reflects a weighted blend of fees charged by the underlying investment options within the Lifestyle Portfolio, based upon the percentage allocations designated by San Bernardino and detailed within the Strategy section.

This Portfolio is not a registered investment company, and interests in the Portfolio have not been registered with the Securities and Exchange Commission. It is only available to participants in the San Bernardino qualified retirement program. Only eligible participants in the plan may invest in the Portfolio.

You can obtain copies of free prospectuses for the underlying funds which contain additional information on the charges and expenses for the funds at any time by calling Your Local Voya

representative. Other fees and expenses may be charged under your retirement program. More

Investment Objective

The investment objective of the Conservative Allocation Portfolio is to provide total returns with an emphasis on income and lower volatility of principal. Thirty percent (30%) of the total fund assets are allocated to equities and seventy percent (70%) are allocated to fixed income securities. It is the most conservative of the three Lifestyle Funds in terms of its potential for investment return, but also has the lowest risk of the Lifestyle Funds. It is most suitable for participants who are close to retirement, need access to their money within five years, or are not comfortable with the higher short-term fluctuations that are characteristic of investing a large portion of their portfolio in equity markets.

Strategy

The strategy for the Conservative Allocation Portfolio is to invest in a combination of active and passive investments in the following proportions: --- 70% in the San Bernardino Stable Value Option where stability of principal is the primary objective. StabilizerSM guarantees a minimum rate of interest for the life of the contract, and may credit a higher interest rate from time to time. The current rate is subject to change, but will never fall below the guaranteed minimum.

--- 13% in the Fidelity® 500 Index Fund which seeks to provide investment results that correspond to the total return performance of common stocks publicly traded in the United States.

--- 3% in the Fidelity® Mid Cap Index Fund which seeks to provide investment results that correspond to the total return of stocks of mid-capitalization United States companies.

--- 2% in the Fidelity® Small Cap Index Fund which seeks to provide investment results that correspond to the total return of stocks of small-capitalization United States companies.

--- 12% in the Fidelity® Total International Index Fund which seeks to provide investment results that correspond to the total return of foreign developed and emerging stock markets.

Each sub-fund description contains more detailed information regarding the sub-funds' Investment Advisers, Portfolio Managers, Investment Objectives,

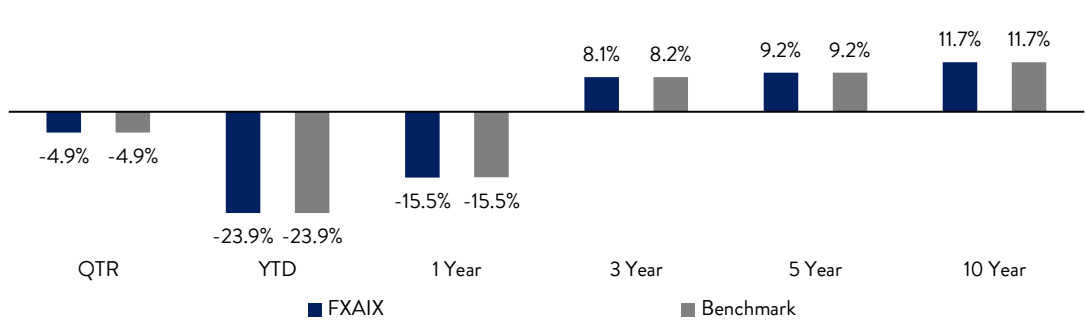
Principal Risks

All equity (both U.S. and International) and fixed income investments exhibit certain risk characteristics that include the potential for loss of principal value. Generally, the probability of loss of principal is greater with investment funds that also provide the greatest potential for investment return. International stocks carry additional risks that relate to currency and political uncertainty. The risks of Lifestyle Portfolios are based on the proportionate risk characteristics of the underlying sub-funds described above.

Product Details

Name	Fidelity® 500 Index
Ticker	FXAIX
Expense Ratio	0.015%
Morningstar Category	US Fund Large Blend
Benchmark	S&P 500 TR USD
Inception Date	5/4/2011
Longest Tenured Manager	Louis Bottari
Longest Manager Tenure	13.75 Years
Fund Size	\$326,831,481,123

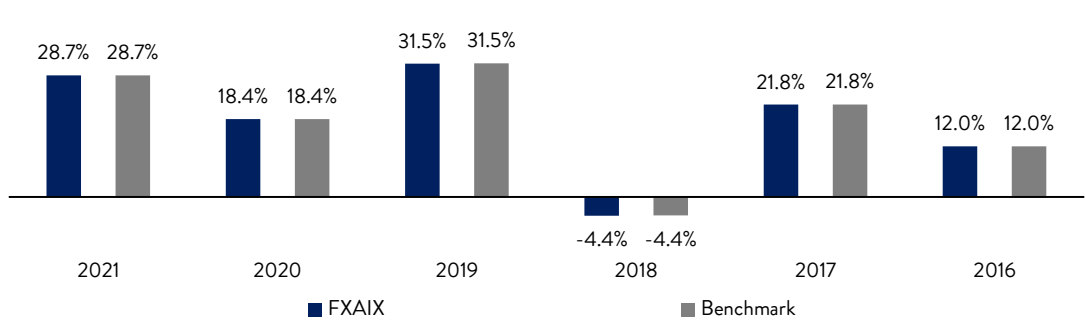
Trailing Performance



Fund Characteristics

	FXAIX	+/- Category
% Assets in Top 10 Holdings	27.69%	-22.86%
Average Market Cap (mil)	\$181,998	-\$28,336
P/E Ratio (TTM)	19.64	1.40
P/B Ratio (TTM)	3.72	0.12
Est. Dividend Yield	1.79%	-0.17%

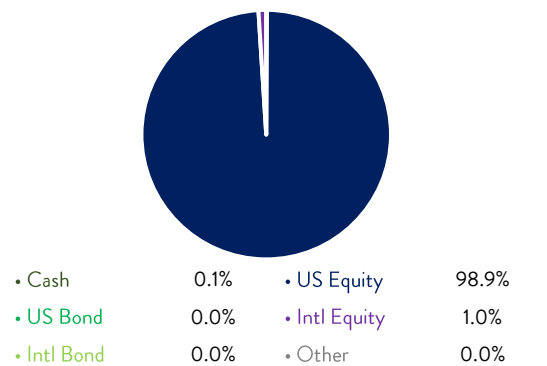
Annual Performance



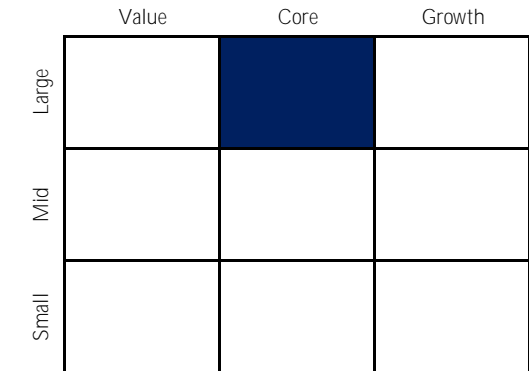
Sector Allocations

	FXAIX	Category	+/- Category
Materials	2.2%	2.7%	-0.4%
Communication Services	8.4%	7.9%	0.5%
Consumer Discretionary	11.2%	10.2%	1.0%
Consumer Staples	7.2%	7.3%	-0.2%
Healthcare	14.2%	15.6%	-1.5%
Industrials	8.5%	10.1%	-1.6%
Real Estate	2.9%	2.5%	0.3%
Technology	24.7%	23.1%	1.6%
Energy	4.7%	4.1%	0.6%
Financial Services	13.0%	13.6%	-0.6%
Utilities	3.1%	2.8%	0.3%
Other	0.0%	0.0%	0.0%

Asset Allocation



Morningstar Style Box



Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• FXAIX	-4.89%	-23.88%	-15.49%	8.15%	9.23%	11.69%
• Benchmark	-4.88%	-23.87%	-15.47%	8.16%	9.24%	11.70%
+/- Benchmark	0.00%	-0.01%	-0.02%	-0.01%	-0.01%	-0.01%
Peer Group Rank	45	46	37	20	16	11

5-Year Quarterly Performance	3Q22	2Q22	1Q22	4Q21
• FXAIX	-4.89%	-16.10%	-4.60%	11.02%
• Benchmark	-4.88%	-16.10%	-4.60%	11.03%
+/- Benchmark	0.00%	0.00%	0.00%	-0.01%

Annual Performance	2021	2020	2019	2018	2017	2016
• FXAIX	28.69%	18.40%	31.47%	-4.40%	21.81%	11.97%
• Benchmark	28.71%	18.40%	31.49%	-4.38%	21.83%	11.96%
+/- Benchmark	-0.01%	0.00%	-0.01%	-0.02%	-0.02%	0.01%
Peer Group Rank	22	36	24	26	33	27

5-Year Quarterly Performance	3Q21	2Q21	1Q21	4Q20
• FXAIX	0.58%	8.55%	6.18%	12.14%
• Benchmark	0.58%	8.55%	6.17%	12.15%
+/- Benchmark	-0.01%	0.00%	0.00%	-0.01%

Rolling 5-Year Performance	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021	07/2016 - 06/2021
• FXAIX	9.23%	11.29%	15.98%	18.46%	16.88%	17.63%
• Benchmark	9.24%	11.31%	15.99%	18.47%	16.90%	17.65%
+/- Benchmark	-0.01%	-0.01%	-0.01%	-0.01%	-0.01%	-0.01%
Peer Group Rank	16	15	13	17	20	23

5-Year Quarterly Performance	3Q20	2Q20	1Q20	4Q19
• FXAIX	8.94%	20.53%	-19.59%	9.06%
• Benchmark	8.93%	20.54%	-19.60%	9.07%
+/- Benchmark	0.01%	-0.01%	0.00%	-0.01%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	-0.01	0.00	-0.01	0.00	-0.01	0.00
Beta	1.00	1.00	1.00	1.00	1.00	1.00
Standard Deviation	20.30	20.30	18.07	18.07	14.40	14.40
Sharpe Ratio	0.45	0.45	0.51	0.51	0.79	0.79
Information Ratio	-0.97	-	-0.98	-	-0.62	-
Treynor Ratio	7.52	7.53	8.03	8.04	10.98	10.99
Upside Capture Ratio	99.96	100.00	99.97	100.00	99.97	100.00
Downside Capture Ratio	100.00	100.00	100.01	100.00	100.01	100.00

5-Year Quarterly Performance	3Q19	2Q19	1Q19	4Q18
• FXAIX	1.69%	4.30%	13.65%	-13.53%
• Benchmark	1.70%	4.30%	13.65%	-13.52%
+/- Benchmark	0.00%	0.00%	0.00%	-0.01%

5-Year Quarterly Performance	3Q18	2Q18	1Q18	4Q17
• FXAIX	7.71%	3.43%	-0.77%	6.65%
• Benchmark	7.71%	3.43%	-0.76%	6.64%
+/- Benchmark	0.00%	0.00%	-0.01%	0.00%

All data and information on this fact sheet is taken from sources believed to be accurate but is not guaranteed to be accurate, complete, or correct.

Release date 09-30-2022 | Note: Portions of the analysis are based on pre- inception returns. Please read disclosure for more information.

Fidelity® 500 Index (USD)

Morningstar Analyst Rating™ Overall Morningstar Rating™ Standard Index Category Index **Morningstar Cat**
Gold **★★★★** S&P 500 TR USD Russell 1000 TR US Fund Large Blend
 02-16-2022 1,237 US Fund Large Blend

Performance 09-30-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-19.59	20.53	8.94	12.14	18.40
2021	6.18	8.55	0.58	11.02	28.69
2022	-4.60	-16.10	-4.89	—	-23.88
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-15.49	8.15	9.23	11.69	11.13
Std 09-30-2022	-15.49	—	9.23	11.69	11.13
Total Return	-15.49	8.15	9.23	11.69	11.13
+/- Std Index	-0.02	-0.01	-0.01	-0.01	—
+/- Cat Index	1.73	0.20	0.23	0.09	—
% Rank Cat	40	22	19	11	—
No. in Cat	1366	1237	1118	820	—

7-day Yield Subsidized Unsubsidized
 30-day SEC Yield — —

Performance Disclosure
 The overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

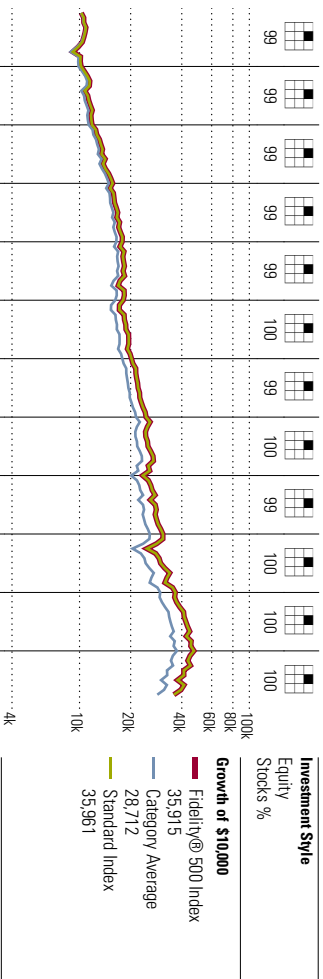
The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate, thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 202-551-8090 or visit www.institutional.fidelity.com.

Fees and Expenses	
Sales Charges	NA
Front-End Load %	NA
Deferred Load %	NA
Fund Expenses	0.02
Management Fees %	0.02
12bt Expense %	NA
Net Expense Ratio %	0.02
Gross Expense Ratio %	0.02
Risk and Return Profile	
Morningstar Rating™	3 Yr: 4★ 5 Yr: 4★ 10 Yr: 4★
Morningstar Risk	Avg 4★ Avg 4★ Avg 4★
Morningstar Return	+Avg +Avg +Avg
Standard Deviation	3 Yr: 20.30 5 Yr: 18.07 10 Yr: 14.40
Mean	8.15 9.23 11.69
Sharpe Ratio	0.45 0.51 0.79

MPF Statistics	
Alpha	-0.01
Beta	1.00
R-Squared	100.00
12-Month Yield	—
Potential Cap Gains Exp	48.33%

Operations
 Family: Fidelity Investments
 Manager: Multiple
 Tenure: 13.8 Years
 Objective: Growth and Income



Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	History
NAV/Price	44.50	50.49	65.49	72.85	71.80	78.35	93.45	87.10	112.02	130.17	165.32	124.93	NAV/Price
Total Return %	2.10	15.99	32.37	13.66	1.38	11.97	21.81	-4.40	31.47	18.40	28.69	-23.88	Total Return %
+/- Standard Index	-0.01	-0.01	-0.03	0.00	0.01	-0.02	-0.02	-0.02	-0.01	0.00	-0.01	-0.01	+/- Standard Index
+/- Category Index	0.60	-0.43	-0.74	0.42	0.47	-0.09	0.12	0.38	0.05	-2.57	2.24	0.71	+/- Category Index
% Rank Cat	—	35	41	18	20	26	28	25	23	37	23	—	% Rank Cat
No. of Funds in Cat	1686	1559	1568	1606	1409	1396	1402	1387	1363	1382	1387	—	No. of Funds in Cat

Portfolio Analysis 08-31-2022

Asset Allocation %	Net %	Long %	Short %
Cash	0.01	0.08	0.08
US Stocks	98.97	98.97	0.00
Non-US Stocks	1.00	1.00	0.00
Bonds	0.02	0.02	0.00
Other/Not Cstfd	0.00	0.00	0.00
Total	100.00	100.08	0.08

Equity Style

Value	Share	Weight	Portfolio Statistics
Large	High	Med	Port Avg Index
Mid	Med	Med	Rel Index
Small	Low	Low	Rel Cat
			P/E Ratio TTM
			P/C Ratio TTM
			P/B Ratio TTM
			Geo Avg Mkt Cap
			Geo Avg Mkt Cap \$mil

Fixed-Income Style

Value	Share	Weight	Portfolio Statistics
Large	High	Med	Avg Eff Maturity
Mid	Med	Med	Avg Eff Duration
Small	Low	Low	Avg Wtd Coupon
			Avg Wtd Price

Credit Quality Breakdown —

AAA	AA	A	BBB	BB	B	Below B	NR	Bond %
—	—	—	—	—	—	—	—	—

Regional Exposure

Stocks %	Rel Std Index
Americas 99.0	1.00
Greater Europe 1.0	0.97
Greater Asia 0.0	1.14

Base Currency: USD
FXAX
Ticker: US3159117502
SIN:
Minimum Initial Purchase: \$0

Purchase Constraints: A
Incept: 05-04-2011
Type: MF
Total Assets: \$326,831,47 mil

Share Clng	Share	Holdings:	Net Assets %
since 07-2022	Amount	503 Total Stocks, 1 Total Fixed-Income, 2% Turnover Ratio	%
165 mil	Apple Inc	7.24	
80 mil	Microsoft Corp	5.85	
94 mil	Amazon.com Inc	3.32	
27 mil	Tesla Inc	2.08	
65 mil	Alphabet Inc Class A	1.95	
59 mil	Alphabet Inc Class C	1.80	
19 mil	Berkshire Hathaway Inc Class B	1.52	
10 mil	Unitedhealth Group Inc	1.46	
28 mil	Johnson & Johnson	1.27	
45 mil	Exxon Mobil Corp	1.21	
27 mil	NVIDIA Corp	1.13	
25 mil	Meta Platforms Inc Class A	1.12	
32 mil	JPMorgan Chase & Co	1.00	
26 mil	Procter & Gamble Co	0.99	
18 mil	Visa Inc Class A	0.98	

Sector Weightings

Stocks %	Rel Std Index
Cyclical 29.3	0.99
Basic Materials 2.2	1.00
Consumer Cyclical 11.2	0.98
Financial Services 13.0	0.99
Real Estate 2.9	0.99
Sensitive 46.2	1.03
Communication Services 8.4	1.04
Energy 4.7	1.03
Industrials 8.5	1.02
Technology 24.7	1.04
Defensive 24.5	0.96
Consumer Defensive 7.2	0.98
Healthcare 14.2	0.93
Utilities 3.1	1.02

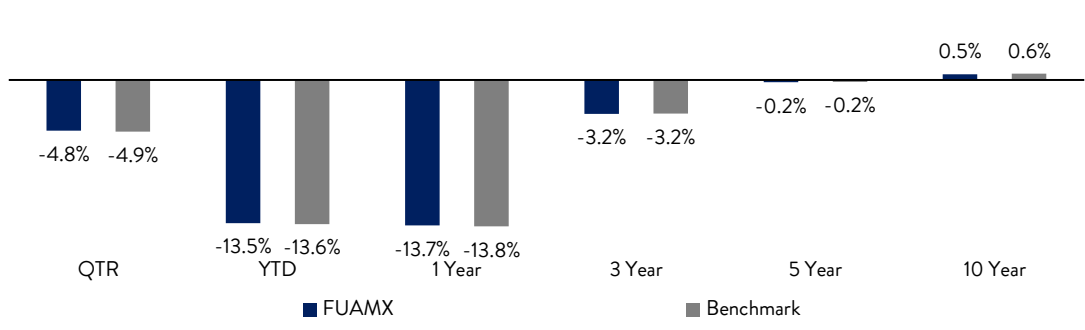
©2022 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be predated or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.



Product Details

Name	Fidelity® Inter Trs Bd Index
Ticker	FUAMX
Expense Ratio	0.030%
Morningstar Category	US Fund Intermediate Government
Benchmark	Bloomberg US Treasury 5-10 Yr TR USD
Inception Date	10/4/2017
Longest Tenured Manager	Brandon C Bettencourt
Longest Manager Tenure	8.42 Years
Fund Size	\$4,250,041,699

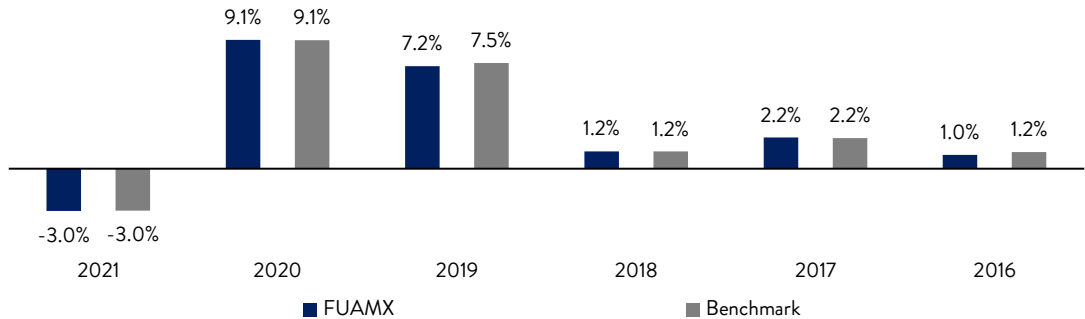
Trailing Performance



Fund Characteristics

	FUAMX	+/- Category
% Assets in Top 10 Holdings	36.90%	-28.69%
Average Eff Duration	6.32	0.70
Average Eff Maturity	-	-
Average Credit Quality	AAA	AA (Cat Avg.)
Average Coupon	1.58%	-0.75%

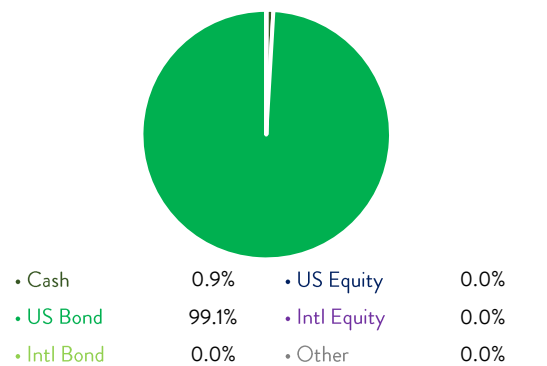
Annual Performance



Sector Allocations

	FUAMX	Category	+/- Category
Government	99.1%	55.1%	44.0%
Municipal	0.0%	0.4%	-0.4%
Bank Loan	0.0%	0.0%	0.0%
Convertible	0.0%	0.0%	0.0%
Corporate Bond	0.0%	0.9%	-0.9%
Preferred Stock	0.0%	0.0%	0.0%
Agency MBS	0.0%	36.0%	-36.0%
Non-Agency RMBS	0.0%	0.0%	0.0%
Commercial MBS	0.0%	0.4%	-0.4%
Asset-Backed	0.0%	1.5%	-1.5%
Cash & Equivalents	0.9%	5.5%	-4.6%
Other	0.0%	0.1%	-0.1%

Asset Allocation



Morningstar Style Box

	Low IR Sens	Mod IR Sens	Ext IR Sens
High Qual			
Med Qual			
Low Qual			

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• FUAMX	-4.79%	-13.51%	-13.71%	-3.20%	-0.21%	0.53%
• Benchmark	-4.86%	-13.60%	-13.80%	-3.18%	-0.19%	0.60%
+/- Benchmark	0.07%	0.09%	0.09%	-0.02%	-0.03%	-0.07%
Peer Group Rank	31	67	61	37	19	24

5-Year Quarterly Performance	3Q22	2Q22	1Q22	4Q21
• FUAMX	-4.79%	-3.38%	-5.97%	-0.23%
• Benchmark	-4.86%	-3.41%	-5.99%	-0.23%
+/- Benchmark	0.07%	0.02%	0.01%	0.00%

Annual Performance	2021	2020	2019	2018	2017	2016
• FUAMX	-3.00%	9.10%	7.25%	1.23%	2.20%	0.97%
• Benchmark	-2.97%	9.09%	7.48%	1.22%	2.17%	1.18%
+/- Benchmark	-0.03%	0.01%	-0.23%	0.01%	0.03%	-0.21%
Peer Group Rank	93	7	1	3	16	62

5-Year Quarterly Performance	3Q21	2Q21	1Q21	4Q20
• FUAMX	-0.14%	1.84%	-4.40%	-0.81%
• Benchmark	-0.06%	1.84%	-4.45%	-0.80%
+/- Benchmark	-0.07%	-0.01%	0.05%	0.00%

Rolling 5-Year Performance	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021	07/2016 - 06/2021
• FUAMX	-0.21%	0.85%	1.79%	3.26%	2.30%	2.24%
• Benchmark	-0.19%	0.91%	1.86%	3.30%	2.39%	2.32%
+/- Benchmark	-0.03%	-0.05%	-0.06%	-0.04%	-0.08%	-0.08%
Peer Group Rank	19	15	12	4	20	25

5-Year Quarterly Performance	3Q20	2Q20	1Q20	4Q19
• FUAMX	0.26%	0.74%	8.91%	-0.91%
• Benchmark	0.35%	0.86%	8.66%	-0.76%
+/- Benchmark	-0.09%	-0.12%	0.25%	-0.15%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	-0.01	0.00	-0.02	0.00	-0.07	0.00
Beta	1.00	1.00	1.00	1.00	1.01	1.00
Standard Deviation	5.93	5.91	5.44	5.43	4.97	4.88
Sharpe Ratio	-0.62	-0.62	-0.23	-0.23	-0.01	0.00
Information Ratio	-0.07	-	-0.09	-	-0.23	-
Treynor Ratio	-3.83	-3.82	-1.40	-1.38	-0.18	-0.11
Upside Capture Ratio	100.26	100.00	100.03	100.00	101.14	100.00
Downside Capture Ratio	100.40	100.00	100.39	100.00	102.47	100.00

5-Year Quarterly Performance	3Q19	2Q19	1Q19	4Q18
• FUAMX	2.16%	3.46%	2.40%	3.49%
• Benchmark	2.12%	3.53%	2.44%	3.40%
+/- Benchmark	0.04%	-0.06%	-0.04%	0.09%

5-Year Quarterly Performance	3Q18	2Q18	1Q18	4Q17
• FUAMX	-0.50%	-0.13%	-1.56%	-0.43%
• Benchmark	-0.53%	-0.08%	-1.51%	-0.42%
+/- Benchmark	0.03%	-0.06%	-0.04%	-0.01%

All data and information on this fact sheet is taken from sources believed to be accurate but is not guaranteed to be accurate, complete, or correct.

Fidelity® Interm Trs Bd Index (USD)

Performance 09-30-2022	09-30-2022				Total %
	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	
Quarterly Returns	8.91	0.74	0.26	-0.81	9.10
2020	-4.40	1.84	-0.14	-0.23	-3.00
2021	-5.97	-3.38	-4.79	—	-13.51
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-13.71	-3.20	—	—	-0.21
Std 09-30-2022	-13.71	—	—	—	-0.21
Total Return	-13.71	-3.20	-0.21	0.53	-0.21
+/- Std Index	0.89	0.05	0.06	-0.36	—
+/- Cat Index	-0.89	-0.15	-0.01	0.00	—
% Rank Cat	66	41	21	18	—
No. in Cat	238	225	214	178	—

	Subsidized	Unsubsidized
7-day Yield	—	—
30-day SEC Yield	—	—

Performance Disclosure
The overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate, thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-544-8544 or visit www.institutional.fidelity.com.

Fees and Expenses

Sales Charges	NA
Front-End Load %	NA
Deferred Load %	NA

Fund Expenses

Management Fees %	0.03
12B1 Expense %	NA
Net Expense Ratio %	0.03
Gross Expense Ratio %	0.03

Risk and Return Profile

	3 Yr	5 Yr	10 Yr
Morningstar Rating™	225 funds	214 funds	178 funds
Morningstar Risk	3★	4★	4★
Morningstar Return	High	High	High
	Avg	+Avg	+Avg

	3 Yr	5 Yr	10 Yr
Standard Deviation	5.93	5.45	4.97
Mean	-3.20	-0.21	0.53
Sharpe Ratio	-0.62	-0.23	-0.01

MPI Statistics	Standard Index	Best Fit Index
Alpha	-0.08	0.35
Beta	0.96	1.13
R-Squared	75.44	96.39
12-Month Yield	—	—
Potential Cap Gains Exp	-2.58%	—

	Government TR USD	Best Fit Index
Alpha	-0.08	0.35
Beta	0.96	1.13
R-Squared	75.44	96.39
12-Month Yield	—	—
Potential Cap Gains Exp	-2.58%	—

Operations

Family:	Fidelity Investments
Manager:	Multiple
Tenure:	8.4 Years
Objective:	Government Bond - Treasury

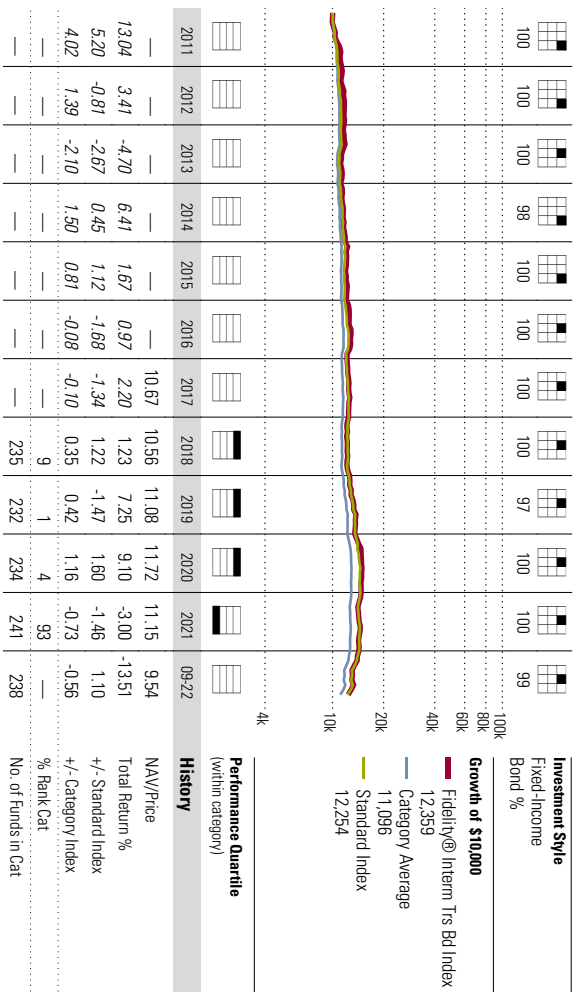
Morningstar Quantitative Rating™
Silver ⁰
09-30-2022

Overall Morningstar Rating™ ★★
225 US Fund Intermediate Government

Standard Index
Bloomberg US Agg Bond TR USD

Category Index
Bloomberg US Government TR

Morningstar Cat
US Fund Intermediate Government



Portfolio Analysis 08-31-2022

Asset Allocation %	Net %	Long %	Short %
Cash	0.92	0.92	0.00
US Stocks	0.00	0.00	0.00
Non-US Stocks	0.00	0.00	0.00
Bonds	99.08	99.08	0.00
Other/Not Cstfd	0.00	0.00	0.00
Total	100.00	100.00	0.00

Equity Style	Value	Brand	Geom	Portfolio Statistics	Port Avg	Rel Index	Rel Cat
	Large	Med	Small	P/E Ratio TTM	—	—	—
	Large	Med	Small	P/C Ratio TTM	—	—	—
	Large	Med	Small	P/B Ratio TTM	—	—	—
	Large	Med	Small	Geo Avg Mkt Cap	—	—	—
	Large	Med	Small	Geo Avg Mkt Cap	—	—	—

Fixed-Income Style	Ltd	Med	Ext	Avg Eff Maturity	Avg Eff Duration	Avg Wtd Coupon	Avg Wtd Price
	High	Med	Low	—	—	—	—
	High	Med	Low	—	—	—	—
	High	Med	Low	—	—	—	—
	High	Med	Low	—	—	—	—

Credit Quality Breakdown 08-31-2022

Credit Quality	100%
AAA	100.00
AA	0.00
A	0.00
BBB	0.00
BB	0.00
B	0.00
Below B	0.00
NR	0.00

Regional Exposure	Stocks %	Rel Std Index
Americas	—	—
Greater Europe	—	—
Greater Asia	—	—

Base Currency:	USD
Ticker:	FUAMX
ISIN:	US31635V2575
Minimum Initial Purchase:	\$0

Purchase Constraints:	A
Incept:	10-04-2017
Type:	MF
Total Assets:	\$4,250.04 mil

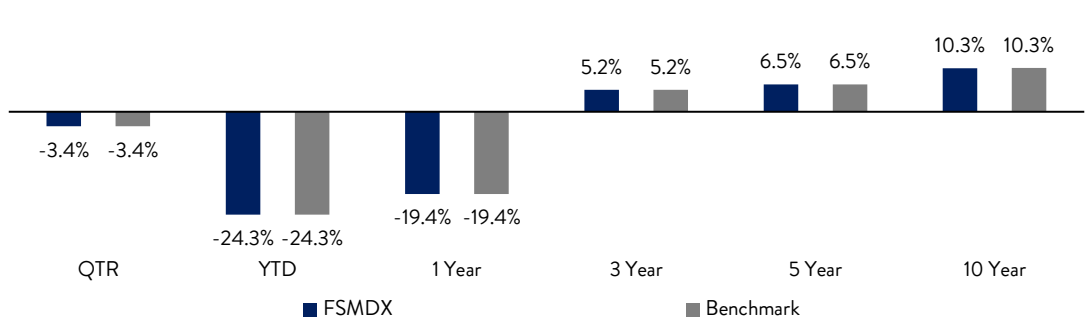
Sector Weightings	Stocks %	Rel Std Index
Cyclical	—	—
Basic Materials	—	—
Consumer Cyclical	—	—
Financial Services	—	—
Real Estate	—	—
Sensitive	—	—
Communication Services	—	—
Energy	—	—
Industrials	—	—
Technology	—	—
Defensive	—	—
Consumer Defensive	—	—
Healthcare	—	—
Utilities	—	—

©2022 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted, either in whole or in part, as to accuracy. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc., including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be predated or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.

Product Details

Name	Fidelity® Mid Cap Index
Ticker	FSMDX
Expense Ratio	0.025%
Morningstar Category	US Fund Mid-Cap Blend
Benchmark	Russell Mid Cap TR USD
Inception Date	9/8/2011
Longest Tenured Manager	Louis Bottari
Longest Manager Tenure	11.08 Years
Fund Size	\$22,139,857,043

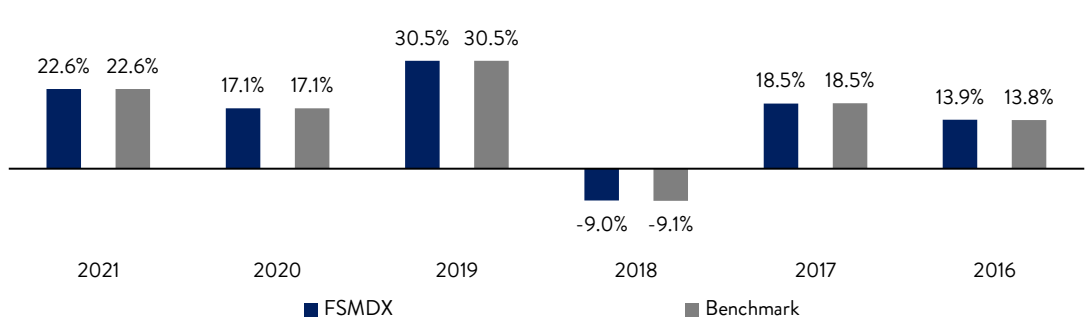
Trailing Performance



Fund Characteristics

	FSMDX	+/- Category
% Assets in Top 10 Holdings	4.63%	-10.55%
Average Market Cap (mil)	\$17,157	\$8,407
P/E Ratio (TTM)	16.29	2.90
P/B Ratio (TTM)	2.69	0.41
Est. Dividend Yield	1.74%	0.01%

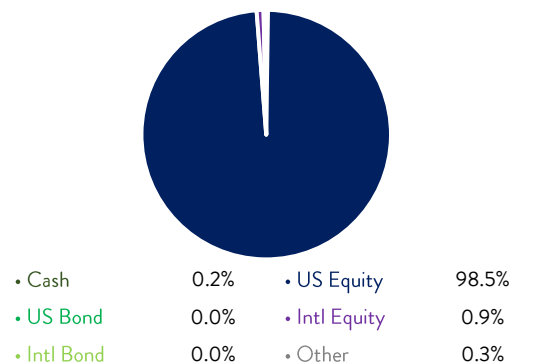
Annual Performance



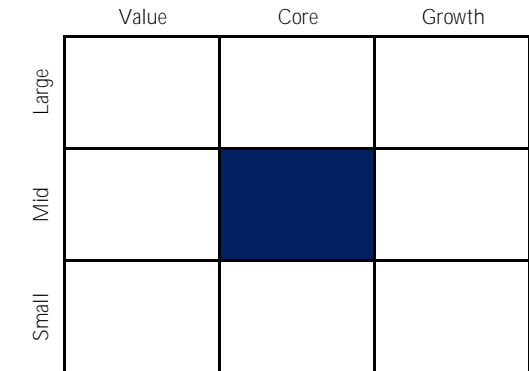
Sector Allocations

	FSMDX	Category	+/- Category
Materials	5.0%	5.3%	-0.3%
Communication Services	4.1%	2.8%	1.3%
Consumer Discretionary	12.0%	13.1%	-1.1%
Consumer Staples	3.9%	4.4%	-0.5%
Healthcare	10.1%	11.3%	-1.1%
Industrials	14.7%	16.3%	-1.5%
Real Estate	8.7%	7.5%	1.2%
Technology	17.1%	15.4%	1.7%
Energy	5.2%	5.1%	0.1%
Financial Services	13.2%	14.9%	-1.7%
Utilities	5.9%	4.0%	2.0%
Other	0.0%	0.0%	0.0%

Asset Allocation



Morningstar Style Box



Fidelity® Mid Cap Index
FSMDX

Fund Fact Sheet
Data as of 09/30/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• FSMDX	-3.42%	-24.26%	-19.38%	5.19%	6.48%	10.29%
• Benchmark	-3.44%	-24.27%	-19.39%	5.19%	6.48%	10.30%
+/- Benchmark	0.02%	0.01%	0.01%	0.00%	0.00%	-0.01%
Peer Group Rank	39	71	74	52	27	18

5-Year Quarterly Performance	3Q22	2Q22	1Q22	4Q21
• FSMDX	-3.42%	-16.85%	-5.69%	6.44%
• Benchmark	-3.44%	-16.85%	-5.68%	6.44%
+/- Benchmark	0.02%	0.00%	-0.01%	0.00%

Annual Performance	2021	2020	2019	2018	2017	2016
• FSMDX	22.56%	17.11%	30.51%	-9.05%	18.47%	13.86%
• Benchmark	22.58%	17.10%	30.54%	-9.06%	18.52%	13.80%
+/- Benchmark	-0.02%	0.01%	-0.03%	0.01%	-0.05%	0.07%
Peer Group Rank	63	25	27	31	29	56

5-Year Quarterly Performance	3Q21	2Q21	1Q21	4Q20
• FSMDX	-0.93%	7.47%	8.15%	19.89%
• Benchmark	-0.93%	7.50%	8.14%	19.91%
+/- Benchmark	0.00%	-0.03%	0.01%	-0.02%

Rolling 5-Year Performance	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021	07/2016 - 06/2021
• FSMDX	6.48%	7.95%	12.61%	15.08%	14.37%	15.61%
• Benchmark	6.48%	7.96%	12.62%	15.10%	14.39%	15.62%
+/- Benchmark	0.00%	-0.01%	-0.01%	-0.02%	-0.02%	-0.01%
Peer Group Rank	27	29	19	17	20	23

5-Year Quarterly Performance	3Q20	2Q20	1Q20	4Q19
• FSMDX	7.49%	24.55%	-27.04%	7.06%
• Benchmark	7.46%	24.61%	-27.07%	7.06%
+/- Benchmark	0.03%	-0.06%	0.03%	0.00%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	0.00	0.00	0.00	0.00	0.00	0.00
Beta	1.00	1.00	1.00	1.00	1.00	1.00
Standard Deviation	23.05	23.07	20.30	20.31	16.07	16.09
Sharpe Ratio	0.31	0.31	0.35	0.35	0.65	0.65
Information Ratio	0.01	-	-0.01	-	-0.08	-
Treynor Ratio	4.56	4.56	5.29	5.29	9.59	9.59
Upside Capture Ratio	99.89	100.00	99.90	100.00	99.88	100.00
Downside Capture Ratio	99.88	100.00	99.88	100.00	99.85	100.00

5-Year Quarterly Performance	3Q19	2Q19	1Q19	4Q18
• FSMDX	0.44%	4.14%	16.53%	-15.32%
• Benchmark	0.48%	4.13%	16.54%	-15.37%
+/- Benchmark	-0.04%	0.01%	0.00%	0.06%

5-Year Quarterly Performance	3Q18	2Q18	1Q18	4Q17
• FSMDX	4.97%	2.80%	-0.48%	6.08%
• Benchmark	5.00%	2.82%	-0.46%	6.07%
+/- Benchmark	-0.02%	-0.02%	-0.02%	0.01%

All data and information on this fact sheet is taken from sources believed to be accurate but is not guaranteed to be accurate, complete, or correct.

Fidelity® Mid Cap Index (USD)

Morningstar Quantitative **Overall Morningstar Rating™ Standard Index** **Category Index** **Morningstar Cat**
Rating™ **★★★★** **367 US Fund Mid-Cap Blend** **SGP 500 TR USD** **Russell Mid Cap TR** **US Fund Mid-Cap Blend**
Gold® **09-30-2022** **USD**

Performance 09-30-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-27.04	24.55	7.49	19.89	17.11
2021	8.15	7.47	-0.93	6.44	22.56
2022	-5.69	-16.85	-3.42	—	-24.26
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-19.38	5.19	6.48	10.29	10.99
Std 09-30-2022	-19.38	—	6.48	10.29	10.99
Total Return	-19.38	5.19	6.48	10.29	10.99
+/- Std Index	-3.91	-2.97	-2.76	-1.41	—
+/- Cat Index	0.01	0.00	0.00	-0.01	—
% Rank Cat	79	57	30	19	—
No. in Cat	411	367	335	218	—

7-day Yield Subsidized Unsubsidized
 30-day SEC Yield — —

Performance Disclosure
 The overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate, thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-544-8944 or visit www.institutional.fidelity.com.

Fees and Expenses

Sales Charges
Front-End Load % **NA**
Deferred Load % **NA**

Fund Expenses

Management Fees % 0.03
 12b1 Expense % NA
Net Expense Ratio % **0.03**
Gross Expense Ratio % **0.03**

Risk and Return Profile

	3 Yr	5 Yr	10 Yr
Morningstar Rating™	3★	4★	4★
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	Avg	+Avg	+Avg

Standard Deviation 23.05 20.30 16.08
 Mean 5.19 6.48 10.29
 Sharpe Ratio 0.31 0.35 0.65

MPI Statistics

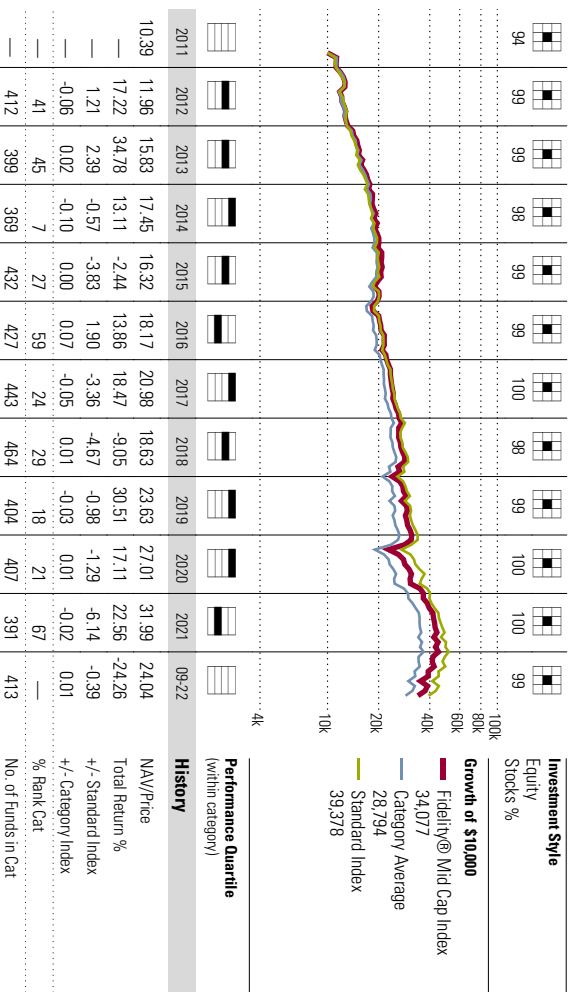
	Standard Index	Best Fit Index
Alpha	0.00	0.00
Beta	-2.97	1.09
R-Squared	91.76	100.00
12-Month Yield	—	—
Potential Cap Gains Exp	—	16.53%

Operations

Family: Fidelity Investments
 Manager: Multiple
 Tenure: 11.1 Years
 Objective: Growth

Base Currency: USD
 Ticker: FSMDX
 ISIN: US3161462656
 Minimum Initial Purchase: \$0

Purchase Constraints: A
 Incept: 09-08-2011
 Type: MF
 Total Assets: \$22,139,86 mil



Portfolio Analysis 08-31-2022					
Asset Allocation %	Net %	Long %	Short %	Share Cng	Holdings:
Cash	-0.01	0.20	0.22	07-2022	827 Total Stocks - 1 Total Fixed-Income, 12% Turnover Ratio
US Stocks	98.75	98.75	0.00		379,908 Synopsys Inc
Non-US Stocks	0.89	0.89	0.00		679,773 Cadence Design Systems Inc
Bonds	0.02	0.02	0.00		2 mil Devon Energy Corp
Other/Not Cstfd	0.34	0.34	0.00		162,769 O'Reilly Automotive Inc
Total	100.00	100.22	0.22		2 mil Corveva Inc

Equity Style		Portfolio Statistics	
Value	Brand Growth	Port Avg Index	Rel Index Cat
Large	High	16.3	0.91
Mid	Med	13.2	0.97
Small	Low	2.7	0.79
		Geo Avg Mkt Cap	17157 0.10
		Geo Avg Mkt Cap	17157 0.10

Fixed-Income Style		Ang Eff Maturity	
Ltd	Med	Ext	Ang Eff Duration
High	Med	Low	Ang Wld Coupon
			Ang Wld Price

Credit Quality Breakdown

	AAA	AA	A	BBB	BB	B	Below B	NR
AAA	—	—	—	—	—	—	—	—
AA	—	—	—	—	—	—	—	—
A	—	—	—	—	—	—	—	—
BBB	—	—	—	—	—	—	—	—
BB	—	—	—	—	—	—	—	—
B	—	—	—	—	—	—	—	—
Below B	—	—	—	—	—	—	—	—
NR	—	—	—	—	—	—	—	—

Regional Exposure		Stocks %	Rel Std Index
Americas	99.2	1.00	—
Greater Europe	0.7	0.75	—
Greater Asia	0.1	2.49	—

Sector Weightings		Stocks %	Rel Std Index
Cyclical	38.9	1.31	2.22
Basic Materials	5.0	2.22	5.0
Consumer Cyclical	12.0	1.05	12.0
Financial Services	13.2	1.01	13.2
Real Estate	8.7	3.01	8.7
Sensitive	41.1	0.92	4.11
Communication Services	4.1	0.51	4.1
Energy	5.2	1.15	5.2
Industrials	14.7	1.77	14.7
Technology	17.1	0.72	17.1
Defensive	20.0	0.78	3.9
Consumer Defensive	3.9	0.54	3.9
Healthcare	10.1	0.67	10.1
Utilities	5.9	1.93	5.9

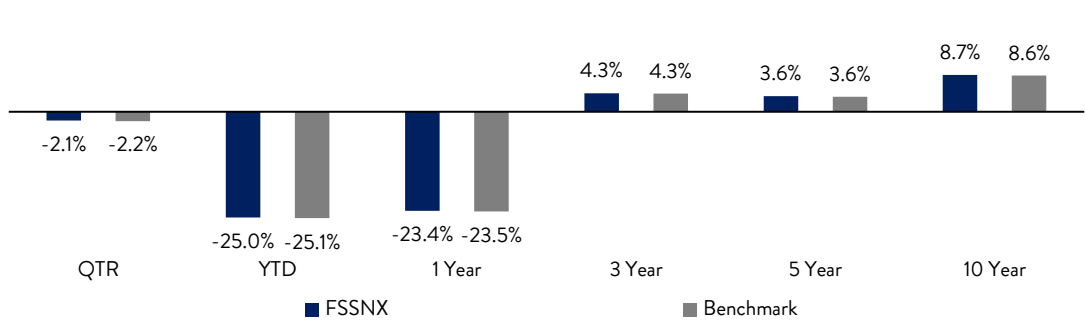
©2022 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be predated or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.



Product Details

Name	Fidelity® Small Cap Index
Ticker	FSSNX
Expense Ratio	0.025%
Morningstar Category	US Fund Small Blend
Benchmark	Russell 2000 TR USD
Inception Date	9/8/2011
Longest Tenured Manager	Louis Bottari
Longest Manager Tenure	11.08 Years
Fund Size	\$17,061,811,787

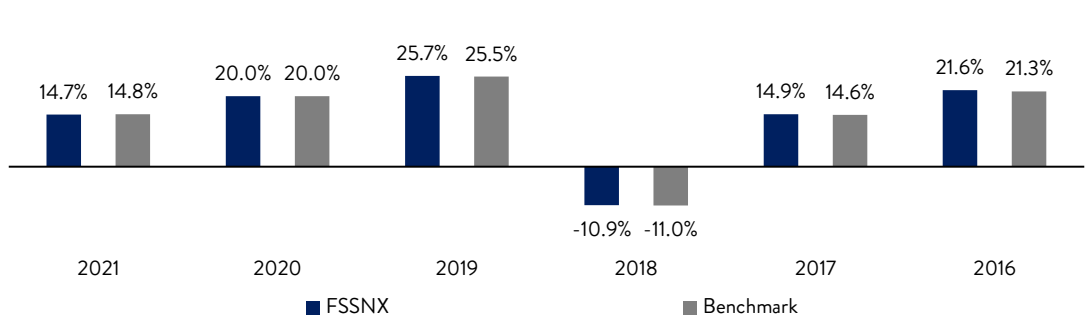
Trailing Performance



Fund Characteristics

	FSSNX	+/- Category
% Assets in Top 10 Holdings	4.15%	-20.35%
Average Market Cap (mil)	\$2,211	-\$1,527
P/E Ratio (TTM)	12.98	0.99
P/B Ratio (TTM)	1.95	0.01
Est. Dividend Yield	1.42%	-0.13%

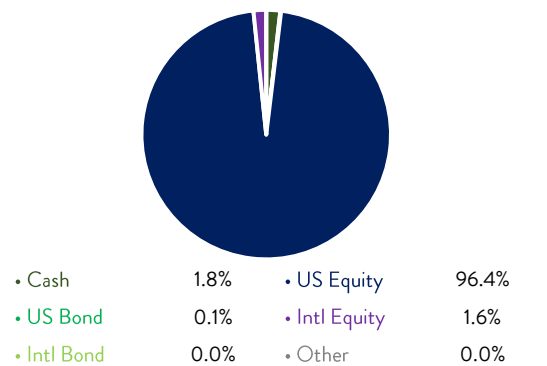
Annual Performance



Sector Allocations

	FSSNX	Category	+/- Category
Materials	4.2%	4.6%	-0.4%
Communication Services	2.7%	2.7%	0.0%
Consumer Discretionary	10.1%	11.3%	-1.2%
Consumer Staples	4.0%	4.3%	-0.3%
Healthcare	16.9%	14.4%	2.6%
Industrials	14.4%	17.2%	-2.8%
Real Estate	8.5%	7.0%	1.4%
Technology	14.5%	14.1%	0.5%
Energy	5.6%	5.0%	0.5%
Financial Services	15.7%	16.7%	-1.0%
Utilities	3.4%	2.8%	0.7%
Other	0.0%	0.0%	0.0%

Asset Allocation



Morningstar Style Box

	Value	Core	Growth
Large			
Mid			
Small			

Fidelity® Small Cap Index

FSSNX

Fund Fact Sheet

Data as of 09/30/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• FSSNX	-2.08%	-24.96%	-23.39%	4.35%	3.65%	8.71%
• Benchmark	-2.19%	-25.10%	-23.50%	4.29%	3.55%	8.55%
+/- Benchmark	0.10%	0.14%	0.11%	0.06%	0.09%	0.16%
Peer Group Rank	13	67	84	53	53	44

5-Year Quarterly Performance	3Q22	2Q22	1Q22	4Q21
• FSSNX	-2.08%	-17.18%	-7.47%	2.10%
• Benchmark	-2.19%	-17.20%	-7.53%	2.14%
+/- Benchmark	0.10%	0.02%	0.05%	-0.04%

Annual Performance	2021	2020	2019	2018	2017	2016
• FSSNX	14.71%	19.99%	25.71%	-10.88%	14.85%	21.63%
• Benchmark	14.82%	19.96%	25.52%	-11.01%	14.65%	21.31%
+/- Benchmark	-0.11%	0.03%	0.18%	0.14%	0.20%	0.32%
Peer Group Rank	90	14	37	38	27	44

5-Year Quarterly Performance	3Q21	2Q21	1Q21	4Q20
• FSSNX	-4.40%	4.26%	12.73%	31.28%
• Benchmark	-4.36%	4.29%	12.70%	31.37%
+/- Benchmark	-0.04%	-0.04%	0.03%	-0.09%

Rolling 5-Year Performance	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021	07/2016 - 06/2021
• FSSNX	3.65%	5.25%	9.84%	12.11%	13.56%	16.59%
• Benchmark	3.55%	5.17%	9.74%	12.02%	13.45%	16.47%
+/- Benchmark	0.09%	0.08%	0.09%	0.09%	0.11%	0.13%
Peer Group Rank	53	59	43	37	25	8

5-Year Quarterly Performance	3Q20	2Q20	1Q20	4Q19
• FSSNX	4.98%	25.49%	-30.62%	10.01%
• Benchmark	4.93%	25.42%	-30.61%	9.94%
+/- Benchmark	0.05%	0.07%	-0.01%	0.07%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	0.06	0.00	0.09	0.00	0.15	0.00
Beta	1.00	1.00	1.00	1.00	1.00	1.00
Standard Deviation	25.46	25.47	22.81	22.81	18.88	18.88
Sharpe Ratio	0.27	0.27	0.22	0.22	0.50	0.49
Information Ratio	0.68	-	1.07	-	1.57	-
Treynor Ratio	3.71	3.65	2.45	2.36	8.00	7.84
Upside Capture Ratio	100.13	100.00	100.22	100.00	100.34	100.00
Downside Capture Ratio	99.95	100.00	99.91	100.00	99.76	100.00

5-Year Quarterly Performance	3Q19	2Q19	1Q19	4Q18
• FSSNX	-2.34%	2.13%	14.56%	-20.17%
• Benchmark	-2.40%	2.10%	14.58%	-20.20%
+/- Benchmark	0.06%	0.04%	-0.02%	0.03%

5-Year Quarterly Performance	3Q18	2Q18	1Q18	4Q17
• FSSNX	3.63%	7.79%	-0.05%	3.38%
• Benchmark	3.58%	7.75%	-0.08%	3.34%
+/- Benchmark	0.05%	0.03%	0.03%	0.04%

All data and information on this fact sheet is taken from sources believed to be accurate but is not guaranteed to be accurate, complete, or correct.

Fidelity® Small Cap Index (USD)

Morningstar Quantitative Rating™ **Bronze** Overall Morningstar Rating™ Standard Index S&P 500 TR USD Category Index Russell 2000 TR Morningstar Cat US Fund Small Blend

Performance 09-30-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-30.62	25.49	4.98	31.28	19.99
2021	12.73	4.26	-4.40	2.10	14.71
2022	-7.47	-17.18	-2.08	—	-24.96
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly Std 09-30-2022	-23.39	4.35	3.65	8.71	9.83
	-23.39	—	3.65	8.71	9.83
Total Return	-23.39	4.35	3.65	8.71	9.83
+/- Std Index	-7.92	-3.81	-5.59	-2.99	—
+/- Cat Index	0.11	0.06	0.09	0.16	—
% Rank Cat	85	60	57	48	—
No. in Cat	607	578	536	356	—

7-day Yield **Subsidized** Unsubsidized
30-day SEC Yield **—** **—**

Performance Disclosure
The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-544-8544 or visit www.institutional.fidelity.com.

Fees and Expenses	
Sales Charges	NA
Front-End Load %	NA
Deferred Load %	NA
Fund Expenses	0.03
Management Fees %	0.03
12bt Expense %	NA
Net Expense Ratio %	0.03
Gross Expense Ratio %	0.03
Risk and Return Profile	

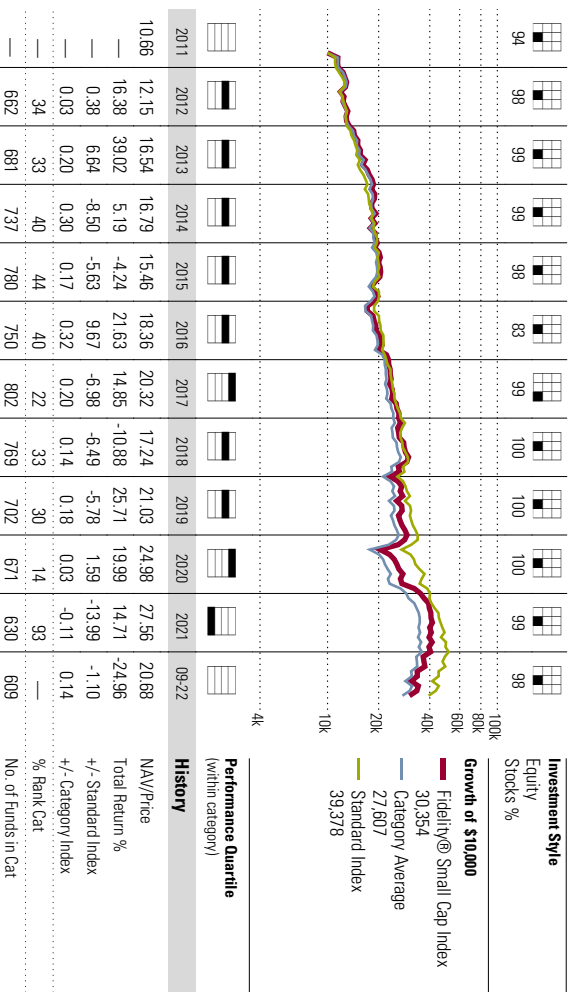
	3 Yr	5 Yr	10 Yr
Morningstar Rating™	3★	3★	3★
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	Avg	Avg	Avg

	3 Yr	5 Yr	10 Yr
Standard Deviation	25.46	22.81	18.88
Mean	4.35	3.65	8.71
Sharpe Ratio	0.27	0.22	0.50
MPI Statistics	Standard Index	Best Fit Index Russell 2000TR	USD
Alpha	-3.49	0.06	0.06
Beta	1.12	1.00	1.00
R-Squared	79.87	100.00	100.00
12-Month Yield	—	—	—
Potential Cap Gains Exp	5.18%	—	—

Operations
Family: Fidelity Investments
Manager: Multiple
Tenure: 11.1 Years
Objective: Small Company

Base Currency: USD
Ticker: FSSNX
ISIN: US3161461823
Minimum Initial Purchase: \$0

Purchase Constraints: A
Incept: 09-08-2011
Type: MF
Total Assets: \$17,061.81 mill



Portfolio Analysis 07-31-2022		Net %	Long %	Short %	Share Clng	Share Holdings:	Net Assets %
Asset Allocation %	Cash	-0.06	1.85	1.90	06-2022	Amount	1,971 Total Stocks - 1 Total Fixed-Income, 24% Turnover Ratio
	US Stocks	98.27	98.27	0.00			
	Non-US Stocks	1.67	1.67	0.00			
	Bonds	0.11	0.11	0.00			
	Other/Not Clsfd	0.00	0.00	0.00			
	Total	100.00	101.90	1.90			
Equity Style		Portfolio Statistics		Port	Rel	Index	Rel
	Value	Avg P/E Ratio TTM	13.0	0.72	1.08		1.08
	Brand	P/C Ratio TTM	10.5	0.77	1.05		1.05
	Geom	P/B Ratio TTM	2.0	0.58	1.01		1.01
	Small	Geo Avg Mkt Cap	2211	0.01	0.59		0.59

Fixed-Income Style		Avg Eff Maturity		Avg Eff Duration		Avg Wtd Coupon		Avg Wtd Price	
Low	Med	High	Med	Low	High	Med	Low	High	Med

Credit Quality Breakdown		Bond %	
AAA	AAA	—	—
AA	AA	—	—
A	A	—	—
BBB	BBB	—	—
BB	BB	—	—
B	B	—	—
Below B	Below B	—	—
NR	NR	—	—
Regional Exposure		Stocks %	Rel Std Index
Americas	99.3	1.00	—
Greater Europe	0.4	0.36	—
Greater Asia	0.4	10.43	—

Sector Weightings

Sector	Weighting	Stocks %	Rel Std Index
Cyclical	38.4	1.29	—
Basic Materials	4.2	1.85	—
Consumer Cyclical	10.1	0.88	—
Financial Services	15.7	1.19	—
Real Estate	8.5	2.93	—
Sensitive	37.3	0.83	—
Communication Services	2.7	0.34	—
Energy	5.6	1.23	—
Industrials	14.4	1.74	—
Technology	14.5	0.61	—
Defensive	24.3	0.95	—
Consumer Defensive	4.0	0.54	—
Healthcare	16.9	1.12	—
Utilities	3.4	1.11	—

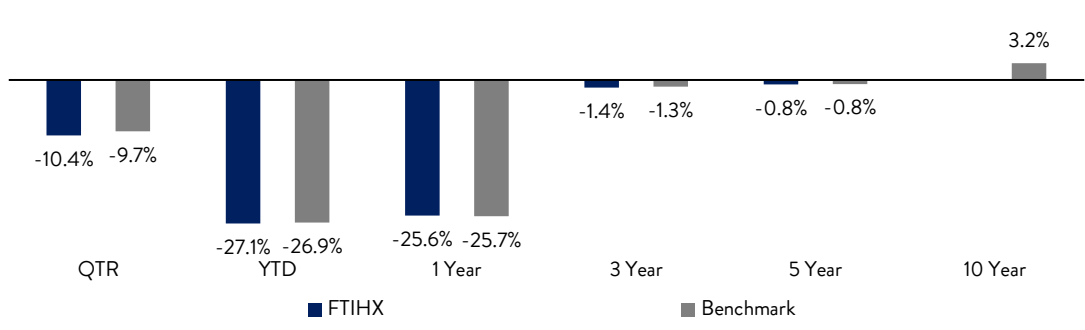
©2022 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted, in whole or in part, to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be predated or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.



Product Details

Name	Fidelity® Total International Index
Ticker	FTIHX
Expense Ratio	0.060%
Morningstar Category	US Fund Foreign Large Blend
Benchmark	MSCI ACWI Ex USA IMI NR USD
Inception Date	6/7/2016
Longest Tenured Manager	Louis Bottari;Peter Matthew;
Longest Manager Tenure	6.33 Years
Fund Size	\$7,726,573,419

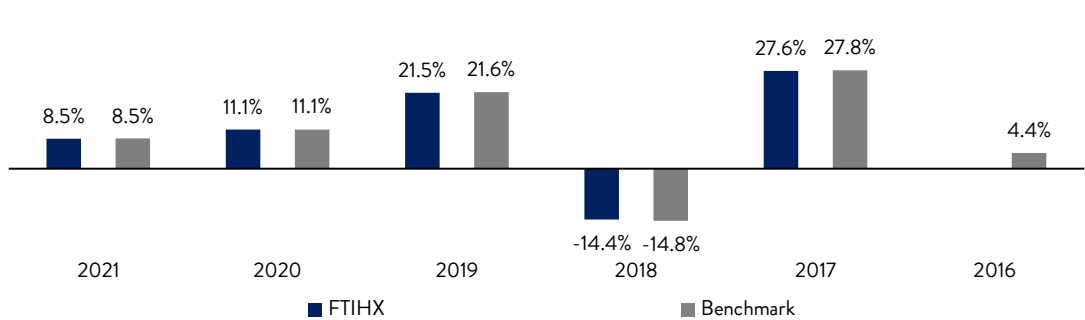
Trailing Performance



Fund Characteristics

	FTIHX	+/- Category
% Assets in Top 10 Holdings	10.40%	-3.64%
Average Market Cap (mil)	\$25,303	-\$16,345
P/E Ratio (TTM)	11.70	0.43
P/B Ratio (TTM)	1.55	0.04
Est. Dividend Yield	3.98%	-0.60%

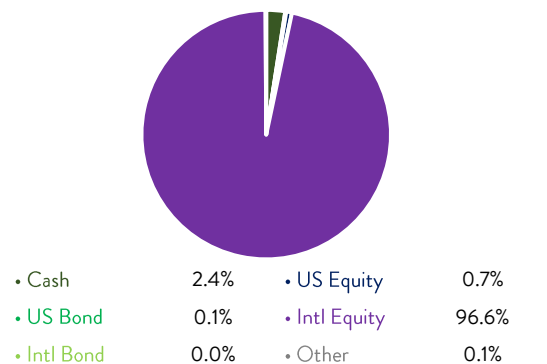
Annual Performance



Sector Allocations

	FTIHX	Category	+/- Category
Materials	8.4%	7.5%	0.8%
Communication Services	6.2%	5.5%	0.7%
Consumer Discretionary	11.2%	10.7%	0.5%
Consumer Staples	8.5%	10.2%	-1.7%
Healthcare	9.4%	12.4%	-3.1%
Industrials	13.1%	14.3%	-1.2%
Real Estate	3.5%	2.3%	1.3%
Technology	11.4%	10.0%	1.3%
Energy	6.0%	5.6%	0.4%
Financial Services	19.0%	18.4%	0.6%
Utilities	3.3%	3.0%	0.3%
Other	0.0%	0.0%	0.0%

Asset Allocation



Morningstar Style Box

	Value	Core	Growth
Large			
Mid			
Small			

Fidelity® Total International Index
FTIHX

Fund Fact Sheet
Data as of 09/30/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• FTIHX	-10.45%	-27.06%	-25.59%	-1.42%	-0.83%	-
• Benchmark	-9.69%	-26.92%	-25.72%	-1.27%	-0.78%	3.19%
+/- Benchmark	-0.76%	-0.14%	0.13%	-0.15%	-0.04%	-
Peer Group Rank	54	32	41	41	42	-

5-Year Quarterly Performance	3Q22	2Q22	1Q22	4Q21
• FTIHX	-10.45%	-13.16%	-6.21%	2.01%
• Benchmark	-9.69%	-14.28%	-5.60%	1.64%
+/- Benchmark	-0.76%	1.12%	-0.61%	0.36%

Annual Performance	2021	2020	2019	2018	2017	2016
• FTIHX	8.47%	11.07%	21.48%	-14.38%	27.63%	-
• Benchmark	8.53%	11.12%	21.63%	-14.76%	27.81%	4.41%
+/- Benchmark	-0.06%	-0.04%	-0.16%	0.37%	-0.18%	-
Peer Group Rank	65	42	62	42	29	-

5-Year Quarterly Performance	3Q21	2Q21	1Q21	4Q20
• FTIHX	-3.02%	5.53%	3.91%	16.81%
• Benchmark	-2.56%	5.60%	3.77%	17.22%
+/- Benchmark	-0.46%	-0.06%	0.14%	-0.41%

Rolling 5-Year Performance	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021	07/2016 - 06/2021
• FTIHX	-0.83%	2.60%	6.75%	9.85%	8.89%	11.02%
• Benchmark	-0.78%	2.50%	6.92%	9.83%	9.13%	11.20%
+/- Benchmark	-0.04%	0.10%	-0.16%	0.02%	-0.24%	-0.18%
Peer Group Rank	42	37	39	43	43	33

5-Year Quarterly Performance	3Q20	2Q20	1Q20	4Q19
• FTIHX	6.78%	17.41%	-24.15%	9.02%
• Benchmark	6.80%	16.96%	-24.11%	9.20%
+/- Benchmark	-0.01%	0.45%	-0.05%	-0.18%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	-0.16	0.00	-0.06	0.00	-	0.00
Beta	0.99	1.00	0.99	1.00	-	1.00
Standard Deviation	18.86	18.98	16.64	16.71	-	14.31
Sharpe Ratio	-0.02	-0.01	-0.04	-0.03	-	0.24
Information Ratio	-0.08	-	-0.03	-	-	-
Treynor Ratio	-2.07	-1.90	-2.04	-1.98	-	2.48
Upside Capture Ratio	99.91	100.00	99.64	100.00	-	100.00
Downside Capture Ratio	100.47	100.00	99.86	100.00	-	100.00

5-Year Quarterly Performance	3Q19	2Q19	1Q19	4Q18
• FTIHX	-1.68%	2.85%	10.19%	-11.71%
• Benchmark	-1.72%	2.74%	10.31%	-11.88%
+/- Benchmark	0.04%	0.11%	-0.12%	0.17%

5-Year Quarterly Performance	3Q18	2Q18	1Q18	4Q17
• FTIHX	0.33%	-2.96%	-0.40%	4.96%
• Benchmark	0.39%	-2.61%	-1.06%	5.23%
+/- Benchmark	-0.06%	-0.35%	0.66%	-0.27%

All data and information on this fact sheet is taken from sources believed to be accurate but is not guaranteed to be accurate, complete, or correct.

Fidelity® Total International Index (USD)

Morningstar Quantitative Rating™
Gold^o
 09-30-2022

Overall Morningstar Rating™ Standard Index Blend

 701 US Fund Foreign Large Blend
 MSCI ACWI EX USA NR USD
 MSCI ACWI EX USA NR USD
 US Fund Foreign Large Blend

Performance 09-30-2022	Quarterly Returns				Total %
	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	
2020	-24.15	17.41	6.78	16.81	11.07
2021	3.91	5.53	-3.02	2.01	8.47
2022	-6.21	-13.16	-10.45	—	-27.06
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
	-25.59	-1.42	-0.83	—	2.55
Std 09-30-2022	-25.59	—	-0.83	—	2.55
Total Return	-25.59	-1.42	-0.83	—	2.55
+/- Std Index	-0.43	0.10	-0.01	—	—
+/- Cat Index	-0.43	0.10	-0.01	—	—
% Rank Cat	49	40	42	—	—
No. in Cat	750	701	610	—	—

7-day Yield — Subsidized
 30-day SEC Yield — Unsubsidized

Performance Disclosure
 The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-544-8544 or visit www.institutional.fidelity.com.

Fees and Expenses

Sales Charges
Front-End Load % NA
Deferred Load % NA

Fund Expenses

Management Fees % 0.06
 12bt Expense % NA
Net Expense Ratio % 0.06
Gross Expense Ratio % 0.06
Risk and Return Profile

	3 Yr	5 Yr	10 Yr
Morningstar Rating™	3★	3★	3★
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	Avg	Avg	Avg

Standard Deviation 18.86 16.64 10 Yr
 Mean -1.42 -0.83
 Sharpe Ratio -0.02 -0.04

MPI Statistics

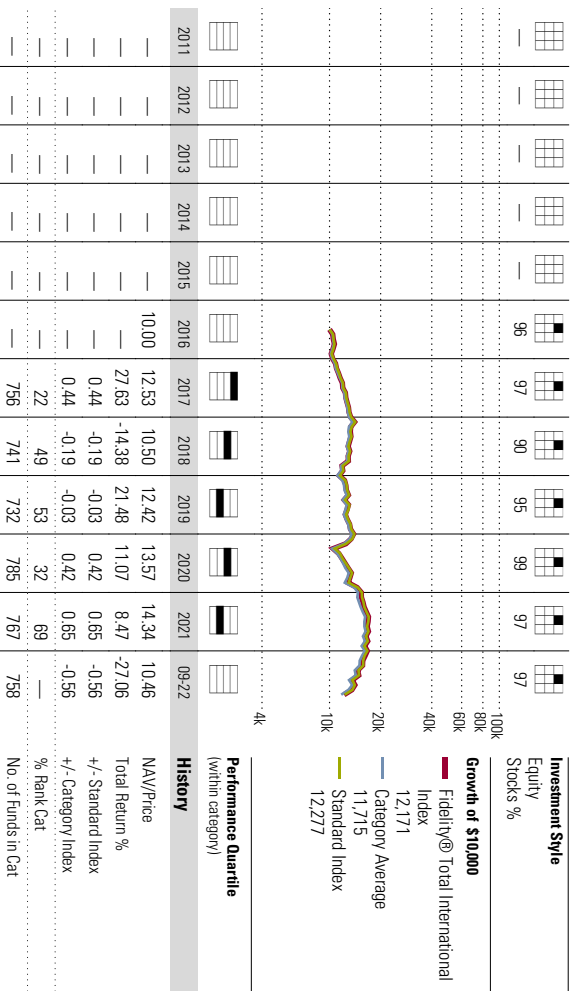
	Standard Index	Best Fit Index
Alpha	0.19	0.19
Beta	1.02	1.02
R-Squared	99.09	99.09
12-Month Yield	—	—
Potential Cap Gains Exp	14.31%	—

Operations

Family: Fidelity Investments
 Manager: Multiple
 Tenure: 6.3 Years
 Objective: Foreign Stock

Base Currency: USD
 Ticker: FTIH
 ISIN: US31635V6386
 Minimum Initial Purchase: \$0

Purchase Constraints: —
 Incept: 06-07-2016
 Type: MF
 Total Assets: \$7,726.57 mil



Portfolio Analysis 08-31-2022

Asset Allocation %	Net %	Long %	Short %	Share Cng since 07-2022	Share Holdings: Amount	Holdings: 5.094 Total Stocks, 2 Total Fixed-Income, 5% Turnover Ratio	Net Assets %
Cash	-0.13	2.51	2.64				
US Stocks	0.78	0.78	0.00				
Non-US Stocks	99.13	99.13	0.00		204 mil	Fidelity Reverse Str Tr	2.45
Bonds	0.13	0.13	0.00		1,667	MSCI EAFE Index Future Sept 22	1.83
Other/Not Cstfd	0.09	0.09	0.00		8 mil	Taiwan Semiconductor Manufacturing	1.54
Total	100.00	102.64	2.64		896,220	Nestle SA	1.26
					2 mil	Tencent Holdings Ltd	0.99

Equity Style	Value	Share	Gain/Loss	Portfolio Statistics
Value	117.7	1.06	1.04	P/E Ratio TTM
Share	86	1.07	1.05	P/C Ratio TTM
Gain/Loss	1.5	1.04	1.02	P/B Ratio TTM
	25303	0.72	0.61	Geo Avg Mkt Cap \$mil

Fixed-Income Style	Value	Share	Gain/Loss	Portfolio Statistics
Value	—	—	—	Avg Eff Maturity
Share	—	—	—	Avg Eff Duration
Gain/Loss	—	—	—	Avg Wtd Coupon
	—	—	—	Avg Wtd Price

Credit Quality Breakdown

Credit Quality	AAA	AA	A	BBB	BB	B	Below B	Bond %
AAA	—	—	—	—	—	—	—	—
AA	—	—	—	—	—	—	—	—
A	—	—	—	—	—	—	—	—
BBB	—	—	—	—	—	—	—	—
BB	—	—	—	—	—	—	—	—
B	—	—	—	—	—	—	—	—
Below B	—	—	—	—	—	—	—	—

Regional Exposure	Stocks %	Rel Std Index
Americas	11.3	0.97
Greater Europe	42.2	0.97
Greater Asia	46.5	1.04

Sector Weightings	Stocks %	Rel Std Index
Cyclical	42.2	1.00
Basic Materials	8.4	1.02
Consumer Cyclical	11.2	1.03
Financial Services	19.0	0.92
Real Estate	3.5	1.43
Sensitive	36.7	1.04
Communication Services	6.2	0.98
Energy	6.0	0.96
Industrials	13.1	1.10
Technology	11.4	1.05
Defensive	21.1	0.95
Consumer Defensive	8.5	0.92
Healthcare	9.4	0.94
Utilities	3.3	1.03

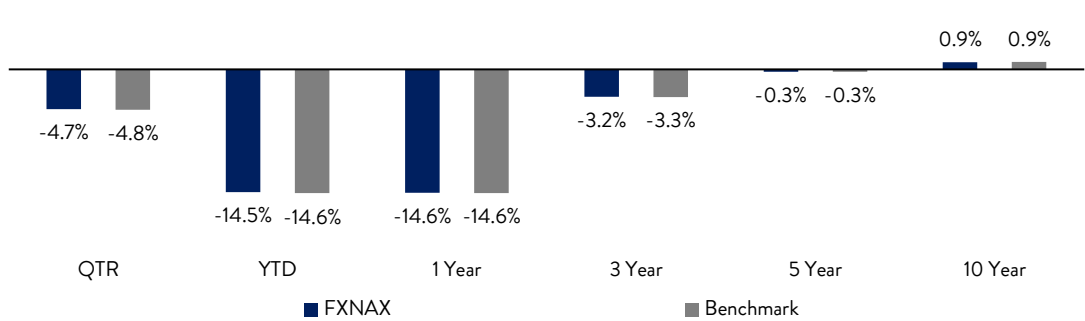
©2022 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted, in whole or in part, to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be predated or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.



Product Details

Name	Fidelity® US Bond Index
Ticker	FXNAX
Expense Ratio	0.025%
Morningstar Category	US Fund Intermediate Core Bond
Benchmark	Bloomberg US Agg Bond TR USD
Inception Date	5/4/2011
Longest Tenured Manager	Brandon C Bettencourt
Longest Manager Tenure	8.42 Years
Fund Size	\$53,033,947,340

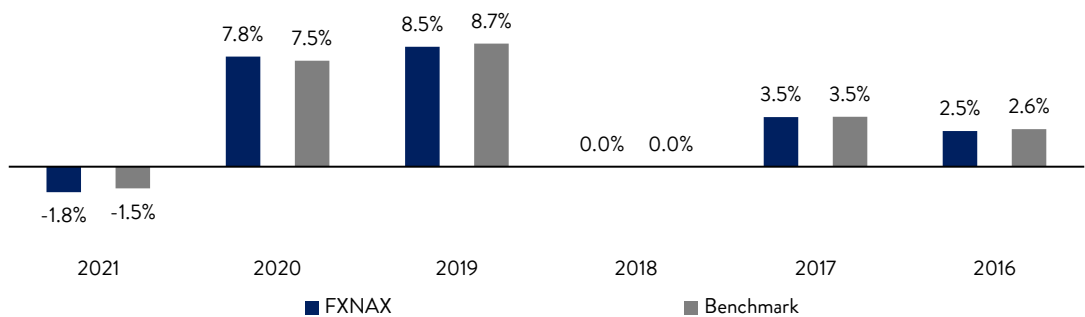
Trailing Performance



Fund Characteristics

	FXNAX	+/- Category
% Assets in Top 10 Holdings	9.09%	-35.49%
Average Eff Duration	6.29	0.34
Average Eff Maturity	-	-
Average Credit Quality	AA	A (Cat Avg.)
Average Coupon	2.53%	-0.51%

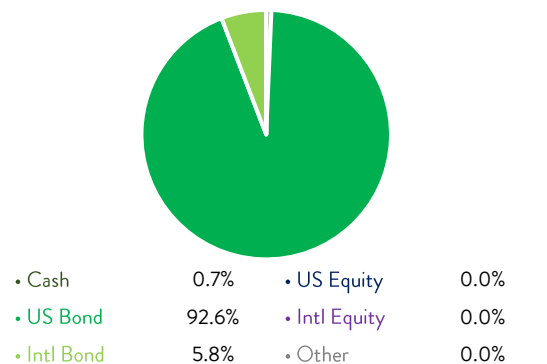
Annual Performance



Sector Allocations

	FXNAX	Category	+/- Category
Government	45.8%	30.9%	14.9%
Municipal	0.6%	0.7%	-0.1%
Bank Loan	0.0%	0.0%	0.0%
Convertible	1.0%	1.3%	-0.2%
Corporate Bond	23.2%	24.8%	-1.6%
Preferred Stock	0.0%	0.0%	0.0%
Agency MBS	27.4%	25.4%	2.0%
Non-Agency RMBS	0.0%	0.2%	-0.2%
Commercial MBS	0.9%	2.8%	-1.9%
Asset-Backed	0.4%	6.1%	-5.7%
Cash & Equivalents	0.7%	6.0%	-5.3%
Other	0.0%	1.7%	-1.7%

Asset Allocation



Morningstar Style Box

	Low IR Sens	Mod IR Sens	Ext IR Sens
High Qual			
Med Qual			
Low Qual			

Fidelity® US Bond Index
FXNAX

Fund Fact Sheet
Data as of 09/30/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• FXNAX	-4.69%	-14.47%	-14.57%	-3.24%	-0.28%	0.85%
• Benchmark	-4.75%	-14.61%	-14.60%	-3.26%	-0.27%	0.89%
+/- Benchmark	0.06%	0.14%	0.03%	0.02%	-0.01%	-0.04%
Peer Group Rank	46	30	28	47	41	46

5-Year Quarterly Performance	3Q22	2Q22	1Q22	4Q21
• FXNAX	-4.69%	-4.66%	-5.88%	-0.12%
• Benchmark	-4.75%	-4.69%	-5.93%	0.01%
+/- Benchmark	0.06%	0.04%	0.06%	-0.13%

Annual Performance	2021	2020	2019	2018	2017	2016
• FXNAX	-1.79%	7.80%	8.48%	0.01%	3.50%	2.52%
• Benchmark	-1.54%	7.51%	8.72%	0.01%	3.54%	2.65%
+/- Benchmark	-0.25%	0.29%	-0.23%	0.00%	-0.04%	-0.13%
Peer Group Rank	63	52	49	25	44	57

5-Year Quarterly Performance	3Q21	2Q21	1Q21	4Q20
• FXNAX	0.02%	1.85%	-3.48%	0.75%
• Benchmark	0.05%	1.83%	-3.37%	0.67%
+/- Benchmark	-0.03%	0.02%	-0.11%	0.08%

Rolling 5-Year Performance	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021	07/2016 - 06/2021
• FXNAX	-0.28%	0.86%	2.09%	3.52%	2.89%	2.97%
• Benchmark	-0.27%	0.88%	2.14%	3.57%	2.94%	3.03%
+/- Benchmark	-0.01%	-0.02%	-0.05%	-0.05%	-0.06%	-0.06%
Peer Group Rank	41	39	51	51	58	60

5-Year Quarterly Performance	3Q20	2Q20	1Q20	4Q19
• FXNAX	0.43%	2.77%	3.66%	0.06%
• Benchmark	0.62%	2.90%	3.15%	0.18%
+/- Benchmark	-0.19%	-0.13%	0.51%	-0.12%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	0.00	0.00	-0.02	0.00	-0.04	0.00
Beta	0.99	1.00	1.00	1.00	1.01	1.00
Standard Deviation	5.34	5.36	4.77	4.77	3.98	3.93
Sharpe Ratio	-0.70	-0.70	-0.29	-0.28	0.05	0.06
Information Ratio	0.06	-	-0.04	-	-0.15	-
Treynor Ratio	-3.89	-3.89	-1.48	-1.46	0.14	0.18
Upside Capture Ratio	99.74	100.00	99.73	100.00	101.07	100.00
Downside Capture Ratio	99.61	100.00	99.93	100.00	102.14	100.00

5-Year Quarterly Performance	3Q19	2Q19	1Q19	4Q18
• FXNAX	2.27%	2.97%	2.96%	1.70%
• Benchmark	2.27%	3.08%	2.94%	1.64%
+/- Benchmark	0.00%	-0.11%	0.01%	0.06%

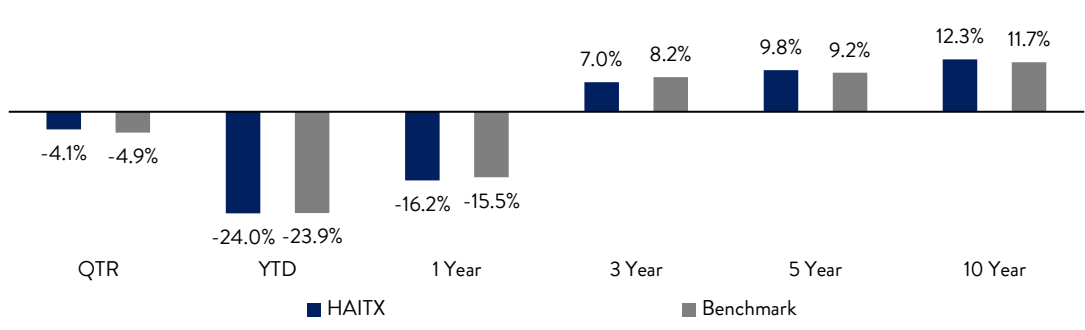
5-Year Quarterly Performance	3Q18	2Q18	1Q18	4Q17
• FXNAX	0.07%	-0.22%	-1.51%	0.37%
• Benchmark	0.02%	-0.16%	-1.46%	0.39%
+/- Benchmark	0.05%	-0.06%	-0.05%	-0.02%

All data and information on this fact sheet is taken from sources believed to be accurate but is not guaranteed to be accurate, complete, or correct.

Product Details

Name	Hartford Core Equity R6
Ticker	HAITX
Expense Ratio	0.360%
Morningstar Category	US Fund Large Blend
Benchmark	S&P 500 TR USD
Inception Date	3/31/2015
Longest Tenured Manager	Mammen Chally
Longest Manager Tenure	24.50 Years
Fund Size	\$9,495,823,873

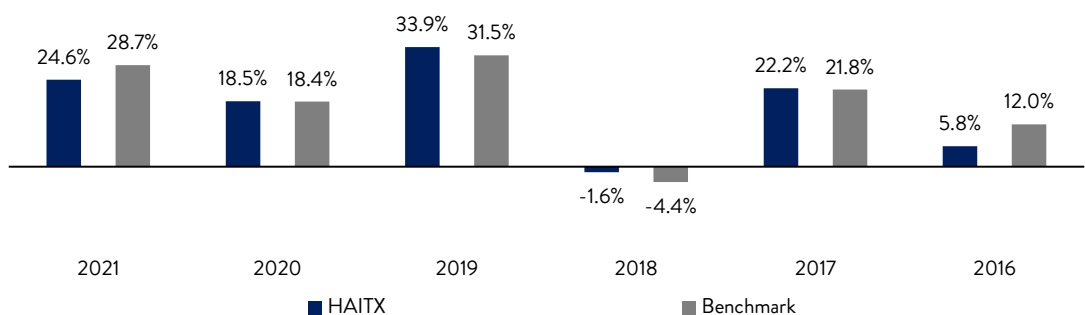
Trailing Performance



Fund Characteristics

	HAITX	+/- Category
% Assets in Top 10 Holdings	33.19%	-17.37%
Average Market Cap (mil)	\$148,964	-\$61,371
P/E Ratio (TTM)	18.92	0.68
P/B Ratio (TTM)	3.55	-0.06
Est. Dividend Yield	1.70%	-0.27%

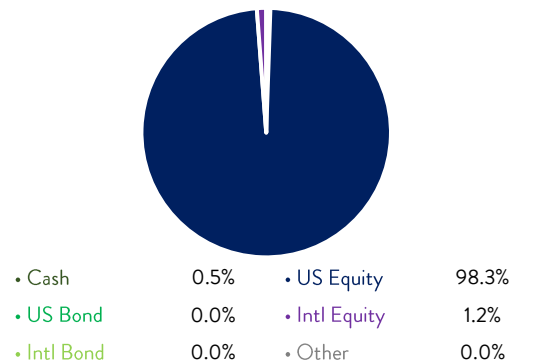
Annual Performance



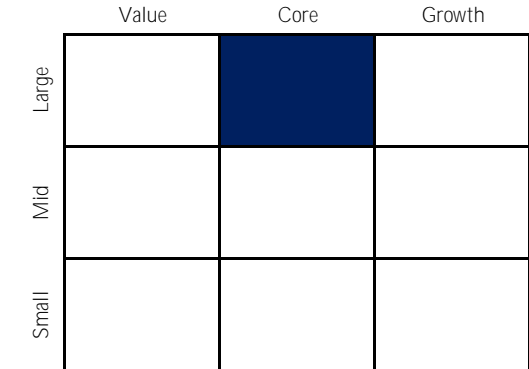
Sector Allocations

	HAITX	Category	+/- Category
Materials	1.0%	2.7%	-1.6%
Communication Services	7.1%	7.9%	-0.8%
Consumer Discretionary	10.5%	10.2%	0.2%
Consumer Staples	7.1%	7.3%	-0.3%
Healthcare	18.7%	15.6%	3.1%
Industrials	9.0%	10.1%	-1.1%
Real Estate	1.7%	2.5%	-0.8%
Technology	24.9%	23.1%	1.9%
Energy	3.5%	4.1%	-0.5%
Financial Services	12.9%	13.6%	-0.7%
Utilities	3.5%	2.8%	0.7%
Other	0.0%	0.0%	0.0%

Asset Allocation



Morningstar Style Box



Hartford Core Equity R6

HAITX

Fund Fact Sheet

Data as of 09/30/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• HAITX	-4.14%	-23.97%	-16.18%	6.98%	9.78%	12.34%
• Benchmark	-4.88%	-23.87%	-15.47%	8.16%	9.24%	11.70%
+/- Benchmark	0.74%	-0.10%	-0.71%	-1.18%	0.55%	0.63%
Peer Group Rank	18	49	50	54	8	3

5-Year Quarterly Performance	3Q22	2Q22	1Q22	4Q21
• HAITX	-4.14%	-15.16%	-6.51%	10.24%
• Benchmark	-4.88%	-16.10%	-4.60%	11.03%
+/- Benchmark	0.74%	0.94%	-1.91%	-0.78%

Annual Performance	2021	2020	2019	2018	2017	2016
• HAITX	24.62%	18.49%	33.89%	-1.55%	22.17%	5.75%
• Benchmark	28.71%	18.40%	31.49%	-4.38%	21.83%	11.96%
+/- Benchmark	-4.08%	0.09%	2.41%	2.83%	0.33%	-6.21%
Peer Group Rank	74	35	7	6	29	89

5-Year Quarterly Performance	3Q21	2Q21	1Q21	4Q20
• HAITX	0.26%	7.78%	4.61%	12.49%
• Benchmark	0.58%	8.55%	6.17%	12.15%
+/- Benchmark	-0.33%	-0.76%	-1.56%	0.34%

Rolling 5-Year Performance	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021	07/2016 - 06/2021
• HAITX	9.78%	11.35%	15.92%	18.92%	17.07%	17.35%
• Benchmark	9.24%	11.31%	15.99%	18.47%	16.90%	17.65%
+/- Benchmark	0.55%	0.04%	-0.07%	0.44%	0.17%	-0.29%
Peer Group Rank	8	13	15	11	15	31

5-Year Quarterly Performance	3Q20	2Q20	1Q20	4Q19
• HAITX	9.77%	19.10%	-19.42%	9.06%
• Benchmark	8.93%	20.54%	-19.60%	9.07%
+/- Benchmark	0.84%	-1.45%	0.17%	-0.01%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	-0.86	0.00	0.81	0.00	1.09	0.00
Beta	0.96	1.00	0.95	1.00	0.95	1.00
Standard Deviation	19.51	20.30	17.31	18.07	13.82	14.40
Sharpe Ratio	0.41	0.45	0.56	0.51	0.86	0.79
Information Ratio	-0.63	-	0.28	-	0.28	-
Treynor Ratio	6.63	7.53	9.02	8.04	12.26	10.99
Upside Capture Ratio	93.57	100.00	96.71	100.00	97.03	100.00
Downside Capture Ratio	96.22	100.00	93.23	100.00	90.98	100.00

5-Year Quarterly Performance	3Q19	2Q19	1Q19	4Q18
• HAITX	2.49%	5.44%	13.61%	-11.97%
• Benchmark	1.70%	4.30%	13.65%	-13.52%
+/- Benchmark	0.79%	1.14%	-0.04%	1.55%

5-Year Quarterly Performance	3Q18	2Q18	1Q18	4Q17
• HAITX	7.62%	2.78%	1.10%	7.77%
• Benchmark	7.71%	3.43%	-0.76%	6.64%
+/- Benchmark	-0.09%	-0.65%	1.86%	1.12%

All data and information on this fact sheet is taken from sources believed to be accurate but is not guaranteed to be accurate, complete, or correct.

Hartford Core Equity R6 (USD)

Morningstar Analyst Rating™ Overall Morningstar Rating™ Standard Index Category Index Morningstar Cat
Bronze **★★★★** **1,237 US Fund Large Blend** **SP500 TR USD** **Russell 1000 TR** **US Fund Large Blend**
 08-15-2022

Performance 09-30-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-19.42	19.10	9.77	12.49	18.49
2021	4.61	7.78	0.26	10.24	24.62
2022	-6.51	-15.16	-4.14	—	-23.97
Trailing Returns					
	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-16.18	6.98	9.78	—	9.50
Std 09-30-2022	-16.18	—	9.78	—	9.50
Total Return	-16.18	6.98	9.78	12.34	9.50
+/- Std Index	-0.71	-1.18	0.55	0.63	—
+/- Cat Index	1.03	-0.96	0.78	0.73	—
% Rank Cat	52	58	8	2	—
No. in Cat	1366	1237	1118	820	—

7-day Yield — Subsidized
 30-day SEC Yield — Unsubsidized

Performance Disclosure
 The overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 888-943-7824 or visit www.hartfordfunds.com.

Fees and Expenses	
Sales Charges	
Front-End Load %	NA
Deferred Load %	NA
Fund Expenses	0.33
Management Fees %	NA
12bt Expense %	NA
Net Expense Ratio %	0.36
Gross Expense Ratio %	0.36
Risk and Return Profile	

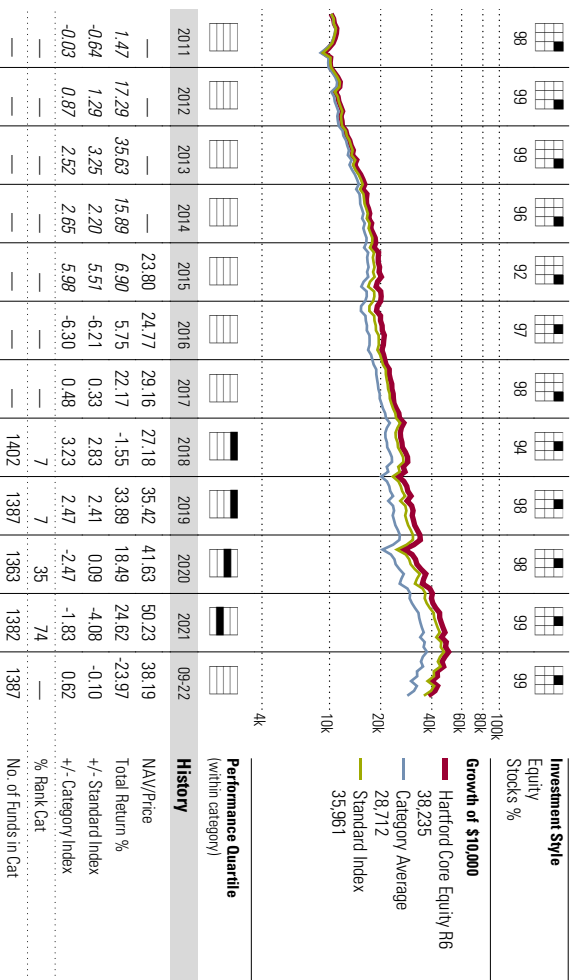
	3 Yr	5 Yr	10 Yr
Morningstar Rating™	3★	5★	5★
Morningstar Risk	Avg	Avg	High
Morningstar Return	Avg	High	Avg
Standard Deviation	19.51	17.31	13.82
Mean	6.98	9.78	12.34
Sharpe Ratio	0.41	0.56	0.86

MPI Statistics	Standard Index	Best Fit Index
Alpha	-0.86	-0.86
Beta	0.96	0.96
R-Squared	99.28	99.28
12-Month Yield	—	—
Potential Cap Gains Exp	—	40.89%

Operations
 Family: Hartford Mutual Funds
 Manager: Multiple
 Tenure: 24.5 Years
 Objective: Growth

Base Currency: USD
 Ticker: HAITX
 ISIN: US41664R1840
 Minimum Initial Purchase: \$0

Purchase Constraints: A
 Incept: 03-31-2015
 Type: MIF
 Total Assets: \$9,495.82 mil



Portfolio Analysis 09-30-2022					
Asset Allocation %	08-31-2022	Net %	Long %	Short %	
Cash	—	0.55	0.55	0.00	
US Stocks	1.47	35.63	15.89	6.90	5.75
Non-US Stocks	-0.64	1.29	3.25	2.20	5.51
Bonds	-0.03	0.87	2.52	2.65	5.98
Other/Not Cstfd	—	—	—	—	-6.30
Total	—	—	—	—	0.48

Top Holdings 08-31-2022					
Share Cng	Share	Holdings:	NAV/Price	Total Return %	+/- Standard Index
08-2022	71	Total Stocks: 0	50.23	38.19	-23.97
	13%	Turnover Ratio	24.62	-4.08	-0.10
	2 mil	Microsoft Corp	0.09	-1.83	0.62
	3 mil	Apple Inc	-2.47	-1.83	0.62
	5 mil	Alphabet Inc Class A	35	74	—
	3 mil	Amazon.com Inc	1387	1387	—
	639,013	Unitedhealth Group Inc	1382	1387	—
	2 mil	Procter & Gamble Co	—	—	—
	2 mil	EOG Resources Inc	—	—	—
	2 mil	JPMorgan Chase & Co	—	—	—
	4 mil	Pfizer Inc	—	—	—
	615,970	Eli Lilly and Co	—	—	—
	2 mil	Morgan Stanley	—	—	—
	316,736	Thermo Fisher Scientific Inc	—	—	—
	5 mil	Bank of America Corp	—	—	—
	509,449	Mastercard Inc Class A	—	—	—
	3 mil	TJX Companies Inc	—	—	—

Fixed-Income Style					
Value	Brand	Govt	Avg Eff Maturity	Avg P/C Ratio	Avg Yld Coupon
Large	Med	Small	1.15	1.15	1.05
High	Med	Low	1.12	0.98	0.91
High	Med	Low	1.12	0.98	0.71
High	Med	Low	1.12	0.98	0.71

Sector Weightings			
Weighting	Stocks %	Rel Std Index	
Cyclical	26.1	0.88	
Basic Materials	1.0	0.47	
Consumer Cyclical	10.5	0.91	
Financial Services	12.9	0.98	
Real Estate	1.7	0.60	
Sensitive	44.6	1.00	
Communication Services	7.1	0.88	
Energy	3.5	0.78	
Industrials	9.0	1.08	
Technology	24.9	1.05	
Defensive	29.3	1.14	
Consumer Defensive	7.1	0.97	
Healthcare	18.7	1.23	
Utilities	3.5	1.14	

Regional Exposure		
Region	Stocks %	Rel Std Index
Americas	98.8	1.00
Greater Europe	1.2	1.22
Greater Asia	0.0	0.00

Regional Exposure
 Stocks % Rel Std Index
 Americas 98.8 1.00
 Greater Europe 1.2 1.22
 Greater Asia 0.0 0.00

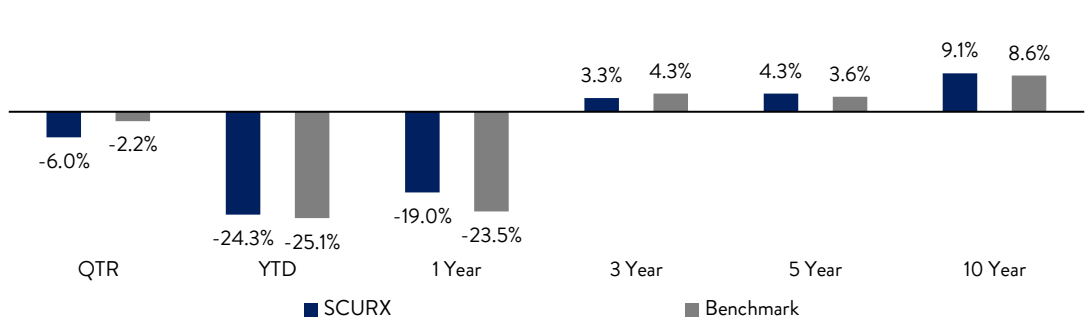
©2022 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted, in whole or in part, to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be predated or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.



Product Details

Name	Hartford Schroders US Small Cap Opps SDR
Ticker	SCURX
Expense Ratio	0.950%
Morningstar Category	US Fund Small Blend
Benchmark	Russell 2000 TR USD
Inception Date	9/28/2015
Longest Tenured Manager	Robert Kaynor
Longest Manager Tenure	4.75 Years
Fund Size	\$302,039,763

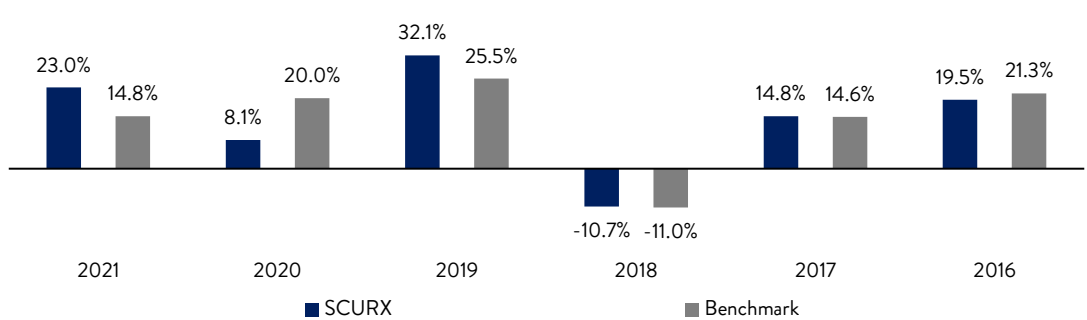
Trailing Performance



Fund Characteristics

	SCURX	+/- Category
% Assets in Top 10 Holdings	15.81%	-8.68%
Average Market Cap (mil)	\$2,538	-\$1,200
P/E Ratio (TTM)	16.09	4.10
P/B Ratio (TTM)	1.90	-0.04
Est. Dividend Yield	1.51%	-0.04%

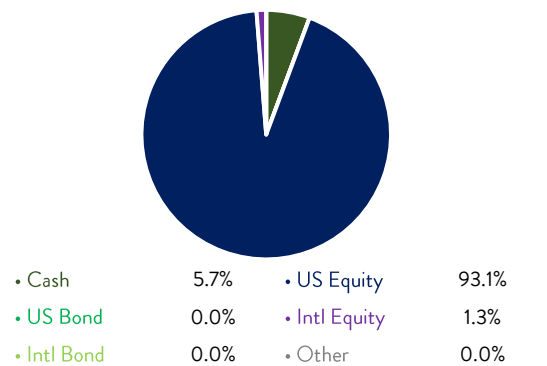
Annual Performance



Sector Allocations

	SCURX	Category	+/- Category
Materials	8.9%	4.6%	4.3%
Communication Services	2.5%	2.7%	-0.2%
Consumer Discretionary	10.0%	11.3%	-1.3%
Consumer Staples	5.2%	4.3%	0.9%
Healthcare	11.9%	14.4%	-2.4%
Industrials	10.9%	17.2%	-6.3%
Real Estate	3.0%	7.0%	-4.1%
Technology	20.3%	14.1%	6.3%
Energy	5.5%	5.0%	0.4%
Financial Services	18.0%	16.7%	1.4%
Utilities	3.8%	2.8%	1.0%
Other	0.0%	0.0%	0.0%

Asset Allocation



Morningstar Style Box

	Value	Core	Growth
Large			
Mid			
Small			

Hartford Schroders US Small Cap Opps SDR
SCURX

Fund Fact Sheet
Data as of 09/30/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• SCURX	-6.04%	-24.27%	-19.03%	3.26%	4.30%	9.10%
• Benchmark	-2.19%	-25.10%	-23.50%	4.29%	3.55%	8.55%
+/- Benchmark	-3.85%	0.83%	4.47%	-1.03%	0.74%	0.55%
Peer Group Rank	89	58	44	70	39	30

5-Year Quarterly Performance	3Q22	2Q22	1Q22	4Q21
• SCURX	-6.04%	-13.33%	-7.01%	6.92%
• Benchmark	-2.19%	-17.20%	-7.53%	2.14%
+/- Benchmark	-3.85%	3.86%	0.51%	4.78%

Annual Performance	2021	2020	2019	2018	2017	2016
• SCURX	22.98%	8.14%	32.06%	-10.72%	14.81%	19.49%
• Benchmark	14.82%	19.96%	25.52%	-11.01%	14.65%	21.31%
+/- Benchmark	8.16%	-11.82%	6.53%	0.29%	0.16%	-1.82%
Peer Group Rank	52	73	3	36	27	66

5-Year Quarterly Performance	3Q21	2Q21	1Q21	4Q20
• SCURX	-1.21%	2.84%	13.20%	26.06%
• Benchmark	-4.36%	4.29%	12.70%	31.37%
+/- Benchmark	3.15%	-1.45%	0.50%	-5.32%

Rolling 5-Year Performance	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021	07/2016 - 06/2021
• SCURX	4.30%	6.33%	10.01%	12.47%	12.62%	14.27%
• Benchmark	3.55%	5.17%	9.74%	12.02%	13.45%	16.47%
+/- Benchmark	0.74%	1.16%	0.26%	0.46%	-0.83%	-2.19%
Peer Group Rank	39	34	39	27	46	52

5-Year Quarterly Performance	3Q20	2Q20	1Q20	4Q19
• SCURX	4.86%	21.22%	-32.51%	9.33%
• Benchmark	4.93%	25.42%	-30.61%	9.94%
+/- Benchmark	-0.07%	-4.20%	-1.90%	-0.61%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	-0.68	0.00	0.88	0.00	1.41	0.00
Beta	0.90	1.00	0.90	1.00	0.87	1.00
Standard Deviation	23.74	25.47	21.08	22.81	16.84	18.88
Sharpe Ratio	0.23	0.27	0.25	0.22	0.56	0.49
Information Ratio	-0.15	-	0.13	-	0.11	-
Treynor Ratio	2.92	3.65	3.46	2.36	9.69	7.84
Upside Capture Ratio	91.96	100.00	93.76	100.00	89.82	100.00
Downside Capture Ratio	94.47	100.00	90.82	100.00	83.88	100.00

5-Year Quarterly Performance	3Q19	2Q19	1Q19	4Q18
• SCURX	0.72%	6.02%	13.12%	-16.99%
• Benchmark	-2.40%	2.10%	14.58%	-20.20%
+/- Benchmark	3.12%	3.92%	-1.47%	3.21%

5-Year Quarterly Performance	3Q18	2Q18	1Q18	4Q17
• SCURX	4.34%	4.69%	-1.54%	3.93%
• Benchmark	3.58%	7.75%	-0.08%	3.34%
+/- Benchmark	0.76%	-3.06%	-1.46%	0.59%

All data and information on this fact sheet is taken from sources believed to be accurate but is not guaranteed to be accurate, complete, or correct.

Hartford Schroders US Small Cap Opps SDR (USD)

Morningstar Analyst Rating™
Bronze
01-28-2022

Overall Morningstar Rating™
★★★★
5/8 US Fund Small Blend

Standard Index
S&P 500 TR USD

Category Index
Russell 2000 TR
USD

Morningstar Cat
US Fund Small Blend

Performance 09-30-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-32.51	21.22	4.86	26.06	8.14
2021	13.20	2.84	-1.21	6.92	22.98
2022	-7.01	-13.33	-6.04	—	-24.27
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-19.03	3.26	4.30	—	7.80
Std 09-30-2022	-19.03	—	4.30	—	7.80
Total Return	-19.03	3.26	4.30	9.10	7.80
+/- Std Index	-3.56	-4.90	-4.94	-2.60	—
+/- Cat Index	4.47	-1.03	0.74	0.55	—
% Rank Cat	50	77	44	30	—
No. in Cat	607	578	536	356	—

7-day Yield — Subsidized
30-day SEC Yield — Unsubsidized

Performance Disclosure
The overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate, thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 888-943-7824 or visit www.hartfordfunds.com.

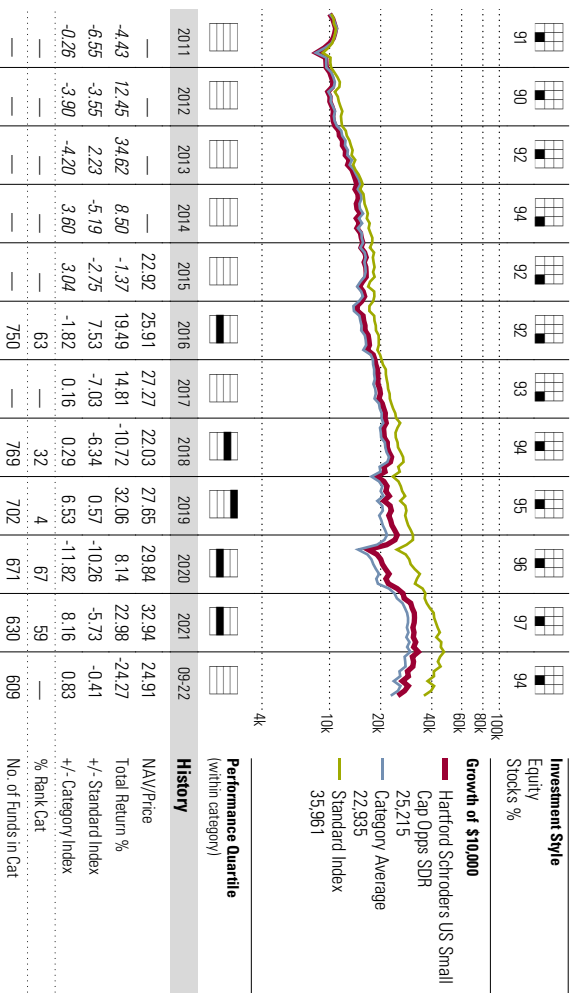
Fees and Expenses	
Sales Charges	NA
Front-End Load %	NA
Deferred Load %	NA
Fund Expenses	0.90
Management Fees %	NA
12b1 Expense %	NA
Net Expense Ratio %	0.95
Gross Expense Ratio %	0.99
Risk and Return Profile	

	3 Yr	5 Yr	10 Yr
Morningstar Rating™	2★	4★	4★
Morningstar Risk	-Avg	-Avg	Low
Morningstar Return	-Avg	-Avg	+Avg
Standard Deviation	23.74	21.08	16.84
Mean	3.26	4.30	9.10
Sharpe Ratio	0.23	0.25	0.56
MPI Statistics	Standard Index	Best Fit Index	Morningstar US Sml
Alpha	-4.16	-0.45	Ext TR USD
Beta	1.04	0.89	
R-Squared	78.87	95.44	
12-Month Yield	—	—	—
Potential Cap Gains Exp	—	35.02%	—

Operations
Family: Hartford Mutual Funds
Manager: Robert Kaynor
Tenure: 4.8 Years
Objective: Growth

Base Currency: USD
Ticker: SCLRX
ISIN: US41665H2682
Minimum Initial Purchase: \$5 mil

Purchase Constraints: A
Incept: 09-28-2015
Type: MF
Total Assets: \$302.04 mil



Portfolio Analysis 09-30-2022		
Asset Allocation %	08-31-2022	Net %
Cash	5.56	5.56
US Stocks	93.26	93.26
Non-US Stocks	1.18	1.18
Bonds	0.00	0.00
Other/Not Cstfd	0.00	0.00
Total	100.00	100.00

Equity Style		
Value	Brand	Growth
Large	Med	Small
High	Med	Low
High	Med	Low

Fixed-Income Style		
Ltd	Med	Ext
High <td>Med</td> <td>Low</td>	Med	Low
High <td>Med</td> <td>Low</td>	Med	Low

Credit Quality Breakdown		
	AAA	Bond %
AAA	—	—
AA	—	—
A	—	—
BBB	—	—
BB	—	—
B	—	—
Below B	—	—
NR	—	—

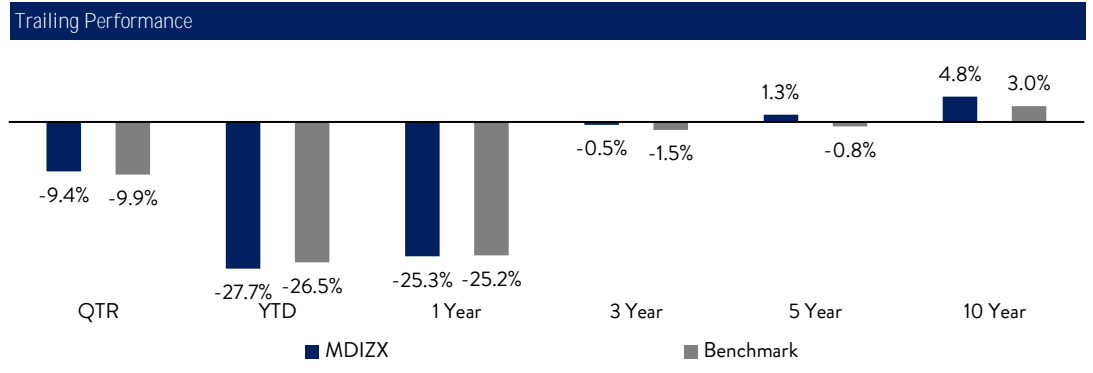
Regional Exposure		
Stocks %	Rel Std Index	
Americas	100.0	1.01
Greater Europe	0.0	0.00
Greater Asia	0.0	0.00

Top Holdings 08-31-2022			
Share Cng	Share	Holdings	
08-2022	98 Total Stocks - 11 Total Fixed-Income, 56% Turnover Ratio	Net Assets %	
⊕	17 mil	Morgan Stanley Instlltdly TrsSees	5.56
⊕	59,688	WMS (Holdings) Ltd ADR	1.67
⊕	31,261	ICU Medical Inc	1.65
⊕	37,480	Baldchem Corp	1.64
⊕	111,215	Terminix Global Holdings Inc	1.58
⊕	75,437	Hexcel Corp	1.47
⊕	108,499	First Merchants Corp	1.44
⊕	55,214	Perficient Inc	1.43
⊕	206,632	Compass Diversified Holdings	1.43
⊕	15,544	Valmont Industries Inc	1.43
⊕	43,694	ASSGN Inc	1.40
⊕	33,673	Reinsurance Group of America Inc	1.40
⊕	126,157	The Chert's Warehouse Inc	1.40
⊕	74,526	MACOM Technology Solutions Holding	1.37
⊕	110,714	Envista Holdings Corp Ordinary Sha	1.36

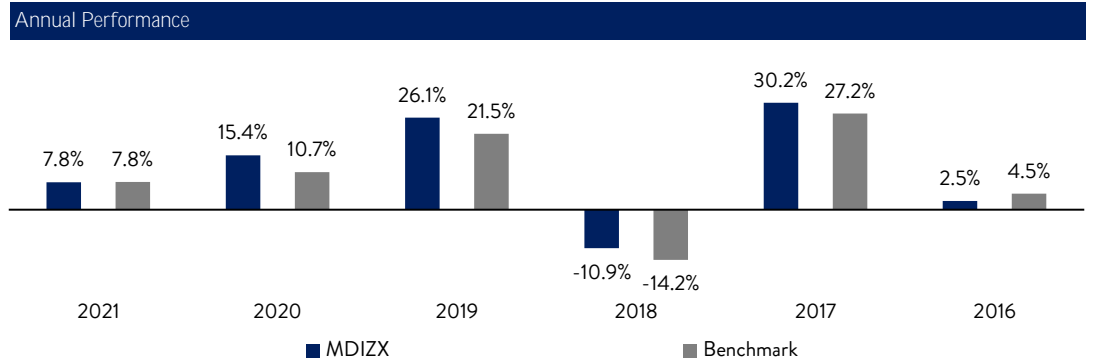
Sector Weightings		
Stocks %	Rel Std Index	
⊕ Cyclical	40.0	1.35
Basic Materials	8.9	3.98
Consumer Cyclical	10.0	0.87
Financial Services	18.0	1.38
Real Estate	3.0	1.03
⊖ Sensitive	39.1	0.87
Communication Services	2.5	0.30
Energy	5.5	1.20
Industrials	10.9	1.31
Technology	20.3	0.85
⊖ Defensive	20.9	0.82
Consumer Defensive	5.2	0.71
Healthcare	11.9	0.79
Utilities	3.8	1.23

©2022 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc., including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be predated or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.

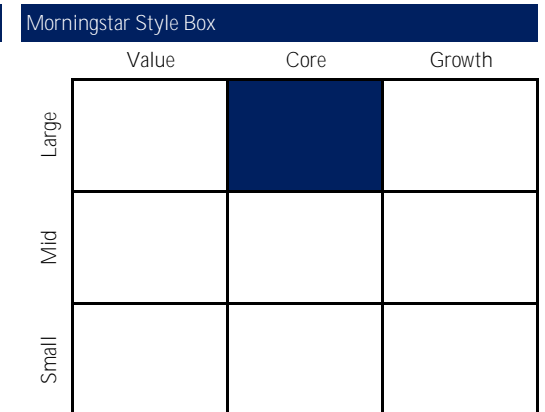
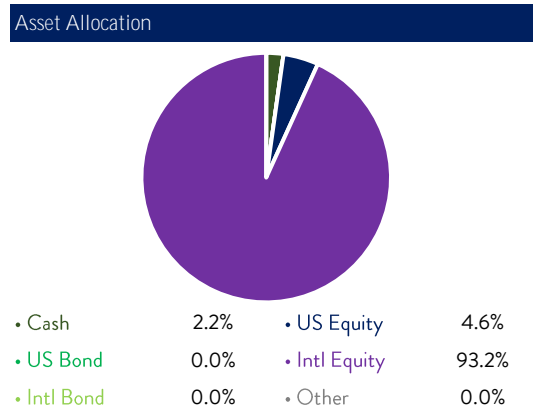
Product Details	
Name	MFS Intl Diversification R6
Ticker	MDIZX
Expense Ratio	0.720%
Morningstar Category	US Fund Foreign Large Blend
Benchmark	MSCI ACWI Ex USA NR USD
Inception Date	10/2/2017
Longest Tenured Manager	Camille Humphries Lee
Longest Manager Tenure	4.08 Years
Fund Size	\$29,467,542,980



Fund Characteristics	MDIZX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$28,478	-\$13,170
P/E Ratio (TTM)	14.21	2.94
P/B Ratio (TTM)	1.83	0.31
Est. Dividend Yield	3.48%	-1.09%



Sector Allocations	MDIZX	Category	+/- Category
Materials	9.3%	7.5%	1.8%
Communication Services	5.4%	5.5%	-0.1%
Consumer Discretionary	10.7%	10.7%	0.0%
Consumer Staples	14.1%	10.2%	3.9%
Healthcare	9.0%	12.4%	-3.5%
Industrials	15.1%	14.3%	0.8%
Real Estate	2.1%	2.3%	-0.2%
Technology	13.4%	10.0%	3.4%
Energy	3.2%	5.6%	-2.5%
Financial Services	15.6%	18.4%	-2.8%
Utilities	2.3%	3.0%	-0.7%
Other	0.0%	0.0%	0.0%



MFS Intl Diversification R6

MDIZX

Fund Fact Sheet

Data as of 09/30/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• MDIZX	-9.35%	-27.68%	-25.34%	-0.54%	1.35%	4.79%
• Benchmark	-9.91%	-26.50%	-25.17%	-1.52%	-0.81%	3.01%
+/- Benchmark	0.56%	-1.18%	-0.17%	0.98%	2.16%	1.78%
Peer Group Rank	20	45	35	25	8	7

5-Year Quarterly Performance	3Q22	2Q22	1Q22	4Q21
• MDIZX	-9.35%	-12.36%	-8.97%	3.24%
• Benchmark	-9.91%	-13.73%	-5.44%	1.82%
+/- Benchmark	0.56%	1.37%	-3.53%	1.43%

Annual Performance	2021	2020	2019	2018	2017	2016
• MDIZX	7.78%	15.43%	26.09%	-10.92%	30.25%	2.47%
• Benchmark	7.82%	10.65%	21.51%	-14.20%	27.19%	4.50%
+/- Benchmark	-0.05%	4.78%	4.58%	3.27%	3.05%	-2.03%
Peer Group Rank	70	21	20	10	11	29

5-Year Quarterly Performance	3Q21	2Q21	1Q21	4Q20
• MDIZX	-2.39%	5.01%	1.84%	13.65%
• Benchmark	-2.99%	5.48%	3.49%	17.01%
+/- Benchmark	0.60%	-0.47%	-1.65%	-3.37%

Rolling 5-Year Performance	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021	07/2016 - 06/2021
• MDIZX	1.35%	4.33%	8.93%	12.72%	10.94%	12.79%
• Benchmark	-0.81%	2.50%	6.76%	9.61%	8.94%	11.08%
+/- Benchmark	2.16%	1.83%	2.17%	3.11%	1.99%	1.71%
Peer Group Rank	8	8	7	7	11	10

5-Year Quarterly Performance	3Q20	2Q20	1Q20	4Q19
• MDIZX	7.97%	17.21%	-19.74%	9.37%
• Benchmark	6.25%	16.12%	-23.36%	8.92%
+/- Benchmark	1.72%	1.09%	3.61%	0.45%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	0.74	0.00	1.92	0.00	1.91	0.00
Beta	0.92	1.00	0.91	1.00	0.90	1.00
Standard Deviation	17.31	18.48	15.29	16.40	13.07	14.16
Sharpe Ratio	0.02	-0.03	0.09	-0.04	0.37	0.23
Information Ratio	0.27	-	0.61	-	0.51	-
Treynor Ratio	-1.27	-2.15	0.17	-2.01	4.55	2.29
Upside Capture Ratio	98.90	100.00	98.50	100.00	95.54	100.00
Downside Capture Ratio	95.22	100.00	89.20	100.00	85.29	100.00

5-Year Quarterly Performance	3Q19	2Q19	1Q19	4Q18
• MDIZX	-1.15%	4.11%	12.02%	-11.72%
• Benchmark	-1.80%	2.98%	10.31%	-11.46%
+/- Benchmark	0.65%	1.13%	1.71%	-0.26%

5-Year Quarterly Performance	3Q18	2Q18	1Q18	4Q17
• MDIZX	1.31%	-0.25%	-0.15%	5.82%
• Benchmark	0.71%	-2.61%	-1.18%	5.00%
+/- Benchmark	0.61%	2.36%	1.03%	0.82%

All data and information on this fact sheet is taken from sources believed to be accurate but is not guaranteed to be accurate, complete, or correct.

Moderate Allocation Portfolio

Lifestyle Portfolios are multi-asset type investment options that are intended to be managed in accordance with a plan participant's retirement time horizon, long-term return expectations and overall tolerance for risk of principal loss. Since the asset allocation decision is the most important factor in determining investment returns over time, these types of funds provide three "packaged," diversified investment choices for those seeking assistance in making the asset allocation decision. Lifestyle Portfolios are constructed to provide different long-term investment return and risk characteristics that are determined by their underlying sub-funds. The sub-funds are actively managed U.S. Stock, International Stock and U.S. Bond Funds that are also available as "stand-alone" investment funds.

Asset Class: **Asset Allocation**
Category: **Lifestyle**

information is included in the enrollment material.

FUND FACTS

Investment Objective

Inception Date: **October 1, 2004**

The investment objective of the Moderate Allocation Portfolio is to provide long-term total return through a combination of capital growth and income. Sixty percent (60%) of the total fund assets are allocated to equities and forty percent (40%) are allocated to fixed income securities. It falls in the middle of the three Lifestyle Funds in terms of its potential for investment return as well as the potential risk it assumes. It is most suitable for participants who are able to remain invested for more than five, but less than ten years, or who are comfortable with the higher short-term fluctuations that are characteristic of investing at least half of their portfolio in equity markets.

Investment advisory fee for period ended June 30, 2022: **0.07%**

Moderate Allocation Portfolio is to provide long-term total return through a combination of capital growth and income. Sixty percent (60%) of the total fund assets are allocated to equities and forty percent (40%) are allocated to fixed income securities. It falls in the middle of the three Lifestyle Funds in terms of its potential for investment return as well as the potential risk it assumes. It is most suitable for participants who are able to remain invested for more than five, but less than ten years, or who are comfortable with the higher short-term fluctuations that are characteristic of investing at least half of their portfolio in equity markets.

12b-1 fee: **0.000%**

Each sub-fund description contains more detailed information regarding the sub-funds' Investment Advisers, Portfolio Managers, Investment Objectives, Strategies and Principal Risks, and must accompany this Lifestyle Portfolio description.

Other expenses: **0.11%**

Principal Risks
All equity (both U.S. and International) and fixed income investments exhibit certain risk characteristics that include the potential for loss of principal value. Generally, the probability of loss of principal is greater with investment funds that also provide the greatest potential for investment return. International stocks do carry additional risks that relate to currency and political uncertainty. The risks of Lifestyle Portfolios are based on the proportionate risk characteristics of the underlying sub-funds described above.

Total fund annual expenses without waivers or reductions for period ended June 30, 2022: **0.18%**

Total fund annual expenses without waivers or reductions for period ended June 30, 2022: **0.18%**

Total waivers, recoupments, and reductions: **-0.02%**

Net fund annual expenses after waivers or reductions for period ended June 30, 2022: **0.16%**

Turnover rate: **13%**

If offered through a retirement program, additional fees and expenses may be charged under that program.

Important Information

Category is interpreted by **Voya®** using Fund Company and/or Morningstar category information.

Investment advisory fee reflects a weighted blend of fees charged by the underlying investment options within the Lifestyle Portfolio, based upon the percentage allocations designated by San Bernardino and detailed within the Strategy section.

This Portfolio is not a registered investment company, and interests in the Portfolio have not been registered with the Securities and Exchange Commission. It is only available to participants in the San Bernardino qualified retirement program. Only eligible participants in the plan may invest in the Portfolio.

You can obtain copies of free prospectuses for the underlying funds which contain additional information on the charges and expenses for the funds at any time by calling Your Local Voya representative. Other fees and expenses may be charged under your retirement program. [More](#)

Strategy

The strategy for the Moderate Allocation Portfolio is to invest in a combination of active and passive investments in the following proportions:

---20% in the San Bernardino Stable Value Option where stability of principal is the primary objective. StabilizerSM guarantees a minimum rate of interest for the life of the contract, and may credit a higher interest rate from time to time. The current rate is subject to change, but will never fall below the guaranteed minimum.

---20% in the Sterling Capital Total Return Bond Fund - Class R6 Shares which seeks a high level of current income and a competitive total return.

---26% in the Fidelity® 500 Index Fund which seeks to provide investment results that correspond to the total return performance of common stocks publicly traded in the United States.

---6% in the Fidelity® Mid Cap Index Fund which seeks to provide investment results that correspond to the total return of stocks of mid-capitalization United States companies.

---4% in the Fidelity® Small Cap Index Fund which seeks to provide investment results that correspond to the total return of stocks of small-capitalization United States companies.

---24% in the Fidelity® Total International Index Fund which seeks to provide investment results that correspond to the total return of foreign developed and emerging stock markets.

San Bernardino Stable Value Option

StabilizerSM is the name for a series of stable value separate accounts marketed to 401, 457 and 403(b) Plans. Stabilizer is available through a group annuity contract issued by Voya Retirement Insurance and Annuity Company ("VRIAC"), a member of the Voya[®] family of companies.

Asset Class: **Stability of Principal**

Important Information

Voya Retirement Insurance and Annuity Company
One Orange Way
Windsor, CT 06095-4774
www.voyaretirementplans.com

What is the stable value option?

The stable value investment option of your defined contribution plan seeks to preserve participant account balances and to return steady growth over time without daily fluctuations.

What is Stabilizer?

It is an insurance company participating separate account group annuity contract provided by VRIAC. Subject to certain conditions, the contract generally guarantees the availability of participant account balances in the ordinary course of the plan's operation. The guarantees provided by the contract are based on the claims-paying ability of VRIAC and are supported by its full faith and credit. VRIAC is a leading provider of stable value products and services and a member of the Voya[®] family of companies. The separate account assets are managed by Voya Investment Management Co. LLC. The assets held in the separate account are "insulated" from claims arising out of any other business conducted by VRIAC and can be used only for the benefit of plan participants.

What does it invest in?

The separate account invests in a diversified portfolio of fixed income assets. This diversified separate account portfolio seeks to maintain a high overall credit quality and consists of various publicly traded fixed-income instruments.

Potential Risks

Under some scenarios it is possible for participants to lose money even in a stable value option. Those situations are unlikely and rarely occur, but they can happen. It's important for investors to be aware of these potential risks. Withdrawals resulting from employer-initiated events, such as withdrawals following mass layoffs, employer bankruptcy or full or partial plan termination are not always covered by Stabilizer's guarantees and may be restricted or subject to market value adjustment. Your stable value account balance is not guaranteed by the Federal Deposit Insurance Corporation (FDIC), by any other government agency or by your plan.

What is the objective?

Stability of principal is the primary objective of this investment option. While the contract is active, StabilizerSM guarantees a minimum rate of interest and may credit a higher interest rate from period to period. The credited interest rate is subject to change, up or down but will never fall below the guaranteed minimum. Once the rate is credited, the interest becomes part of the principal and may increase through compound interest.

How is the rate of interest stated?

Participant balances are credited interest daily. This rate is net of all expenses and will apply to all new contributions and existing account balances for the specified period.

The crediting rate is announced in advance of the upcoming crediting rate period. The crediting rate periods are quarterly, semi-annually or annually.

For information on your current rate, please check your Voya quarterly participant statement.

How does it benefit me?

The stable value investment option is intended to help insulate against the daily fluctuations in market value. Many participants find this stability an attractive feature. An announced rate of interest is another feature of stable value investment options that many participants like.

Are there any limitations on contributions, withdrawals, or transfers from my plan's stable value option?

Voya generally does not limit contributions or withdrawals as a result of retirement, death, disability, unforeseen hardship, separation from service, or attainment of age 65 (consult your own plan for limitations), however sometimes there are restrictions on participant transfers. Participant transfers between the stable value option and funds with similar investment objectives (referred to as competing funds) may be subject to an industry standard 90 day "equity wash" provision.

What are the fees?

Total Annual fees are 0.34%.

This portfolio is not a registered investment under the 1940 Act and has not been registered with the Securities and Exchange Commission.

Top Ten Credit Exposures (as of

06/30/2022)

Bank of America Corp	1.34
JPMorgan Chase & Co	1.04
Morgan Stanley	0.90
Goldman Sachs Group Inc/The Citigroup Inc	0.49
Wells Fargo & Company	0.40
Mitsubishi UFJ Financial Group Inc	0.37
Verizon Communications Inc	0.36
Royal Bank of Canada	0.32
American Honda Motor Company Inc	0.32

Sector Holdings (as of 06/30/2022)

Agency Mortgages	35.1
Asset Backed Securities	2.5
Commercial Mortgage Backed Securities	6.0
Emerging Markets	0.1
Government Related	0.1
HY Corporates	0.0
IG Corporates	26.5
Non-Agency RMBS and SF CRT	0.1
Other	0.0
US Treasury & Cash	29.7

Statistical Data (as of 06/30/2022)

Portfolio Duration (Years)	4.35
Yield to Maturity	3.64%
Average Life (Years)	5.983

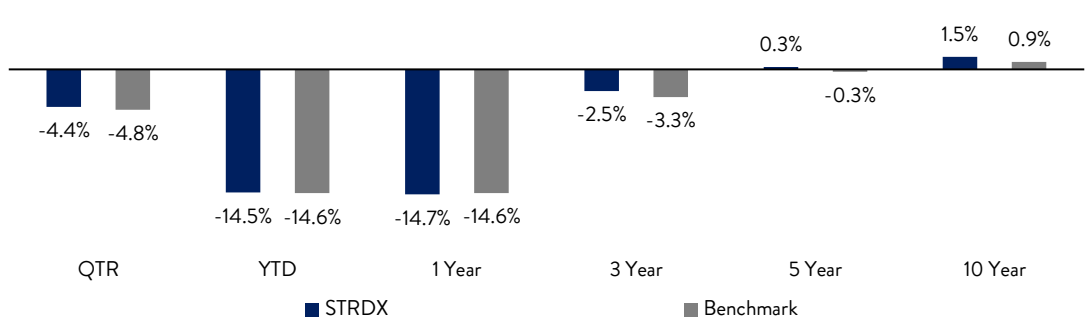
Sterling Capital Total Return Bond R6
STRDX

Fund Fact Sheet
Data as of 09/30/2022

Product Details

Name	Sterling Capital Total Return Bond R6
Ticker	STRDX
Expense Ratio	0.350%
Morningstar Category	US Fund Intermediate Core Bond
Benchmark	Bloomberg US Agg Bond TR USD
Inception Date	2/1/2018
Longest Tenured Manager	Mark M. Montgomery
Longest Manager Tenure	14.75 Years
Fund Size	\$994,402,431

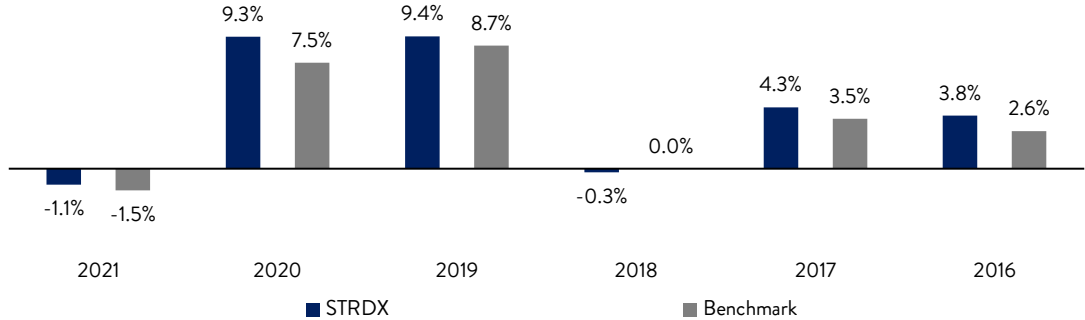
Trailing Performance



Fund Characteristics

	STRDX	+/- Category
% Assets in Top 10 Holdings	21.35%	-23.23%
Average Eff Duration	5.88	-0.07
Average Eff Maturity	8.55	0.47
Average Credit Quality	AA	A (Cat Avg.)
Average Coupon	3.00%	-0.03%

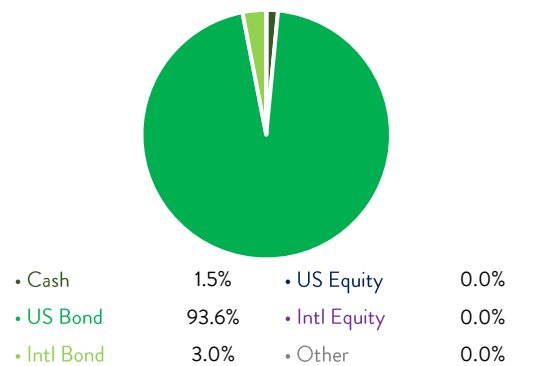
Annual Performance



Sector Allocations

	STRDX	Category	+/- Category
Government	14.8%	30.9%	-16.1%
Municipal	3.9%	0.7%	3.2%
Bank Loan	0.0%	0.0%	0.0%
Convertible	1.6%	1.3%	0.4%
Corporate Bond	23.5%	24.8%	-1.3%
Preferred Stock	0.0%	0.0%	0.0%
Agency MBS	24.3%	25.4%	-1.1%
Non-Agency RMBS	0.1%	0.2%	-0.1%
Commercial MBS	14.0%	2.8%	11.1%
Asset-Backed	16.4%	6.1%	10.3%
Cash & Equivalents	1.5%	6.0%	-4.5%
Other	0.0%	1.7%	-1.7%

Asset Allocation



Morningstar Style Box

	Low IR Sens	Mod IR Sens	Ext IR Sens
High Qual			
Med Qual			
Low Qual			

Sterling Capital Total Return Bond R6
STRDX

Fund Fact Sheet
Data as of 09/30/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• STRDX	-4.42%	-14.50%	-14.72%	-2.54%	0.29%	1.46%
• Benchmark	-4.75%	-14.61%	-14.60%	-3.26%	-0.27%	0.89%
+/- Benchmark	0.33%	0.11%	-0.12%	0.71%	0.56%	0.57%
Peer Group Rank	20	32	36	16	8	6

5-Year Quarterly Performance	3Q22	2Q22	1Q22	4Q21
• STRDX	-4.42%	-4.69%	-6.15%	-0.26%
• Benchmark	-4.75%	-4.69%	-5.93%	0.01%
+/- Benchmark	0.33%	0.01%	-0.21%	-0.27%

Annual Performance	2021	2020	2019	2018	2017	2016
• STRDX	-1.12%	9.35%	9.37%	-0.27%	4.33%	3.75%
• Benchmark	-1.54%	7.51%	8.72%	0.01%	3.54%	2.65%
+/- Benchmark	0.42%	1.84%	0.65%	-0.28%	0.79%	1.10%
Peer Group Rank	26	17	18	42	11	13

5-Year Quarterly Performance	3Q21	2Q21	1Q21	4Q20
• STRDX	0.04%	2.16%	-3.00%	1.67%
• Benchmark	0.05%	1.83%	-3.37%	0.67%
+/- Benchmark	-0.02%	0.33%	0.37%	1.00%

Rolling 5-Year Performance	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021	07/2016 - 06/2021
• STRDX	0.29%	1.41%	2.72%	4.23%	3.75%	3.95%
• Benchmark	-0.27%	0.88%	2.14%	3.57%	2.94%	3.03%
+/- Benchmark	0.56%	0.53%	0.57%	0.66%	0.80%	0.93%
Peer Group Rank	8	7	9	9	7	7

5-Year Quarterly Performance	3Q20	2Q20	1Q20	4Q19
• STRDX	1.59%	5.10%	0.73%	0.14%
• Benchmark	0.62%	2.90%	3.15%	0.18%
+/- Benchmark	0.97%	2.21%	-2.42%	-0.04%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	0.68	0.00	0.53	0.00	0.58	0.00
Beta	0.98	1.00	0.97	1.00	0.96	1.00
Standard Deviation	5.57	5.36	4.85	4.77	3.94	3.93
Sharpe Ratio	-0.54	-0.70	-0.16	-0.28	0.21	0.06
Information Ratio	0.39	-	0.38	-	0.50	-
Treynor Ratio	-3.23	-3.89	-0.93	-1.46	0.78	0.18
Upside Capture Ratio	115.73	100.00	108.39	100.00	106.30	100.00
Downside Capture Ratio	100.98	100.00	98.84	100.00	94.91	100.00

5-Year Quarterly Performance	3Q19	2Q19	1Q19	4Q18
• STRDX	2.19%	3.53%	3.23%	1.06%
• Benchmark	2.27%	3.08%	2.94%	1.64%
+/- Benchmark	-0.08%	0.45%	0.29%	-0.57%

5-Year Quarterly Performance	3Q18	2Q18	1Q18	4Q17
• STRDX	0.24%	-0.15%	-1.40%	0.64%
• Benchmark	0.02%	-0.16%	-1.46%	0.39%
+/- Benchmark	0.22%	0.00%	0.06%	0.25%

All data and information on this fact sheet is taken from sources believed to be accurate but is not guaranteed to be accurate, complete, or correct.

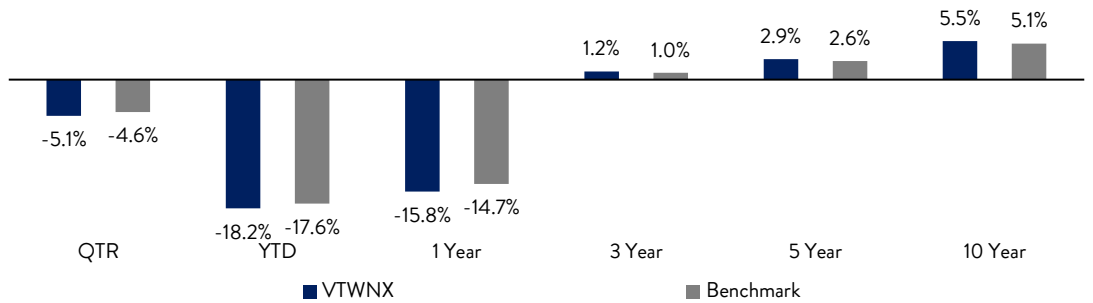
Vanguard Target Retirement 2020 Fund
VTWNX

Fund Fact Sheet
Data as of 09/30/2022

Product Details

Name	Vanguard Target Retirement 2020 Fund
Ticker	VTWNX
Expense Ratio	0.080%
Morningstar Category	US Fund Target-Date 2020
Benchmark	S&P Target Date 2020 TR USD
Inception Date	6/7/2006
Longest Tenured Manager	William A. Coleman; Walter Nejman;
Longest Manager Tenure	9.67 Years
Fund Size	\$39,834,773,754

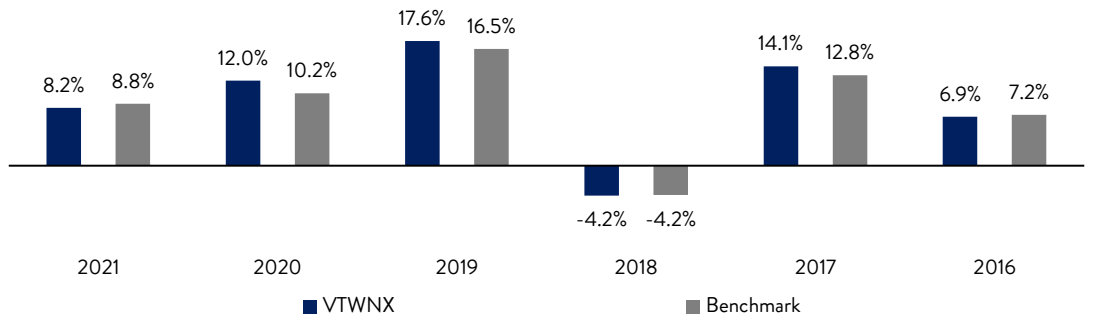
Trailing Performance



Fund Characteristics

	VTWNX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$53,592	-\$4,596
P/E Ratio (TTM)	13.88	-0.52
P/B Ratio (TTM)	2.09	-0.11
Est. Dividend Yield	2.86%	0.08%

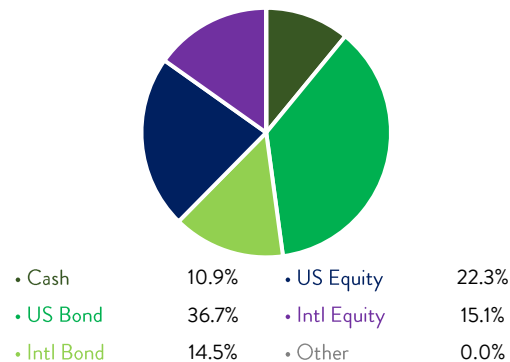
Annual Performance



Sector Allocations

	VTWNX	Category	+/- Category
Materials	4.9%	4.5%	0.3%
Communication Services	6.8%	6.7%	0.1%
Consumer Discretionary	11.3%	10.8%	0.4%
Consumer Staples	7.4%	6.9%	0.5%
Healthcare	12.9%	13.0%	-0.1%
Industrials	10.8%	10.4%	0.4%
Real Estate	3.6%	5.7%	-2.0%
Technology	18.4%	18.2%	0.2%
Energy	5.1%	5.2%	0.0%
Financial Services	15.7%	15.3%	0.4%
Utilities	3.1%	3.3%	-0.1%
Other	0.0%	0.0%	0.0%

Asset Allocation



Morningstar Style Box

	Value	Core	Growth
Large			
Mid			
Small			

Vanguard Target Retirement 2020 Fund
VTWNX

Fund Fact Sheet
Data as of 09/30/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VTWNX	-5.12%	-18.21%	-15.83%	1.17%	2.91%	5.46%
• Benchmark	-4.59%	-17.57%	-14.75%	0.98%	2.64%	5.11%
+/- Benchmark	-0.54%	-0.65%	-1.08%	0.18%	0.27%	0.35%
Peer Group Rank	48	41	36	39	26	19

5-Year Quarterly Performance	3Q22	2Q22	1Q22	4Q21
• VTWNX	-5.12%	-9.20%	-5.06%	2.91%
• Benchmark	-4.59%	-9.33%	-4.72%	3.42%
+/- Benchmark	-0.54%	0.13%	-0.35%	-0.51%

Annual Performance	2021	2020	2019	2018	2017	2016
• VTWNX	8.17%	12.04%	17.63%	-4.24%	14.08%	6.95%
• Benchmark	8.76%	10.24%	16.52%	-4.16%	12.80%	7.22%
+/- Benchmark	-0.60%	1.80%	1.11%	-0.08%	1.28%	-0.27%
Peer Group Rank	70	43	35	43	24	33

5-Year Quarterly Performance	3Q21	2Q21	1Q21	4Q20
• VTWNX	-0.41%	4.20%	1.28%	7.86%
• Benchmark	-0.24%	3.90%	1.46%	7.37%
+/- Benchmark	-0.18%	0.30%	-0.18%	0.49%

Rolling 5-Year Performance	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021	07/2016 - 06/2021
• VTWNX	2.91%	4.64%	7.27%	9.26%	8.60%	9.39%
• Benchmark	2.64%	4.18%	6.78%	8.60%	7.98%	8.63%
+/- Benchmark	0.27%	0.46%	0.49%	0.67%	0.62%	0.76%
Peer Group Rank	26	26	33	32	32	32

5-Year Quarterly Performance	3Q20	2Q20	1Q20	4Q19
• VTWNX	4.48%	11.40%	-10.76%	4.46%
• Benchmark	3.74%	10.65%	-10.55%	4.19%
+/- Benchmark	0.74%	0.76%	-0.21%	0.27%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	0.19	0.00	0.24	0.00	0.25	0.00
Beta	1.02	1.00	1.02	1.00	1.02	1.00
Standard Deviation	10.98	10.71	9.59	9.34	7.96	7.76
Sharpe Ratio	0.10	0.08	0.22	0.20	0.62	0.59
Information Ratio	0.21	-	0.35	-	0.53	-
Treynor Ratio	0.52	0.35	1.67	1.44	4.65	4.40
Upside Capture Ratio	103.74	100.00	103.38	100.00	103.33	100.00
Downside Capture Ratio	102.63	100.00	101.75	100.00	101.17	100.00

5-Year Quarterly Performance	3Q19	2Q19	1Q19	4Q18
• VTWNX	1.19%	3.21%	7.82%	-6.50%
• Benchmark	1.17%	2.88%	7.45%	-6.49%
+/- Benchmark	0.02%	0.33%	0.38%	-0.01%

5-Year Quarterly Performance	3Q18	2Q18	1Q18	4Q17
• VTWNX	2.36%	0.61%	-0.54%	3.36%
• Benchmark	2.33%	1.09%	-0.92%	3.20%
+/- Benchmark	0.02%	-0.48%	0.38%	0.16%

All data and information on this fact sheet is taken from sources believed to be accurate but is not guaranteed to be accurate, complete, or correct.

Vanguard Target Retirement 2020 Fund (USD)

Morningstar Analyst Rating™ Overall Morningstar Rating™ Standard Index Category Index Morningstar Cat
Silver **★★★★** **US Fund Target-Date 2020**
 02-24-2022 146 US Fund Target-Date Tgt Risk TR USD Lifetime Mod 2020 TR USD

Performance 09-30-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-10.76	11.40	4.48	7.86	12.04
2021	1.28	4.20	-0.41	2.91	8.17
2022	-5.06	-9.20	-5.12	—	-18.21
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-15.83	1.17	2.91	5.46	5.30
Std 09-30-2022	-15.83	—	2.91	5.46	5.30
Total Return	-15.83	1.17	2.91	5.46	5.30
+/- Std Index	2.37	0.02	-0.04	0.29	—
+/- Cat Index	3.05	0.99	0.43	0.84	—
% Rank Cat	36	48	35	24	—
No. in Cat	156	146	119	56	—

7-day Yield — Subsidized Unsubsidized
 30-day SEC Yield 10-26-22 2.49 2.57

Performance Disclosure
 The overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-662-7447 or visit www.vanguard.com.

Fees and Expenses

Sales Charges
Front-End Load % NA
Deferred Load % NA

Fund Expenses
 Management Fees % 0.00
 12b1 Expense % NA

Net Expense Ratio % 0.08
Gross Expense Ratio % 0.08

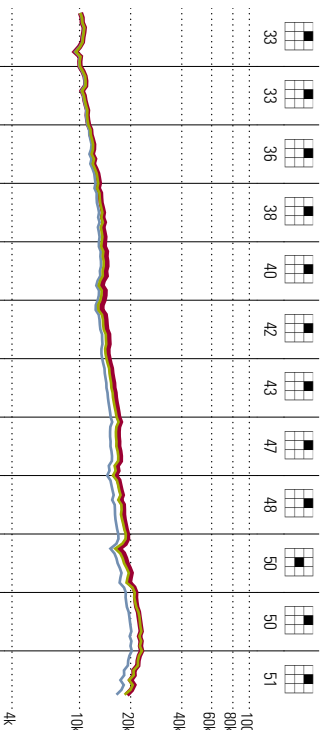
Risk and Return Profile					
Morningstar Rating™	3★	4★	4★	4★	4★
Morningstar Risk	Avg	Avg	Avg	Avg	Avg
Morningstar Return	Avg	Avg	+Avg		

	3 Yr	5 Yr	10 Yr
Standard Deviation	10.98	9.59	7.96
Mean	1.17	2.91	5.46
Sharpe Ratio	0.10	0.22	0.62

MPT Statistics	Standard Index	Best Fit Index Morningstar Intl USD
Alpha	-0.01	0.69
Beta	0.83	0.80
R-Squared	98.87	99.05

12-Month Yield 2.57%
 Potential Cap Gains Exp 43.35%

Operations
 Family: Vanguard
 Manager: Multiple
 Tenure: 9.7 Years
 Objective: Asset Allocation



Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	09-22
NAV/Price	21.69	23.83	27.11	28.46	27.15	28.26	31.38	28.63	32.53	34.29	31.02	25.37
Total Return %	0.60	12.35	15.65	7.11	-0.68	6.95	14.08	-4.24	17.63	12.04	8.17	-18.21
+/- Standard Index	0.01	0.31	1.54	2.22	1.11	-1.62	-0.58	0.52	-1.39	-0.78	-2.02	2.70
+/- Category Index	-1.14	-0.18	2.87	1.24	1.20	-0.71	1.29	-0.08	-0.10	-1.28	-0.87	3.50
% Rank Cat	32	36	18	1	23	29	17	42	28	46	68	—
No. of Funds in Cat	205	208	222	228	237	221	234	250	233	178	171	156

Portfolio Analysis 09-30-2022					
Asset Allocation %			Net %	Long %	Short %
Cash	2.57	11.87	9.30		
US Stocks	24.47	24.47	0.00		
Non-US Stocks	16.48	16.48	0.00		
Bonds	55.95	55.95	0.02		
Other/Not Cstfd	0.53	0.53	0.00		
Total	100.00	109.31	9.31		

Equity Style		Portfolio Statistics	
Value	Small Growth	P/E Ratio TTM	13.9
Large	Mid Small	P/C Ratio TTM	10.5
		P/B Ratio TTM	2.1
		Geo Avg Mkt Cap	\$3592 1.48
			0.92

Fixed-Income Style		Portfolio Statistics	
Mid	Ext	Avg Eff Maturity	7.65
High	Low	Avg Eff Duration	5.98
		Avg Wtd Coupon	1.93
		Avg Wtd Price	89.23

Credit Quality Breakdown 09-30-2022

	Bond %
AAA	65.22
AA	8.01
A	14.09
BBB	12.23
BB	0.00
B	0.00
Below B	0.33
NR	0.12

Regional Exposure		Stocks %	Rel Std Index
Americas	64.0	1.04	
Greater Europe	17.0	0.96	
Greater Asia	19.0	0.93	

Base Currency: USD
 Ticker: VTWVX
 SIN: US92202E8057
 Minimum Initial Purchase: \$1,000

Purchase Constraints: —
 Incept: 06-07-2006
 Type: MF
 Total Assets: \$39,834,77 mil

Sector Weightings			Stocks %	Rel Std Index
Cyclical			35.5	0.90
Basic Materials	4.9		0.93	
Consumer Cyclical	11.3		1.05	
Financial Services	15.7		0.97	
Real Estate	3.6		0.51	
Sensitive			41.2	1.13
Communication Services	6.8		1.16	
Energy	5.1		0.95	
Industrials	10.8		0.98	
Technology	18.4		1.30	
Defensive			23.3	0.97
Consumer Defensive	7.4		0.94	
Healthcare	12.9		1.02	
Utilities	3.1		0.84	

©2022 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be precatred or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.



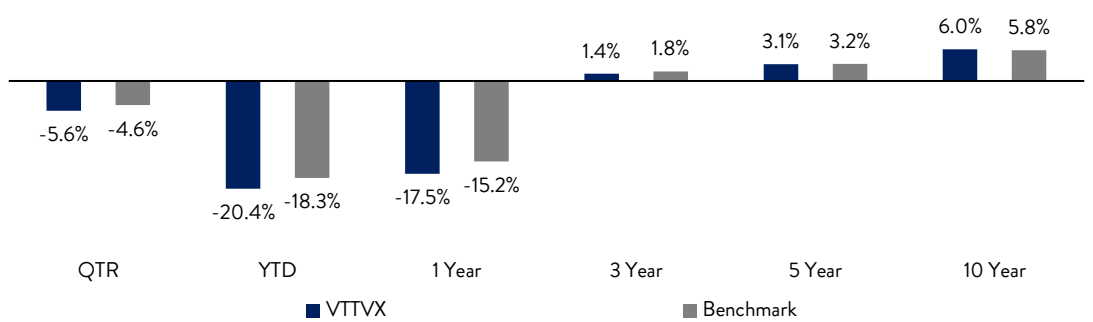
Vanguard Target Retirement 2025 Fund
VTTVX

Fund Fact Sheet
Data as of 09/30/2022

Product Details

Name	Vanguard Target Retirement 2025 Fund
Ticker	VTTVX
Expense Ratio	0.080%
Morningstar Category	US Fund Target-Date 2025
Benchmark	S&P Target Date 2025 TR USD
Inception Date	10/27/2003
Longest Tenured Manager	William A. Coleman;Walter Nejman;
Longest Manager Tenure	9.67 Years
Fund Size	\$69,386,399,086

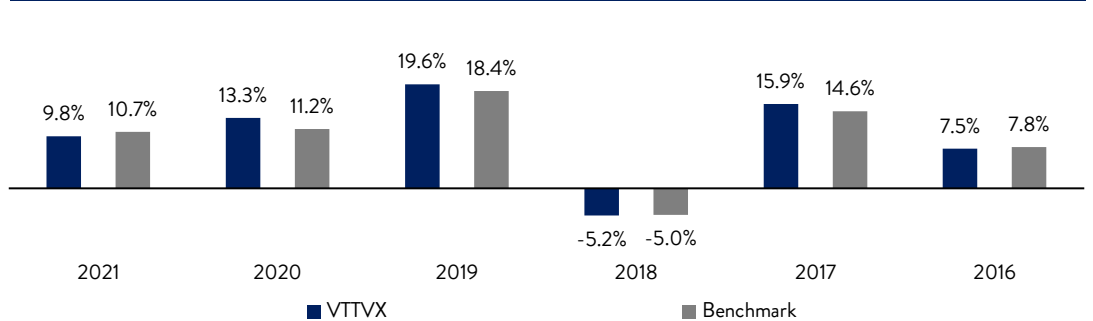
Trailing Performance



Fund Characteristics

	VTTVX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$54,249	-\$9,103
P/E Ratio (TTM)	13.93	-0.64
P/B Ratio (TTM)	2.10	-0.14
Est. Dividend Yield	2.84%	0.10%

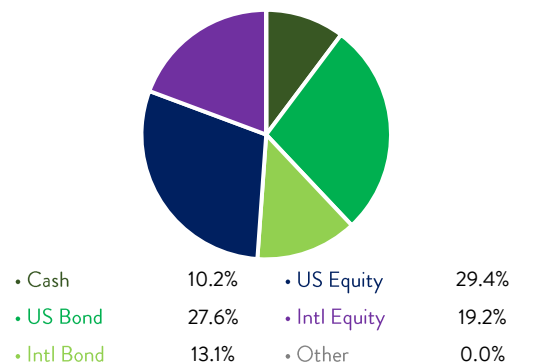
Annual Performance



Sector Allocations

	VTTVX	Category	+/- Category
Materials	4.8%	4.3%	0.5%
Communication Services	6.8%	6.8%	0.0%
Consumer Discretionary	11.3%	10.9%	0.4%
Consumer Staples	7.4%	7.0%	0.3%
Healthcare	12.9%	13.2%	-0.3%
Industrials	10.8%	10.2%	0.6%
Real Estate	3.6%	5.4%	-1.8%
Technology	18.5%	18.8%	-0.3%
Energy	5.1%	5.0%	0.1%
Financial Services	15.7%	15.1%	0.6%
Utilities	3.1%	3.3%	-0.2%
Other	0.0%	0.0%	0.0%

Asset Allocation



Morningstar Style Box

	Value	Core	Growth
Large			
Mid			
Small			

Vanguard Target Retirement 2025 Fund
VTTVX

Fund Fact Sheet
Data as of 09/30/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VTTVX	-5.59%	-20.35%	-17.53%	1.40%	3.15%	5.96%
• Benchmark	-4.57%	-18.31%	-15.16%	1.82%	3.24%	5.80%
+/- Benchmark	-1.02%	-2.05%	-2.36%	-0.42%	-0.09%	0.16%
Peer Group Rank	59	63	61	39	28	20

5-Year Quarterly Performance	3Q22	2Q22	1Q22	4Q21
• VTTVX	-5.59%	-10.72%	-5.51%	3.55%
• Benchmark	-4.57%	-10.05%	-4.83%	3.85%
+/- Benchmark	-1.02%	-0.66%	-0.68%	-0.30%

Annual Performance	2021	2020	2019	2018	2017	2016
• VTTVX	9.80%	13.30%	19.63%	-5.15%	15.94%	7.48%
• Benchmark	10.67%	11.22%	18.38%	-5.02%	14.55%	7.82%
+/- Benchmark	-0.87%	2.08%	1.25%	-0.13%	1.39%	-0.34%
Peer Group Rank	49	34	21	47	23	22

5-Year Quarterly Performance	3Q21	2Q21	1Q21	4Q20
• VTTVX	-0.65%	4.79%	1.86%	9.33%
• Benchmark	-0.33%	4.43%	2.38%	9.01%
+/- Benchmark	-0.32%	0.35%	-0.52%	0.32%

Rolling 5-Year Performance	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021	07/2016 - 06/2021
• VTTVX	3.15%	5.07%	8.14%	10.35%	9.61%	10.56%
• Benchmark	3.24%	4.87%	7.71%	9.65%	9.01%	9.76%
+/- Benchmark	-0.09%	0.20%	0.43%	0.70%	0.60%	0.80%
Peer Group Rank	28	25	27	25	25	25

5-Year Quarterly Performance	3Q20	2Q20	1Q20	4Q19
• VTTVX	5.17%	13.20%	-12.95%	5.22%
• Benchmark	4.39%	12.25%	-12.93%	4.97%
+/- Benchmark	0.77%	0.96%	-0.02%	0.25%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	-0.43	0.00	-0.14	0.00	-0.01	0.00
Beta	1.05	1.00	1.04	1.00	1.04	1.00
Standard Deviation	12.78	12.15	11.17	10.68	9.17	8.81
Sharpe Ratio	0.12	0.15	0.23	0.24	0.60	0.60
Information Ratio	-0.40	-	-0.09	-	0.21	-
Treynor Ratio	0.73	1.18	1.87	2.04	5.06	5.09
Upside Capture Ratio	103.51	100.00	103.13	100.00	103.18	100.00
Downside Capture Ratio	106.43	100.00	104.46	100.00	103.36	100.00

5-Year Quarterly Performance	3Q19	2Q19	1Q19	4Q18
• VTTVX	1.10%	3.35%	8.82%	-7.74%
• Benchmark	1.04%	2.99%	8.37%	-7.81%
+/- Benchmark	0.06%	0.36%	0.45%	0.07%

5-Year Quarterly Performance	3Q18	2Q18	1Q18	4Q17
• VTTVX	2.76%	0.65%	-0.59%	3.87%
• Benchmark	2.72%	1.24%	-0.93%	3.73%
+/- Benchmark	0.03%	-0.58%	0.34%	0.14%

All data and information on this fact sheet is taken from sources believed to be accurate but is not guaranteed to be accurate, complete, or correct.

Vanguard Target Retirement 2025 Fund (USD)

Morningstar Analyst Rating™
Silver
02-24-2022

Overall Morningstar Rating™
★★★★
200 US Fund Target-Date
2025

Standard Index
Morningstar Mod
Tgt Risk TR USD

Category Index
Morningstar
Lifetime Mod 2025
TR USD

Morningstar Cat
US Fund Target-Date
2025

Performance 09-30-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-12.95	13.20	5.17	9.33	13.30
2021	1.86	4.79	-0.65	3.55	9.80
2022	-5.51	-10.72	-5.59	—	-20.35
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-17.53	1.40	3.15	5.96	5.88
Std 09-30-2022	-17.53	—	3.15	5.96	5.88
Total Return	-17.53	1.40	3.15	5.96	5.88
+/- Std Index	0.67	0.26	0.20	0.79	—
+/- Cat Index	2.35	1.13	0.52	0.74	—
% Rank Cat	58	46	34	21	—
No. in Cat	224	200	170	93	—

	Subsidized	Unsubsidized
7-day Yield	—	—
30-day SEC Yield 10-26-22	2.38	2.32

Performance Disclosure
The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-662-7447 or visit www.vanguard.com.

Fees and Expenses

Sales Charges

Front-End Load % NA

Deferred Load % NA

Fund Expenses

Management Fees % 0.00

12b1 Expense % NA

Net Expense Ratio % 0.08

Gross Expense Ratio % 0.08

Risk and Return Profile

	3 Yr	5 Yr	10 Yr
Morningstar Rating™	3★	3★	4★
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	Avg	Avg	+Avg

	3 Yr	5 Yr	10 Yr
Standard Deviation	12.78	11.18	9.17
Mean	1.40	3.15	5.96
Sharpe Ratio	0.12	0.23	0.60

MPT Statistics	Standard Index	Best Fit Index Morningstar Intl
Alpha	0.25	1.05
Beta	0.97	0.93
R-Squared	99.25	99.29

12-Month Yield 2.31%

Potential Cap Gains Exp 46.16%

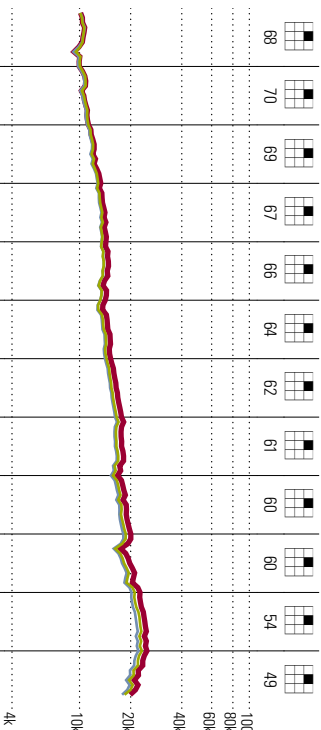
Operations

Family: Vanguard

Manager: Multiple

Tenure: 9.7 Years

Objective: Asset Allocation



Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
NAV/Price	12.27	13.59	15.75	16.53	15.62	16.35	18.50	17.01	19.84	21.54	20.34	16.20
Total Return %	-0.37	13.29	18.14	7.17	-0.85	7.48	15.94	-5.15	19.63	13.30	9.80	-20.35
+/- Standard Index	-0.96	1.25	3.63	2.28	0.94	-1.09	1.28	-0.39	0.60	0.47	-0.39	0.56
+/- Category Index	-0.61	-0.37	1.87	1.13	1.21	-0.91	1.40	-0.25	0.26	-0.37	-0.30	2.56
% Rank Cat	16	43	24	4	24	23	21	42	22	40	57	—
No. of Funds in Cat	145	154	181	185	206	195	208	226	232	214	220	225

Investment Style
Equity
Stocks %

Growth of \$10,000
Vanguard Target Retirement 2025 Fund
19,851
Category Average
17,802
Standard Index
18,413

Performance Quartile
(within category)
History

Asset Allocation %	Net %	Long %	Short %	Share Clng	Share Holdings	Net Assets
Cash	2.68	11.01	8.33	since 08-2022	10,954 Total Stocks, 18,623 Total Fixed-Income, 7% Turnover Ratio	%
US Stocks	31.96	31.96	0.00	Amount	137 mil Vanguard Total Stock Mkt Idx Instl	32.39
Non-US Stocks	20.80	20.80	0.00		2,150 mil Vanguard Total Bond Market II Idx	28.76
Bonds	44.07	44.08	0.01		1,006 mil Vanguard Total Intl Stock Index Inv	21.31
Other/Not Clsfd	0.48	0.48	0.00		351 mil Vanguard Total Intl Bnd II Idx Intl	12.92
Total	100.00	108.34	8.34		99 mil Vanguard Shrt-Term Intl-Prot Sec I	3.36

Equity Style	Value	Brand	Growth	Port	Rel	Index	Rel	Index	Rel		
	Large	Med	Small	P/E Ratio TTM	13.9	1.06	0.96	P/C Ratio TTM	10.6	1.03	0.95
				P/B Ratio TTM	2.1	1.10	0.94	Geo Avg Mkt Cap	54249	1.50	0.86

Fixed-Income Style	High	Med	Ext	Avg Eff Maturity	Avg Eff Duration	Avg Wtd Coupon	Avg Wtd Price
				8.41	6.50	2.16	88.17

Credit Quality Breakdown 09-30-2022

Credit	AAA	AA	A	BBB	BB	B	Below B	NR
AAA	60.19	9.14	16.13	14.04	0.00	0.00	0.37	0.14
AA	60.19	9.14	16.13	14.04	0.00	0.00	0.37	0.14
A	60.19	9.14	16.13	14.04	0.00	0.00	0.37	0.14
BBB	60.19	9.14	16.13	14.04	0.00	0.00	0.37	0.14
BB	60.19	9.14	16.13	14.04	0.00	0.00	0.37	0.14
B	60.19	9.14	16.13	14.04	0.00	0.00	0.37	0.14
Below B	60.19	9.14	16.13	14.04	0.00	0.00	0.37	0.14
NR	60.19	9.14	16.13	14.04	0.00	0.00	0.37	0.14

Regional Exposure	Stocks %	Rel Std Index
Americas	64.7	1.05
Greater Europe	16.7	0.94
Greater Asia	18.6	0.91

Base Currency: USD

Ticker: VTTVX

ISIN: US92202E4098

Minimum Initial Purchase: \$1,000

Purchase Constraints:

Incept: 10-27-2003

Type: MF

Total Assets: \$69,386.40 mil

©2022 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be predated or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.



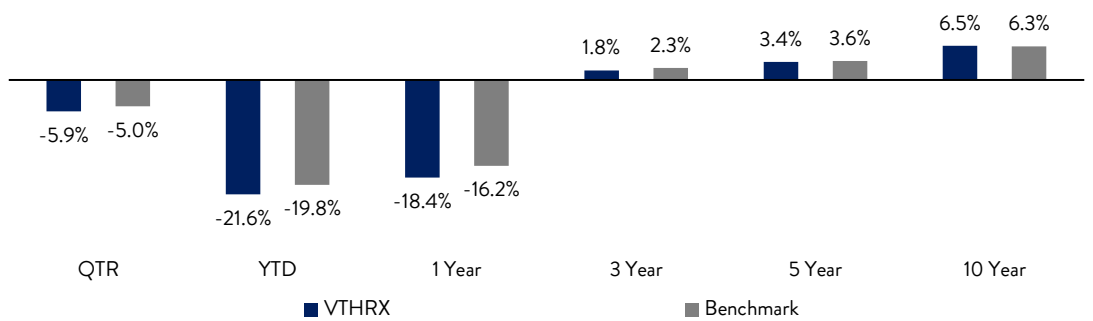
Vanguard Target Retirement 2030 Fund
VTHR

Fund Fact Sheet
Data as of 09/30/2022

Product Details

Name	Vanguard Target Retirement 2030 Fund
Ticker	VTHR
Expense Ratio	0.080%
Morningstar Category	US Fund Target-Date 2030
Benchmark	S&P Target Date 2030 TR USD
Inception Date	6/7/2006
Longest Tenured Manager	William A. Coleman; Walter Nejman;
Longest Manager Tenure	9.67 Years
Fund Size	\$72,115,547,003

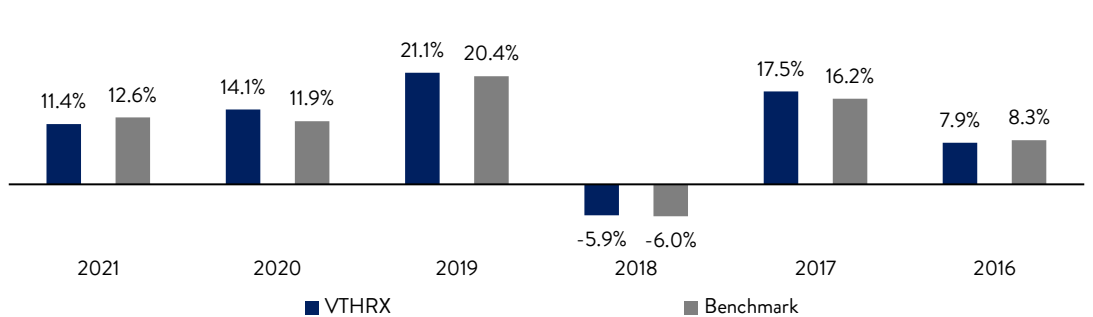
Trailing Performance



Fund Characteristics

	VTHR	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$54,334	-\$10,197
P/E Ratio (TTM)	13.94	-0.79
P/B Ratio (TTM)	2.11	-0.19
Est. Dividend Yield	2.84%	0.16%

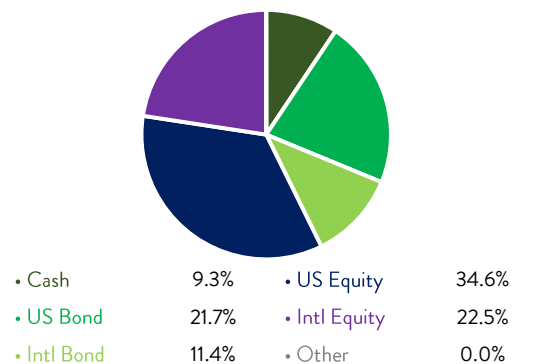
Annual Performance



Sector Allocations

Sector	VTHR	Category	+/- Category
Materials	4.8%	4.3%	0.5%
Communication Services	6.8%	6.8%	0.0%
Consumer Discretionary	11.3%	11.0%	0.3%
Consumer Staples	7.3%	7.0%	0.3%
Healthcare	12.9%	13.5%	-0.6%
Industrials	10.8%	10.4%	0.4%
Real Estate	3.6%	4.5%	-0.9%
Technology	18.5%	19.0%	-0.5%
Energy	5.1%	5.0%	0.1%
Financial Services	15.7%	15.3%	0.4%
Utilities	3.1%	3.3%	-0.1%
Other	0.0%	0.0%	0.0%

Asset Allocation



Morningstar Style Box

	Value	Core	Growth
Large			
Mid			
Small			

Vanguard Target Retirement 2030 Fund
VTHRX

Fund Fact Sheet
Data as of 09/30/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VTHRX	-5.93%	-21.60%	-18.42%	1.82%	3.43%	6.46%
• Benchmark	-4.98%	-19.79%	-16.23%	2.26%	3.58%	6.34%
+/- Benchmark	-0.95%	-1.81%	-2.18%	-0.44%	-0.15%	0.12%
Peer Group Rank	64	49	54	46	36	27

5-Year Quarterly Performance	3Q22	2Q22	1Q22	4Q21
• VTHRX	-5.93%	-11.67%	-5.65%	4.06%
• Benchmark	-4.98%	-11.21%	-4.93%	4.44%
+/- Benchmark	-0.95%	-0.45%	-0.72%	-0.38%

Annual Performance	2021	2020	2019	2018	2017	2016
• VTHRX	11.38%	14.10%	21.07%	-5.86%	17.52%	7.85%
• Benchmark	12.61%	11.91%	20.38%	-5.99%	16.19%	8.35%
+/- Benchmark	-1.23%	2.19%	0.70%	0.14%	1.34%	-0.49%
Peer Group Rank	56	36	39	37	37	28

5-Year Quarterly Performance	3Q21	2Q21	1Q21	4Q20
• VTHRX	-0.78%	5.25%	2.49%	10.52%
• Benchmark	-0.46%	4.92%	3.24%	10.52%
+/- Benchmark	-0.32%	0.33%	-0.75%	0.00%

Rolling 5-Year Performance	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021	07/2016 - 06/2021
• VTHRX	3.43%	5.50%	8.85%	11.23%	10.44%	11.49%
• Benchmark	3.58%	5.39%	8.56%	10.63%	9.93%	10.76%
+/- Benchmark	-0.15%	0.11%	0.29%	0.60%	0.51%	0.72%
Peer Group Rank	36	37	35	38	36	35

5-Year Quarterly Performance	3Q20	2Q20	1Q20	4Q19
• VTHRX	5.70%	14.58%	-14.76%	5.95%
• Benchmark	5.02%	13.94%	-15.38%	5.81%
+/- Benchmark	0.68%	0.64%	0.62%	0.14%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	-0.44	0.00	-0.15	0.00	0.06	0.00
Beta	1.01	1.00	1.01	1.00	1.01	1.00
Standard Deviation	14.11	13.89	12.38	12.27	10.14	9.99
Sharpe Ratio	0.15	0.18	0.24	0.25	0.60	0.59
Information Ratio	-0.44	-	-0.17	-	0.15	-
Treynor Ratio	1.17	1.63	2.22	2.38	5.68	5.63
Upside Capture Ratio	100.33	100.00	99.74	100.00	101.37	100.00
Downside Capture Ratio	102.77	100.00	100.68	100.00	101.05	100.00

5-Year Quarterly Performance	3Q19	2Q19	1Q19	4Q18
• VTHRX	0.89%	3.41%	9.54%	-8.86%
• Benchmark	0.88%	3.09%	9.39%	-9.26%
+/- Benchmark	0.01%	0.31%	0.15%	0.40%

5-Year Quarterly Performance	3Q18	2Q18	1Q18	4Q17
• VTHRX	3.09%	0.78%	-0.56%	4.21%
• Benchmark	3.15%	1.40%	-0.95%	4.24%
+/- Benchmark	-0.06%	-0.62%	0.38%	-0.03%

All data and information on this fact sheet is taken from sources believed to be accurate but is not guaranteed to be accurate, complete, or correct.

Vanguard Target Retirement 2030 Fund (USD)

Morningstar Analyst Rating™
Silver
 02-24-2022

Overall Morningstar Rating™
★★★★
 200 US Fund Target-Date
 2030

Standard Index
 Morningstar Mod Tgt Risk TR USD
Category Index
 Morningstar US Fund Target-Date Lifetime Mod 2030 TR USD
Morningstar Cat
 US Fund Target-Date 2030

Performance 09-30-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-14.76	14.58	5.70	10.52	14.10
2021	2.49	5.25	-0.78	4.06	11.38
2022	-5.65	-11.67	-5.93	—	-21.60
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-18.42	1.82	3.43	6.46	5.69
Std 09-30-2022	-18.42	—	3.43	6.46	5.69
Total Return	-18.42	1.82	3.43	6.46	5.69
+/- Std Index	-0.22	0.68	0.48	1.29	—
+/- Cat Index	2.10	1.18	0.51	0.57	—
% Rank Cat	50	50	44	27	—
No. in Cat	224	200	168	96	—

	Subsidized	Unsubsidized
7-day Yield	—	—
30-day SEC Yield 10-27-22	2.36	2.24

Performance Disclosure
 The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate, thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-662-7447 or visit www.vanguard.com.

Fees and Expenses

Sales Charges	
Front-End Load %	NA
Deferred Load %	NA

Fund Expenses	
Management Fees %	0.00
12b1 Expense %	NA
Net Expense Ratio %	0.08
Gross Expense Ratio %	0.08

Risk and Return Profile

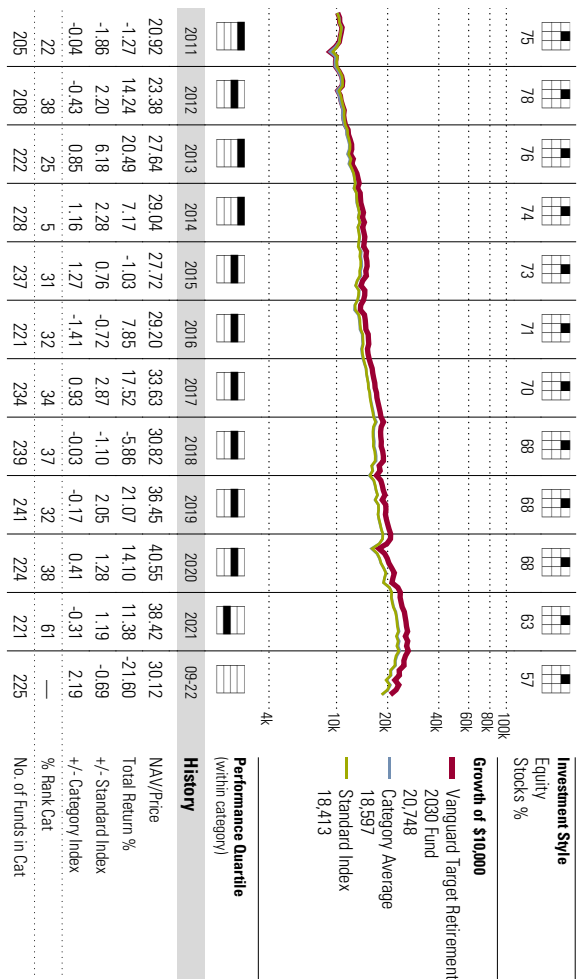
Morningstar Rating™	3★	3★	4★
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	Avg	Avg	+Avg

Standard Deviation	3 Yr 14.11	5 Yr 12.38	10 Yr 10.14
Mean	1.82	3.43	6.46
Sharpe Ratio	0.15	0.24	0.60

MPT Statistics	Standard Index	Best Fit Index Morningstar Mod Tgt Risk TR USD
Alpha	0.71	0.71
Beta	1.07	1.07
R-Squared	99.34	99.34

12-Month Yield	2.28%
Potential Cap Gains Exp	50.16%

Operations	
Family:	Vanguard
Manager:	Multiple
Tenure:	9.7 Years
Objective:	Asset Allocation



Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	09-22
NAV/Price	20.92	23.38	27.64	29.04	27.72	29.20	33.63	30.82	36.45	40.55	38.42	30.12
Total Return %	-1.27	14.24	20.49	7.17	-1.03	7.85	17.52	-5.86	21.07	14.10	11.38	-21.80
+/- Standard Index	-1.86	2.20	6.18	2.28	0.76	-0.72	2.87	-1.10	2.05	1.28	1.19	-0.69
+/- Category Index	-0.04	-0.43	0.85	1.16	1.27	-1.41	0.93	-0.03	-0.17	0.41	-0.31	2.19
% Rank Cat	22	38	25	5	31	32	34	37	32	38	61	—
No. of Funds in Cat	205	208	222	228	237	221	234	239	241	224	221	225

Portfolio Analysis 09-30-2022		Asset Allocation %		Net %		Long %		Short %	
Cash	2.81	9.98	7.18	8.90	6.83	8.90	6.83	8.90	6.83
US Stocks	37.16	37.16	0.00	13.9	1.06	0.95	1.06	0.95	0.95
Non-US Stocks	24.08	24.08	0.00	10.6	1.04	0.95	1.04	0.95	0.95
Bonds	35.53	35.54	0.01	2.1	1.10	0.92	1.10	0.92	0.92
Other/Not Cstfd	0.42	0.42	0.00	54.334	1.51	0.84	1.51	0.84	0.84
Total	100.00	107.19	7.19	107.19	7.19	7.19	107.19	7.19	7.19

Equity Style	Value	Brand	Growth	Port	Rel	Index	Rel	Cat
	Large	Mid	Small	P/E Ratio TTM	P/C Ratio TTM	P/B Ratio TTM	Geo Avg Mkt Cap	54334
	High	Med	Low	Avg Eff Maturity	Avg Eff Duration	Avg Wtd Coupon	Avg Wtd Price	8.90

Credit Quality Breakdown 09-30-2022

AAA	57.10	Bond %
AA	9.80	
A	17.38	
BBB	15.17	
BB	0.00	
B	0.00	
Below B	0.40	
NR	0.15	

Regional Exposure		Stocks %	Rel Std Index
Americas	64.8	1.05	
Greater Europe	16.7	0.94	
Greater Asia	18.5	0.91	

Base Currency:	USD
Ticker:	VTHR
ISIN:	US92202E8883
Minimum Initial Purchase:	\$1,000

Purchase Constraints:	—
Incept:	06-07-2006
Type:	MF
Total Assets:	\$72,115.54 mil

Sector Weightings		Stocks %	Rel Std Index
Cyclical		35.4	0.90
Basic Materials	4.8	0.92	
Consumer Cyclical	11.3	1.05	
Financial Services	15.7	0.97	
Real Estate	3.6	0.51	
Sensitive		41.2	1.13
Communication Services	6.8	1.16	
Energy	5.1	0.95	
Industrials	10.8	0.97	
Technology	18.5	1.31	
Defensive		23.4	0.97
Consumer Defensive	7.3	0.94	
Healthcare	12.9	1.02	
Utilities	3.1	0.84	

©2022 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be predated or accompanied by a prospectus, or equivalent, and disclosure statement. This report is supplemental sales literature. If applicable it must be predated.



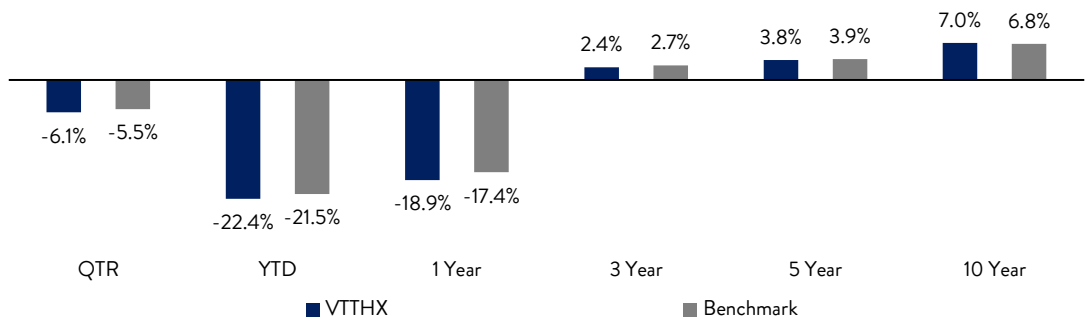
Vanguard Target Retirement 2035 Fund
VTTHX

Fund Fact Sheet
Data as of 09/30/2022

Product Details

Name	Vanguard Target Retirement 2035 Fund
Ticker	VTTHX
Expense Ratio	0.080%
Morningstar Category	US Fund Target-Date 2035
Benchmark	S&P Target Date 2035 TR USD
Inception Date	10/27/2003
Longest Tenured Manager	William A. Coleman;Walter Nejman;
Longest Manager Tenure	9.67 Years
Fund Size	\$70,249,951,788

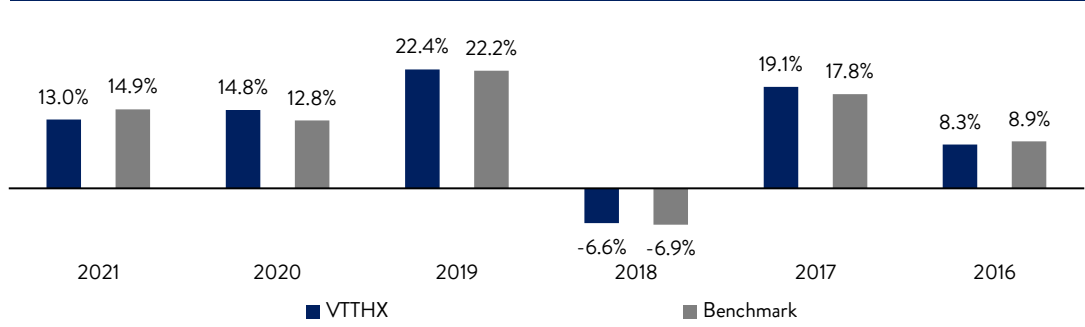
Trailing Performance



Fund Characteristics

	VTTHX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$54,077	-\$8,718
P/E Ratio (TTM)	13.92	-0.60
P/B Ratio (TTM)	2.10	-0.16
Est. Dividend Yield	2.85%	0.13%

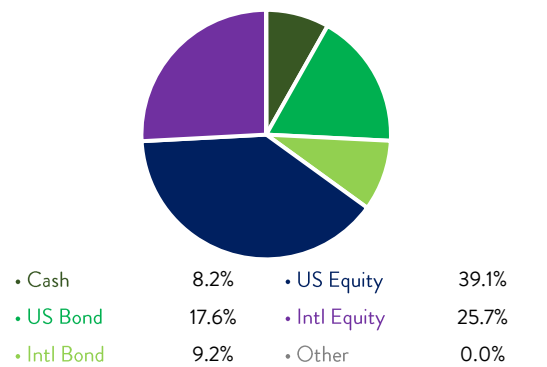
Annual Performance



Sector Allocations

	VTTHX	Category	+/- Category
Materials	4.8%	4.3%	0.5%
Communication Services	6.8%	6.8%	0.0%
Consumer Discretionary	11.3%	11.0%	0.2%
Consumer Staples	7.4%	7.0%	0.3%
Healthcare	12.9%	13.3%	-0.4%
Industrials	10.8%	10.4%	0.4%
Real Estate	3.6%	4.5%	-0.9%
Technology	18.5%	19.0%	-0.5%
Energy	5.1%	5.1%	0.1%
Financial Services	15.7%	15.4%	0.4%
Utilities	3.1%	3.2%	-0.1%
Other	0.0%	0.0%	0.0%

Asset Allocation



Morningstar Style Box

	Value	Core	Growth
Large			
Mid			
Small			

Vanguard Target Retirement 2035 Fund
VTTHX

Fund Fact Sheet
Data as of 09/30/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VTTHX	-6.09%	-22.40%	-18.87%	2.39%	3.78%	6.99%
• Benchmark	-5.50%	-21.51%	-17.42%	2.75%	3.92%	6.83%
+/- Benchmark	-0.59%	-0.89%	-1.45%	-0.35%	-0.14%	0.16%
Peer Group Rank	59	32	42	46	38	26

5-Year Quarterly Performance	3Q22	2Q22	1Q22	4Q21
• VTTHX	-6.09%	-12.41%	-5.66%	4.55%
• Benchmark	-5.50%	-12.55%	-5.02%	5.21%
+/- Benchmark	-0.59%	0.14%	-0.64%	-0.66%

Annual Performance	2021	2020	2019	2018	2017	2016
• VTTHX	12.96%	14.79%	22.44%	-6.58%	19.12%	8.26%
• Benchmark	14.93%	12.79%	22.18%	-6.88%	17.78%	8.85%
+/- Benchmark	-1.96%	2.00%	0.26%	0.30%	1.35%	-0.59%
Peer Group Rank	79	39	51	29	41	32

5-Year Quarterly Performance	3Q21	2Q21	1Q21	4Q20
• VTTHX	-0.87%	5.65%	3.17%	11.62%
• Benchmark	-0.61%	5.45%	4.22%	12.20%
+/- Benchmark	-0.26%	0.20%	-1.05%	-0.58%

Rolling 5-Year Performance	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021	07/2016 - 06/2021
• VTTHX	3.78%	5.96%	9.57%	12.06%	11.24%	12.39%
• Benchmark	3.92%	5.92%	9.50%	11.67%	10.88%	11.82%
+/- Benchmark	-0.14%	0.04%	0.08%	0.38%	0.36%	0.58%
Peer Group Rank	38	39	42	43	42	42

5-Year Quarterly Performance	3Q20	2Q20	1Q20	4Q19
• VTTHX	6.29%	15.90%	-16.52%	6.68%
• Benchmark	5.70%	15.55%	-17.69%	6.61%
+/- Benchmark	0.58%	0.36%	1.18%	0.07%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	-0.32	0.00	-0.08	0.00	0.21	0.00
Beta	0.97	1.00	0.97	1.00	0.99	1.00
Standard Deviation	15.35	15.76	13.52	13.90	11.10	11.18
Sharpe Ratio	0.19	0.21	0.25	0.26	0.60	0.58
Information Ratio	-0.31	-	-0.13	-	0.17	-
Treynor Ratio	1.81	2.11	2.67	2.73	6.35	6.12
Upside Capture Ratio	96.78	100.00	96.78	100.00	100.22	100.00
Downside Capture Ratio	98.15	100.00	96.93	100.00	99.06	100.00

5-Year Quarterly Performance	3Q19	2Q19	1Q19	4Q18
• VTTHX	0.70%	3.42%	10.20%	-9.93%
• Benchmark	0.73%	3.18%	10.27%	-10.55%
+/- Benchmark	-0.03%	0.24%	-0.07%	0.61%

5-Year Quarterly Performance	3Q18	2Q18	1Q18	4Q17
• VTTHX	3.47%	0.83%	-0.58%	4.62%
• Benchmark	3.52%	1.52%	-0.94%	4.71%
+/- Benchmark	-0.05%	-0.69%	0.36%	-0.09%

All data and information on this fact sheet is taken from sources believed to be accurate but is not guaranteed to be accurate, complete, or correct.

Vanguard Target Retirement 2035 Fund (USD)

Morningstar Analyst Rating™ Overall Morningstar Rating™ Standard Index Category Index Morningstar Cat
Silver **★★★★** **US Fund Target-Date**
 02-24-2022 **193 US Fund Target-Date** **US Fund Target-Date**
TR USD **193 US Fund Target-Date** **TR USD** **193 US Fund Target-Date** **TR USD**

Performance 09-30-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-16.52	15.90	6.29	11.62	14.79
2021	3.17	5.65	-0.87	4.55	12.96
2022	-5.66	-12.41	-6.09	—	-22.40
Trailing Returns					
	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-18.87	2.39	3.78	6.99	6.52
Std 09-30-2022	-18.87	—	3.78	6.99	6.52
Total Return	-18.87	2.39	3.78	6.99	6.52
+/- Std Index	-0.67	1.25	0.84	1.82	—
+/- Cat Index	1.87	1.17	0.51	0.53	—
% Rank Cat					
	39	49	44	28	
No. in Cat					
	217	193	167	90	

7-day Yield	
Subsidized	Unsubsidized
30-day SEC Yield 10-26-22	2.43
	2.28

Performance Disclosure
 The overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-662-7447 or visit www.vanguard.com.

Fees and Expenses

Sales Charges	
Front-End Load %	NA
Deferred Load %	NA

Fund Expenses	
Management Fees %	0.00
12b1 Expense %	NA
Net Expense Ratio %	0.08
Gross Expense Ratio %	0.08

Risk and Return Profile

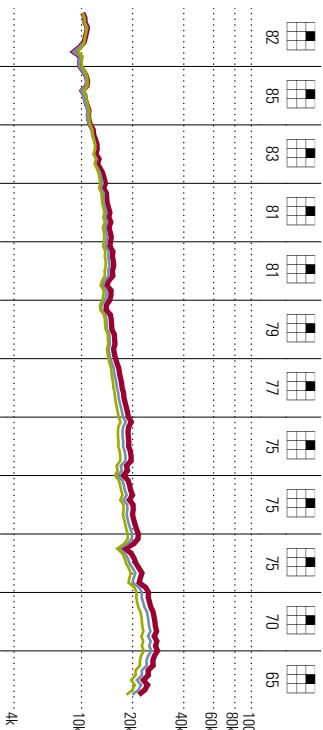
Morningstar Rating™	3★	3★	4★
Morningstar Risk	-Avg	-Avg	-Avg
Morningstar Return	Avg	Avg	+Avg

Standard Deviation	3 Yr 15.35	5 Yr 13.52	10 Yr 11.10
Mean	2.39	3.78	6.99
Sharpe Ratio	0.19	0.25	0.60

MPT Statistics	Standard Index	Best Fit Index
	TR USD	Morningstar TR USD
		Lifetime Mod 2035

Alpha	1.32	1.12
Beta	1.16	0.94
R-Squared	99.22	99.43
12-Month Yield	2.47%	2.47%
Potential Cap Gains Exp	55.22%	55.22%

Operations	
Family:	Vanguard
Manager:	Multiple
Tenure:	9.7 Years
Objective:	Asset Allocation



Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	09-22
NAV/Price	12.51	14.09	16.98	17.84	16.94	17.74	20.69	18.82	22.52	25.22	23.84	18.50
Total Return %	-2.24	15.16	22.82	7.24	-1.26	8.26	19.12	-6.58	22.44	14.79	12.96	-22.40
+/- Standard Index	-2.83	3.12	8.52	2.35	0.53	-0.31	4.46	-1.82	3.41	1.97	2.77	-1.49
+/- Category Index	0.04	-0.20	0.79	1.44	1.32	-1.80	0.60	0.24	-0.60	1.41	-0.67	1.87
% Rank Cat	19	40	23	10	37	32	35	32	42	43	79	—
No. of Funds in Cat	139	154	181	185	205	195	208	221	229	207	213	218

Portfolio Analysis 09-30-2022		Asset Allocation %		Net %		Long %		Short %	
Cash	2.92	8.57	5.66	8.57	5.66	8.57	5.66	8.57	5.66
US Stocks	41.38	41.38	0.00	41.38	0.00	41.38	0.00	41.38	0.00
Non-US Stocks	27.17	27.17	0.00	27.17	0.00	27.17	0.00	27.17	0.00
Bonds	28.19	28.20	0.01	28.19	28.20	0.01	28.19	28.20	0.01
Other/Not Cstfd	0.34	0.34	0.00	0.34	0.00	0.34	0.00	0.34	0.00
Total	100.00	106.67	5.67	106.67	5.67	106.67	5.67	106.67	5.67

Equity Style		Portfolio Statistics		Port		Rel		Rel	
Value	Small Growth	P/E Ratio TTM	13.9	1.06	0.96	8.90	6.83	8.90	6.83
Large	Mid Small	P/C Ratio TTM	10.5	1.03	0.96	6.83	2.31	6.83	2.31
		P/B Ratio TTM	2.1	1.09	0.93	2.31	87.51	2.31	87.51
		Geo Avg Mkt Cap	54077	1.50	0.86	87.51		87.51	

Fixed-Income Style		Avg Eff Maturity		Avg Eff Duration		Avg Wtd Coupon		Avg Wtd Price	
High	Med	8.90	6.83	6.83	2.31	87.51		8.90	6.83
Med	Ext	6.83	2.31	2.31	87.51			6.83	2.31
Low		2.31	87.51					2.31	87.51

Credit Quality Breakdown 09-30-2022

AAA	57.20	Bond %
AA	9.75	
A	17.34	
BBB	15.16	
BB	0.00	
B	0.00	
Below B	0.39	
NR	0.15	

Regional Exposure

Americas	64.5	Stocks %
Greater Europe	16.8	Rel Std Index
Greater Asia	18.7	1.04

Base Currency:	USD
Ticker:	VTHIX
ISIN:	US92202E9087
Minimum Initial Purchase:	\$1,000

Purchase Constraints:	—
Incept:	10-27-2003
Type:	MF
Total Assets:	\$70,249,96 mil

Sector Weightings		Stocks %		Rel Std Index	
⬇ Cyclicals	35.4	4.8	0.93	4.8	0.93
Basic Materials	11.3	10.8	0.98	11.3	1.05
Consumer Cyclical	15.7	15.7	0.97	15.7	0.97
Financial Services	3.6	3.6	0.51	3.6	0.51
Real Estate	41.2	6.8	1.16	41.2	1.13
⬆ Sensitive	6.8	5.1	0.95	6.8	0.95
Communication Services	5.1	10.8	0.98	5.1	1.05
Energy	10.8	18.5	1.31	10.8	0.98
Industrials	18.5	7.4	0.94	18.5	0.97
Technology	23.4	12.9	1.02	23.4	0.94
⬆ Defensive	7.4	3.1	0.84	7.4	0.94
Consumer Defensive	12.9			12.9	
Healthcare	3.1			3.1	
Utilities					

©2022 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be predated or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.



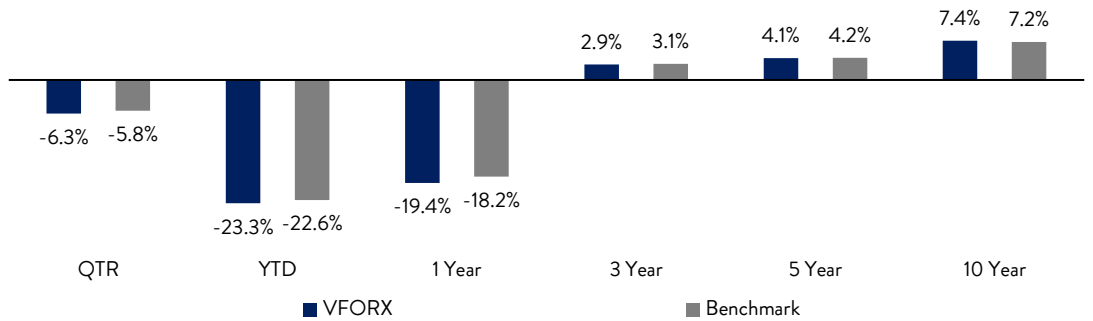
Vanguard Target Retirement 2040 Fund
VFORX

Fund Fact Sheet
Data as of 09/30/2022

Product Details

Name	Vanguard Target Retirement 2040 Fund
Ticker	VFORX
Expense Ratio	0.080%
Morningstar Category	US Fund Target-Date 2040
Benchmark	S&P Target Date 2040 TR USD
Inception Date	6/7/2006
Longest Tenured Manager	William A. Coleman;Walter Nejman;
Longest Manager Tenure	9.67 Years
Fund Size	\$60,363,325,437

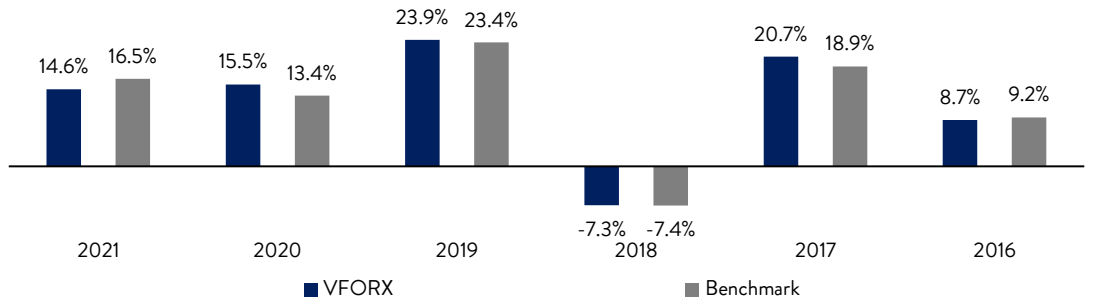
Trailing Performance



Fund Characteristics

	VFORX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$54,070	-\$6,017
P/E Ratio (TTM)	13.92	-0.54
P/B Ratio (TTM)	2.10	-0.13
Est. Dividend Yield	2.85%	0.12%

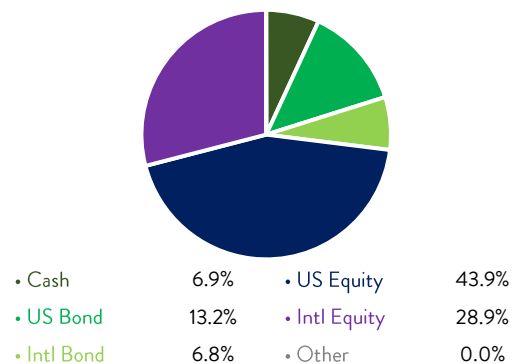
Annual Performance



Sector Allocations

	VFORX	Category	+/- Category
Materials	4.8%	4.3%	0.5%
Communication Services	6.8%	6.8%	0.0%
Consumer Discretionary	11.3%	11.0%	0.3%
Consumer Staples	7.4%	7.0%	0.4%
Healthcare	12.9%	13.2%	-0.3%
Industrials	10.8%	10.4%	0.4%
Real Estate	3.6%	4.9%	-1.3%
Technology	18.5%	18.8%	-0.4%
Energy	5.1%	5.0%	0.1%
Financial Services	15.7%	15.3%	0.4%
Utilities	3.1%	3.2%	-0.1%
Other	0.0%	0.0%	0.0%

Asset Allocation



Morningstar Style Box

	Value	Core	Growth
Large			
Mid			
Small			

Vanguard Target Retirement 2040 Fund
VFORX

Fund Fact Sheet
Data as of 09/30/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VFORX	-6.33%	-23.27%	-19.42%	2.91%	4.11%	7.40%
• Benchmark	-5.83%	-22.65%	-18.21%	3.08%	4.16%	7.18%
+/- Benchmark	-0.50%	-0.62%	-1.20%	-0.17%	-0.05%	0.23%
Peer Group Rank	56	27	31	43	32	20

5-Year Quarterly Performance	3Q22	2Q22	1Q22	4Q21
• VFORX	-6.33%	-13.17%	-5.66%	5.02%
• Benchmark	-5.83%	-13.50%	-5.03%	5.73%
+/- Benchmark	-0.50%	0.34%	-0.63%	-0.71%

Annual Performance	2021	2020	2019	2018	2017	2016
• VFORX	14.56%	15.47%	23.86%	-7.32%	20.71%	8.73%
• Benchmark	16.55%	13.37%	23.37%	-7.41%	18.87%	9.23%
+/- Benchmark	-1.99%	2.11%	0.49%	0.08%	1.84%	-0.49%
Peer Group Rank	81	42	51	34	30	21

5-Year Quarterly Performance	3Q21	2Q21	1Q21	4Q20
• VFORX	-0.98%	6.11%	3.82%	12.76%
• Benchmark	-0.70%	5.79%	4.93%	13.36%
+/- Benchmark	-0.29%	0.33%	-1.11%	-0.60%

Rolling 5-Year Performance	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021	07/2016 - 06/2021
• VFORX	4.11%	6.42%	10.28%	12.88%	12.03%	13.30%
• Benchmark	4.16%	6.30%	10.15%	12.40%	11.54%	12.55%
+/- Benchmark	-0.05%	0.13%	0.13%	0.48%	0.49%	0.75%
Peer Group Rank	32	34	38	40	39	36

5-Year Quarterly Performance	3Q20	2Q20	1Q20	4Q19
• VFORX	6.80%	17.29%	-18.25%	7.38%
• Benchmark	6.14%	16.66%	-19.24%	7.15%
+/- Benchmark	0.65%	0.62%	0.99%	0.22%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	-0.13	0.00	0.00	0.00	0.22	0.00
Beta	0.97	1.00	0.98	1.00	1.00	1.00
Standard Deviation	16.61	17.03	14.69	14.99	12.03	11.99
Sharpe Ratio	0.22	0.22	0.27	0.27	0.59	0.58
Information Ratio	-0.14	-	-0.05	-	0.22	-
Treynor Ratio	2.34	2.44	2.99	2.97	6.70	6.46
Upside Capture Ratio	97.55	100.00	98.00	100.00	101.49	100.00
Downside Capture Ratio	98.04	100.00	97.88	100.00	100.59	100.00

5-Year Quarterly Performance	3Q19	2Q19	1Q19	4Q18
• VFORX	0.49%	3.46%	10.96%	-11.03%
• Benchmark	0.60%	3.27%	10.82%	-11.33%
+/- Benchmark	-0.11%	0.19%	0.13%	0.30%

5-Year Quarterly Performance	3Q18	2Q18	1Q18	4Q17
• VFORX	3.79%	0.90%	-0.53%	5.00%
• Benchmark	3.72%	1.64%	-0.94%	5.03%
+/- Benchmark	0.07%	-0.74%	0.41%	-0.03%

All data and information on this fact sheet is taken from sources believed to be accurate but is not guaranteed to be accurate, complete, or correct.

Vanguard Target Retirement 2040 Fund (USD)

Morningstar Analyst Rating™ Overall Morningstar Rating™ Standard Index Category Index Morningstar Cat
Silver **★★★★** **US Fund Target-Date**
 02-24-2022 194 US Fund Target-Date 194 US Fund Target-Date 194 US Fund Target-Date 194 US Fund Target-Date
 Tgt Risk TR USD TR USD TR USD TR USD

Performance 09-30-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-18.25	17.29	6.80	12.76	15.47
2021	3.82	6.11	-0.98	5.02	14.56
2022	-5.66	-13.17	-6.33	—	-23.27
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-19.42	2.91	4.11	7.40	6.18
Std 09-30-2022	-19.42	—	4.11	7.40	6.18
Total Return	-19.42	2.91	4.11	7.40	6.18
+/- Std Index	-1.22	1.77	1.17	2.23	—
+/- Cat Index	1.37	1.13	0.56	0.61	—
% Rank Cat	33	46	39	22	—
No. in Cat	218	194	168	96	—

	Subsidized	Unsubsidized
7-day Yield	—	2.32
30-day SEC Yield 10-27-22	2.49	2.32

Performance Disclosure
 The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate, thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-662-7447 or visit www.vanguard.com.

Fees and Expenses

Sales Charges	
Front-End Load %	NA
Deferred Load %	NA

Fund Expenses	
Management Fees %	0.00
12b1 Expense %	NA
Net Expense Ratio %	0.08
Gross Expense Ratio %	0.08

Risk and Return Profile

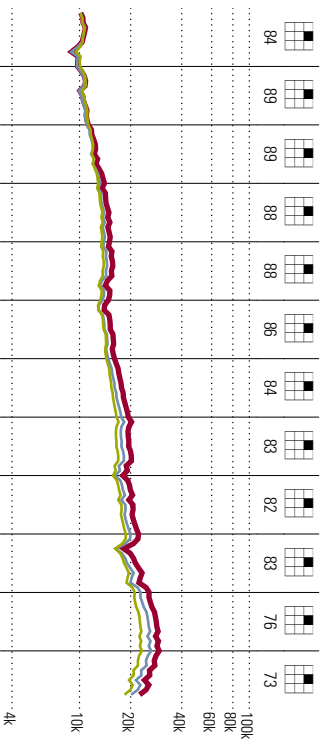
Morningstar Rating™	3★	4★	4★
Morningstar Risk	-Avg	Avg	-Avg
Morningstar Return	Avg	Avg	+Avg

Standard Deviation	3 Yr	5 Yr	10 Yr
Mean	16.61	14.69	12.03
Sharpe Ratio	2.91	4.11	7.40
	0.22	0.27	0.60

MPT Statistics	Standard Index	Best Fit Index
Alpha	1.90	-0.59
Beta	1.25	0.85
R-Squared	99.00	99.45
12-Month Yield	2.51%	2.51%
Potential Cap Gains Exp	23.59%	23.59%

Operations

Family:	Vanguard
Manager:	Multiple
Tenure:	9.7 Years
Objective:	Asset Allocation



Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	09-22
NAV/Price	20.50	23.18	28.32	29.76	28.45	30.21	35.77	32.31	39.13	44.27	42.03	32.25
Total Return %	-2.55	15.56	24.37	7.15	-1.59	8.73	20.71	-7.32	23.86	15.47	14.56	-23.27
+/- Standard Index	-3.14	3.52	10.07	2.26	0.21	0.16	6.05	-2.57	4.83	2.65	4.37	-2.36
+/- Category Index	0.30	-0.15	1.32	1.63	1.25	-1.88	0.84	0.33	-0.49	2.38	-0.80	1.27
% Rank Cat	19	31	15	12	43	27	25	37	43	40	81	—
No. of Funds in Cat	202	204	218	227	237	221	234	239	241	218	215	220

Performance Quartile (within category)		History	
NAV/Price	Total Return %	NAV/Price	Total Return %
20.50	-2.55	32.31	-7.32
23.18	15.56	39.13	23.86
28.32	7.15	44.27	15.47
29.76	-1.59	42.03	14.56
28.45	8.73	32.25	-23.27
30.21	20.71	32.25	-23.27
35.77	20.71	32.25	-23.27
32.31	-7.32	32.25	-23.27
39.13	23.86	32.25	-23.27
44.27	15.47	32.25	-23.27
42.03	14.56	32.25	-23.27
32.25	-23.27	32.25	-23.27

Portfolio Analysis 09-30-2022		Asset Allocation %	
Net %	Long %	Short %	Net Assets %
2.95	7.11	4.16	35.4
45.84	45.84	0.00	4.8
30.11	30.11	0.00	11.3
20.83	20.84	0.01	15.7
0.26	0.26	0.00	3.6
104.17	104.17	4.17	6.8

Equity Style		Portfolio Statistics	
Value	Brand Growth	P/E Ratio TTM	Rel Index Cat
Large	Med	10.5	1.03
Med	Med	2.1	1.09
Small	Small	Geo Avg Mkt Cap	54070

Fixed-Income Style		Credit Quality Breakdown 09-30-2022	
Value	Brand Growth	Avg Eff Maturity	Bond %
High	High	6.83	57.31
Med	Med	2.31	9.69
Low	Low	Avg Wtd Coupon	17.30
		Avg Wtd Price	87.52

Sector Weightings		Sensitve	
Stocks %	Rel Std Index	Stocks %	Rel Std Index
35.4	0.90	41.2	1.13
4.8	0.33	6.8	1.16
11.3	1.05	5.1	0.95
15.7	0.97	10.8	0.98
3.6	0.51	18.5	1.31
		23.4	0.97
		7.4	0.94
		12.9	1.02
		3.1	0.84

Regional Exposure		Performance Constraints:	
Stocks %	Rel Std Index	Base Currency:	USD
64.5	1.04	Tickers:	VFORX
16.8	0.94	SIN:	US92202EB701
18.7	0.91	Minimum Initial Purchase:	\$1,000
		Total Assets:	\$60,363.33 mil

©2022 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be predated or accompanied by a prospectus, or equivalent, and disclosure statement. This report is supplemental sales literature. If applicable it must be predated.



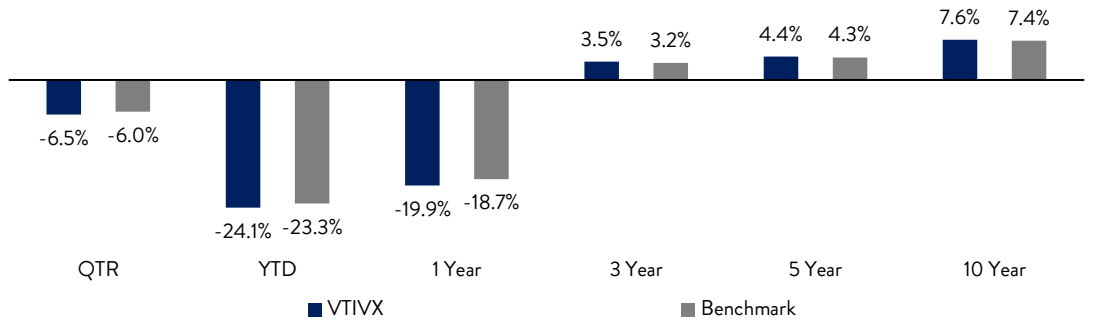
Vanguard Target Retirement 2045 Fund
VTIVX

Fund Fact Sheet
Data as of 09/30/2022

Product Details

Name	Vanguard Target Retirement 2045 Fund
Ticker	VTIVX
Expense Ratio	0.080%
Morningstar Category	US Fund Target-Date 2045
Benchmark	S&P Target Date 2045 TR USD
Inception Date	10/27/2003
Longest Tenured Manager	William A. Coleman; Walter Nejman;
Longest Manager Tenure	9.67 Years
Fund Size	\$55,921,318,210

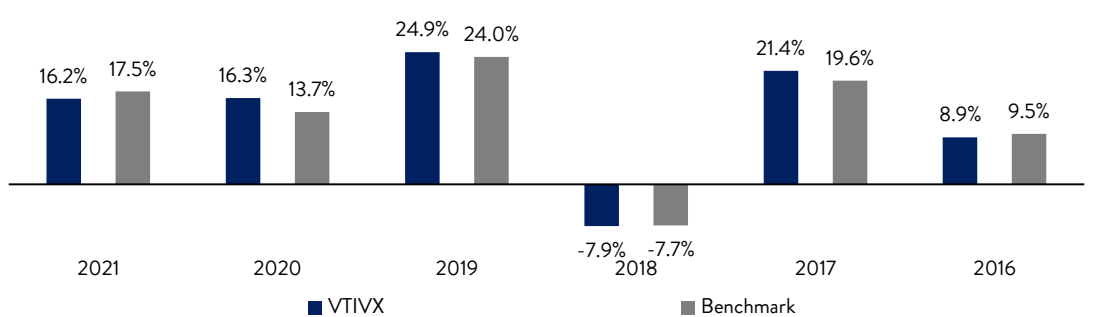
Trailing Performance



Fund Characteristics

	VTIVX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$54,027	-\$5,337
P/E Ratio (TTM)	13.91	-0.55
P/B Ratio (TTM)	2.10	-0.12
Est. Dividend Yield	2.85%	0.12%

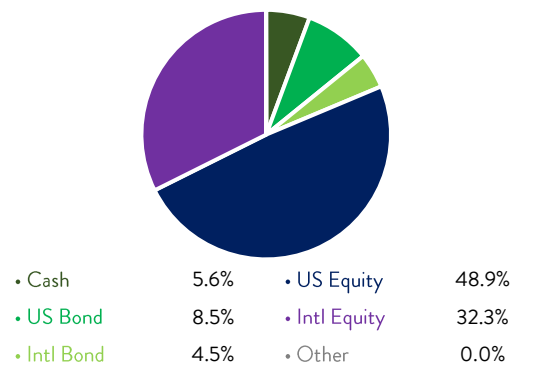
Annual Performance



Sector Allocations

	VTIVX	Category	+/- Category
Materials	4.8%	4.4%	0.5%
Communication Services	6.8%	6.8%	0.0%
Consumer Discretionary	11.3%	11.1%	0.2%
Consumer Staples	7.4%	7.0%	0.4%
Healthcare	12.9%	13.4%	-0.5%
Industrials	10.8%	10.4%	0.5%
Real Estate	3.6%	4.8%	-1.1%
Technology	18.5%	18.7%	-0.2%
Energy	5.1%	4.9%	0.2%
Financial Services	15.7%	15.3%	0.4%
Utilities	3.1%	3.3%	-0.1%
Other	0.0%	0.0%	0.0%

Asset Allocation



Morningstar Style Box

	Value	Core	Growth
Large			
Mid			
Small			

Vanguard Target Retirement 2045 Fund
VTIVX

Fund Fact Sheet
Data as of 09/30/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VTIVX	-6.51%	-24.10%	-19.93%	3.46%	4.42%	7.61%
• Benchmark	-6.01%	-23.33%	-18.70%	3.25%	4.27%	7.40%
+/- Benchmark	-0.50%	-0.77%	-1.23%	0.21%	0.15%	0.21%
Peer Group Rank	58	28	36	29	23	17

5-Year Quarterly Performance	3Q22	2Q22	1Q22	4Q21
• VTIVX	-6.51%	-13.93%	-5.67%	5.49%
• Benchmark	-6.01%	-14.12%	-5.02%	6.04%
+/- Benchmark	-0.50%	0.19%	-0.65%	-0.55%

Annual Performance	2021	2020	2019	2018	2017	2016
• VTIVX	16.16%	16.30%	24.94%	-7.90%	21.42%	8.87%
• Benchmark	17.51%	13.66%	24.02%	-7.74%	19.56%	9.54%
+/- Benchmark	-1.36%	2.64%	0.92%	-0.15%	1.86%	-0.67%
Peer Group Rank	67	36	41	40	23	23

5-Year Quarterly Performance	3Q21	2Q21	1Q21	4Q20
• VTIVX	-1.08%	6.55%	4.47%	13.90%
• Benchmark	-0.75%	6.00%	5.33%	14.02%
+/- Benchmark	-0.33%	0.55%	-0.86%	-0.12%

Rolling 5-Year Performance	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021	07/2016 - 06/2021
• VTIVX	4.42%	6.80%	10.89%	13.55%	12.62%	13.93%
• Benchmark	4.27%	6.47%	10.51%	12.81%	11.93%	12.99%
+/- Benchmark	0.15%	0.33%	0.38%	0.73%	0.69%	0.94%
Peer Group Rank	23	23	29	34	31	28

5-Year Quarterly Performance	3Q20	2Q20	1Q20	4Q19
• VTIVX	7.36%	18.70%	-19.88%	8.00%
• Benchmark	6.44%	17.29%	-20.15%	7.48%
+/- Benchmark	0.93%	1.40%	0.28%	0.52%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	0.20	0.00	0.14	0.00	0.13	0.00
Beta	1.00	1.00	1.01	1.00	1.01	1.00
Standard Deviation	17.88	17.79	15.76	15.63	12.70	12.51
Sharpe Ratio	0.24	0.23	0.28	0.27	0.59	0.58
Information Ratio	0.18	-	0.14	-	0.22	-
Treynor Ratio	2.82	2.61	3.21	3.08	6.82	6.69
Upside Capture Ratio	101.32	100.00	101.18	100.00	101.95	100.00
Downside Capture Ratio	100.58	100.00	100.66	100.00	101.46	100.00

5-Year Quarterly Performance	3Q19	2Q19	1Q19	4Q18
• VTIVX	0.26%	3.51%	11.48%	-11.78%
• Benchmark	0.53%	3.32%	11.10%	-11.75%
+/- Benchmark	-0.28%	0.19%	0.38%	-0.03%

5-Year Quarterly Performance	3Q18	2Q18	1Q18	4Q17
• VTIVX	4.03%	0.94%	-0.58%	5.22%
• Benchmark	3.81%	1.66%	-0.94%	5.20%
+/- Benchmark	0.22%	-0.72%	0.36%	0.02%

All data and information on this fact sheet is taken from sources believed to be accurate but is not guaranteed to be accurate, complete, or correct.

Vanguard Target Retirement 2045 Fund (USD)

Morningstar Analyst Rating™
Silver
 02-24-2022

Overall Morningstar Rating™ **Standard Index** **Category Index** **Morningstar Cat**
★★★★ Morningstar Mod Morningstar US Fund Target-Date
 193 US Fund Target-Date Tgt Risk TR USD Lifetime Mod 2045 2045
 2045 TR USD

Performance 09-30-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-19.88	18.70	7.36	13.90	16.30
2021	4.47	6.55	-1.08	5.49	16.16
2022	-5.67	-13.93	-6.51	—	-24.10
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-19.93	3.46	4.42	7.61	7.02
Std 09-30-2022	-19.93	—	4.42	7.61	7.02
Total Return	-19.93	3.46	4.42	7.61	7.02
+/- Std Index	-1.73	2.32	1.47	2.45	—
+/- Cat Index	0.90	1.36	0.74	0.73	—
% Rank Cat	36	34	31	20	—
No. in Cat	217	193	167	89	—

	Subsidized	Unsubsidized
7-day Yield	—	2.36
30-day SEC Yield 10-27-22	2.55	2.36

Performance Disclosure
 The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.
 The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.
 Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-662-7447 or visit www.vanguard.com.

Sales Charges
Front-End Load % **NA**
Deferred Load % **NA**
Fund Expenses 0.00
Management Fees % 0.00
12b1 Expense % NA
Net Expense Ratio % **0.08**
Gross Expense Ratio % **0.08**
Risk and Return Profile

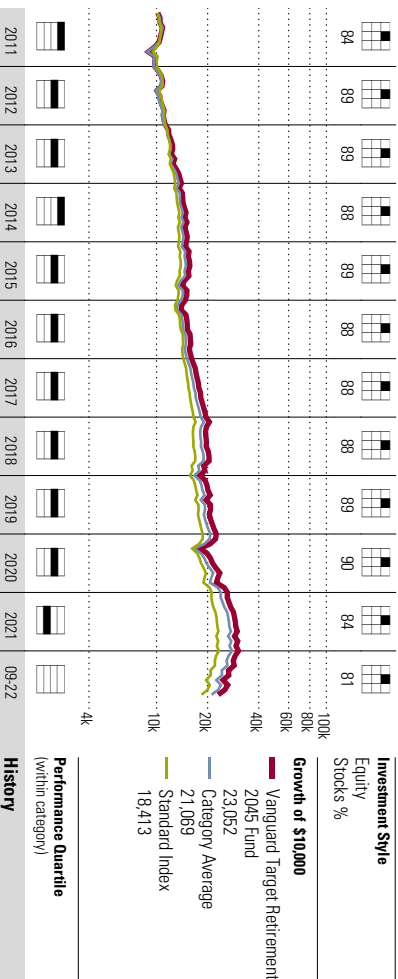
	3 Yr	5 Yr	10 Yr
Morningstar Rating™	4★	4★	4★
Morningstar Risk	Avg	Avg	-Avg
Morningstar Return	Avg	+Avg	+Avg
Standard Deviation	17.88	15.76	12.70
Mean	3.46	4.42	7.61
Sharpe Ratio	0.24	0.28	0.59
MPT Statistics	Standard Index	Best Fit Index	MSP AOCMI NR
Alpha	2.52	-0.17	USD
Beta	1.35	0.92	
R-Squared	98.70	99.61	
12-Month Yield	2.49%		
Potential Cap Gains Exp	24.72%		

	3 Yr	5 Yr	10 Yr
AAA			
AA			
A			
BBB			
BB			
B			
Below B			
NR			

Regional Exposure
 Americas 64.5
 Greater Europe 16.8
 Greater Asia 18.7
 Stocks % 64.5
 Rel Std Index 1.04
 0.95
 0.92

	High	Med	Low
Large			
Mid			
Small			

Fixed-Income Style
 Avg Eff Maturity 8.90
 Avg Eff Duration 6.83
 Avg Wtd Coupon 2.31
 Avg Wtd Price —
Credit Quality Breakdown 09-30-2022
 AAA 56.98
 AA 9.86
 A 17.43
 BBB 15.19
 BB 0.00
 B 0.00
 Below B 0.40
 NR 0.15
 Bond %
 Healthcare
 Utilities
Defensive 23.4
 Consumer Defensive 7.4
 Healthcare 12.9
 Utilities 3.1



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	09-22
NAV/Price	12.87	14.55	17.76	18.65	17.78	18.89	22.50	20.21	24.70	28.19	28.38	21.54
Total Return %	-2.51	15.58	24.37	7.16	-1.57	8.87	21.42	-7.90	24.94	16.30	16.16	-24.10
+/- Standard Index	-3.11	3.54	10.06	2.27	0.22	0.30	6.77	-3.14	5.91	3.48	5.97	-3.19
+/- Category Index	0.67	-0.26	1.30	1.91	1.45	-1.97	0.89	0.27	-0.03	3.35	-0.20	0.61
% Rank Cat	14	43	26	12	42	28	26	43	43	36	68	—
No. of Funds in Cat	139	145	180	185	206	195	208	221	229	207	213	218

Portfolio Analysis 09-30-2022			Net %	Long %	Short %
Asset Allocation %			3.00	5.74	2.74
Cash			50.34	50.34	0.00
US Stocks			33.14	33.14	0.00
Non-US Stocks			13.34	13.35	0.00
Bonds			0.18	0.18	0.00
Other/Not Cstfd			102.75		2.75
Total					

Equity Style	Value	Brand	Growth	Port	Rel	Index	Rel	Cat
Large				13.9	1.06	0.96	6.83	0.96
Mid				10.5	1.03	0.96	2.31	0.96
Small				2.1	1.09	0.95	2.31	0.95
Geo Avg Mkt Cap	54027		1.50	0.91				

Share Cng	Share	Holdings	Net Assets
since	Amount	11,264 Total Stocks	%
08-2022	6% Turnover Ratio	16,434 Total Fixed-Income,	
⊕	174 mil	Vanguard Total Stock Mkt Idx Instl	51.01
⊕	1,292 mil	Vanguard Total Intl Stock Index Inv	33.95
⊕	569 mil	Vanguard Total Bond Market II Idx	9.45
⊕	92 mil	Vanguard Total Intl Bd II Idx Instl	4.22

Sector Weightings	Stocks %	Rel Std Index
Cyclical	35.4	0.90
Basic Materials	4.8	0.93
Consumer Cyclical	11.3	1.05
Financial Services	15.7	0.97
Real Estate	3.6	0.51
Sensitive	41.2	1.13
Communication Services	6.8	1.16
Energy	5.1	0.95
Industrials	10.8	0.98
Technology	18.5	1.31
Defensive	23.4	0.97
Consumer Defensive	7.4	0.94
Healthcare	12.9	1.02
Utilities	3.1	0.84

Operations
 Family: Vanguard
 Manager: Multiple
 Tenure: 9.7 Years
 Objective: Asset Allocation
 Base Currency: USD
 Ticker: VTIWX
 SIN: US92202E6077
 Minimum Initial Purchase: \$1,000
 Purchase Constraints: —
 Incept: 10-27-2003
 Type: MF
 Total Assets: \$55,921.32 mil

©2022 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be predated or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.



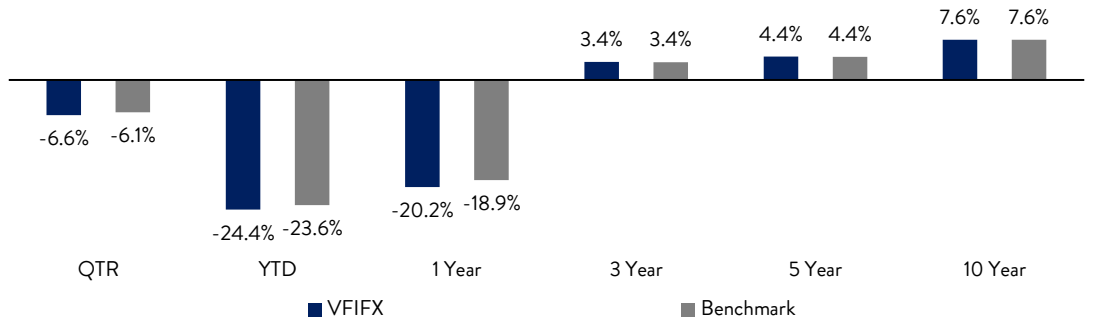
Vanguard Target Retirement 2050 Fund
VFIFX

Fund Fact Sheet
Data as of 09/30/2022

Product Details

Name	Vanguard Target Retirement 2050 Fund
Ticker	VFIFX
Expense Ratio	0.080%
Morningstar Category	US Fund Target-Date 2050
Benchmark	S&P Target Date 2050 TR USD
Inception Date	6/7/2006
Longest Tenured Manager	William A. Coleman; Walter Nejman;
Longest Manager Tenure	9.67 Years
Fund Size	\$44,736,231,475

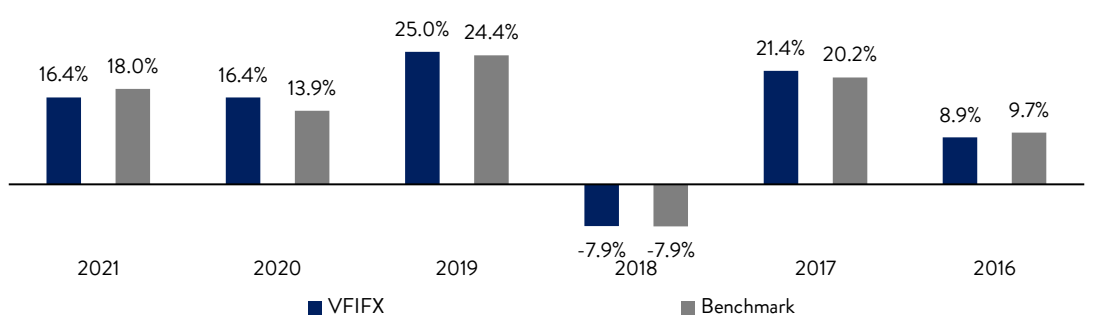
Trailing Performance



Fund Characteristics

	VFIFX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$53,786	-\$3,506
P/E Ratio (TTM)	13.89	-0.54
P/B Ratio (TTM)	2.09	-0.12
Est. Dividend Yield	2.86%	0.13%

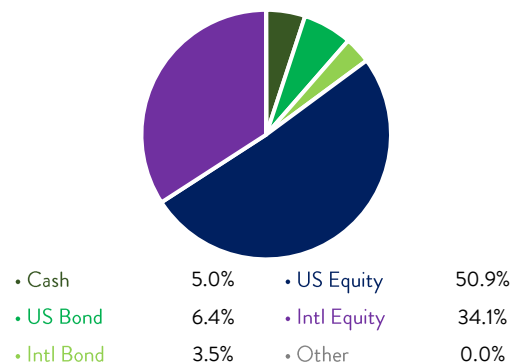
Annual Performance



Sector Allocations

	VFIFX	Category	+/- Category
Materials	4.9%	4.3%	0.5%
Communication Services	6.8%	6.7%	0.1%
Consumer Discretionary	11.3%	11.0%	0.2%
Consumer Staples	7.4%	6.9%	0.4%
Healthcare	12.9%	13.4%	-0.5%
Industrials	10.8%	10.4%	0.4%
Real Estate	3.6%	5.1%	-1.5%
Technology	18.4%	18.6%	-0.2%
Energy	5.1%	4.9%	0.2%
Financial Services	15.7%	15.3%	0.4%
Utilities	3.1%	3.2%	-0.1%
Other	0.0%	0.0%	0.0%

Asset Allocation



Morningstar Style Box

	Value	Core	Growth
Large			
Mid			
Small			

Vanguard Target Retirement 2050 Fund
VFIFX

Fund Fact Sheet
Data as of 09/30/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VFIFX	-6.64%	-24.43%	-20.18%	3.41%	4.39%	7.60%
• Benchmark	-6.07%	-23.62%	-18.88%	3.37%	4.35%	7.61%
+/- Benchmark	-0.57%	-0.81%	-1.30%	0.04%	0.04%	0.00%
Peer Group Rank	59	27	37	30	24	20

5-Year Quarterly Performance	3Q22	2Q22	1Q22	4Q21
• VFIFX	-6.64%	-14.21%	-5.65%	5.63%
• Benchmark	-6.07%	-14.39%	-5.02%	6.20%
+/- Benchmark	-0.57%	0.17%	-0.63%	-0.57%

Annual Performance	2021	2020	2019	2018	2017	2016
• VFIFX	16.41%	16.39%	24.98%	-7.90%	21.39%	8.85%
• Benchmark	17.99%	13.86%	24.35%	-7.94%	20.18%	9.74%
+/- Benchmark	-1.58%	2.53%	0.63%	0.05%	1.22%	-0.89%
Peer Group Rank	70	37	47	36	31	25

5-Year Quarterly Performance	3Q21	2Q21	1Q21	4Q20
• VFIFX	-1.11%	6.61%	4.53%	14.01%
• Benchmark	-0.80%	6.08%	5.57%	14.40%
+/- Benchmark	-0.31%	0.52%	-1.04%	-0.39%

Rolling 5-Year Performance	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021	07/2016 - 06/2021
• VFIFX	4.39%	6.81%	10.96%	13.62%	12.66%	13.97%
• Benchmark	4.35%	6.59%	10.72%	13.07%	12.19%	13.30%
+/- Benchmark	0.04%	0.22%	0.24%	0.55%	0.47%	0.68%
Peer Group Rank	24	24	31	39	36	32

5-Year Quarterly Performance	3Q20	2Q20	1Q20	4Q19
• VFIFX	7.35%	18.67%	-19.86%	8.01%
• Benchmark	6.53%	17.61%	-20.56%	7.65%
+/- Benchmark	0.82%	1.06%	0.70%	0.36%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	0.05	0.00	0.06	0.00	0.05	0.00
Beta	0.99	1.00	0.99	1.00	0.99	1.00
Standard Deviation	18.01	18.14	15.86	15.96	12.76	12.82
Sharpe Ratio	0.24	0.24	0.27	0.27	0.58	0.58
Information Ratio	0.03	-	0.04	-	0.00	-
Treynor Ratio	2.80	2.74	3.23	3.16	6.94	6.89
Upside Capture Ratio	99.90	100.00	99.61	100.00	99.59	100.00
Downside Capture Ratio	99.74	100.00	99.34	100.00	99.40	100.00

5-Year Quarterly Performance	3Q19	2Q19	1Q19	4Q18
• VFIFX	0.29%	3.47%	11.50%	-11.79%
• Benchmark	0.47%	3.32%	11.28%	-12.05%
+/- Benchmark	-0.18%	0.16%	0.22%	0.26%

5-Year Quarterly Performance	3Q18	2Q18	1Q18	4Q17
• VFIFX	4.02%	0.94%	-0.55%	5.19%
• Benchmark	3.87%	1.72%	-0.94%	5.34%
+/- Benchmark	0.15%	-0.78%	0.38%	-0.14%

All data and information on this fact sheet is taken from sources believed to be accurate but is not guaranteed to be accurate, complete, or correct.

Vanguard Target Retirement 2050 Fund (USD)

Morningstar Analyst Rating™
Silver
 02-24-2022

Overall Morningstar Rating™
★★★★
 194 US Fund Target-Date
 2050

Standard Index
 Morningstar Mod
 Tgt Risk TR USD

Category Index
 Morningstar
 Lifetime Mod 2050
 TR USD

Morningstar Cat
 US Fund Target-Date
 2050

Performance 09-30-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-19.86	18.67	7.35	14.01	16.39
2021	4.53	6.61	-1.11	5.63	16.41
2022	-5.65	-14.21	-6.64	—	-24.43
Trailing Returns					
	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-20.18	3.41	4.39	7.60	6.33
Std 09-30-2022	-20.18	—	4.39	7.60	6.33
Total Return	-20.18	3.41	4.39	7.60	6.33
+/- Std Index	-1.98	2.27	1.45	2.43	—
+/- Cat Index	0.73	1.24	0.73	0.75	—
% Rank Cat	38	35	33	20	—
No. in Cat	218	194	168	94	—

7-day Yield	
30-day SEC Yield 10-26-22	2.59
Subsidized	—
Unsubsidized	2.38

Performance Disclosure
 The overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-662-7447 or visit www.vanguard.com.

Fees and Expenses

Sales Charges	NA
Front-End Load %	NA
Deferred Load %	NA

Fund Expenses	0.00
Management Fees %	0.00
12b1 Expense %	NA

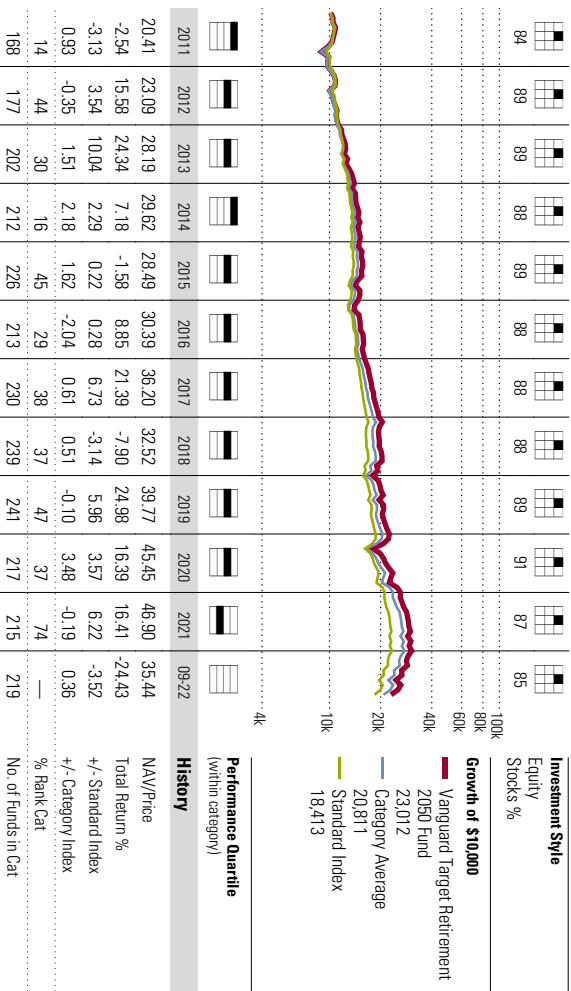
Net Expense Ratio %	0.08
Gross Expense Ratio %	0.08

Risk and Return Profile				
Morningstar Rating™	3 Yr	5 Yr	10 Yr	
	194 funds	188 funds	94 funds	
Morningstar Risk	4★	4★	4★	
	-Avg	-Avg	-Avg	
Morningstar Return	Avg	Avg	+Avg	

Standard Deviation	3 Yr	5 Yr	10 Yr
	18.01	15.86	12.76
Mean	3.41	4.39	7.60
Sharpe Ratio	0.24	0.28	0.58

MPT Statistics	Standard Index	Best Fit Index
Alpha	2.49	-0.22
Beta	1.36	0.93
R-Squared	98.79	99.64
12-Month Yield		2.54%
Potential Cap Gains Exp		22.99%

Operations	
Family:	Vanguard
Manager:	Multiple
Tenure:	9.7 Years
Objective:	Asset Allocation



Portfolio Analysis 09-30-2022				
Asset Allocation %		Net %	Long %	Short %
Cash	2.99	5.09	2.10	
US Stocks	52.12	52.12	0.00	
Non-US Stocks	34.74	34.74	0.00	
Bonds	10.01	10.01	0.00	
Other/Not Cstfd	0.14	0.14	0.00	
Total	100.00	102.10	2.10	

Equity Style		Portfolio Statistics	
Value	Small	P/E Ratio TTM	13.9
Blend	Mid	P/C Ratio TTM	10.5
Large	Mid	P/B Ratio TTM	2.1
	Small	Geo Avg Mkt Cap	53786
			1.49
			0.94

Fixed-Income Style		Avg Eff Maturity	
Lat	Med	Avg Eff Duration	6.84
Med	Ext	Avg Wtd Coupon	2.30
High	High	Avg Wtd Price	—
Low	Low		

Credit Quality Breakdown 09-30-2022

Credit Rating	Bond %
AAA	56.75
AA	9.97
A	17.52
BBB	15.21
BB	0.00
B	0.00
Below B	0.41
NR	0.15

Regional Exposure		Stocks %	Rel Std Index
Americas	64.2	1.04	
Greater Europe	16.9	0.95	
Greater Asia	18.8	0.92	

Base Currency:		USD
Ticker:	VFIKX	
ISIN:	US92202E8628	
Minimum Initial Purchase:	\$1,000	

Purchase Constraints:	
Incept:	06-07-2006
Type:	MF
Total Assets:	\$44,736.23 mil

Sector Weightings				
Sector	Weighting	Rel Std Index	Stocks %	Rel Std Index
Cyclical			35.5	0.90
Basic Materials	4.9	0.93		
Consumer Cyclical	11.3	1.05		
Financial Services	15.7	0.97		
Real Estate	3.6	0.51		
Sensitive			41.2	1.13
Communication Services	6.8	1.16		
Energy	5.1	0.95		
Industrials	10.8	0.98		
Technology	18.4	1.30		
Defensive			23.4	0.97
Consumer Defensive	7.4	0.94		
Healthcare	12.9	1.02		
Utilities	3.1	0.84		

©2022 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be presented or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.



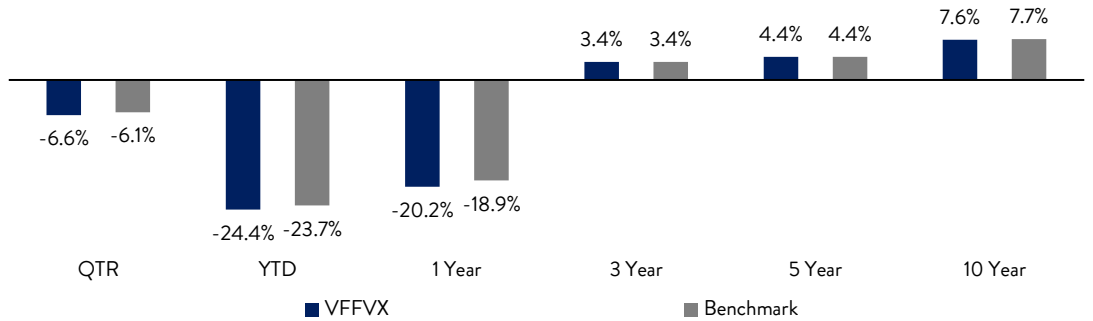
Vanguard Target Retirement 2055 Fund
VFFVX

Fund Fact Sheet
Data as of 09/30/2022

Product Details

Name	Vanguard Target Retirement 2055 Fund
Ticker	VFFVX
Expense Ratio	0.080%
Morningstar Category	US Fund Target-Date 2055
Benchmark	S&P Target Date 2055 TR USD
Inception Date	8/18/2010
Longest Tenured Manager	William A. Coleman;Walter Nejman;
Longest Manager Tenure	9.67 Years
Fund Size	\$27,570,033,615

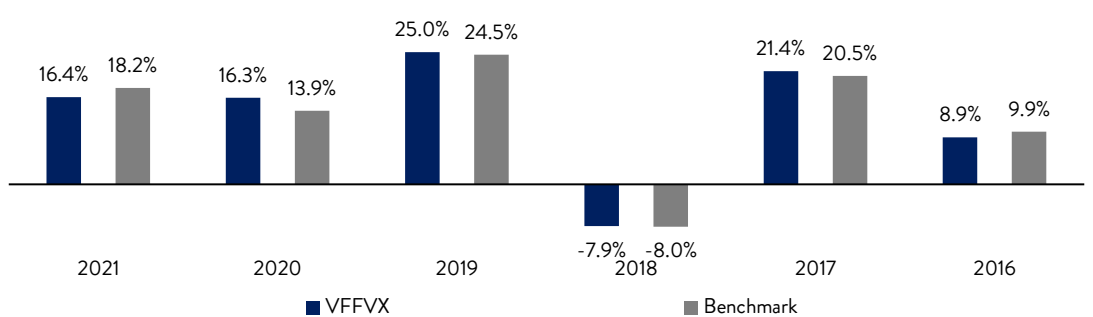
Trailing Performance



Fund Characteristics

	VFFVX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$53,736	-\$3,069
P/E Ratio (TTM)	13.89	-0.43
P/B Ratio (TTM)	2.09	-0.09
Est. Dividend Yield	2.86%	0.10%

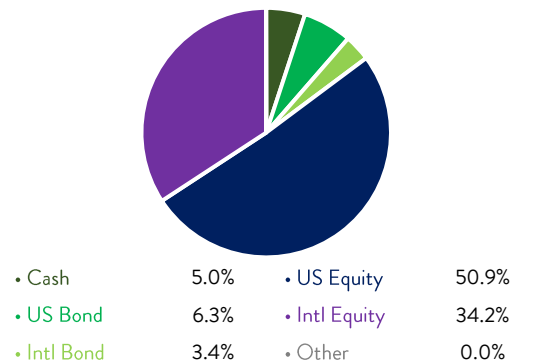
Annual Performance



Sector Allocations

Sector	VFFVX	Category	+/- Category
Materials	4.9%	4.5%	0.3%
Communication Services	6.8%	6.8%	0.0%
Consumer Discretionary	11.3%	11.0%	0.2%
Consumer Staples	7.4%	6.9%	0.4%
Healthcare	12.9%	13.3%	-0.4%
Industrials	10.8%	10.3%	0.5%
Real Estate	3.6%	5.0%	-1.4%
Technology	18.4%	18.5%	-0.1%
Energy	5.1%	5.0%	0.1%
Financial Services	15.7%	15.4%	0.3%
Utilities	3.1%	3.2%	-0.1%
Other	0.0%	0.0%	0.0%

Asset Allocation



Morningstar Style Box

	Value	Core	Growth
Large			
Mid			
Small			

Vanguard Target Retirement 2055 Fund
VFFVX

Fund Fact Sheet
Data as of 09/30/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VFFVX	-6.63%	-24.44%	-20.17%	3.40%	4.38%	7.58%
• Benchmark	-6.07%	-23.69%	-18.94%	3.42%	4.39%	7.74%
+/- Benchmark	-0.55%	-0.75%	-1.23%	-0.02%	-0.01%	-0.15%
Peer Group Rank	58	27	36	32	27	27

5-Year Quarterly Performance	3Q22	2Q22	1Q22	4Q21
• VFFVX	-6.63%	-14.19%	-5.69%	5.65%
• Benchmark	-6.07%	-14.47%	-5.01%	6.22%
+/- Benchmark	-0.55%	0.27%	-0.67%	-0.57%

Annual Performance	2021	2020	2019	2018	2017	2016
• VFFVX	16.44%	16.32%	24.98%	-7.89%	21.38%	8.88%
• Benchmark	18.19%	13.86%	24.48%	-7.97%	20.48%	9.94%
+/- Benchmark	-1.75%	2.46%	0.49%	0.09%	0.90%	-1.06%
Peer Group Rank	75	41	48	34	39	22

5-Year Quarterly Performance	3Q21	2Q21	1Q21	4Q20
• VFFVX	-1.11%	6.61%	4.54%	13.97%
• Benchmark	-0.80%	6.15%	5.67%	14.56%
+/- Benchmark	-0.30%	0.46%	-1.13%	-0.59%

Rolling 5-Year Performance	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021	07/2016 - 06/2021
• VFFVX	4.38%	6.80%	10.95%	13.61%	12.65%	13.96%
• Benchmark	4.39%	6.64%	10.80%	13.18%	12.33%	13.46%
+/- Benchmark	-0.01%	0.16%	0.15%	0.43%	0.32%	0.50%
Peer Group Rank	27	26	37	42	40	37

5-Year Quarterly Performance	3Q20	2Q20	1Q20	4Q19
• VFFVX	7.38%	18.64%	-19.89%	8.02%
• Benchmark	6.62%	17.76%	-20.84%	7.73%
+/- Benchmark	0.76%	0.88%	0.95%	0.29%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	0.00	0.00	0.03	0.00	-0.02	0.00
Beta	0.98	1.00	0.98	1.00	0.98	1.00
Standard Deviation	18.02	18.31	15.86	16.09	12.75	12.98
Sharpe Ratio	0.24	0.24	0.27	0.27	0.58	0.58
Information Ratio	-0.02	-	-0.01	-	-0.15	-
Treynor Ratio	2.82	2.79	3.24	3.20	7.01	7.02
Upside Capture Ratio	98.96	100.00	98.70	100.00	98.06	100.00
Downside Capture Ratio	98.95	100.00	98.52	100.00	98.11	100.00

5-Year Quarterly Performance	3Q19	2Q19	1Q19	4Q18
• VFFVX	0.27%	3.48%	11.50%	-11.76%
• Benchmark	0.46%	3.34%	11.31%	-12.10%
+/- Benchmark	-0.19%	0.14%	0.20%	0.34%

5-Year Quarterly Performance	3Q18	2Q18	1Q18	4Q17
• VFFVX	3.99%	0.95%	-0.56%	5.18%
• Benchmark	3.88%	1.70%	-0.91%	5.38%
+/- Benchmark	0.11%	-0.76%	0.35%	-0.20%

All data and information on this fact sheet is taken from sources believed to be accurate but is not guaranteed to be accurate, complete, or correct.

Vanguard Target Retirement 2055 Fund (USD)

Morningstar Analyst Rating™
Silver
 02-24-2022

Overall Morningstar Rating™
★★★★
 193 US Fund Target-Date
 2055

Standard Index
 Morningstar Mod
 Tgt Risk TR USD

Category Index
 Morningstar
 Lifetime Mod 2055
 TR USD

Morningstar Cat
 US Fund Target-Date
 2055

Performance 09-30-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-19.89	18.64	7.38	13.97	16.32
2021	4.54	6.61	-1.11	5.65	16.44
2022	-5.69	-14.19	-6.63	—	-24.44
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-20.17	3.40	4.38	7.58	8.37
Std 09-30-2022	-20.17	—	4.38	7.58	8.37
Total Return	-20.17	3.40	4.38	7.58	8.37
+/- Std Index	-1.97	2.26	1.44	2.41	—
+/- Cat Index	0.87	1.28	0.80	0.82	—
% Rank Cat	37	35	38	26	—
No. in Cat	217	193	167	71	—

7-day Yield	Subsidized	Unsubsidized
30-day SEC Yield 10-27-22	2.59	2.39

Performance Disclosure
 The overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-662-7447 or visit www.vanguard.com.

Fees and Expenses

Sales Charges	
Front-End Load %	NA
Deferred Load %	NA

Fund Expenses	
Management Fees %	0.00
12b1 Expense %	NA
Net Expense Ratio %	0.08
Gross Expense Ratio %	0.08

Risk and Return Profile

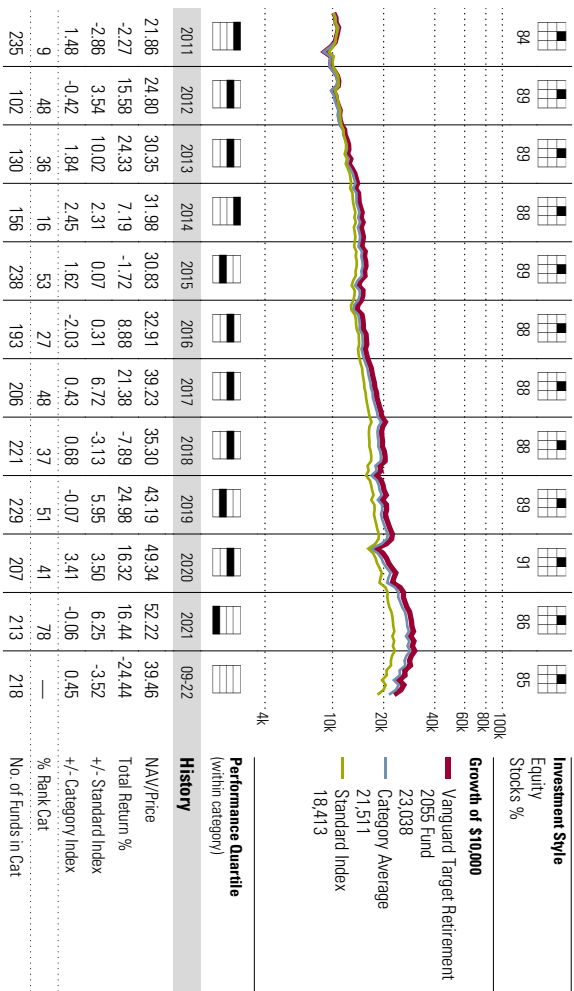
Morningstar Rating™	3 Yr	5 Yr	10 Yr
	193 funds	167 funds	71 funds
Morningstar Risk	4★	4★	4★
	-Avg	-Avg	-Avg
Morningstar Return	Avg	Avg	+Avg

Standard Deviation	3 Yr	5 Yr	10 Yr
	18.02	15.86	12.75
Mean	3.40	4.38	7.58
Sharpe Ratio	0.24	0.27	0.58

MPT Statistics	Standard Index	Best Fit Index
		MSCI ACWI NR
Alpha	2.48	-0.23
		USD
Beta	1.36	0.93
R-Squared	98.80	99.65

12-Month Yield	2.52%
Potential Cap Gains Exp	20.49%

Operations	
Family:	Vanguard
Manager:	Multiple
Tenure:	9.7 Years
Objective:	Asset Allocation



Portfolio Analysis 09-30-2022											
Asset Allocation %			Net %	Long %	Short %	Share Clng					NAV/Price
Cash	US Stocks	Non-US Stocks	3.02	5.08	2.07	since	Amount	Holdings	Total	Fixed-Income,	Total Return %
21.86	24.80	30.35	31.98	30.83	32.91	08-2022	11,264	15,484	39.46	-2.44	NAV/Price
-2.27	15.58	24.33	7.19	-1.72	8.88		5%	16.44	16.44	-2.44	Total Return %
-2.86	3.54	10.02	2.31	0.07	0.31		89 mil	Vanguard Total Stock Mkt Idx Instl	6.25	-3.52	+/- Standard Index
1.48	-0.42	1.84	2.45	1.62	-2.03		669 mil	Vanguard Total Int'l Stock Index Inv	-0.06	0.45	+/- Category Index
9	48	36	16	53	27		208 mil	Vanguard Total Bond Market II Idx	78	—	% Rank Cat
235	102	130	156	238	193		34 mil	Vanguard Total Intl Bd II Idx Instl	213	218	No. of Funds in Cat

Equity Style	Value	Blend	Growth
	Large	Mid	Small
	High	Med	Low

Fixed-Income Style	Ltd	Med	Ext
	High	Med	Low

Portfolio Statistics	P/E Ratio TTM	13.9
	P/C Ratio TTM	10.5
	P/B Ratio TTM	2.1
	Geo Avg Mkt Cap	53736
	Avg Eff Maturity	8.90
	Avg Eff Duration	6.84
	Avg Wtd Coupon	2.31
	Avg Wtd Price	—

Credit Quality Breakdown 09-30-2022

AAA	56.86
AA	9.92
A	17.47
BBB	15.20
BB	0.00
B	0.00
Below B	0.40
NR	0.15

Regional Exposure	Stocks %	Rel Std Index
Americas	64.2	1.04
Greater Europe	17.0	0.95
Greater Asia	18.9	0.92

Base Currency:	USD
Tickers:	VFFVX
ISIN:	US92202E8479
Minimum Initial Purchase:	\$1,000

Purchase Constraints:	—
Incept:	08-18-2010
Type:	MF
Total Assets:	\$27,570.03 mil

Sensitive	412	1.13
Communication Services	6.8	1.16
Energy	5.1	0.95
Industrials	10.8	0.98
Technology	18.4	1.30
Defensive	234	0.97
Consumer Defensive	7.4	0.94
Healthcare	12.9	1.02
Utilities	3.1	0.84

©2022 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be predated or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.



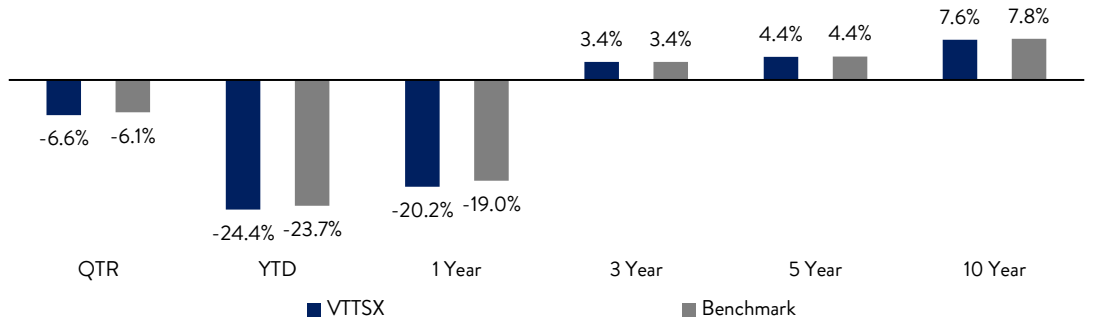
Vanguard Target Retirement 2060 Fund
VTTSX

Fund Fact Sheet
Data as of 09/30/2022

Product Details

Name	Vanguard Target Retirement 2060 Fund
Ticker	VTTSX
Expense Ratio	0.080%
Morningstar Category	US Fund Target-Date 2060
Benchmark	S&P Target Date 2060 TR USD
Inception Date	1/19/2012
Longest Tenured Manager	William A. Coleman; Walter Nejman;
Longest Manager Tenure	9.67 Years
Fund Size	\$13,679,555,621

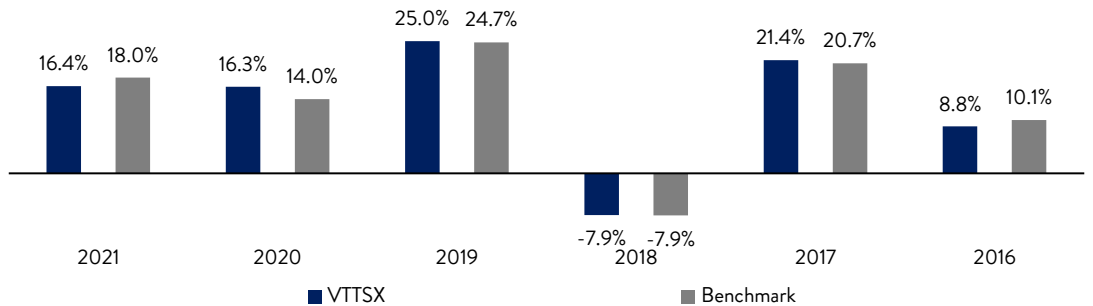
Trailing Performance



Fund Characteristics

	VTTSX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$53,657	-\$4,508
P/E Ratio (TTM)	13.89	-0.52
P/B Ratio (TTM)	2.09	-0.13
Est. Dividend Yield	2.86%	0.10%

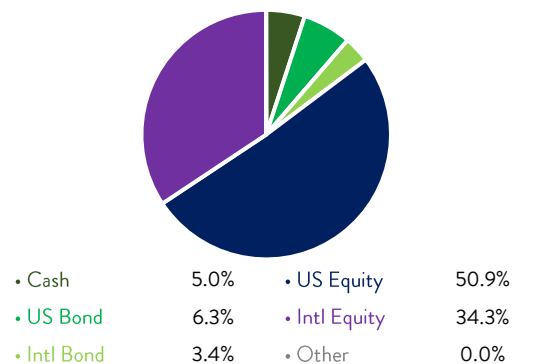
Annual Performance



Sector Allocations

Sector Allocations	VTTSX	Category	+/- Category
Materials	4.9%	4.6%	0.3%
Communication Services	6.8%	6.8%	-0.1%
Consumer Discretionary	11.3%	11.0%	0.2%
Consumer Staples	7.4%	7.0%	0.4%
Healthcare	12.9%	13.6%	-0.7%
Industrials	10.8%	10.4%	0.4%
Real Estate	3.6%	4.9%	-1.2%
Technology	18.4%	18.4%	0.0%
Energy	5.1%	5.0%	0.1%
Financial Services	15.7%	15.1%	0.6%
Utilities	3.1%	3.1%	0.0%
Other	0.0%	0.0%	0.0%

Asset Allocation



Morningstar Style Box

	Value	Core	Growth
Large			
Mid			
Small			

Vanguard Target Retirement 2060 Fund
VTTSX

Fund Fact Sheet
Data as of 09/30/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VTTSX	-6.64%	-24.44%	-20.16%	3.40%	4.38%	7.58%
• Benchmark	-6.09%	-23.73%	-18.99%	3.43%	4.44%	7.78%
+/- Benchmark	-0.54%	-0.71%	-1.17%	-0.03%	-0.06%	-0.20%
Peer Group Rank	61	24	36	35	29	1

5-Year Quarterly Performance	3Q22	2Q22	1Q22	4Q21
• VTTSX	-6.64%	-14.19%	-5.68%	5.66%
• Benchmark	-6.09%	-14.48%	-5.02%	6.21%
+/- Benchmark	-0.54%	0.29%	-0.66%	-0.55%

Annual Performance	2021	2020	2019	2018	2017	2016
• VTTSX	16.44%	16.32%	24.96%	-7.87%	21.36%	8.84%
• Benchmark	18.05%	13.99%	24.73%	-7.95%	20.75%	10.08%
+/- Benchmark	-1.60%	2.33%	0.23%	0.08%	0.61%	-1.23%
Peer Group Rank	77	41	56	29	42	18

5-Year Quarterly Performance	3Q21	2Q21	1Q21	4Q20
• VTTSX	-1.11%	6.61%	4.54%	13.96%
• Benchmark	-0.83%	6.12%	5.61%	14.56%
+/- Benchmark	-0.29%	0.48%	-1.07%	-0.59%

Rolling 5-Year Performance	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021	07/2016 - 06/2021
• VTTSX	4.38%	6.79%	10.95%	13.61%	12.64%	13.96%
• Benchmark	4.44%	6.70%	10.87%	13.28%	12.46%	13.61%
+/- Benchmark	-0.06%	0.09%	0.08%	0.32%	0.18%	0.35%
Peer Group Rank	29	31	42	48	48	50

5-Year Quarterly Performance	3Q20	2Q20	1Q20	4Q19
• VTTSX	7.39%	18.61%	-19.86%	8.02%
• Benchmark	6.61%	17.93%	-20.86%	7.81%
+/- Benchmark	0.77%	0.68%	0.99%	0.20%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	0.00	0.00	-0.01	0.00	-0.03	0.00
Beta	0.98	1.00	0.98	1.00	0.97	1.00
Standard Deviation	17.99	18.34	15.84	16.15	12.75	13.04
Sharpe Ratio	0.24	0.24	0.27	0.28	0.58	0.59
Information Ratio	-0.02	-	-0.06	-	-0.20	-
Treynor Ratio	2.83	2.80	3.26	3.25	7.04	7.07
Upside Capture Ratio	98.69	100.00	98.13	100.00	97.49	100.00
Downside Capture Ratio	98.69	100.00	98.09	100.00	97.56	100.00

5-Year Quarterly Performance	3Q19	2Q19	1Q19	4Q18
• VTTSX	0.28%	3.48%	11.48%	-11.77%
• Benchmark	0.45%	3.37%	11.42%	-12.22%
+/- Benchmark	-0.18%	0.12%	0.06%	0.45%

5-Year Quarterly Performance	3Q18	2Q18	1Q18	4Q17
• VTTSX	4.00%	0.93%	-0.52%	5.17%
• Benchmark	3.97%	1.77%	-0.90%	5.47%
+/- Benchmark	0.02%	-0.84%	0.38%	-0.30%

All data and information on this fact sheet is taken from sources believed to be accurate but is not guaranteed to be accurate, complete, or correct.

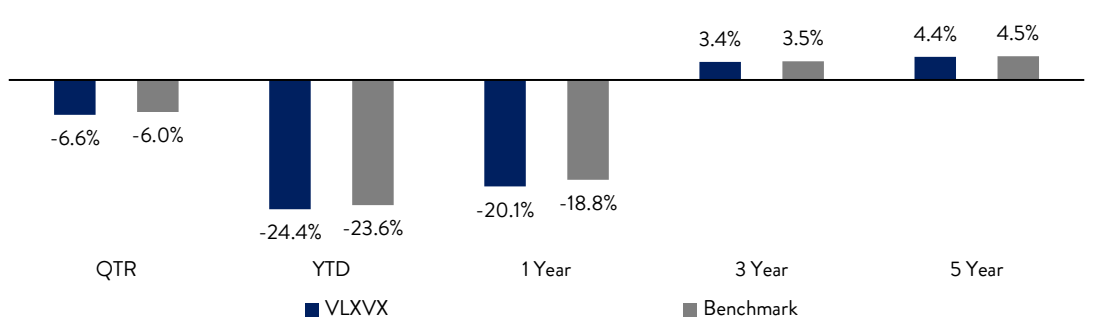
Vanguard Target Retirement 2065 Fund
VLXVX

Fund Fact Sheet
Data as of 09/30/2022

Product Details

Name	Vanguard Target Retirement 2065 Fund
Ticker	VLXVX
Expense Ratio	0.080%
Morningstar Category	US Fund Target-Date 2065+
Benchmark	S&P Target Date 2065+ TR USD
Inception Date	7/12/2017
Longest Tenured Manager	William A. Coleman;Walter Nejman;
Longest Manager Tenure	5.25 Years
Fund Size	\$3,133,079,547

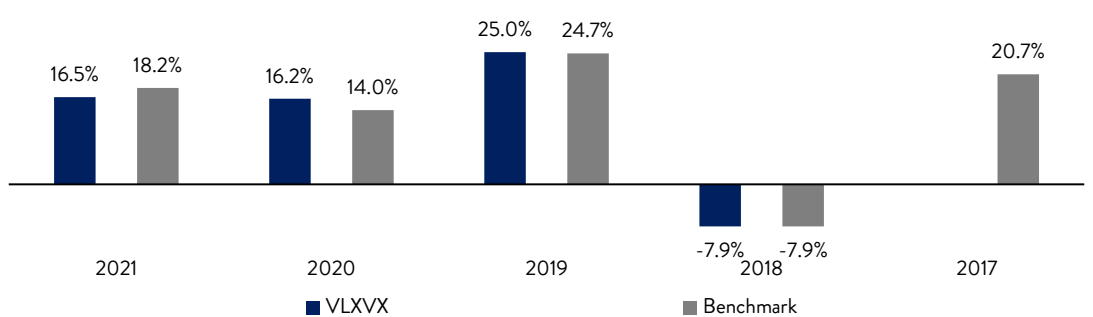
Trailing Performance



Fund Characteristics

	VLXVX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$53,684	-\$2,004
P/E Ratio (TTM)	13.89	-0.10
P/B Ratio (TTM)	2.09	-0.05
Est. Dividend Yield	2.86%	0.05%

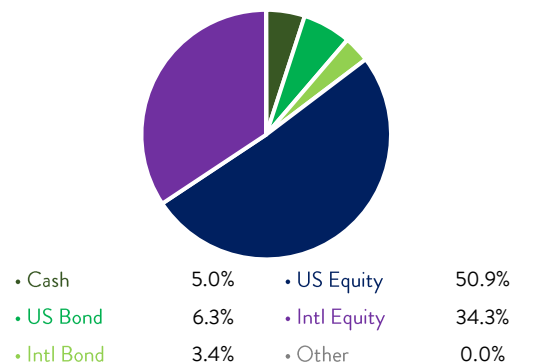
Annual Performance



Sector Allocations

	VLXVX	Category	+/- Category
Materials	4.9%	4.7%	0.1%
Communication Services	6.8%	7.0%	-0.2%
Consumer Discretionary	11.3%	11.2%	0.1%
Consumer Staples	7.4%	7.1%	0.2%
Healthcare	12.9%	12.8%	0.1%
Industrials	10.8%	10.7%	0.2%
Real Estate	3.6%	4.4%	-0.8%
Technology	18.4%	18.7%	-0.3%
Energy	5.1%	5.1%	0.0%
Financial Services	15.7%	15.3%	0.4%
Utilities	3.1%	3.0%	0.1%
Other	0.0%	0.0%	0.0%

Asset Allocation



Morningstar Style Box

	Value	Core	Growth
Large			
Mid			
Small			

Vanguard Target Retirement 2065 Fund
VLXVX

Fund Fact Sheet
Data as of 09/30/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VLXVX	-6.60%	-24.38%	-20.10%	3.38%	4.36%	-
• Benchmark	-6.04%	-23.61%	-18.84%	3.52%	4.50%	-
+/- Benchmark	-0.56%	-0.77%	-1.26%	-0.14%	-0.13%	-
Peer Group Rank	52	21	24	43	50	-

5-Year Quarterly Performance	3Q22	2Q22	1Q22	4Q21
• VLXVX	-6.60%	-14.20%	-5.63%	5.66%
• Benchmark	-6.04%	-14.44%	-4.98%	6.25%
+/- Benchmark	-0.56%	0.24%	-0.65%	-0.59%

Annual Performance	2021	2020	2019	2018	2017	2016
• VLXVX	16.46%	16.17%	24.96%	-7.95%	-	-
• Benchmark	18.17%	13.99%	24.73%	-7.95%	20.75%	-
+/- Benchmark	-1.71%	2.18%	0.23%	0.00%	-	-
Peer Group Rank	66	56	57	1	-	-

5-Year Quarterly Performance	3Q21	2Q21	1Q21	4Q20
• VLXVX	-1.11%	6.61%	4.55%	13.95%
• Benchmark	-0.80%	6.16%	5.61%	14.56%
+/- Benchmark	-0.31%	0.44%	-1.06%	-0.61%

Rolling 5-Year Performance	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021	07/2016 - 06/2021
• VLXVX	4.36%	-	-	-	-	-
• Benchmark	4.50%	6.75%	10.91%	13.30%	12.47%	13.62%
+/- Benchmark	-0.13%	-	-	-	-	-
Peer Group Rank	50	-	-	-	-	-

5-Year Quarterly Performance	3Q20	2Q20	1Q20	4Q19
• VLXVX	7.36%	18.59%	-19.92%	8.00%
• Benchmark	6.61%	17.93%	-20.86%	7.81%
+/- Benchmark	0.74%	0.66%	0.94%	0.19%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	-0.10	0.00	-0.09	0.00	-	-
Beta	0.98	1.00	0.98	1.00	-	-
Standard Deviation	18.01	18.33	15.86	16.14	-	-
Sharpe Ratio	0.24	0.24	0.27	0.28	-	-
Information Ratio	-0.12	-	-0.13	-	-	-
Treynor Ratio	2.80	2.88	3.23	3.30	-	-
Upside Capture Ratio	98.55	100.00	98.03	100.00	-	-
Downside Capture Ratio	98.96	100.00	98.32	100.00	-	-

5-Year Quarterly Performance	3Q19	2Q19	1Q19	4Q18
• VLXVX	0.27%	3.52%	11.47%	-11.77%
• Benchmark	0.45%	3.37%	11.42%	-12.22%
+/- Benchmark	-0.19%	0.16%	0.06%	0.45%

5-Year Quarterly Performance	3Q18	2Q18	1Q18	4Q17
• VLXVX	3.95%	0.97%	-0.60%	5.19%
• Benchmark	3.97%	1.77%	-0.90%	5.47%
+/- Benchmark	-0.03%	-0.80%	0.30%	-0.28%

All data and information on this fact sheet is taken from sources believed to be accurate but is not guaranteed to be accurate, complete, or correct.

Vanguard Target Retirement 2065 Fund (USD)

Morningstar Analyst Rating™
Silver
 02-24-2022

Overall Morningstar Rating™
★★★★
 36 US Fund Target-Date
 2065+

Standard Index
 Morningstar Mod
 Tgt Risk TR USD

Category Index
 Morningstar
 Lifetime Mod 2060
 TR USD

Morningstar Cat
 US Fund Target-Date
 2065+

Performance 09-30-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-19.92	18.59	7.36	13.95	16.17
2021	4.55	6.61	-1.11	5.66	16.46
2022	-5.63	-14.20	-6.60	—	-24.38
Trailing Returns					
	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-20.10	3.38	4.36	—	4.95
Std 09-30-2022	-20.10	—	4.36	—	4.95
Total Return	-20.10	3.38	4.36	—	4.95
+/- Std Index	-1.90	2.24	1.42	—	—
+/- Cat Index	1.08	1.35	0.88	—	—
% Rank Cat	24	55	68	—	—
No. in Cat	160	36	8	—	—
	Subsidized		Unsubsidized		
7-day Yield	—	—	—	—	2.39
30-day SEC Yield 10-26-22	—	—	—	—	2.59

Performance Disclosure
 The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate, thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-662-7447 or visit www.vanguard.com.

Fees and Expenses

Sales Charges	
Front-End Load %	NA
Deferred Load %	NA

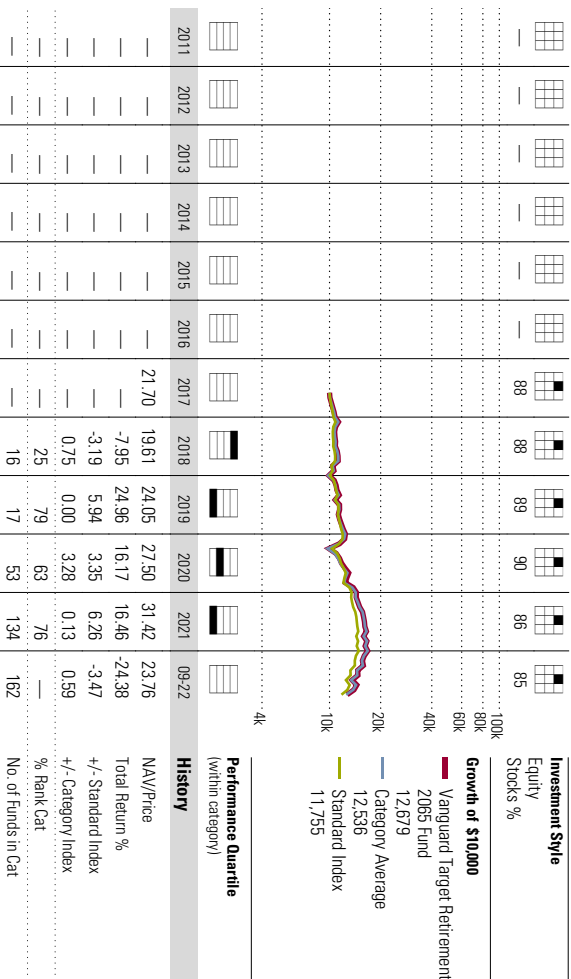
Fund Expenses	
Management Fees %	0.00
12b1 Expense %	NA
Net Expense Ratio %	0.08
Gross Expense Ratio %	0.08

Risk and Return Profile

Morningstar Rating™	3 Yr	36 funds	5 Yr	10 Yr
Morningstar Risk	3★	—	—	—
Morningstar Return	-Avg	—	—	—
	Avg	—	—	—
Standard Deviation	3 Yr	5 Yr	10 Yr	
	18.01	15.86	—	
Mean	3.38	4.36	—	
Sharpe Ratio	0.24	0.27	—	

MPT Statistics	Standard Index	Best Fit Index
		MSD ACMI NR
Alpha	2.46	-0.25
Beta	1.36	0.93
R-Squared	98.78	99.65
12-Month Yield	2.24%	2.24%
Potential Cap Gains Exp	13.18%	—

Operations	
Family:	Vanguard
Manager:	Multiple
Tenure:	5.3 Years
Objective:	Asset Allocation



Portfolio Analysis 09-30-2022				
Asset Allocation %	Net %	Long %	Short %	Net Assets %
Cash	2.97	5.04	2.07	52.80
US Stocks	52.11	52.11	0.00	35.79
Non-US Stocks	34.92	34.92	0.00	6.92
Bonds	9.86	9.86	0.00	3.17
Other/Not Cstfd	0.14	0.14	0.00	
Total	100.00	102.08	2.08	

Equity Style	Value	Brand	Growth	Portfolio Statistics
	Large	Mid	Small	P/E Ratio TTM
				P/C Ratio TTM
				P/B Ratio TTM
				Geo Avg Mkt Cap
				\$mil

Fixed-Income Style	Ltd	Med	Ext	High	Low	Portfolio Statistics
						Avg Eff Maturity
						Avg Eff Duration
						Avg Wtd Coupon
						Avg Wtd Price

Credit Quality Breakdown 09-30-2022

AAA	56.71	Bond %
AA	9.99	
A	17.53	
BBB	15.21	
BB	0.00	
B	0.00	
Below B	0.41	
NR	0.15	

Regional Exposure	Stocks %	Rel Std Index
Americas	64.1	1.04
Greater Europe	17.0	0.96
Greater Asia	18.9	0.93

Base Currency:	USD
Ticker:	VLXVX
SIN:	US92202E6804
Minimum Initial Purchase:	\$1,000

Share Cng	Share	Holdings:	NAV/Price	Total Return %	+/- Standard Index	+/- Category Index	% Rank Cat	No. of Funds in Cat
since 08-2022	Amount	11,269 Total Stocks, 3% Turnover Ratio	27.50	16.46	-3.47	0.59	—	—
		10 mil Vanguard Total Stock Mkt Idx Instl	31.42	23.76				
		76 mil Vanguard Total Intl Stock Index Inv	16.46	-24.38				
		23 mil Vanguard Total Bond Market II Idx	6.26	-3.47				
		4 mil Vanguard Total Intl Bd II Idx Instl	0.13	0.59				

Sector Weightings	Stocks %	Rel Std Index
Cyclical	35.5	0.90
Basic Materials	4.9	0.93
Consumer Cyclical	11.3	1.05
Financial Services	15.7	0.97
Real Estate	3.6	0.51
Sensitive	41.2	1.13
Communication Services	6.8	1.16
Energy	5.1	0.95
Industrials	10.8	0.98
Technology	18.4	1.30
Defensive	23.4	0.97
Consumer Defensive	7.4	0.94
Healthcare	12.9	1.02
Utilities	3.1	0.84

Purchase Constraints:	—
Incept:	07-12-2017
Type:	MF
Total Assets:	\$3,133.08 mil

©2022 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be predated or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.



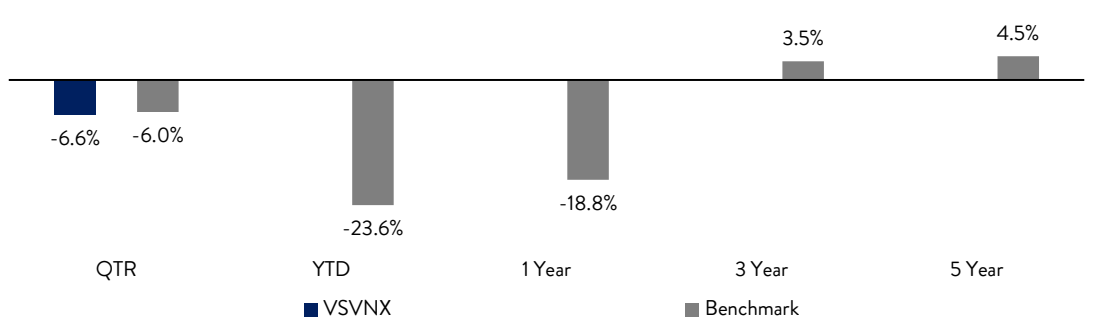
Vanguard Target Retirement 2070 Fund
VSVNX

Fund Fact Sheet
Data as of 09/30/2022

Product Details

Name	Vanguard Target Retirement 2070 Fund
Ticker	VSVNX
Expense Ratio	0.080%
Morningstar Category	US Fund Target-Date 2065+
Benchmark	S&P Target Date 2065+ TR USD
Inception Date	6/28/2022
Longest Tenured Manager	William A. Coleman;Walter Nejman;
Longest Manager Tenure	0.33 Years
Fund Size	\$31,902,929

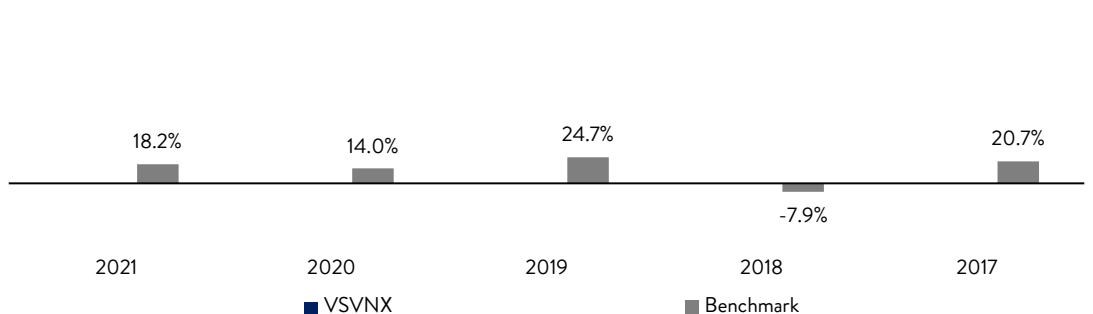
Trailing Performance



Fund Characteristics

	VSVNX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$53,926	-\$1,762
P/E Ratio (TTM)	13.91	-0.08
P/B Ratio (TTM)	2.10	-0.05
Est. Dividend Yield	2.85%	0.04%

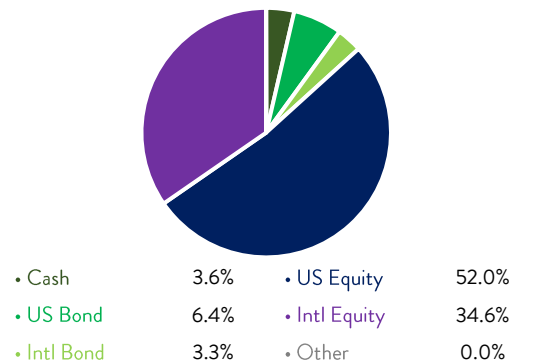
Annual Performance



Sector Allocations

	VSVNX	Category	+/- Category
Materials	4.8%	4.7%	0.1%
Communication Services	6.8%	7.0%	-0.2%
Consumer Discretionary	11.3%	11.2%	0.1%
Consumer Staples	7.4%	7.1%	0.2%
Healthcare	12.9%	12.8%	0.1%
Industrials	10.8%	10.7%	0.2%
Real Estate	3.6%	4.4%	-0.8%
Technology	18.5%	18.7%	-0.3%
Energy	5.1%	5.1%	0.0%
Financial Services	15.7%	15.3%	0.4%
Utilities	3.1%	3.0%	0.1%
Other	0.0%	0.0%	0.0%

Asset Allocation



Morningstar Style Box

	Value	Core	Growth
Large			
Mid			
Small			

Vanguard Target Retirement 2070 Fund
VSVNX

Fund Fact Sheet
Data as of 09/30/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VSVNX	-6.57%	-	-	-	-	-
• Benchmark	-6.04%	-23.61%	-18.84%	3.52%	4.50%	-
+/- Benchmark	-0.52%	-	-	-	-	-
Peer Group Rank	49	-	-	-	-	-

5-Year Quarterly Performance	3Q22	2Q22	1Q22	4Q21
• VSVNX	-6.57%	-	-	-
• Benchmark	-6.04%	-14.44%	-4.98%	6.25%
+/- Benchmark	-0.52%	-	-	-

Annual Performance	2021	2020	2019	2018	2017	2016
• VSVNX	-	-	-	-	-	-
• Benchmark	18.17%	13.99%	24.73%	-7.95%	20.75%	-
+/- Benchmark	-	-	-	-	-	-
Peer Group Rank	-	-	-	-	-	-

5-Year Quarterly Performance	3Q21	2Q21	1Q21	4Q20
• VSVNX	-	-	-	-
• Benchmark	-0.80%	6.16%	5.61%	14.56%
+/- Benchmark	-	-	-	-

Rolling 5-Year Performance	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021	07/2016 - 06/2021
• VSVNX	-	-	-	-	-	-
• Benchmark	4.50%	6.75%	10.91%	13.30%	12.47%	13.62%
+/- Benchmark	-	-	-	-	-	-
Peer Group Rank	-	-	-	-	-	-

5-Year Quarterly Performance	3Q20	2Q20	1Q20	4Q19
• VSVNX	-	-	-	-
• Benchmark	6.61%	17.93%	-20.86%	7.81%
+/- Benchmark	-	-	-	-

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	-	0.00	-	0.00	-	-
Beta	-	1.00	-	1.00	-	-
Standard Deviation	-	18.33	-	16.14	-	-
Sharpe Ratio	-	0.24	-	0.28	-	-
Information Ratio	-	-	-	-	-	-
Treynor Ratio	-	2.88	-	3.30	-	-
Upside Capture Ratio	-	100.00	-	100.00	-	-
Downside Capture Ratio	-	100.00	-	100.00	-	-

5-Year Quarterly Performance	3Q19	2Q19	1Q19	4Q18
• VSVNX	-	-	-	-
• Benchmark	0.45%	3.37%	11.42%	-12.22%
+/- Benchmark	-	-	-	-

5-Year Quarterly Performance	3Q18	2Q18	1Q18	4Q17
• VSVNX	-	-	-	-
• Benchmark	3.97%	1.77%	-0.90%	5.47%
+/- Benchmark	-	-	-	-

All data and information on this fact sheet is taken from sources believed to be accurate but is not guaranteed to be accurate, complete, or correct.

Vanguard Target Retirement 2070 Fund (USD)

Standard Index Morningstar Mod Tgt Risk TR USD
Category Index Morningstar 2070 Fund Lifetime Mod 2060 TR USD
Morningstar Cat US Fund Target-Date 2065+

Performance 09-30-2022					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	—	—	—	—	—
2021	—	—	—	—	—
2022	—	—	-6.57	—	—
Trailing Returns					
1 Yr	3 Yr	5 Yr	10 Yr	Incept	
Load-adj Mthly	—	—	—	-7.50	
Std 09-30-2022	—	—	—	-7.50	
Total Return	—	—	—	-7.50	
+/- Std Index	—	—	—	—	
+/- Cat Index	—	—	—	—	
% Rank Cat	—	—	—	—	
No. in Cat	—	—	—	—	
7-day Yield	Subsidized				
30-day SEC Yield	Unsubsidized				

Performance Disclosure
 The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate, thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-662-7447 or visit www.vanguard.com.

Sales Charges		NA
Front-End Load %		NA
Deferred Load %		NA
Fund Expenses		
Management Fees %		0.00
12b1 Expense %		NA
Net Expense Ratio %		0.08
Gross Expense Ratio %		0.08
Risk and Return Profile		
Morningstar Rating™	3 Yr 36 funds	5 Yr 8 funds
Morningstar Risk	—	—
Morningstar Return	—	—
Standard Deviation	3 Yr	5 Yr
Mean	—	—
Sharpe Ratio	—	—
MPT Statistics	Standard Index	Best Ft Index
Alpha	—	—
Beta	—	—
R-Squared	—	—
12-Month Yield	—	—
Potential Cap Gains Exp	—	—

Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	09-22	Investment Style
Asset Allocation %													NAV/Price
Cash	1.23	3.65	2.42	—	—	—	—	—	—	—	—	18.50	Total Return %
US Stocks	53.42	53.42	0.00	—	—	—	—	—	—	—	—	—	+/- Standard Index
Non-US Stocks	35.36	35.36	0.00	—	—	—	—	—	—	—	—	—	+/- Category Index
Bonds	9.85	9.85	0.00	—	—	—	—	—	—	—	—	—	% Rank Cat
Other/Not Clsfd	0.14	0.14	0.00	—	—	—	—	—	—	—	—	—	No. of Funds in Cat
Total	100.00	102.43	2.43	—	—	—	—	—	—	—	—	—	
Portfolio Analysis 09-30-2022 Net % Long % Short % Cash 1.23 3.65 2.42 US Stocks 53.42 53.42 0.00 Non-US Stocks 35.36 35.36 0.00 Bonds 9.85 9.85 0.00 Other/Not Clsfd 0.14 0.14 0.00 Total 100.00 102.43 2.43													
Equity Style Value Small Growth Large Mid Small P/E Ratio TTM 13.9 1.06 0.99 P/C Ratio TTM 10.5 1.03 0.99 P/B Ratio TTM 2.1 1.09 0.98 Geo Avg Mkt Cap \$3926 1.49 0.97 \$mil													
Fixed-Income Style Ltd Mid Ext Avg Eff Maturity 8.90 Avg Eff Duration 6.83 Avg Wtd Coupon — Avg Wtd Price —													
Credit Quality Breakdown 09-30-2022 AAA 57.39 Bond % AA 9.66 A 17.27 BBB 15.15 BB 0.00 B 0.00 Below B 0.39 NR 0.15													
Regional Exposure Americas 64.4 Stocks % Greater Europe 16.9 Rel Std Index 1.04 Greater Asia 18.8 0.95 0.92													

Share Cng	Share Holdings	Net Assets
since	Amount	%
08-2022	11,269 Total Stocks , 15,435 Total Fixed-Income, — Turnover Ratio	54.13
⊖	104,990 Vanguard Total Stock Mkt Idx Instl	36.23
⊕	782,743 Vanguard Total Intl Stock Index Inv	7.06
⊖	241,720 Vanguard Total Bond Market II Idx	3.02
⊖	37,558 Vanguard Total Intl Bd II Idx Instl	
Sector Weightings		
Cyclical	Stocks %	Rel Std Index
Basic Materials	4.8	0.93
Consumer Cyclical	11.3	1.05
Financial Services	15.7	0.97
Real Estate	3.6	0.51
Sensitive	41.2	1.13
Communication Services	6.8	1.16
Energy	5.1	0.95
Industrials	10.8	0.98
Technology	18.5	1.31
Defensive	23.4	0.97
Consumer Defensive	7.4	0.94
Healthcare	12.9	1.02
Utilities	3.1	0.84

Operations
 Family: Vanguard
 Manager: Multiple
 Tenure: 0.3 Year
 Objective: Asset Allocation

Base Currency: USD
 Ticker: VSVNX
 ISIN: US92202E6648
 Minimum Initial Purchase: \$1,000

Purchase Constraints: —
 Incept: 06-28-2022
 Type: M/F
 Total Assets: \$31,90 mil

©2022 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc., including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be precatred or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.



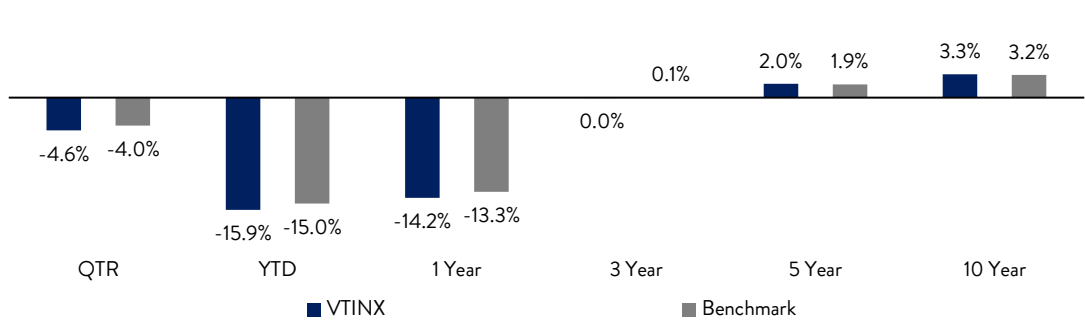
Vanguard Target Retirement Income Fund
VTINX

Fund Fact Sheet
Data as of 09/30/2022

Product Details

Name	Vanguard Target Retirement Income Fund
Ticker	VTINX
Expense Ratio	0.080%
Morningstar Category	US Fund Target-Date Retirement
Benchmark	S&P Target Date Retirement Income TR USD
Inception Date	10/27/2003
Longest Tenured Manager	William A. Coleman;Walter Nejman;
Longest Manager Tenure	9.67 Years
Fund Size	\$36,518,218,140

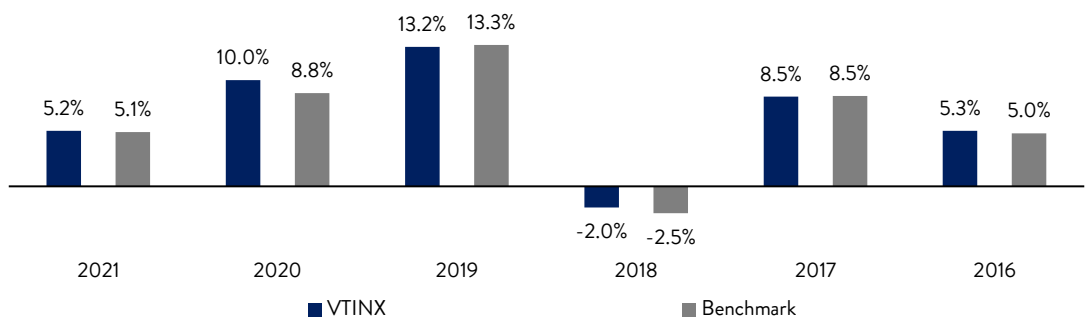
Trailing Performance



Fund Characteristics

	VTINX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$53,654	-\$1,203
P/E Ratio (TTM)	13.89	-0.11
P/B Ratio (TTM)	2.09	0.00
Est. Dividend Yield	2.86%	-0.16%

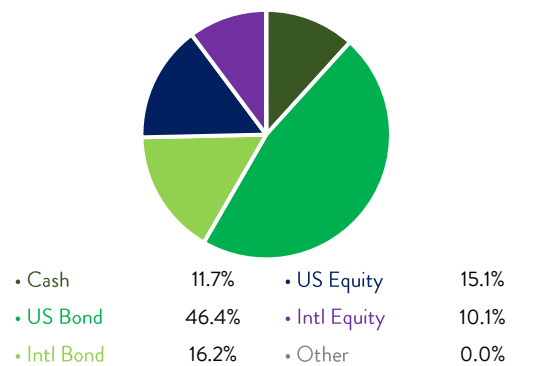
Annual Performance



Sector Allocations

	VTINX	Category	+/- Category
Materials	4.9%	4.2%	0.7%
Communication Services	6.8%	6.6%	0.2%
Consumer Discretionary	11.3%	10.2%	1.0%
Consumer Staples	7.4%	6.9%	0.5%
Healthcare	12.9%	12.4%	0.5%
Industrials	10.8%	9.9%	1.0%
Real Estate	3.6%	8.8%	-5.1%
Technology	18.4%	18.0%	0.4%
Energy	5.1%	5.0%	0.1%
Financial Services	15.7%	14.9%	0.9%
Utilities	3.1%	3.3%	-0.2%
Other	0.0%	0.0%	0.0%

Asset Allocation



Morningstar Style Box

	Value	Core	Growth
Large			
Mid			
Small			

Vanguard Target Retirement Income Fund
VTINX

Fund Fact Sheet
Data as of 09/30/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VTINX	-4.64%	-15.89%	-14.19%	-0.02%	1.96%	3.31%
• Benchmark	-3.97%	-15.00%	-13.31%	0.06%	1.88%	3.23%
+/- Benchmark	-0.67%	-0.89%	-0.88%	-0.08%	0.08%	0.08%
Peer Group Rank	51	45	45	25	23	28

5-Year Quarterly Performance	3Q22	2Q22	1Q22	4Q21
• VTINX	-4.64%	-7.37%	-4.77%	2.01%
• Benchmark	-3.97%	-7.29%	-4.52%	1.99%
+/- Benchmark	-0.67%	-0.09%	-0.25%	0.03%

Annual Performance	2021	2020	2019	2018	2017	2016
• VTINX	5.25%	10.02%	13.16%	-1.99%	8.47%	5.25%
• Benchmark	5.11%	8.81%	13.33%	-2.54%	8.54%	5.01%
+/- Benchmark	0.14%	1.21%	-0.17%	0.55%	-0.07%	0.24%
Peer Group Rank	63	30	48	18	52	31

5-Year Quarterly Performance	3Q21	2Q21	1Q21	4Q20
• VTINX	-0.13%	3.23%	0.08%	5.15%
• Benchmark	-0.03%	3.06%	0.03%	4.93%
+/- Benchmark	-0.11%	0.17%	0.04%	0.22%

Rolling 5-Year Performance	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021	07/2016 - 06/2021
• VTINX	1.96%	3.34%	5.30%	6.85%	6.22%	6.65%
• Benchmark	1.88%	3.13%	5.08%	6.52%	5.94%	6.29%
+/- Benchmark	0.08%	0.21%	0.23%	0.34%	0.28%	0.36%
Peer Group Rank	23	29	42	49	45	46

5-Year Quarterly Performance	3Q20	2Q20	1Q20	4Q19
• VTINX	3.12%	7.84%	-5.91%	2.60%
• Benchmark	2.73%	8.18%	-6.69%	3.05%
+/- Benchmark	0.39%	-0.34%	0.77%	-0.45%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	-0.07	0.00	0.09	0.00	0.09	0.00
Beta	1.01	1.00	0.99	1.00	0.99	1.00
Standard Deviation	8.10	7.96	6.82	6.82	5.40	5.40
Sharpe Ratio	-0.04	-0.03	0.14	0.13	0.50	0.48
Information Ratio	-0.10	-	0.10	-	0.13	-
Treynor Ratio	-0.65	-0.57	0.77	0.69	2.62	2.52
Upside Capture Ratio	101.67	100.00	99.14	100.00	99.48	100.00
Downside Capture Ratio	102.44	100.00	97.98	100.00	97.77	100.00

5-Year Quarterly Performance	3Q19	2Q19	1Q19	4Q18
• VTINX	1.52%	2.97%	5.50%	-3.20%
• Benchmark	1.32%	2.82%	5.57%	-3.92%
+/- Benchmark	0.21%	0.15%	-0.07%	0.72%

5-Year Quarterly Performance	3Q18	2Q18	1Q18	4Q17
• VTINX	1.33%	0.43%	-0.50%	2.03%
• Benchmark	1.55%	0.70%	-0.80%	2.24%
+/- Benchmark	-0.22%	-0.27%	0.30%	-0.20%

All data and information on this fact sheet is taken from sources believed to be accurate but is not guaranteed to be accurate, complete, or correct.

Vanguard Target Retirement Income Fund (USD)

Morningstar Analyst Rating™
Silver
 02-24-2022

Overall Morningstar Rating™
 ★★★★★
 144 US Fund Target-Date Retirement

Standard Index
 Morningstar Mod Tgt Risk TR USD

Category Index
 Morningstar Lifetime Mod Incm TR USD

Morningstar Cat
 US Fund Target-Date Retirement

Performance 09-30-2022

Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2020	-5.91	7.84	3.12	5.15	10.02
2021	0.08	3.23	-0.13	2.01	5.25
2022	-4.77	-7.37	-4.64	—	-15.89

Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-14.19	-0.02	1.96	3.31	4.43
Std 09-30-2022	-14.19	—	1.96	3.31	4.43
Total Return	-14.19	-0.02	1.96	3.31	4.43
+/- Std Index	4.01	-1.16	-0.98	-1.85	—
+/- Cat Index	0.08	-0.87	-0.45	-0.03	—
% Rank Cat	49	31	27	36	—
No. in Cat	160	144	121	80	—

7-day Yield — Subsidized
 30-day SEC Yield 10-26-22 2.55 2.76

Performance Disclosure

The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-662-7447 or visit www.vanguard.com.

Fees and Expenses

Sales Charges
Front-End Load % NA
Deferred Load % NA

Fund Expenses
 Management Fees % 0.00
 12b1 Expense % NA
Net Expense Ratio % 0.08
Gross Expense Ratio % 0.08

Risk and Return Profile

	3 Yr	5 Yr	10 Yr
Morningstar Rating™	4★	4★	4★
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	+Avg	+Avg	Avg

Standard Deviation 3 Yr 8.10 5 Yr 6.82 10 Yr 5.40
 Mean -0.02 1.96 3.31
 Sharpe Ratio -0.04 0.14 0.50

MPT Statistics Standard Index Best Fit Index
 Morningstar US Mod Con Tgt Alloc NR USD

Alpha -1.15
 Beta 0.60 0.83
 R-Squared 94.81 98.82
 12-Month Yield 2.97%
 Potential Cap Gains Exp 27.65%

Operations

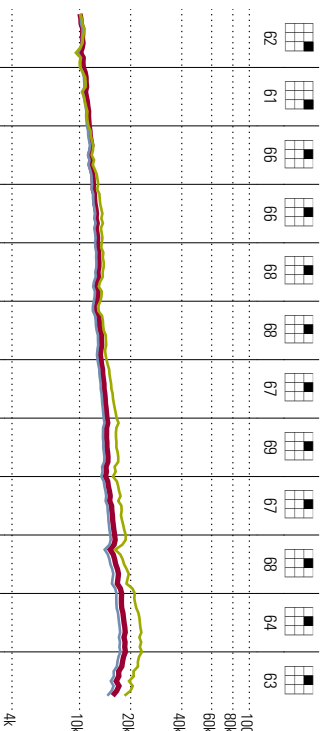
Family: Vanguard
Manager: Multiple
Tenure: 9.7 Years
Objective: Asset Allocation

Base Currency: USD
Ticker: VTINX
SIN: USS92202E1029

Minimum Initial Purchase: \$1,000

Purchase Constraints: —
Incept: 10-27-2003
Type: MF

Total Assets: \$36,518.22 mil



Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	09-22
NAV/Price	11.53	12.19	12.50	12.91	12.45	12.81	13.55	12.75	14.05	14.93	14.46	12.00
Total Return %	5.25	8.23	5.87	5.54	-0.17	5.25	8.47	-1.99	13.16	10.02	5.25	-15.89
+/- Standard Index	4.66	-3.82	-8.44	0.65	1.62	-3.32	-6.18	2.77	-5.87	-2.80	-4.94	5.03
+/- Category Index	1.12	-0.56	-0.58	1.45	1.12	-0.73	-0.07	0.21	-0.11	-0.54	-2.37	0.60
% Rank Cat	9	67	56	19	7	41	62	21	49	36	65	—
No. of Funds in Cat	260	281	293	272	172	171	175	187	183	168	167	161

Performance Quartile

(within category)

History

NAV/Price 12.00
 Total Return % -15.89
 +/- Standard Index 5.03
 +/- Category Index 0.60
 % Rank Cat —
 No. of Funds in Cat 161

Portfolio Analysis 09-30-2022

Asset Allocation %

Asset Class	Net %	Long %	Short %
Cash	2.38	12.86	10.48
US Stocks	16.68	16.68	0.00
Non-US Stocks	11.20	11.20	0.00
Bonds	69.14	69.16	0.02
Other/Not Cstfd	0.60	0.60	0.00
Total	100.00	110.50	10.50

Equity Style

Value	Brand	Growth	Port	Rel	Index	Rel	Cat
Large	High	Med	13.9	1.06	0.99	5.76	1.84
Med	High	Med	10.5	1.03	1.02	1.84	1.84
Small	High	Low	2.1	1.09	1.00	89.69	89.69

Fixed-Income Style

Value	Brand	Growth	Port	Rel	Index	Rel	Cat
High	High	Med	7.32	7.32	7.32	5.76	5.76
Med	High	Med	5.76	5.76	5.76	1.84	1.84
Low	High	Low	1.84	1.84	1.84	89.69	89.69

Credit Quality Breakdown 09-30-2022

AAA	AA	A	BBB	BB	B	Below B	NR
67.70	7.37	13.09	11.43	0.00	0.00	0.30	0.12

Regional Exposure

Region	Stocks %	Rel Std Index
Americas	64.1	1.04
Greater Europe	17.0	0.96
Greater Asia	18.9	0.93

Share Cng

Share since	Share Amount	Holdings: 10,108 Total Stocks, 18,875 Total Fixed-Income, 6% Turnover Ratio	Net Assets %
08-2022	1,458 mil	Vanguard Total Bond Market II Idx	37.05
⊖	263 mil	Vanguard Shrt-Term Intl-Prot Sec I	17.06
⊖	383 mil	Vanguard Total Stock Mkt Idx Inst	16.90
⊖	232 mil	Vanguard Total Intl Bd II Idx Intl	16.25
⊕	285 mil	Vanguard Total Intl Stock Index Inv	11.47

Sector Weightings

Sector	Stocks %	Rel Std Index
Cyclical	35.5	0.90
Basic Materials	4.9	0.93
Consumer Cyclical	11.3	1.05
Financial Services	15.7	0.97
Real Estate	3.6	0.51
Sensitive	41.2	1.13
Communication Services	6.8	1.16
Energy	5.1	0.95
Industrials	10.8	0.98
Technology	18.4	1.30
Defensive	23.4	0.97
Consumer Defensive	7.4	0.94
Healthcare	12.9	1.02
Utilities	3.1	0.84

©2022 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be presented or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.

The Voya Fixed Account is available through a group annuity or other type of contract issued by Voya Retirement Insurance and Annuity Company ("VRIAAC" or the "Company"). The Voya Fixed Account is an obligation of VRIAAC's general account which supports all of the Company's insurance and annuity commitments. All guarantees are based on the financial strength and claims-paying ability of VRIAAC, which is solely responsible for all obligations under its contracts.

Asset Class: Stability of Principal

Important Information

This information should be read in conjunction with your contract prospectus, contract prospectus summary or disclosure booklet, as applicable. Please read them carefully before investing.

Voya Retirement Insurance and Annuity Company

One Orange Way
Windsor, CT 06095-4774
www.voyaretirementplans.com

Investment Objective

Stability of principal is the primary objective of this investment option. The Voya Fixed Account guarantees minimum rates of interest and may credit interest that exceeds the guaranteed minimum rates. Daily credited interest becomes part of principal and the investment increases through compound interest. All amounts invested by your plan in the Voya Fixed Account receive the same credited rate. This is known as a portfolio method of interest rate crediting.

Key Features

The Voya Fixed Account is intended to be a long-term investment for participants seeking stability of principal. The assets supporting it are invested by VRIAAC with this goal in mind. Therefore, VRIAAC may impose restrictions on transfers and withdrawals involving the Voya Fixed Account if Competing Investment Options (as defined below) are offered. These restrictions help VRIAAC to provide stable credited interest rates which historically have not varied significantly from month to month despite the general market's volatility in new money interest rates.

Restrictions on Transfers from the Voya Fixed Account

Transfers from the Voya Fixed Account will be subject to the equity wash restrictions shown below.

Equity Wash Restrictions on Transfers

Transfers between investment options are allowed at any time, subject to the following provisions:

- (a) Direct transfers from the Voya Fixed Account cannot be made to a Competing Investment Option;
- (b) A transfer from the Voya Fixed Account to other investment options under the contract cannot be made if a transfer to a Competing Investment Option has taken place within 90 days;
- (c) A transfer from the Voya Fixed Account to other investment options under the contract cannot be made if a non-benefit withdrawal from a non-Competing Investment Option has taken place within 90 days; and
- (d) A transfer from a non-Competing Investment Option to a Competing Investment Option cannot be made if a transfer from the Voya Fixed Account has taken place within 90 days.

Competing Investment Option

As used throughout this document, a Competing Investment Option is defined as any investment option that:

- (a) Provides a direct or indirect investment performance guarantee;
- (b) Is, or may be, invested primarily in assets other than common or preferred stock;
- (c) Is, or may be, invested primarily in financial vehicles (such as mutual funds, trusts or insurance company contracts) which are invested in assets other than common or preferred stock;
- (d) Is available through an account with a brokerage firm designated by the Company and made available by the Contract Holder (as defined in the contract) as an additional investment under the plan;
- (e) Is a self-directed brokerage arrangement;
- (f) Is any fund with similar characteristics to the above as reasonably determined by the Company; or
- (g) Is any fund with a targeted duration of less than three years (e.g. money market funds).

For more information regarding Competing Investment Options in your plan, please contact the Customer Contact Center at (800) 584-6001.

Requests for Full Withdrawals

If the contract is surrendered completely, or if you surrender your account to transfer to another carrier within the plan, a Market Value Adjustment ("MVA") may be applied to the Voya Fixed Account portion of your account (or the Contract Holder may elect to have the surrendered amount paid out over a period of 60 months, with interest paid). This MVA would not apply to any distribution made to you as a benefit payment. For contracts with a withdrawal fee schedule, the withdrawal may be subject to a withdrawal fee. Please refer to your contract prospectus, contract prospectus summary or disclosure booklet, as applicable, for more information.

Interest Rate Structure

The Voya Fixed Account guarantees principal and a guaranteed minimum interest rate ("GMIR") for the life of the contract, as well as featuring two declared interest rates: a current rate, determined at least monthly, and a guaranteed minimum floor rate declared for a defined period - currently one calendar year. The guaranteed minimum floor rate may change after a defined period, but it will never be lower than the GMIR that applies for the life of the contract. The current rate, the guaranteed minimum floor rate and the GMIR are expressed as annual effective yields. Taking the effect of compounding into account, the interest credited to your account daily yields the then current credited rate.

VRIAAC's determination of credited interest rates reflects a number of factors, which may include mortality and expense risks, interest rate guarantees, the investment income earned on invested assets and the amortization of any capital gains and/or losses realized on the sale of invested assets. Under this option, VRIAAC assumes the risk of investment gain or loss by guaranteeing the principal amount you allocate to this option and promising a minimum interest rate during the accumulation period and also throughout the annuity payout period, if applicable.

Currently, the guaranteed minimum floor rate equals the GMIR. The current rate to be credited under a contract may be higher than the GMIR/guaranteed minimum floor rate and may be changed at any time, except that VRIAAC will not apply a decrease to the current rate following a rate change initiated solely by us prior to the last day of the three-month period measured from the first day of the

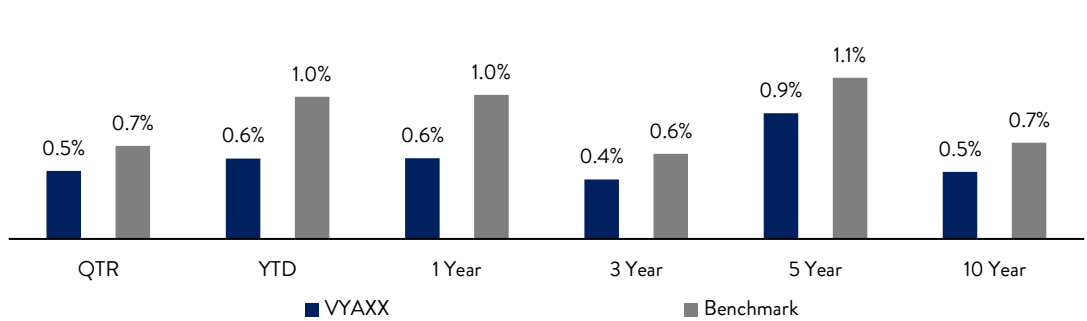
month in which such change was effective. The current rate for a plan's initial investment in the Voya Fixed Account may be in effect for less than a full three-month period.

Any insurance products, annuities and funding agreements that you may have purchased are issued by Voya Retirement Insurance and Annuity Company ("VRIAC"). VRIAC is solely responsible for meeting its obligations. Plan administrative services provided by VRIAC or Voya Institutional Plan Services, LLC ("VIPS"). Neither VRIAC nor VIPS engage in the sale or solicitation of securities. If custodial or trust agreements are part of this arrangement, they may be provided by Voya Institutional Trust Company. All companies are members of the Voya® family of companies. Securities distributed by Voya Financial Partners, LLC (member SIPC) or other broker-dealers with which it has a selling agreement. All products or services may not be available in all states.

Product Details

Name	Voya Government Money Market A
Ticker	VYAXX
Expense Ratio	0.400%
Morningstar Category	US Fund Money Market - Taxable
Benchmark	USTREAS Stat US T-Bill 90 Day TR
Inception Date	4/15/1994
Longest Tenured Manager	David S. Yealy
Longest Manager Tenure	17.92 Years
Fund Size	\$231,963,525

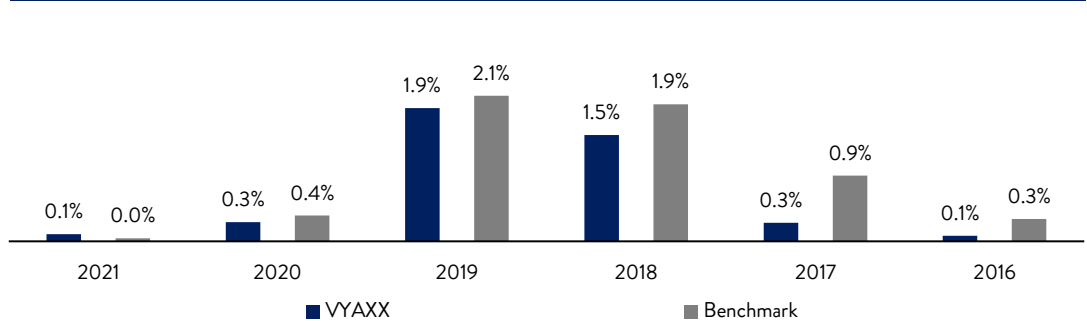
Trailing Performance



Fund Characteristics

	VYAXX	+/- Category
% Assets in Top 10 Holdings	100.00%	94.41%
Average Eff Duration	-	-
Average Eff Maturity	-	-
Average Credit Quality	-	AAA (Cat Avg.)
Average Coupon	-	-

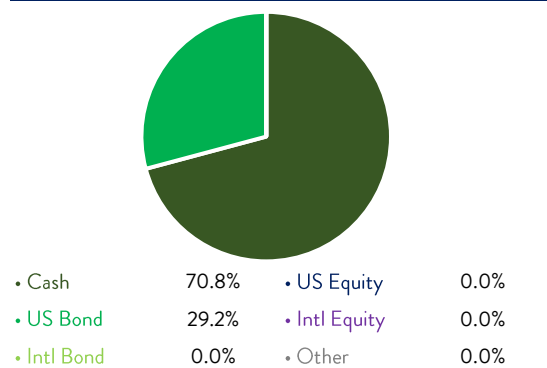
Annual Performance



Sector Allocations

	VYAXX	Category	+/- Category
Government	29.2%	17.1%	12.0%
Municipal	0.0%	0.3%	-0.3%
Bank Loan	0.0%	0.0%	0.0%
Convertible	0.0%	0.2%	-0.2%
Corporate Bond	0.0%	6.4%	-6.4%
Preferred Stock	0.0%	0.0%	0.0%
Agency MBS	0.0%	0.0%	0.0%
Non-Agency RMBS	0.0%	0.0%	0.0%
Commercial MBS	0.0%	0.0%	0.0%
Asset-Backed	0.0%	0.0%	0.0%
Cash & Equivalents	70.8%	76.0%	-5.1%
Other	0.0%	0.0%	0.0%

Asset Allocation



Morningstar Style Box

	Low IR Sens	Mod IR Sens	Ext IR Sens
High Qual			
Med Qual			
Low Qual			

Voya Government Money Market A

VYAXX

Fund Fact Sheet

Data as of 09/30/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VYAXX	0.48%	0.57%	0.57%	0.42%	0.89%	0.47%
• Benchmark	0.66%	1.01%	1.02%	0.60%	1.14%	0.68%
+/- Benchmark	-0.18%	-0.44%	-0.45%	-0.18%	-0.25%	-0.21%
Peer Group Rank	19	39	38	39	44	46

5-Year Quarterly Performance	3Q22	2Q22	1Q22	4Q21
• VYAXX	0.48%	0.09%	0.00%	0.00%
• Benchmark	0.66%	0.27%	0.08%	0.01%
+/- Benchmark	-0.18%	-0.18%	-0.08%	-0.01%

Annual Performance	2021	2020	2019	2018	2017	2016
• VYAXX	0.10%	0.27%	1.88%	1.51%	0.26%	0.08%
• Benchmark	0.04%	0.36%	2.06%	1.94%	0.93%	0.32%
+/- Benchmark	0.06%	-0.09%	-0.18%	-0.43%	-0.67%	-0.24%
Peer Group Rank	2	54	46	46	79	39

5-Year Quarterly Performance	3Q21	2Q21	1Q21	4Q20
• VYAXX	0.08%	0.00%	0.01%	0.00%
• Benchmark	0.01%	0.01%	0.01%	0.02%
+/- Benchmark	0.07%	0.00%	0.00%	-0.02%

Rolling 5-Year Performance	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021	07/2016 - 06/2021
• VYAXX	0.89%	0.81%	0.80%	0.80%	0.80%	0.80%
• Benchmark	1.14%	1.06%	1.05%	1.06%	1.08%	1.10%
+/- Benchmark	-0.25%	-0.25%	-0.25%	-0.26%	-0.28%	-0.29%
Peer Group Rank	44	48	51	52	52	52

5-Year Quarterly Performance	3Q20	2Q20	1Q20	4Q19
• VYAXX	0.00%	0.02%	0.25%	0.32%
• Benchmark	0.03%	0.04%	0.28%	0.39%
+/- Benchmark	-0.03%	-0.02%	-0.03%	-0.07%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	-0.03	0.00	-0.07	0.00	-0.09	0.00
Beta	5.56	1.00	4.36	1.00	4.49	1.00
Standard Deviation	0.19	0.24	0.24	0.28	0.21	0.24
Sharpe Ratio	-2.09	-2.51	-3.25	-4.15	-2.72	-2.75
Information Ratio	-1.94	-	-2.93	-	-2.55	-
Treynor Ratio	-0.04	-0.03	-0.07	-0.05	-0.05	-0.03
Upside Capture Ratio	70.20	100.00	78.09	100.00	69.76	100.00
Downside Capture Ratio	-	-	-	-	-	-

5-Year Quarterly Performance	3Q19	2Q19	1Q19	4Q18
• VYAXX	0.50%	0.53%	0.52%	0.47%
• Benchmark	0.49%	0.57%	0.59%	0.57%
+/- Benchmark	0.01%	-0.04%	-0.07%	-0.10%

5-Year Quarterly Performance	3Q18	2Q18	1Q18	4Q17
• VYAXX	0.40%	0.35%	0.27%	0.13%
• Benchmark	0.51%	0.46%	0.39%	0.30%
+/- Benchmark	-0.10%	-0.11%	-0.12%	-0.17%

All data and information on this fact sheet is taken from sources believed to be accurate but is not guaranteed to be accurate, complete, or correct.

Standardized and Tax Adjusted Returns Disclosure Statement

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end please visit <http://advisor.morningstar.com/familyinfo.asp>.

Standardized Returns assume reinvestment of dividends and capital gains. They depict performance without adjusting for the effects of taxation, but are adjusted to reflect sales charges and ongoing fund expenses.

If adjusted for taxation, the performance quoted would be significantly reduced. For variable annuities, additional expenses will be taken into account, including M&E risk charges, fund-level expenses such as management fees and operating fees, contract-level administration fees, and charges such as surrender, contract, and sales charges. The maximum redemption fee is the maximum amount a fund may charge if redeemed in a specific time period after the fund's purchase.

After-tax returns are calculated using the highest individual federal marginal income tax rates, and do not reflect the impact of state and local taxes. Actual after-tax returns depend on the investor's tax situation and may differ from those shown. The after-tax returns shown are not relevant to investors who hold their fund shares through tax-deferred arrangements such as 401(k) plans or an IRA. After-tax returns exclude the effects of either the alternative minimum tax or phase-out of certain tax credits. Any taxes due are as of the time the distributions are made, and the taxable amount and tax character of each distribution are as specified by the fund on the dividend declaration date. Due to foreign tax credits or realized capital losses, after-tax returns may be greater than before-tax returns. After-tax returns for exchange-traded funds are based on net asset value.

Money Market Fund Disclosures

If money market fund(s) are included in the Standardized Returns table below, each money market fund's name will be followed by a superscripted letter that links it to the applicable disclosure below:

Institutional Money Market Funds (designated by an "S"):

You could lose money by investing in the fund. Because the share price of the fund will fluctuate, when you sell your shares they may be worth more or less than what you originally paid for them. The fund may impose a fee upon sale of your shares or may temporarily suspend your ability to sell shares if the fund's liquidity falls below required minimums because of market conditions or other factors. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

Government Money Market Funds that have chosen to rely on the ability to impose liquidity fees and suspend redemptions (designated by an "L") and

You could lose money by investing in the fund. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. The fund may impose a fee upon sale of your shares or may temporarily suspend your ability to sell shares if the fund's liquidity falls below required minimums because of market conditions or other factors. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

Government Money Market Funds that have chosen not to rely on the ability to impose liquidity fees and suspend redemptions (designated by an "N"):

You could lose money by investing in the fund. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

Annualized returns 09-30-2022												
Standardized Returns (%)	7-day Yield		1Yr	5Yr	10Yr	Since Inception		Max Front Load %	Max Back Load %	Net Exp Ratio %	Gross Exp Ratio %	Max Redemption %
	Subsidized as of date	Unsubsidized as of date				Inception	Inception Date					
Baron Growth Instl	—	—	-26.12	9.81	11.31	13.10	05-29-2009	NA	NA	1.03	1.03	NA
Fidelity@ 500 Index	—	—	-15.49	9.23	11.69	11.13	05-04-2011	NA	NA	0.02	0.02	NA
Fidelity@ Inerm Trs Bd Index	—	—	-13.71	—	—	-0.21	10-04-2017	NA	NA	0.03	0.03	NA
Fidelity@ Mid Cap Index	—	—	-19.38	6.48	10.29	10.99	09-08-2011	NA	NA	0.03	0.03	NA
Fidelity@ Small Cap Index	—	—	-23.39	3.65	8.71	9.83	09-08-2011	NA	NA	0.03	0.03	NA
Fidelity@ Total International Index	—	—	-25.59	-0.83	—	2.55	06-07-2016	NA	NA	0.06	0.06	NA
Fidelity@ US Bond Index	—	—	-14.57	-0.28	0.85	1.60	05-04-2011	NA	NA	0.03	0.03	NA

©2022 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analysis and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analysis or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be preceded or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.

Annualized returns 09-30-2022												
Standardized Returns (%)	7-day Yield		1Yr	5Yr	10Yr	Since Inception	Inception Date	Max Front Load %	Max Back Load %	Net Exp Ratio %	Gross Exp Ratio %	Max Redemption %
	Subsidized as of date	Unsubsidized as of date										
Hartford Core Equity R6	—	—	-16.18	9.78	—	9.50	03-31-2015	NA	NA	0.36	0.36	NA
Hartford Schroders US Small Cap Opps SDR	—	—	-19.03	4.30	—	7.80	09-28-2015	NA	NA	0.95 ¹	0.99	NA
MFS Intl Diversification R6	—	—	-25.34	—	—	1.35	10-02-2017	NA	NA	0.72 ²	0.73	NA
Sterling Capital Total Return Bond R6	—	—	-14.72	—	—	0.41	02-01-2018	NA	NA	0.35 ³	0.46	NA
Vanguard Target Retirement 2020 Fund	—	—	-15.83	2.91	—	5.46	06-07-2006	NA	NA	0.08	0.08	NA
Vanguard Target Retirement 2025 Fund	—	—	-17.53	3.15	—	5.88	10-27-2003	NA	NA	0.08	0.08	NA
Vanguard Target Retirement 2030 Fund	—	—	-18.42	3.43	—	6.46	06-07-2006	NA	NA	0.08	0.08	NA
Vanguard Target Retirement 2035 Fund	—	—	-18.87	3.78	—	6.99	10-27-2003	NA	NA	0.08	0.08	NA
Vanguard Target Retirement 2040 Fund	—	—	-19.42	4.11	—	7.40	06-07-2006	NA	NA	0.08	0.08	NA
Vanguard Target Retirement 2045 Fund	—	—	-19.93	4.42	—	7.61	10-27-2003	NA	NA	0.08	0.08	NA
Vanguard Target Retirement 2050 Fund	—	—	-20.18	4.39	—	7.60	06-07-2006	NA	NA	0.08	0.08	NA
Vanguard Target Retirement 2055 Fund	—	—	-20.17	4.38	—	7.58	08-18-2010	NA	NA	0.08	0.08	NA
Vanguard Target Retirement 2060 Fund	—	—	-20.16	4.38	—	7.58	01-19-2012	NA	NA	0.08	0.08	NA
Vanguard Target Retirement 2065 Fund	—	—	-20.10	4.36	—	4.95	07-12-2017	NA	NA	0.08	0.08	NA
Vanguard Target Retirement 2070 Fund	—	—	—	—	—	-7.50	06-28-2022	NA	NA	0.08	0.08	NA
Vanguard Target Retirement Income Fund	—	—	-14.19	1.96	—	3.31	10-27-2003	NA	NA	0.08	0.08	NA
Bloomberg US Agg Bond TR USD			-14.60	-0.27	0.89	—	01-03-1980	—	01-03-1989	—	—	NA
Bloomberg US Government TR USD			-12.81	-0.20	0.53	—	01-03-1989	—	12-31-1998	—	—	NA
Bloomberg US Universal TR USD			-14.92	-0.18	1.17	—	12-31-1998	—	06-18-2013	—	—	NA
Morningstar Gbl Allocation TR USD			-20.42	2.12	—	—	06-18-2013	—	02-18-2009	—	—	NA
Morningstar Lifetime Mod 2020 TR USD			-18.89	2.47	4.62	—	02-18-2009	—	02-18-2009	—	—	NA
Morningstar Lifetime Mod 2025 TR USD			-19.88	2.63	5.22	—	02-18-2009	—	02-18-2009	—	—	NA
Morningstar Lifetime Mod 2030 TR USD			-20.52	2.92	5.89	—	02-18-2009	—	02-18-2009	—	—	NA
Morningstar Lifetime Mod 2035 TR USD			-20.74	3.27	6.46	—	02-18-2009	—	06-23-2014	—	—	NA
Morningstar Lifetime Mod 2040 TR USD			-20.78	3.56	6.79	—	02-18-2009	—	02-18-2009	—	—	NA
Morningstar Lifetime Mod 2045 TR USD			-20.83	3.68	6.89	—	02-18-2009	—	02-18-2009	—	—	NA
Morningstar Lifetime Mod 2050 TR USD			-20.91	3.67	6.85	—	02-18-2009	—	02-18-2009	—	—	NA
Morningstar Lifetime Mod 2055 TR USD			-21.04	3.59	6.76	—	02-18-2009	—	02-18-2009	—	—	NA
Morningstar Lifetime Mod 2060 TR USD			-21.18	3.49	—	—	06-23-2014	—	02-18-2009	—	—	NA
Morningstar Lifetime Mod Incm TR USD			-14.27	2.41	3.35	—	02-18-2009	—	02-18-2009	—	—	NA
Morningstar Mod Tgt Risk TR USD			-18.20	2.95	5.17	—	02-18-2009	—	05-01-2019	—	—	NA
Morningstar US Core Bd TR USD			-14.54	—	—	—	05-01-2019	—	12-21-2020	—	—	NA
Morningstar US Mid Brd Grt TR USD			-26.35	—	—	—	12-21-2020	—	06-30-2020	—	—	NA
Morningstar US Mod Con Tgt Alloc NR USD			-15.50	—	—	—	06-30-2020	—	12-21-2020	—	—	NA
Morningstar US SmI Ext TR USD			-22.77	—	—	—	12-21-2020	—	01-01-2001	—	—	NA
MSCI ACWI Ex USA NR USD			-25.17	-0.81	3.01	—	01-01-2001	—	01-01-2001	—	—	NA
MSCI ACWI NR USD			-20.66	4.44	7.28	—	01-01-2001	—	03-31-1986	—	—	NA
MSCI EAFE NR USD			-25.13	-0.84	3.67	—	03-31-1986	—	12-31-1978	—	—	NA
Russell 1000 TR USD			-17.22	9.00	11.60	—	12-31-1978	—	12-31-1978	—	—	NA
Russell 2000 TR USD			-23.50	3.55	8.55	—	12-31-1978	—	02-01-1995	—	—	NA
Russell Mid Cap Growth TR USD			-29.50	7.62	10.85	—	02-01-1995	—	12-31-1978	—	—	NA
Russell Mid Cap TR USD			-19.39	6.48	10.30	—	12-31-1978	—	01-30-1970	—	—	NA
S&P 500 TR USD			-15.47	9.24	11.70	—	01-30-1970	—	02-28-1941	—	—	NA
USTREAS T-Bill Auction Ave 3 Mon			1.08	1.19	0.71	—	02-28-1941	—	—	—	—	NA

- Contractual waiver, Expires 02-28-2023
- Contractual waiver, Expires 09-30-2023
- Contractual waiver, Expires 01-31-2023

Return after Tax (%)	On Distribution					On Distribution and Sales of Shares				
	1Yr	5Yr	10Yr	Since Inception	Inception Date	1Yr	5Yr	10Yr	Since Inception	
Baron Growth Instl	-27.35	8.15	9.58	11.76	05-29-2009	-13.92	7.69	9.00	10.96	
Fidelity@ 500 Index	-15.88	8.64	10.96	10.40	05-04-2011	-9.00	7.15	9.42	9.00	
Fidelity@ Inerm Tts Bd Index	-14.03	—	—	-0.85	10-04-2017	-7.88	—	—	-0.23	
Fidelity@ Mid Cap Index	-20.23	5.68	9.45	10.20	09-08-2011	-10.86	4.96	8.24	8.93	

©2022 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be preceded or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.



Annualized returns 09-30-2022

Return after Tax (%)	On Distribution				On Distribution and Sales of Shares				
	1Yr	5Yr	10Yr	Since Inception	Inception Date	1Yr	5Yr	10Yr	Since Inception
Fidelity® Small Cap Index	-24.04	2.80	7.77	8.92	09-08-2011	-13.11	2.72	6.84	7.87
Fidelity® Total International Index	-26.05	-1.47	—	1.99	06-07-2016	-14.63	-0.69	—	1.88
Fidelity® US Bond Index	-15.07	-1.02	-0.08	0.64	05-04-2011	-8.25	-0.30	0.36	0.93
Hartford Core Equity R6	-16.97	8.78	—	8.67	03-31-2015	-9.05	7.47	—	7.41
Hartford Schroders US Small Cap Opps SDR	-21.05	2.44	—	5.95	09-28-2015	-9.12	3.19	—	5.93
MFS Intl Diversification R6	-26.06	—	—	0.55	10-02-2017	-14.70	—	—	0.86
Sterling Capital Total Return Bond R6	-15.78	—	—	-0.92	02-01-2018	-8.53	—	—	-0.16
Vanguard Target Retirement 2020 Fund	-19.31	1.05	4.07	4.24	06-07-2006	-6.29	2.23	4.16	4.10
Vanguard Target Retirement 2025 Fund	-20.42	1.65	4.73	4.97	10-27-2003	-7.65	2.44	4.54	4.65
Vanguard Target Retirement 2030 Fund	-21.43	2.03	5.33	4.84	06-07-2006	-7.91	2.72	5.00	4.50
Vanguard Target Retirement 2035 Fund	-22.13	2.34	5.81	5.69	10-27-2003	-7.85	3.06	5.46	5.29
Vanguard Target Retirement 2040 Fund	-22.82	2.69	6.29	5.36	06-07-2006	-7.98	3.37	5.86	4.97
Vanguard Target Retirement 2045 Fund	-22.58	3.22	6.60	6.28	10-27-2003	-9.04	3.57	6.02	5.75
Vanguard Target Retirement 2050 Fund	-22.44	3.30	6.68	5.61	06-07-2006	-9.60	3.50	6.01	5.08
Vanguard Target Retirement 2055 Fund	-22.00	3.42	6.78	7.65	08-18-2010	-10.09	3.39	6.01	6.78
Vanguard Target Retirement 2060 Fund	-21.33	3.61	6.89	7.26	01-19-2012	-10.94	3.33	5.98	6.30
Vanguard Target Retirement 2065 Fund	-20.53	3.89	—	4.50	07-12-2017	-11.57	3.32	—	3.80
Vanguard Target Retirement 2070 Fund	—	—	—	-7.50	06-28-2022	—	—	—	-4.44
Vanguard Target Retirement Income Fund	-16.19	0.63	2.17	3.30	10-27-2003	-7.14	1.27	2.29	3.18

©2022 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc., including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be preceded or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.



Mutual Fund Detail Report

Disclosure Statement

The Mutual Fund Detail Report is supplemental sales literature, and therefore must be preceded or accompanied by the mutual fund's current prospectus or an equivalent statement. Please read this information carefully. In all cases, this disclosure statement should accompany the Mutual Fund Detail Report. Morningstar is not itself a FINRA-member firm.

All data presented is based on the most recent information available to Morningstar as of the release date and may or may not be an accurate reflection of current data for securities included in the fund's portfolio. There is no assurance that the data will remain the same.

Unless otherwise specified, the definition of "funds" used throughout this Disclosure Statement includes closed-end funds, exchange-traded funds, grantor trusts, index mutual funds, open-ended mutual funds, and unit investment trusts. It does not include exchange-traded notes or exchange-traded commodities.

Prior to 2016, Morningstar's methodology evaluated open-end mutual funds and exchange-traded funds as separate groups. Each group contained a subset of the current investments included in our current comparative analysis. In this report, historical data presented on a calendar-year basis and trailing periods ending at the most-recent month-end reflect the updated methodology.

Risk measures (such as alpha, beta, r-squared, standard deviation, mean, or Sharpe ratio) are calculated for securities or portfolios that have at least a three-year history.

Most Morningstar rankings do not include any adjustment for one-time sales charges, or loads. Morningstar does publish load-adjusted returns, and ranks such returns within a Morningstar Category in certain reports. The total returns for ETFs and fund share classes without one-time loads are equal to Morningstar's calculation of load-adjusted returns. Share classes that are subject to one-time loads relating to advice or sales commissions have their returns adjusted as part of the load-adjusted return calculation to reflect those loads.

Comparison of Fund Types

Funds, including closed-end funds, exchange-traded funds (ETFs), money market funds, open-end funds, and unit investment trusts (UITs), have many similarities, but also many important differences. In general, publically-offered funds are investment companies registered with the Securities and Exchange Commission under the Investment Company Act of 1940, as amended. Funds pool money from their investors and manage it according to an investment strategy or objective, which can vary greatly from fund to fund. Funds have the ability to offer diversification and professional management, but also involve risk, including the loss of principal.

A closed-end fund is an investment company, which typically makes one public offering of a fixed number of shares. Thereafter, shares are traded on a secondary market. As a result, the secondary market price may be higher or lower than the closed-end fund's net asset value (NAV). If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. A closed-end mutual fund's expense ratio is an annual fee charged to a shareholder. It includes operating expenses and management fees, but does not take into account any brokerage costs. Closed-end funds may also have 12b-1 fees. Income distributions and capital gains of the closed-end fund are subject

to income tax, if held in a taxable account.

An ETF is an investment company that typically has an investment objective of striving to achieve a similar return as a particular market index. The ETF will invest in either all or a representative sample of the securities included in the index it is seeking to imitate. Like closed-end funds, an ETF can be traded on a secondary market and thus have a market price that may be higher or lower than its net asset value. If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. ETFs are not actively managed, so their value may be affected by a general decline in the U.S. market segments relating to their underlying indexes. Similarly, an imperfect match between an ETF's holdings and those of its underlying index may cause its performance to vary from that of its underlying index. The expense ratio of an ETF is an annual fee charged to a shareholder. It includes operating expenses and management fees, but does not take into account any brokerage costs. ETFs do not have 12b-1 fees or sales loads. Capital gains from funds held in a taxable account are subject to income tax. In many, but not all cases, ETFs are generally considered to be more tax-efficient when compared to similarly invested mutual funds.

Holding company depository receipts (HOLDRS) are similar to ETFs, but they focus on narrow industry groups. HOLDRS initially own 20 stocks, which are unmanaged, and can become more concentrated due to mergers, or the disparate performance of their holdings. HOLDRS can only be bought in 100-share increments. Investors may exchange shares of a HOLDR for its underlying stocks at any time.

A money-market fund is an investment company that invests in commercial paper, banker's acceptances, repurchase agreements, government securities, certificates of deposit and other highly liquid securities, and pays money market rates of interest. Money markets are not FDIC-insured, may lose money, and are not guaranteed by a bank or other financial institution.

An open-end fund is an investment company that issues shares on a continuous basis. Shares can be purchased from the open-end mutual fund itself, or through an intermediary, but cannot be traded on a secondary market, such as the New York Stock Exchange. Investors pay the open-end mutual fund's current net asset value plus any initial sales loads. Net asset value is calculated daily, at the close of business. Open-end mutual fund shares can be redeemed, or sold back to the fund or intermediary, at their current net asset value minus any deferred sales loads or redemption fees. The expense ratio for an open-end mutual fund is an annual fee charged to a shareholder. It includes operating expenses and management fees, but does not take into account any brokerage costs. Open-end funds may also have 12b-1 fees. Income distributions and capital gains of the open-end fund are subject to income tax, if held in a taxable account.

A unit investment trust (UIT) is an investment company organized under a trust agreement between a sponsor and trustee. UITs typically purchase a fixed portfolio of securities and then sell units in the trust to investors. The major difference between a UIT and a mutual fund is that a mutual fund is actively managed, while a UIT is not. On a periodic basis, UITs usually distribute to the unit holder their pro rata share of the trust's net investment income and net realized capital gains, if any. If the trust is one that invests only in tax-free securities, then the income from the trust is also tax-free. UITs generally make one public offering of a fixed number of units. However, in some cases, the sponsor will maintain a secondary market that allows existing unit holders to sell their units and for new investors to buy units. A one-time initial sales charge is deducted from an investment made into the trust. UIT investors may also pay creation and development fees, organization costs, and/or trustee and operation expenses. UIT units may be redeemed by the sponsor at their net

©2022 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analysis and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analysis or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be preceded or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.

asset value minus a deferred sales charge, and sold to other investors. UITs have set termination dates, at which point the underlying securities are sold and the sales proceeds are paid to the investor. Typically, a UIT investment is rolled over into successive trusts as part of a long-term strategy. A rollover fee may be charged for the exercise of rollover purchases. There are tax consequences associated with rolling over an investment from one trust to the next.

Performance

The performance data given represents past performance and should not be considered indicative of future results. Principal value and investment return will fluctuate, so that an investor's shares, when sold, may be worth more or less than the original investment. Fund portfolio statistics change over time. Funds are not FDIC-insured, may lose value, and are not guaranteed by a bank or other financial institution.

Morningstar calculates after-tax returns using the highest applicable federal marginal income tax rate plus the investment income tax and Medicare surcharge. As of 2018, this rate is 37% plus 3.8% investment income plus 0.9% Medicare surcharge, or 41.7%. This rate changes periodically in accordance with changes in federal law.

Pre-Inception Returns

The analysis in this report may be based, in part, on adjusted historical returns for periods prior to the inception of the share class of the fund shown in this report ("Report Share Class"). If pre-inception returns are shown, a performance stream consisting of the Report Share Class and older share classes) is created. Morningstar adjusts pre-inception returns downward to reflect higher expenses in the Report Share Class, we do not hypothetically adjust returns upwards for lower expenses. For more information regarding calculation of pre-inception returns please see the Morningstar Extended Performance Methodology.

When pre-inception data is presented in the report, the header at the top of the report will indicate this. In addition, the pre-inception data included in the report will appear in italics.

While the inclusion of pre-inception data provides valuable insight into the probable long-term behavior of newer share classes of a fund, investors should be aware that an adjusted historical return can only provide an approximation of that behavior. For example, the fee structures of a retail share class will vary from that of an institutional share class, as retail shares tend to have higher operating expenses and sales charges. These adjusted historical returns are not actual returns. The underlying investments in the share classes used to calculate the pre-performance string will likely vary from the underlying investments held in the fund after inception. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the fund itself.

12b1 Expense %

A 12b-1 fee is a fee used to pay for a mutual fund's distribution costs. It is often used as a commission to brokers for selling the fund. The amount of the fee is taken from a fund's returns.

Alpha

Alpha is a measure of the difference between a security or portfolio's actual returns and its expected performance, given its level of risk (as measured by beta.) Alpha is often seen as a measure of the value added or subtracted by a portfolio manager.

Asset Allocation

Asset Allocation reflects asset class weightings of the portfolio. The "Other"

category includes security types that are not neatly classified in the other asset classes, such as convertible bonds and preferred stocks, or cannot be classified by Morningstar as a result of missing data. Morningstar may display asset allocation data in several ways, including tables or pie charts. In addition, Morningstar may compare the asset class breakdown of the fund against its three-year average, category average, and/or index proxy.

Asset allocations shown in tables may include a breakdown among the long, short, and net (long positions net of short) positions. These statistics summarize what the fund's managers are buying and how they are positioning the fund's portfolio. When short positions are captured in these portfolio statistics, investors get a more robust description of the fund's exposure and risk. Long positions involve buying the security outright and selling it later, with the hope the security's price rises over time. Short positions are taken with the hope of benefiting from anticipated price declines. The investor borrows the security from another investor, sells it and receives cash, and then is obligated to buy it back at some point in the future. If the price falls after the short sale, the investor will have sold high and can buy low to close the short position and lock in a profit. However, if the price of the security increases after the short sale, the investor will experience a loss buying it at a higher price than the sale price.

Most fund portfolios hold fairly conventional securities, such as long positions in equities and bonds. Morningstar may generate a colored pie chart for these portfolios. Other portfolios use other investment strategies or securities, such as short positions or derivatives, in an attempt to reduce transaction costs, enhance returns, or reduce risk. Some of these securities and strategies behave like conventional securities, while other have unique return and risk characteristics. Portfolios that incorporate investment strategies resulting in short positions or portfolio with relatively exotic derivative positions often report data to Morningstar that does not meet the parameters of the calculation underlying a pie chart's generation. Because of the nature of how these securities are reported to Morningstar, we may not always get complete portfolio information to report asset allocation. Morningstar, at its discretion, may determine if unidentified characteristics of fund holdings are material. Asset allocation and other breakdowns may be rescaled accordingly so that percentages total to 100 percent. (Morningstar used discretion to determine if unidentified characteristics of fund holdings are material, pie charts and other breakdowns may rescale identified characteristics to 100% for more intuitive presentation.)

Note that all other portfolio statistics presented in this report are based on the long (or long rescaled) holdings of the fund only.

Average Effective Duration

Duration is a time measure of a bond's interest-rate sensitivity. Average effective duration is a weighted average of the duration of the fixed-income securities within a portfolio.

Average Effective Maturity

Average Effective Maturity is a weighted average of the maturities of all bonds in a portfolio.

Average Weighted Coupon

A coupon is the fixed annual percentage paid out on a bond. The average weighted coupon is the asset-weighted coupon of each bond in the portfolio.

Average Weighted Price

Average Weighted Price is the asset-weighted price of bonds held in a portfolio, expressed as a percentage of par (face) value. This number reveals if the portfolio favors bonds selling at prices above or below par value (premium or discount securities respectively.)

©2022 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by Morningstar, Inc., including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be preceded or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.

Best Fit Index

Alpha, beta, and R-squared statistics are presented for a broad market index and a "best fit" index. The Best Fit Index identified in this report was determined by Morningstar by calculating R-squared for the fund against approximately 100 indexes tracked by Morningstar. The index representing the highest R-squared is identified as the best fit index. The best fit index may not be the fund's benchmark, nor does it necessarily contain the types of securities that may be held by the fund or portfolio.

Beta

Beta is a measure of a security or portfolio's sensitivity to market movements (proxied using an index.) A beta of greater than 1 indicates more volatility than the market, and a beta of less than 1 indicates less volatility than the market.

Credit Quality Breakdown

Credit Quality breakdowns are shown for corporate-bond holdings in the fund's portfolio and depict the quality of bonds in the underlying portfolio. It shows the percentage of fixed-income securities that fall within each credit-quality rating as assigned by a Nationally Recognized Statistical Rating Organization (NRSRO). Bonds not rated by an NRSRO are included in the Other/Not-Classified category.

Deferred Load %

The back-end sales charge or deferred load is imposed when an investor redeems shares of a fund. The percentage of the load charged generally declines the longer the fund's shares are held by the investor. This charge, coupled with 12b-1 fees, commonly serves as an alternative to a traditional front-end load.

Expense Ratio %

The expense ratio is the annual fee that all funds charge their shareholders. It expresses the percentage of assets deducted each fiscal year for fund expenses, including 12b-1 fees, management fees, administrative fees, operating costs, and all other asset-based costs incurred by the fund. Portfolio transaction fees, or brokerage costs, as well as front-end or deferred sales charges are not included in the expense ratio. The expense ratio, which is deducted from the fund's average net assets, is accrued on a daily basis. The gross expense ratio, in contrast to the net expense ratio, does not reflect any fee waivers in effect during the time period.

Front-end Load %

The initial sales charge or front-end load is a deduction made from each investment in the fund and is generally based on the amount of the investment.

Geometric Average Market Capitalization

Geometric Average Market Capitalization is a measure of the size of the companies in which a portfolio invests.

Growth of 10,000

For funds, this graph compares the growth of an investment of 10,000 (in the base currency of the fund) with that of an index and/or with that of the average for all funds in its Morningstar Category. The total returns are not adjusted to reflect sales charges or the effects of taxation but are adjusted to reflect actual ongoing fund expenses, and they assume reinvestment of dividends and capital gains. If adjusted, effects of sales charges and taxation would reduce the performance quoted. If pre-inception data is included in the analysis, it will be graphed.

The index in the Growth of 10,000 graph is an unmanaged portfolio of specified securities and cannot be invested in directly. The index does not reflect any initial or ongoing expenses. A fund's portfolio may differ significantly from the securities in the index. The index is chosen by Morningstar.

Management Fees %

The management fee includes the management and administrative fees listed in the Management Fees section of a fund's prospectus. Typically, these fees represent the costs shareholders paid for management and administrative services over the fund's prior fiscal year.

Maximum Redemption Fee %

The Maximum Redemption Fee is the maximum amount a fund may charge if redeemed in a specific time period after the fund's purchase (for example, 30, 180, or 365 days).

Mean

Mean is the annualized geometric return for the period shown.

Morningstar Analyst Rating™

The Morningstar Analyst Rating™ is not a credit or risk rating. It is a subjective evaluation performed by Morningstar's manager research group, which consists of various Morningstar, Inc. subsidiaries ("Manager Research Group"). In the United States, that subsidiary is Morningstar Research Services LLC, which is registered with and governed by the U.S. Securities and Exchange Commission. The Manager Research Group evaluates investment products based on five key pillars, which are process, performance, people, parent, and price. The Manager Research Group uses this five-pillar evaluation to determine how they believe investment products are likely to perform relative to a benchmark over the long term on a risk-adjusted basis. They consider quantitative and qualitative factors in their research. For actively managed strategies, people and process each receive a 45% weighting in their analysis, while parent receives a 10% weighting. For passive strategies, process receives an 80% weighting, while people and parent each receive a 10% weighting. For both active and passive strategies, performance has no explicit weight as it is incorporated into the analysis of people and process, price at the share-class level (where applicable) is directly subtracted from an expected gross alpha estimate derived from the analysis of the other pillars. The impact of the weighted pillar scores for people, process and parent on the final Morningstar Analyst Rating is further modified by a measure of the dispersion of historical alphas among relevant peers. For certain peer groups where standard benchmarking is not applicable, primarily peer groups of investment products using alternative investment strategies, the modification by alpha dispersion is not used.

Separately managed accounts are rated using the methodology for actively managed funds. A proxy fee is deducted from all separately managed accounts in a given Morningstar Category. The proxy fee is based on a survey of separately managed account model-delivery fees.

The Morningstar Analyst Rating scale is Gold, Silver, Bronze, Neutral, and Negative. For active investment products, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that an active investment product will be able to deliver positive alpha net of fees relative to the standard benchmark index assigned to the Morningstar category. The level of the rating relates to the level of expected positive net alpha relative to Morningstar category peers for active investment products. For passive investment products, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that an investment product will be able to deliver a higher alpha net of fees than the lesser of the relevant Morningstar category median or 0. The level of the rating relates to the level of expected net alpha relative to Morningstar category peers for passive investment products. For certain peer groups where standard benchmarking is not applicable, primarily peer groups of investment products using alternative investment strategies, a Morningstar Analyst Rating of Gold, Silver, or Bronze reflects the Manager Research Group's expectation that an investment product will deliver a weighted pillar score above a predetermined threshold within its peer group. Morningstar Analyst Ratings ultimately reflect the Manager

©2022 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analysis and opinions contained herein: (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analysis or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be preceded or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.

Research Group's overall assessment, are overseen by an Analyst Rating Committee, and are continuously monitored and reevaluated at least every 14 months.

For more detailed information about Morningstar's Analyst Rating, including its methodology, please go to <http://global.morningstar.com/equitydisclosure>.

The Morningstar Analyst Rating (i) should not be used as the sole basis in evaluating an investment product, (ii) involves unknown risks and uncertainties which may cause the Manager Research Group's expectations not to occur or to differ significantly from what they expected, and (iii) should not be considered an offer or solicitation to buy or sell the investment product.

Morningstar Quantitative Rating™

Morningstar's quantitative fund ratings consist of: (i) Morningstar Quantitative Rating (overall score), (ii) Quantitative Parent pillar, (iii) Quantitative People pillar, and (iv) Quantitative Process pillar (collectively the "Quantitative Fund Ratings"). The Quantitative Fund Ratings are calculated monthly and derived from the analyst-driven ratings of a fund's peers as determined by statistical algorithms. Morningstar, Inc. calculates Quantitative Fund Ratings for funds when an analyst rating does not exist as part of its qualitative coverage.

- Morningstar Quantitative Rating:** Intended to be comparable to Morningstar's Analyst Ratings for open-end funds and ETFs, which is the summary expression of Morningstar's forward-looking analysis of a fund. The Morningstar Analyst Rating is based on the analyst's conviction in the fund's ability to outperform its peer group and/or relevant benchmark on a risk-adjusted basis over a full market cycle of at least 5 years. Ratings are assigned on a five-tier scale with three positive ratings of Gold, Silver, and Bronze, a Neutral rating, and a Negative rating. Morningstar calculates the Morningstar Quantitative Rating using a statistical model derived from the Morningstar Analyst Rating our fund analysts assign to open-end funds and ETFs. Please go to <https://shareholders.morningstar.com/investor-relations/governance/Compliance--Disclosure/default.aspx> for information about Morningstar Analyst Rating Morningstar's fund analysts assign to funds.

- Quantitative Parent pillar:** Intended to be comparable to Morningstar's Parent pillar scores, which provides Morningstar's analyst opinion on the stewardship quality of a firm. Morningstar calculates the Quantitative Parent pillar using an algorithm designed to predict the Parent Pillar score our fund analysts would assign to a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), Low (1).
- Quantitative People pillar:** Morningstar's People pillar scores, which provides Morningstar's analyst opinion on the fund manager's talent, tenure, and resources. Morningstar calculates the Quantitative People pillar using an algorithm designed to predict the People pillar score our fund analysts would assign to the fund. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), Low (1).

- Quantitative Process Pillar:** Intended to be comparable to Morningstar's Process pillar scores, which provides Morningstar's analyst opinion on the fund's strategy and whether the management has a competitive advantage enabling it to execute the process and consistently over time. Morningstar calculates the Quantitative Process pillar using an algorithm designed to predict the Process pillar score our fund analysts would assign to the fund. The quantitative pillar rating is expressed in both a rating and a numerical value as High (5), Above Average (4), Average (3), Below Average (2), and Low (1).

Morningstar Quantitative Ratings **have not been made available** to the issuer of the security prior to publication.

Risk Warning

The quantitative fund ratings are not statements of fact. Morningstar does not guarantee the completeness or accuracy of the assumptions or models used in determining the quantitative fund ratings. In addition, there is the risk that the return target will not be met due to such things as unforeseen changes in changes in management, technology, economic development, interest rate development, operating and/or material costs, competitive pressure, supervisory law, exchange rate, and tax rate. For investments in foreign markets there are further risks, generally based on exchange rate changes or changes in political and social conditions. A change in the fundamental factors underlying the quantitative fund ratings can mean that the recommendation is subsequently no longer accurate.

For more information about Morningstar's quantitative methodology, please visit <https://shareholders.morningstar.com/investor-relations/governance/Compliance--Disclosure/default.aspx>

Morningstar Category

Morningstar Category is assigned by placing funds into peer groups based on their underlying holdings. The underlying securities in each portfolio are the primary factor in our analysis as the investment objective and investment strategy stated in a fund's prospectus may not be sufficiently detailed for our proprietary classification methodology. Funds are placed in a category based on their portfolio statistics and compositions over the past three years. Analysis of performance and other indicative facts are also considered. If the fund is new and has no portfolio history, Morningstar estimates where it will fall before giving it a permanent category assignment. Categories may be changed based on recent changes to the portfolio.

Morningstar Rank

Morningstar Rank is the total return percentile rank within each Morningstar Category. The highest (or most favorable) percentile rank is zero and the lowest (or least favorable) percentile rank is 100. Historical percentile ranks are based on a snapshot of a fund at the time of calculation.

Morningstar Rating™

The Morningstar Rating™ for funds, or "star rating", is calculated for funds and separate accounts with at least a three-year history. Exchange-traded funds and open-ended mutual funds are considered a single population for comparative purposes. It is calculated based on a Morningstar Risk-Adjusted Return measure that accounts for variation in a managed product's monthly excess performance, placing more emphasis on downward variations and rewarding consistent performance. The Morningstar Rating does not include any adjustment for sales loads. The top 10% of products in each product category receive 5 stars, the next 22.5% receive 4 stars, the next 35% receive 3 stars, the next 22.5% receive 2 stars, and the bottom 10% receive 1 star. The Overall Morningstar Rating for a managed product is derived from a weighted average of the performance figures associated with its three-, five-, and 10-year (if applicable) Morningstar Rating metrics. For more information about the Morningstar Rating for funds, including its methodology, please go to global.morningstar.com/manageddisclosures

The Morningstar Return rates a fund's performance relative to other managed products in its Morningstar Category. It is an assessment of a product's excess return over a risk-free rate (the return of the 90-day Treasury Bill) in comparison with the products in its Morningstar category. In each Morningstar category, the top 10% of products earn a High Morningstar Return (High), the next 22.5% Above Average (+Avg), the middle 35% Average (Avg), the next 22.5% Below Average (-Ave), and the bottom 10% Low (Low). Morningstar Return is

©2022 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analysis and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analysis or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc., including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be preceded or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.

measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

Morningstar Risk

Morningstar Risk evaluates a fund's downside volatility relative to that of other products in its Morningstar Category. It is an assessment of the variations in monthly returns, with an emphasis on downside variations, in comparison with the products in its Morningstar category. In each Morningstar category, the 10% of products with the lowest measured risk are described as Low Risk (Low), the next 22.5% Below Average (Avg), the middle 35% Average (Avg), the next 22.5% Above Average (+Avg), and the top 10% High (High). Morningstar Risk is measured for up to three time periods (three, five, and 10 years). These separate measures are then weighted and averaged to produce an overall measure for the product. Products with less than three years of performance history are not rated.

Style Analysis

The Morningstar Style Box reveals a fund's investment style as of the date noted on this report.

For equity funds, the vertical axis shows the market capitalization of the long stocks owned, and the horizontal axis shows the investment style (value, blend, or growth.) A darkened cell in the style box matrix indicates the weighted average style of the portfolio.

For portfolios holding fixed-income investments, a Fixed Income Style Box is calculated. The vertical axis shows the credit quality based on credit ratings and the horizontal axis shows interest-rate sensitivity as measured by effective duration. There are three credit categories: "High", "Medium", and "Low", and there are three interest rate sensitivity categories: "Limited", "Moderate", and "Extensive" resulting in nine possible combinations. As in the equity Style Box the combination of credit and interest rate sensitivity for a portfolio is represented by a darkened cell in the matrix.

Morningstar uses credit rating information from credit rating agencies (CRA's) that have been designated Nationally Recognized Statistical Rating Organizations (NRSRO's) by the Securities and Exchange Commission (SEC) in the United States. For a list of all NRSROs, please visit <https://www.sec.gov/ocf/ocf-learn-nrsros.html>. Additionally, Morningstar will use credit ratings from CRA's which have been recognized by foreign regulatory institutions that are deemed the equivalent of the NRSRO designation.

To determine the rating applicable to a holding and the subsequent holding weighted value of a portfolio two methods may be employed. First is a common methodology approach where if a case exists such that two rating organizations/ agencies have rated a holding, the lower rating of the two should be applied; if three or more CRA's have rated a holding the median rating should be applied, and in cases where there are more than two ratings and a median rating cannot be determined the lower of the two middle ratings should be applied. Alternatively, if there is more than one rating available an average can be calculated from all and applied. Please Note: Morningstar, Inc. is not an NRSRO nor does it issue a credit rating on the fund. Credit ratings for any security held in a portfolio may change over time.

Morningstar uses the credit rating information to calculate a weighted-average credit quality value for the portfolio. This value is based only upon those holdings which are considered to be classified as "Fixed Income", such as government, corporate, or securitized issues. Other types of holdings such as equities and many, though not all, types of derivatives are excluded. The weighted-average credit quality value is represented by a rating symbol which

corresponds to the long-term rating symbol schemas employed by most CRA's. Note that this value is not explicitly published but instead serves an input in Style Box calculation. This symbol is then used to map to a Style Box credit quality category of "low", "medium", or "high". Funds with a "low" credit quality category are those whose weighted-average credit quality is determined to be equivalent to the commonly used High Yield classification, meaning a rating below "BBB", portfolios assigned to the "high" credit category have either a "AAA" or "Aa+" average credit quality value, while "medium" are those with an average rating of "AA" inclusive to "BBB-". It is expected and intended that the majority of portfolios will be assigned a credit category of "medium".

For assignment to an interest-rate sensitivity category Morningstar uses the average effective duration of the portfolio. From this value there are three distinct methodologies employed to determine assignment to category.

Portfolios which are assigned to Morningstar municipal bond categories employ static breakpoints between categories. These breakpoints are "Limited" equal to 4.5 years or less; (i) "Moderate" equal to 4.5 years to less than 7 years, and "Extensive" equal to more than 7 years. For portfolios assigned to Morningstar categories other than U.S. Taxable, including all domiciled outside the United States, static duration breakpoints are also used. The values differ from the municipal category values: (i) "Limited" equals less than or equal to 3.5 years, "Moderate" equals greater than 3.5 years but less than or equal to 6 years, "Extensive" is assigned to portfolios with effective durations of more than 6 years. Note: Interest-rate sensitivity for non-U.S. domiciled portfolios (excluding those in Morningstar convertible categories) may be assigned using average modified duration when average effective duration is not available.

For portfolios Morningstar classifies as U.S Taxable Fixed-Income, interest-rate sensitivity category assignment is based on the effective duration of the Morningstar Core Bond Index (MCBI). The classification assignment is dynamically determined relative to the benchmark index value. A "Limited" category will be assigned to portfolios whose average effective duration is between 25% to 75% of MCBI average effective duration, where the average effective duration is between 75% to 125% of the MCBI the portfolio will be classified as "Moderate", and those portfolios with an average effective duration value 125% or greater of the average effective duration of the MCBI will be classified as "Extensive".

P/B Ratio TTM

The Price/Book Ratio (or P/B Ratio) for a fund is the weighted average of the P/B Ratio of the stocks in its portfolio. Book value is the total assets of a company, less total liabilities. The P/B ratio of a company is calculated by dividing the market price of its outstanding stock by the company's book value, and then adjusting for the number of shares outstanding. Stocks with negative book values are excluded from this calculation. It shows approximately how much an investor is paying for a company's assets based on historical valuations.

P/C Ratio TTM

The Price/Cash Flow Ratio (or P/C Ratio) for a fund is the weighted average of the P/C Ratio of the stocks in its portfolio. The P/C Ratio of a stock represents the amount an investor is willing to pay for a dollar generated from a company's operations. It shows the ability of a company to generate cash and acts as a gauge of liquidity and solvency.

P/E Ratio TTM

The Price/Earnings Ratio (or P/E Ratio) for a fund is the weighted average of the P/E Ratios of the stocks in its portfolio. The P/E Ratio of a stock is the stock's current price divided by the company's trailing 12-month earnings per share. A high P/E Ratio usually indicates the market will pay more to obtain the company's earnings because it believes in the company's abilities to increase their earnings. A low P/E Ratio indicates the market has less confidence that the company's earnings will increase, however value investors may believe such

©2022 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analysis and opinions contained herein: (1) include the confidential and proprietary information of Morningstar; (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar; (3) may not be copied or redistributed; (4) do not constitute investment advice offered by Morningstar; (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analysis or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc., including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be preceded or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.

stocks have an overlooked or undervalued potential for appreciation.

Percentile Rank in Category

Percentile Rank is a standardized way of ranking items within a peer group, in this case, funds within the same Morningstar Category. The observation with the largest numerical value is ranked zero the observation with the smallest numerical value is ranked 100. The remaining observations are placed equal distance from one another on the rating scale. Note that lower percentile ranks are generally more favorable for returns (high returns), while higher percentile ranks are generally more favorable for risk measures (low risk).

Performance Quartile

Performance Quartile reflects a fund's Morningstar Rank.

Potential Capital Gains Exposure

Potential Capital Gains Exposure is an estimate of the percent of a fund's assets that represent gains. It measures how much the fund's assets have appreciated, and it can be an indicator of possible future capital gains distributions. A positive potential capital gains exposure value means that the fund's holdings have generally increased in value while a negative value means that the fund has reported losses on its book.

Quarterly Returns

Quarterly Return is calculated applying the same methodology as Total Return except it represents return through each quarter-end.

R-Squared

R-squared is the percentage of a security or portfolio's return movements that are explained by movements in its benchmark index, showing the degree of correlation between the security or portfolio and the benchmark. This figure is helpful in assessing how likely it is that beta and alpha are statistically significant. A value of 1 indicates perfect correlation between the security or portfolio and its benchmark. The lower the R-squared value, the lower the correlation.

Regional Exposure

The regional exposure is a display of the portfolio's assets invested in the regions shown on the report.

Sector Weightings

Super Sectors represent Morningstar's broadest classification of equity sectors by assigning the 11 equity sectors into three classifications. The Cyclical Super Sector includes industries significantly impacted by economic shifts, and the Defensive Super Sector generally includes industries that are relatively immune to economic cycles, and the stocks in these industries generally have betas less than 1. The Sensitive Super Sector includes industries that ebb and flow with the overall economy, but not severely so. Stocks in the Sensitive Super Sector generally have betas that are close to 1.

Share Change

Shares Change represents the number of shares of a stock bought or sold by a fund since the previously reported portfolio of the fund.

Sharpe Ratio

Sharpe Ratio uses standard deviation and excess return (a measure of a security or portfolio's return in excess of the U.S. Treasury three-month Treasury Bill) to determine the reward per unit of risk.

Standard Deviation

Standard deviation is a statistical measure of the volatility of the security or portfolio's returns. The larger the standard deviation, the greater the volatility

of return.

Standardized Returns

Standardized Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since-inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experienced if the security was purchased at the beginning of the period and sold at the end, incurring transaction charges.

Total Return

Total Return, or "Non Load-Adjusted Return", reflects performance without adjusting for sales charges (if applicable) or the effects of taxation, but it is adjusted to reflect all actual ongoing security expenses and assumes reinvestment of dividends and capital gains. It is the return an investor would have experienced if the fund was held throughout the period. If adjusted for sales charges and the effects of taxation, the performance quoted would be significantly reduced.

Total Return +/- indicates how a fund has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

Trailing Returns

Standardized Return applies the methodology described in the Standardized Returns page of this report. Standardized Return is calculated through the most recent calendar-quarter end for one-year, five-year, 10-year, and/or since-inception periods, and it demonstrates the impact of sales charges (if applicable) and ongoing fund expenses. Standardized Return reflects the return an investor may have experienced if the fund was purchased at the beginning of the period and sold at the end, incurring transaction charges.

Load-Adjusted Monthly Return is calculated applying the same methodology as Standardized Return, except that it represents return through month-end. As with Standardized Return, it reflects the impact of sales charges and ongoing fund expenses, but not taxation. If adjusted for the effects of taxation, the performance quoted would be significantly different.

Trailing Return +/- indicates how a fund has performed relative to its peers (as measure by its Standard Index and/or Morningstar Category Index) over the time periods shown.

Investment Risks

International/Emerging Market Equities: Investing in international securities involves special additional risks. These risks include, but are not limited to, currency risk, political risk, and risk associated with varying accounting standards. Investing in emerging markets may accentuate these risks.

Sector Strategies: Portfolios that invest exclusively in one sector or industry involve additional risks. The lack of industry diversification subjects the investor to increased industry-specific risks.

Non-Diversified Strategies: Portfolios that invest a significant percentage of assets in a single issuer involve additional risks, including share price fluctuations, because of the increased concentration of investments.

Small Cap Equities: Portfolios that invest in stocks of small companies involve additional risks. Smaller companies typically have a higher risk of failure, and

©2022 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by Subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be preceded or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.

are not as well established as larger blue-chip companies. Historically, smaller-company stocks have experienced a greater degree of market volatility than the overall market average.

Mid Cap Equities: Portfolios that invest in companies with market capitalization below \$10 billion involve additional risks. The securities of these companies may be more volatile and less liquid than the securities of larger companies.

High-Yield Bonds: Portfolios that invest in lower-rated debt securities (commonly referred to as junk bonds) involve additional risks because of the lower credit quality of the securities in the portfolio. The investor should be aware of the possible higher level of volatility, and increased risk of default.

Tax-Free Municipal Bonds: The investor should note that the income from tax-free municipal bond funds may be subject to state and local taxation and the Alternative Minimum Tax.

Bonds: Bonds are subject to interest rate risk. As the prevailing level of bond interest rates rise, the value of bonds already held in a portfolio declines. Portfolios that hold bonds are subject to declines and increases in value due to general changes in interest rates.

HOLDERS: The investor should note that these are narrow industry-focused products that, if the industry is hit by hard times, will lack diversification and possible loss of investment would be likely. These securities can trade at a discount to market price, ownership is of a fractional share interest, the underlying investments may not be representative of the particular industry, the HOLDER might be delisted from the AMEX if the number of underlying companies drops below nine, and the investor may experience trading halts.

Hedge Funds: The investor should note that hedge fund investing involves specialized risks that are dependent upon the type of strategies undertaken by the manager. This can include distressed or event-driven strategies, long/short strategies, using arbitrage (exploiting price inefficiencies), international investing, and use of leverage, options and/or derivatives. Although the goal of hedge fund managers may be to reduce volatility and produce positive absolute return under a variety of market conditions, hedge funds may involve a high degree of risk and are suitable only for investors of substantial financial means who could bear the entire loss of their investment.

Bank Loan/Senior Debt: Bank loans and senior loans are impacted by the risks associated with fixed income in general, including interest rate risk and default risk. They are often non-investment grade; therefore, the risk of default is high. These securities are also relatively illiquid. Managed products that invest in bank loans/senior debt are often highly leveraged, producing a high risk of return volatility.

Exchange Traded Notes (ETNs): ETNs are unsecured debt obligations. Any repayment of notes is subject to the issuer's ability to repay its obligations. ETNs do not typically pay interest.

Leveraged ETFs: Leveraged investments are designed to meet multiples of the return performance of the index they track and seek to meet their fund objectives on a daily basis (or other time period stated within the prospectus objective). The leverage/gearing ratio is the amount of excess return that a leveraged investment is designed to achieve in comparison to its index performance (i.e. 200%, 300%, -200%, or -300% or 2X, 3X, -2X, -3X). Compounding has the ability to affect the performance of the fund to be either greater or less than the index performance multiplied by the multiple stated within the funds objective over a stated time period.

Short Positions: When a short position moves in an unfavorable way, the losses

are theoretically unlimited. The broker may demand more collateral and a manager might have to close out a short position at an inopportune time to limit further losses.

Long-Short: Due to the strategies used by long-short funds, which may include but are not limited to leverage, short selling, short-term trading, and investing in derivatives, these funds may have greater risk, volatility, and expenses than those focusing on traditional investment strategies.

Liquidity Risk: Closed-end fund, ETF, and HOLDER trading may be halted due to market conditions, impacting an investor's ability to sell a fund.

Market Price Risk: The market price of ETFs, HOLDERS, and closed-end funds traded on the secondary market is subject to the forces of supply and demand and thus independent of the NAV. This can result in the market price trading at a premium or discount to the NAV, which will affect an investor's value.

Market Risk: The market prices of ETFs and HOLDERS can fluctuate as a result of several factors, such as security-specific factors or general investor sentiment. Therefore, investors should be aware of the prospect of market fluctuations and the impact it may have on the market price.

Target-Date Funds: Target-date funds typically invest in other mutual funds and are designed for investors who are planning to retire during the target date year. The fund's target date is the approximate date when investors expect to begin withdrawing their money. A target-date fund's investment objective/strategy typically becomes more conservative over time, primarily by reducing its allocation to equity mutual funds and increasing its allocations in fixed-income mutual funds. An investor's principal value in a target-date fund is not guaranteed at any time, including at the fund's target date.

High double- and triple-digit returns: High double- and triple-digit returns were the result of extremely favorable market conditions, which may not continue to be the case. High returns for short time periods must not be a major factor when making investment decisions.

Benchmark Disclosure

Bloomberg US Agg Bond TR USD

This index is composed of the BarCap Government/Credit Index, the Mortgage-Backed Securities Index, and the Asset-Backed Securities Index. The returns we publish for the index are total returns, which includes the daily reinvestment of dividends. Bloomberg Indexes and its associated data, Copyright © 2022 Bloomberg Index Services Limited. Bloomberg® is a trademark and service mark of Bloomberg Finance L.P. and its affiliates (collectively "Bloomberg"). Bloomberg or Bloomberg's licensors own all proprietary rights in the Bloomberg Indexes. Bloomberg does not approve or endorse this material or guarantee the accuracy or completeness of any information herein, nor does Bloomberg make any warranty, express or implied, as to the results to be obtained therefrom and, to the maximum extent allowed by law, Bloomberg shall not have any liability or responsibility for injury or damages arising in connection therewith. The constituents displayed for this index are from the following proxy: iShares Core US Aggregate Bond ETF.

Bloomberg US Government TR USD

Tracks the returns of U.S. Treasuries, agency bonds, and one- to three-year U.S. government obligations. Bloomberg Indexes and its associated data, Copyright © 2022 Bloomberg Index Services Limited. Bloomberg® is a trademark and service mark of Bloomberg Finance L.P. and its affiliates (collectively

©2022 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be preceded or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.

"Bloomberg"). Bloomberg or Bloomberg's licensors own all proprietary rights in the Bloomberg Indices. Bloomberg does not approve or endorse this material or guarantee the accuracy or completeness of any information herein, nor does Bloomberg make any warranty, express or implied, as to the results to be obtained therefrom and, to the maximum extent allowed by law, Bloomberg shall not have any liability or responsibility for injury or damages arising in connection therewith.

Bloomberg US Universal TR USD

BarCap U.S. Universal Bond Index: The U.S. Universal Index mirrors the increasingly popular "Core Plus" choice set used by many U.S.-dollar investors. It is the union of the U.S. Aggregate Index, the U.S. High Yield Corporate Index, the 144A Index, the Eurodollar Index, the Emerging Markets Index, the non-ERISA portion of the CMBS Index, and the CMBS High Yield Index. Municipal debt, private placements, and non-dollar- denominated issues are excluded from the Universal Index. The constituents displayed for this index are from the following proxy: iShares Core Total USD Bond Market ETF.

Morningstar Gbl Allocation TR USD

The index measures the performance of a multi-asset class portfolio of global equities, global bonds and cash. This portfolio is held in a static allocation that is appropriate for investors who seek average exposure to global equity market risk and returns. This Index does not incorporate Environmental, Social, or Governance (ESG) criteria.

Morningstar Lifetime Mod 2020 TR USD

The Morningstar Lifetime Moderate 2020 Index represents a portfolio of global equities, bonds and traditional inflation hedges such as commodities and TIPS. This portfolio is held in proportions appropriate for a U.S. investor who is about ten years away from retirement. The Moderate risk profile is for investors who are comfortable with average exposure to equity market volatility.

Morningstar Lifetime Mod 2025 TR USD

The Morningstar Lifetime Moderate 2025 Index represents a portfolio of global equities, bonds and traditional inflation hedges such as commodities and TIPS. This portfolio is held in proportions appropriate for a U.S. investor who is about 15 years away from retirement. The Moderate risk profile is for investors who are comfortable with average exposure to equity market volatility.

Morningstar Lifetime Mod 2030 TR USD

The Morningstar Lifetime Moderate 2030 Index represents a portfolio of global equities, bonds and traditional inflation hedges such as commodities and TIPS. This portfolio is held in proportions appropriate for a U.S. investor who is about 20 years away from retirement. The Moderate risk profile is for investors who are comfortable with average exposure to equity market volatility.

Morningstar Lifetime Mod 2035 TR USD

The Morningstar Lifetime Moderate 2035 Index represents a portfolio of global equities, bonds and traditional inflation hedges such as commodities and TIPS. This portfolio is held in proportions appropriate for a U.S. investor who is about 25 years away from retirement. The Moderate risk profile is for investors who are comfortable with average exposure to equity market volatility.

Morningstar Lifetime Mod 2040 TR USD

The Morningstar Lifetime Moderate 2040 Index represents a portfolio of global equities, bonds and traditional inflation hedges such as commodities and TIPS. This portfolio is held in proportions appropriate for a U.S. investor who is about 30 years away from retirement. The Moderate risk profile is for investors who are comfortable with average exposure to equity market volatility.

Morningstar Lifetime Mod 2045 TR USD

The Morningstar Lifetime Moderate 2045 Index represents a portfolio of global

equities, bonds and traditional inflation hedges such as commodities and TIPS. This portfolio is held in proportions appropriate for a U.S. investor who is about 35 years away from retirement. The Moderate risk profile is for investors who are comfortable with average exposure to equity market volatility.

Morningstar Lifetime Mod 2050 TR USD

The Morningstar Lifetime Moderate 2050 Index represents a portfolio of global equities, bonds and traditional inflation hedges such as commodities and TIPS. This portfolio is held in proportions appropriate for a U.S. investor who is about 40 years away from retirement. The Moderate risk profile is for investors who are comfortable with average exposure to equity market volatility.

Morningstar Lifetime Mod 2055 TR USD

The Morningstar Lifetime Moderate 2055 Index represents a portfolio of global equities, bonds and traditional inflation hedges such as commodities and TIPS. This portfolio is held in proportions appropriate for a U.S. investor who is about 45 years away from retirement. The Moderate risk profile is for investors who are comfortable with average exposure to equity market volatility.

Morningstar Lifetime Mod 2060 TR USD

The index measures the performance of a portfolio of global equities, bonds and traditional inflation hedges such as commodities and TIPS. This portfolio is held in proportions appropriate for a US investor who has a target maturity date of 2060. The Moderate risk profile is for investors who are comfortable with average exposure to equity market volatility. This Index does not incorporate Environmental, Social, or Governance (ESG) criteria.

Morningstar Lifetime Mod Incm TR USD

The Morningstar Lifetime Moderate Income Index represents a portfolio of global equities, bonds and traditional inflation hedges such as commodities and TIPS. This portfolio is held in proportions appropriate for a U.S. investor who is at least ten years into retirement. The Moderate risk profile is for investors who are comfortable with average exposure to equity market volatility.

Morningstar Mod Tgt Risk TR USD

The Morningstar Moderate Target Risk Index represents a portfolio of global equities, bonds and traditional inflation hedges such as commodities and TIPS. This portfolio is held in a static allocation appropriate for U.S. investors who seek average exposure to equity market risk and returns.

Morningstar US Core Bd TR USD

The index measures the performance of fixed-rate, investment-grade USD-denominated securities with maturities greater than one year. It is market-capitalization weighted. This Index does not incorporate Environmental, Social, or Governance (ESG) criteria.

Morningstar US Mid Brd Gr TR USD

The index measures the performance of US mid-cap growth stocks. It targets stocks representing the faster growing half of the mid-cap market. This Index does not incorporate Environmental, Social, or Governance (ESG) criteria.

Morningstar US Mod Con Tgt Alloc NR USD

The Morningstar Target Allocation Index family consists of indexes that offer a diversified mix of stocks and bonds created for local investors to benchmark their allocation funds. Morningstar's Category classification system defines the level of equity and bond exposure for each index. The Morningstar US Moderately Conservative Target Allocation Index seeks 40% exposure to global equity markets.

Morningstar US SmI Ext TR USD

The index measures the performance of US small-cap stocks. These stocks fall

©2022 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be precatelod or accompanied by a prospectus, or equivalent, and disclose statement. Please see important disclosures at the end of this report.



between the 90th and 99.5th percentile in market capitalization of the investable universe. This Index does not incorporate Environmental, Social, or Governance (ESG) criteria

MSCI ACWI Ex USA NR USD

The MSCI AC World ex USA is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global developed and emerging markets. The index consists of 48 developed and emerging market country indices. The returns we publish for the index are total returns, which include reinvestment of dividends. The constituents displayed for this index are from the following proxy: iShares MSCI ACWI ex US ETF.

MSCI ACWI NR USD

The index measures the performance of the large and mid cap segments of all country markets. It is free float-adjusted market-capitalization weighted. The constituents displayed for this index are from the following proxy: iShares MSCI ACWI ETF.

MSCI EAFE NR USD

This Europe, Australasia, and Far East index is a market-capitalization-weighted index of 21 non-U.S., industrialized country indexes.

This disclosure applies to all MSCI indices: Certain information included herein is derived by Morningstar in part from MSCI's Index Constituents (the "Index Data"). However, MSCI has not reviewed any information contained herein and does not endorse or express any opinion such information or analysis. MSCI does not make any express or implied warranties, representations or guarantees concerning the Index Data or any information or data derived therefrom, and in no event will MSCI have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) relating to any use of this information. The constituents displayed for this index are from the following proxy: Schwab International Index Fund®.

Russell 1000 TR USD

Consists of the 1000 largest companies within the Russell 3000 index, which represents approximately 98% of the investable US equity market. Also known as the Market-Oriented Index, because it represents the group of stocks from which most active money managers choose. The constituents displayed for this index are from the following proxy: iShares Russell 1000 ETF.

Russell 2000 TR USD

Consists of the 2000 smallest companies in the Russell 3000 Index. The constituents displayed for this index are from the following proxy: iShares Russell 2000 ETF.

Russell Mid Cap Growth TR USD

Tracks the companies within the Russell Midcap Index with higher price-to-book ratios and higher forecasted growth values. The constituents displayed for this index are from the following proxy: iShares Russell Mid-Cap Growth ETF.

Russell Mid Cap TR USD

Measures the performance of the 800 smallest companies in the Russell 1000 Index, which represent approximately 25% of the total market capitalization of the Russell 1000 Index. The constituents displayed for this index are from the following proxy: iShares Russell Mid-Cap ETF.

S&P 500 TR USD

A market capitalization-weighted index composed of the 500 most widely held stocks whose assets and/or revenues are based in the US; it's often used as a proxy for the U.S. stock market. TR (Total Return) indexes include daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: SPDR® S&P 500 ETF Trust.

USTREAS T-Bill Auction Ave 3 Mon
Three-month T-bills are government-backed, short-term investments considered to be risk-free and as good as cash because the maturity is only three months. Morningstar collects yields on the T-bill on a weekly basis from the Wall Street Journal.

©2022 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar; (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar; (3) may not be copied or redistributed; (4) do not constitute investment advice offered by Morningstar; (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc., including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be preceded or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.

Important Disclosures:

The material in this Report is not to be reproduced or distributed to any other persons (other than professional advisors of the investors) and is intended solely for the use of the persons to whom it has been delivered. This material is not for distribution to the general public.

This information is being provided as a service of your Hyas Group Consultant and does not supersede or replace your customer account statement provided by your custodian ("Custodial Statement"). Information in this Report may vary from the information in your Custodial Statement as a result of differences in accounting procedures, reporting dates, or valuation methodologies of certain securities. The market values reflected in this Report may vary slightly from the market values in your Custodial Statement. The information in this Report is as of the date(s) noted and subject to daily market fluctuation.

Sources of Information. Material in this Report has been obtained from sources that we believe to be reliable, but we do not guarantee its accuracy, completeness, or timeliness. The performance produced herein is calculated utilizing custodian data downloads and manually entered material. Although we take every precaution to ensure accuracy, we are not able to guarantee complete accuracy.

No Tax or Legal Advice. When Hyas Group, its affiliates and Hyas Group Consultants provide "investment advice" regarding a retirement or welfare benefit plan account, an individual retirement account or a Coverdell education savings account ("Retirement Account"), Hyas Group is a "fiduciary" as those terms are defined under the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), and/or the Internal Revenue Code of 1986 (the "Code"), as applicable. When Hyas Group provides investment education or otherwise does not provide "investment advice", Hyas Group will not be considered a "fiduciary" under ERISA and/or the Code. Tax laws are complex and subject to change. Hyas Group does not provide tax or legal advice.

Key Asset Class Risk Disclosures. Investing involves market risk, including possible loss of principal. Please refer to Hyas Group's Form ADV Brochure for more information about the risks associated with certain investment products. The Hyas Group's Form ADV Brochure is available upon request.

ALL MUTUAL FUND PRODUCTS AND EXCHANGE-TRADED FUNDS ARE SOLD BY PROSPECTUS, WHICH CONTAINS MORE COMPLETE INFORMATION ABOUT A FUND, ITS EXPENSES AND MATERIAL RISKS RELATED TO THAT FUND'S INVESTMENT STRATEGY.

PLEASE CONTACT YOUR HYAS GROUP CONSULTANT FOR A COPY OF A FUND'S PROSPECTUS.

PLEASE READ THE PROSPECTUS AND CONSIDER THE FUND'S INVESTMENT OBJECTIVES, RISKS, CHARGES AND EXPENSES CAREFULLY BEFORE INVESTING. THE PROSPECTUS CONTAINS THIS AND OTHER IMPORTANT INFORMATION ABOUT THE FUND.

Performance. Performance results illustrated herein do not reflect a deduction of any investment advisory fees charged by Hyas Group or any investment manager but do include the fund's internal expenses. Performance results are annualized for time periods greater than one year and include all cash and cash equivalents, realized and unrealized capital gains and losses, and dividends, interest, and income. The investment results depicted herein represent historical performance. As a result of recent market activity, current performance may vary from the figures shown. Past performance is not a guarantee of future results.

The underlying fund's internal expenses (also known as the expense ratio) generally covers investment management fees, marketing, and distribution fees (also known as 12b-1 fees) and other operating expenses of the fund. The expense ratios being displayed for mutual funds reflect each fund's prospectus "net" expenses as provided by Morningstar. Such "net" expenses are subject to change and may increase at any time.

To learn more about the Hyas Group advisory services, please see the Hyas Group ADV Brochure for more information. It is available from your Hyas Group Consultant.

Performance data quoted is historical. Past performance does not guarantee future results. Current performance may be higher or lower than the performance quoted. You can obtain performance data current to the most recent month-end for each fund by visiting the fund company website. The investment return and principal value of an investment will fluctuate such that an investor's shares, when redeemed, may be worth more or less than their original cost. Total returns include reinvestment of dividends and capital gains and are net of all fund fees and expenses.

Performance figures are based on Net Asset Value (NAV) within a qualified retirement plan. If an individual were to purchase shares outside of a qualified plan, they would likely be subject to all, or a portion of, any applicable sales charges. These charges would lower the performance indicated above.

Each fund's performance may, from time to time, have been affected significantly by material market and economic conditions, including interest rates, market trends, and general business and economic cycles, which may or may not be repeated in the future. Also, keep in mind that any double-digit returns are highly unusual and cannot be sustained. Such returns are primarily achieved during favorable market conditions.

Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns include the reinvestment of all dividends, but do not reflect the payment of transaction costs, advisory fees or expenses that are associated with an investment. The indices selected by Hvas Group to measure performance are representative of broad asset classes. Hvas Group retains the right to change representative indices at any time. Performance of indices may be more or less volatile than any investment product. The risk of loss in value of a specific investment is not the same as the risk of loss in a broad market index. Therefore, the historical returns of an index will not be the same as the historical returns of a particular investment a client selects. Past performance does not guarantee future results.

The "Investment Policy Statement Compliance Report" indicates funds that are on the Plan's Watch List, as based on investment monitoring criteria which is provided to Hvas Group by the plan sponsor. The plan sponsor should inform its Hvas Group Consultant of any changes to the plan's investment policy.

Fund data provided by Morningstar.

Peer Groups. Peer Groups are a collection of similar investment strategies that essentially group investment products that share the same investment approach. Peer Groups are used for comparison purposes to compare and illustrate a client's investment portfolio versus its peer across various quantitative metrics like performance and risk. Peer Group comparison is conceptually another form of benchmark comparison whereby the actual investment can be ranked versus its peer across various quantitative metrics.

Peer Group Ranking Methodology. A percentile rank denotes the value of a product in which a certain percent of observations falls within a peer group. The range of percentile rankings is between 1 and 100, where 1 represents a high statistical value and 100 represents a low statistical value. The 30th percentile, for example, is the value in which 30% of the highest observations may be found, the 65th percentile is the value in which 65% of the highest observations may be found, and so on.

Percentile rankings are calculated based on a normalized distribution ranging from 1 to 100 for all products in each peer group, where a ranking of 1 denotes a high statistical value and a ranking of 100 denotes a low statistical value. It is important to note that the same ranking methodology applies to all statistics, implying that a ranking of 1 will always mean highest value across all statistics.

For example, consider a risk/return assessment using standard deviation as a measure of risk. A percentile ranking equal to 1 for return denotes highest return, whereas a percentile ranking of 1 for standard deviation denotes highest risk among peers.

In addition, values may be used to demonstrate quartile rankings. For example, the third quartile is also known as the 75th percentile, and the median is the 50th percentile.

Hvas Group, a business of Morgan Stanley. © Morgan Stanley, 2022.