



SAN BERNARDINO COUNTY
Full-Time and Part-Time Retirement and RMT Plans
December 31, 2022 Performance Report

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Section 1



CONSTRUCTIVE VIEWS ON PRODUCTIVITY

2022 contained no shortage of high-level events across the spectrum: military conflicts, continued pandemic, a bear market, inflation, aggressive monetary policy, and many more which continue into 2023. The importance of these notwithstanding, this article pivots to discuss a longer-term subject whose course has been influenced by 2022 and the era leading up to it: productivity. From the aftermath of the Great Financial Crisis (GFC) up to the start of COVID, productivity growth lagged longer-term averages and was not broadly dispersed throughout the myriad of sectors in the broader economy. Looking forward, factors on the supply side, which combined with demographic trends offer several avenues for new and productivity-enhancing capital expansion. After all last year's difficulties, it's nice to talk about something positive for a change!

Households and corporations still have substantially healthy balance sheets. Corporate cash levels are high, debt maturities are several years out, and leverage ratios are well below long-term trends. Banks in particular, the proverbial switch-board of capital, maintain excess capital thanks in part to controls set after the GFC. Good to know the funds are there, but who and what will the productivity come from? The US workforce is expected to get younger on average in the years to come, ushering in workers with a more natural proclivity to new technology and the potential for increased automation. This demographic transformation comes on the back of several recent years of increased venture capital funding bringing superior computing products to a more tractable labor market. More expensive financing via higher interest rates may also compel companies to leverage new technology to remain profitable.

The ingredients for productivity growth being there, where in particular might the capital expenditure money go? One of the offshoots more directly linked to the pandemic is the digitization of business models, wherein artificial intelligence and machine learning was originally substituted in for traditional R&D to help expedite the production of mRNA technologies, it has the potential for application across many other industries. Another is the adoption of hybrid or remote working, allowing increased labor mobility, reduced time lost to commuting, and more business start-ups bringing unique, new products to market. Spending on decarbonization from the Inflation Reduction Act, to come via fiscal and public/private partnership spending, also has the potential to add hundreds of billions of dollars to domestic output in new technologies. While other areas such as increases in defense and infrastructure spending also can bolster productivity, the economy-wide possibilities are varied and endless.

This article's optimistic hypotheses, which may take years to unfold, illustrate one of the benefits of a dynamic and open economy that is easily overlooked in stressful times: the potential for positive surprises. COVID's damages being what they are, many of the financial reactions to it when combined with other technological and demographic trends have the potential to positively transform economic lives for years to come. Such transformation arguably could not be as easily achieved in a more economically stagnant, sedate, or otherwise closed environment. Although the productivity gains we are hoping for are by no means guaranteed; the ingredients are there and the prospect reminds investors that the long-run can pack a lot of upside, even if the recent past has been anything but easy.¹

¹Source: Morgan Stanley Global Investment Committee Special Report by Lisa Shalett, The Next American Productivity Renaissance, January 4, 2023

GLOBAL ECONOMIC LANDSCAPE

- As expected by a consensus of forecasters, inflation as measured by CPI came down in December 2022 for a second month; 7.0% at the headline level and 6.0% at core. In turn, the Fed lowered the pace of rate hikes to 50 basis points at its December meeting, bringing the fed funds rate to 4.5%. While there is reason to be sanguine about inflation, sticky prices in services and the tightness of the labor market are wildcards which the Fed has explicitly cited as risks. Despite the Fed's hawkish rhetoric which raised the terminal rate and pushed out guidance on first rate cuts, the market discounted only 25 to 50 basis points more in hikes and aggressive rate cuts by June. With financial conditions quite loose, the Fed has room to deliver negative surprises².
- The rise in Treasury yields may well challenge the US Government's ability to finance operations. For example, as of year-end 2022, nearly 30% of US Government debt was scheduled to mature within one year and approximately another 20% has a maturity date of between one and three years. One implication is that increased borrowing costs will crowd out discretionary spending. Another is that the Treasury may seek to issue longer-term debt which, thanks to an inverted yield curve, entails lower borrowing costs³.
- According to a Federal Reserve Report in November 2022 ("What Happens in China Does Not Stay in China"), policy-driven increases in China's credit may provide a tailwind for energy and commodity prices. For example, the International Energy Agency noted that China's demand for oil dropped by the greatest amount in over three decades due to lockdowns. Factors such as a re-opening in travel, an uptick in property demand, combined with relatively low inventory levels of copper and aluminum have the potential to stoke demand⁴.

GLOBAL FINANCIAL MARKETS

- In 2022, persistent global inflationary pressures and coordinated central bank rate hikes led equities to decline to bear market lows and fixed income to experience the sharpest losses in decades. This was the first time in modern history where both US stocks and long-term bonds declined by double digits in a year. The traditional 60% stock/40% bond portfolio lost -16.1% in 2022, the worst return in more than 50 years⁵.
- The US Dollar retreated in value from its peak on September 28, 2022, suggesting that investors believe the Fed is near the end of its tightening cycle. This in turn has been viewed positively for Emerging Markets in terms of their ability to attract, compete in export markets, raise capital by issuing dollar-denominated debt, and otherwise develop economically⁶.
- Despite being viewed as an inflation-hedge, Real Estate Investment Trusts (REITs) saw their second worst year on record in 2022 (the worst being 2008), returning -24.5% versus -18.1% for the S&P 500. Although operating income growth was above historical averages, valuation metrics such as rising interest rates and credit spreads, as well as declining earnings expectations and falling private market valuations presented a formidable headwind for the sector⁷.
- Gold typically trades inversely with real, or inflation-adjusted, yields. Falling real yields support the yellow metal and rising yields on inflation-protection securities drive losses. With the 10-year US Treasury real yield having backed up by nearly 280 basis points in 2022 to 1.6% from an extremely negative

² Source: Morgan Stanley Global Investment Committee Weekly December 19, 2022

³ Source: Morgan Stanley Global Investment Committee Weekly January 9, 2023

⁴ Source: Morgan Stanley, A Few Things We're Thinking About, by Christopher Baxter, January 5, 2023

⁵ Source: Morgan Stanley, Client Commentary, January 2023

⁶ Source: Morgan Stanley, A Few Things We're Thinking About, by Christopher Baxter January 5, 2023

⁷ Source: Morgan Stanley, The REIT Cheat Sheet, North America by Ronald Kamden, January 3, 2023

position, it should have been a horrendous year for gold. However, demand has remained strong as shifting geopolitics and currency market turmoil have led central banks, especially those in China and Russia, to build their reserves⁸.

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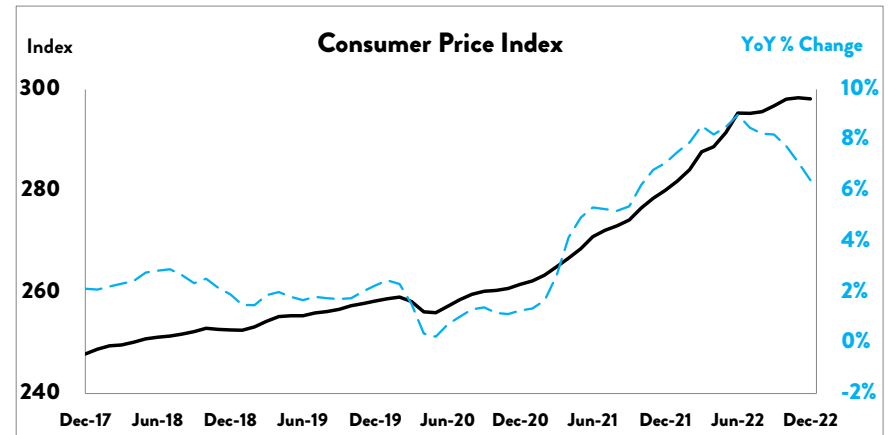
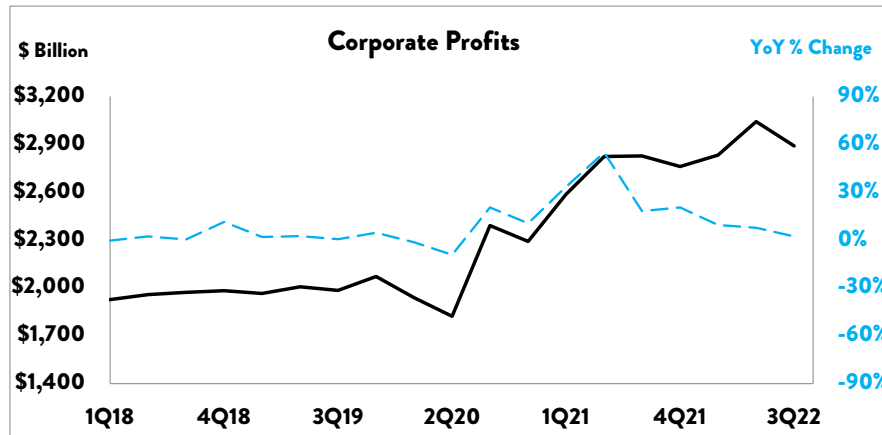
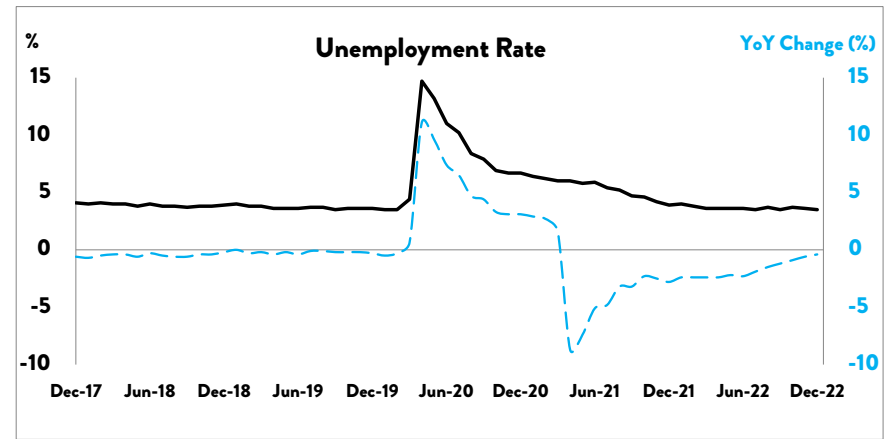
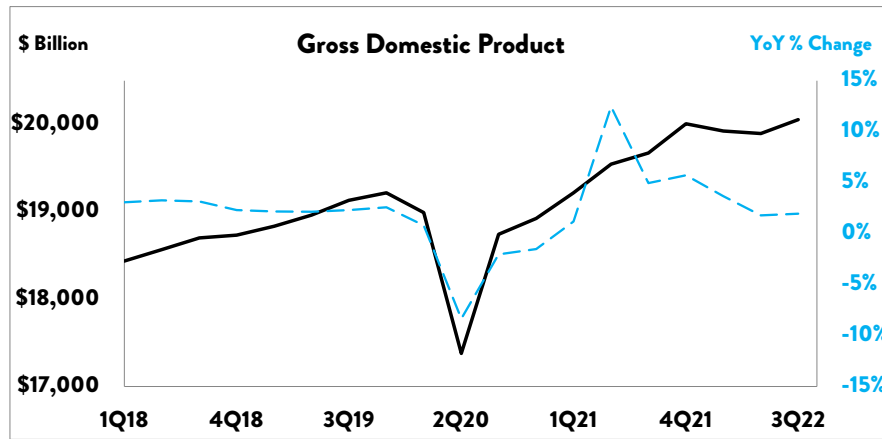
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⁸ Source: Morgan Stanley Global Investment Committee Weekly January 3, 2023

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4Q2022 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	223,000	4,505,000	-20,493,000	103,567	Dec-22
Unemployment Rate	3.5%	14.7%	3.5%	4.9%	Dec-22
Median Unemployment Length (Weeks)	7.5	22.2	4.0	11.2	Dec-22
Average Hourly Earnings	\$32.82	\$32.82	\$26.73	\$29.45	Dec-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	\$3.17	\$4.84	\$1.80	-34.5%	Dec-22
Spot Oil	\$76.44	\$114.84	\$16.55	-33.4%	Dec-22
Case-Shiller Home Price Index	304.2	316.2	204.7	48.7%*	Oct-22
Medical Care CPI	552.3	557.4	480.8	14.9%*	Dec-22

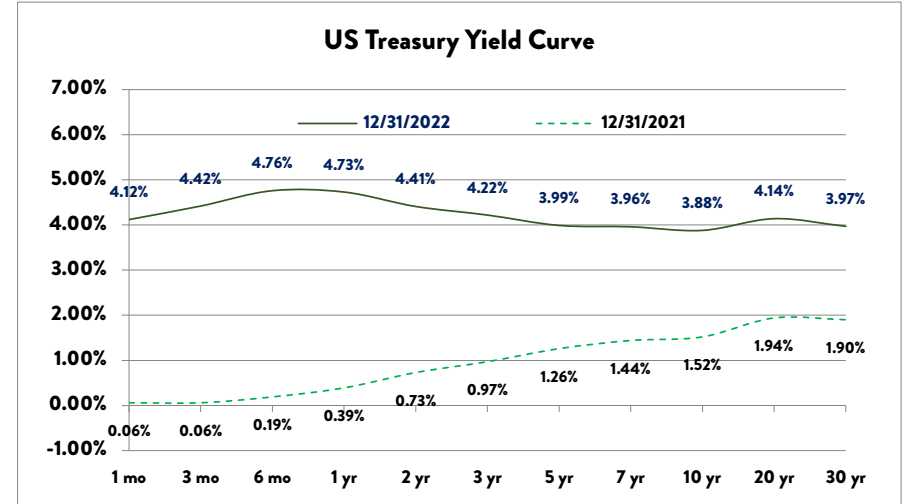
*% Off Low

Morningstar data as of 12/31/2022

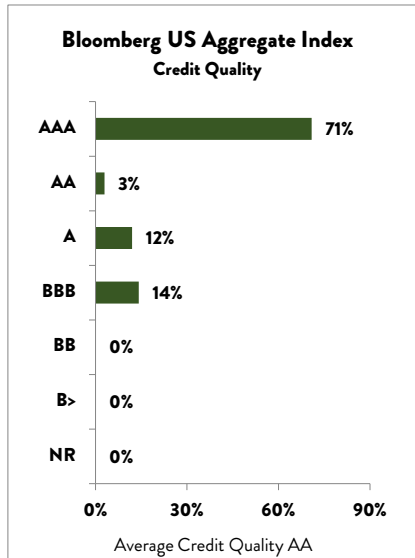
4Q2022 Bond Market Data

Index	QTR	YTD	1 yr.	3 yrs.	5 yrs.	10 yrs.
90-Day T-Bill	1.02%	2.05%	2.05%	0.82%	1.31%	0.79%
Bloomberg US Aggregate	1.87%	-13.01%	-13.01%	-2.71%	0.02%	1.06%
Bloomberg Short US Treasury	0.85%	0.98%	0.98%	0.66%	1.26%	0.80%
Bloomberg Int. US Treasury	1.02%	-7.77%	-7.77%	-1.39%	0.46%	0.69%
Bloomberg Long US Treasury	-0.59%	-29.26%	-29.26%	-7.40%	-2.20%	0.60%
Bloomberg US TIPS	2.04%	-11.85%	-11.85%	1.21%	2.11%	1.12%
Bloomberg US Credit	3.44%	-15.26%	-15.26%	-2.86%	0.42%	1.82%
Bloomberg US Mortgage-Backed	2.14%	-11.81%	-11.81%	-3.22%	-0.53%	0.74%
Bloomberg US Asset-Backed	0.81%	-4.30%	-4.30%	-0.11%	1.18%	1.23%
Bloomberg US 20-Yr Municipal	5.23%	-11.02%	-11.02%	-1.05%	1.37%	2.64%
Bloomberg US High Yield	4.17%	-11.19%	-11.19%	0.05%	2.31%	4.03%
Bloomberg Global	4.55%	-16.25%	-16.25%	-4.48%	-1.66%	-0.44%
Bloomberg International	6.81%	-18.70%	-18.70%	-5.94%	-3.07%	-1.64%
Bloomberg Emerging Market	6.59%	-15.26%	-15.26%	-3.89%	-0.42%	1.71%

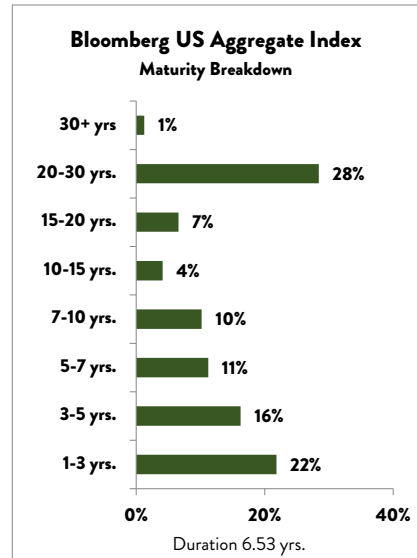
Source: Morningstar



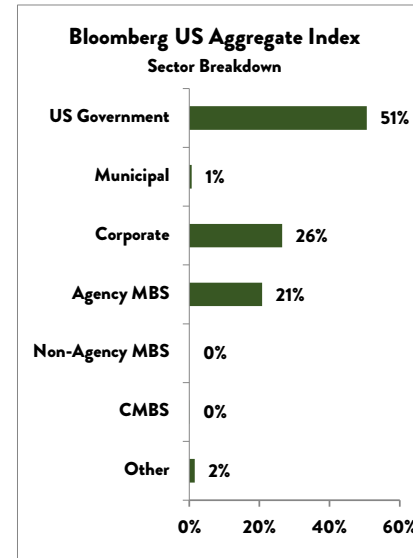
Source: Department of US Treasury



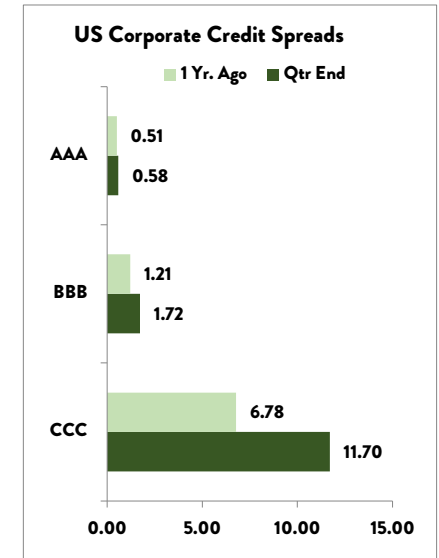
Source: Morningstar



Source: Morningstar



Source: Morningstar



Source: Federal Reserve / Bank of America

4Q2022 US Equity Market Data

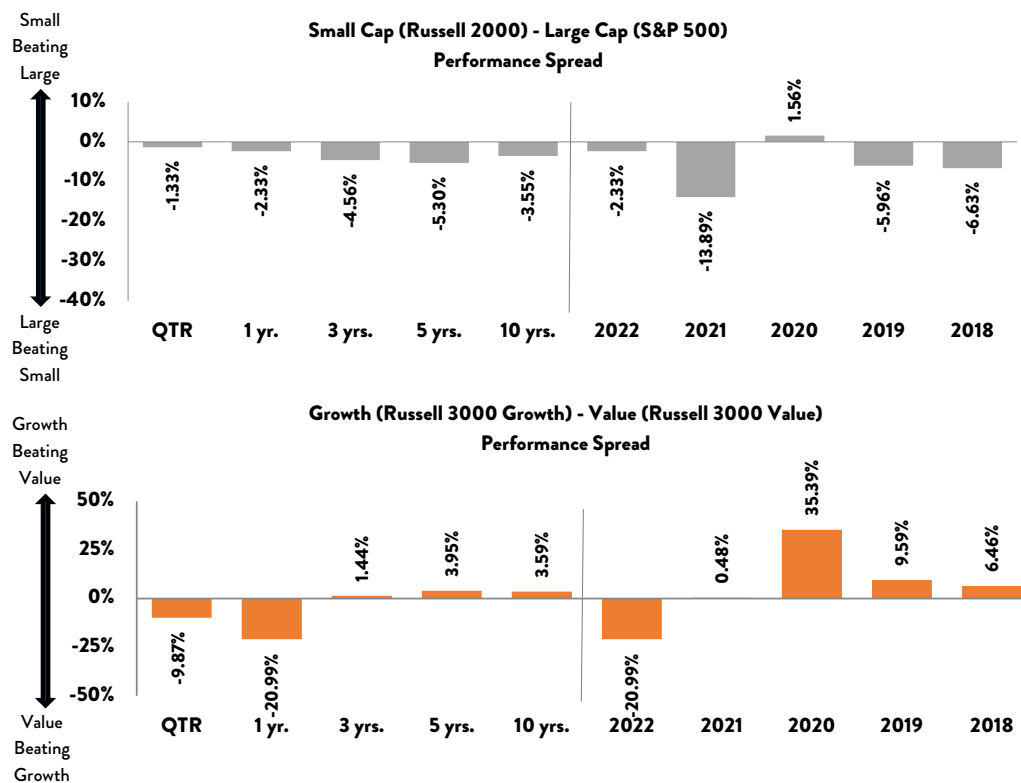
Sectors Weights/Returns (ranked by quarter performance)

	Wgt.	Sector	QTR	YTD	1 yr.
S&P 500 Index	5%	Energy	22.81%	65.72%	65.72%
	9%	Industrials	19.22%	-5.48%	-5.48%
	3%	Materials	15.05%	-12.27%	-12.27%
	12%	Financials	13.61%	-10.53%	-10.53%
	16%	Health Care	12.80%	-1.95%	-1.95%
	7%	Consumer Staples	12.72%	-0.62%	-0.62%
	3%	Utilities	8.64%	1.57%	1.57%
	26%	Information Technology	4.74%	-28.19%	-28.19%
	3%	Real Estate	3.82%	-26.13%	-26.13%
	7%	Communication Services	-1.38%	-39.89%	-39.89%
10%	Consumer Discretionary	-10.18%	-37.03%	-37.03%	
S&P Midcap 400 Index	7%	Materials	21.92%	-2.73%	-2.73%
	14%	Consumer Discretionary	14.24%	-21.03%	-21.03%
	20%	Industrials	12.77%	-11.50%	-11.50%
	4%	Utilities	11.62%	-0.15%	-0.15%
	4%	Consumer Staples	11.59%	-0.77%	-0.77%
	4%	Energy	10.45%	36.62%	36.62%
	15%	Financials	9.57%	-3.04%	-3.04%
	12%	Information Technology	9.36%	-20.47%	-20.47%
	10%	Health Care	5.22%	-20.05%	-20.05%
	2%	Communication Services	4.31%	-20.39%	-20.39%
8%	Real Estate	3.74%	-26.35%	-26.35%	
S&P Smallcap 600 Index	5%	Energy	20.45%	47.89%	47.89%
	17%	Industrials	14.66%	-9.40%	-9.40%
	3%	Utilities	12.64%	-1.84%	-1.84%
	6%	Materials	11.51%	-6.09%	-6.09%
	13%	Consumer Discretionary	10.91%	-27.82%	-27.82%
	5%	Consumer Staples	9.76%	-6.47%	-6.47%
	8%	Real Estate	9.01%	-29.50%	-29.50%
	13%	Information Technology	8.09%	-22.36%	-22.36%
	18%	Financials	7.21%	-14.02%	-14.02%
	11%	Health Care	0.48%	-26.32%	-26.32%
2%	Communication Services	-3.18%	-34.46%	-34.46%	

Source: Morningstar

Index Performance Data

Index	QTR	YTD	1 yr.	Annualized		
				3 yrs.	5 yrs.	10 yrs.
S&P 500	7.56%	-18.11%	-18.11%	7.66%	9.42%	12.56%
Russell 1000 Value	12.42%	-7.54%	-7.54%	5.96%	6.67%	10.29%
Russell 1000 Growth	2.20%	-29.14%	-29.14%	7.79%	10.96%	14.10%
Russell Mid Cap	9.18%	-17.32%	-17.32%	5.88%	7.10%	10.96%
Russell Mid Cap Value	10.45%	-12.03%	-12.03%	5.82%	5.72%	10.11%
Russell Mid Cap Growth	6.90%	-26.72%	-26.72%	3.85%	7.64%	11.41%
Russell 2000	6.23%	-20.44%	-20.44%	3.10%	4.13%	9.01%
Russell 2000 Value	8.42%	-14.48%	-14.48%	4.70%	4.13%	8.48%
Russell 2000 Growth	4.13%	-26.36%	-26.36%	0.65%	3.51%	9.20%
Russell 3000	7.18%	-19.21%	-19.21%	7.07%	8.79%	12.13%
DJ US Select REIT	4.76%	-25.96%	-25.96%	-1.37%	2.50%	5.74%



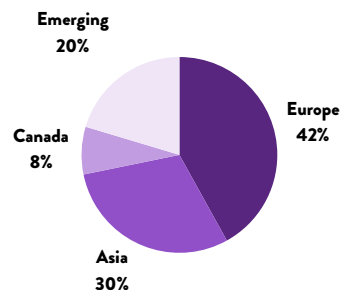
4Q2022 International Market Data

Index Performance Data (net)

Index (US\$)	QTR	YTD	1 yr.	3 yrs.	5 yrs.	10 yrs.
MSCI ACWI ex-US	14.28%	-16.00%	-16.00%	0.07%	0.88%	3.80%
MSCI EAFE	17.34%	-14.45%	-14.45%	0.87%	1.54%	4.67%
Europe	19.35%	-15.06%	-15.06%	1.35%	1.87%	4.58%
United Kingdom	16.98%	-4.84%	-4.84%	0.32%	0.96%	3.07%
Germany	24.57%	-22.34%	-22.34%	-3.01%	-3.02%	2.66%
France	22.19%	-13.33%	-13.33%	2.53%	3.41%	6.14%
Pacific	14.13%	-13.04%	-13.04%	-0.03%	0.95%	4.89%
Japan	13.23%	-16.65%	-16.65%	-0.99%	0.23%	5.55%
Hong Kong	18.21%	-4.71%	-4.71%	-1.05%	-0.29%	4.77%
Australia	15.68%	-5.25%	-5.25%	4.07%	4.05%	3.97%
Canada	7.42%	-12.87%	-12.87%	4.95%	4.06%	3.68%
MSCI EM	9.70%	-20.09%	-20.09%	-2.69%	-1.40%	1.44%
MSCI EM Latin America	5.73%	8.92%	8.92%	-4.79%	-1.08%	-2.15%
MSCI EM Asia	10.83%	-21.11%	-21.11%	-1.31%	-0.62%	3.55%
MSCI EM Eur/Mid East	1.25%	-35.34%	-35.34%	-9.53%	-4.07%	-4.02%
MSCI ACWI Value ex-US	15.70%	-8.59%	-8.59%	0.06%	-0.05%	2.72%
MSCI ACWI Growth ex-US	12.89%	-23.05%	-23.05%	-0.40%	1.49%	4.68%
MSCI ACWI Sm Cap ex-US	13.31%	-19.97%	-19.97%	1.07%	0.67%	5.24%

Regional Exposure

MSCI ACWI ex-USA

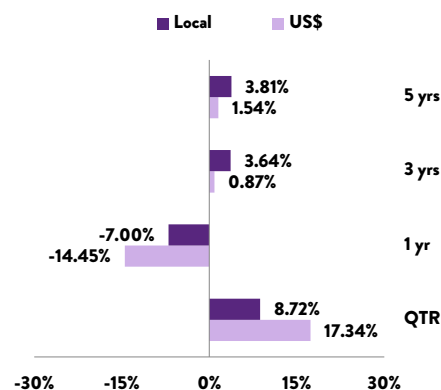


Top 10 Countries (MSCI AC World ex-USA)

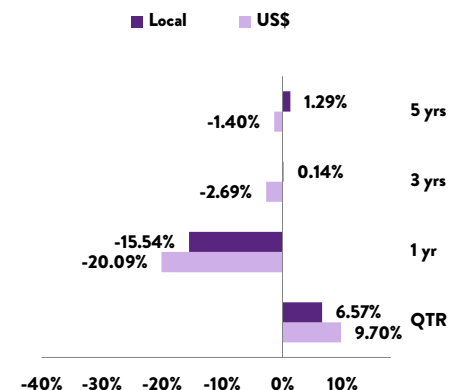
Japan	14%
UK	10%
China	9%
Canada	8%
France	8%
Switzerland	7%
Germany	5%
Australia	5%
India	4%
Taiwan	4%

Source: Morningstar

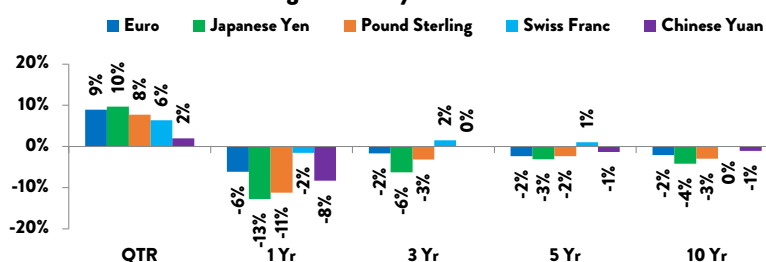
MSCI EAFE Index Return



MSCI Emerging Index Return



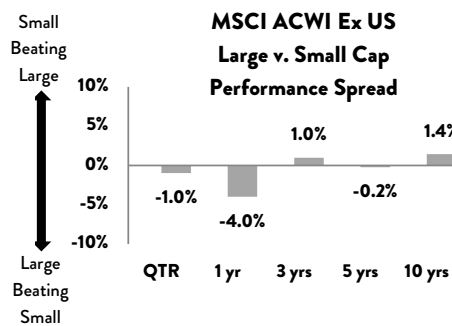
Foreign Currency v. US\$ Returns



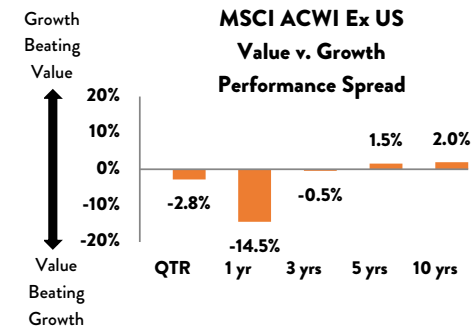
Exchange Rates	QTR	3Q22	2Q22	1Q22	4Q21	3Q21
Japanese Yen	131.81	144.71	135.69	121.44	115.17	111.50
Euro	0.93	1.02	0.96	0.90	0.88	0.86
British Pound	0.83	0.90	0.82	0.76	0.74	0.74
Swiss Franc	0.92	0.98	0.96	0.92	0.91	0.93
Chinese Yuan	6.90	7.11	6.70	6.34	6.37	6.44

Source: Federal Reserve Bank of St. Louis

MSCI ACWI Ex US Large v. Small Cap Performance Spread



MSCI ACWI Ex US Value v. Growth Performance Spread



Performance Source: Morningstar

Historical Market Returns

Ranked by Performance

2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	4Q22
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. 16.09%	Intl 14.28%
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 6.59%	Emerging Markets 9.70%
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 2.05%	Mid Cap 9.18%
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%	High Yield -11.19%	Large Cap 7.56%
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%	TIPS -11.85%	Global Balanced 7.50%
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%	US Bonds -13.01%	Small Cap 6.23%
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%	Intl -16.00%	Global Bonds 4.55%
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 Bonds -16.25%	High Yield 4.17%
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%	Global Balanced -16.40%	Commod. 2.22%
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 -17.32%	TIPS 2.04%
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%	Large Cap -18.11%	US Bonds 1.87%
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%	Emerging Markets -20.09%	Cash 1.02%
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%	Small Cap -20.44%	Core Real Estate -5.13%

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

Fourth Quarter 2022

Fixed Income	Ticker	Assets	%
Stabilizer	-	\$278,212,715	19.9%
Voya Fixed Account	-	\$86,537,188	6.2%
Voya Government Money Market A	VYAXX	\$14,573	0.0%
Sterling Capital Total Return Bond R6	STRDX	\$30,009,705	2.1%
Fidelity US Bond Index	FXNAX	\$8,789,982	0.6%
Fidelity Intermediate Treasury Bond Index	FUAMX	\$2,317,815	0.2%
Total		\$405,881,977	29.0%

Large Cap	Ticker	Assets	%
Fidelity 500 Index	FXAIX	\$145,863,493	10.4%
Hartford Core Equity R6	HAITX	\$128,738,836	9.2%
Total		\$274,602,329	19.6%

Mid Cap	Ticker	Assets	%
Fidelity Mid Cap Index	FSMDX	\$71,693,868	5.1%
Baron Growth Instl	BGRIX	\$46,085,553	3.3%
Total		\$117,779,421	8.4%

Small Cap	Ticker	Assets	%
Hartford Schrodgers US Small Cap Opps SDR	SCURX	\$11,307,739	0.8%
Fidelity Small Cap Index	FSSNX	\$42,624,393	3.0%
Total		\$53,932,132	3.9%

International	Ticker	Assets	%
MFS International Diversification R6	MDIZX	\$53,891,588	3.8%
Fidelity Total International Index	FTIHX	\$33,976,259	2.4%
Total		\$87,867,847	6.3%

Asset Allocation	Ticker	Assets	%
Conservative Allocation Portfolio	-	\$40,195,020	2.9%
Moderate Allocation Portfolio	-	\$84,776,399	6.1%
Aggressive Allocation Portfolio	-	\$63,911,107	4.6%
Vanguard Target Retirement Income	VTINX	\$7,127,007	0.5%
Vanguard Target Retirement 2020	VTWNX	\$31,210,163	2.2%
Vanguard Target Retirement 2025	VTTVX	\$3,221,804	0.2%
Vanguard Target Retirement 2030	VTHRX	\$67,746,767	4.8%
Vanguard Target Retirement 2035	VTHX	\$3,379,497	0.2%
Vanguard Target Retirement 2040	VFORX	\$67,284,116	4.8%
Vanguard Target Retirement 2045	VTIVX	\$2,557,266	0.2%
Vanguard Target Retirement 2050	VFIFX	\$50,329,537	3.6%
Vanguard Target Retirement 2055	VFFVX	\$2,005,506	0.1%
Vanguard Target Retirement 2060	VTTX	\$1,664,250	0.1%
Vanguard Target Retirement 2065	VLXVX	\$935,071	0.1%
Vanguard Target Retirement 2070	VSVNX	\$11,542	0.0%
Total		\$426,355,052	30.5%

Miscellaneous	Ticker	Assets	%
Self-Directed Brokerage Account	-	\$5,423,893	0.4%
Participant Loans	-	\$28,013,918	2.0%
Total		\$33,437,811	2.4%

TOTAL PLAN ASSETS

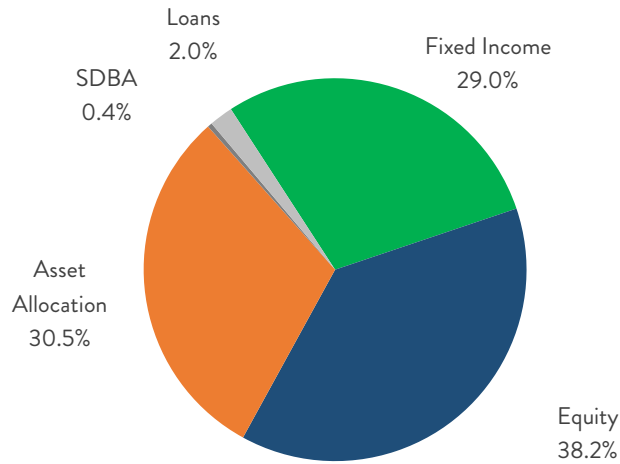
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SAN BERNARDINO COUNTY

Full-Time Plans - Combined

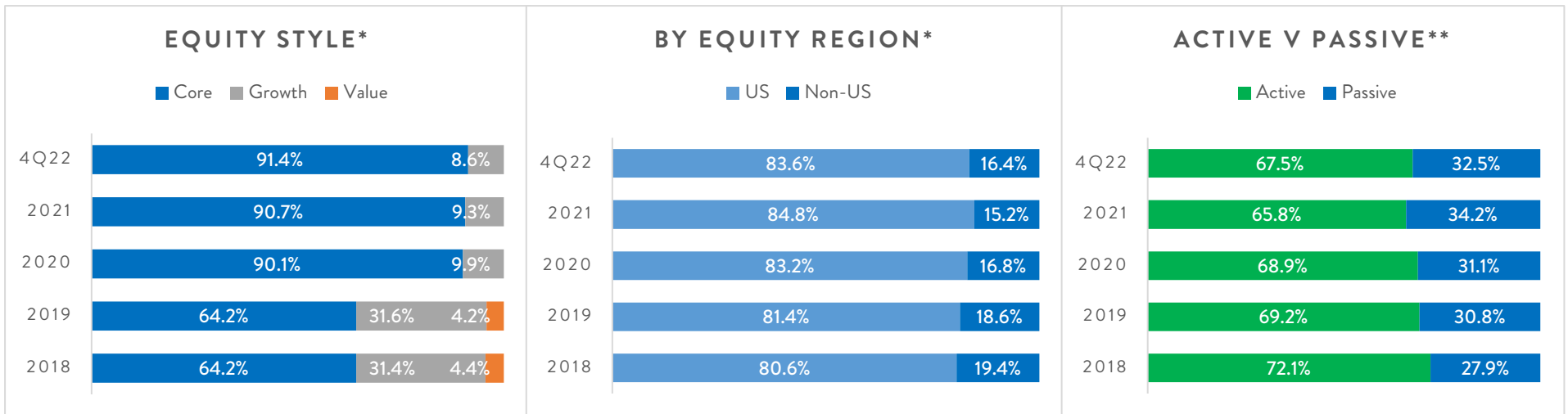
PLAN ASSET ALLOCATION

Fourth Quarter 2022



HISTORICAL PLAN ALLOCATION

Asset Class	4Q22	2021	2020	2019	2018	2017	2016	2015
Fixed Income	29.0%	25.7%	29.1%	29.9%	33.8%	N/A	N/A	N/A
Large Cap	19.6%	21.9%	20.4%	20.2%	19.0%	N/A	N/A	N/A
Mid Cap	8.4%	9.7%	9.3%	8.5%	4.9%	N/A	N/A	N/A
Small Cap	3.9%	4.2%	4.1%	4.3%	6.7%	N/A	N/A	N/A
International	6.3%	6.4%	6.8%	7.5%	7.3%	N/A	N/A	N/A
Asset Allocation	30.5%	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	2.0%	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

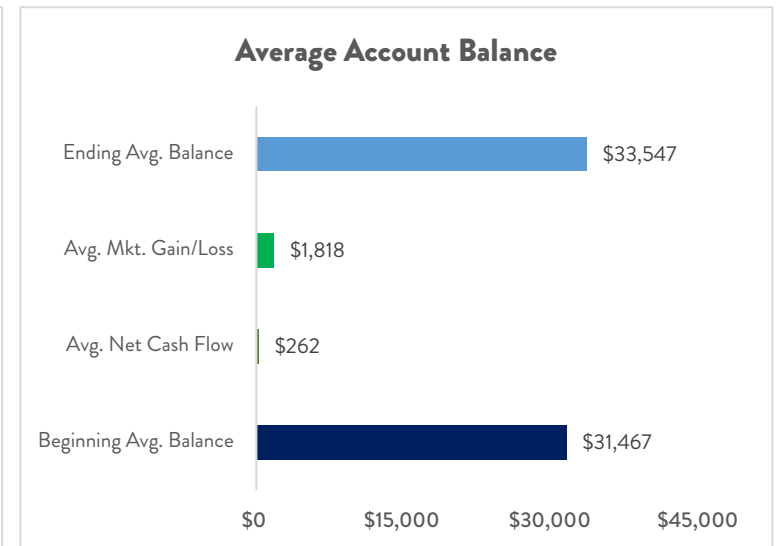
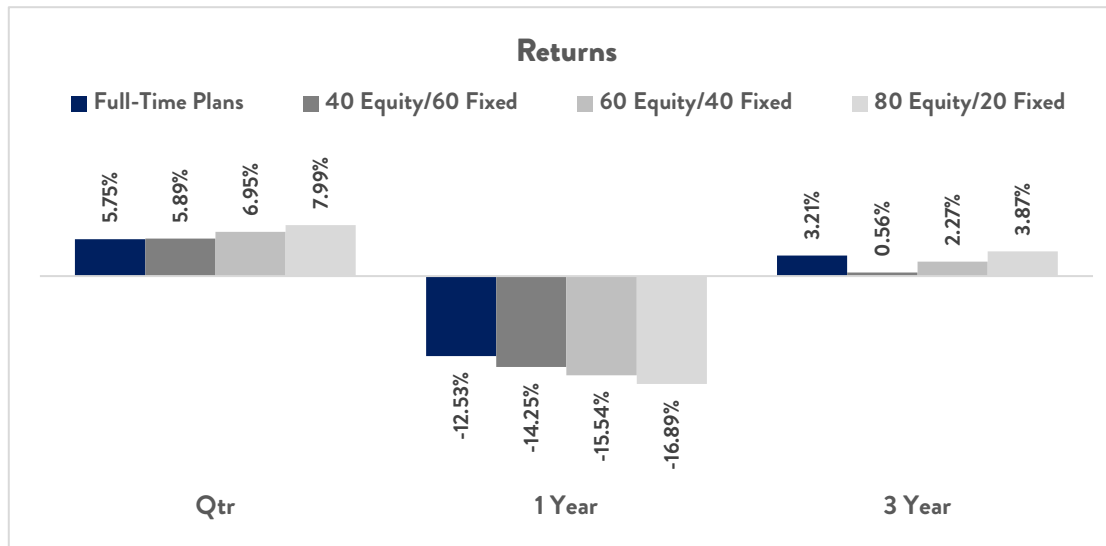
Fourth Quarter 2022

PLAN LEVEL CASH FLOWS

	Beginning Value	Cash Flow (+)	Cash Flow (-)	Transfer	Market Gain/Loss	Ending Value
Fixed Income	\$403,563,516	\$10,158,509	(\$7,121,664)	(\$3,196,752)	\$2,478,368	\$405,881,977
Large Cap	\$255,533,356	\$3,793,271	(\$3,939,153)	\$601,392	\$18,613,463	\$274,602,329
Mid Cap	\$104,771,608	\$1,975,152	(\$1,180,195)	\$1,444,041	\$10,768,815	\$117,779,421
Small Cap	\$50,078,705	\$1,145,217	(\$766,730)	(\$36,829)	\$3,511,769	\$53,932,132
International	\$76,596,490	\$1,629,909	(\$965,933)	(\$664,082)	\$11,271,463	\$87,867,847
Asset Allocation	\$390,697,061	\$11,690,059	(\$5,685,927)	\$1,814,935	\$27,838,924	\$426,355,052
SDBA	\$5,520,460	\$0	\$0	\$37,294	(\$133,862)	\$5,423,893
Total	\$1,286,761,196	\$30,392,117	(\$19,659,601)	\$0	\$74,348,939	\$1,371,842,650

HISTORICAL PLAN CASH FLOWS

	Beginning Value	Net Cash Flow	Market Gain/Loss	Ending Value
4Q22	\$1,286,761,196	\$10,732,515	\$74,348,939	\$1,371,842,650
YTD	\$1,532,878,892	\$31,236,797	(\$192,273,039)	\$1,371,842,650
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)

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SAN BERNARDINO COUNTY

457 Deferred Compensation Plan

PLAN ASSET ALLOCATION

Fourth Quarter 2022

Fixed Income	Ticker	Assets	%
Stabilizer	-	\$226,456,843	23.0%
Sterling Capital Total Return Bond R6	STRDX	\$25,299,090	2.6%
Fidelity US Bond Index	FXNAX	\$7,951,261	0.8%
Fidelity Intermediate Treasury Bond Index	FUAMX	\$1,819,541	0.2%
Total		\$261,526,735	26.5%

Large Cap	Ticker	Assets	%
Fidelity 500 Index	FXAIX	\$116,663,886	11.8%
Hartford Core Equity R6	HAITX	\$101,472,000	10.3%
Total		\$218,135,885	22.1%

Mid Cap	Ticker	Assets	%
Fidelity Mid Cap Index	FSMDX	\$55,700,226	5.6%
Baron Growth Instl	BGRIX	\$36,510,058	3.7%
Total		\$92,210,283	9.4%

Small Cap	Ticker	Assets	%
Hartford Schroders US Small Cap Opps SDR	SCURX	\$9,497,294	1.0%
Fidelity Small Cap Index	FSSNX	\$33,909,331	3.4%
Total		\$43,406,624	4.4%

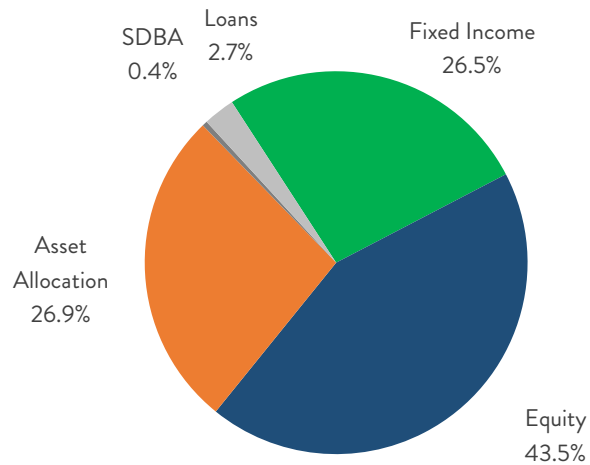
International	Ticker	Assets	%
MFS International Diversification R6	MDIZX	\$45,370,242	4.6%
Fidelity Total International Index	FTIHX	\$29,401,837	3.0%
Total		\$74,772,078	7.6%

Asset Allocation	Ticker	Assets	%
Conservative Allocation Portfolio	-	\$27,693,117	2.8%
Moderate Allocation Portfolio	-	\$63,612,213	6.5%
Aggressive Allocation Portfolio	-	\$50,393,395	5.1%
Vanguard Target Retirement Income	VTINX	\$4,818,278	0.5%
Vanguard Target Retirement 2020	VTWNX	\$11,757,706	1.2%
Vanguard Target Retirement 2025	VTTVX	\$2,271,280	0.2%
Vanguard Target Retirement 2030	VTHRXX	\$25,881,903	2.6%
Vanguard Target Retirement 2035	VTHHX	\$2,144,139	0.2%
Vanguard Target Retirement 2040	VFORX	\$33,465,537	3.4%
Vanguard Target Retirement 2045	VTIVX	\$1,637,645	0.2%
Vanguard Target Retirement 2050	VFIFX	\$38,057,422	3.9%
Vanguard Target Retirement 2055	VFFVX	\$1,358,782	0.1%
Vanguard Target Retirement 2060	VTTSX	\$1,409,175	0.1%
Vanguard Target Retirement 2065	VLXVX	\$832,987	0.1%
Vanguard Target Retirement 2070	VSVNX	\$7,960	0.0%
Total		\$265,341,536	26.9%

Miscellaneous	Ticker	Assets	%
Self-Directed Brokerage Account	-	\$4,283,507	0.4%
Participant Loans	-	\$26,282,147	2.7%
Total		\$30,565,654	3.1%

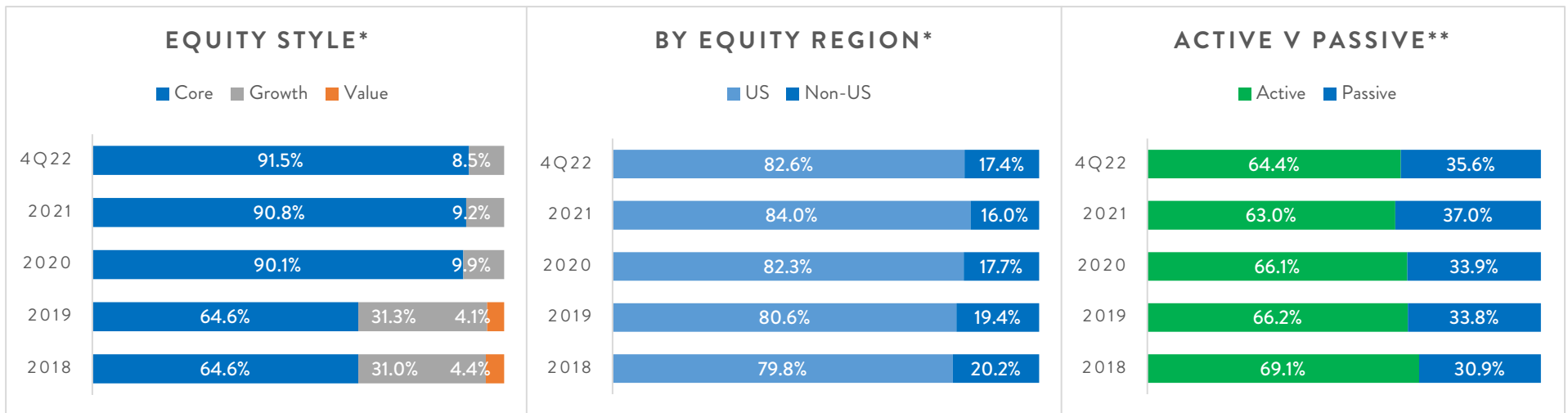
TOTAL PLAN ASSETS

\$985,958,796



HISTORICAL PLAN ALLOCATION

Asset Class	4Q22	2021	2020	2019	2018	2017	2016	2015
Fixed Income	26.5%	23.2%	26.4%	26.5%	30.2%	N/A	N/A	N/A
Large Cap	22.1%	24.5%	22.7%	22.6%	21.4%	N/A	N/A	N/A
Mid Cap	9.4%	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	7.6%	7.6%	8.1%	8.9%	8.7%	N/A	N/A	N/A
Asset Allocation	26.9%	26.4%	24.6%	24.0%	22.5%	N/A	N/A	N/A
SDBA	0.4%	0.4%	0.3%	0.2%	0.3%	N/A	N/A	N/A
Loans	2.7%	2.4%	2.8%	3.5%	3.9%	N/A	N/A	N/A



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

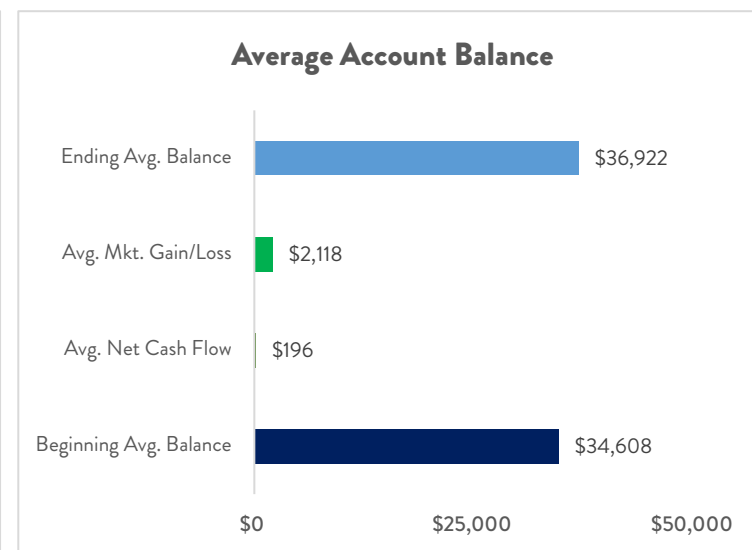
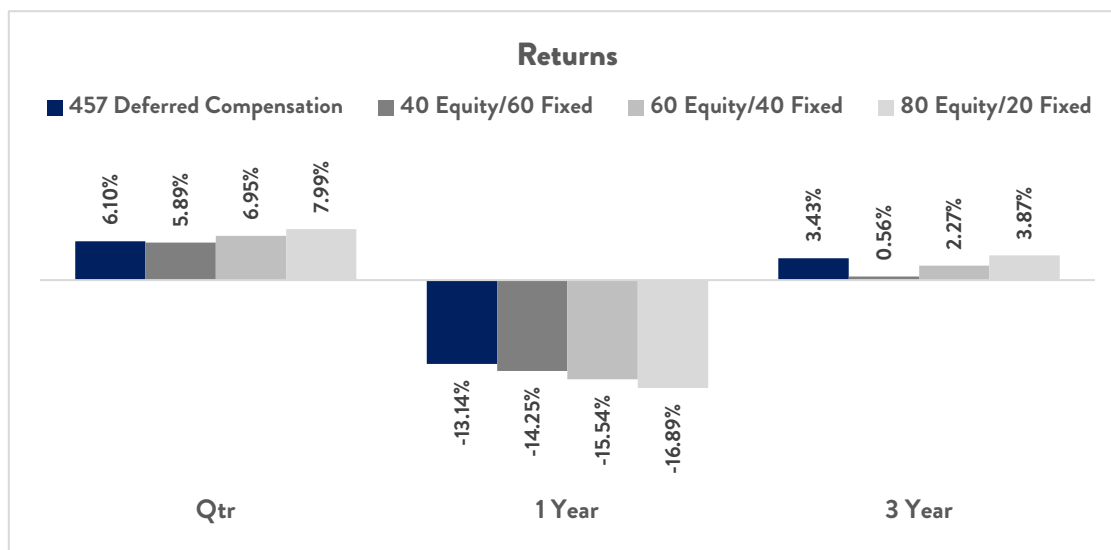
**Excludes Asset Allocation, SDBA, and Loan assets

PLAN LEVEL CASH FLOWS

	Beginning Value	Cash Flow (+)	Cash Flow (-)	Transfer	Market Gain/Loss	Ending Value
Fixed Income	\$260,521,672	\$3,442,258	(\$4,662,767)	\$410,253	\$1,815,320	\$261,526,735
Large Cap	\$203,377,411	\$2,979,898	(\$3,254,847)	\$211,936	\$14,821,486	\$218,135,885
Mid Cap	\$81,945,858	\$1,523,316	(\$951,688)	\$1,256,921	\$8,435,876	\$92,210,283
Small Cap	\$40,315,389	\$882,279	(\$625,024)	(\$7,769)	\$2,841,749	\$43,406,624
International	\$65,327,085	\$1,366,432	(\$869,149)	(\$657,510)	\$9,605,220	\$74,772,078
Asset Allocation	\$243,709,564	\$9,365,775	(\$4,104,600)	(\$1,241,218)	\$17,612,016	\$265,341,536
SDBA	\$4,339,123	\$0	\$0	\$27,387	(\$83,003)	\$4,283,507
Total	\$899,536,102	\$19,559,958	(\$14,468,074)	\$0	\$55,048,664	\$959,676,649

HISTORICAL PLAN CASH FLOWS

	Beginning Value	Net Cash Flow	Market Gain/Loss	Ending Value
4Q22	\$899,536,102	\$5,091,884	\$55,048,664	\$959,676,649
YTD	\$1,089,028,791	\$13,564,232	(\$142,916,374)	\$959,676,649
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)

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SAN BERNARDINO COUNTY

401(a) Defined Contribution Plan

PLAN ASSET ALLOCATION

Fourth Quarter 2022

Fixed Income	Ticker	Assets	%
Stabilizer	-	\$2,522,003	6.8%
Sterling Capital Total Return Bond R6	STRDX	\$227,294	0.6%
Fidelity US Bond Index	FXNAX	\$17,748	0.0%
Fidelity Intermediate Treasury Bond Index	FUAMX	\$32,112	0.1%
Total		\$2,799,157	7.5%

Large Cap	Ticker	Assets	%
Fidelity 500 Index	FXAIX	\$1,319,964	3.5%
Hartford Core Equity R6	HAITX	\$636,767	1.7%
Total		\$1,956,731	5.2%

Mid Cap	Ticker	Assets	%
Fidelity Mid Cap Index	FSMDX	\$584,867	1.6%
Baron Growth Instl	BGRIX	\$433,856	1.2%
Total		\$1,018,723	2.7%

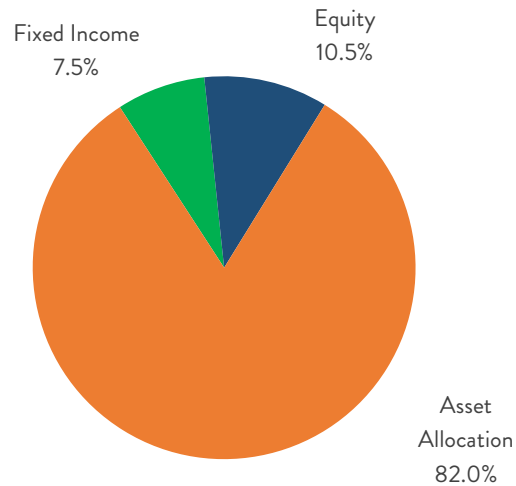
Small Cap	Ticker	Assets	%
Hartford Schroders US Small Cap Opps SDR	SCURX	\$160,218	0.4%
Fidelity Small Cap Index	FSSNX	\$350,746	0.9%
Total		\$510,964	1.4%

International	Ticker	Assets	%
MFS International Diversification R6	MDIZX	\$183,708	0.5%
Fidelity Total International Index	FTIHX	\$231,013	0.6%
Total		\$414,721	1.1%

Asset Allocation	Ticker	Assets	%
Conservative Allocation Portfolio	-	\$960,945	2.6%
Moderate Allocation Portfolio	-	\$1,357,838	3.6%
Aggressive Allocation Portfolio	-	\$1,222,454	3.3%
Vanguard Target Retirement Income	VTINX	\$743,779	2.0%
Vanguard Target Retirement 2020	VTWNX	\$3,811,734	10.2%
Vanguard Target Retirement 2025	VTTVX	\$373,888	1.0%
Vanguard Target Retirement 2030	VTHRXX	\$8,182,060	21.9%
Vanguard Target Retirement 2035	VTTTHX	\$603,608	1.6%
Vanguard Target Retirement 2040	VFORX	\$8,168,562	21.9%
Vanguard Target Retirement 2045	VTIVX	\$676,694	1.8%
Vanguard Target Retirement 2050	VFIFX	\$3,666,628	9.8%
Vanguard Target Retirement 2055	VFFVX	\$546,162	1.5%
Vanguard Target Retirement 2060	VTTTSX	\$237,898	0.6%
Vanguard Target Retirement 2065	VLXVX	\$23,381	0.1%
Vanguard Target Retirement 2070	VSVNX	\$35	0.0%
Total		\$30,575,666	82.0%

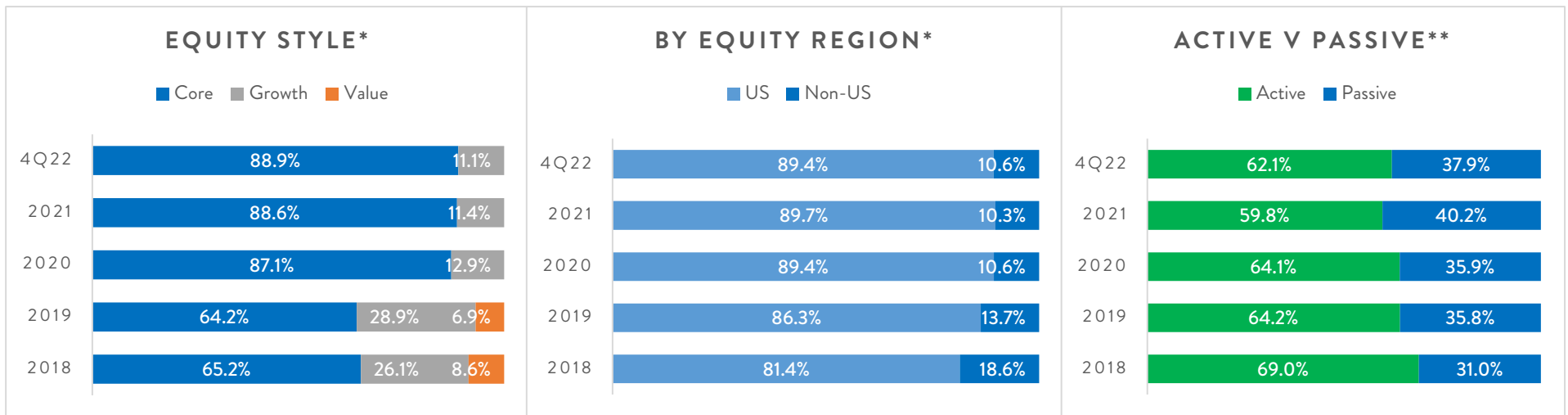
TOTAL PLAN ASSETS

\$37,275,963



HISTORICAL PLAN ALLOCATION

Asset Class	4Q22	2021	2020	2019	2018	2017	2016	2015
Fixed Income	7.5%	6.2%	7.3%	6.7%	8.7%	N/A	N/A	N/A
Large Cap	5.2%	5.5%	5.2%	4.9%	4.3%	N/A	N/A	N/A
Mid Cap	2.7%	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	1.1%	1.1%	1.1%	1.4%	1.7%	N/A	N/A	N/A
Asset Allocation	82.0%	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

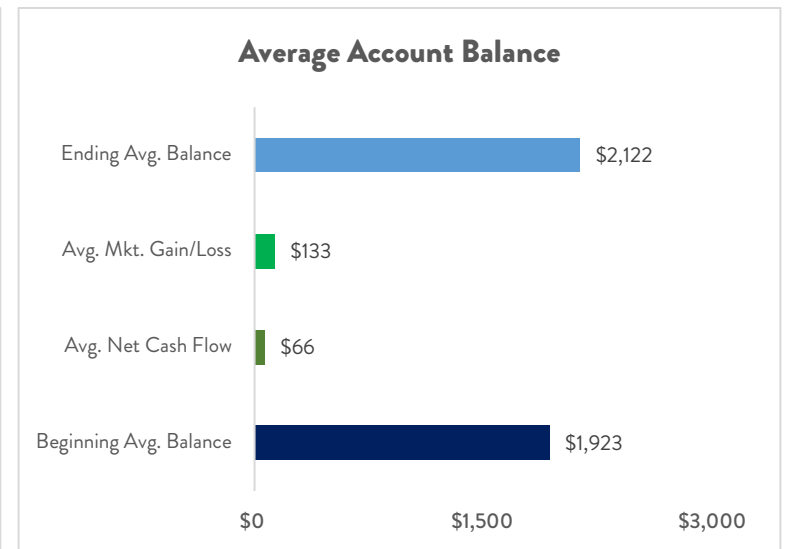
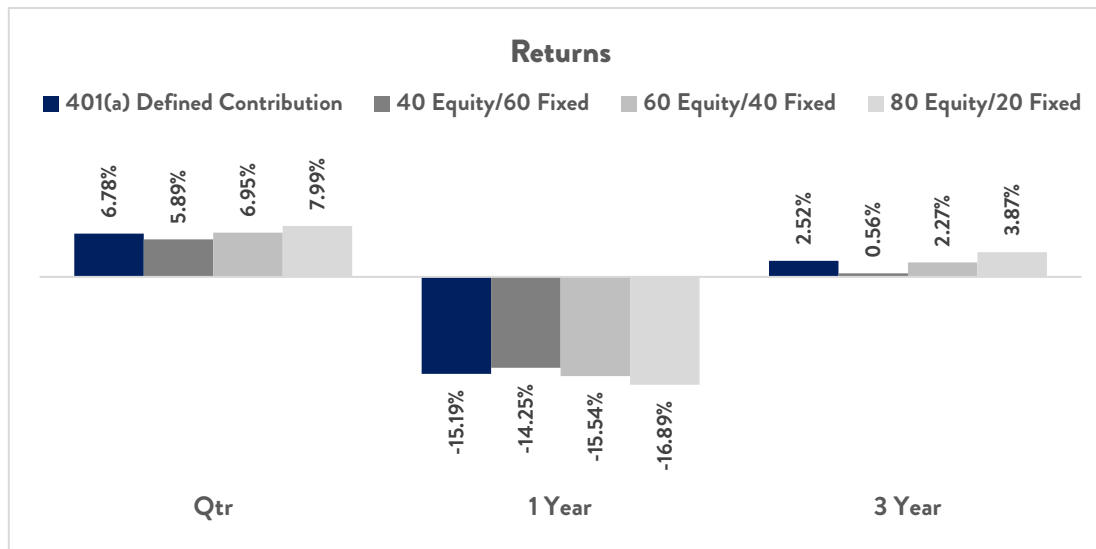
Fourth Quarter 2022

PLAN LEVEL CASH FLOWS

	Beginning Value	Cash Flow (+)	Cash Flow (-)	Transfer	Market Gain/Loss	Ending Value
Fixed Income	\$2,692,027	\$60,081	(\$18,091)	\$47,012	\$18,128	\$2,799,157
Large Cap	\$1,779,876	\$64,330	(\$12,044)	(\$6,921)	\$131,489	\$1,956,731
Mid Cap	\$885,892	\$36,605	(\$7,683)	\$11,457	\$92,453	\$1,018,723
Small Cap	\$457,664	\$22,559	(\$8,246)	\$5,037	\$33,951	\$510,964
International	\$347,718	\$13,858	(\$2,229)	\$3,478	\$51,897	\$414,721
Asset Allocation	\$27,625,574	\$1,234,441	(\$226,695)	(\$60,063)	\$2,002,409	\$30,575,666
Total	\$33,788,752	\$1,431,874	(\$274,989)	\$0	\$2,330,326	\$37,275,963

HISTORICAL PLAN CASH FLOWS

	Beginning Value	Net Cash Flow	Market Gain/Loss	Ending Value
4Q22	\$33,788,752	\$1,156,885	\$2,330,326	\$37,275,963
YTD	\$39,612,962	\$3,746,919	(\$6,083,919)	\$37,275,963
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)

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SAN BERNARDINO COUNTY

401(k) Defined Contribution Plan

PLAN ASSET ALLOCATION

Fourth Quarter 2022

Fixed Income	Ticker	Assets	%
Stabilizer	-	\$49,233,869	26.2%
Sterling Capital Total Return Bond R6	STRDX	\$3,837,404	2.0%
Fidelity US Bond Index	FXNAX	\$776,950	0.4%
Fidelity Intermediate Treasury Bond Index	FUAMX	\$383,770	0.2%
Total		\$54,231,993	28.8%

Large Cap	Ticker	Assets	%
Fidelity 500 Index	FXAIX	\$24,591,144	13.1%
Hartford Core Equity R6	HAITX	\$23,250,997	12.4%
Total		\$47,842,141	25.4%

Mid Cap	Ticker	Assets	%
Fidelity Mid Cap Index	FSMDX	\$12,929,633	6.9%
Baron Growth Instl	BGRIX	\$7,096,636	3.8%
Total		\$20,026,269	10.6%

Small Cap	Ticker	Assets	%
Hartford Schroders US Small Cap Opps SDR	SCURX	\$1,328,120	0.7%
Fidelity Small Cap Index	FSSNX	\$7,002,477	3.7%
Total		\$8,330,597	4.4%

International	Ticker	Assets	%
MFS International Diversification R6	MDIZX	\$7,570,701	4.0%
Fidelity Total International Index	FTIHX	\$3,881,224	2.1%
Total		\$11,451,926	6.1%

Asset Allocation	Ticker	Assets	%
Conservative Allocation Portfolio	-	\$9,558,261	5.1%
Moderate Allocation Portfolio	-	\$15,816,361	8.4%
Aggressive Allocation Portfolio	-	\$6,906,594	3.7%
Vanguard Target Retirement Income	VTINX	\$111,996	0.1%
Vanguard Target Retirement 2020	VTWNX	\$1,662,923	0.9%
Vanguard Target Retirement 2025	VTTVX	\$226,216	0.1%
Vanguard Target Retirement 2030	VTHRXX	\$3,943,564	2.1%
Vanguard Target Retirement 2035	VTHHX	\$512,671	0.3%
Vanguard Target Retirement 2040	VFORX	\$2,681,129	1.4%
Vanguard Target Retirement 2045	VTIVX	\$232,341	0.1%
Vanguard Target Retirement 2050	VFIFX	\$1,572,835	0.8%
Vanguard Target Retirement 2055	VFFVX	\$77,936	0.0%
Vanguard Target Retirement 2060	VTTSX	\$13,937	0.0%
Vanguard Target Retirement 2065	VLXVX	\$66,897	0.0%
Vanguard Target Retirement 2070	VSVNX	\$3,547	0.0%
Total		\$43,387,209	23.1%

Miscellaneous	Ticker	Assets	%
Self-Directed Brokerage Account	-	\$1,140,386	0.6%
Participant Loans	-	\$1,731,771	0.9%
Total		\$2,872,157	1.5%

TOTAL PLAN ASSETS

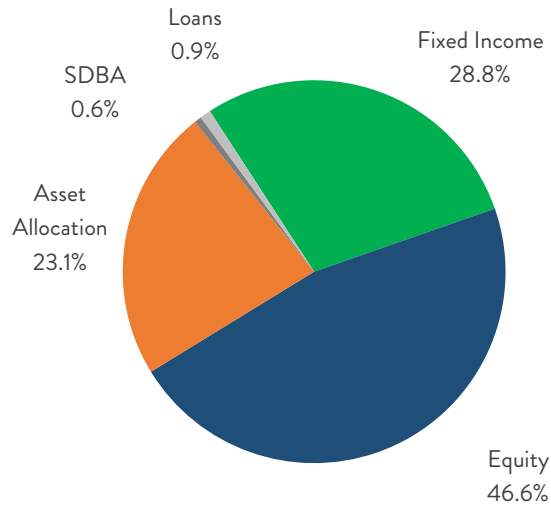
\$188,142,291

SAN BERNARDINO COUNTY

401(k) Defined Contribution Plan

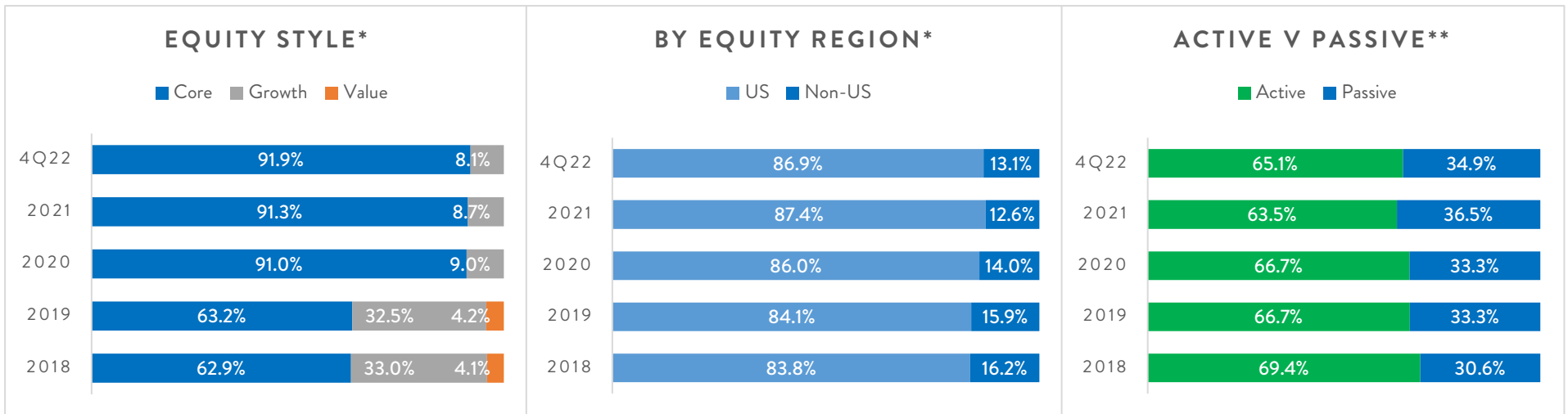
PLAN ASSET ALLOCATION

Fourth Quarter 2022



HISTORICAL PLAN ALLOCATION

Asset Class	4Q22	2021	2020	2019	2018	2017	2016	2015
Fixed Income	28.8%	25.3%	29.0%	29.7%	32.9%	N/A	N/A	N/A
Large Cap	25.4%	27.7%	25.5%	24.8%	23.1%	N/A	N/A	N/A
Mid Cap	10.6%	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	6.1%	6.3%	6.6%	7.4%	7.0%	N/A	N/A	N/A
Asset Allocation	23.1%	22.9%	22.5%	22.1%	22.1%	N/A	N/A	N/A
SDBA	0.6%	0.6%	0.6%	0.3%	0.3%	N/A	N/A	N/A
Loans	0.9%	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

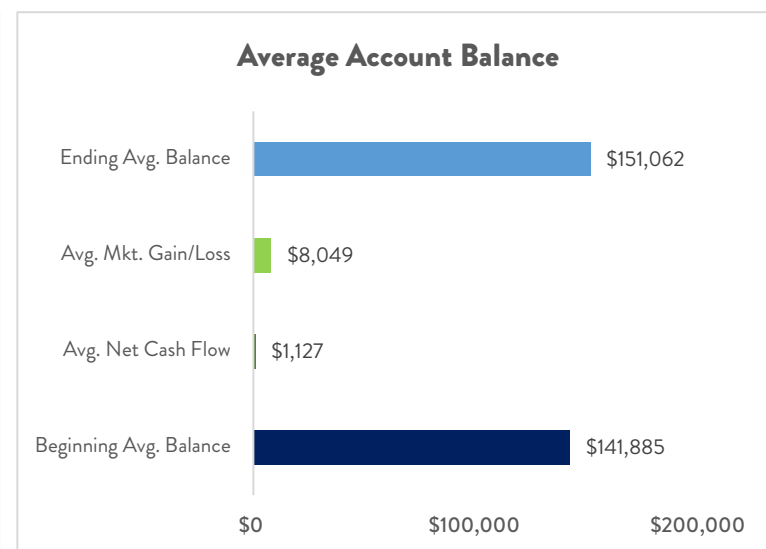
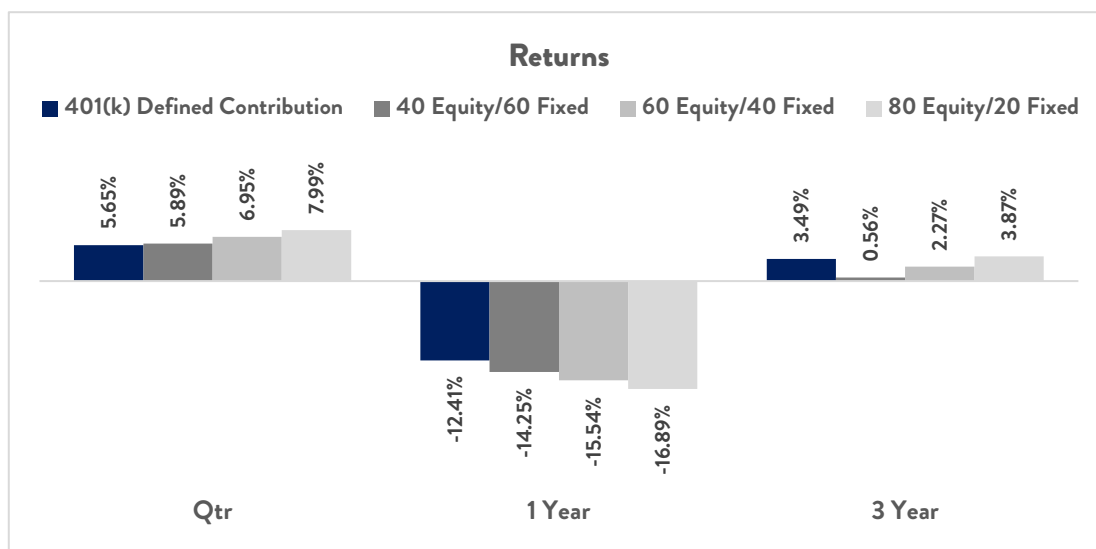
Fourth Quarter 2022

PLAN LEVEL CASH FLOWS

	Beginning Value	Cash Flow (+)	Cash Flow (-)	Transfer	Market Gain/Loss	Ending Value
Fixed Income	\$53,975,936	\$589,454	(\$778,700)	\$90,522	\$354,781	\$54,231,993
Large Cap	\$44,136,408	\$749,042	(\$573,863)	\$324,470	\$3,206,083	\$47,842,141
Mid Cap	\$17,886,579	\$414,555	(\$166,479)	\$74,349	\$1,817,264	\$20,026,269
Small Cap	\$7,769,400	\$240,379	(\$121,050)	(\$87,552)	\$529,419	\$8,330,597
International	\$9,867,710	\$249,619	(\$80,749)	(\$42,407)	\$1,457,753	\$11,451,926
Asset Allocation	\$40,268,971	\$1,089,843	(\$220,743)	(\$369,289)	\$2,618,426	\$43,387,209
SDBA	\$1,181,337	\$0	\$0	\$9,907	(\$50,859)	\$1,140,386
Total	\$175,086,344	\$3,332,893	(\$1,941,583)	\$0	\$9,932,867	\$186,410,520

HISTORICAL PLAN CASH FLOWS

	Beginning Value	Net Cash Flow	Market Gain/Loss	Ending Value
4Q22	\$175,086,344	\$1,391,310	\$9,932,867	\$186,410,520
YTD	\$211,583,102	\$1,092,184	(\$26,264,766)	\$186,410,520
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)

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SAN BERNARDINO COUNTY

Retirement Medical Trust

PLAN ASSET ALLOCATION

Fourth Quarter 2022

Fixed Income	Ticker	Assets	%
Voya Fixed Account	-	\$86,537,188	45.9%
Voya Government Money Market A	VYAXX	\$14,573	0.0%
Sterling Capital Total Return Bond R6	STRDX	\$645,917	0.3%
Fidelity US Bond Index	FXNAX	\$44,022	0.0%
Fidelity Intermediate Treasury Bond Index	FUAMX	\$82,392	0.0%
Total		\$87,324,092	46.3%

Large Cap	Ticker	Assets	%
Fidelity 500 Index	FXAIX	\$3,288,499	1.7%
Hartford Core Equity R6	HAITX	\$3,379,072	1.8%
Total		\$6,667,571	3.5%

Mid Cap	Ticker	Assets	%
Fidelity Mid Cap Index	FSMDX	\$2,479,142	1.3%
Baron Growth Instl	BGRIX	\$2,045,004	1.1%
Total		\$4,524,146	2.4%

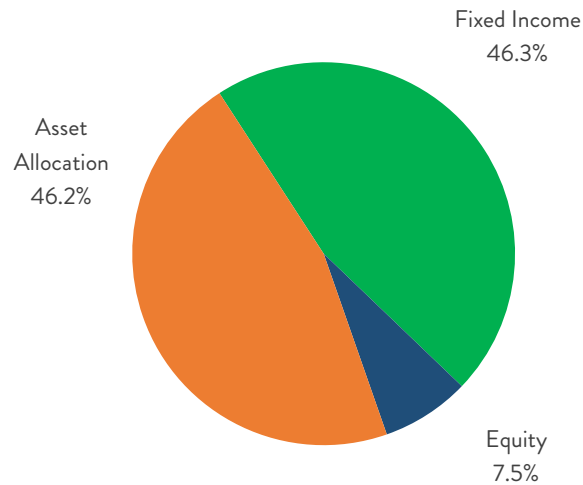
Small Cap	Ticker	Assets	%
Hartford Schroders US Small Cap Opps SDR	SCURX	\$322,107	0.2%
Fidelity Small Cap Index	FSSNX	\$1,361,839	0.7%
Total		\$1,683,946	0.9%

International	Ticker	Assets	%
MFS International Diversification R6	MDIZX	\$766,936	0.4%
Fidelity Total International Index	FTIHX	\$462,185	0.2%
Total		\$1,229,122	0.7%

Asset Allocation	Ticker	Assets	%
Conservative Allocation Portfolio	-	\$1,982,697	1.1%
Moderate Allocation Portfolio	-	\$3,989,987	2.1%
Aggressive Allocation Portfolio	-	\$5,388,664	2.9%
Vanguard Target Retirement Income	VTINX	\$1,452,955	0.8%
Vanguard Target Retirement 2020	VTWNX	\$13,977,800	7.4%
Vanguard Target Retirement 2025	VTTVX	\$350,420	0.2%
Vanguard Target Retirement 2030	VTHRX	\$29,739,240	15.8%
Vanguard Target Retirement 2035	VTTHX	\$119,080	0.1%
Vanguard Target Retirement 2040	VFORX	\$22,968,888	12.2%
Vanguard Target Retirement 2045	VTIVX	\$10,585	0.0%
Vanguard Target Retirement 2050	VFIFX	\$7,032,653	3.7%
Vanguard Target Retirement 2055	VFFVX	\$22,626	0.0%
Vanguard Target Retirement 2060	VTTSX	\$3,241	0.0%
Vanguard Target Retirement 2065	VLXVX	\$11,806	0.0%
Vanguard Target Retirement 2070	VSVNX	\$0	0.0%
Total		\$87,050,641	46.2%

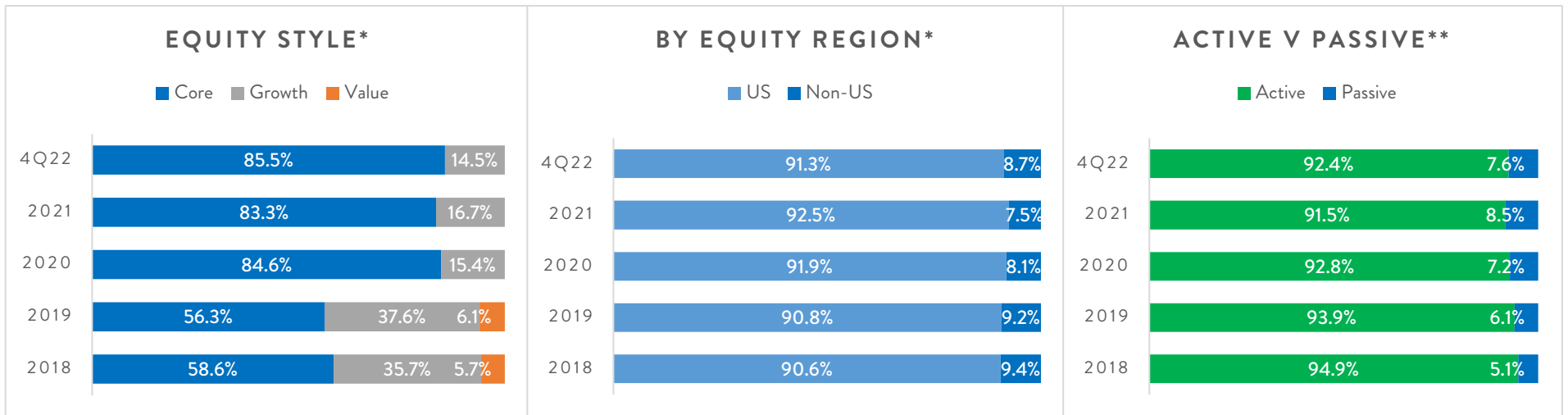
TOTAL PLAN ASSETS

\$188,479,518



HISTORICAL PLAN ALLOCATION

Asset Class	4Q22	2021	2020	2019	2018	2017	2016	2015
Fixed Income	46.3%	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	2.4%	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	0.7%	0.6%	0.6%	0.7%	0.6%	N/A	N/A	N/A
Asset Allocation	46.2%	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

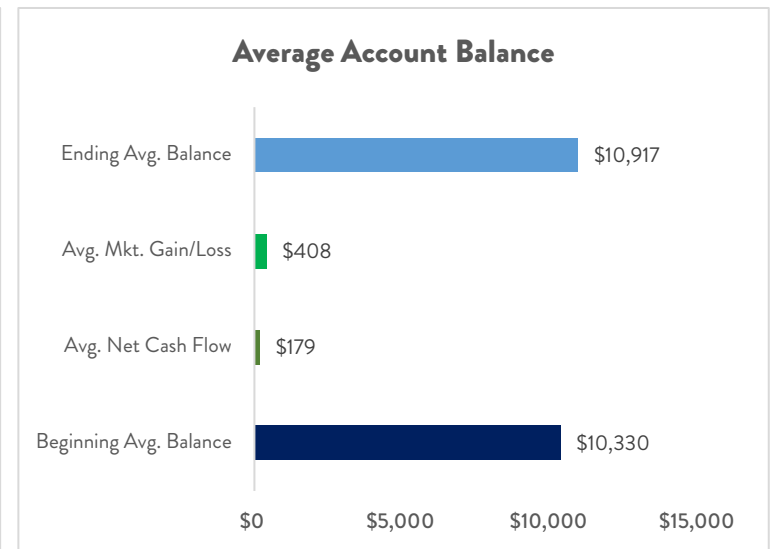
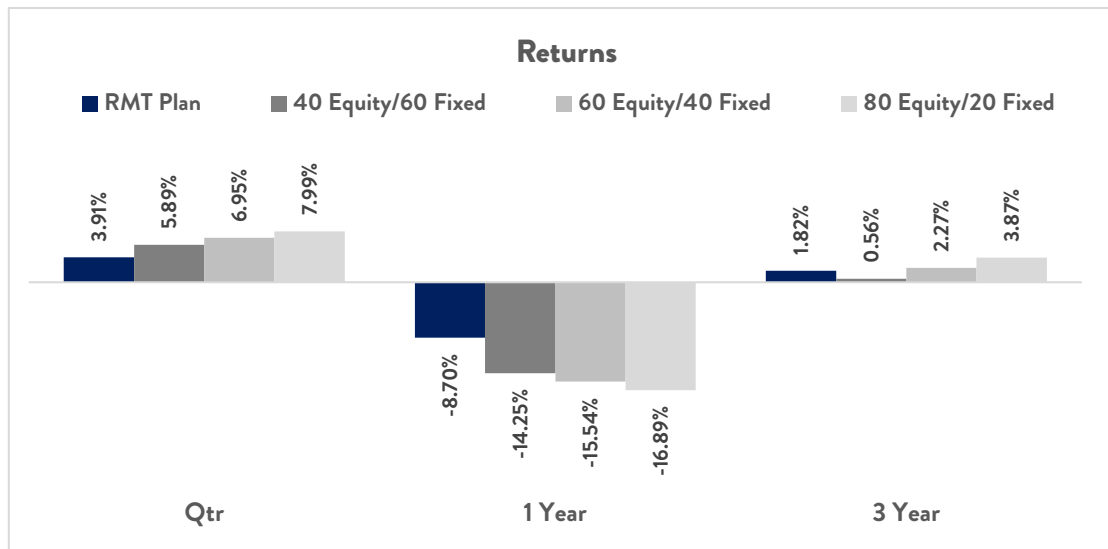
Fourth Quarter 2022

PLAN LEVEL CASH FLOWS

	Beginning Value	Cash Flow (+)	Cash Flow (-)	Transfer	Market Gain/Loss	Ending Value
Fixed Income	\$86,373,881	\$6,066,716	(\$1,662,105)	(\$3,744,539)	\$290,139	\$87,324,092
Large Cap	\$6,239,659	\$0	(\$98,400)	\$71,907	\$454,405	\$6,667,571
Mid Cap	\$4,053,279	\$676	(\$54,345)	\$101,315	\$423,222	\$4,524,146
Small Cap	\$1,536,252	\$0	(\$12,410)	\$53,455	\$106,650	\$1,683,946
International	\$1,053,976	\$0	(\$13,806)	\$32,357	\$156,594	\$1,229,122
Asset Allocation	\$79,092,952	\$0	(\$1,133,889)	\$3,485,505	\$5,606,072	\$87,050,641
Total	\$178,349,998	\$6,067,392	(\$2,974,955)	\$0	\$7,037,082	\$188,479,518

HISTORICAL PLAN CASH FLOWS

	Beginning Value	Net Cash Flow	Market Gain/Loss	Ending Value
4Q22	\$178,349,998	\$3,092,437	\$7,037,082	\$188,479,518
YTD	\$192,654,036	\$12,833,462	(\$17,007,980)	\$188,479,518
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)

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Section 3

SAN BERNARDINO COUNTY

PST Deferred Compensation Retirement Plan

PLAN ASSET ALLOCATION

Fourth Quarter 2022

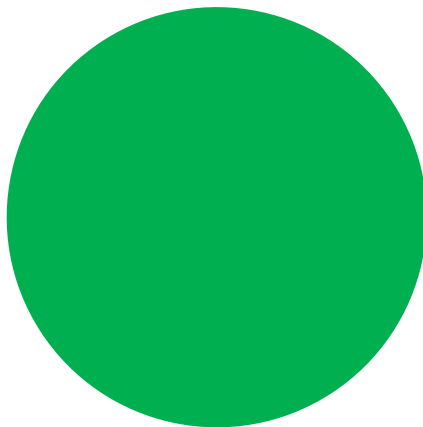
HISTORICAL PLAN CASH FLOWS

Fixed Income	Ticker	Assets	%
Stabilizer	-	\$47,281,493	100.0%
Total		\$47,281,493	100.0%

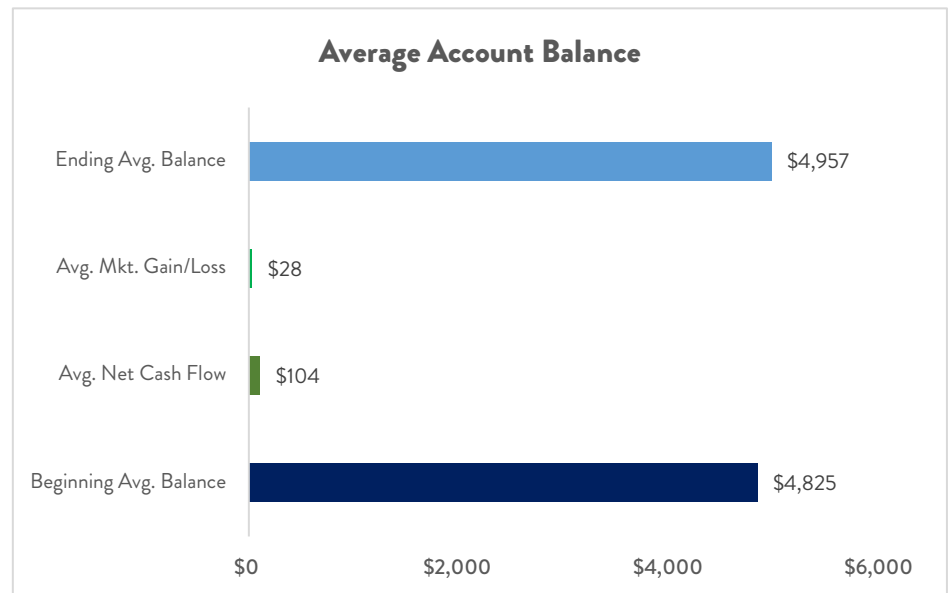
	Beginning Value	Net Cash Flow	Market Gain/Loss	Ending Value
4Q22	\$46,026,768	\$990,545	\$264,180	\$47,281,493
YTD	\$43,987,776	\$2,489,021	\$804,696	\$47,281,493
2021	\$40,555,917	\$2,736,548	\$695,312	\$43,987,776
2020	\$37,906,246	\$1,699,237	\$950,434	\$40,555,917
2019	\$36,665,327	\$292,121	\$948,798	\$37,906,246
2018	N/A	N/A	N/A	\$36,665,327

TOTAL PLAN ASSETS \$47,281,493

Fixed Income
100.0%



Average Account Balance



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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	Ⓟ	Ⓟ	-	

Proposed Investment Policy Status

Key: Ⓟ Pass / ● Fail

	Performance Factors	Qualitative Factors	On-Watch Information	Notes
Vanguard Target Retirement 2040	Ⓟ	Ⓟ	-	Target date suite to be mapped to CIT version of funds.
Vanguard Target Retirement 2045	Ⓟ	Ⓟ	-	
Vanguard Target Retirement 2050	Ⓟ	Ⓟ	-	
Vanguard Target Retirement 2055	Ⓟ	Ⓟ	-	
Vanguard Target Retirement 2060	Ⓟ	Ⓟ	-	
Vanguard Target Retirement 2065	Ⓟ	Ⓟ	-	
Vanguard Target Retirement 2070	Ⓟ	Ⓟ	-	

SAN BERNARDINO COUNTY

All Plans - Combined

PERFORMANCE REVIEW

Fourth Quarter 2022

	QTR	YTD	1Yr	Annualized			2021	2020	2019	2018	2017	2016
				3Yr	5Yr	10Yr						
Stabilizer	0.57	1.80	1.80	1.95	2.19	2.26	1.64	2.42	2.59	2.50	N/A	N/A
5 Yr Constant Maturity US Treasury Yield	0.99	3.00	3.00	1.46	1.81	1.68	0.85	0.54	1.96	2.75	1.91	1.44
+/- Index	(0.42)	(1.20)	(1.20)	0.49	0.38	0.58	0.79	1.88	0.63	(0.25)	-	-
US Stable Value	21	29	29	16	9	6	24	4	7	6	N/A	N/A
Voya Fixed Account	0.25	1.00	1.00	1.01	1.14	1.40	1.50	1.40	1.85	1.90	N/A	N/A
5 Yr Constant Maturity US Treasury Yield	0.99	3.00	3.00	1.46	1.81	1.68	0.85	0.54	1.96	2.75	1.91	1.44
+/- Index	(0.74)	(2.00)	(2.00)	(0.45)	(0.67)	(0.28)	0.65	0.86	(0.11)	(0.85)	-	-
US Stable Value	97	90	90	90	94	68	36	86	82	42	N/A	N/A
Voya Government Money Market A	0.86	1.43	1.43	0.60	1.04	0.56	0.10	0.27	1.88	1.51	0.26	0.08
US 90 Day T-Bill	0.99	2.01	2.01	0.80	1.28	0.78	0.04	0.36	2.06	1.94	0.93	0.32
+/- Index	(0.13)	(0.58)	(0.58)	(0.20)	(0.24)	(0.22)	0.06	(0.09)	(0.18)	(0.43)	(0.67)	(0.24)
US Money Market - Taxable	17	27	27	23	37	42	2	52	45	44	77	41
Sterling Capital Total Return Bond R6	1.57	-13.15	-13.15	-2.08	0.48	1.58	-1.12	9.35	9.37	-0.27	4.33	3.75
Bloomberg US Aggregate Bond Index	1.87	-13.01	-13.01	-2.71	0.02	1.06	-1.54	7.51	8.72	0.01	3.54	2.65
+/- Index	(0.30)	(0.14)	(0.14)	0.63	0.46	0.52	0.42	1.84	0.65	(0.28)	0.79	1.10
US Fund Intermediate Core Bond	57	34	34	15	11	6	28	15	18	42	10	12
Fidelity US Bond Index	1.68	-13.03	-13.03	-2.72	-0.02	1.01	-1.79	7.80	8.48	0.01	3.50	2.52
Bloomberg US Aggregate Bond Index	1.87	-13.01	-13.01	-2.71	0.02	1.06	-1.54	7.51	8.72	0.01	3.54	2.65
+/- Index	(0.19)	(0.02)	(0.02)	(0.01)	(0.04)	(0.05)	(0.25)	0.29	(0.23)	0.00	(0.04)	(0.13)
US Fund Intermediate Core Bond	43	29	29	46	38	42	65	50	48	26	43	55

SAN BERNARDINO COUNTY

All Plans - Combined

PERFORMANCE REVIEW

Fourth Quarter 2022

	QTR	YTD	1Yr	Annualized			2021	2020	2019	2018	2017	2016
				3Yr	5Yr	10Yr						
Fidelity Intermediate Treasury Bond Index	0.91	-12.72	-12.72	-2.61	0.06	0.65	-3.00	9.10	7.25	1.23	2.20	0.97
Bloomberg US Treasury 5-10 Year Index	1.18	-12.58	-12.58	-2.56	0.13	0.73	-2.97	9.09	7.48	1.22	2.17	1.18
+/- Index	(0.27)	(0.14)	(0.14)	(0.05)	(0.07)	(0.08)	(0.03)	0.01	(0.23)	0.01	0.03	(0.21)
US Fund Intermediate Government	71	76	76	33	19	26	92	8	1	2	16	59
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Fidelity 500 Index	7.56	-18.13	-18.13	7.65	9.41	12.55	28.69	18.40	31.47	-4.40	21.81	11.97
S&P 500 Index	7.56	-18.11	-18.11	7.66	9.42	12.56	28.71	18.40	31.49	-4.38	21.83	11.96
+/- Index	0.00	(0.02)	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)	0.00	(0.01)	(0.02)	(0.02)	0.01
US Fund Large Blend	56	49	49	30	20	11	21	33	22	22	32	27
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Hartford Core Equity R6	7.00	-18.65	-18.65	6.30	9.63	13.14	24.62	18.49	33.89	-1.55	22.17	5.75
S&P 500 Index	7.56	-18.11	-18.11	7.66	9.42	12.56	28.71	18.40	31.49	-4.38	21.83	11.96
+/- Index	(0.56)	(0.54)	(0.54)	(1.36)	0.21	0.58	(4.09)	0.09	2.40	2.83	0.34	(6.21)
US Fund Large Blend	76	61	61	70	14	2	72	31	5	5	28	91
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Fidelity Mid Cap Index	9.21	-17.28	-17.28	5.89	7.10	10.95	22.56	17.11	30.51	-9.05	18.47	13.86
Russell Mid Cap Index	9.18	-17.32	-17.32	5.88	7.10	10.96	22.58	17.10	30.54	-9.06	18.52	13.80
+/- Index	0.03	0.04	0.04	0.01	0.00	(0.01)	(0.02)	0.01	(0.03)	0.01	(0.05)	0.07
US Fund Mid-Cap Blend	51	67	67	53	30	16	66	24	24	25	26	57
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Baron Growth Instl	11.93	-22.40	-22.40	7.45	11.15	12.33	20.15	33.05	40.50	-2.67	27.35	6.31
Russell Mid Cap Growth Index	6.90	-26.72	-26.72	3.85	7.64	11.41	12.73	35.59	35.47	-4.75	25.27	7.33
+/- Index	5.03	4.32	4.32	3.60	3.51	0.92	7.42	(2.53)	5.03	2.08	2.09	(1.02)
US Fund Mid-Cap Growth	4	13	13	11	7	16	16	61	8	28	32	41

SAN BERNARDINO COUNTY

All Plans - Combined

PERFORMANCE REVIEW

Fourth Quarter 2022

	QTR	YTD	1Yr	Annualized			2021	2020	2019	2018	2017	2016
				3Yr	5Yr	10Yr						
Hartford Schroders US Small Cap Opps SDR	10.04	-16.67	-16.67	3.48	5.49	9.95	22.98	8.14	32.06	-10.72	14.81	19.49
Russell 2000 Index	6.23	-20.44	-20.44	3.10	4.13	9.01	14.82	19.96	25.52	-11.01	14.65	21.31
+/- Index	3.81	3.77	3.77	0.38	1.36	0.94	8.16	(11.82)	6.53	0.29	0.16	(1.82)
US Fund Small Blend	27	49	49	68	32	27	51	67	3	32	27	69
Fidelity Small Cap Index	6.25	-20.27	-20.27	3.15	4.22	9.17	14.71	19.99	25.71	-10.88	14.85	21.63
Russell 2000 Index	6.23	-20.44	-20.44	3.10	4.13	9.01	14.82	19.96	25.52	-11.01	14.65	21.31
+/- Index	0.02	0.17	0.17	0.05	0.09	0.16	(0.11)	0.03	0.18	0.14	0.20	0.32
US Fund Small Blend	89	79	79	73	61	48	89	12	36	34	26	46
MFS International Diversification R6	14.74	-17.02	-17.02	1.06	3.00	5.73	7.78	15.43	26.09	-10.92	30.25	2.47
MSCI ACWI Ex-USA (Net) Index	14.28	-16.00	-16.00	0.07	0.88	3.80	7.82	10.65	21.51	-14.20	27.19	4.50
+/- Index	0.46	(1.02)	(1.02)	0.99	2.12	1.93	(0.04)	4.78	4.58	3.27	3.05	(2.03)
US Fund Foreign Large Blend	79	62	62	37	9	8	70	20	20	9	9	28
Fidelity Total International Index	14.78	-16.28	-16.28	0.29	0.96	-	8.47	11.07	21.48	-14.38	27.63	-
MSCI ACWI Ex-USA IMI (Net) Index	14.15	-16.58	-16.58	0.20	0.85	3.98	8.53	11.12	21.63	-14.76	27.81	4.41
+/- Index	0.63	0.30	0.30	0.09	0.11	-	(0.06)	(0.04)	(0.16)	0.37	(0.18)	-
US Fund Foreign Large Blend	78	55	55	58	58	-	65	42	62	39	27	-
Conservative Allocation Portfolio	3.60	-3.85	-3.85	3.40	3.73	4.76	6.71	7.74	9.55	-0.82	N/A	N/A
Dow Jones Moderately Conservative Index	5.46	-14.42	-14.42	-0.44	1.76	3.66	4.76	10.08	14.14	-3.15	10.91	5.65
+/- Index	(1.86)	10.57	10.57	3.84	1.97	1.10	1.95	(2.34)	(4.59)	2.33	-	-
US Fund Allocation--30% to 50% Equity	87	2	2	4	13	26	81	62	100	1	N/A	N/A

SAN BERNARDINO COUNTY

All Plans - Combined

PERFORMANCE REVIEW

Fourth Quarter 2022

	QTR	YTD	1Yr	Annualized			2021	2020	2019	2018	2017	2016
				3Yr	5Yr	10Yr						
Moderate Allocation Portfolio	6.80	-12.41	-12.41	2.40	3.67	6.38	11.27	10.15	18.64	-6.01	N/A	N/A
Dow Jones Moderate Index	6.80	-14.97	-14.97	1.45	3.26	5.66	9.40	12.24	18.60	-5.21	15.15	7.67
+/- Index	0.00	2.56	2.56	0.95	0.41	0.72	1.87	(2.09)	0.04	(0.80)	-	-
US Fund Allocation--50% to 70% Equity	40	25	25	62	61	49	76	71	66	56	N/A	N/A
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Aggressive Allocation Portfolio	8.78	-16.14	-16.14	2.67	4.20	7.30	14.78	12.42	23.80	-8.33	N/A	N/A
Dow Jones Moderately Aggressive Index	8.26	-15.59	-15.59	3.19	4.58	7.40	14.05	14.14	22.84	-7.33	19.08	9.31
+/- Index	0.52	(0.55)	(0.55)	(0.52)	(0.38)	(0.10)	0.73	(1.72)	0.96	(1.00)	-	-
US Fund Allocation--70% to 85% Equity	32	50	50	72	60	48	66	60	26	59	N/A	N/A
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Vanguard Target Retirement Income	3.74	-12.74	-12.74	0.34	2.30	3.62	5.25	10.02	13.16	-1.99	8.47	5.25
Vanguard Retirement Income Index	3.95	-12.44	-12.44	0.72	2.58	3.86	5.43	10.70	13.40	-1.98	8.67	5.35
+/- Index	(0.21)	(0.30)	(0.30)	(0.38)	(0.28)	(0.24)	(0.18)	(0.68)	(0.24)	(0.01)	(0.19)	(0.10)
US Fund Target-Date Retirement	62	49	49	32	32	30	64	30	48	18	50	30
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Vanguard Target Retirement 2020	4.97	-14.15	-14.15	1.33	3.22	5.83	8.17	12.04	17.63	-4.24	14.08	6.95
Vanguard Retirement 2020 Index	5.12	-13.77	-13.77	1.81	3.58	6.13	8.43	12.86	17.87	-4.14	14.22	7.17
+/- Index	(0.15)	(0.38)	(0.38)	(0.48)	(0.36)	(0.30)	(0.26)	(0.82)	(0.24)	(0.10)	(0.14)	(0.22)
US Fund Target-Date 2020	69	40	40	48	37	26	62	41	32	47	23	30
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Vanguard Target Retirement 2025	6.03	-15.55	-15.55	1.66	3.58	6.43	9.80	13.30	19.63	-5.15	15.94	7.48
Vanguard Retirement 2025 Index	6.16	-15.02	-15.02	2.23	4.01	6.77	10.10	14.19	19.93	-5.01	16.08	7.66
+/- Index	(0.13)	(0.53)	(0.53)	(0.57)	(0.43)	(0.34)	(0.30)	(0.89)	(0.30)	(0.14)	(0.14)	(0.18)
US Fund Target-Date 2025	40	52	52	39	31	18	47	34	20	48	22	21

SAN BERNARDINO COUNTY

All Plans - Combined

PERFORMANCE REVIEW

Fourth Quarter 2022

	QTR	YTD	1Yr	Annualized			2021	2020	2019	2018	2017	2016
				3Yr	5Yr	10Yr						
Vanguard Target Retirement 2030	6.81	-16.27	-16.27	2.09	3.94	6.99	11.38	14.10	21.07	-5.86	17.52	7.85
Vanguard Retirement 2030 Index	6.92	-15.71	-15.71	2.66	4.35	7.33	11.65	14.96	21.33	-5.74	17.65	8.11
+/- Index	(0.11)	(0.56)	(0.56)	(0.57)	(0.41)	(0.34)	(0.27)	(0.86)	(0.26)	(0.12)	(0.13)	(0.26)
US Fund Target-Date 2030	39	47	47	46	39	26	54	35	37	39	37	27
Vanguard Target Retirement 2035	7.45	-16.62	-16.62	2.64	4.34	7.57	12.96	14.79	22.44	-6.58	19.12	8.26
Vanguard Retirement 2035 Index	7.41	-16.22	-16.22	3.14	4.73	7.91	13.24	15.67	22.76	-6.48	19.24	8.55
+/- Index	0.04	(0.40)	(0.40)	(0.50)	(0.39)	(0.34)	(0.28)	(0.87)	(0.33)	(0.10)	(0.12)	(0.29)
US Fund Target-Date 2035	62	38	38	52	42	30	78	38	49	31	40	32
Vanguard Target Retirement 2040	8.20	-16.98	-16.98	3.17	4.74	8.06	14.56	15.47	23.86	-7.32	20.71	8.73
Vanguard Retirement 2040 Index	8.23	-16.51	-16.51	3.70	5.14	8.42	14.85	16.31	24.19	-7.22	20.87	8.98
+/- Index	(0.03)	(0.47)	(0.47)	(0.53)	(0.40)	(0.36)	(0.29)	(0.83)	(0.33)	(0.11)	(0.16)	(0.25)
US Fund Target-Date 2040	63	34	34	49	40	23	80	39	49	35	30	23
Vanguard Target Retirement 2045	8.89	-17.36	-17.36	3.74	5.14	8.34	16.16	16.30	24.94	-7.90	21.42	8.87
Vanguard Retirement 2045 Index	8.99	-16.84	-16.84	4.26	5.55	8.71	16.45	17.03	25.36	-7.77	21.54	9.13
+/- Index	(0.10)	(0.52)	(0.52)	(0.52)	(0.41)	(0.37)	(0.29)	(0.73)	(0.42)	(0.13)	(0.11)	(0.26)
US Fund Target-Date 2045	53	31	31	32	27	19	65	34	40	41	24	26
Vanguard Target Retirement 2050	9.23	-17.46	-17.46	3.80	5.18	8.36	16.41	16.39	24.98	-7.90	21.39	8.85
Vanguard Retirement 2050 Index	9.18	-17.07	-17.07	4.30	5.58	8.72	16.77	17.18	25.36	-7.77	21.54	9.13
+/- Index	0.05	(0.39)	(0.39)	(0.50)	(0.40)	(0.36)	(0.36)	(0.79)	(0.38)	(0.13)	(0.14)	(0.28)
US Fund Target-Date 2050	44	29	29	32	28	20	70	35	45	37	31	27

SAN BERNARDINO COUNTY

All Plans - Combined

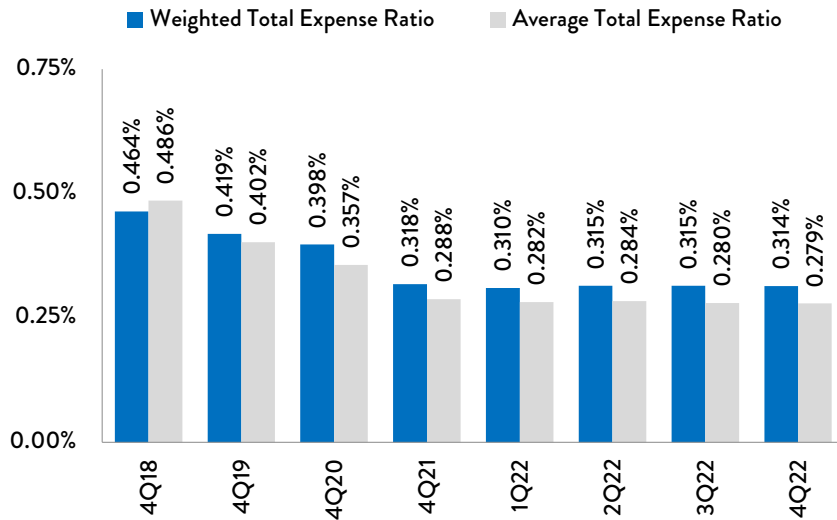
PERFORMANCE REVIEW

Fourth Quarter 2022

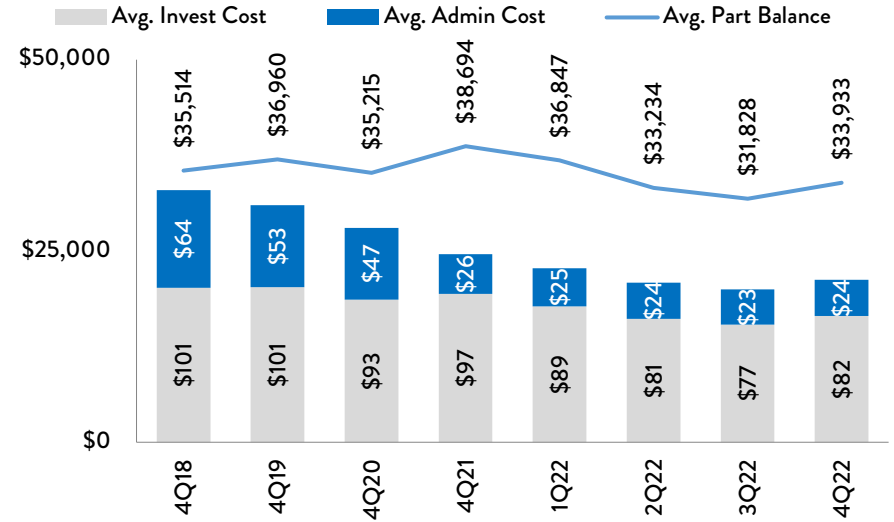
	QTR	YTD	1Yr	<i>Annualized</i>			2021	2020	2019	2018	2017	2016
				3Yr	5Yr	10Yr						
Vanguard Target Retirement 2055	9.23	-17.46	-17.46	3.79	5.18	8.34	16.44	16.32	24.98	-7.89	21.38	8.88
Vanguard Retirement 2055 Index	9.18	-17.07	-17.07	4.30	5.58	8.72	16.77	17.18	25.36	-7.77	21.54	9.13
+/- Index	0.05	(0.39)	(0.39)	(0.51)	(0.40)	(0.38)	(0.33)	(0.86)	(0.38)	(0.12)	(0.16)	(0.25)
US Fund Target-Date 2055	48	26	26	36	29	26	75	40	47	35	39	26
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Vanguard Target Retirement 2060	9.23	-17.46	-17.46	3.79	5.18	8.34	16.44	16.32	24.96	-7.87	21.36	8.84
Vanguard Retirement 2060 Index	9.18	-17.07	-17.07	4.30	5.58	8.72	16.77	17.18	25.36	-7.77	21.54	9.13
+/- Index	0.05	(0.39)	(0.39)	(0.51)	(0.40)	(0.38)	(0.33)	(0.85)	(0.40)	(0.10)	(0.18)	(0.28)
US Fund Target-Date 2060	53	25	25	38	32	50	77	41	56	30	43	23
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Vanguard Target Retirement 2065	9.24	-17.39	-17.39	3.78	5.15	-	16.46	16.17	24.96	-7.95	-	-
Vanguard Retirement 2065 Index	9.18	-17.07	-17.07	4.30	5.58	-	16.77	17.18	25.36	-7.77	-	-
+/- Index	0.06	(0.32)	(0.32)	(0.52)	(0.43)	-	(0.31)	(1.00)	(0.39)	(0.18)	-	-
US Fund Target-Date 2065+	51	18	18	31	31	-	67	56	59	12	-	-
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2021	2020	2019	2018	2017	2016
Vanguard Target Retirement 2070	9.21	-	-	-	-	-	-	-	-	-	-	-
Vanguard Retirement 2070 Index	9.18	-	-	-	-	-	-	-	-	-	-	-
+/- Index	0.03	-	-	-	-	-	-	-	-	-	-	-
US Fund Target-Date 2065+	54	-	-	-	-	-	-	-	-	-	-	-

Section 5

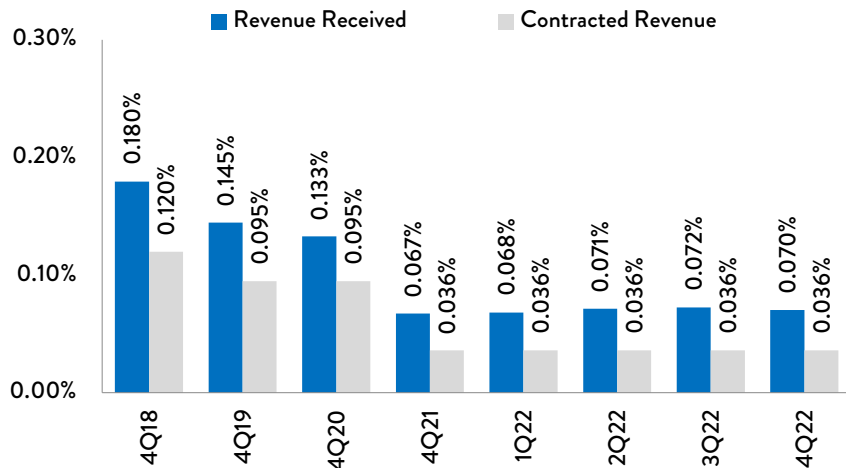
Annualized Plan Cost (%)



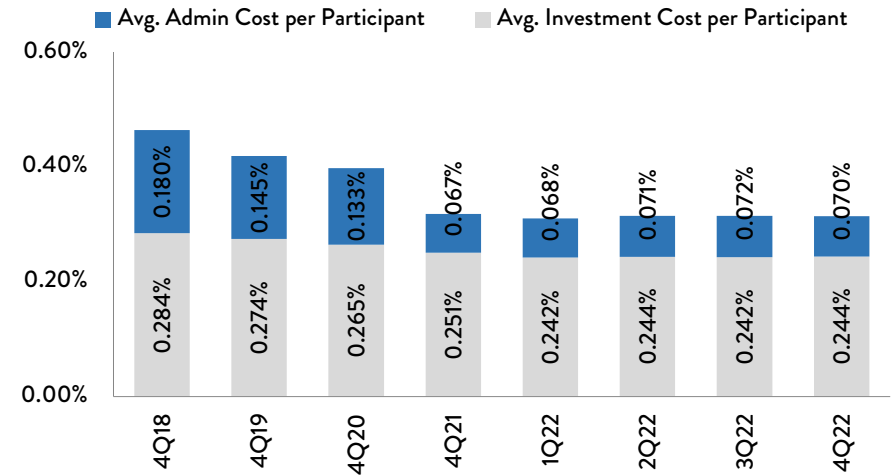
Average Participant Balance and Cost (\$)



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



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



*Revenue received is 0.070% 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

Fourth Quarter 2022

Annualized

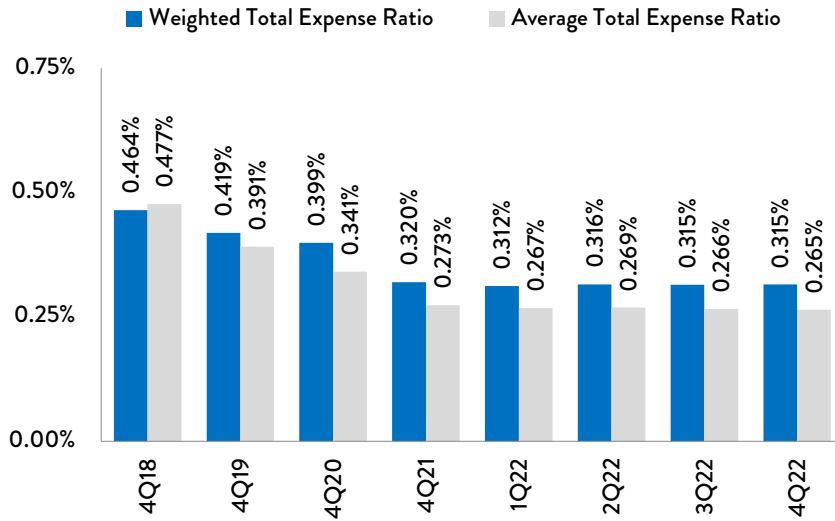
Fund	Ticker	Quarter End Assets	Net Expense Ratio	Admin Fee	Est. Total Invest. Cost	Est. Total Admin. Cost
Stabilizer	-	\$278,212,715	0.34%	0.070%	\$945,923	\$195,287
Voya Fixed Account**	-	\$86,537,188	0.41%	0.070%	\$354,802	\$60,743
Voya Government Money Market A	VYAXX	\$14,573	0.40%	0.070%	\$58	\$10
Sterling Capital Total Return Bond R6	STRDX	\$30,009,705	0.35%	0.070%	\$105,034	\$21,065
Fidelity US Bond Index	FXNAX	\$8,789,982	0.03%	0.070%	\$2,197	\$6,170
Fidelity Intermediate Treasury Bond Index	FUAMX	\$2,317,815	0.03%	0.070%	\$695	\$1,627
Fidelity 500 Index	FXAIX	\$145,863,493	0.02%	0.070%	\$21,880	\$102,387
Hartford Core Equity R6	HAITX	\$128,738,836	0.36%	0.070%	\$463,460	\$90,366
Fidelity Mid Cap Index	FSMDX	\$71,693,868	0.03%	0.070%	\$17,923	\$50,324
Baron Growth Instl*	BGRIX	\$46,085,553	0.88%	0.070%	\$405,553	\$32,349
Hartford Schroders US Small Cap Opps SDR	SCURX	\$11,307,739	0.95%	0.070%	\$107,424	\$7,937
Fidelity Small Cap Index	FSSNX	\$42,624,393	0.03%	0.070%	\$10,656	\$29,920
MFS International Diversification R6	MDIZX	\$53,891,588	0.72%	0.070%	\$388,019	\$37,828
Fidelity Total International Index	FTIHX	\$33,976,259	0.06%	0.070%	\$20,386	\$23,849
Conservative Allocation Portfolio	-	\$40,195,020	0.25%	0.070%	\$100,488	\$28,214
Moderate Allocation Portfolio*	-	\$84,776,399	0.16%	0.070%	\$135,642	\$59,507
Aggressive Allocation Portfolio*	-	\$63,911,107	0.10%	0.070%	\$63,911	\$44,861
Vanguard Target Retirement Income	VTINX	\$7,127,007	0.08%	0.070%	\$5,702	\$5,003
Vanguard Target Retirement 2020	VTWNX	\$31,210,163	0.08%	0.070%	\$24,968	\$21,907
Vanguard Target Retirement 2025	VTTVX	\$3,221,804	0.08%	0.070%	\$2,577	\$2,261
Vanguard Target Retirement 2030	VTHRX	\$67,746,767	0.08%	0.070%	\$54,197	\$47,554
Vanguard Target Retirement 2035	VTTHX	\$3,379,497	0.08%	0.070%	\$2,704	\$2,372
Vanguard Target Retirement 2040	VFORX	\$67,284,116	0.08%	0.070%	\$53,827	\$47,229
Vanguard Target Retirement 2045	VTIVX	\$2,557,266	0.08%	0.070%	\$2,046	\$1,795
Vanguard Target Retirement 2050	VFIFX	\$50,329,537	0.08%	0.070%	\$40,264	\$35,328
Vanguard Target Retirement 2055	VFFVX	\$2,005,506	0.08%	0.070%	\$1,604	\$1,408
Vanguard Target Retirement 2060	VTTSX	\$1,664,250	0.08%	0.070%	\$1,331	\$1,168
Vanguard Target Retirement 2065	VLXVX	\$935,071	0.08%	0.070%	\$748	\$656
Vanguard Target Retirement 2070	VSVNX	\$11,542	0.08%	0.070%	\$9	\$8
Self-Directed Brokerage Account	-	\$5,423,893	-	0.000%	-	\$0
TOTAL		\$1,371,842,650			\$3,334,030	\$959,137

Plan Administration Cost	Quarter	Annualized
Contracted Revenue to Voya (3.6 bps excluding SDBA - est):	\$122,978	\$491,911
Additional Administrative Allowance (\$505,000 pro-rated - est):	\$116,807	\$467,226
Total Plan Administration Cost (7.0 bps excluding SDBA - est):	\$239,784	\$959,137

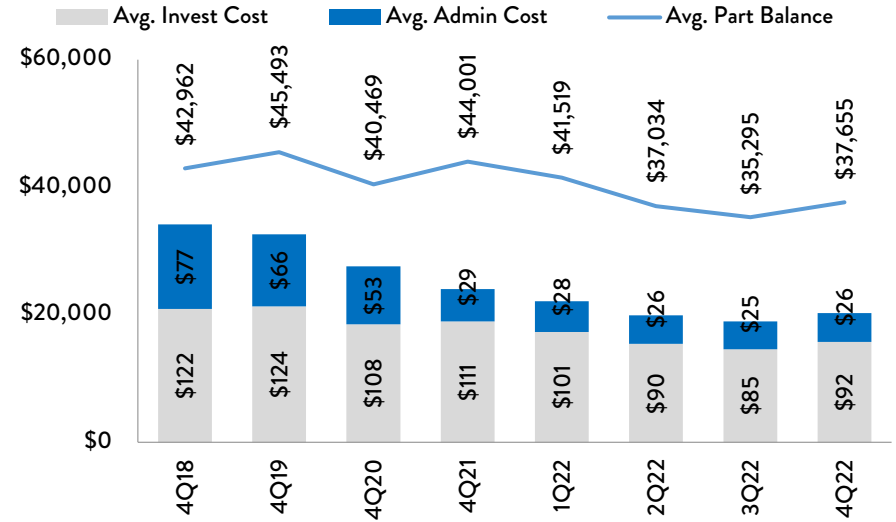
*Revenue derived from funds credited to participant accounts in which they are held. For fee reporting purposes, the credit has been used to offset the reported fund expense ratio.

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

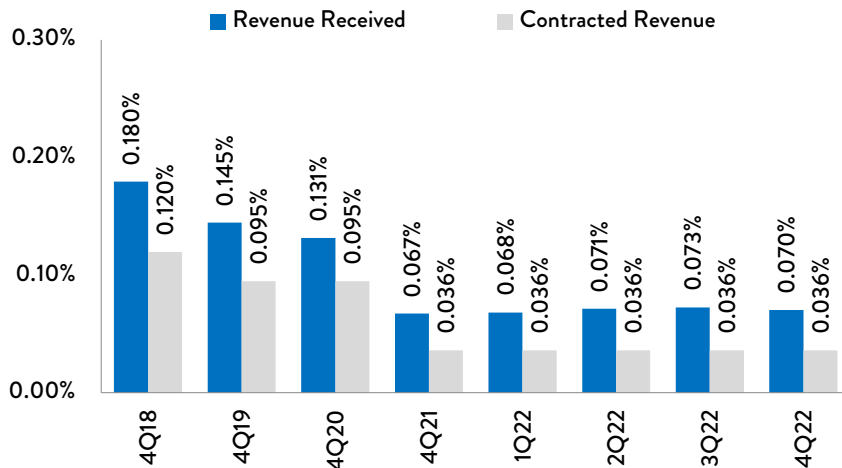
Annualized Plan Cost (%)



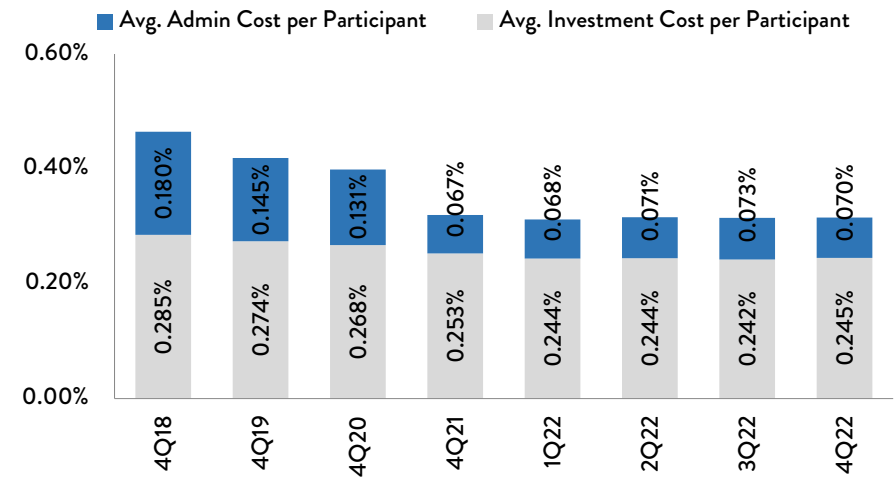
Average Participant Balance and Cost (\$)



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



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



*Revenue received is 0.070% 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

Fourth Quarter 2022

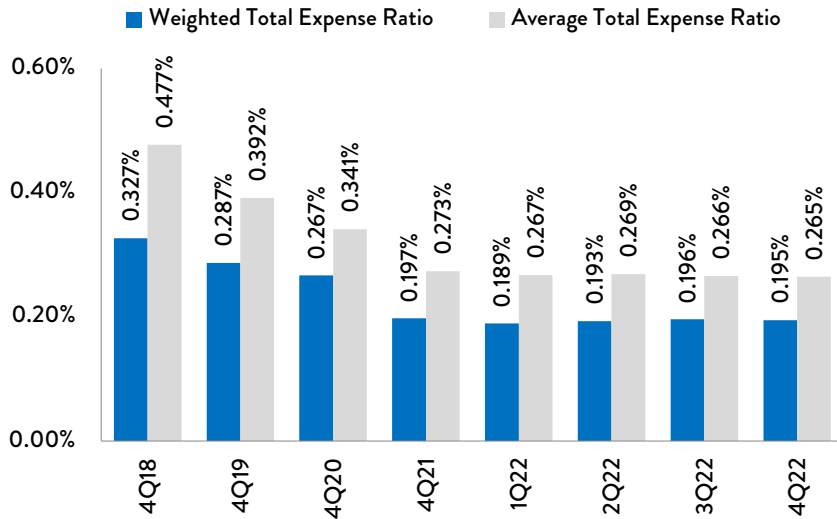
Annualized

Fund	Ticker	Quarter End Assets	Net Expense Ratio	Admin Fee	Est. Total Invest. Cost	Est. Total Admin. Cost
Stabilizer	-	\$226,456,843	0.34%	0.070%	\$769,953	\$158,970
Sterling Capital Total Return Bond R6	STRDX	\$25,299,090	0.35%	0.070%	\$88,547	\$17,760
Fidelity US Bond Index	FXNAX	\$7,951,261	0.03%	0.070%	\$1,988	\$5,582
Fidelity Intermediate Treasury Bond Index	FUAMX	\$1,819,541	0.03%	0.070%	\$546	\$1,277
Fidelity 500 Index	FXAIX	\$116,663,886	0.02%	0.070%	\$17,500	\$81,897
Hartford Core Equity R6	HAITX	\$101,472,000	0.36%	0.070%	\$365,299	\$71,232
Fidelity Mid Cap Index	FSMDX	\$55,700,226	0.03%	0.070%	\$13,925	\$39,101
Baron Growth Instl*	BGRIX	\$36,510,058	0.88%	0.070%	\$321,289	\$25,630
Hartford Schrodgers US Small Cap Opps SDR	SCURX	\$9,497,294	0.95%	0.070%	\$90,224	\$6,667
Fidelity Small Cap Index	FSSNX	\$33,909,331	0.03%	0.070%	\$8,477	\$23,804
MFS International Diversification R6	MDIZX	\$45,370,242	0.72%	0.070%	\$326,666	\$31,849
Fidelity Total International Index	FTIHX	\$29,401,837	0.06%	0.070%	\$17,641	\$20,640
Conservative Allocation Portfolio	-	\$27,693,117	0.25%	0.070%	\$69,233	\$19,440
Moderate Allocation Portfolio*	-	\$63,612,213	0.16%	0.070%	\$101,780	\$44,655
Aggressive Allocation Portfolio*	-	\$50,393,395	0.10%	0.070%	\$50,393	\$35,376
Vanguard Target Retirement Income	VTINX	\$4,818,278	0.08%	0.070%	\$3,855	\$3,382
Vanguard Target Retirement 2020	VTWNX	\$11,757,706	0.08%	0.070%	\$9,406	\$8,254
Vanguard Target Retirement 2025	VTTVX	\$2,271,280	0.08%	0.070%	\$1,817	\$1,594
Vanguard Target Retirement 2030	VTHRX	\$25,881,903	0.08%	0.070%	\$20,706	\$18,169
Vanguard Target Retirement 2035	VTTHX	\$2,144,139	0.08%	0.070%	\$1,715	\$1,505
Vanguard Target Retirement 2040	VFORX	\$33,465,537	0.08%	0.070%	\$26,772	\$23,492
Vanguard Target Retirement 2045	VTIVX	\$1,637,645	0.08%	0.070%	\$1,310	\$1,150
Vanguard Target Retirement 2050	VFIFX	\$38,057,422	0.08%	0.070%	\$30,446	\$26,716
Vanguard Target Retirement 2055	VFFVX	\$1,358,782	0.08%	0.070%	\$1,087	\$954
Vanguard Target Retirement 2060	VTTSX	\$1,409,175	0.08%	0.070%	\$1,127	\$989
Vanguard Target Retirement 2065	VLXVX	\$832,987	0.08%	0.070%	\$666	\$585
Vanguard Target Retirement 2070	VSVNX	\$7,960	0.08%	0.070%	\$6	\$6
Self-Directed Brokerage Account	-	\$4,283,507	-	0.000%	-	\$0
TOTAL		\$959,676,649			\$2,342,375	\$670,677

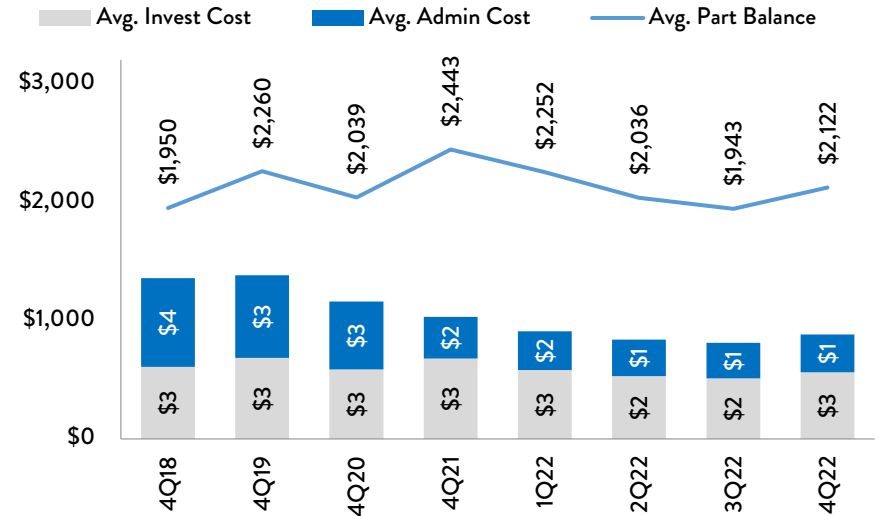
Plan Administration Cost	Quarter	Annualized
Plan Generated Revenue (est):	\$167,669	\$670,677
Contracted Revenue (est):	\$85,985	\$343,942
Net Excess/(Deficit) (est):	\$81,684	\$326,735

*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.

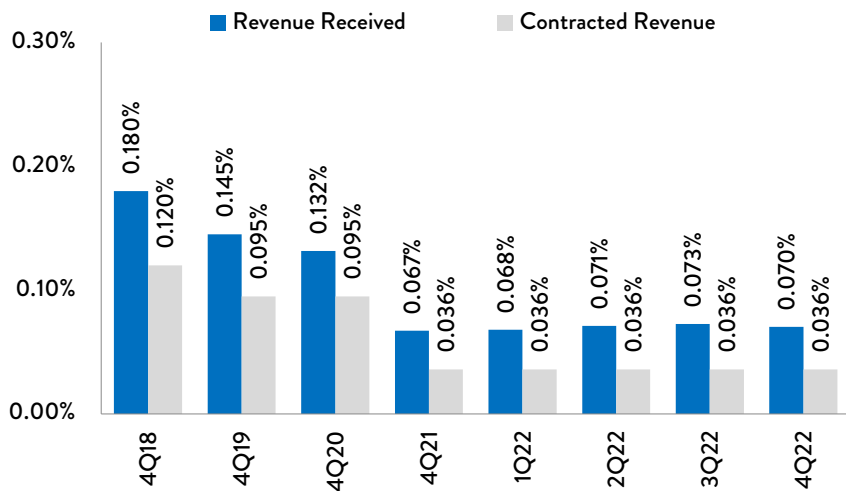
Annualized Plan Cost (%)



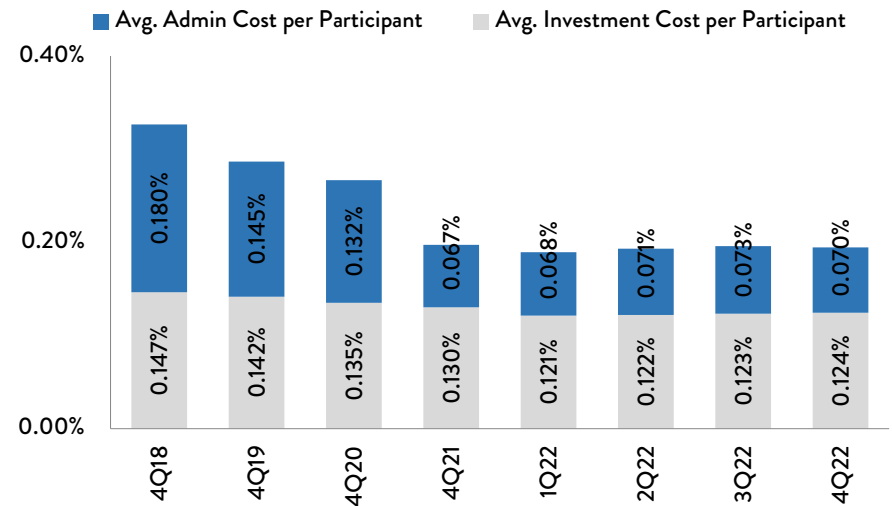
Average Participant Balance and Cost (\$)



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



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



*Revenue received is 0.070% 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

Fourth Quarter 2022

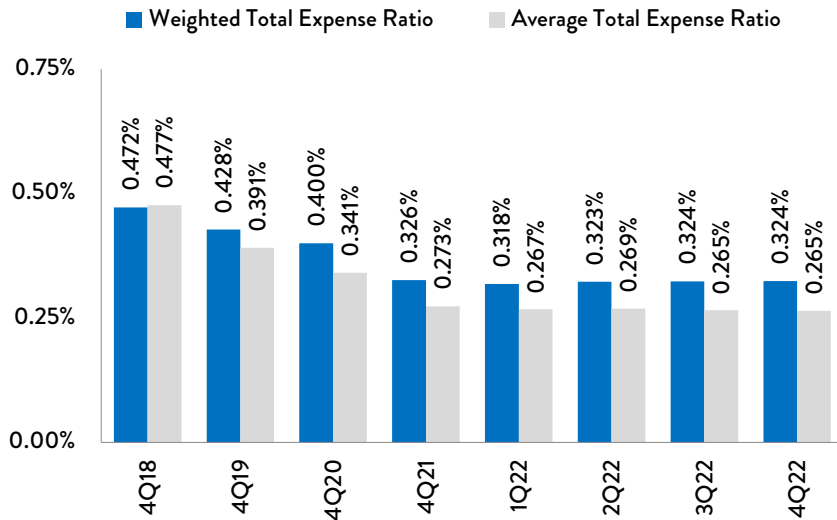
Annualized

Fund	Ticker	Quarter End Assets	Net Expense Ratio	Admin Fee	Est. Total Invest. Cost	Est. Total Admin. Cost
Stabilizer	-	\$2,522,003	0.34%	0.070%	\$8,575	\$1,772
Sterling Capital Total Return Bond R6	STRDX	\$227,294	0.35%	0.070%	\$796	\$160
Fidelity US Bond Index	FXNAX	\$17,748	0.03%	0.070%	\$4	\$12
Fidelity Intermediate Treasury Bond Index	FUAMX	\$32,112	0.03%	0.070%	\$10	\$23
Fidelity 500 Index	FXAIX	\$1,319,964	0.02%	0.070%	\$198	\$928
Hartford Core Equity R6	HAITX	\$636,767	0.36%	0.070%	\$2,292	\$447
Fidelity Mid Cap Index	FSMDX	\$584,867	0.03%	0.070%	\$146	\$411
Baron Growth Instl*	BGRIX	\$433,856	0.88%	0.070%	\$3,818	\$305
Hartford Schroders US Small Cap Opps SDR	SCURX	\$160,218	0.95%	0.070%	\$1,522	\$113
Fidelity Small Cap Index	FSSNX	\$350,746	0.03%	0.070%	\$88	\$246
MFS International Diversification R6	MDIZX	\$183,708	0.72%	0.070%	\$1,323	\$129
Fidelity Total International Index	FTIHX	\$231,013	0.06%	0.070%	\$139	\$162
Conservative Allocation Portfolio	-	\$960,945	0.25%	0.070%	\$2,402	\$675
Moderate Allocation Portfolio*	-	\$1,357,838	0.16%	0.070%	\$2,173	\$954
Aggressive Allocation Portfolio*	-	\$1,222,454	0.10%	0.070%	\$1,222	\$859
Vanguard Target Retirement Income	VTINX	\$743,779	0.08%	0.070%	\$595	\$523
Vanguard Target Retirement 2020	VTWNX	\$3,811,734	0.08%	0.070%	\$3,049	\$2,679
Vanguard Target Retirement 2025	VTTVX	\$373,888	0.08%	0.070%	\$299	\$263
Vanguard Target Retirement 2030	VTHRX	\$8,182,060	0.08%	0.070%	\$6,546	\$5,750
Vanguard Target Retirement 2035	VTTHX	\$603,608	0.08%	0.070%	\$483	\$424
Vanguard Target Retirement 2040	VFORX	\$8,168,562	0.08%	0.070%	\$6,535	\$5,740
Vanguard Target Retirement 2045	VTIVX	\$676,694	0.08%	0.070%	\$541	\$476
Vanguard Target Retirement 2050	VFIFX	\$3,666,628	0.08%	0.070%	\$2,933	\$2,577
Vanguard Target Retirement 2055	VFFVX	\$546,162	0.08%	0.070%	\$437	\$384
Vanguard Target Retirement 2060	VTTSX	\$237,898	0.08%	0.070%	\$190	\$167
Vanguard Target Retirement 2065	VLXVX	\$23,381	0.08%	0.070%	\$19	\$16
Vanguard Target Retirement 2070	VSVNX	\$35	0.08%	0.070%	\$0	\$0
TOTAL		\$37,275,963			\$46,335	\$26,196

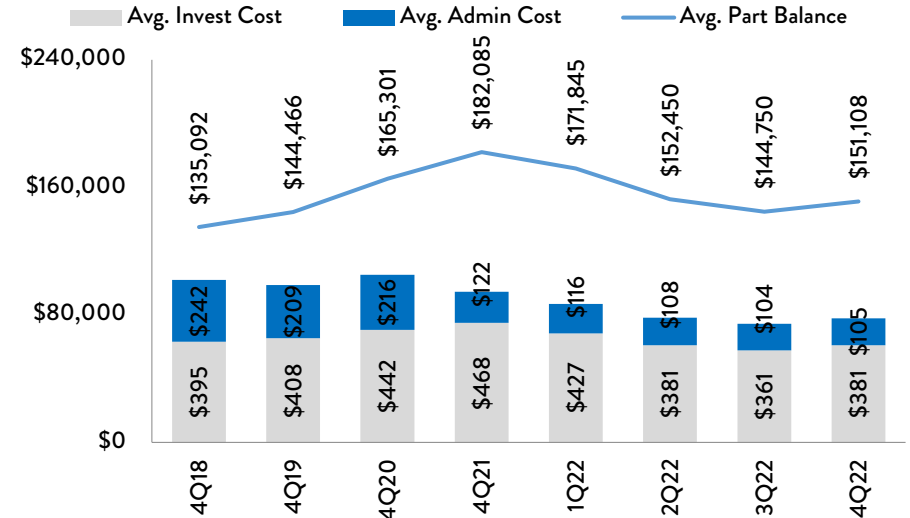
Plan Administration Cost	Quarter	Annualized
Plan Generated Revenue (est):	\$6,549	\$26,196
Contracted Revenue (est):	\$3,355	\$13,419
Net Excess/(Deficit) (est):	\$3,194	\$12,777

*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.

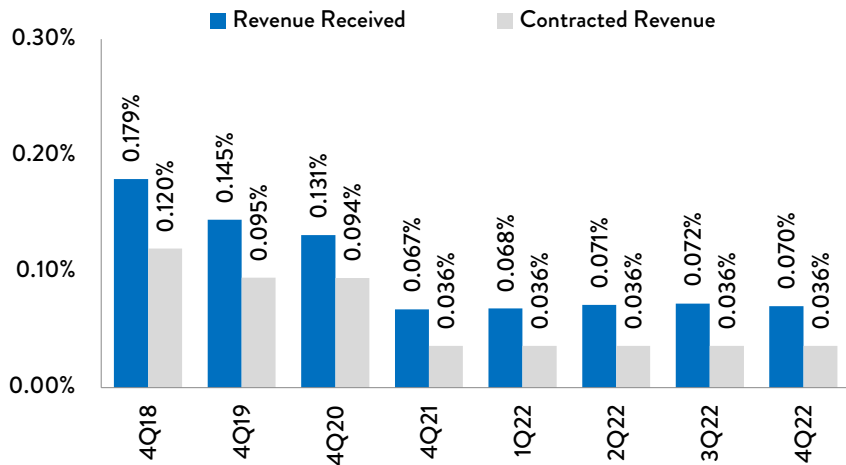
Annualized Plan Cost (%)



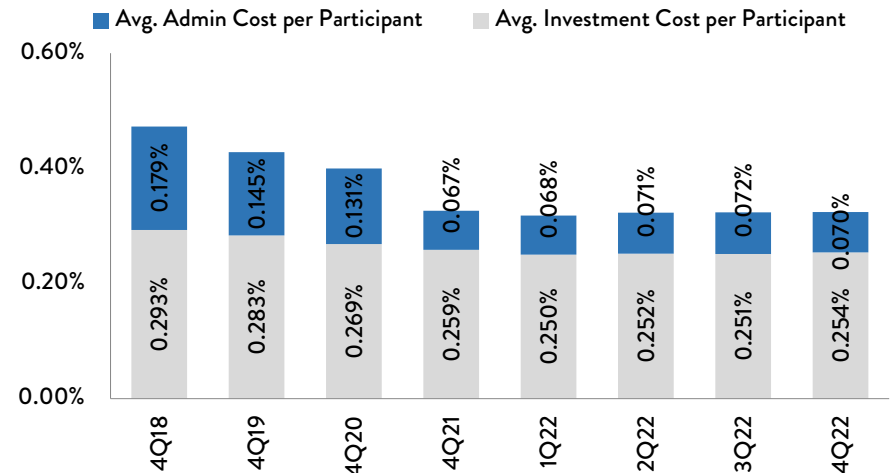
Average Participant Balance and Cost (\$)



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



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



*Revenue received is 0.070% 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

Fourth Quarter 2022

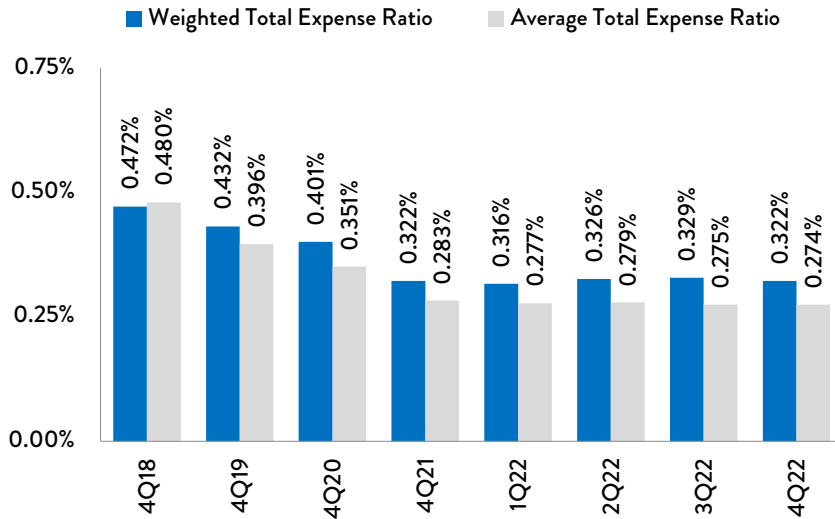
Annualized

Fund	Ticker	Quarter End Assets	Net Expense Ratio	Admin Fee	Est. Total Invest. Cost	Est. Total Admin. Cost
Stabilizer	-	\$49,233,869	0.34%	0.070%	\$167,395	\$34,548
Sterling Capital Total Return Bond R6	STRDX	\$3,837,404	0.35%	0.070%	\$13,431	\$2,693
Fidelity US Bond Index	FXNAX	\$776,950	0.03%	0.070%	\$194	\$545
Fidelity Intermediate Treasury Bond Index	FUAMX	\$383,770	0.03%	0.070%	\$115	\$269
Fidelity 500 Index	FXAIX	\$24,591,144	0.02%	0.070%	\$3,689	\$17,256
Hartford Core Equity R6	HAITX	\$23,250,997	0.36%	0.070%	\$83,704	\$16,315
Fidelity Mid Cap Index	FSMDX	\$12,929,633	0.03%	0.070%	\$3,232	\$9,073
Baron Growth Instl*	BGRIX	\$7,096,636	0.88%	0.070%	\$62,450	\$4,980
Hartford Schroders US Small Cap Opps SDR	SCURX	\$1,328,120	0.95%	0.070%	\$12,617	\$932
Fidelity Small Cap Index	FSSNX	\$7,002,477	0.03%	0.070%	\$1,751	\$4,914
MFS International Diversification R6	MDIZX	\$7,570,701	0.72%	0.070%	\$54,509	\$5,312
Fidelity Total International Index	FTIHX	\$3,881,224	0.06%	0.070%	\$2,329	\$2,723
Conservative Allocation Portfolio	-	\$9,558,261	0.25%	0.070%	\$23,896	\$6,707
Moderate Allocation Portfolio*	-	\$15,816,361	0.16%	0.070%	\$25,306	\$11,098
Aggressive Allocation Portfolio*	-	\$6,906,594	0.10%	0.070%	\$6,907	\$4,846
Vanguard Target Retirement Income	VTINX	\$111,996	0.08%	0.070%	\$90	\$79
Vanguard Target Retirement 2020	VTWNX	\$1,662,923	0.08%	0.070%	\$1,330	\$1,167
Vanguard Target Retirement 2025	VTTVX	\$226,216	0.08%	0.070%	\$181	\$159
Vanguard Target Retirement 2030	VTHRX	\$3,943,564	0.08%	0.070%	\$3,155	\$2,767
Vanguard Target Retirement 2035	VTTHX	\$512,671	0.08%	0.070%	\$410	\$360
Vanguard Target Retirement 2040	VFORX	\$2,681,129	0.08%	0.070%	\$2,145	\$1,881
Vanguard Target Retirement 2045	VTIVX	\$232,341	0.08%	0.070%	\$186	\$163
Vanguard Target Retirement 2050	VFIFX	\$1,572,835	0.08%	0.070%	\$1,258	\$1,104
Vanguard Target Retirement 2055	VFFVX	\$77,936	0.08%	0.070%	\$62	\$55
Vanguard Target Retirement 2060	VTTSX	\$13,937	0.08%	0.070%	\$11	\$10
Vanguard Target Retirement 2065	VLXVX	\$66,897	0.08%	0.070%	\$54	\$47
Vanguard Target Retirement 2070	VSVNX	\$60,879	0.08%	0.072%	\$49	\$44
Self-Directed Brokerage Account	-	\$1,140,386	-	0.000%	-	\$0
TOTAL		\$186,467,853			\$470,455	\$130,046

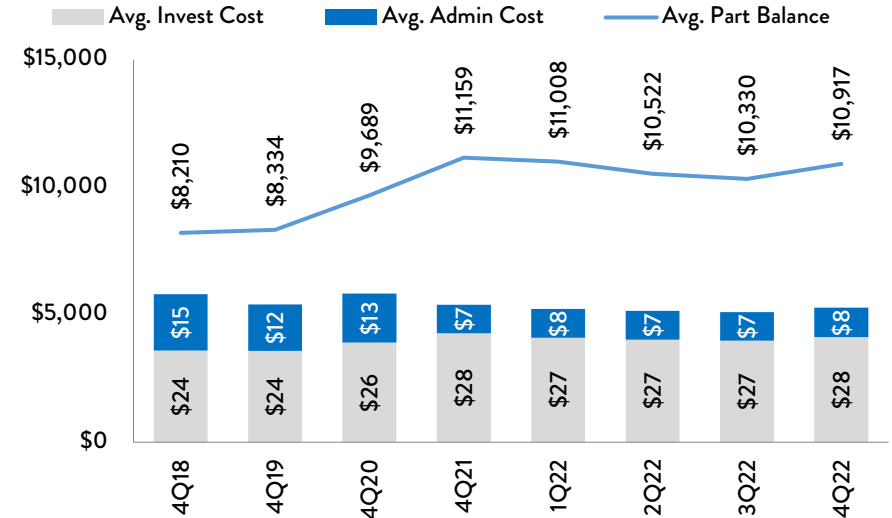
Plan Administration Cost	Quarter	Annualized
Plan Generated Revenue (est):	\$32,512	\$130,046
Contracted Revenue (est):	\$16,679	\$66,718
Net Excess/(Deficit) (est):	\$15,832	\$63,328

*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.

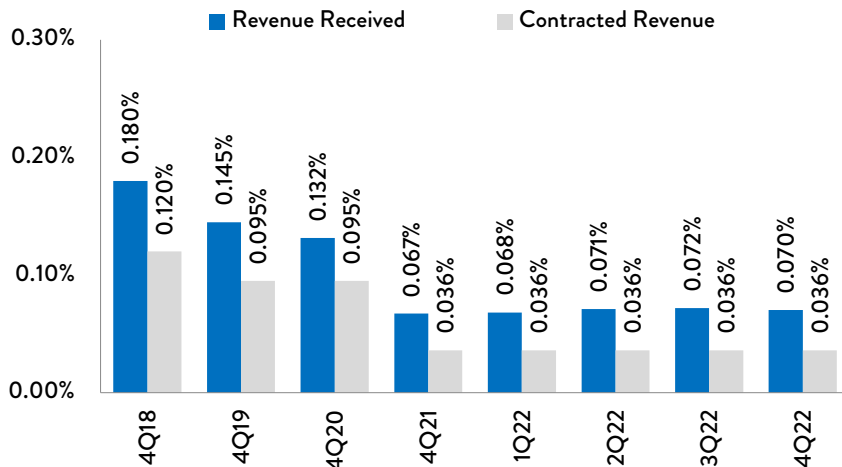
Annualized Plan Cost (%)



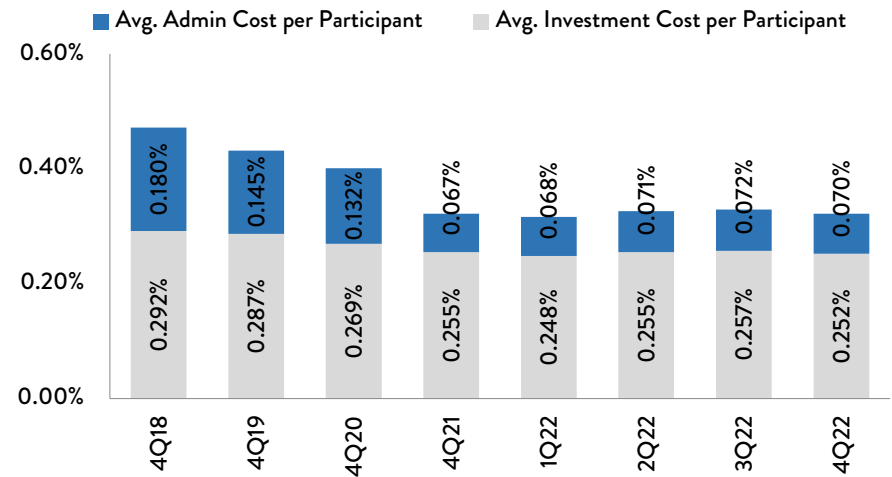
Average Participant Balance and Cost (\$)



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



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



*Revenue received is 0.070% 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

Fourth Quarter 2022

Annualized

Fund	Ticker	Quarter End Assets	Net Expense Ratio	Admin Fee	Est. Total Invest. Cost	Est. Total Admin. Cost
Voya Fixed Account**	-	\$86,537,188	0.41%	0.070%	\$354,802	\$60,716
Voya Government Money Market A	VYAXX	\$14,573	0.40%	0.070%	\$58	\$10
Sterling Capital Total Return Bond R6	STRDX	\$645,917	0.35%	0.070%	\$2,261	\$453
Fidelity US Bond Index	FXNAX	\$44,022	0.03%	0.070%	\$11	\$31
Fidelity Intermediate Treasury Bond Index	FUAMX	\$82,392	0.03%	0.070%	\$25	\$58
Fidelity 500 Index	FXAIX	\$3,288,499	0.02%	0.070%	\$493	\$2,307
Hartford Core Equity R6	HAITX	\$3,379,072	0.36%	0.070%	\$12,165	\$2,371
Fidelity Mid Cap Index	FSMDX	\$2,479,142	0.03%	0.070%	\$620	\$1,739
Baron Growth Instl*	BGRIX	\$2,045,004	0.88%	0.070%	\$17,996	\$1,435
Hartford Schroders US Small Cap Opps SDR	SCURX	\$322,107	0.95%	0.070%	\$3,060	\$226
Fidelity Small Cap Index	FSSNX	\$1,361,839	0.03%	0.070%	\$340	\$955
MFS International Diversification R6	MDIZX	\$766,936	0.72%	0.070%	\$5,522	\$538
Fidelity Total International Index	FTIHX	\$462,185	0.06%	0.070%	\$277	\$324
Conservative Allocation Portfolio	-	\$1,982,697	0.25%	0.070%	\$4,957	\$1,391
Moderate Allocation Portfolio*	-	\$3,989,987	0.16%	0.070%	\$6,384	\$2,799
Aggressive Allocation Portfolio*	-	\$5,388,664	0.10%	0.070%	\$5,389	\$3,781
Vanguard Target Retirement Income	VTINX	\$1,452,955	0.08%	0.070%	\$1,162	\$1,019
Vanguard Target Retirement 2020	VTWNX	\$13,977,800	0.08%	0.070%	\$11,182	\$9,807
Vanguard Target Retirement 2025	VTTVX	\$350,420	0.08%	0.070%	\$280	\$246
Vanguard Target Retirement 2030	VTHRX	\$29,739,240	0.08%	0.070%	\$23,791	\$20,866
Vanguard Target Retirement 2035	VTTTHX	\$119,080	0.08%	0.070%	\$95	\$84
Vanguard Target Retirement 2040	VFORX	\$22,968,888	0.08%	0.070%	\$18,375	\$16,115
Vanguard Target Retirement 2045	VTIVX	\$10,585	0.08%	0.070%	\$8	\$7
Vanguard Target Retirement 2050	VFIFX	\$7,032,653	0.08%	0.070%	\$5,626	\$4,934
Vanguard Target Retirement 2055	VFFVX	\$22,626	0.08%	0.070%	\$18	\$16
Vanguard Target Retirement 2060	VTTTSX	\$3,241	0.08%	0.070%	\$3	\$2
Vanguard Target Retirement 2065	VLXVX	\$11,806	0.08%	0.070%	\$9	\$8
Vanguard Target Retirement 2070	VSVNX	\$0	0.08%	0.070%	\$0	\$0
TOTAL		\$188,479,518			\$474,911	\$132,240

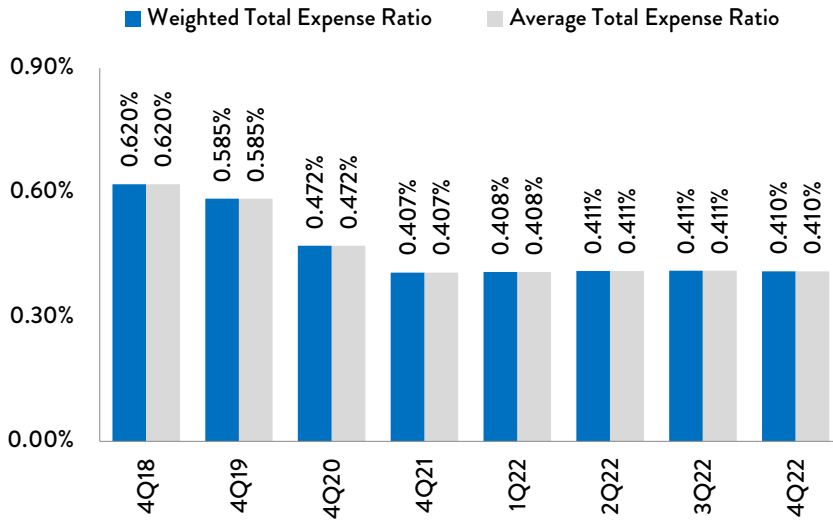
Plan Administration Cost	Quarter	Annualized
Plan Generated Revenue (est):	\$33,060	\$132,240
Contracted Revenue (est):	\$16,963	\$67,853
Net Excess/(Deficit) (est):	\$16,097	\$64,388

*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.

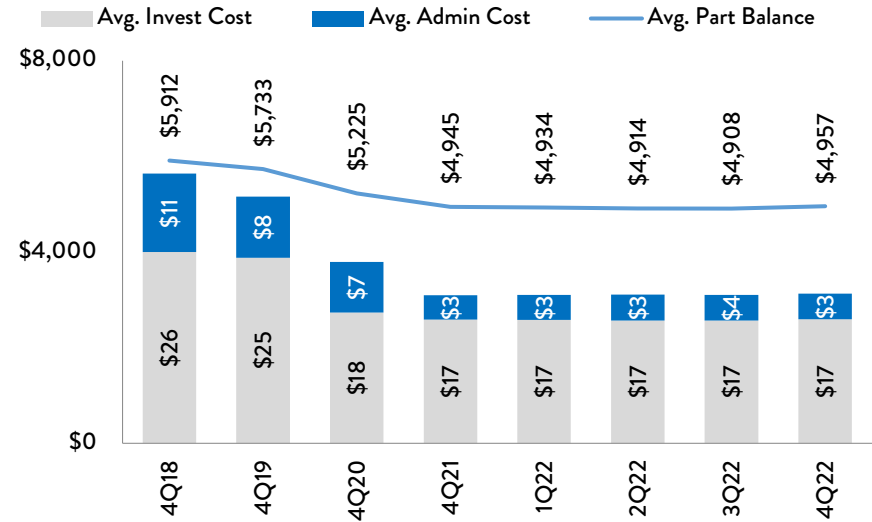
**No explicit expense ratio given for the Voya Fixed Account. An expense ratio of 0.41% is assumed for reporting purposes.

Section 6

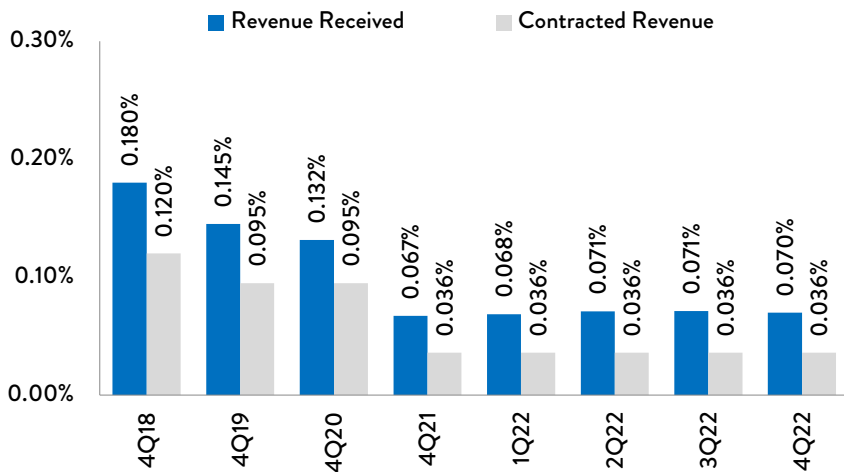
Annualized Plan Cost (%)



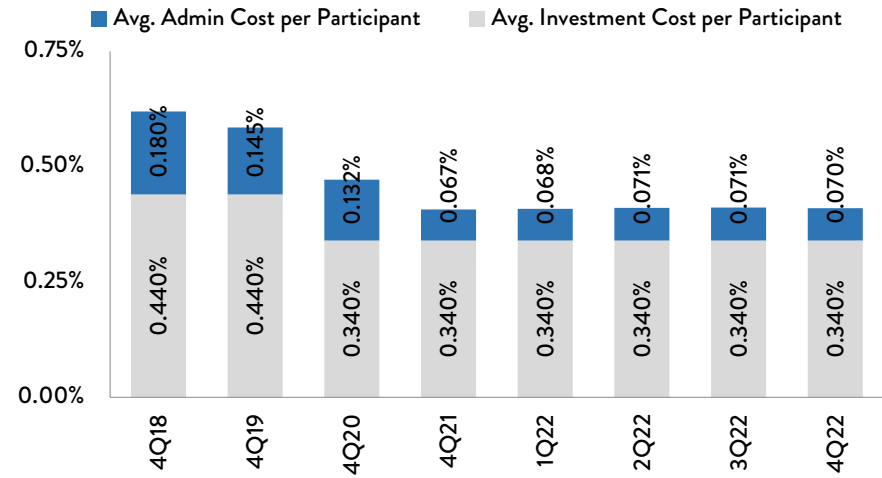
Average Participant Balance and Cost (\$)



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
Fourth Quarter 2022

Annualized

Fund	Ticker	Quarter End Assets	Net Expense Ratio	Admin Fee	Est. Total Invest. Cost	Est. Total Admin. Cost
Stabilizer	-	\$47,281,493	0.34%	0.070%	\$160,757	\$33,080
TOTAL		\$47,281,493			\$160,757	\$33,080

Plan Administration Cost	Quarter	Annualized
Plan Generated Revenue (est):	\$8,270	\$33,080
Contracted Revenue (est):	\$4,255	\$17,021
Net Excess/(Deficit) (est):	\$4,015	\$16,059

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**

FUND FACTS

Inception Date: **October 1, 2004**

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

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

Other expenses: **0.04%**

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

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

Net fund annual expenses after waivers or reductions for period ended September 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

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

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.

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

accompany this Lifestyle Portfolio description.

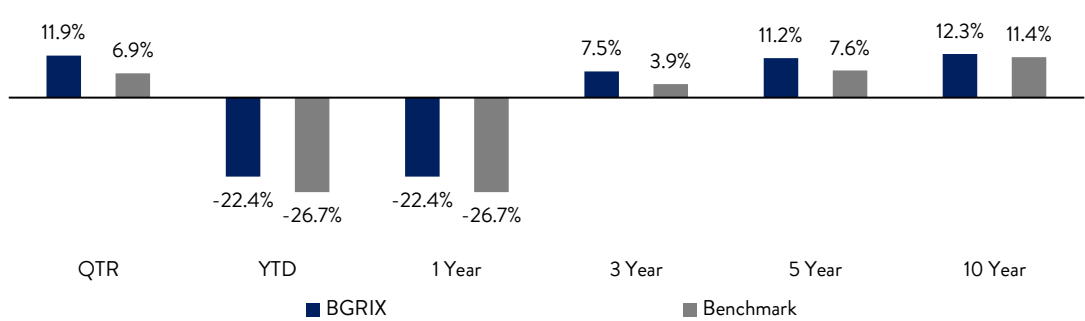
Principal Risks

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.

Product Details

Name	Baron Growth Instl
Ticker	BGRIX
Expense Ratio	1.040%
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	28.17 Years
Fund Size	\$7,534,881,006

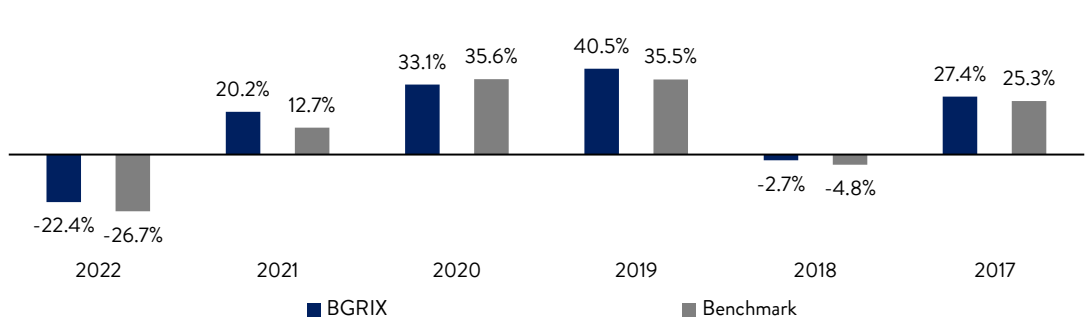
Trailing Performance



Fund Characteristics

	BGRIX	+/- Category
% Assets in Top 10 Holdings	64.13%	38.09%
Average Market Cap (mil)	\$13,198	-\$2,810
P/E Ratio (TTM)	29.06	3.51
P/B Ratio (TTM)	4.12	0.10
Est. Dividend Yield	1.47%	0.53%

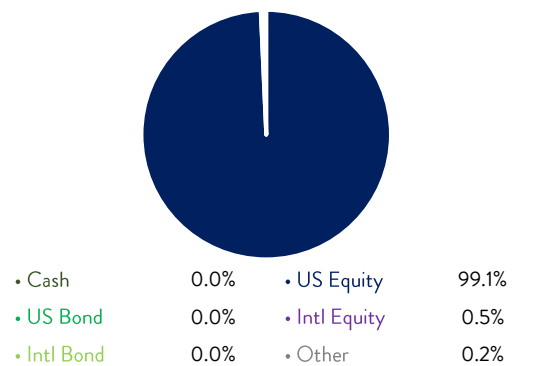
Annual Performance



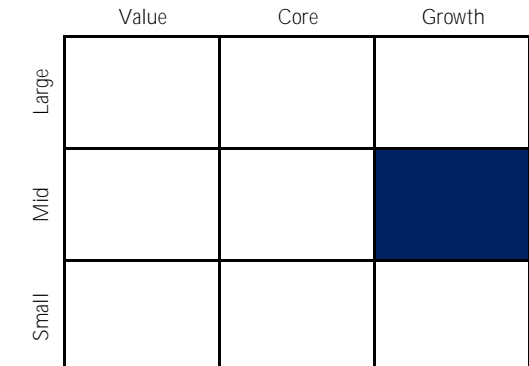
Sector Allocations

	BGRIX	Category	+/- Category
Materials	0.0%	2.3%	-2.3%
Communication Services	5.9%	2.8%	3.0%
Consumer Discretionary	18.8%	13.1%	5.7%
Consumer Staples	0.0%	2.9%	-2.9%
Healthcare	10.5%	20.2%	-9.7%
Industrials	1.0%	15.1%	-14.1%
Real Estate	12.3%	3.3%	9.0%
Technology	12.5%	26.3%	-13.9%
Energy	0.0%	3.3%	-3.3%
Financial Services	39.0%	10.0%	29.0%
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	11.93%	-22.40%	-22.40%	7.45%	11.15%	12.33%
• Benchmark	6.90%	-26.72%	-26.72%	3.85%	7.64%	11.41%
+/- Benchmark	5.03%	4.32%	4.32%	3.60%	3.51%	0.92%
Peer Group Rank	4	14	14	11	7	16

5-Year Quarterly Performance	4Q22	3Q22	2Q22	1Q22
• BGRIX	11.93%	-1.61%	-18.69%	-13.33%
• Benchmark	6.90%	-0.65%	-21.07%	-12.58%
+/- Benchmark	5.03%	-0.96%	2.38%	-0.75%

Annual Performance	2022	2021	2020	2019	2018	2017
• BGRIX	-22.40%	20.15%	33.05%	40.50%	-2.67%	27.35%
• Benchmark	-26.72%	12.73%	35.59%	35.47%	-4.75%	25.27%
+/- Benchmark	4.32%	7.42%	-2.53%	5.03%	2.08%	2.09%
Peer Group Rank	14	15	64	8	29	32

5-Year Quarterly Performance	4Q21	3Q21	2Q21	1Q21
• BGRIX	6.56%	3.63%	7.80%	0.94%
• Benchmark	2.85%	-0.76%	11.07%	-0.57%
+/- Benchmark	3.71%	4.39%	-3.27%	1.50%

Rolling 5-Year Performance	01/2018 - 12/2022	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021
• BGRIX	11.15%	9.81%	10.87%	16.93%	22.73%	21.16%
• Benchmark	7.64%	7.62%	8.88%	15.10%	19.83%	19.27%
+/- Benchmark	3.51%	2.19%	1.99%	1.82%	2.90%	1.90%
Peer Group Rank	7	12	15	21	19	27

5-Year Quarterly Performance	4Q20	3Q20	2Q20	1Q20
• BGRIX	21.10%	10.95%	27.46%	-22.30%
• Benchmark	19.02%	9.37%	30.26%	-20.04%
+/- Benchmark	2.08%	1.57%	-2.81%	-2.26%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	3.70	0.00	3.33	0.00	0.90	0.00
Beta	1.02	1.00	1.03	1.00	1.01	1.00
Standard Deviation	26.28	24.87	23.37	21.95	18.25	17.25
Sharpe Ratio	0.37	0.24	0.51	0.38	0.69	0.67
Information Ratio	0.54	-	0.60	-	0.17	-
Treynor Ratio	6.46	3.00	9.52	6.30	11.39	10.59
Upside Capture Ratio	112.85	100.00	112.70	100.00	104.78	100.00
Downside Capture Ratio	103.09	100.00	103.34	100.00	102.78	100.00

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• BGRIX	8.65%	-0.69%	7.03%	21.67%
• Benchmark	8.17%	-0.67%	5.40%	19.62%
+/- Benchmark	0.48%	-0.02%	1.62%	2.05%

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• BGRIX	-18.53%	7.94%	8.01%	2.47%
• Benchmark	-15.99%	7.57%	3.16%	2.17%
+/- Benchmark	-2.54%	0.36%	4.85%	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.

Baron Growth Instl (USD)

Morningstar Analyst Rating™ Overall Morningstar Rating™ Standard Index **Category Index** **Morningstar Cat**
Silver **★★★★** **S&P 500 TR USD** **Russell Mid Cap** **US Fund Mid-Cap**
 08-02-2022 **524 US Fund Mid-Cap Growth** **Growth TR USD** **Growth**

Performance 01-31-2023					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2021	0.94	7.80	3.63	6.56	20.15
2022	-13.33	-18.69	-1.61	11.93	-22.40
2023	—	—	—	—	9.16

Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-3.11	9.45	11.99	12.54	14.42
Std 12-31-2022	-22.40	—	11.15	12.33	13.78
Total Return	-3.11	9.45	11.99	12.54	14.42
+/- Std Index	5.11	-0.43	2.45	-0.14	—
+/- Cat Index	5.41	2.99	3.73	0.87	—
% Rank Cat	9	18	6	16	—
No. in Cat	576	524	492	383	—

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.baronfunds.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 % 1.04
Gross Expense Ratio % 1.04
Risk and Return Profile

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

	3 Yr	5 Yr	10 Yr
Standard Deviation	26.68	23.58	18.32
Mean	9.45	11.99	12.54
Sharpe Ratio	0.44	0.54	0.69

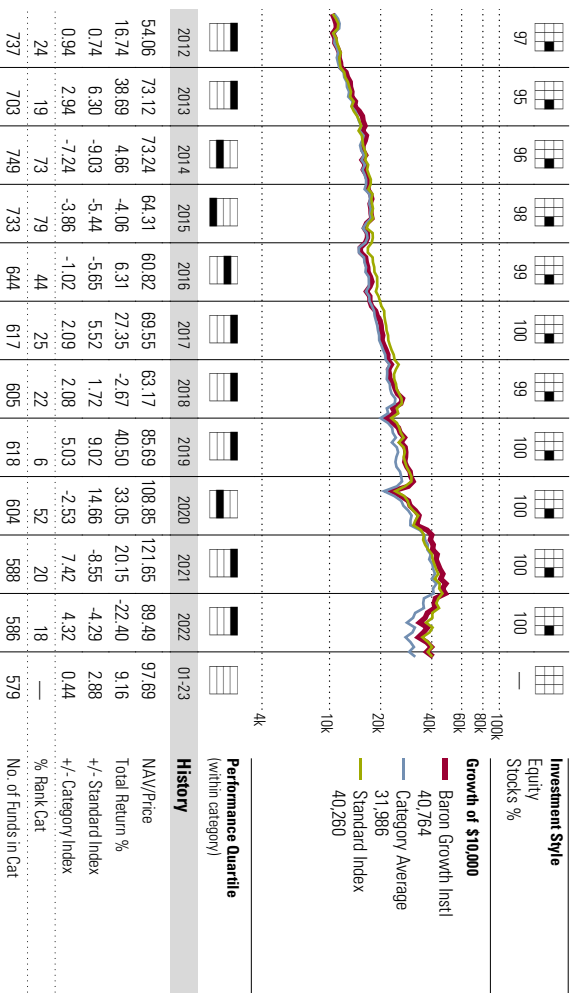
MPT Statistics	Standard Index	Best Fit Index
Alpha	-0.85	0.67
Beta	1.16	1.06
R-Squared	86.96	95.48
12-Month Yield	—	—
Potential Cap Gains Exp	81.43%	—

Operations

Family: Baron Capital Group, Inc.
 Manager: Multiple
 Tenure: 28.2 Years
 Objective: Growth

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

Purchase Constraints: A
 Incept: 05-29-2009
 Type: MF
 Total Assets: \$7,534.88 mil



Portfolio Analysis 12-31-2022			Net %	Long %	Short %	Share Clng	Share Holdings:	Net Assets %
Asset Allocation %			0.00	0.00	0.00	since 09-2022	41 Total Stocks, 0 Total Fixed-Income, 0% Turnover Ratio	
Cash			99.12	99.12	0.00			
US Stocks			0.48	0.48	0.00		2 mil MSOI Inc	10.34
Non-US Stocks			0.00	0.00	0.00		9 mil Arch Capital Group Ltd	8.25
Bonds			0.40	0.40	0.00		2 mil Gartrner Inc	7.40
Other/Not Clsfd			0.00	0.00	0.00		1 mil FactSet Research Systems Inc	6.95
Total			100.00	100.00	0.00		2 mil Vail Resorts Inc	6.88

Equity Style	Value	Brand	Growth	Port	Rel	Rel
	Large	Med	Ext	Avg Index	Index	Cat
	High	Med	Low	P/E Ratio TTM	1.43	1.14
				P/C Ratio TTM	1.19	0.93
				P/B Ratio TTM	4.1	1.10
				Geo Avg Mkt Cap	13198	0.08
				Geo Avg Mkt Cap	\$mil	0.82

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

Credit Quality Breakdown —

Sector Weightings	Stocks %	Rel Std Index
Cyclical	70.2	2.35
Basic Materials	0.0	0.00
Consumer Cyclical	18.8	1.82
Financial Services	39.0	2.78
Real Estate	12.3	4.27
Sensitive	19.4	0.43
Communication Services	5.9	0.75
Energy	0.0	0.00
Industrials	1.0	0.12
Technology	12.5	0.53
Defensive	10.5	0.42
Consumer Defensive	0.0	0.00
Healthcare	10.5	0.71
Utilities	0.0	0.00

Regional Exposure	Stocks %	Rel Std Index
Americas	99.5	1.01
Greater Europe	0.5	0.45
Greater Asia	0.0	0.00

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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 September 30, 2022: **0.01%**

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

Other expenses: **0.24%**

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

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

Net fund annual expenses after waivers or reductions for period ended September 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.

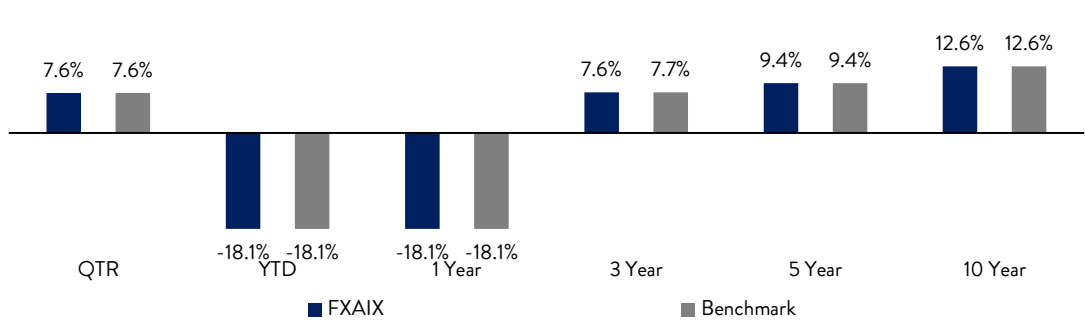
--- 12% in the Fidelity® Total International Index Fund which seeks to provide investment results that correspond to the total return of foreign developed and emerging stock markets.

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

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	14.08 Years
Fund Size	\$373,802,517,593

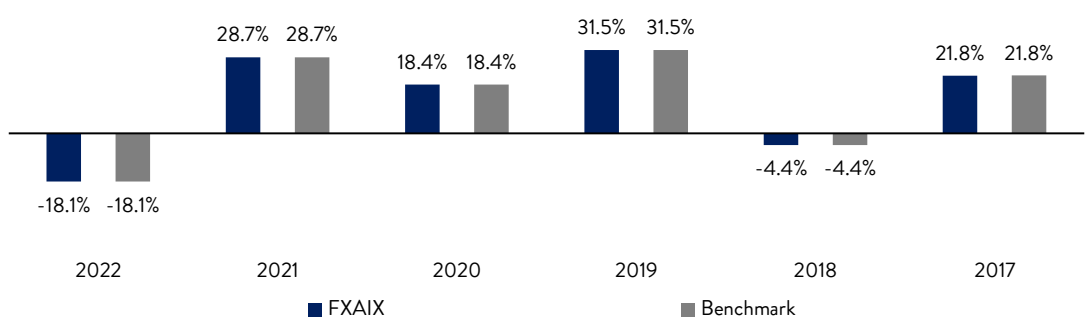
Trailing Performance



Fund Characteristics

	FXAIX	+/- Category
% Assets in Top 10 Holdings	24.33%	-25.32%
Average Market Cap (mil)	\$161,215	-\$49,806
P/E Ratio (TTM)	19.03	0.74
P/B Ratio (TTM)	3.59	-0.55
Est. Dividend Yield	1.93%	-0.01%

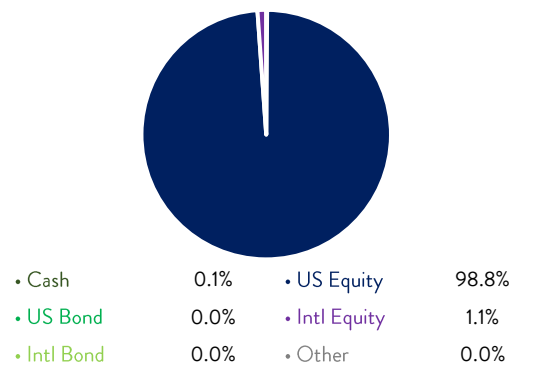
Annual Performance



Sector Allocations

	FXAIX	Category	+/- Category
Materials	2.5%	2.8%	-0.4%
Communication Services	7.3%	7.1%	0.2%
Consumer Discretionary	9.6%	9.8%	-0.3%
Consumer Staples	7.6%	7.4%	0.2%
Healthcare	15.9%	16.0%	-0.1%
Industrials	9.1%	10.4%	-1.4%
Real Estate	2.8%	2.4%	0.4%
Technology	23.0%	22.5%	0.6%
Energy	5.2%	4.4%	0.8%
Financial Services	13.9%	14.3%	-0.4%
Utilities	3.2%	2.8%	0.4%
Other	0.0%	0.0%	0.0%

Asset Allocation



Morningstar Style Box

	Value	Core	Growth
Large			
Mid			
Small			

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• FXAIX	7.56%	-18.13%	-18.13%	7.65%	9.41%	12.55%
• Benchmark	7.56%	-18.11%	-18.11%	7.66%	9.42%	12.56%
+/- Benchmark	-0.01%	-0.02%	-0.02%	-0.01%	-0.01%	-0.01%
Peer Group Rank	58	49	49	30	21	12

5-Year Quarterly Performance	4Q22	3Q22	2Q22	1Q22
• FXAIX	7.56%	-4.89%	-16.10%	-4.60%
• Benchmark	7.56%	-4.88%	-16.10%	-4.60%
+/- Benchmark	-0.01%	0.00%	0.00%	0.00%

Annual Performance	2022	2021	2020	2019	2018	2017
• FXAIX	-18.13%	28.69%	18.40%	31.47%	-4.40%	21.81%
• Benchmark	-18.11%	28.71%	18.40%	31.49%	-4.38%	21.83%
+/- Benchmark	-0.02%	-0.01%	0.00%	-0.01%	-0.02%	-0.02%
Peer Group Rank	49	23	37	25	26	34

5-Year Quarterly Performance	4Q21	3Q21	2Q21	1Q21
• FXAIX	11.02%	0.58%	8.55%	6.18%
• Benchmark	11.03%	0.58%	8.55%	6.17%
+/- Benchmark	-0.01%	-0.01%	0.00%	0.00%

Rolling 5-Year Performance	01/2018 - 12/2022	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021
• FXAIX	9.41%	9.23%	11.29%	15.98%	18.46%	16.88%
• Benchmark	9.42%	9.24%	11.31%	15.99%	18.47%	16.90%
+/- Benchmark	-0.01%	-0.01%	-0.01%	-0.01%	-0.01%	-0.01%
Peer Group Rank	21	17	16	14	18	21

5-Year Quarterly Performance	4Q20	3Q20	2Q20	1Q20
• FXAIX	12.14%	8.94%	20.53%	-19.59%
• Benchmark	12.15%	8.93%	20.54%	-19.60%
+/- Benchmark	-0.01%	0.01%	-0.01%	0.00%

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	21.16	21.16	18.69	18.69	14.77	14.77
Sharpe Ratio	0.41	0.41	0.50	0.50	0.82	0.82
Information Ratio	-0.99	-	-1.10	-	-0.64	-
Treynor Ratio	6.80	6.81	8.07	8.08	11.73	11.75
Upside Capture Ratio	99.97	100.00	99.97	100.00	99.97	100.00
Downside Capture Ratio	100.00	100.00	100.02	100.00	100.02	100.00

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• FXAIX	9.06%	1.69%	4.30%	13.65%
• Benchmark	9.07%	1.70%	4.30%	13.65%
+/- Benchmark	-0.01%	0.00%	0.00%	0.00%

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• FXAIX	-13.53%	7.71%	3.43%	-0.77%
• Benchmark	-13.52%	7.71%	3.43%	-0.76%
+/- Benchmark	-0.01%	0.00%	0.00%	-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® 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 1,277 US Fund Large Blend USD

Performance 01-31-2023					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2021	6.18	8.55	0.58	11.02	28.69
2022	-4.60	-16.10	-4.89	7.56	-18.13
2023	—	—	—	—	6.28

Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-8.23	9.87	9.53	12.67	12.06
Std 12-31-2022	-18.13	—	9.41	12.55	11.57
Total Return	-8.23	9.87	9.53	12.67	12.06
+/- Std Index	-0.02	-0.01	-0.01	-0.01	—
+/- Cat Index	0.32	0.21	0.14	0.16	—
% Rank Cat	54	32	22	11	—
No. in Cat	1354	1227	1119	822	—

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	

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

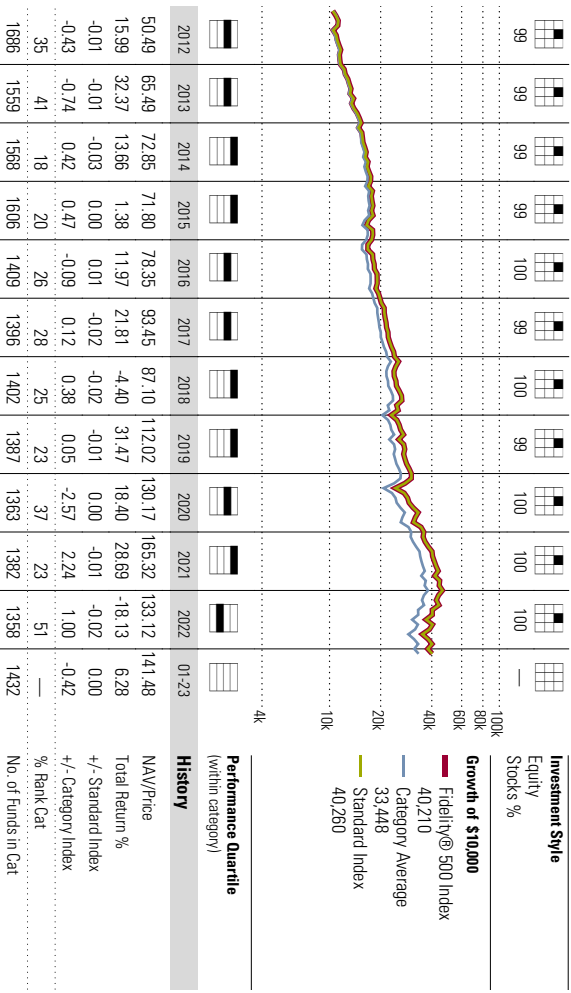
	3 Yr	5 Yr	10 Yr
Standard Deviation	21.39	18.72	14.81
Mean	9.87	9.53	12.67
Sharpe Ratio	0.50	0.51	0.83

MPI Statistics	Standard Index	Best Fit Index
Alpha	-0.01	-0.01
Beta	1.00	1.00
R-Squared	100.00	100.00
12-Month Yield	—	—
Potential Cap Gains Exp	—	48.33%

Operations
 Family: Fidelity Investments
 Manager: Multiple
 Tenure: 14.1 Years
 Objective: Growth and Income

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

Purchase Constraints: A
 Incept: 05-04-2011
 Type: MF
 Total Assets: \$373,802.53 mil



Portfolio Analysis 12-31-2022	
Asset Allocation %	Net % Long % Short %
Cash	-0.04 0.12 0.16
US Stocks	98.91 98.91 0.00
Non-US Stocks	1.13 1.13 0.00
Bonds	0.00 0.00 0.00
Other/Not Cstfd	0.00 0.00 0.00
Total	100.00 100.16 0.16

Equity Style		Portfolio Statistics	
Value	Small Growth	Port	Rel
Large	Mid	Index	Cat
Mid	Ext	19.0	0.94
High	Low	14.2	0.94
Low	High	3.6	0.96
High	Low	16.1215	0.94
Low	High	Geo Avg Mkt Cap	161215
High	Low		0.94
Low	High		0.76

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

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 %	
Americas	Americas	98.9	1.00
Greater Europe	Greater Europe	1.1	1.02
Greater Asia	Greater Asia	0.0	0.82

Share Clng	Share Holdings	Amount	503 Total Stocks	0 Total Fixed-Income	2% Turnover Ratio	Net Assets %
11-2022	Apple Inc	164 mil	2%	—	—	6.03
	Microsoft Corp	82 mil	—	—	—	5.55
	Amazon.com Inc	97 mil	—	—	—	2.32
	Berkshire Hathway Inc Class B	20 mil	—	—	—	1.73
	Alphabet Inc Class A	65 mil	—	—	—	1.64
	UnitedHealth Group Inc	10 mil	—	—	—	1.54
	Alphabet Inc Class C	58 mil	—	—	—	1.46
	Johnson & Johnson	29 mil	—	—	—	1.43
	Exxon Mobil Corp	45 mil	—	—	—	1.41
	JPMorgan Chase & Co	32 mil	—	—	—	1.22
	NVIDIA Corp	27 mil	—	—	—	1.13
	Procter & Gamble Co	26 mil	—	—	—	1.12
	Visa Inc Class A	18 mil	—	—	—	1.06
	Tesla Inc	29 mil	—	—	—	1.03
	The Home Depot Inc	11 mil	—	—	—	1.00

Sector Weightings	Stocks %	Rel Std Index
Cyclical	28.7	0.96
Basic Materials	2.5	0.98
Consumer Cyclical	9.6	0.92
Financial Services	13.9	0.99
Real Estate	2.8	0.97
Sensitive	44.6	0.98
Communication Services	7.3	0.93
Energy	5.2	1.03
Industrials	9.1	1.03
Technology	23.0	0.97
Defensive	26.7	1.08
Consumer Defensive	7.6	1.07
Healthcare	15.9	1.08
Utilities	3.2	1.08

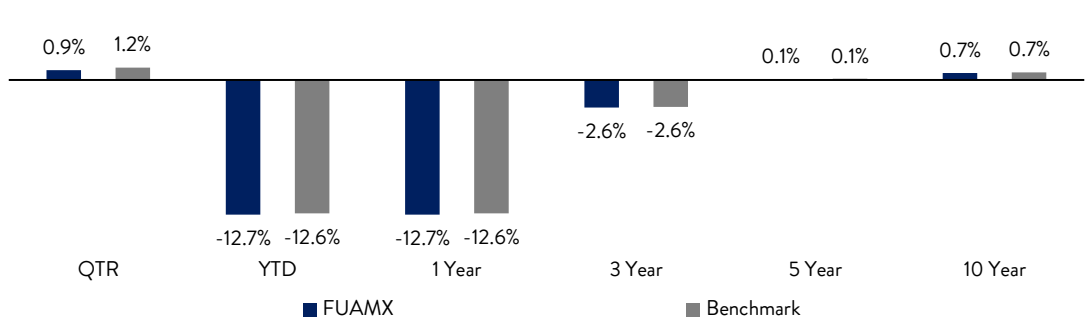
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Product Details

Name	Fidelity® Interim 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	8.75 Years
Fund Size	\$4,830,989,778

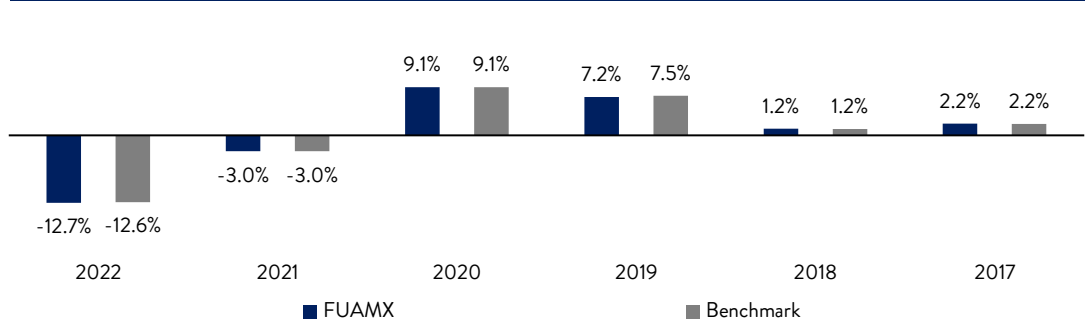
Trailing Performance



Fund Characteristics

	FUAMX	+/- Category
% Assets in Top 10 Holdings	38.14%	-26.45%
Average Eff Duration	6.24	0.88
Average Eff Maturity	-	-
Average Credit Quality	AAA	AA (Cat Avg.)
Average Coupon	1.76%	-0.69%

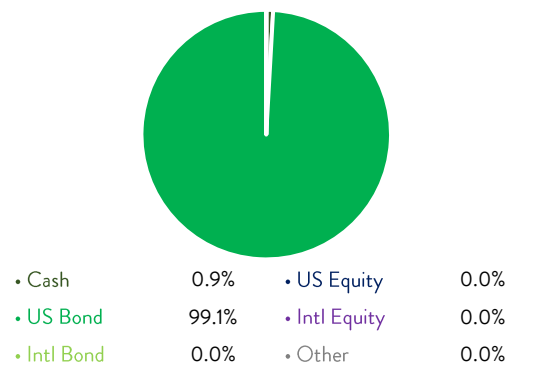
Annual Performance



Sector Allocations

	FUAMX	Category	+/- Category
Government	99.1%	58.5%	40.6%
Municipal	0.0%	0.0%	0.0%
Bank Loan	0.0%	0.0%	0.0%
Convertible	0.0%	0.0%	0.0%
Corporate Bond	0.0%	0.6%	-0.6%
Preferred Stock	0.0%	0.0%	0.0%
Agency MBS	0.0%	30.9%	-30.9%
Non-Agency RMBS	0.0%	0.1%	-0.1%
Commercial MBS	0.0%	0.3%	-0.3%
Asset-Backed	0.0%	1.3%	-1.3%
Cash & Equivalents	0.9%	8.1%	-7.2%
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	0.91%	-12.72%	-12.72%	-2.61%	0.06%	0.65%
• Benchmark	1.18%	-12.58%	-12.58%	-2.56%	0.13%	0.73%
+/- Benchmark	-0.27%	-0.14%	-0.14%	-0.06%	-0.08%	-0.08%
Peer Group Rank	70	78	78	34	20	25

5-Year Quarterly Performance	4Q22	3Q22	2Q22	1Q22
• FUAMX	0.91%	-4.79%	-3.38%	-5.97%
• Benchmark	1.18%	-4.86%	-3.41%	-5.99%
+/- Benchmark	-0.27%	0.07%	0.02%	0.01%

Annual Performance	2022	2021	2020	2019	2018	2017
• FUAMX	-12.72%	-3.00%	9.10%	7.25%	1.23%	2.20%
• Benchmark	-12.58%	-2.97%	9.09%	7.48%	1.22%	2.17%
+/- Benchmark	-0.14%	-0.03%	0.01%	-0.23%	0.01%	0.03%
Peer Group Rank	78	93	7	1	3	16

5-Year Quarterly Performance	4Q21	3Q21	2Q21	1Q21
• FUAMX	-0.23%	-0.14%	1.84%	-4.40%
• Benchmark	-0.23%	-0.06%	1.84%	-4.45%
+/- Benchmark	0.00%	-0.07%	-0.01%	0.05%

Rolling 5-Year Performance	01/2018 - 12/2022	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021
• FUAMX	0.06%	-0.21%	0.85%	1.79%	3.26%	2.30%
• Benchmark	0.13%	-0.19%	0.91%	1.86%	3.30%	2.39%
+/- Benchmark	-0.08%	-0.03%	-0.05%	-0.06%	-0.04%	-0.08%
Peer Group Rank	20	19	16	12	4	21

5-Year Quarterly Performance	4Q20	3Q20	2Q20	1Q20
• FUAMX	-0.81%	0.26%	0.74%	8.91%
• Benchmark	-0.80%	0.35%	0.86%	8.66%
+/- Benchmark	0.00%	-0.09%	-0.12%	0.25%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	-0.04	0.00	-0.07	0.00	-0.07	0.00
Beta	1.01	1.00	1.00	1.00	1.02	1.00
Standard Deviation	6.28	6.24	5.66	5.63	5.07	4.98
Sharpe Ratio	-0.52	-0.52	-0.20	-0.19	-0.01	0.01
Information Ratio	-0.18	-	-0.27	-	-0.23	-
Treynor Ratio	-3.45	-3.41	-1.28	-1.21	-0.16	-0.09
Upside Capture Ratio	100.63	100.00	99.95	100.00	101.06	100.00
Downside Capture Ratio	101.07	100.00	100.98	100.00	102.39	100.00

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• FUAMX	-0.91%	2.16%	3.46%	2.40%
• Benchmark	-0.76%	2.12%	3.53%	2.44%
+/- Benchmark	-0.15%	0.04%	-0.06%	-0.04%

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• FUAMX	3.49%	-0.50%	-0.13%	-1.56%
• Benchmark	3.40%	-0.53%	-0.08%	-1.51%
+/- Benchmark	0.09%	0.03%	-0.06%	-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® Interm Trs Bd Index (USD)

Performance 01-31-2023					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2021	-4.40	1.84	-0.14	-0.23	-3.00
2022	-5.97	-3.38	-4.79	0.91	-12.72
2023	—	—	—	—	2.87
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-8.43	-2.59	0.99	—	0.50
Std 12-31-2022	-12.72	—	0.06	—	-0.03
Total Return	-8.43	-2.59	0.99	1.04	0.50
+/- Std Index	-0.07	-0.24	0.13	-0.39	—
+/- Cat Index	0.00	-0.04	0.29	0.12	—
% Rank Cat	73	68	12	14	—
No. in Cat	235	222	214	176	—

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 % 0.03
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™	2★	4★	4★
Morningstar Risk	High	High	High
Morningstar Return	Avg	+Avg	+Avg
Standard Deviation	6.29	5.74	5.13
Mean	-2.59	0.99	1.04
Sharpe Ratio	-0.54	-0.04	0.06

MPI Statistics	Standard Index	Best Fit Index
Alpha	-0.47	0.44
Beta	0.93	1.13
R-Squared	78.50	96.39
12-Month Yield	—	—
Potential Cap Gains Exp	—	-2.58%

Operations
Family: Fidelity Investments
Manager: Multiple
Tenure: 8.8 Years
Objective: Government Bond - Treasury

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

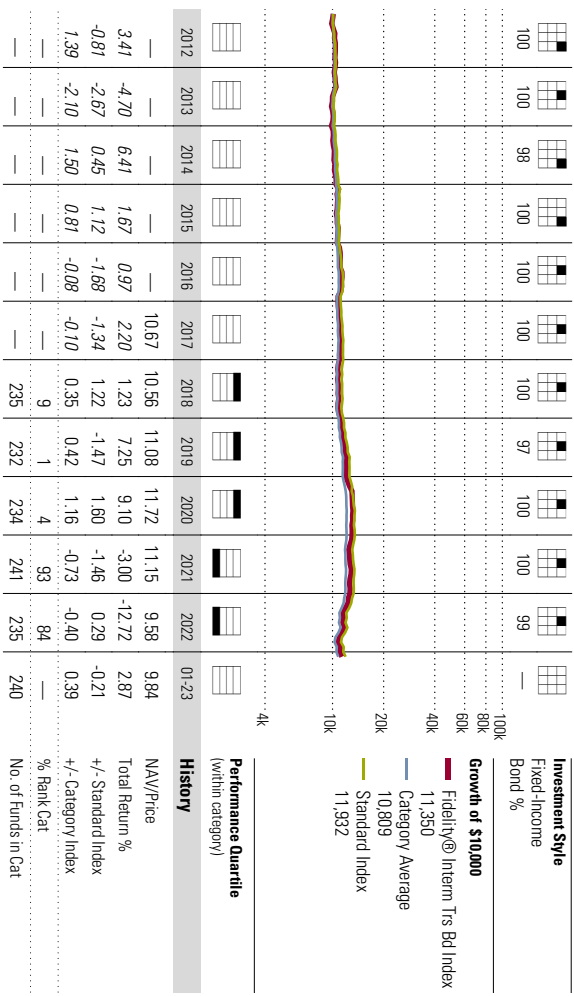
Purchase Constraints: A
Incept: 10-04-2017
Type: MF
Total Assets: \$4,830.99 mil

Morningstar Quantitative
Rating™ Silver^o
12-31-2022

Overall Morningstar Rating™ Standard Index
★★★★
222 US Fund Intermediate Government

Category Index
Bloomberg US Agg Bond TR USD
Government TR USD

Morningstar Cat
US Fund Intermediate Government



Portfolio Analysis 12-31-2022		Net %	Long %	Short %	Share Cng since 11-2022	Share Amount	Holdings: 0 Total Stocks, 62 Total Fixed-Income, 54% Turnover Ratio	Net Assets %
Asset Allocation %	Cash	0.89	0.89	0.00	—	—	—	—
	US Stocks	0.00	0.00	0.00	—	—	—	—
	Non-US Stocks	0.00	0.00	0.00	—	—	—	—
	Bonds	99.11	99.11	0.00	—	—	—	—
	Other/Not Cstfd	0.00	0.00	0.00	—	—	—	—
	Total	100.00	100.00	0.00	—	—	—	—

Equity Style	Value Brand Growth	P/E Ratio TTM	P/C Ratio TTM	P/B Ratio TTM	Geo Avg Mkt Cap \$mil	Port Avg Index	Rel Index	Rel Cat
	Large	—	—	—	—	—	—	—
	Mid	—	—	—	—	—	—	—
	Small	—	—	—	—	—	—	—

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

Credit Quality Breakdown 12-31-2022	AAA	AA	A	BBB	BB	B	Below B	NR
100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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

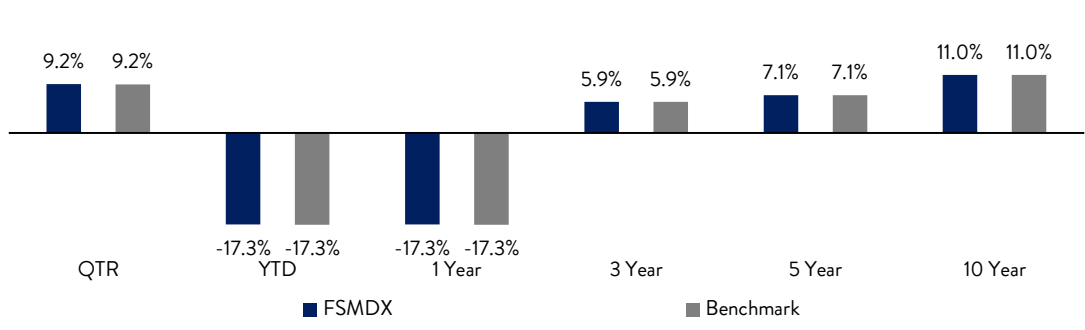
- Sector Weightings**
- Cyclical**
 - Basic Materials
 - Consumer Cyclical
 - Financial Services
 - Real Estate
 - Sensitive**
 - Communication Services
 - Energy
 - Industrials
 - Technology
 - Defensive**
 - Consumer Defensive
 - Healthcare
 - Utilities

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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	11.42 Years
Fund Size	\$26,896,381,431

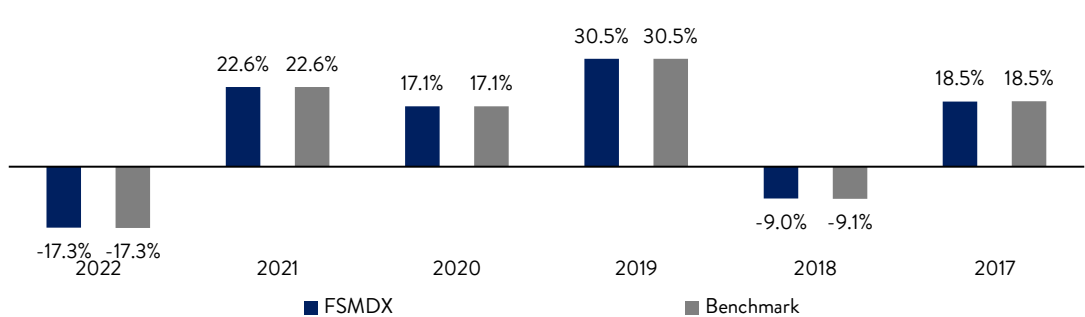
Trailing Performance



Fund Characteristics

	FSMDX	+/- Category
% Assets in Top 10 Holdings	4.91%	-11.35%
Average Market Cap (mil)	\$17,141	\$7,509
P/E Ratio (TTM)	16.07	1.77
P/B Ratio (TTM)	2.61	0.21
Est. Dividend Yield	1.89%	0.27%

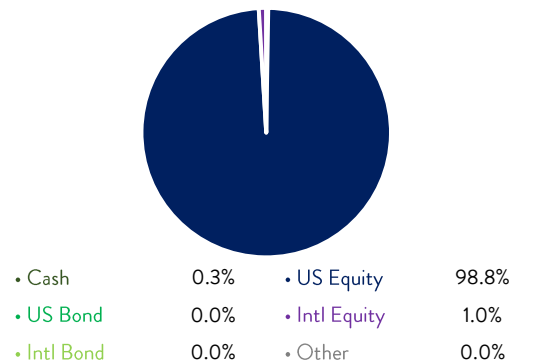
Annual Performance



Sector Allocations

	FSMDX	Category	+/- Category
Materials	5.0%	5.4%	-0.4%
Communication Services	3.3%	2.7%	0.6%
Consumer Discretionary	12.5%	13.3%	-0.8%
Consumer Staples	4.0%	4.6%	-0.6%
Healthcare	10.9%	11.0%	0.0%
Industrials	15.4%	17.0%	-1.6%
Real Estate	8.1%	7.0%	1.1%
Technology	15.8%	15.0%	0.7%
Energy	5.4%	5.5%	-0.1%
Financial Services	13.6%	14.7%	-1.1%
Utilities	6.0%	3.8%	2.2%
Other	0.0%	0.0%	0.0%

Asset Allocation



Morningstar Style Box

	Value	Core	Growth
Large			
Mid			
Small			

Fidelity® Mid Cap Index
FSMDX

Fund Fact Sheet
Data as of 12/31/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• FSMDX	9.21%	-17.28%	-17.28%	5.89%	7.10%	10.95%
• Benchmark	9.18%	-17.32%	-17.32%	5.88%	7.10%	10.96%
+/- Benchmark	0.03%	0.03%	0.03%	0.01%	0.00%	-0.01%
Peer Group Rank	52	68	68	53	30	15

5-Year Quarterly Performance	4Q22	3Q22	2Q22	1Q22
• FSMDX	9.21%	-3.42%	-16.85%	-5.69%
• Benchmark	9.18%	-3.44%	-16.85%	-5.68%
+/- Benchmark	0.03%	0.02%	0.00%	-0.01%

Annual Performance	2022	2021	2020	2019	2018	2017
• FSMDX	-17.28%	22.56%	17.11%	30.51%	-9.05%	18.47%
• Benchmark	-17.32%	22.58%	17.10%	30.54%	-9.06%	18.52%
+/- Benchmark	0.03%	-0.02%	0.01%	-0.03%	0.01%	-0.05%
Peer Group Rank	68	61	27	27	31	30

5-Year Quarterly Performance	4Q21	3Q21	2Q21	1Q21
• FSMDX	6.44%	-0.93%	7.47%	8.15%
• Benchmark	6.44%	-0.93%	7.50%	8.14%
+/- Benchmark	0.00%	0.00%	-0.03%	0.01%

Rolling 5-Year Performance	01/2018 - 12/2022	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021
• FSMDX	7.10%	6.48%	7.95%	12.61%	15.08%	14.37%
• Benchmark	7.10%	6.48%	7.96%	12.62%	15.10%	14.39%
+/- Benchmark	0.00%	0.00%	-0.01%	-0.01%	-0.02%	-0.02%
Peer Group Rank	30	26	29	19	20	23

5-Year Quarterly Performance	4Q20	3Q20	2Q20	1Q20
• FSMDX	19.89%	7.49%	24.55%	-27.04%
• Benchmark	19.91%	7.46%	24.61%	-27.07%
+/- Benchmark	-0.02%	0.03%	-0.06%	0.03%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	0.01	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	23.94	23.95	20.91	20.92	16.46	16.47
Sharpe Ratio	0.32	0.32	0.37	0.37	0.67	0.67
Information Ratio	0.17	-	0.04	-	-0.07	-
Treynor Ratio	5.04	5.03	5.76	5.75	10.15	10.14
Upside Capture Ratio	99.91	100.00	99.91	100.00	99.88	100.00
Downside Capture Ratio	99.87	100.00	99.88	100.00	99.84	100.00

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• FSMDX	7.06%	0.44%	4.14%	16.53%
• Benchmark	7.06%	0.48%	4.13%	16.54%
+/- Benchmark	0.00%	-0.04%	0.01%	0.00%

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• FSMDX	-15.32%	4.97%	2.80%	-0.48%
• Benchmark	-15.37%	5.00%	2.82%	-0.46%
+/- Benchmark	0.06%	-0.02%	-0.02%	-0.02%

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Fidelity® Mid Cap Index (USD)

Morningstar Quantitative Overall Morningstar Rating™ Standard Index Category Index Morningstar Cat Rating™ **★★★★** S&P 500 TR USD Russell Mid Cap TR US Fund Mid-Cap Blend **Gold** 381 US Fund Mid-Cap Blend USD Blend

Performance 01-31-2023					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2021	8.15	7.47	-0.93	6.44	22.56
2022	-5.69	-16.85	-3.42	9.21	-17.28
2023	—	—	—	—	8.29

Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-3.29	9.03	8.03	11.10	12.29
Std 12-31-2022	-17.28	—	7.10	10.95	11.60
Total Return	-3.29	9.03	8.03	11.10	12.29

+/- Std Index		+/- Cat Index	
1 Yr	4.93	-0.85	-1.51
3 Yr	-1.51	-1.58	—
5 Yr	0.04	0.01	-0.01
10 Yr	0.01	0.01	-0.01

% Rank Cat	72	63	32	18
No. in Cat	415	381	353	227

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.

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

	3 Yr	5 Yr	10 Yr
Standard Deviation	24.32	21.14	16.51
Mean	9.03	8.03	11.10
Sharpe Ratio	0.44	0.41	0.67

MPI Statistics

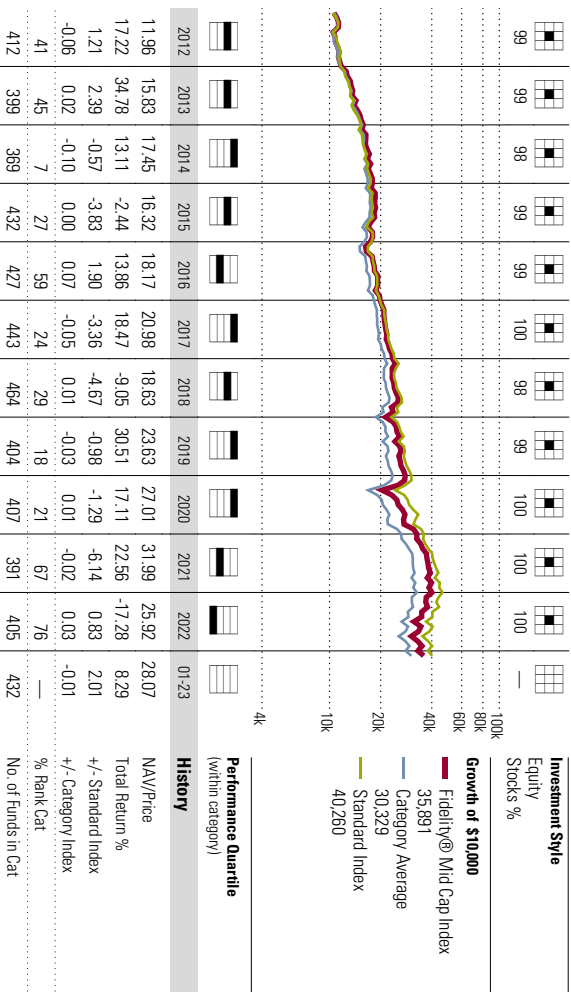
	Standard Index	Best Fit Index
Alpha	0.01	0.01
Beta	-1.07	1.00
R-Squared	92.46	100.00
12-Month Yield	—	—
Potential Cap Gains Exp	—	16.53%

Operations

Family: Fidelity Investments
Manager: Multiple
Tenure: 11.4 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: \$26,896.38 mil



Portfolio Analysis 12-31-2022		Net %	Long %	Short %
Asset Allocation %	Cash	0.07	0.26	0.19
	US Stocks	98.97	98.97	0.00
	Non-US Stocks	0.96	0.96	0.00
	Bonds	0.00	0.00	0.00
	Other/Not Cstfd	0.00	0.00	0.00
	Total	100.00	100.19	0.19

Equity Style		Value	Brand	Growth
	P/E Ratio TTM	16.1	0.79	1.12
	P/C Ratio TTM	12.7	0.84	1.14
	P/B Ratio TTM	2.6	0.69	1.09
	Geo Avg Mkt Cap	17141	0.10	1.78

Fixed-Income Style		Ltd	Med	Ext
	Ang Eff Maturity	—	—	—
	Ang Eff Duration	—	—	—
	Ang Wtd Coupon	—	—	—
	Ang Wtd 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	99.1	1.00	
Greater Europe	0.8	0.77	
Greater Asia	0.1	2.39	

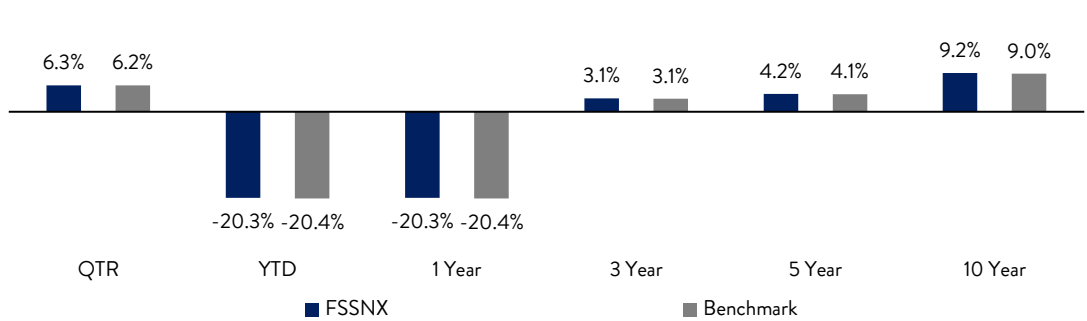
Sector Weightings		Stocks %	Rel Std Index
Cyclical	39.2	1.31	
Basic Materials	5.0	1.98	
Consumer Cyclical	12.5	1.21	
Financial Services	13.6	0.97	
Real Estate	8.1	2.81	
Sensitive	39.9	0.88	
Communication Services	3.3	0.42	
Energy	5.4	1.07	
Industrials	15.4	1.76	
Technology	15.8	0.66	
Defensive	21.0	0.84	
Consumer Defensive	4.0	0.57	
Healthcare	10.9	0.74	
Utilities	6.0	2.05	

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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	11.42 Years
Fund Size	\$20,828,879,215

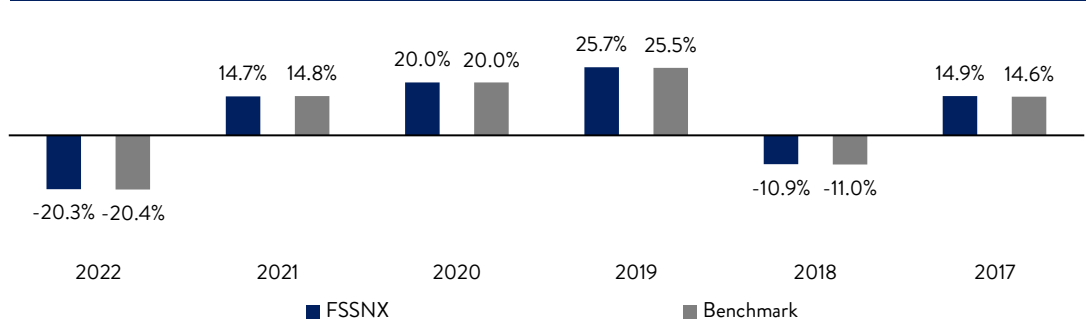
Trailing Performance



Fund Characteristics

	FSSNX	+/- Category
% Assets in Top 10 Holdings	3.58%	-22.66%
Average Market Cap (mil)	\$2,280	-\$1,859
P/E Ratio (TTM)	11.54	-0.43
P/B Ratio (TTM)	1.97	-0.15
Est. Dividend Yield	1.58%	0.03%

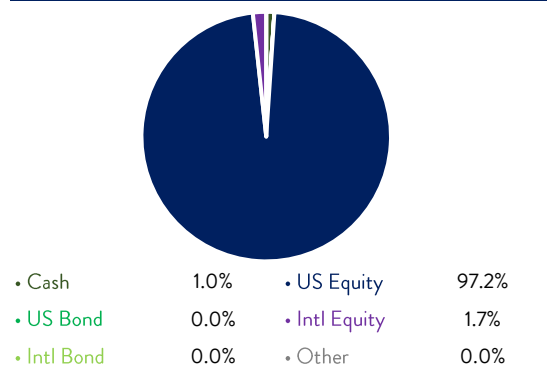
Annual Performance



Sector Allocations

	FSSNX	Category	+/- Category
Materials	4.3%	4.7%	-0.4%
Communication Services	2.5%	2.3%	0.2%
Consumer Discretionary	10.4%	11.6%	-1.2%
Consumer Staples	4.2%	4.3%	-0.1%
Healthcare	16.1%	13.9%	2.3%
Industrials	14.7%	17.6%	-2.9%
Real Estate	7.7%	6.7%	1.0%
Technology	13.6%	13.6%	0.1%
Energy	6.7%	5.3%	1.4%
Financial Services	16.3%	17.2%	-1.0%
Utilities	3.5%	2.7%	0.8%
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 12/31/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• FSSNX	6.25%	-20.27%	-20.27%	3.15%	4.22%	9.17%
• Benchmark	6.23%	-20.44%	-20.44%	3.10%	4.13%	9.01%
+/- Benchmark	0.02%	0.16%	0.16%	0.05%	0.09%	0.16%
Peer Group Rank	89	80	80	74	63	49

5-Year Quarterly Performance	4Q22	3Q22	2Q22	1Q22
• FSSNX	6.25%	-2.08%	-17.18%	-7.47%
• Benchmark	6.23%	-2.19%	-17.20%	-7.53%
+/- Benchmark	0.02%	0.10%	0.02%	0.05%

Annual Performance	2022	2021	2020	2019	2018	2017
• FSSNX	-20.27%	14.71%	19.99%	25.71%	-10.88%	14.85%
• Benchmark	-20.44%	14.82%	19.96%	25.52%	-11.01%	14.65%
+/- Benchmark	0.16%	-0.11%	0.03%	0.18%	0.14%	0.20%
Peer Group Rank	80	90	14	38	38	28

5-Year Quarterly Performance	4Q21	3Q21	2Q21	1Q21
• FSSNX	2.10%	-4.40%	4.26%	12.73%
• Benchmark	2.14%	-4.36%	4.29%	12.70%
+/- Benchmark	-0.04%	-0.04%	-0.04%	0.03%

Rolling 5-Year Performance	01/2018 - 12/2022	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021
• FSSNX	4.22%	3.65%	5.25%	9.84%	12.11%	13.56%
• Benchmark	4.13%	3.55%	5.17%	9.74%	12.02%	13.45%
+/- Benchmark	0.09%	0.09%	0.08%	0.09%	0.09%	0.11%
Peer Group Rank	63	53	59	43	38	26

5-Year Quarterly Performance	4Q20	3Q20	2Q20	1Q20
• FSSNX	31.28%	4.98%	25.49%	-30.62%
• Benchmark	31.37%	4.93%	25.42%	-30.61%
+/- Benchmark	-0.09%	0.05%	0.07%	-0.01%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	0.05	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	26.38	26.39	23.49	23.50	19.25	19.26
Sharpe Ratio	0.22	0.21	0.24	0.23	0.51	0.50
Information Ratio	0.51	-	1.02	-	1.63	-
Treynor Ratio	2.29	2.25	2.87	2.78	8.36	8.19
Upside Capture Ratio	100.06	100.00	100.16	100.00	100.30	100.00
Downside Capture Ratio	99.92	100.00	99.89	100.00	99.72	100.00

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• FSSNX	10.01%	-2.34%	2.13%	14.56%
• Benchmark	9.94%	-2.40%	2.10%	14.58%
+/- Benchmark	0.07%	0.06%	0.04%	-0.02%

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• FSSNX	-20.17%	3.63%	7.79%	-0.05%
• Benchmark	-20.20%	3.58%	7.75%	-0.08%
+/- Benchmark	0.03%	0.05%	0.03%	0.03%

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Fidelity® Small Cap Index (USD)

Morningstar Quantitative Rating™
Bronze 0
 12-31-2022

Overall Morningstar Rating™
★★★★
 588 US Fund Small Blend

Standard Index S&P 500 TR USD

Category Index Russell 2000 TR

Morningstar Cat US Fund Small Blend

Performance 01-31-2023					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2021	12.73	4.26	-4.40	2.10	14.71
2022	-7.47	-17.18	-2.08	6.25	-20.27
2023	—	—	—	—	9.82

Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-3.17	7.59	5.63	9.53	11.01
Std 12-31-2022	-20.27	—	4.22	9.17	10.19
Total Return	-3.17	7.59	5.63	9.53	11.01
+/- Std Index	5.05	-2.30	-3.91	-3.15	—
+/- Cat Index	0.21	0.08	0.10	0.17	—
% Rank Cat	73	78	66	50	—
No. in Cat	613	588	543	364	—

7-day Yield
 30-day SEC Yield

Subsidized	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	NA
Front-End Load %	NA
Deferred Load %	NA

Fund Expenses

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™	2★	3★	3★
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	-Avg	Avg	Avg

	3 Yr	5 Yr	10 Yr
Standard Deviation	26.81	23.83	19.38
Mean	7.59	5.63	9.53
Sharpe Ratio	0.37	0.29	0.53

MPI Statistics

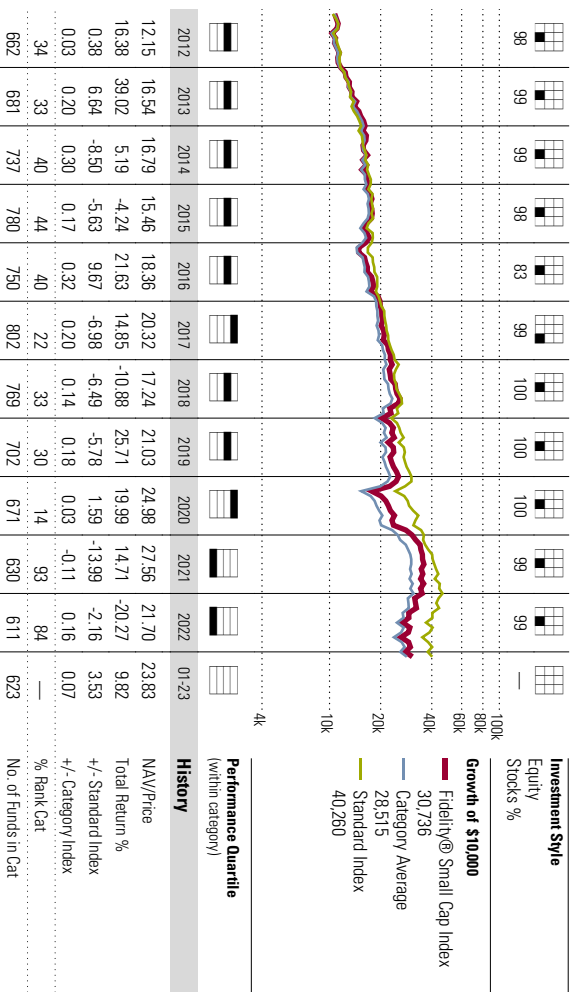
	Standard Index	Best Fit Index
Alpha	0.08	USD
Beta	-2.15	0.08
R-Squared	1.13	1.00
12-Month Yield	80.90	100.00
Potential Cap Gains Exp	—	5.18%

Operations

Family: Fidelity Investments
 Manager: Multiple
 Tenure: 11.4 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: \$20,828,88 mil



Portfolio Analysis 11-30-2022

Asset Allocation %	Net %	Long %	Short %	Share Cng since 10-2022	Share Holdings: Amount, 24% Turnover Ratio	Net Assets %
Cash	0.05	1.06	1.00	—	—	—
US Stocks	98.20	98.20	0.00	—	187 mil Fidelity Reverse Str Tr	0.95
Non-US Stocks	1.74	1.74	0.00	—	1,869 E-mini Russell 2000 Index Future D	0.90
Bonds	0.01	0.01	0.00	—	284,353 ShockWave Medical Inc	0.37
Other/Not Cstfd	0.00	0.00	0.00	—	1 mil Halozyme Therapeutics Inc	0.31
Total	100.00	101.00	1.00	—	388,412 EMCOR Group Inc	0.31

Equity Style	Value	Brand	Grwth	Port Avg	Rel Index	Rel Cat
Large	—	—	—	11.5	0.57	0.96
Mid	—	—	—	9.8	0.65	0.97
Small	—	—	—	2.0	0.52	0.93
Geo Avg Mkt Cap	2280	0.01	0.55	—	—	—

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

Credit Quality Breakdown

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

Sector Weightings	Stocks %	Rel Std Index
Cyclical	38.6	1.29
Basic Materials	4.3	1.70
Consumer Cyclical	10.4	1.00
Financial Services	16.3	1.16
Real Estate	7.7	2.66
Sensitive	37.6	0.83
Communication Services	2.5	0.32
Energy	6.7	1.32
Industrials	14.7	1.68
Technology	13.6	0.57
Defensive	23.9	0.96
Consumer Defensive	4.2	0.60
Healthcare	16.1	1.10
Utilities	3.5	1.19

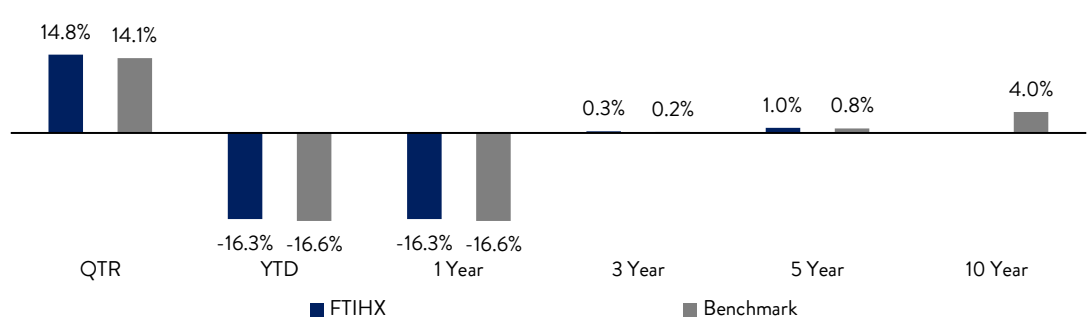
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Product Details

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	6.67 Years
Fund Size	\$9,844,954,518

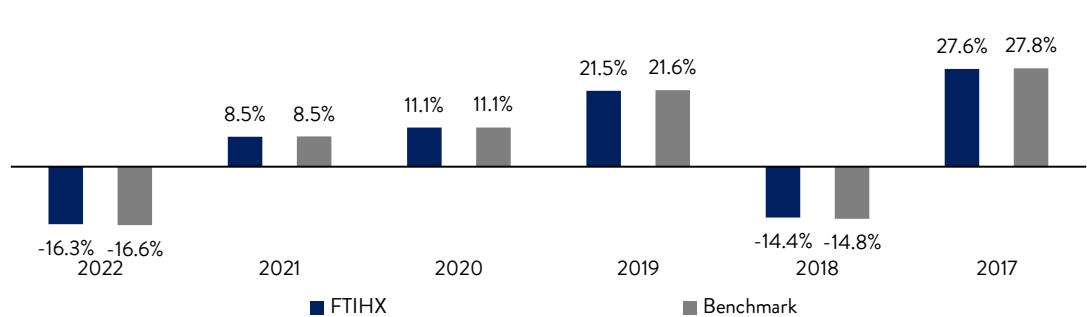
Trailing Performance



Fund Characteristics

	FTIHX	+/- Category
% Assets in Top 10 Holdings	9.62%	-5.09%
Average Market Cap (mil)	\$26,104	-\$21,129
P/E Ratio (TTM)	11.69	-0.99
P/B Ratio (TTM)	1.52	-0.20
Est. Dividend Yield	4.03%	0.16%

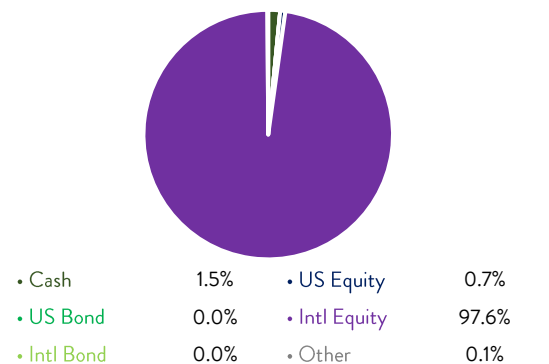
Annual Performance



Sector Allocations

	FTIHX	Category	+/- Category
Materials	8.7%	7.6%	1.1%
Communication Services	6.0%	5.2%	0.8%
Consumer Discretionary	11.1%	10.6%	0.5%
Consumer Staples	8.3%	10.1%	-1.8%
Healthcare	9.7%	12.5%	-2.8%
Industrials	13.2%	14.6%	-1.4%
Real Estate	3.4%	2.1%	1.2%
Technology	10.9%	9.9%	1.0%
Energy	5.9%	5.7%	0.2%
Financial Services	19.7%	18.9%	0.8%
Utilities	3.2%	2.9%	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 12/31/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• FTIHX	14.78%	-16.28%	-16.28%	0.29%	0.96%	-
• Benchmark	14.15%	-16.58%	-16.58%	0.20%	0.85%	3.98%
+/- Benchmark	0.63%	0.31%	0.31%	0.09%	0.12%	-
Peer Group Rank	77	56	56	59	59	-

5-Year Quarterly Performance	4Q22	3Q22	2Q22	1Q22
• FTIHX	14.78%	-10.45%	-13.16%	-6.21%
• Benchmark	14.15%	-9.69%	-14.28%	-5.60%
+/- Benchmark	0.63%	-0.76%	1.12%	-0.61%

Annual Performance	2022	2021	2020	2019	2018	2017
• FTIHX	-16.28%	8.47%	11.07%	21.48%	-14.38%	27.63%
• Benchmark	-16.58%	8.53%	11.12%	21.63%	-14.76%	27.81%
+/- Benchmark	0.31%	-0.06%	-0.04%	-0.16%	0.37%	-0.18%
Peer Group Rank	56	66	44	63	42	29

5-Year Quarterly Performance	4Q21	3Q21	2Q21	1Q21
• FTIHX	2.01%	-3.02%	5.53%	3.91%
• Benchmark	1.64%	-2.56%	5.60%	3.77%
+/- Benchmark	0.36%	-0.46%	-0.06%	0.14%

Rolling 5-Year Performance	01/2018 - 12/2022	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021
• FTIHX	0.96%	-0.83%	2.60%	6.75%	9.85%	8.89%
• Benchmark	0.85%	-0.78%	2.50%	6.92%	9.83%	9.13%
+/- Benchmark	0.12%	-0.04%	0.10%	-0.16%	0.02%	-0.24%
Peer Group Rank	59	42	38	41	44	44

5-Year Quarterly Performance	4Q20	3Q20	2Q20	1Q20
• FTIHX	16.81%	6.78%	17.41%	-24.15%
• Benchmark	17.22%	6.80%	16.96%	-24.11%
+/- Benchmark	-0.41%	-0.01%	0.45%	-0.05%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	0.15	0.00	0.15	0.00	-	0.00
Beta	1.01	1.00	1.01	1.00	-	1.00
Standard Deviation	20.32	19.92	17.75	17.48	-	14.72
Sharpe Ratio	0.07	0.07	0.07	0.06	-	0.28
Information Ratio	0.04	-	0.06	-	-	-
Treynor Ratio	-0.56	-0.66	-0.38	-0.50	-	3.17
Upside Capture Ratio	102.95	100.00	101.77	100.00	-	100.00
Downside Capture Ratio	102.50	100.00	101.26	100.00	-	100.00

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• FTIHX	9.02%	-1.68%	2.85%	10.19%
• Benchmark	9.20%	-1.72%	2.74%	10.31%
+/- Benchmark	-0.18%	0.04%	0.11%	-0.12%

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• FTIHX	-11.71%	0.33%	-2.96%	-0.40%
• Benchmark	-11.88%	0.39%	-2.61%	-1.06%
+/- Benchmark	0.17%	-0.06%	-0.35%	0.66%

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Fidelity® Total International Index (USD)

Morningstar Quantitative Rating™
Gold ^o
 12-31-2022

Overall Morningstar Rating™ Standard Index Blend

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

Performance 01-31-2023	01-31-2023				Total %
	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	
Quarterly Returns	3.91	5.53	-3.02	2.01	8.47
2021	-6.21	-13.16	-10.45	14.78	-16.28
2022	—	—	—	—	8.45
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-6.46	4.20	1.52	—	5.85
Std 12-31-2022	-16.28	—	0.96	—	4.82
Total Return	-6.46	4.20	1.52	—	5.85
+/- Std Index	-0.74	0.56	0.16	—	—
+/- Cat Index	-0.74	0.56	0.16	—	—
% Rank Cat	70	53	61	—	—
No. in Cat	744	702	614	—	—

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.

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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™	702 funds	614 funds	422 funds
Morningstar Risk	3★	3★	—
Morningstar Return	Avg	Avg	—

Standard Deviation 20.75 17.98 10 Yr
 Mean 4.20 1.52
 Sharpe Ratio 0.26 0.10

MPT Statistics

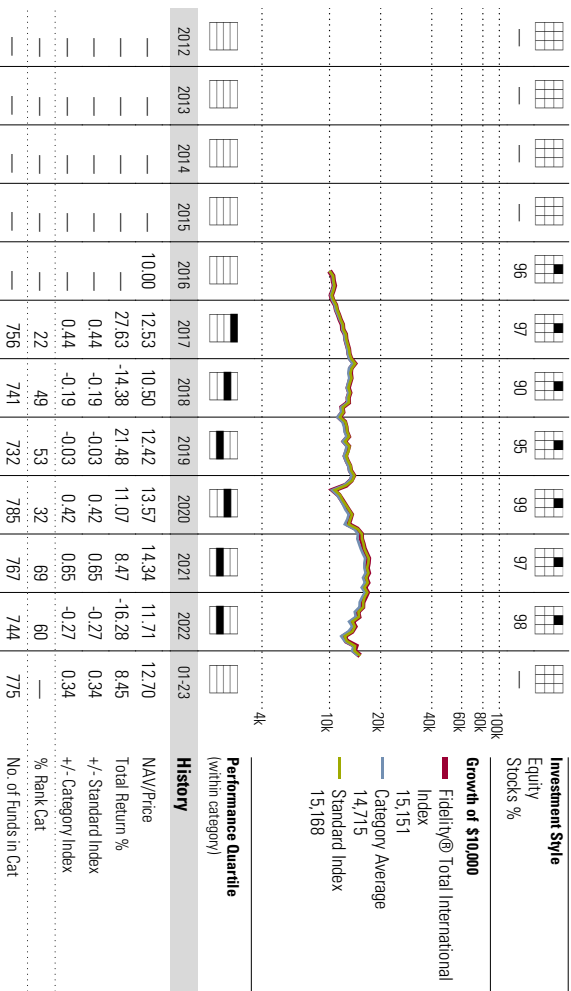
	Standard Index	Best Fit Index
Alpha	0.54	0.54
Beta	1.03	1.03
R-Squared	98.94	98.94
12-Month Yield	—	—
Potential Cap Gains Exp	-18.74%	—

Operations

Family: Fidelity Investments
 Manager: Multiple
 Tenure: 6.7 Years
 Objective: Foreign Stock

Base Currency: USD
 Ticker: FTIHX
 SIN: US31635V6386
 Minimum Initial Purchase: \$0

Purchase Constraints: —
 Incept: 06-07-2016
 Type: MF
 Total Assets: \$9,844.95 mil



Portfolio Analysis 12-31-2022

Asset Allocation %	Net %	Long %	Short %
Cash	-0.10	1.57	1.66
US Stocks	0.68	0.68	0.00
Non-US Stocks	99.27	99.27	0.00
Bonds	0.00	0.00	0.00
Other/Not Cstfd	0.15	0.15	0.00
Total	100.00	101.66	1.66

Equity Style

Value	Brand	Geom	Port	Rel	Rel
Large	Mid	Ext	Avg Index	Index	Cat
—	—	—	11.7	0.93	0.92
—	—	—	8.3	0.92	0.93
—	—	—	1.5	0.91	0.88
—	—	—	26104	0.60	0.55

Fixed-Income Style

Value	Brand	Geom	Avg Eff Maturity	Avg Eff Duration	Avg Wtd Coupon	Avg Wtd Price
Large	Mid	Ext	High	Med	Low	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—

Credit Quality Breakdown

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

Regional Exposure

Region	Stocks %	Rel Std Index
Americas	10.8	0.99
Greater Europe	44.0	0.98
Greater Asia	45.2	1.02

Sector Weightings

Sector	Stocks %	Rel Std Index
Cyclical	42.8	0.99
Basic Materials	8.7	1.02
Consumer Cyclical	11.1	0.98
Financial Services	19.7	0.94
Real Estate	3.4	1.41
Sensitive	36.0	1.00
Communication Services	6.0	0.93
Energy	5.9	1.00
Industrials	13.2	1.09
Technology	10.9	0.95
Defensive	21.2	1.02
Consumer Defensive	8.3	0.99
Healthcare	9.7	1.02
Utilities	3.2	1.07

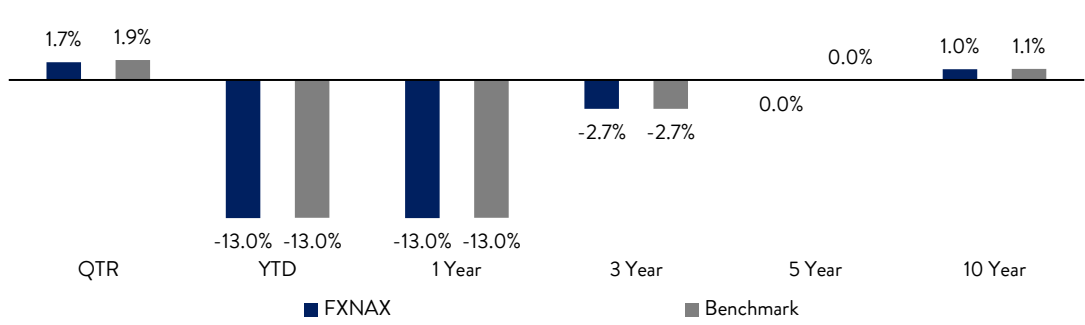
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Product Details

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	8.75 Years
Fund Size	\$58,424,122,537

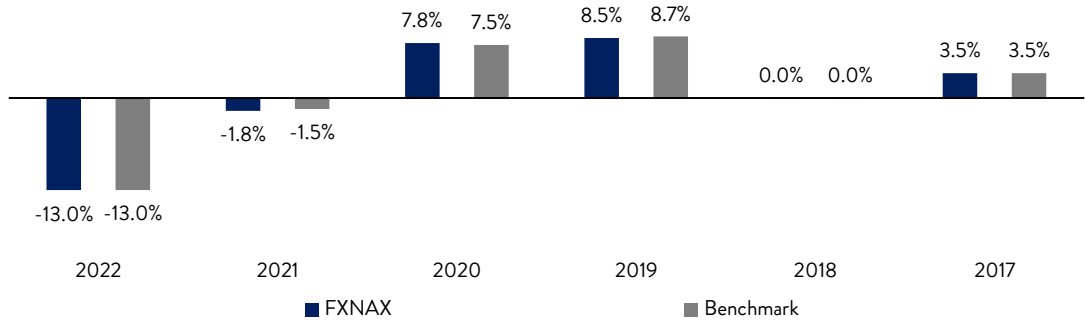
Trailing Performance



Fund Characteristics

	FXNAX	+/- Category
% Assets in Top 10 Holdings	9.63%	-35.75%
Average Eff Duration	6.13	0.08
Average Eff Maturity	-	-
Average Credit Quality	AA	A (Cat Avg.)
Average Coupon	2.67%	-0.36%

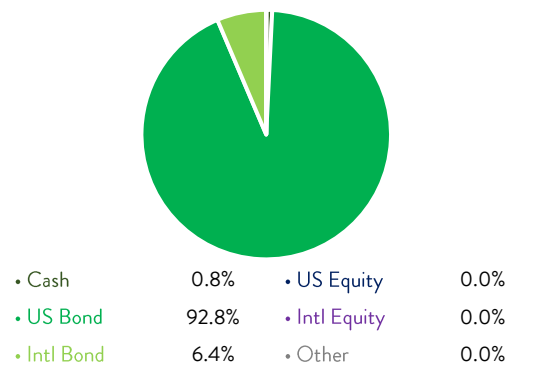
Annual Performance



Sector Allocations

	FXNAX	Category	+/- Category
Government	47.7%	30.9%	16.8%
Municipal	0.5%	0.8%	-0.3%
Bank Loan	0.0%	0.1%	-0.1%
Convertible	0.0%	0.0%	0.0%
Corporate Bond	23.3%	25.7%	-2.4%
Preferred Stock	0.0%	0.0%	0.0%
Agency MBS	27.4%	25.8%	1.6%
Non-Agency RMBS	0.0%	0.3%	-0.3%
Commercial MBS	0.0%	0.7%	-0.7%
Asset-Backed	0.3%	6.3%	-6.0%
Cash & Equivalents	0.8%	6.8%	-6.0%
Other	0.0%	2.6%	-2.6%

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 12/31/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• FXNAX	1.68%	-13.03%	-13.03%	-2.72%	-0.02%	1.01%
• Benchmark	1.87%	-13.01%	-13.01%	-2.71%	0.02%	1.06%
+/- Benchmark	-0.19%	-0.02%	-0.02%	0.00%	-0.04%	-0.05%
Peer Group Rank	45	28	28	45	38	42

5-Year Quarterly Performance	4Q22	3Q22	2Q22	1Q22
• FXNAX	1.68%	-4.69%	-4.66%	-5.88%
• Benchmark	1.87%	-4.75%	-4.69%	-5.93%
+/- Benchmark	-0.19%	0.06%	0.04%	0.06%

Annual Performance	2022	2021	2020	2019	2018	2017
• FXNAX	-13.03%	-1.79%	7.80%	8.48%	0.01%	3.50%
• Benchmark	-13.01%	-1.54%	7.51%	8.72%	0.01%	3.54%
+/- Benchmark	-0.02%	-0.25%	0.29%	-0.23%	0.00%	-0.04%
Peer Group Rank	28	63	51	50	25	44

5-Year Quarterly Performance	4Q21	3Q21	2Q21	1Q21
• FXNAX	-0.12%	0.02%	1.85%	-3.48%
• Benchmark	0.01%	0.05%	1.83%	-3.37%
+/- Benchmark	-0.13%	-0.03%	0.02%	-0.11%

Rolling 5-Year Performance	01/2018 - 12/2022	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021
• FXNAX	-0.02%	-0.28%	0.86%	2.09%	3.52%	2.89%
• Benchmark	0.02%	-0.27%	0.88%	2.14%	3.57%	2.94%
+/- Benchmark	-0.04%	-0.01%	-0.02%	-0.05%	-0.05%	-0.06%
Peer Group Rank	38	41	38	51	51	58

5-Year Quarterly Performance	4Q20	3Q20	2Q20	1Q20
• FXNAX	0.75%	0.43%	2.77%	3.66%
• Benchmark	0.67%	0.62%	2.90%	3.15%
+/- Benchmark	0.08%	-0.19%	-0.13%	0.51%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	0.00	0.00	-0.04	0.00	-0.05	0.00
Beta	1.00	1.00	1.00	1.00	1.01	1.00
Standard Deviation	5.86	5.85	5.10	5.09	4.18	4.11
Sharpe Ratio	-0.58	-0.58	-0.24	-0.23	0.07	0.08
Information Ratio	-0.01	-	-0.15	-	-0.16	-
Treynor Ratio	-3.57	-3.57	-1.36	-1.32	0.19	0.24
Upside Capture Ratio	100.19	100.00	100.02	100.00	101.36	100.00
Downside Capture Ratio	100.16	100.00	100.70	100.00	102.63	100.00

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• FXNAX	0.06%	2.27%	2.97%	2.96%
• Benchmark	0.18%	2.27%	3.08%	2.94%
+/- Benchmark	-0.12%	0.00%	-0.11%	0.01%

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• FXNAX	1.70%	0.07%	-0.22%	-1.51%
• Benchmark	1.64%	0.02%	-0.16%	-1.46%
+/- Benchmark	0.06%	0.05%	-0.06%	-0.05%

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® US Bond Index (USD)

Morningstar Analyst Rating™ Overall Morningstar Rating™ Standard Index **Category Index** **Morningstar Cat**
★★★★ 406 US Fund Intermediate **Bloomberg US** **Bloomberg US Agg**
Gold 03-30-2022 **Agg Bond TR USD** **Bond TR USD** **US Fund Intermediate** **Core Bond**

Performance 01-31-2023					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2021	-3.48	1.85	0.02	-0.12	-1.79
2022	-5.88	-4.66	-4.69	1.68	-13.03
2023	—	—	—	—	3.18
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-8.36	-2.37	0.84	1.39	1.97
Std 12-31-2022	-13.03	—	-0.02	1.01	1.71
Total Return	-8.36	-2.37	0.84	1.39	1.97
+/- Std Index	0.00	-0.02	-0.02	-0.04	—
+/- Cat Index	0.00	-0.02	-0.02	-0.04	—
% Rank Cat	34	47	37	38	—
No. in Cat	453	406	373	276	—

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
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™	406 funds	373 funds	276 funds
Morningstar Risk	3★	3★	3★
Morningstar Return	Avg	Avg	Avg

	3 Yr	5 Yr	10 Yr
Standard Deviation	6.04	5.27	4.28
Mean	-2.37	0.84	1.39
Sharpe Ratio	-0.52	-0.08	0.15

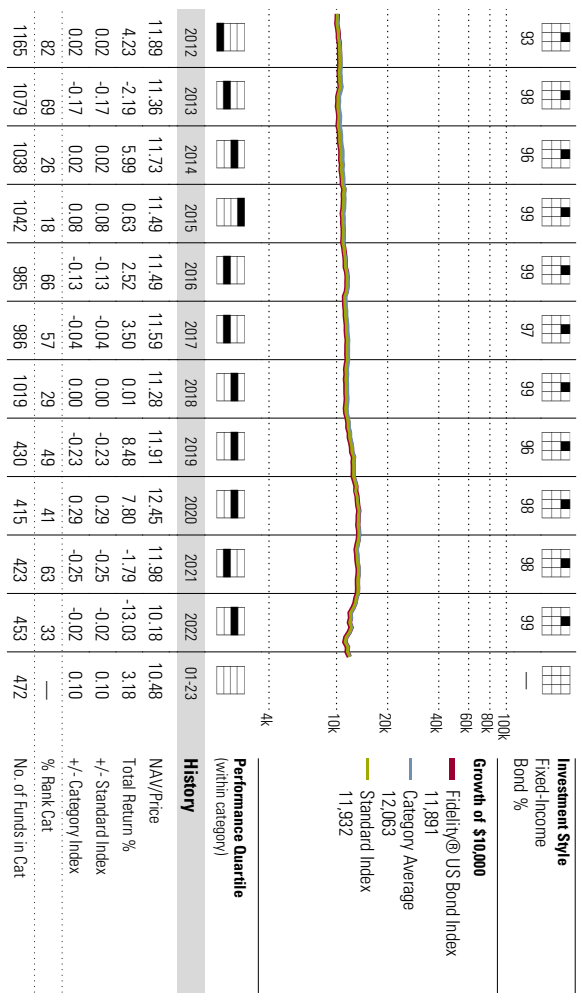
MPI Statistics	Standard Index	Best Fit Index
Alpha	-0.02	-0.02
Beta	1.00	1.00
R-Squared	99.70	99.70
12-Month Yield	—	—
Potential Cap Gains Exp	-0.01%	-0.01%

Operations

Family: Fidelity Investments
 Manager: Multiple
 Tenure: 8.8 Years
 Objective: Multisector Bond

Base Currency: USD
 Ticker: FXMAXX
 ISIN: US3161463563
 Minimum Initial Purchase: \$0

Purchase Constraints: A
 Incept: 05-04-2011
 Type: MF
 Total Assets: \$54,947.37 mil



Portfolio Analysis 12-31-2022		
Asset Allocation %	Net %	Long %
Cash	0.67	0.77
US Stocks	0.00	0.00
Non-US Stocks	0.00	0.00
Bonds	99.33	99.33
Other/Not Cstfd	0.00	0.00
Total	100.00	100.10

Equity Style	Value	Brand	Grwth
Large	—	—	—
Mid	—	—	—
Small	—	—	—

Fixed-Income Style	Value	Brand	Grwth
High	—	—	—
Med	—	—	—
Low	—	—	—

Credit Quality Breakdown	12-31-2022
AAA	74.70
AA	4.37
A	10.73
BBB	10.18
BB	0.00
B	0.00
Below B	0.00
NR	0.02

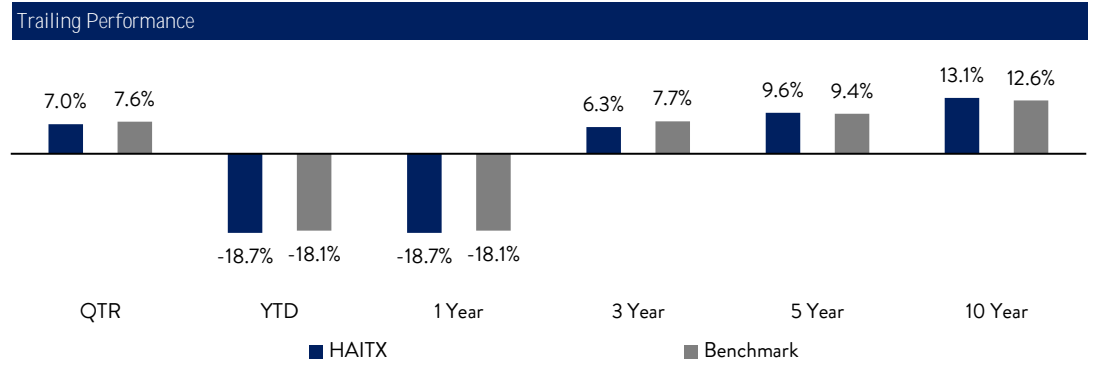
Regional Exposure	Stocks %	Rel Std Index
Americas	—	—
Greater Europe	—	—
Greater Asia	—	—

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	—	—

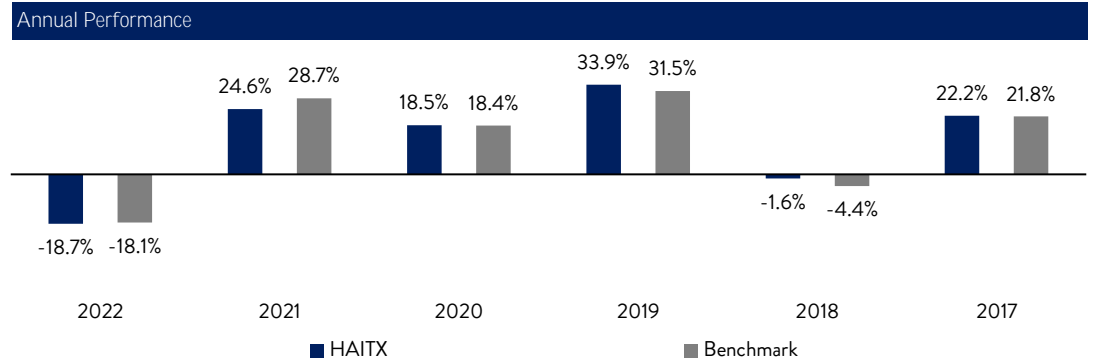
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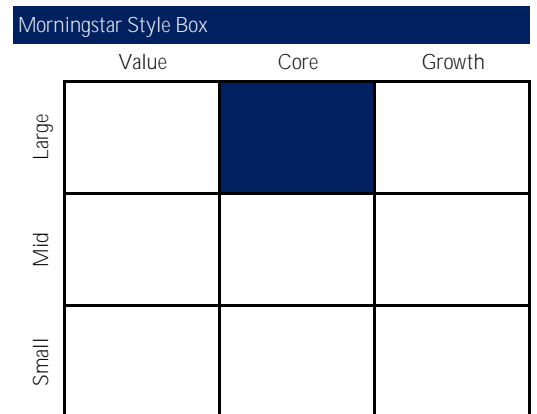
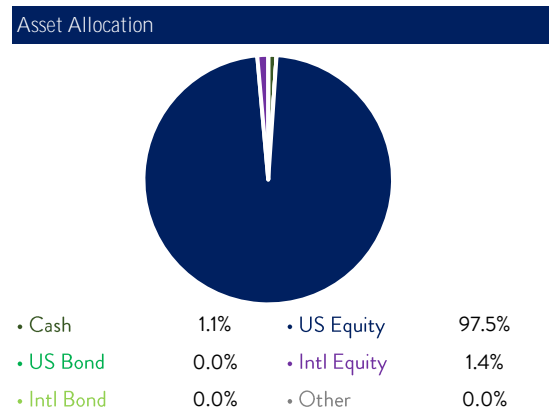
Product Details	
Name	Hartford Core Equity R6
Ticker	HAITX
Expense Ratio	0.360%
Morningstar Category	US Fund Large Blend
Benchmark	S&P 500 TR USD
Inception Date	3/31/2015
Longest Tenured Manager	Mammen Chally
Longest Manager Tenure	24.83 Years
Fund Size	\$9,803,818,251



Fund Characteristics	HAITX	+/- Category
% Assets in Top 10 Holdings	31.89%	-17.75%
Average Market Cap (mil)	\$148,707	-\$62,314
P/E Ratio (TTM)	20.23	1.94
P/B Ratio (TTM)	3.86	-0.28
Est. Dividend Yield	1.62%	-0.32%



Sector Allocations	HAITX	Category	+/- Category
Materials	1.1%	2.8%	-1.7%
Communication Services	5.5%	7.1%	-1.6%
Consumer Discretionary	9.4%	9.8%	-0.4%
Consumer Staples	7.7%	7.4%	0.2%
Healthcare	18.8%	16.0%	2.7%
Industrials	10.2%	10.4%	-0.2%
Real Estate	1.7%	2.4%	-0.7%
Technology	24.0%	22.5%	1.5%
Energy	3.9%	4.4%	-0.5%
Financial Services	14.1%	14.3%	-0.2%
Utilities	3.7%	2.8%	0.9%
Other	0.0%	0.0%	0.0%



Hartford Core Equity R6

HAITX

Fund Fact Sheet

Data as of 12/31/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• HAITX	7.00%	-18.65%	-18.65%	6.30%	9.63%	13.14%
• Benchmark	7.56%	-18.11%	-18.11%	7.66%	9.42%	12.56%
+/- Benchmark	-0.57%	-0.54%	-0.54%	-1.36%	0.20%	0.58%
Peer Group Rank	77	61	61	71	15	2

5-Year Quarterly Performance	4Q22	3Q22	2Q22	1Q22
• HAITX	7.00%	-4.14%	-15.16%	-6.51%
• Benchmark	7.56%	-4.88%	-16.10%	-4.60%
+/- Benchmark	-0.57%	0.74%	0.94%	-1.91%

Annual Performance	2022	2021	2020	2019	2018	2017
• HAITX	-18.65%	24.62%	18.49%	33.89%	-1.55%	22.17%
• Benchmark	-18.11%	28.71%	18.40%	31.49%	-4.38%	21.83%
+/- Benchmark	-0.54%	-4.08%	0.09%	2.41%	2.83%	0.33%
Peer Group Rank	61	75	35	7	6	29

5-Year Quarterly Performance	4Q21	3Q21	2Q21	1Q21
• HAITX	10.24%	0.26%	7.78%	4.61%
• Benchmark	11.03%	0.58%	8.55%	6.17%
+/- Benchmark	-0.78%	-0.33%	-0.76%	-1.56%

Rolling 5-Year Performance	01/2018 - 12/2022	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021
• HAITX	9.63%	9.78%	11.35%	15.92%	18.92%	17.07%
• Benchmark	9.42%	9.24%	11.31%	15.99%	18.47%	16.90%
+/- Benchmark	0.20%	0.55%	0.04%	-0.07%	0.44%	0.17%
Peer Group Rank	15	8	14	16	12	16

5-Year Quarterly Performance	4Q20	3Q20	2Q20	1Q20
• HAITX	12.49%	9.77%	19.10%	-19.42%
• Benchmark	12.15%	8.93%	20.54%	-19.60%
+/- Benchmark	0.34%	0.84%	-1.45%	0.17%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	-1.06	0.00	0.50	0.00	1.07	0.00
Beta	0.96	1.00	0.95	1.00	0.95	1.00
Standard Deviation	20.29	21.16	17.86	18.69	14.15	14.77
Sharpe Ratio	0.36	0.41	0.53	0.50	0.89	0.82
Information Ratio	-0.74	-	0.11	-	0.26	-
Treynor Ratio	5.70	6.81	8.71	8.08	13.01	11.75
Upside Capture Ratio	93.12	100.00	95.69	100.00	96.68	100.00
Downside Capture Ratio	96.25	100.00	93.41	100.00	90.76	100.00

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• HAITX	9.06%	2.49%	5.44%	13.61%
• Benchmark	9.07%	1.70%	4.30%	13.65%
+/- Benchmark	-0.01%	0.79%	1.14%	-0.04%

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• HAITX	-11.97%	7.62%	2.78%	1.10%
• Benchmark	-13.52%	7.71%	3.43%	-0.76%
+/- Benchmark	1.55%	-0.09%	-0.65%	1.86%

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Hartford Core Equity R6 (USD)

Morningstar Analyst Rating™ Overall Morningstar Rating™ Standard Index Category Index Morningstar Cat
Bronze 89-15-2022 1,227 US Fund Large Blend S&P 500 TR USD Russell 1000 TR US Fund Large Blend USD

Performance 01-31-2023					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2021	4.61	7.78	0.26	10.24	24.62
2022	-6.51	-15.16	-4.14	7.00	-18.65
2023	—	—	—	—	5.32

Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-9.85	7.93	9.47	—	10.75
Std 12-31-2022	-18.65	—	9.63	—	10.13
Total Return	-9.85	7.93	9.47	13.19	10.75
+/- Std Index	-1.64	-1.95	-0.07	0.51	—
+/- Cat Index	-1.30	-1.72	0.08	0.68	—
% Rank Cat	85	81	27	4	—
No. in Cat	1354	1227	1119	822	—

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

Management Fees % 0.33
 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™	2★	4★	5★
Morningstar Risk	-Avg	-Avg	-Avg
Morningstar Return	-Avg	+Avg	High

	3 Yr	5 Yr	10 Yr
Standard Deviation	20.46	17.81	14.16
Mean	7.93	9.47	13.19
Sharpe Ratio	0.43	0.52	0.89

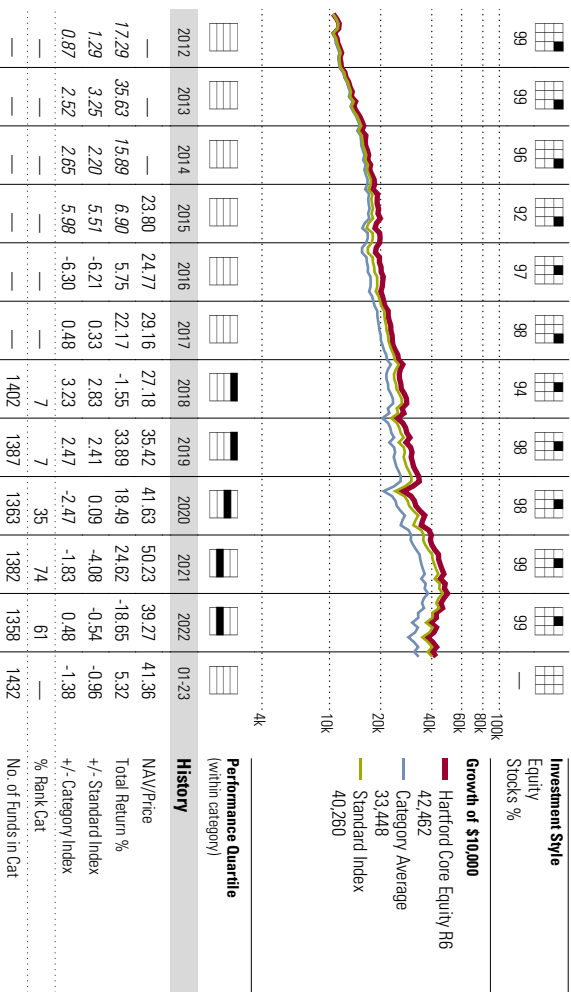
MPI Statistics	Standard Index	Best Fit Index
Alpha	-1.49	-1.49
Beta	0.95	0.95
R-Squared	99.43	99.43
12-Month Yield	—	—
Potential Cap Gains Exp	—	29.40%

Operations

Family: Hartford Mutual Funds
 Manager: Multiple
 Tenure: 24.8 Years
 Objective: Growth

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

Purchase Constraints: A
 Incept: 03-31-2015
 Type: MF
 Total Assets: \$9,908.15 mil



Portfolio Analysis 12-31-2022		Net %	Long %	Short %	Share Clng	Share Holdings:	NAV/Price	Total Return %	+/- Standard Index	+/- Category Index	% Rank Cat	History
Asset Allocation %		1.07	1.07	0.00	11-2022	68 Total Stocks, 0 Total Fixed-Income, 15% Turnover Ratio	41.36	5.32	-0.96	-1.38	—	NAV/Price
Cash		97.52	97.52	0.00	2 mil	JPMorgan Chase & Co	29.27	-18.65	-0.54	-1.38	61	Total Return %
US Stocks		1.41	1.41	0.00	2 mil	Procter & Gamble Co	24.62	-18.65	-0.96	-1.38	61	+/- Standard Index
Non-US Stocks		0.00	0.00	0.00	2 mil	EOG Resources Inc	2.47	-1.83	0.48	-1.38	61	+/- Category Index
Bonds		0.00	0.00	0.00	4 mil	Pfizer Inc	0.48	-1.38	0.48	-1.38	61	% Rank Cat
Other/Not Clsfd		0.00	0.00	0.00	5 mil	Alphabet Inc Class A	0.48	-1.38	0.48	-1.38	61	No. of Funds in Cat
Total		100.00	100.00	0.00	604,120	Unitedhealth Group Inc	39.27	41.36	-0.96	-1.38	61	History

Equity Style		Port	Rel	Rel	Rel
Value	Brand	Avg	Index	Cat	Index
Large	Small	202	0.99	1.11	1.11
Med	Med	166	1.10	1.11	1.11
Small	Small	3.9	1.03	0.93	0.93
Fixed-Income Style		Avg Eff Maturity			
Credit Quality Breakdown		Avg Eff Duration			
Avg Wld Price		Geo Avg Mkt Cap			

Sector Weightings	Stocks %	Rel Std Index
Cyclical	26.3	0.88
Basic Materials	1.1	0.45
Consumer Cyclical	9.4	0.91
Financial Services	14.1	1.00
Real Estate	1.7	0.58
Sensitive	43.6	0.96
Communication Services	5.5	0.70
Energy	3.9	0.77
Industrials	10.2	1.17
Technology	24.0	1.01
Defensive	30.1	1.21
Consumer Defensive	7.7	1.07
Healthcare	18.8	1.27
Utilities	3.7	1.26

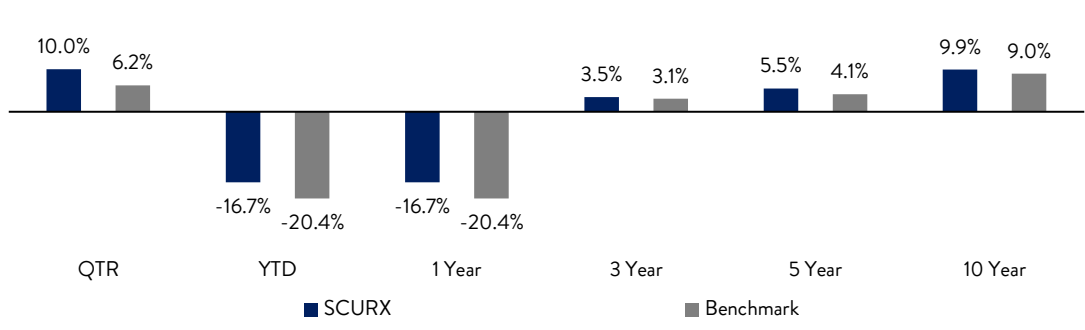
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Product Details

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	Rob Kaynor
Longest Manager Tenure	5.08 Years
Fund Size	\$317,437,730

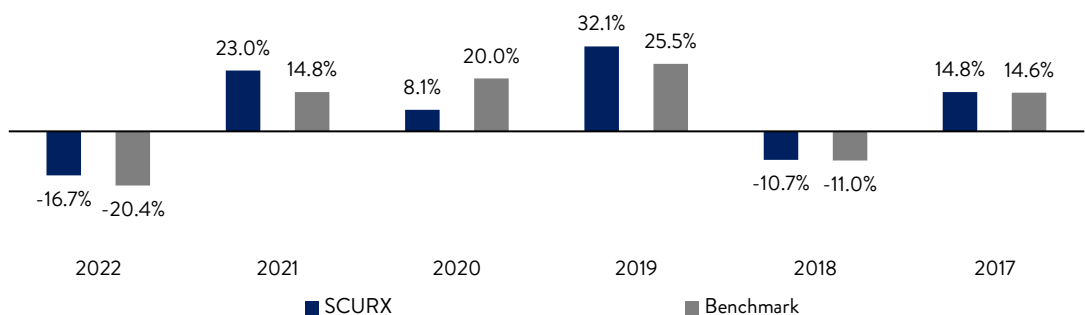
Trailing Performance



Fund Characteristics

	SCURX	+/- Category
% Assets in Top 10 Holdings	16.40%	-9.84%
Average Market Cap (mil)	\$2,748	-\$1,392
P/E Ratio (TTM)	16.82	4.85
P/B Ratio (TTM)	2.05	-0.06
Est. Dividend Yield	1.28%	-0.27%

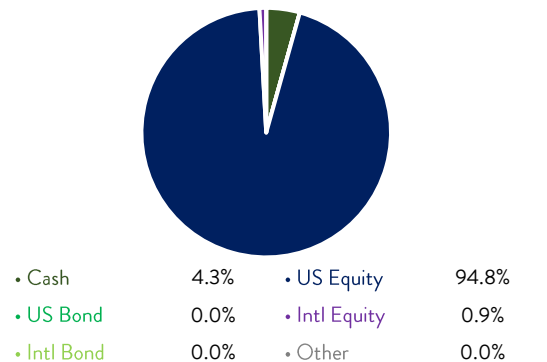
Annual Performance



Sector Allocations

	SCURX	Category	+/- Category
Materials	9.8%	4.7%	5.1%
Communication Services	2.1%	2.3%	-0.3%
Consumer Discretionary	9.0%	11.6%	-2.6%
Consumer Staples	5.1%	4.3%	0.8%
Healthcare	12.7%	13.9%	-1.2%
Industrials	12.0%	17.6%	-5.6%
Real Estate	2.9%	6.7%	-3.8%
Technology	20.8%	13.6%	7.2%
Energy	5.6%	5.3%	0.3%
Financial Services	16.1%	17.2%	-1.1%
Utilities	3.9%	2.7%	1.2%
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 12/31/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• SCURX	10.04%	-16.67%	-16.67%	3.48%	5.49%	9.95%
• Benchmark	6.23%	-20.44%	-20.44%	3.10%	4.13%	9.01%
+/- Benchmark	3.81%	3.77%	3.77%	0.38%	1.37%	0.94%
Peer Group Rank	27	51	51	69	34	27

5-Year Quarterly Performance	4Q22	3Q22	2Q22	1Q22
• SCURX	10.04%	-6.04%	-13.33%	-7.01%
• Benchmark	6.23%	-2.19%	-17.20%	-7.53%
+/- Benchmark	3.81%	-3.85%	3.86%	0.51%

Annual Performance	2022	2021	2020	2019	2018	2017
• SCURX	-16.67%	22.98%	8.14%	32.06%	-10.72%	14.81%
• Benchmark	-20.44%	14.82%	19.96%	25.52%	-11.01%	14.65%
+/- Benchmark	3.77%	8.16%	-11.82%	6.53%	0.29%	0.16%
Peer Group Rank	51	51	74	3	35	28

5-Year Quarterly Performance	4Q21	3Q21	2Q21	1Q21
• SCURX	6.92%	-1.21%	2.84%	13.20%
• Benchmark	2.14%	-4.36%	4.29%	12.70%
+/- Benchmark	4.78%	3.15%	-1.45%	0.50%

Rolling 5-Year Performance	01/2018 - 12/2022	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021
• SCURX	5.49%	4.30%	6.33%	10.01%	12.47%	12.62%
• Benchmark	4.13%	3.55%	5.17%	9.74%	12.02%	13.45%
+/- Benchmark	1.37%	0.74%	1.16%	0.26%	0.46%	-0.83%
Peer Group Rank	34	39	34	39	28	47

5-Year Quarterly Performance	4Q20	3Q20	2Q20	1Q20
• SCURX	26.06%	4.86%	21.22%	-32.51%
• Benchmark	31.37%	4.93%	25.42%	-30.61%
+/- Benchmark	-5.32%	-0.07%	-4.20%	-1.90%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	0.54	0.00	1.50	0.00	1.78	0.00
Beta	0.90	1.00	0.90	1.00	0.87	1.00
Standard Deviation	24.67	26.39	21.77	23.50	17.26	19.26
Sharpe Ratio	0.23	0.21	0.29	0.23	0.59	0.50
Information Ratio	0.05	-	0.23	-	0.19	-
Treynor Ratio	2.92	2.25	4.62	2.78	10.50	8.19
Upside Capture Ratio	93.32	100.00	94.15	100.00	90.71	100.00
Downside Capture Ratio	92.02	100.00	89.31	100.00	83.40	100.00

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• SCURX	9.33%	0.72%	6.02%	13.12%
• Benchmark	9.94%	-2.40%	2.10%	14.58%
+/- Benchmark	-0.61%	3.12%	3.92%	-1.47%

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• SCURX	-16.99%	4.34%	4.69%	-1.54%
• Benchmark	-20.20%	3.58%	7.75%	-0.08%
+/- Benchmark	3.21%	0.76%	-3.06%	-1.46%

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 01-31-2023 | Note: Portions of the analysis are based on pre- inception returns. Please read disclosure for more information.

Hartford Schroders US Small Cap Opps SDR (USD)

Morningstar Analyst Rating™
Silver
01-23-2023

Overall Morningstar Rating™
★★★★
588 US Fund Small Blend

Standard Index
S&P 500 TR USD

Category Index
Russell 2000 TR
USD

Morningstar Cat
US Fund Small Blend

Performance 01-31-2023					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2021	13.20	2.84	-1.21	6.92	22.98
2022	-7.01	-13.33	-6.04	10.04	-16.67
2023	—	—	—	—	9.56
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-1.14	7.74	7.09	—	10.20
Std 12-31-2022	-16.67	—	5.49	—	8.95
Total Return	-1.14	7.74	7.09	10.33	10.20
+/- Std Index	7.08	-2.14	-2.45	-2.35	—
+/- Cat Index	2.24	0.24	1.55	0.97	—
% Rank Cat	45	75	35	25	—
No. in Cat	613	588	543	364	—

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.

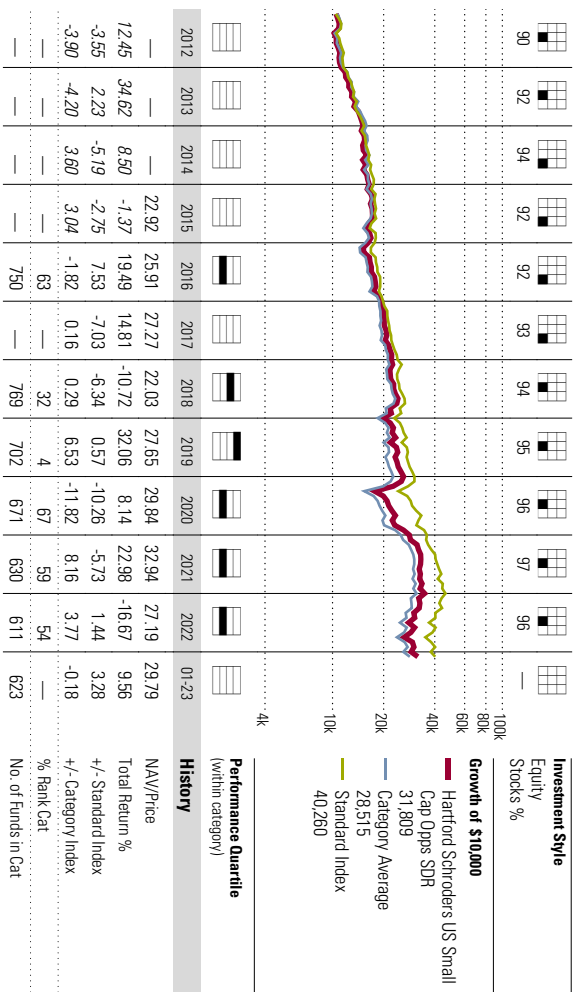
Fees and Expenses	
Sales Charges	NA
Front-End Load %	NA
Deferred Load %	NA
Fund Expenses	0.90
Management Fees %	0.90
12b1 Expense %	NA
Net Expense Ratio %	0.95
Gross Expense Ratio %	0.99
Risk and Return Profile	

	3 Yr	5 Yr	10 Yr
Morningstar Rating™	588 funds 2★	543 funds 4★	364 funds 4★
Morningstar Risk	-Avg	-Avg	Low
Morningstar Return	-Avg	-Avg	+Avg
Standard Deviation	25.12	22.13	17.40
Mean	7.74	7.09	10.33
Sharpe Ratio	0.39	0.36	0.61
MPI Statistics	Standard Index	Best Fit Index	Morningstar US Sml
Alpha	-1.49	0.23	0.90
Beta	1.04	0.90	0.90
R-Squared	79.06	95.42	95.42
12-Month Yield	—	—	—
Potential Cap Gains Exp	—	—	14.61%

Operations
Family: Hartford Mutual Funds
Manager: Rob Kaynor
Tenure: 5.1 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: \$316.75 mil



Portfolio Analysis 12-31-2022									
Asset Allocation %		Net %	Long %	Short %	Share Clng	Share Holdings:	Amount	96 Total Stocks - 5 Total Fixed-Income, 39% Turnover Ratio	Net Assets %
Cash	—	4.35	4.35	0.00	11-2022	13 mil	Morgan Stanley Instll qdly TrsSees	4.35	
US Stocks	12.45	94.78	94.78	0.00	—	39,327	ICU Medical Inc	2.10	
Non-US Stocks	-3.55	0.87	0.87	0.00	—	15,318	Valmont Industries Inc	1.72	
Bonds	-3.90	0.00	0.00	0.00	—	38,885	Balchem Corp	1.61	
Other/Not Clsfd	—	0.00	0.00	0.00	—	152,003	Box Inc Class A	1.61	
Total	—	100.00	100.00	0.00	—	156,877	Allegro Microsystems Inc Ordinary	1.60	

Equity Style		Portfolio Statistics		Port	Rel	Rel
Value	Brand	P/E Ratio TTM	P/C Ratio TTM	Avg Index	Index	Cat
Large	Small	12.0	2.1	168	0.83	1.41
Med	Med	12.0	2.1	0.80	1.19	0.97
Small	Small	2.1	0.55	0.55	1.97	1.19
		Geo Avg Mkt Cap	2748	0.02	0.66	—

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

Credit Quality Breakdown — Bond %

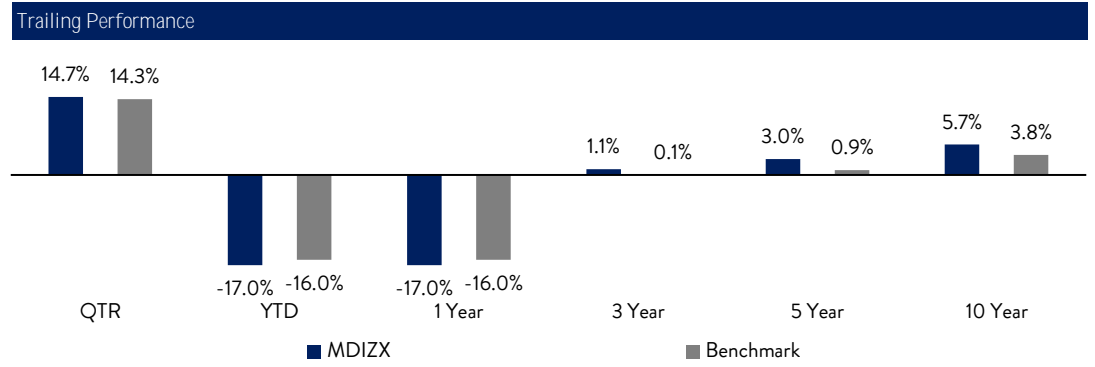
	AAA	AA	A	BBB	BB	Below B	NR
AAA	—	—	—	—	—	—	—
AA	—	—	—	—	—	—	—
A	—	—	—	—	—	—	—
BBB	—	—	—	—	—	—	—
BB	—	—	—	—	—	—	—
Below B	—	—	—	—	—	—	—
NR	—	—	—	—	—	—	—

Sector Weightings		Stocks %	Rel Std Index
Cyclical		37.8	1.27
Basic Materials		9.8	3.89
Consumer Cyclical		9.0	0.87
Financial Services		16.1	1.15
Real Estate		2.9	1.02
Sensitive		40.4	0.89
Communication Services		2.1	0.27
Energy		5.6	1.11
Industrials		12.0	1.36
Technology		20.8	0.88
Defensive		21.7	0.88
Consumer Defensive		5.1	0.72
Healthcare		12.7	0.86
Utilities		3.9	1.33

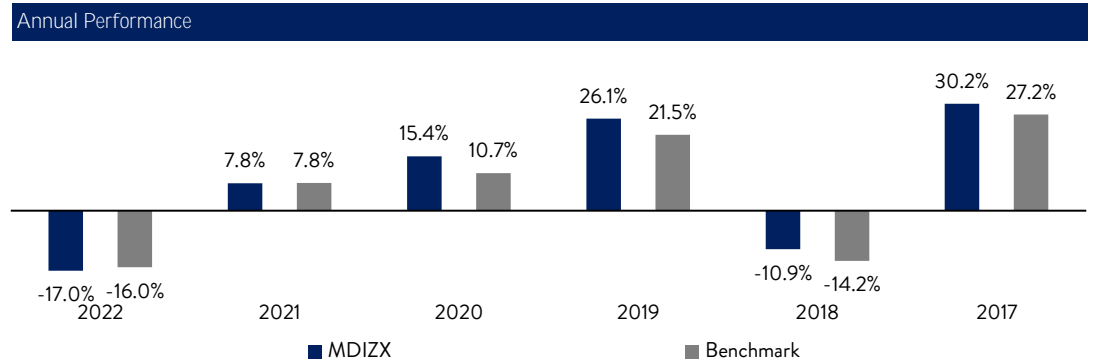
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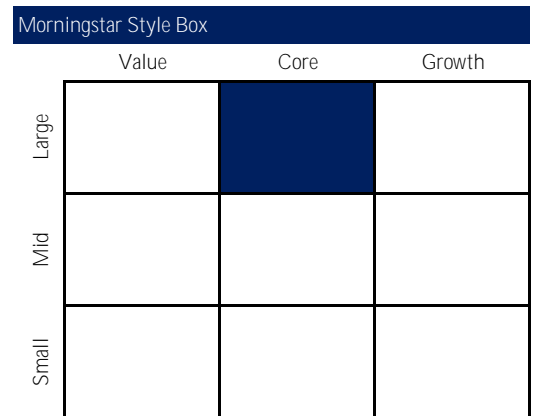
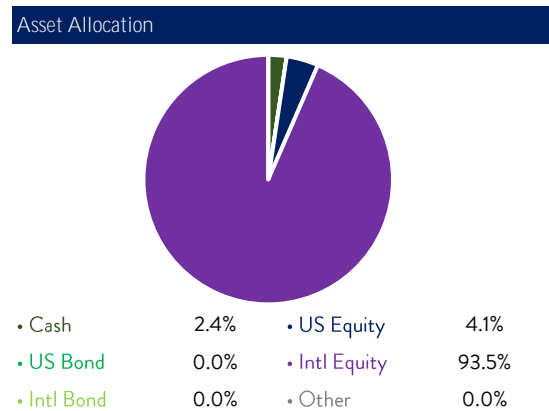
Product Details	
Name	MFS Intl Diversification R6
Ticker	MDIZX
Expense Ratio	0.720%
Morningstar Category	US Fund Foreign Large Blend
Benchmark	MSCI ACWI Ex USA NR USD
Inception Date	10/2/2017
Longest Tenured Manager	Camille Humphries Lee
Longest Manager Tenure	4.42 Years
Fund Size	\$34,684,332,260



Fund Characteristics	MDIZX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$32,175	-\$15,058
P/E Ratio (TTM)	14.44	1.75
P/B Ratio (TTM)	1.90	0.18
Est. Dividend Yield	3.04%	-0.83%



Sector Allocations	MDIZX	Category	+/- Category
Materials	10.0%	7.6%	2.3%
Communication Services	4.9%	5.2%	-0.4%
Consumer Discretionary	10.4%	10.6%	-0.2%
Consumer Staples	12.5%	10.1%	2.4%
Healthcare	9.2%	12.5%	-3.3%
Industrials	15.3%	14.6%	0.8%
Real Estate	1.8%	2.1%	-0.4%
Technology	13.0%	9.9%	3.1%
Energy	4.1%	5.7%	-1.5%
Financial Services	16.7%	18.9%	-2.2%
Utilities	2.2%	2.9%	-0.8%
Other	0.0%	0.0%	0.0%



MFS Intl Diversification R6

MDIZX

Fund Fact Sheet

Data as of 12/31/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• MDIZX	14.74%	-17.02%	-17.02%	1.06%	3.00%	5.73%
• Benchmark	14.28%	-16.00%	-16.00%	0.07%	0.88%	3.80%
+/- Benchmark	0.45%	-1.02%	-1.02%	0.99%	2.12%	1.93%
Peer Group Rank	78	63	63	38	10	9

5-Year Quarterly Performance	4Q22	3Q22	2Q22	1Q22
• MDIZX	14.74%	-9.35%	-12.36%	-8.97%
• Benchmark	14.28%	-9.91%	-13.73%	-5.44%
+/- Benchmark	0.45%	0.56%	1.37%	-3.53%

Annual Performance	2022	2021	2020	2019	2018	2017
• MDIZX	-17.02%	7.78%	15.43%	26.09%	-10.92%	30.25%
• Benchmark	-16.00%	7.82%	10.65%	21.51%	-14.20%	27.19%
+/- Benchmark	-1.02%	-0.05%	4.78%	4.58%	3.27%	3.05%
Peer Group Rank	63	71	22	21	10	11

5-Year Quarterly Performance	4Q21	3Q21	2Q21	1Q21
• MDIZX	3.24%	-2.39%	5.01%	1.84%
• Benchmark	1.82%	-2.99%	5.48%	3.49%
+/- Benchmark	1.43%	0.60%	-0.47%	-1.65%

Rolling 5-Year Performance	01/2018 - 12/2022	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021
• MDIZX	3.00%	1.35%	4.33%	8.93%	12.72%	10.94%
• Benchmark	0.88%	-0.81%	2.50%	6.76%	9.61%	8.94%
+/- Benchmark	2.12%	2.16%	1.83%	2.17%	3.11%	1.99%
Peer Group Rank	10	8	8	8	7	11

5-Year Quarterly Performance	4Q20	3Q20	2Q20	1Q20
• MDIZX	13.65%	7.97%	17.21%	-19.74%
• Benchmark	17.01%	6.25%	16.12%	-23.36%
+/- Benchmark	-3.37%	1.72%	1.09%	3.61%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	0.90	0.00	2.01	0.00	2.07	0.00
Beta	0.95	1.00	0.93	1.00	0.91	1.00
Standard Deviation	18.87	19.53	16.44	17.23	13.72	14.60
Sharpe Ratio	0.10	0.06	0.18	0.06	0.42	0.27
Information Ratio	0.26	-	0.58	-	0.55	-
Treynor Ratio	0.22	-0.78	1.78	-0.46	5.39	2.98
Upside Capture Ratio	100.47	100.00	99.27	100.00	96.87	100.00
Downside Capture Ratio	96.71	100.00	90.26	100.00	85.99	100.00

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• MDIZX	9.37%	-1.15%	4.11%	12.02%
• Benchmark	8.92%	-1.80%	2.98%	10.31%
+/- Benchmark	0.45%	0.65%	1.13%	1.71%

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• MDIZX	-11.72%	1.31%	-0.25%	-0.15%
• Benchmark	-11.46%	0.71%	-2.61%	-1.18%
+/- Benchmark	-0.26%	0.61%	2.36%	1.03%

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MFS Intl Diversification R6 (USD)

Morningstar Analyst Rating™
 Silver
 05-23-2022

Overall Morningstar Rating™
 ★★★★★
 702 US Fund Foreign Large Blend

Standard Index
 MSCI ACWI Ex USA NR USD

Category Index
 MSCI ACWI Ex USA NR USD

Morningstar Cat
 US Fund Foreign Large Blend

Performance 01-31-2023					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2021	1.84	5.01	-2.39	3.24	7.78
2022	-8.97	-12.36	-9.35	14.74	-17.02
2023	—	—	—	—	8.45
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-5.88	4.65	3.73	—	5.50
Std 12-31-2022	-17.02	—	3.00	—	3.98
Total Return	-5.88	4.65	3.73	6.18	5.50
+/- Std Index	-0.17	1.01	2.37	1.99	—
+/- Cat Index	-0.17	1.01	2.37	1.99	—
% Rank Cat	59	38	10	10	—
No. in Cat	744	702	614	422	—

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 800-225-2806 or visit <http://www.mfs.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 % 0.72
Gross Expense Ratio % 0.73

Risk and Return Profile

	3 Yr	5 Yr	10 Yr
Morningstar Rating™	702 funds	614 funds	422 funds
Morningstar Risk	4★	5★	5★
Morningstar Return	Avg	-Avg	High

	3 Yr	5 Yr	10 Yr
Standard Deviation	19.38	16.73	13.91
Mean	4.65	3.73	6.18
Sharpe Ratio	0.28	0.22	0.44

MPI Statistics
 Standard Index Best Fit Index
 MSCI ACWI Ex USA NR USD

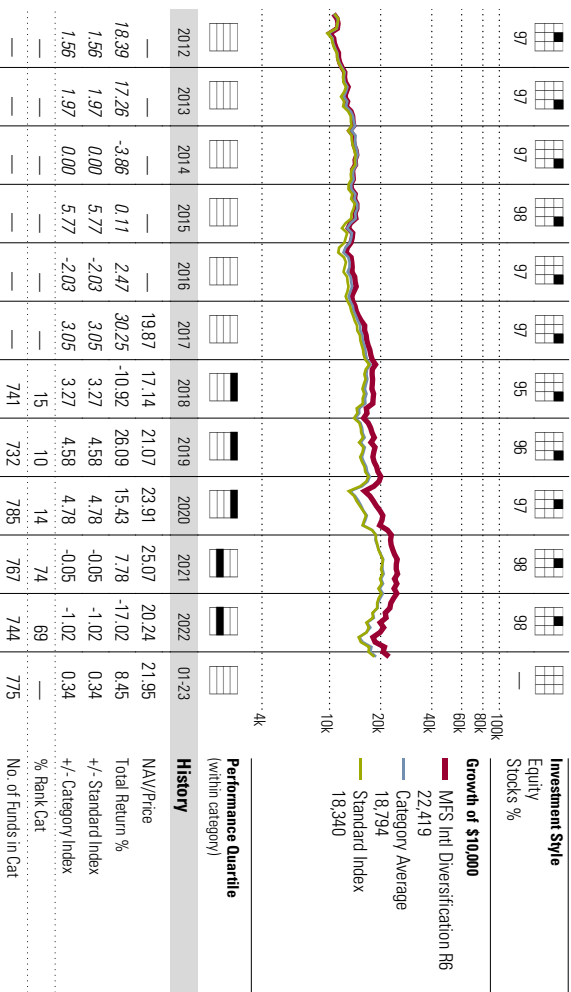
Alpha	1.06	1.06	0.95
Beta	0.95	0.95	0.95
R-Squared	96.36	96.36	96.36
12-Month Yield	—	—	—
Potential Cap Gains Exp	8.44%	8.44%	8.44%

Operations

Family: MFS
 Manager: Multiple
 Tenure: 4.4 Years
 Objective: Growth

Base Currency: USD
 Ticker: MDZX
 SIN: US5527435441
 Minimum Initial Purchase: \$0

Purchase Constraints: A
 Incept: 10-02-2017
 Type: MF
 Total Assets: \$34,920.15 mil



Portfolio Analysis 12-31-2022																															
Asset Allocation %			Net %	Long %	Short %	History																									
Cash	2.35	2.39	0.04	11-2022	Share Clng since	Amount	Holdings: 603 Total Stocks, 0 Total Fixed-Income.	NAV/Price	21.95	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	01-23										
US Stocks	4.14	4.14	0.00	11-2022	448 mil	MFS Research International R6	27.47	18.39	17.26	-3.86	0.11	2.47	30.25	-10.92	26.09	15.43	7.78	-17.02	8.45	18.39	17.26	-3.86	0.11	2.47	30.25	-10.92	26.09	15.43	7.78	-17.02	8.45
Non-US Stocks	93.52	93.52	0.00	11-2022	190 mil	MFS Emerging Markets Equity R6	17.48	1.56	1.97	0.00	5.77	-2.03	3.05	3.27	4.58	4.78	-0.05	-1.02	0.34	4.14	4.14	0.00	93.52	93.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bonds	0.00	0.00	0.00	11-2022	410 mil	MFS International Large Cap Value	14.98	1.56	1.97	0.00	5.77	-2.03	3.05	3.27	4.58	4.78	-0.05	-1.02	0.34	4.14	4.14	0.00	93.52	93.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other/Not Clsfd	0.00	0.00	0.00	11-2022	135 mil	MFS International Intrinsic Value	14.98	1.56	1.97	0.00	5.77	-2.03	3.05	3.27	4.58	4.78	-0.05	-1.02	0.34	4.14	4.14	0.00	93.52	93.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	100.00	100.00	0.04	11-2022	134 mil	MFS International Growth R6	14.97	1.56	1.97	0.00	5.77	-2.03	3.05	3.27	4.58	4.78	-0.05	-1.02	0.34	4.14	4.14	0.00	93.52	93.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00















Equity Style		Portfolio Statistics		Port	Rel	Rel
Value	Share Growth	P/E Ratio TTM	P/C Ratio TTM	Avg Index	Index	Cat
Large	High	11.3	1.25	1.14	1.15	1.14
Mid	Med	1.9	1.14	1.10	1.14	1.10
Small	Low	Geo Avg Mkt Cap	32175 \$mil	0.74	0.74	0.68

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

Credit Quality Breakdown

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

Regional Exposure		Stocks %	Rel Std Index
Americas	10.6	0.97	
Greater Europe	50.9	1.14	
Greater Asia	38.5	0.87	

Sector Weightings		Stocks %	Rel Std Index
 Cyclical	38.8	0.90	
 Basic Materials	10.0	1.17	
 Consumer Cyclical	10.4	0.92	
 Financial Services	16.7	0.79	
 Real Estate	1.8	0.74	
 Sensitive	37.4	1.04	
 Communication Services	4.9	0.75	
 Energy	4.1	0.71	
 Industrials	15.3	1.27	
 Technology	13.0	1.13	
 Defensive	23.8	1.14	
 Consumer Defensive	12.5	1.49	
 Healthcare	9.2	0.97	
 Utilities	2.2	0.72	

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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**

FUND FACTS

Inception Date: **October 1, 2004**

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

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

Other expenses: **0.11%**

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

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

Net fund annual expenses after waivers or reductions for period ended September 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

information is included in the enrollment material.

Investment Objective

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.

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.

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.

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.

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 ("VRIAAC"), 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 VRIAAC. 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 VRIAAC and are supported by its full faith and credit. VRIAAC 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 VRIAAC 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 09/30/2022)

Bank of America Corp	1.21
JPMorgan Chase & Co	0.86
Morgan Stanley	0.74
HSBC Holdings PLC	0.42
Wells Fargo & Company	0.39
Royal Bank of Canada	0.38
Verizon Communications Inc	0.36
Goldman Sachs Group Inc/The	0.35
UBS Group AG	0.35
Southern Company (The)	0.33

Sector Holdings (as of 09/30/2022)

Agency Mortgages	39.1
Asset Backed Securities	2.7
Commercial Mortgage Backed Securities	6.0
Emerging Markets	0.1
Government Related	0.1
HY Corporates	0.0
IG Corporates	25.7
Non-Agency RMBS and SF CRT	0.1
Other	0.0
US Treasury & Cash	26.2

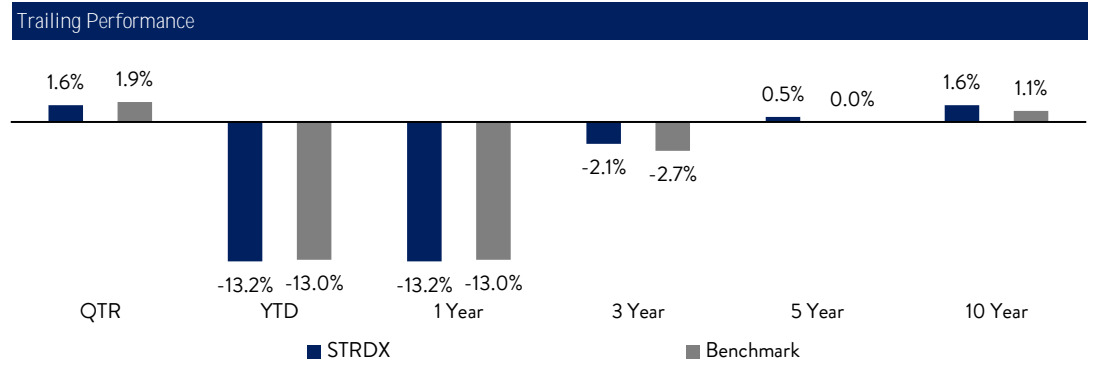
Statistical Data (as of 09/30/2022)

Portfolio Duration (years)	4.97
Yield to Maturity	4.99%
Average Life (years)	6.331

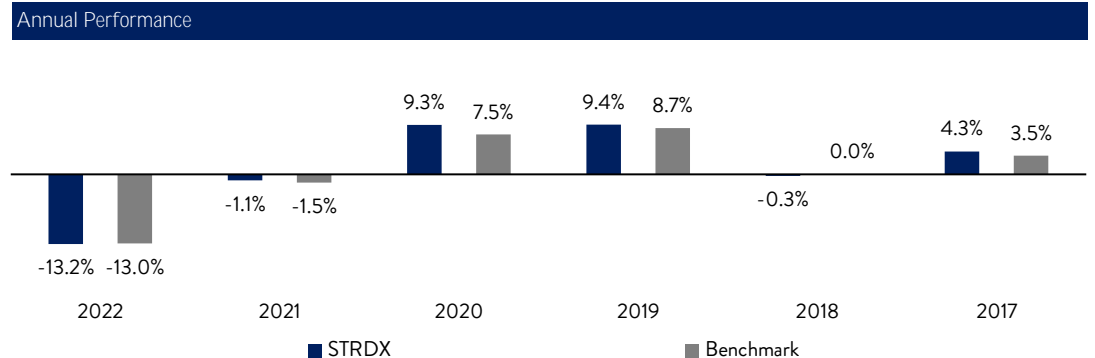
Sterling Capital Total Return Bond R6
STRDX

Fund Fact Sheet
Data as of 12/31/2022

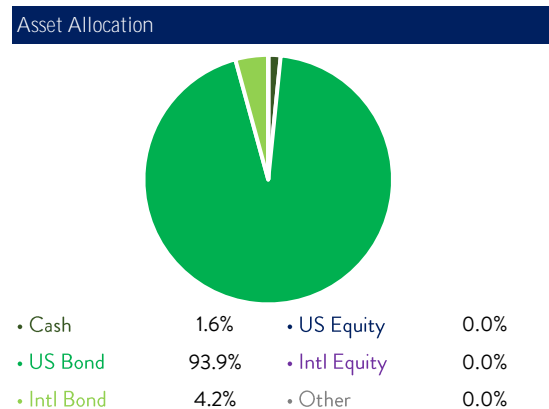
Product Details	
Name	Sterling Capital Total Return Bond R6
Ticker	STRDX
Expense Ratio	0.350%
Morningstar Category	US Fund Intermediate Core Bond
Benchmark	Bloomberg US Agg Bond TR USD
Inception Date	2/1/2018
Longest Tenured Manager	Mark M. Montgomery
Longest Manager Tenure	15.08 Years
Fund Size	\$1,052,426,023



Fund Characteristics	STRDX	+/- Category
% Assets in Top 10 Holdings	22.54%	-22.85%
Average Eff Duration	6.05	0.00
Average Eff Maturity	8.75	0.50
Average Credit Quality	AA	A (Cat Avg.)
Average Coupon	3.17%	0.14%



Sector Allocations	STRDX	Category	+/- Category
Government	19.2%	30.9%	-11.7%
Municipal	4.9%	0.8%	4.1%
Bank Loan	0.0%	0.1%	-0.1%
Convertible	0.0%	0.0%	0.0%
Corporate Bond	26.6%	25.7%	0.8%
Preferred Stock	0.0%	0.0%	0.0%
Agency MBS	29.1%	25.8%	3.3%
Non-Agency RMBS	0.0%	0.3%	-0.3%
Commercial MBS	0.6%	0.7%	-0.1%
Asset-Backed	17.7%	6.3%	11.4%
Cash & Equivalents	1.9%	6.8%	-4.8%
Other	0.0%	2.6%	-2.6%



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 12/31/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• STRDX	1.57%	-13.15%	-13.15%	-2.08%	0.48%	1.58%
• Benchmark	1.87%	-13.01%	-13.01%	-2.71%	0.02%	1.06%
+/- Benchmark	-0.30%	-0.14%	-0.14%	0.64%	0.46%	0.53%
Peer Group Rank	59	34	34	15	11	6

5-Year Quarterly Performance	4Q22	3Q22	2Q22	1Q22
• STRDX	1.57%	-4.42%	-4.69%	-6.15%
• Benchmark	1.87%	-4.75%	-4.69%	-5.93%
+/- Benchmark	-0.30%	0.33%	0.01%	-0.21%

Annual Performance	2022	2021	2020	2019	2018	2017
• STRDX	-13.15%	-1.12%	9.35%	9.37%	-0.27%	4.33%
• Benchmark	-13.01%	-1.54%	7.51%	8.72%	0.01%	3.54%
+/- Benchmark	-0.14%	0.42%	1.84%	0.65%	-0.28%	0.79%
Peer Group Rank	34	26	17	17	42	11

5-Year Quarterly Performance	4Q21	3Q21	2Q21	1Q21
• STRDX	-0.26%	0.04%	2.16%	-3.00%
• Benchmark	0.01%	0.05%	1.83%	-3.37%
+/- Benchmark	-0.27%	-0.02%	0.33%	0.37%

Rolling 5-Year Performance	01/2018 - 12/2022	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021
• STRDX	0.48%	0.29%	1.41%	2.72%	4.23%	3.75%
• Benchmark	0.02%	-0.27%	0.88%	2.14%	3.57%	2.94%
+/- Benchmark	0.46%	0.56%	0.53%	0.57%	0.66%	0.80%
Peer Group Rank	11	8	7	9	8	7

5-Year Quarterly Performance	4Q20	3Q20	2Q20	1Q20
• STRDX	1.67%	1.59%	5.10%	0.73%
• Benchmark	0.67%	0.62%	2.90%	3.15%
+/- Benchmark	1.00%	0.97%	2.21%	-2.42%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	0.57	0.00	0.42	0.00	0.53	0.00
Beta	0.97	1.00	0.97	1.00	0.96	1.00
Standard Deviation	6.00	5.85	5.13	5.09	4.11	4.11
Sharpe Ratio	-0.46	-0.58	-0.14	-0.23	0.20	0.08
Information Ratio	0.33	-	0.30	-	0.44	-
Treynor Ratio	-3.01	-3.57	-0.90	-1.32	0.80	0.24
Upside Capture Ratio	110.83	100.00	105.94	100.00	105.19	100.00
Downside Capture Ratio	100.34	100.00	98.93	100.00	95.20	100.00

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• STRDX	0.14%	2.19%	3.53%	3.23%
• Benchmark	0.18%	2.27%	3.08%	2.94%
+/- Benchmark	-0.04%	-0.08%	0.45%	0.29%

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• STRDX	1.06%	0.24%	-0.15%	-1.40%
• Benchmark	1.64%	0.02%	-0.16%	-1.46%
+/- Benchmark	-0.57%	0.22%	0.00%	0.06%

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.

Sterling Capital Total Return Bond R6 (USD)

Morningstar Quantitative **Morningstar Rating™** **Overall Morningstar Rating™** **Standard Index** **Category Index** **Morningstar Cat**
 Rating ^o **Neutral** **406 US Fund Intermediate** **Bloomberg US Agg Bond TR USD** **Bloomberg US Agg TR USD** **US Fund Intermediate Core Bond**
 12-31-2022

Performance 01-31-2023

Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2021	-3.00	2.16	0.04	-0.26	-1.12
2022	-6.15	-4.69	-4.42	1.57	-13.15
2023	—	—	—	—	3.10

Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-8.62	-1.76	—	—	1.31
Std 12-31-2022	-13.15	—	—	—	0.71
Total Return	-8.62	-1.76	1.25	1.93	1.31
+/- Std Index	-0.26	0.59	0.39	0.50	—
+/- Cat Index	-0.26	0.59	0.39	0.50	—
% Rank Cat	50	17	14	7	—
No. in Cat	453	406	373	276	—

7-day Yield 02-07-23 **3.29** ¹ Subsidized
 30-day SEC Yield 12-31-22 **3.81** ¹ Unsubsidized
 1. Contractual waiver. Expires 01-31-2024

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 800-228-1872 or visit www.sterlingcapitalfunds.com.

Fees and Expenses

Sales Charges	NA
Front-End Load %	NA
Deferred Load %	NA
Fund Expenses	0.25
Management Fees %	0.00
1201 Expense %	0.35
Net Expense Ratio %	0.48
Gross Expense Ratio %	0.48

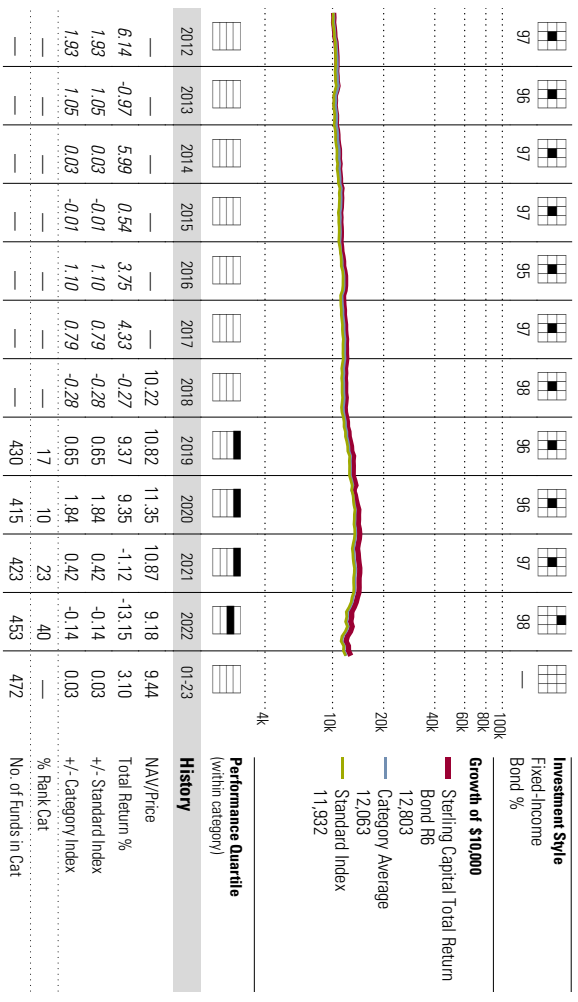
Risk and Return Profile

	3 Yr	5 Yr	10 Yr
Morningstar Rating™	4★	4★	5★
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	+Avg	+Avg	High
Standard Deviation	6.16	5.29	4.22
Mean	-1.76	1.25	1.93
Shapre Ratio	-0.41	0.00	0.28

MPI Statistics

MPI Statistics	Standard Index	Best Fit Index
Alpha	0.52	0.31
Beta	0.97	0.98
R-Squared	90.44	96.07
12-Month Yield	2.89%	2.89%
Potential Cap Gains Exp	-19.17%	-19.17%

Operations
 Family: Sterling Capital Funds
 Manager: Multiple
 Tenure: 15.1 Years
 Objective: Growth and Income
 Base Currency: USD



Portfolio Analysis 12-31-2022

Asset Allocation %	Net %	Long %	Short %
Cash	1.60	1.60	0.00
US Stocks	0.00	0.00	0.00
Non-US Stocks	0.00	0.00	0.00
Bonds	98.13	98.13	0.00
Other/Not Cstfd	0.27	0.27	0.00
Total	100.00	100.00	0.00

Equity Style

Value	Brand	Growth	Port	Rel	Rel
Large	Mid	Ext	Avg	Index	Cat
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—

Fixed-Income Style

Value	Brand	Growth	Port	Rel	Rel
High	Mid	Ext	Avg	Index	Cat
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—

Credit Quality Breakdown 12-31-2022

Credit Quality	Bond %
AAA	66.46
AA	8.48
A	12.58
BBB	12.40
BB	0.06
B	0.00
Below B	0.02
NR	0.00

Regional Exposure

Region	Stocks %	Rel Std Index
Americas	—	—
Greater Europe	—	—
Greater Asia	—	—

Operations
 Ticker: STRDX
 ISIN: US859180D5242
 Minimum Initial Purchase: \$10 mil
 Min Auto Investment Plan: \$10 mil
 Purchase Constraints: A

Incept: 02-01-2018
 Type: MF
 Total Assets: \$1,051.76 mil



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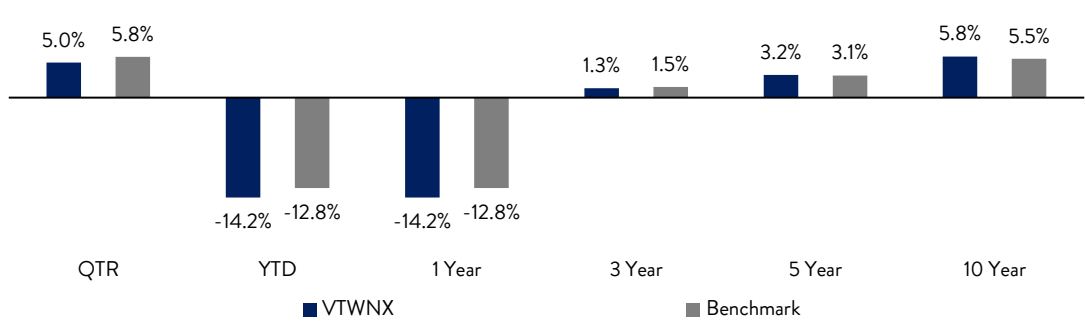
Vanguard Target Retirement 2020 Fund
VTWNX

Fund Fact Sheet
Data as of 12/31/2022

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	10.00 Years
Fund Size	\$41,566,872,499

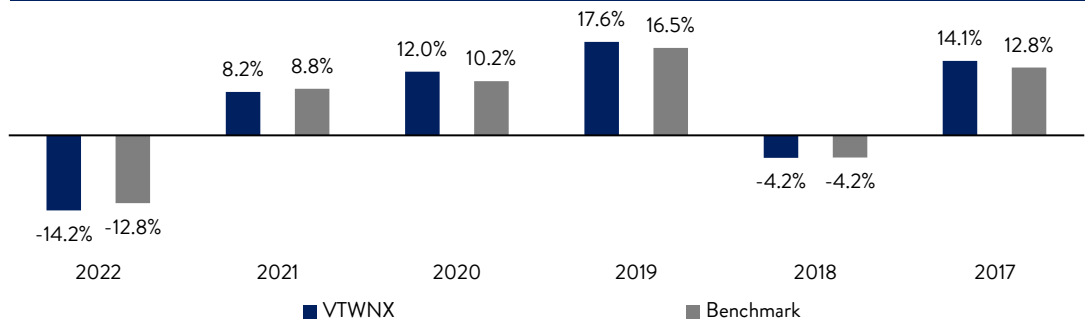
Trailing Performance



Fund Characteristics

	VTWNX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$60,514	-\$3,467
P/E Ratio (TTM)	15.65	0.05
P/B Ratio (TTM)	2.34	-0.05
Est. Dividend Yield	2.60%	0.02%

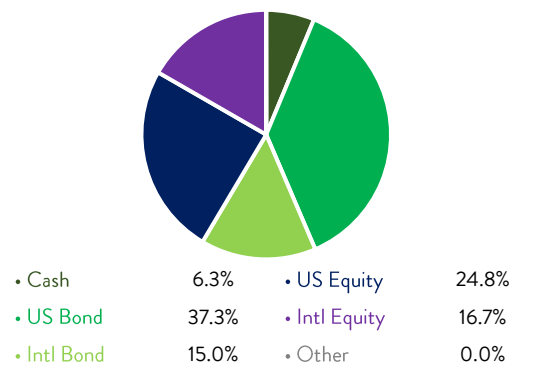
Annual Performance



Sector Allocations

	VTWNX	Category	+/- Category
Materials	5.0%	4.6%	0.4%
Communication Services	6.4%	6.2%	0.2%
Consumer Discretionary	10.3%	10.6%	-0.3%
Consumer Staples	7.4%	6.9%	0.5%
Healthcare	13.3%	13.3%	0.0%
Industrials	11.5%	10.7%	0.7%
Real Estate	3.5%	5.6%	-2.1%
Technology	17.9%	18.0%	-0.1%
Energy	5.4%	5.3%	0.0%
Financial Services	16.3%	15.7%	0.6%
Utilities	3.1%	3.1%	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 12/31/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VTWNX	4.97%	-14.15%	-14.15%	1.33%	3.22%	5.83%
• Benchmark	5.77%	-12.81%	-12.81%	1.49%	3.14%	5.50%
+/- Benchmark	-0.80%	-1.34%	-1.34%	-0.16%	0.08%	0.33%
Peer Group Rank	69	40	40	48	36	25

5-Year Quarterly Performance	4Q22	3Q22	2Q22	1Q22
• VTWNX	4.97%	-5.12%	-9.20%	-5.06%
• Benchmark	5.77%	-4.59%	-9.33%	-4.72%
+/- Benchmark	-0.80%	-0.54%	0.13%	-0.35%

Annual Performance	2022	2021	2020	2019	2018	2017
• VTWNX	-14.15%	8.17%	12.04%	17.63%	-4.24%	14.08%
• Benchmark	-12.81%	8.76%	10.24%	16.52%	-4.16%	12.80%
+/- Benchmark	-1.34%	-0.60%	1.80%	1.11%	-0.08%	1.28%
Peer Group Rank	40	73	45	37	41	25

5-Year Quarterly Performance	4Q21	3Q21	2Q21	1Q21
• VTWNX	2.91%	-0.41%	4.20%	1.28%
• Benchmark	3.42%	-0.24%	3.90%	1.46%
+/- Benchmark	-0.51%	-0.18%	0.30%	-0.18%

Rolling 5-Year Performance	01/2018 - 12/2022	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021
• VTWNX	3.22%	2.91%	4.64%	7.27%	9.26%	8.60%
• Benchmark	3.14%	2.64%	4.18%	6.78%	8.60%	7.98%
+/- Benchmark	0.08%	0.27%	0.46%	0.49%	0.67%	0.62%
Peer Group Rank	36	27	27	34	34	33

5-Year Quarterly Performance	4Q20	3Q20	2Q20	1Q20
• VTWNX	7.86%	4.48%	11.40%	-10.76%
• Benchmark	7.37%	3.74%	10.65%	-10.55%
+/- Benchmark	0.49%	0.74%	0.76%	-0.21%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	-0.16	0.00	0.05	0.00	0.20	0.00
Beta	1.03	1.00	1.03	1.00	1.03	1.00
Standard Deviation	11.48	11.15	9.95	9.65	8.17	7.94
Sharpe Ratio	0.10	0.11	0.23	0.23	0.63	0.61
Information Ratio	-0.16	-	0.09	-	0.45	-
Treynor Ratio	0.46	0.64	1.83	1.80	4.89	4.69
Upside Capture Ratio	102.93	100.00	102.96	100.00	103.56	100.00
Downside Capture Ratio	104.23	100.00	103.00	100.00	102.03	100.00

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• VTWNX	4.46%	1.19%	3.21%	7.82%
• Benchmark	4.19%	1.17%	2.88%	7.45%
+/- Benchmark	0.27%	0.02%	0.33%	0.38%

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• VTWNX	-6.50%	2.36%	0.61%	-0.54%
• Benchmark	-6.49%	2.33%	1.09%	-0.92%
+/- Benchmark	-0.01%	0.02%	-0.48%	0.38%

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Vanguard Target Retirement 2020 Fund (USD)

Morningstar Analyst Rating™ Overall Morningstar Rating™ **Standard Index** **Category Index** **Morningstar Cat**
Silver **★★★★** Morningstar Mod US Fund Target-Date
 02-24-2022 140 US Fund Target-Date Tgt Risk TR USD Lifetime Mod 2020 2020
 2020 140 US Fund Target-Date Tgt Risk TR USD TR USD

Performance 01-31-2023					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2021	1.28	4.20	-0.41	2.91	8.17
2022	-5.06	-9.20	-5.12	4.97	-14.15
2023	—	—	—	—	4.65
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-7.35	2.80	3.65	6.02	5.78
Std 12-31-2022	-14.15	—	3.22	5.83	5.52
Total Return	-7.35	2.80	3.65	6.02	5.78
+/- Std Index	-0.77	-1.06	-0.63	-0.06	—
+/- Cat Index	1.51	0.43	0.03	0.63	—
% Rank Cat	52	54	49	27	—
No. in Cat	150	140	121	55	—

	Subsidized	Unsubsidized
7-day Yield	—	—
30-day SEC Yield 02-07-23	2.53	2.53

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

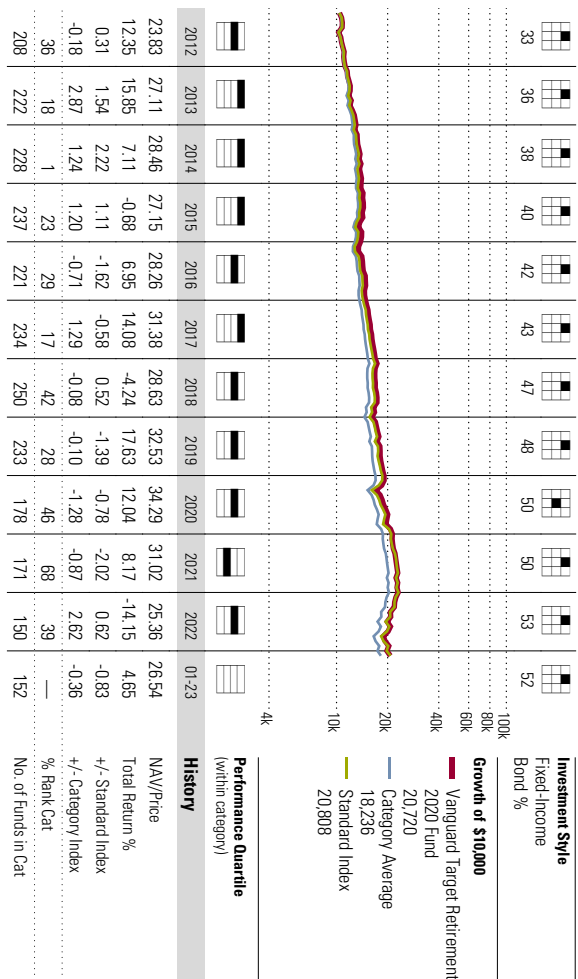
	3 Yr	5 Yr	10 Yr
Morningstar Rating™	3★	3★	4★
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	Avg	Avg	+Avg

Standard Deviation	3 Yr	5 Yr	10 Yr
Mean	11.77	10.09	8.24
Sharpe Ratio	2.80	3.65	6.02
	0.21	0.27	0.65

MPT Statistics	Standard Index	Best Fit Index Morningstar Intl USD
Alpha	-0.68	0.18
Beta	0.83	0.80
R-Squared	98.84	98.96

12-Month Yield	2.41%
Potential Cap Gains Exp	7.18%

Operations	
Family:	Vanguard
Manager:	Multiple
Tenure:	10.0 Years
Objective:	Asset Allocation



Portfolio Analysis 01-31-2023					
Asset Allocation %	Net %	Long %	Short %	Share Clng	Share Holdings
Cash	3.94	6.42	2.47	12-2022	10,638 Total Stocks, 17,466 Total Fixed-Income, 14% Turnover Ratio
US Stocks	25.40	25.40	0.00	Amount	1,364 mil Vanguard Total Bond Market II ldx
Non-US Stocks	17.08	17.08	0.00		57 mil Vanguard Total Bond Mkt ldx Instl
Bonds	53.54	53.58	0.04		400 mil Vanguard Total Intl Stock Index Inv
Other/Not Clsfd	0.03	0.03	0.00		218 mil Vanguard Total Intl Bnd II ldx Intl
Total	100.00	102.51	2.51		186 mil Vanguard Shrt-Term Intl-Prot Sec I

Equity Style	Value	Brand	Growth	Port	Rel	Index	Rel	Cap
	Large	Mid	Ext	15.6	1.04	1.00	1.00	1.00
	Med	Small		11.7	1.02	1.00	1.00	1.00
				2.3	1.08	0.98	0.98	0.95
				60514	1.38	0.95	0.95	0.95

Fixed-Income Style	Ltd	Med	Ext	Avg Eff Maturity	7.67
	High <td>Mid <td>Low <td>Avg Eff Duration <td>5.96</td> </td></td></td>	Mid <td>Low <td>Avg Eff Duration <td>5.96</td> </td></td>	Low <td>Avg Eff Duration <td>5.96</td> </td>	Avg Eff Duration <td>5.96</td>	5.96
				Avg Wtd Coupon <td>2.14</td>	2.14
				Avg Wtd Price <td>92.76</td>	92.76

Credit Quality Breakdown 12-31-2022

AAA	64.59
AA	7.96
A	14.23
BBB	12.55
BB	0.00
B	0.00
Below B	0.37
NR	0.31

Regional Exposure	Stocks %	Rel Std Index
Americas	63.8	1.08
Greater Europe	17.7	0.97
Greater Asia	18.5	0.93

Base Currency:	USD
Ticker:	VTVWXX
ISIN:	US92202E8057
Minimum Initial Purchase:	\$1,000

Purchase Constraints:	—
Incept:	06-07-2006
Type:	MF
Total Assets:	\$41,566.87 mil

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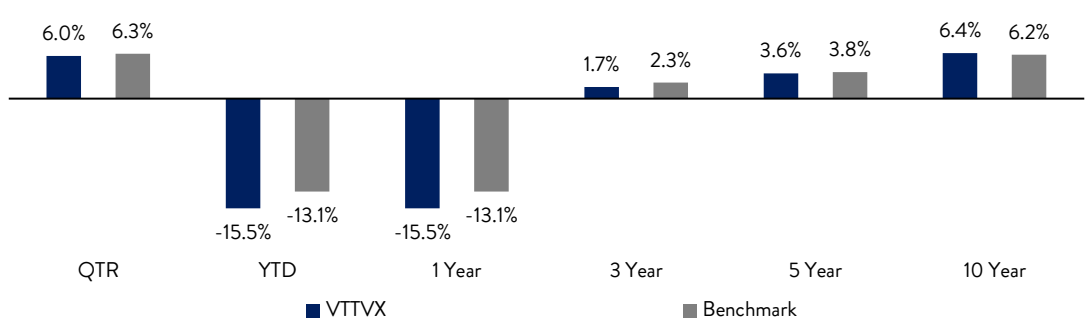
Vanguard Target Retirement 2025 Fund
VTTVX

Fund Fact Sheet
Data as of 12/31/2022

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	10.00 Years
Fund Size	\$75,189,920,903

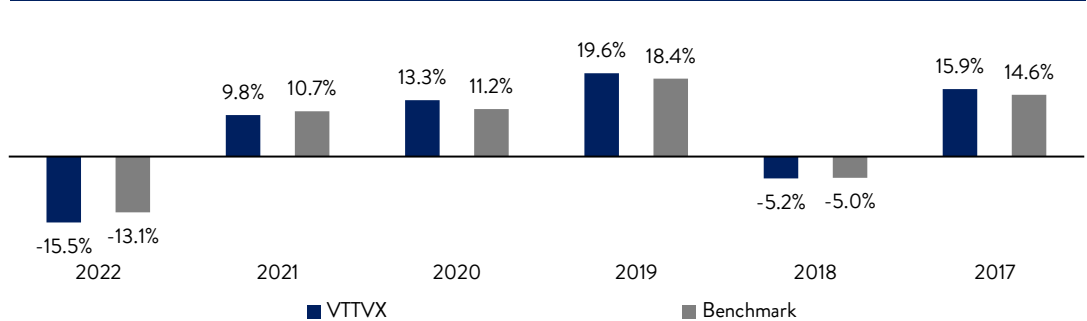
Trailing Performance



Fund Characteristics

	VTTVX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$59,800	-\$5,866
P/E Ratio (TTM)	15.59	0.03
P/B Ratio (TTM)	2.32	-0.06
Est. Dividend Yield	2.62%	0.01%

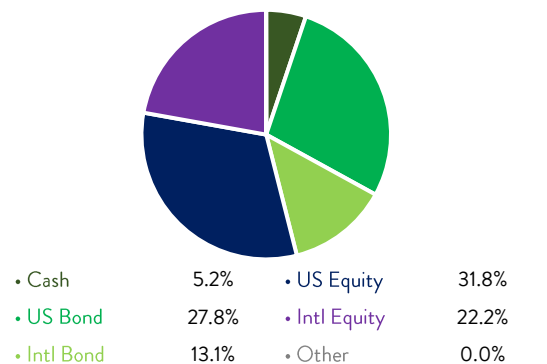
Annual Performance



Sector Allocations

	VTTVX	Category	+/- Category
Materials	5.1%	4.5%	0.5%
Communication Services	6.4%	6.2%	0.1%
Consumer Discretionary	10.3%	10.4%	-0.1%
Consumer Staples	7.4%	7.0%	0.4%
Healthcare	13.2%	13.4%	-0.2%
Industrials	11.5%	10.7%	0.8%
Real Estate	3.5%	5.5%	-2.0%
Technology	17.8%	18.1%	-0.3%
Energy	5.4%	5.3%	0.1%
Financial Services	16.3%	15.6%	0.8%
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 2025 Fund
VTTVX

Fund Fact Sheet
Data as of 12/31/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VTTVX	6.03%	-15.55%	-15.55%	1.66%	3.58%	6.43%
• Benchmark	6.34%	-13.13%	-13.13%	2.26%	3.75%	6.23%
+/- Benchmark	-0.31%	-2.42%	-2.42%	-0.60%	-0.18%	0.20%
Peer Group Rank	39	52	52	39	31	17

5-Year Quarterly Performance	4Q22	3Q22	2Q22	1Q22
• VTTVX	6.03%	-5.59%	-10.72%	-5.51%
• Benchmark	6.34%	-4.57%	-10.05%	-4.83%
+/- Benchmark	-0.31%	-1.02%	-0.66%	-0.68%

Annual Performance	2022	2021	2020	2019	2018	2017
• VTTVX	-15.55%	9.80%	13.30%	19.63%	-5.15%	15.94%
• Benchmark	-13.13%	10.67%	11.22%	18.38%	-5.02%	14.55%
+/- Benchmark	-2.42%	-0.87%	2.08%	1.25%	-0.13%	1.39%
Peer Group Rank	52	50	35	22	45	24

5-Year Quarterly Performance	4Q21	3Q21	2Q21	1Q21
• VTTVX	3.55%	-0.65%	4.79%	1.86%
• Benchmark	3.85%	-0.33%	4.43%	2.38%
+/- Benchmark	-0.30%	-0.32%	0.35%	-0.52%

Rolling 5-Year Performance	01/2018 - 12/2022	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021
• VTTVX	3.58%	3.15%	5.07%	8.14%	10.35%	9.61%
• Benchmark	3.75%	3.24%	4.87%	7.71%	9.65%	9.01%
+/- Benchmark	-0.18%	-0.09%	0.20%	0.43%	0.70%	0.60%
Peer Group Rank	31	29	26	28	26	26

5-Year Quarterly Performance	4Q20	3Q20	2Q20	1Q20
• VTTVX	9.33%	5.17%	13.20%	-12.95%
• Benchmark	9.01%	4.39%	12.25%	-12.93%
+/- Benchmark	0.32%	0.77%	0.96%	-0.02%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	-0.62	0.00	-0.25	0.00	-0.02	0.00
Beta	1.06	1.00	1.05	1.00	1.04	1.00
Standard Deviation	13.38	12.59	11.61	11.00	9.43	9.00
Sharpe Ratio	0.12	0.17	0.24	0.27	0.62	0.63
Information Ratio	-0.45	-	-0.16	-	0.23	-
Treynor Ratio	0.76	1.40	2.12	2.41	5.37	5.41
Upside Capture Ratio	104.18	100.00	103.65	100.00	103.92	100.00
Downside Capture Ratio	108.19	100.00	105.83	100.00	104.31	100.00

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• VTTVX	5.22%	1.10%	3.35%	8.82%
• Benchmark	4.97%	1.04%	2.99%	8.37%
+/- Benchmark	0.25%	0.06%	0.36%	0.45%

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• VTTVX	-7.74%	2.76%	0.65%	-0.59%
• Benchmark	-7.81%	2.72%	1.24%	-0.93%
+/- Benchmark	0.07%	0.03%	-0.58%	0.34%

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Vanguard Target Retirement 2025 Fund (USD)

Morningstar Analyst Rating™
Silver
 02-24-2022

Overall Morningstar Rating™
★★★★
 195 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 01-31-2023					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2021	1.86	4.79	-0.65	3.55	9.80
2022	-5.51	-10.72	-5.59	6.03	-15.55
2023	—	—	—	—	5.40

Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-7.77	3.45	4.05	6.65	6.39
Std 12-31-2022	-15.55	—	3.58	6.43	6.13
Total Return	-7.77	3.45	4.05	6.65	6.39
+/- Std Index	-1.20	-0.41	-0.24	0.57	—
+/- Cat Index	1.32	0.76	0.25	0.65	—
% Rank Cat	54	48	37	19	—
No. in Cat	219	195	170	102	—

7-day Yield	Subsidized	Unsubsidized
30-day SEC Yield 02-07-23	2.20	2.20

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.

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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

Standard Deviation	3 Yr	5 Yr	10 Yr
Mean	13.71	11.77	9.51
Beta	0.97	0.88	0.88
R-Squared	99.18	99.22	99.22
12-Month Yield	2.08%		
Potential Cap Gains Exp	9.02%		

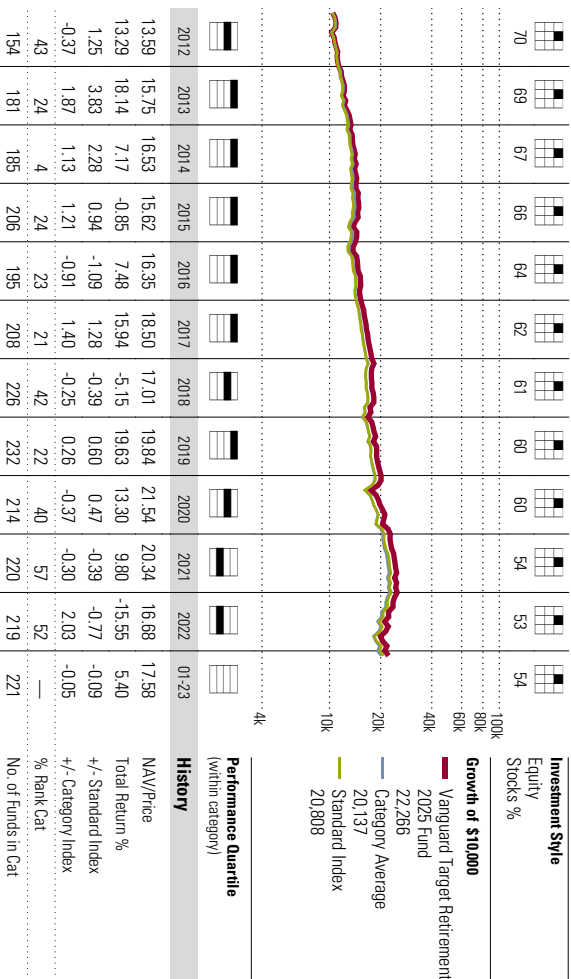
MPT Statistics	Standard Index	Best Fit Index
		Morningstar
	Lifetime Mod 2020	TR USD

Alpha	-0.33	0.28
Beta	0.97	0.88
R-Squared	99.18	99.22
12-Month Yield	2.08%	
Potential Cap Gains Exp	9.02%	

Operations	
Family:	Vanguard
Manager:	Multiple
Tenure:	10.0 Years
Objective:	Asset Allocation

Base Currency:	USD
Ticker:	VTTVX
ISIN:	US92202E4098
Minimum Initial Purchase:	\$1,000

Purchase Constraints:	—
Incept:	10-27-2003
Type:	MF
Total Assets:	\$75,189.92 mil



Portfolio Analysis 01-31-2023

Asset Allocation %	Net %	Long %	Short %
Cash	3.14	5.27	2.13
US Stocks	32.45	32.45	0.00
Non-US Stocks	22.63	22.63	0.00
Bonds	41.74	41.77	0.03
Other/Not Cstfd	0.03	0.03	0.00
Total	100.00	102.16	2.16

Equity Style	Value	Brand	Growth
	Large	Mid	Small

Portfolio Statistics	Port	Rel	Index	Rel	Category
P/E Ratio TTM	15.6	1.03	1.00	1.00	1.00
P/C Ratio TTM	11.6	1.02	1.00	1.00	1.00
P/B Ratio TTM	2.3	1.07	0.97	0.97	0.97
Geo Avg Mkt Cap	59800	1.36	0.91	0.91	0.91

Fixed-Income Style	Ltd	Med	Ext

Portfolio Statistics	Avg Eff Maturity	Avg Eff Duration	Avg Wtd Coupon	Avg Wtd Price
Credit Quality Breakdown	12-31-2022			
AAA				
AA				
A				
BBB				
BB				
B				
Below B				
NR				

Bond %	Bond %
60.19	60.19
8.92	8.92
16.00	16.00
14.15	14.15
0.00	0.00
0.00	0.00
0.41	0.41
0.34	0.34

Regional Exposure	Stocks %	Rel Std Index
Americas	63.0	1.02
Greater Europe	18.1	0.99
Greater Asia	18.9	0.95

Sector Weightings	Stocks %	Rel Std Index
Cyclical	35.2	0.86
Basic Materials	5.1	0.91
Consumer Cyclical	10.3	0.89
Financial Services	16.3	0.98
Real Estate	3.5	0.49
Sensitive	41.1	1.13
Communication Services	6.4	1.17
Energy	5.4	1.04
Industrials	11.5	1.00
Technology	17.8	1.24
Defensive	23.8	1.05
Consumer Defensive	7.4	1.05
Healthcare	13.2	1.10
Utilities	3.1	0.91

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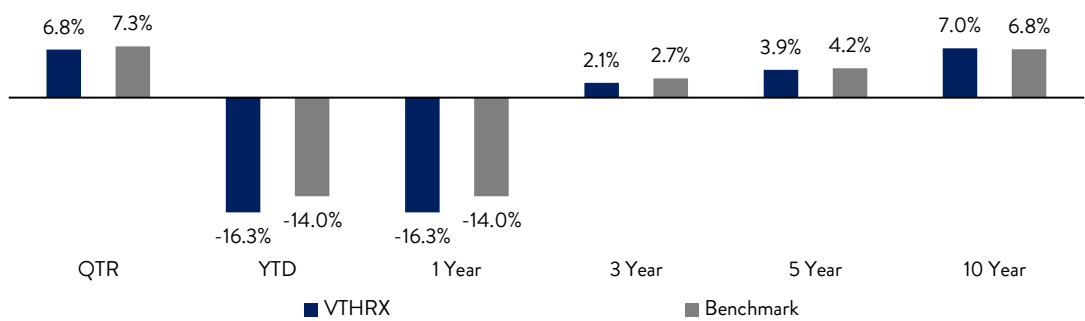
Vanguard Target Retirement 2030 Fund
VTHR

Fund Fact Sheet
Data as of 12/31/2022

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	10.00 Years
Fund Size	\$80,653,797,088

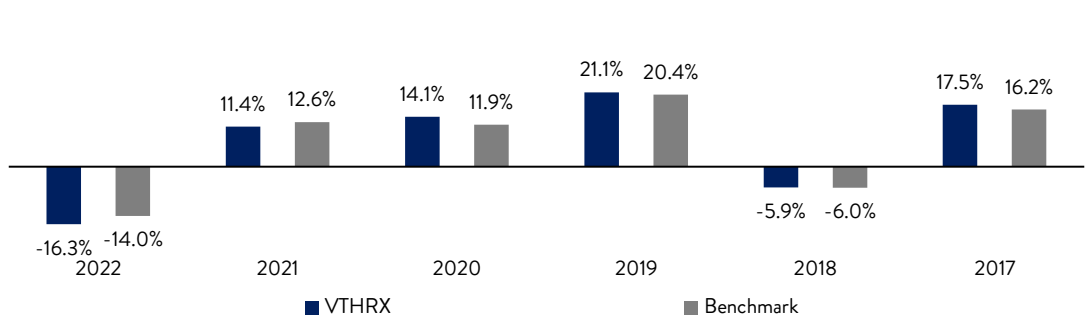
Trailing Performance



Fund Characteristics

	VTHR	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$59,516	-\$9,413
P/E Ratio (TTM)	15.56	-0.32
P/B Ratio (TTM)	2.32	-0.18
Est. Dividend Yield	2.62%	0.12%

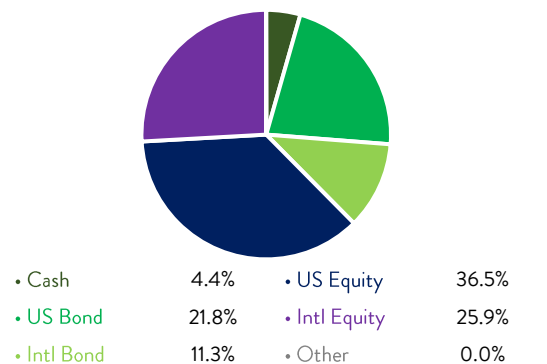
Annual Performance



Sector Allocations

	VTHR	Category	+/- Category
Materials	5.1%	4.4%	0.6%
Communication Services	6.4%	6.3%	0.1%
Consumer Discretionary	10.3%	10.7%	-0.5%
Consumer Staples	7.4%	7.0%	0.4%
Healthcare	13.2%	13.8%	-0.7%
Industrials	11.5%	10.9%	0.6%
Real Estate	3.5%	4.1%	-0.6%
Technology	17.8%	18.6%	-0.8%
Energy	5.4%	5.2%	0.1%
Financial Services	16.3%	15.7%	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 2030 Fund
VTHRX

Fund Fact Sheet
Data as of 12/31/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VTHRX	6.81%	-16.27%	-16.27%	2.09%	3.94%	6.99%
• Benchmark	7.27%	-13.96%	-13.96%	2.73%	4.17%	6.84%
+/- Benchmark	-0.46%	-2.30%	-2.30%	-0.64%	-0.24%	0.15%
Peer Group Rank	39	47	47	45	39	26

5-Year Quarterly Performance	4Q22	3Q22	2Q22	1Q22
• VTHRX	6.81%	-5.93%	-11.67%	-5.65%
• Benchmark	7.27%	-4.98%	-11.21%	-4.93%
+/- Benchmark	-0.46%	-0.95%	-0.45%	-0.72%

Annual Performance	2022	2021	2020	2019	2018	2017
• VTHRX	-16.27%	11.38%	14.10%	21.07%	-5.86%	17.52%
• Benchmark	-13.96%	12.61%	11.91%	20.38%	-5.99%	16.19%
+/- Benchmark	-2.30%	-1.23%	2.19%	0.70%	0.14%	1.34%
Peer Group Rank	47	57	37	40	35	39

5-Year Quarterly Performance	4Q21	3Q21	2Q21	1Q21
• VTHRX	4.06%	-0.78%	5.25%	2.49%
• Benchmark	4.44%	-0.46%	4.92%	3.24%
+/- Benchmark	-0.38%	-0.32%	0.33%	-0.75%

Rolling 5-Year Performance	01/2018 - 12/2022	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021
• VTHRX	3.94%	3.43%	5.50%	8.85%	11.23%	10.44%
• Benchmark	4.17%	3.58%	5.39%	8.56%	10.63%	9.93%
+/- Benchmark	-0.24%	-0.15%	0.11%	0.29%	0.60%	0.51%
Peer Group Rank	39	37	39	37	39	38

5-Year Quarterly Performance	4Q20	3Q20	2Q20	1Q20
• VTHRX	10.52%	5.70%	14.58%	-14.76%
• Benchmark	10.52%	5.02%	13.94%	-15.38%
+/- Benchmark	0.00%	0.68%	0.64%	0.62%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	-0.63	0.00	-0.25	0.00	0.05	0.00
Beta	1.02	1.00	1.01	1.00	1.02	1.00
Standard Deviation	14.76	14.40	12.85	12.64	10.42	10.21
Sharpe Ratio	0.15	0.20	0.26	0.28	0.62	0.62
Information Ratio	-0.50	-	-0.22	-	0.16	-
Treynor Ratio	1.21	1.88	2.56	2.83	6.06	6.02
Upside Capture Ratio	100.88	100.00	100.30	100.00	101.96	100.00
Downside Capture Ratio	104.27	100.00	101.85	100.00	101.83	100.00

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• VTHRX	5.95%	0.89%	3.41%	9.54%
• Benchmark	5.81%	0.88%	3.09%	9.39%
+/- Benchmark	0.14%	0.01%	0.31%	0.15%

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• VTHRX	-8.86%	3.09%	0.78%	-0.56%
• Benchmark	-9.26%	3.15%	1.40%	-0.95%
+/- Benchmark	0.40%	-0.06%	-0.62%	0.38%

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Vanguard Target Retirement 2030 Fund (USD)

Morningstar Analyst Rating™
Silver
02-24-2022

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

Standard Index
Morningstar Mod
Tgt Risk TR USD

Category Index
Morningstar
Lifetime Mod 2030
TR USD

Morningstar Cat
US Fund Target-Date
2030

Performance 01-31-2023					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2021	2.49	5.25	-0.78	4.06	11.98
2022	-5.65	-11.67	-5.93	6.81	-16.27
2023	—	—	—	—	5.87

Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-7.90	4.14	4.40	7.21	6.35
Std 12-31-2022	-16.27	—	3.94	6.99	6.02
Total Return	-7.90	4.14	4.40	7.21	6.35
+/- Std Index	-1.33	0.27	0.11	1.13	—
+/- Cat Index	0.94	0.79	0.30	0.52	—
% Rank Cat	47	48	42	27	—
No. in Cat	221	195	170	96	—

7-day Yield	Subsidized	Unsubsidized
30-day SEC Yield 02-07-23	2.05	2.05

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	0.00
Management Fees %	0.00
12b1 Expense %	NA

Net Expense Ratio %	0.08
Gross Expense Ratio %	0.08

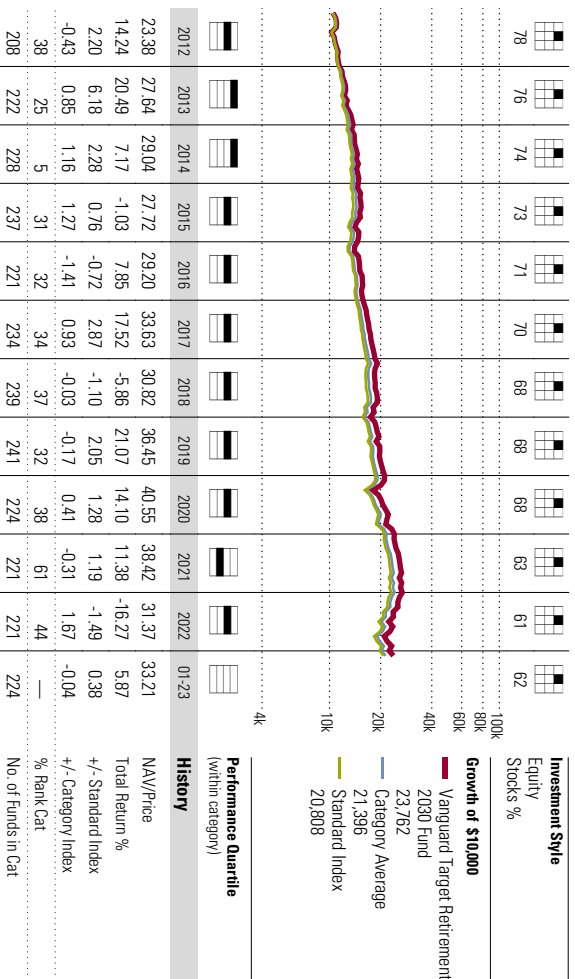
Risk and Return Profile	3 Yr	5 Yr	10 Yr
Morningstar Rating™	3★	3★	4★
Morningstar Risk	Avg	Avg	-Avg
Morningstar Return	Avg	Avg	+Avg

Standard Deviation	3 Yr	5 Yr	10 Yr
Mean	15.11	13.01	10.51
Beta	4.14	4.40	7.21
Sharpe Ratio	0.28	0.29	0.64

MPT Statistics	Standard Index	Best Fit Index	Morningstar
Alpha	0.15	0.12	TR USD
Beta	1.07	0.87	Lifetime Mod 2030
R-Squared	99.23	99.25	TR USD

12-Month Yield	1.93%
Potential Cap Gains Exp	7.70%

Operations	Vanguard
Family:	Multiple
Manager:	10.0 Years
Tenure:	Asset Allocation
Objective:	



Portfolio Analysis 01-31-2023													
Asset Allocation %			Net %	Long %	Short %	Share Clng						Net Assets	
Cash	US Stocks	Non-US Stocks	2.66	4.51	1.85	since	Amount	Holdings	10,941	Total Stocks	17,126	Total Fixed-Income,	%
23.38	27.64	29.04	37.22	37.22	0.00	12-2022	163 mil	Vanguard Total Stock Mkt Idx Instl	11%	Turnover Ratio	37.77		
14.24	20.49	7.17	26.34	26.34	0.00		1,198 mil	Vanguard Total Intl Stock Index Inv			26.83		
2.20	6.18	2.28	33.75	33.78	0.03		2,024 mil	Vanguard Total Bond Market II Idx			24.19		
-0.43	0.85	1.16	0.04	0.04	0.00		318 mil	Vanguard Total Intl Bd II Idx Instl			10.27		
38	25	5	100.00	101.88	1.88								

Equity Style	Value	Brand	Growth	Port	Rel	Rel
	Large	Mid	Small	Index <td>Index <td>Cat </td></td>	Index <td>Cat </td>	Cat
	High	Med	Low	Avg Eff Maturity	8.83	1.33
	High	Med	Low	Avg Eff Duration	6.75	1.17
	High	Med	Low	Avg Wtd Coupon	2.48	1.04
	High	Med	Low	Avg Wtd Price	91.86	1.00

Sector Weightings	Stocks %	Rel Std Index
Cyclical	35.2	0.86
Basic Materials	5.1	0.91
Consumer Cyclical	10.3	0.89
Financial Services	16.3	0.99
Real Estate	3.5	0.49
Sensitive	41.0	1.13
Communication Services	6.4	1.17
Energy	5.4	1.04
Industrials	11.5	1.00
Technology	17.8	1.24
Defensive	23.7	1.05
Consumer Defensive	7.4	1.05
Healthcare	13.2	1.09
Utilities	3.1	0.91

Credit Quality Breakdown	12-31-2022	Bond %
AAA	AA	57.01
AA	A	9.62
AAA	A	17.28
AAA	BBB	15.28
AA	BB	0.00
B	B	0.00
Below B	NR	0.44
NR	NR	0.36

Regional Exposure	Stocks %	Rel Std Index
Americas	62.7	1.02
Greater Europe	18.2	1.00
Greater Asia	19.1	0.95

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

Purchase Constraints:	—
Incept:	06-07-2006
Type:	MF
Total Assets:	\$80,653,80 mil

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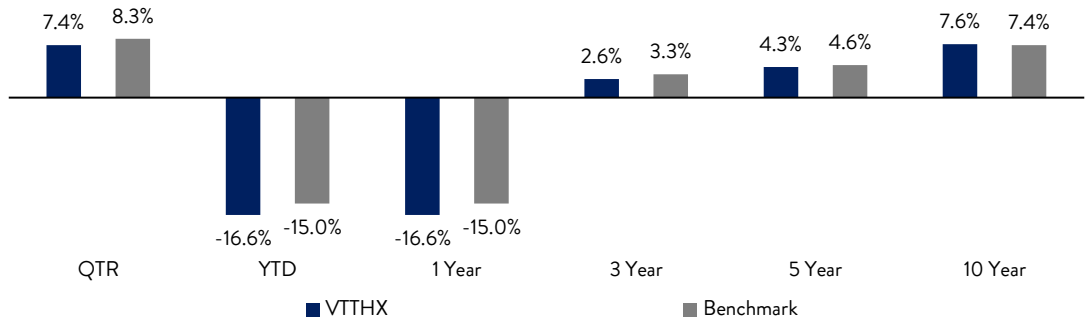
Vanguard Target Retirement 2035 Fund
VTTHX

Fund Fact Sheet
Data as of 12/31/2022

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	10.00 Years
Fund Size	\$79,867,805,599

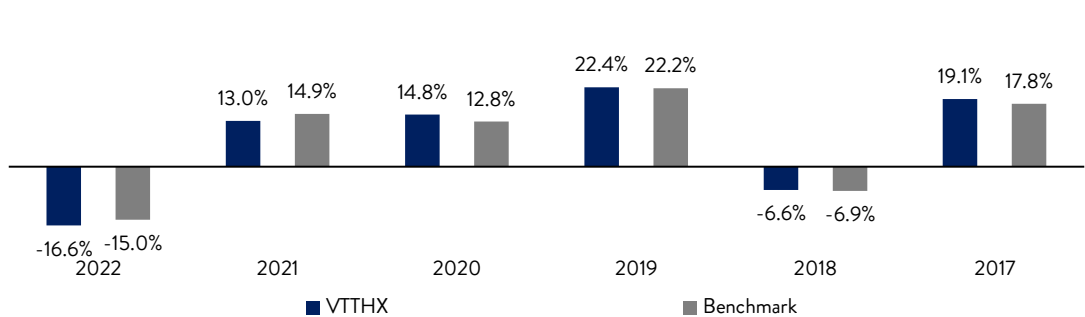
Trailing Performance



Fund Characteristics

	VTTHX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$59,613	-\$5,424
P/E Ratio (TTM)	15.57	-0.09
P/B Ratio (TTM)	2.32	-0.09
Est. Dividend Yield	2.62%	0.08%

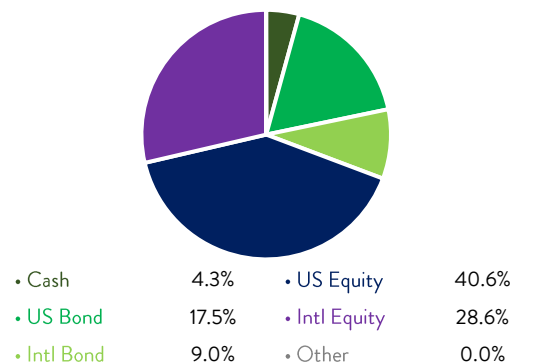
Annual Performance



Sector Allocations

	VTTHX	Category	+/- Category
Materials	5.1%	4.5%	0.5%
Communication Services	6.4%	6.3%	0.1%
Consumer Discretionary	10.3%	10.7%	-0.4%
Consumer Staples	7.4%	7.0%	0.4%
Healthcare	13.2%	13.8%	-0.6%
Industrials	11.5%	10.8%	0.7%
Real Estate	3.5%	4.3%	-0.8%
Technology	17.8%	18.4%	-0.6%
Energy	5.4%	5.2%	0.1%
Financial Services	16.3%	15.7%	0.6%
Utilities	3.1%	3.2%	0.0%
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 12/31/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VTTHX	7.45%	-16.62%	-16.62%	2.64%	4.34%	7.57%
• Benchmark	8.31%	-14.99%	-14.99%	3.29%	4.63%	7.42%
+/- Benchmark	-0.86%	-1.63%	-1.63%	-0.65%	-0.29%	0.15%
Peer Group Rank	61	38	38	52	42	29

5-Year Quarterly Performance	4Q22	3Q22	2Q22	1Q22
• VTTHX	7.45%	-6.09%	-12.41%	-5.66%
• Benchmark	8.31%	-5.50%	-12.55%	-5.02%
+/- Benchmark	-0.86%	-0.59%	0.14%	-0.64%

Annual Performance	2022	2021	2020	2019	2018	2017
• VTTHX	-16.62%	12.96%	14.79%	22.44%	-6.58%	19.12%
• Benchmark	-14.99%	14.93%	12.79%	22.18%	-6.88%	17.78%
+/- Benchmark	-1.63%	-1.96%	2.00%	0.26%	0.30%	1.35%
Peer Group Rank	38	79	40	53	27	42

5-Year Quarterly Performance	4Q21	3Q21	2Q21	1Q21
• VTTHX	4.55%	-0.87%	5.65%	3.17%
• Benchmark	5.21%	-0.61%	5.45%	4.22%
+/- Benchmark	-0.66%	-0.26%	0.20%	-1.05%

Rolling 5-Year Performance	01/2018 - 12/2022	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021
• VTTHX	4.34%	3.78%	5.96%	9.57%	12.06%	11.24%
• Benchmark	4.63%	3.92%	5.92%	9.50%	11.67%	10.88%
+/- Benchmark	-0.29%	-0.14%	0.04%	0.08%	0.38%	0.36%
Peer Group Rank	42	39	41	43	45	43

5-Year Quarterly Performance	4Q20	3Q20	2Q20	1Q20
• VTTHX	11.62%	6.29%	15.90%	-16.52%
• Benchmark	12.20%	5.70%	15.55%	-17.69%
+/- Benchmark	-0.58%	0.58%	0.36%	1.18%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	-0.61	0.00	-0.22	0.00	0.19	0.00
Beta	0.98	1.00	0.98	1.00	0.99	1.00
Standard Deviation	16.04	16.35	14.03	14.34	11.40	11.44
Sharpe Ratio	0.19	0.23	0.28	0.29	0.63	0.61
Information Ratio	-0.50	-	-0.25	-	0.15	-
Treynor Ratio	1.82	2.44	3.07	3.28	6.80	6.60
Upside Capture Ratio	96.77	100.00	96.98	100.00	100.50	100.00
Downside Capture Ratio	99.37	100.00	97.86	100.00	99.62	100.00

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• VTTHX	6.68%	0.70%	3.42%	10.20%
• Benchmark	6.61%	0.73%	3.18%	10.27%
+/- Benchmark	0.07%	-0.03%	0.24%	-0.07%

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• VTTHX	-9.93%	3.47%	0.83%	-0.58%
• Benchmark	-10.55%	3.52%	1.52%	-0.94%
+/- Benchmark	0.61%	-0.05%	-0.69%	0.36%

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Vanguard Target Retirement 2035 Fund (USD)

Morningstar Analyst Rating™
Silver
 02-24-2022

Overall Morningstar Rating™
★★★★
 188 US Fund Target-Date
 2035

Standard Index
 Morningstar Mod
 Tgt Risk TR USD

Category Index
 Morningstar
 Lifetime Mod 2035
 TR USD

Morningstar Cat
 US Fund Target-Date
 2035

Performance 01-31-2023					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2021	3.17	5.65	-0.87	4.55	12.96
2022	-5.66	-12.41	-6.09	7.45	-16.62
2023	—	—	—	—	6.20

Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-7.77	4.89	4.78	7.79	7.13
Std 12-31-2022	-16.62	—	4.34	7.57	6.83
Total Return	-7.77	4.89	4.78	7.79	7.13
+/- Std Index	-1.20	1.02	0.49	1.71	—
+/- Cat Index	0.27	0.61	0.27	0.45	—
% Rank Cat	37	55	49	31	—
No. in Cat	212	188	167	99	—

	Subsidized	Unsubsidized
7-day Yield	—	2.06
30-day SEC Yield 02-07-23	2.06	2.06

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™	188 funds	167 funds	99 funds		
Morningstar Risk	3★	3★	4★		
Morningstar Return	-Avg	-Avg	-Avg		
	Avg	Avg	+Avg		

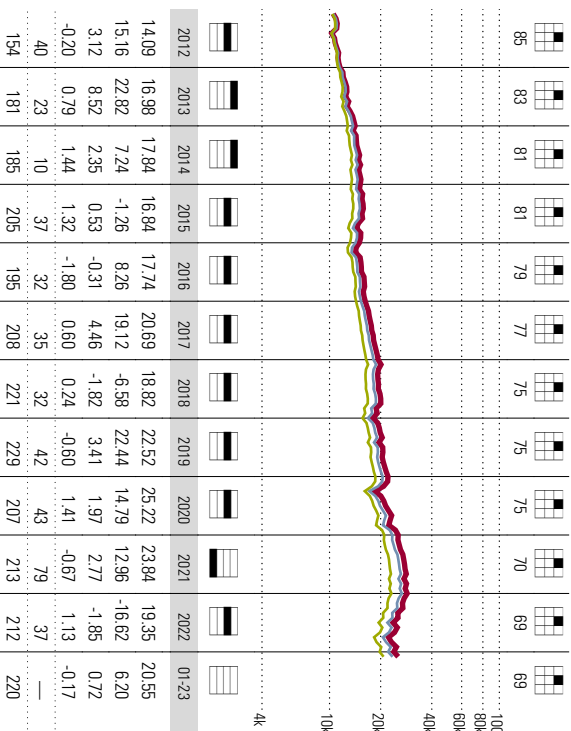
Standard Deviation	3 Yr	5 Yr	10 Yr
	16.39	14.18	11.48
Mean	4.89	4.78	7.79
Sharpe Ratio	0.32	0.30	0.64

MFT Statistics	Standard Index	Best Fit Index	Morningstar TR USD	Lifetime Mod 2035 TR USD
Alpha	0.72	0.69	0.95	0.95
Beta	1.16	0.95	99.37	99.37
R-Squared	99.12	99.37	1.95%	10.78%
12-Month Yield	1.95%	10.78%		
Potential Cap Gains Exp	10.78%			

Operations
 Family: Vanguard
 Manager: Multiple
 Tenure: 10.0 Years
 Objective: Asset Allocation

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

Purchase Constraints: —
 Incept: 10-27-2003
 Type: MF
 Total Assets: \$79,867.81 mil



Investment Style	Equity	Stocks %
Vanguard Target Retirement	25,370	25.37%
Category Average	23,493	23.49%
Standard Index	20,808	20.81%

History	NAV/Price	Total Return %	+/- Standard Index	+/- Category Index	% Rank Cat	No. of Funds in Cat
2012	14.09	16.98	17.84	16.84	17.74	20.69
2013	15.16	22.82	7.24	-1.26	8.26	19.12
2014	3.12	8.52	2.35	0.53	-0.31	4.46
2015	-0.20	0.79	1.44	1.32	-1.80	0.60
2016	40	23	10	37	32	35
2017	154	181	185	205	195	208
2018	221	229	207	213	212	220
2019	229	207	213	212	220	220
2020	207	213	212	220	220	220
2021	212	220	220	220	220	220
2022	220	220	220	220	220	220
01-23	220	220	220	220	220	220

Portfolio Analysis 01-31-2023		
Asset Allocation %	Net %	Long %
Cash	2.87	4.33
US Stocks	41.23	41.23
Non-US Stocks	29.03	29.03
Bonds	26.84	26.86
Other/Not Cstfd	0.04	0.04
Total	100.00	101.49

Share Cng	Share	Holdings	Net Assets
since	Amount	11,017 Total Stocks	16,819 Total Fixed-Income,
12-2022	9% Turnover Ratio		
⊕	179 mil	Vanguard Total Stock Mkt Idx Instl	41.84
⊕	1,308 mil	Vanguard Total Intl Stock Index Inv	29.57
⊕	1,598 mil	Vanguard Total Bond Market II Idx	19.29
⊕	248 mil	Vanguard Total Intl Bd II Idx Instl	8.11

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

Portfolio Statistics	P/E Ratio TTM	P/C Ratio TTM	P/B Ratio TTM	Geo Avg Mkt Cap	5613	1.36	0.92
Ang Eff Maturity	8.83						
Ang Eff Duration	6.75						
Ang Wtd Coupon	2.48						
Ang Wtd Price	91.86						

Fixed-Income Style		
Credit Quality Breakdown	12-31-2022	Bond %
AAA	57.11	57.11
AA	9.58	9.58
A	17.24	17.24
BBB	15.27	15.27
BB	0.00	0.00
B	0.00	0.00
Below B	0.44	0.44
NR	0.36	0.36

Sector Weightings	Stocks %	Rel Std Index
⊖ Cyclical	35.2	0.86
Basic Materials	5.1	0.91
Consumer Cyclical	10.3	0.89
Financial Services	16.3	0.99
Real Estate	3.5	0.49
⊖ Sensitive	41.0	1.13
Communication Services	6.4	1.17
Energy	5.4	1.04
Industrials	11.5	1.00
Technology	17.8	1.24
⊖ Defensive	23.7	1.05
Consumer Defensive	7.4	1.05
Healthcare	13.2	1.10
Utilities	3.1	0.91

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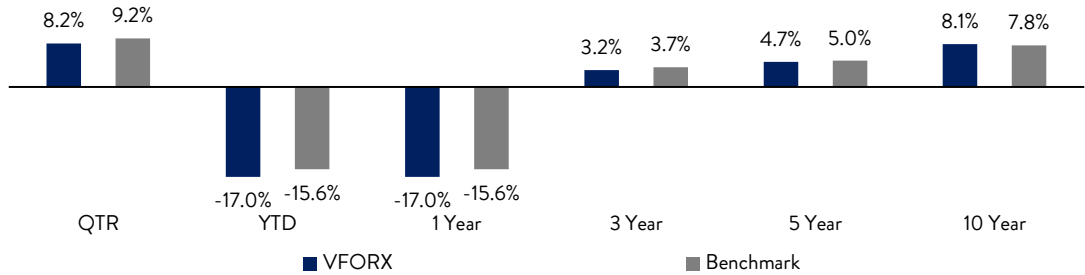
Vanguard Target Retirement 2040 Fund
VFORX

Fund Fact Sheet
Data as of 12/31/2022

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	10.00 Years
Fund Size	\$69,412,078,108

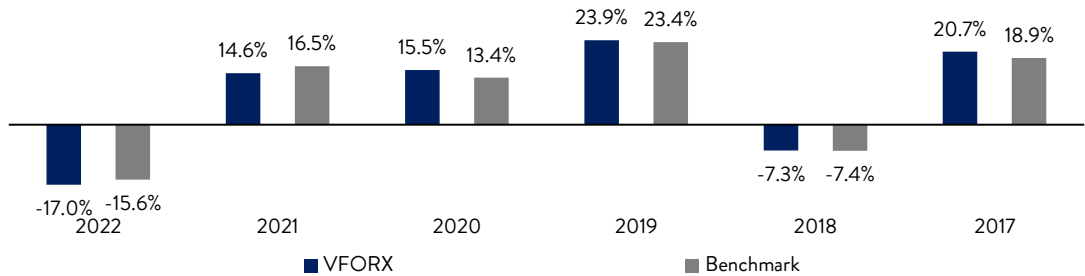
Trailing Performance



Fund Characteristics

	VFORX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$59,895	-\$2,862
P/E Ratio (TTM)	15.60	0.09
P/B Ratio (TTM)	2.32	-0.07
Est. Dividend Yield	2.61%	0.05%

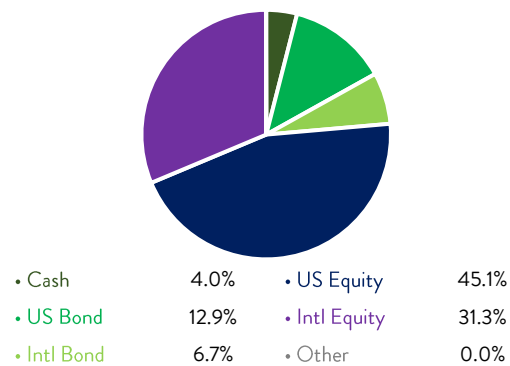
Annual Performance



Sector Allocations

	VFORX	Category	+/- Category
Materials	5.0%	4.5%	0.5%
Communication Services	6.4%	6.2%	0.1%
Consumer Discretionary	10.3%	10.7%	-0.4%
Consumer Staples	7.4%	7.0%	0.4%
Healthcare	13.2%	13.5%	-0.3%
Industrials	11.5%	10.9%	0.6%
Real Estate	3.5%	4.6%	-1.1%
Technology	17.8%	18.3%	-0.5%
Energy	5.4%	5.3%	0.1%
Financial Services	16.3%	15.8%	0.5%
Utilities	3.1%	3.1%	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 12/31/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VFORX	8.20%	-16.98%	-16.98%	3.17%	4.74%	8.06%
• Benchmark	9.17%	-15.56%	-15.56%	3.72%	4.97%	7.84%
+/- Benchmark	-0.97%	-1.42%	-1.42%	-0.55%	-0.23%	0.22%
Peer Group Rank	63	34	34	49	40	23

5-Year Quarterly Performance	4Q22	3Q22	2Q22	1Q22
• VFORX	8.20%	-6.33%	-13.17%	-5.66%
• Benchmark	9.17%	-5.83%	-13.50%	-5.03%
+/- Benchmark	-0.97%	-0.50%	0.34%	-0.63%

Annual Performance	2022	2021	2020	2019	2018	2017
• VFORX	-16.98%	14.56%	15.47%	23.86%	-7.32%	20.71%
• Benchmark	-15.56%	16.55%	13.37%	23.37%	-7.41%	18.87%
+/- Benchmark	-1.42%	-1.99%	2.11%	0.49%	0.08%	1.84%
Peer Group Rank	34	80	43	53	32	31

5-Year Quarterly Performance	4Q21	3Q21	2Q21	1Q21
• VFORX	5.02%	-0.98%	6.11%	3.82%
• Benchmark	5.73%	-0.70%	5.79%	4.93%
+/- Benchmark	-0.71%	-0.29%	0.33%	-1.11%

Rolling 5-Year Performance	01/2018 - 12/2022	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021
• VFORX	4.74%	4.11%	6.42%	10.28%	12.88%	12.03%
• Benchmark	4.97%	4.16%	6.30%	10.15%	12.40%	11.54%
+/- Benchmark	-0.23%	-0.05%	0.13%	0.13%	0.48%	0.49%
Peer Group Rank	40	34	35	39	42	40

5-Year Quarterly Performance	4Q20	3Q20	2Q20	1Q20
• VFORX	12.76%	6.80%	17.29%	-18.25%
• Benchmark	13.36%	6.14%	16.66%	-19.24%
+/- Benchmark	-0.60%	0.65%	0.62%	0.99%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	-0.49	0.00	-0.17	0.00	0.21	0.00
Beta	0.98	1.00	0.98	1.00	1.00	1.00
Standard Deviation	17.33	17.70	15.22	15.48	12.34	12.29
Sharpe Ratio	0.22	0.24	0.29	0.30	0.62	0.61
Information Ratio	-0.40	-	-0.20	-	0.20	-
Treynor Ratio	2.37	2.86	3.47	3.63	7.24	7.02
Upside Capture Ratio	97.06	100.00	97.89	100.00	101.61	100.00
Downside Capture Ratio	98.99	100.00	98.58	100.00	100.94	100.00

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• VFORX	7.38%	0.49%	3.46%	10.96%
• Benchmark	7.15%	0.60%	3.27%	10.82%
+/- Benchmark	0.22%	-0.11%	0.19%	0.13%

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• VFORX	-11.03%	3.79%	0.90%	-0.53%
• Benchmark	-11.33%	3.72%	1.64%	-0.94%
+/- Benchmark	0.30%	0.07%	-0.74%	0.41%

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 189 US Fund Target-Date Tgt Risk TR USD Lifetime Mod 2040 2040 TR USD

Performance 01-31-2023					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2021	3.82	6.11	-0.98	5.02	14.56
2022	-5.66	-13.17	-6.33	8.20	-16.96
2023	—	—	—	—	6.53

Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-7.69	5.64	5.14	8.28	6.96
Std 12-31-2022	-16.98	—	4.74	8.06	6.59
Total Return	-7.69	5.64	5.14	8.28	6.96
+/- Std Index	-1.12	1.77	0.86	2.20	—
+/- Cat Index	-0.60	0.46	0.25	0.51	—
% Rank Cat	41	56	46	27	—
No. in Cat	216	189	170	96	—

7-day Yield	Subsidized	Unsubsidized
30-day SEC Yield 02-07-23	2.07	2.07

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

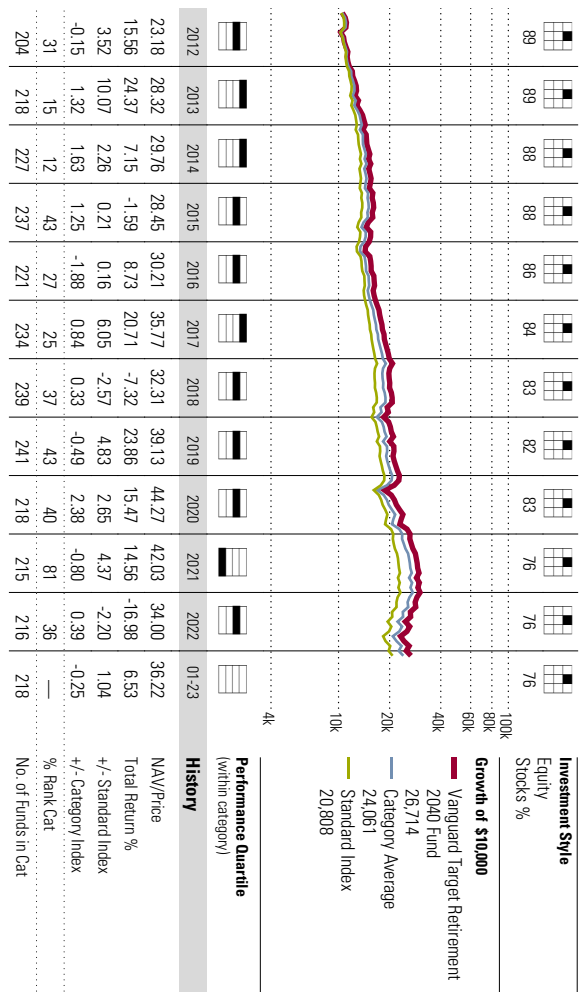
Risk and Return Profile

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

Standard Deviation	3 Yr	5 Yr	10 Yr
Mean	17.67	15.35	12.42
Alpha	1.32	1.25	0.86
Beta	1.25	1.25	0.86
R-Squared	98.89	98.89	99.43
12-Month Yield	1.96%	1.96%	10.64%
Potential Cap Gains Exp	10.64%	10.64%	10.64%

MPT Statistics	Standard Index	Best Fit Index
Alpha	1.32	-0.57
Beta	1.25	0.86
R-Squared	98.89	99.43

Operations	Vanguard
Family:	Vanguard
Manager:	Multiple
Tenure:	10.0 Years
Objective:	Asset Allocation



Portfolio Analysis 01-31-2023												
Asset Allocation %			Net %	Long %	Short %	Share Clng						NAV/Price
Cash	2.93	4.04	1.11	15.66	1.01	12-2022	Amount	11,065	Total Stocks	16,245	Total Fixed-Income,	26.714
US Stocks	45.58	45.58	0.00	172 mil	7%	Turnover Ratio	Amount	7%	Turnover Ratio	Amount	7%	26.714
Non-US Stocks	31.63	31.63	0.00	1,239 mil	Vanguard Total Stock Mkt Idx Instl	Amount	1,239 mil	Vanguard Total Stock Mkt Idx Instl	Amount	1,239 mil	Vanguard Total Stock Mkt Idx Instl	24,061
Bonds	19.82	19.84	0.02	1,025 mil	Vanguard Total Intl Stock Index Inv	Amount	1,025 mil	Vanguard Total Intl Stock Index Inv	Amount	1,025 mil	Vanguard Total Intl Stock Index Inv	20,808
Other/Not Clsfd	0.04	0.04	0.00	160 mil	Vanguard Total Bond Market II Idx	Amount	160 mil	Vanguard Total Bond Market II Idx	Amount	160 mil	Vanguard Total Bond Market II Idx	—
Total	100.00	101.13	1.13	160 mil	Vanguard Total Intl Bd II Idx Instl	Amount	160 mil	Vanguard Total Intl Bd II Idx Instl	Amount	160 mil	Vanguard Total Intl Bd II Idx Instl	—

Equity Style	Value	Brand	Growth	Port	Rel	Index	Rel	Index	Rel	Index
Value	Large	Med	Small	15.66	1.03	1.01	6.75	6.75	6.75	6.75
Brand	Large	Med	Small	11.6	1.02	1.01	2.48	2.48	2.48	2.48
Growth	Large	Med	Small	2.3	1.07	0.97	—	—	—	—

Fixed-Income Style	Ltd	Med	Ext	Avg Eff Maturity	Avg Eff Duration	Avg Wtd Coupon	Avg Wtd Price
Ltd	High	Med	Low	8.83	6.75	2.48	—
Med	High	Med	Low	6.75	6.75	2.48	—
Ext	High	Med	Low	1.01	1.01	1.01	—

Credit Quality Breakdown	12-31-2022
AAA	57.05
AA	9.61
A	17.27
BBB	15.28
BB	0.00
B	0.00
Below B	0.44
NR	0.36

Regional Exposure	Stocks %	Rel Std Index
Americas	63.1	1.02
Greater Europe	18.0	0.98
Greater Asia	18.9	0.94

Operations	Vanguard
Base Currency:	USD
Manager:	VFORX
Ticker:	US92202EB701
SIIN:	US92202EB701
Minimum Initial Purchase:	\$1,000

Purchase Constraints:	—
Incept:	06-07-2006
Type:	MF
Total Assets:	\$69,412.08 mil

NAV/Price	36.22
Total Return %	6.53
+/- Standard Index	1.04
+/- Category Index	-0.25
% Rank Cat	—
No. of Funds in Cat	218

Net Assets %	35.2
Basic Materials	5.0
Consumer Cyclical	10.3
Financial Services	16.3
Real Estate	3.5
Communication Services	6.4
Energy	5.4
Industrials	11.5
Technology	17.8
Consumer Defensive	7.4
Healthcare	13.2
Utilities	3.1

Stocks %	41.1
Consumer Defensive	7.4
Healthcare	13.2
Utilities	3.1

Rel Std Index	1.13
Basic Materials	0.91
Consumer Cyclical	0.89
Financial Services	0.98
Real Estate	0.49
Communication Services	1.17
Energy	1.04
Industrials	1.00
Technology	1.24
Consumer Defensive	1.05
Healthcare	1.10
Utilities	0.91

Stocks %	0.86
Basic Materials	0.91
Consumer Cyclical	0.89
Financial Services	0.98
Real Estate	0.49
Communication Services	1.17
Energy	1.04
Industrials	1.00
Technology	1.24
Consumer Defensive	1.05
Healthcare	1.10
Utilities	0.91

Stocks %	0.86
Basic Materials	0.91
Consumer Cyclical	0.89
Financial Services	0.98
Real Estate	0.49
Communication Services	1.17
Energy	1.04
Industrials	1.00
Technology	1.24
Consumer Defensive	1.05
Healthcare	1.10
Utilities	0.91

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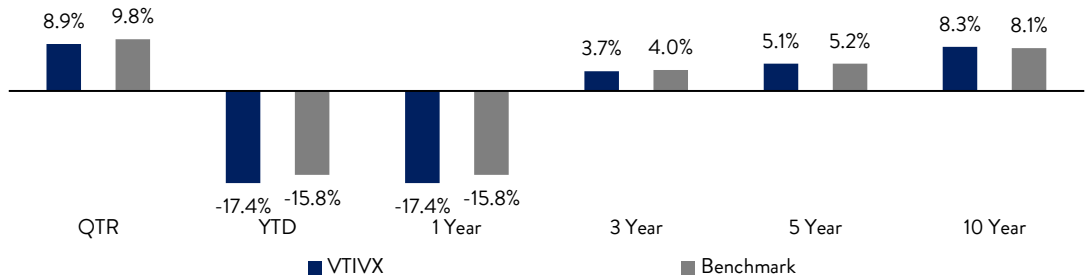
Vanguard Target Retirement 2045 Fund
VTIVX

Fund Fact Sheet
Data as of 12/31/2022

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	10.00 Years
Fund Size	\$65,129,796,881

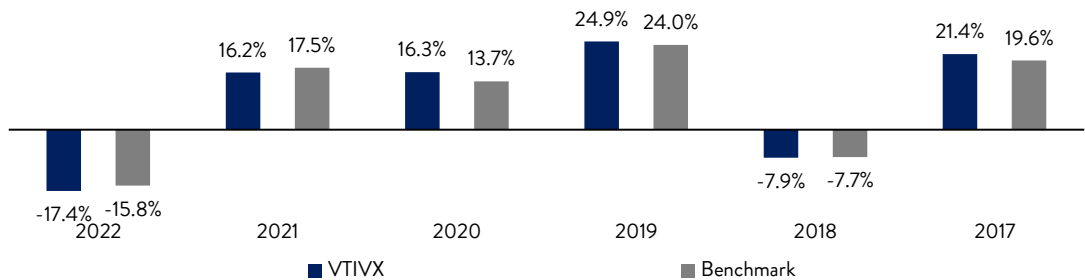
Trailing Performance



Fund Characteristics

	VTIVX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$60,110	-\$2,169
P/E Ratio (TTM)	15.61	0.10
P/B Ratio (TTM)	2.33	-0.05
Est. Dividend Yield	2.61%	0.05%

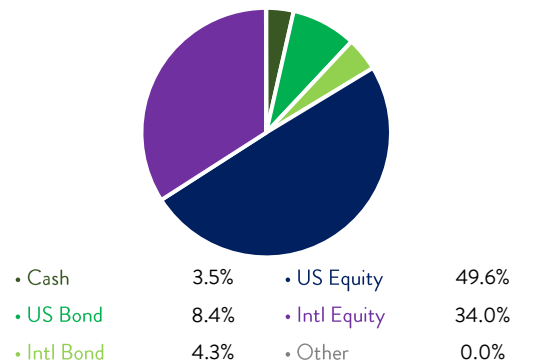
Annual Performance



Sector Allocations

	VTIVX	Category	+/- Category
Materials	5.0%	4.6%	0.5%
Communication Services	6.4%	6.2%	0.1%
Consumer Discretionary	10.3%	10.8%	-0.5%
Consumer Staples	7.4%	7.0%	0.4%
Healthcare	13.2%	13.7%	-0.4%
Industrials	11.5%	10.9%	0.6%
Real Estate	3.5%	4.5%	-1.0%
Technology	17.9%	18.2%	-0.3%
Energy	5.4%	5.2%	0.1%
Financial Services	16.3%	15.7%	0.5%
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 2045 Fund
VTIVX

Fund Fact Sheet
Data as of 12/31/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VTIVX	8.89%	-17.36%	-17.36%	3.74%	5.14%	8.34%
• Benchmark	9.77%	-15.84%	-15.84%	3.98%	5.16%	8.11%
+/- Benchmark	-0.88%	-1.52%	-1.52%	-0.24%	-0.02%	0.23%
Peer Group Rank	53	31	31	32	27	19

5-Year Quarterly Performance	4Q22	3Q22	2Q22	1Q22
• VTIVX	8.89%	-6.51%	-13.93%	-5.67%
• Benchmark	9.77%	-6.01%	-14.12%	-5.02%
+/- Benchmark	-0.88%	-0.50%	0.19%	-0.65%

Annual Performance	2022	2021	2020	2019	2018	2017
• VTIVX	-17.36%	16.16%	16.30%	24.94%	-7.90%	21.42%
• Benchmark	-15.84%	17.51%	13.66%	24.02%	-7.74%	19.56%
+/- Benchmark	-1.52%	-1.36%	2.64%	0.92%	-0.15%	1.86%
Peer Group Rank	31	66	37	41	38	24

5-Year Quarterly Performance	4Q21	3Q21	2Q21	1Q21
• VTIVX	5.49%	-1.08%	6.55%	4.47%
• Benchmark	6.04%	-0.75%	6.00%	5.33%
+/- Benchmark	-0.55%	-0.33%	0.55%	-0.86%

Rolling 5-Year Performance	01/2018 - 12/2022	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021
• VTIVX	5.14%	4.42%	6.80%	10.89%	13.55%	12.62%
• Benchmark	5.16%	4.27%	6.47%	10.51%	12.81%	11.93%
+/- Benchmark	-0.02%	0.15%	0.33%	0.38%	0.73%	0.69%
Peer Group Rank	27	24	23	30	35	32

5-Year Quarterly Performance	4Q20	3Q20	2Q20	1Q20
• VTIVX	13.90%	7.36%	18.70%	-19.88%
• Benchmark	14.02%	6.44%	17.29%	-20.15%
+/- Benchmark	-0.12%	0.93%	1.40%	0.28%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	-0.23	0.00	-0.04	0.00	0.13	0.00
Beta	1.00	1.00	1.01	1.00	1.01	1.00
Standard Deviation	18.64	18.52	16.33	16.17	13.04	12.83
Sharpe Ratio	0.24	0.26	0.31	0.31	0.62	0.61
Information Ratio	-0.17	-	-0.02	-	0.22	-
Treynor Ratio	2.88	3.12	3.77	3.82	7.42	7.30
Upside Capture Ratio	100.44	100.00	100.96	100.00	102.18	100.00
Downside Capture Ratio	101.42	100.00	101.28	100.00	101.81	100.00

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• VTIVX	8.00%	0.26%	3.51%	11.48%
• Benchmark	7.48%	0.53%	3.32%	11.10%
+/- Benchmark	0.52%	-0.28%	0.19%	0.38%

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• VTIVX	-11.78%	4.03%	0.94%	-0.58%
• Benchmark	-11.75%	3.81%	1.66%	-0.94%
+/- Benchmark	-0.03%	0.22%	-0.72%	0.36%

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™ Overall Morningstar Rating™ Standard Index Category Index Morningstar Cat
Silver **★★★★** **188 US Fund Target-Date** **US Fund Target-Date**
 02-24-2022 **188 US Fund Target-Date** **IGT Risk TR USD** **Morningstar Mod** **US Fund Target-Date**
 2045 **188 US Fund Target-Date** **TR USD** **Lifetime Mod 2045** **2045**

Performance 01-31-2023					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2021	4.47	6.55	-1.08	5.49	16.16
2022	-5.67	-13.93	-6.51	8.89	-17.36
2023	—	—	—	—	6.88
Trailing Returns					
	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-7.60	6.43	5.56	8.60	7.74
Std 12-31-2022	-17.36	—	5.14	8.34	7.40
Total Return	-7.60	6.43	5.56	8.60	7.74
+/- Std Index	-1.03	2.56	1.28	2.52	—
+/- Cat Index	-1.22	0.65	0.43	0.65	—
% Rank Cat	37	39	39	19	—
No. in Cat	212	188	167	99	—

	Subsidized	Unsubsidized
7-day Yield	—	—
30-day SEC Yield 02-07-23	2.07	2.07

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

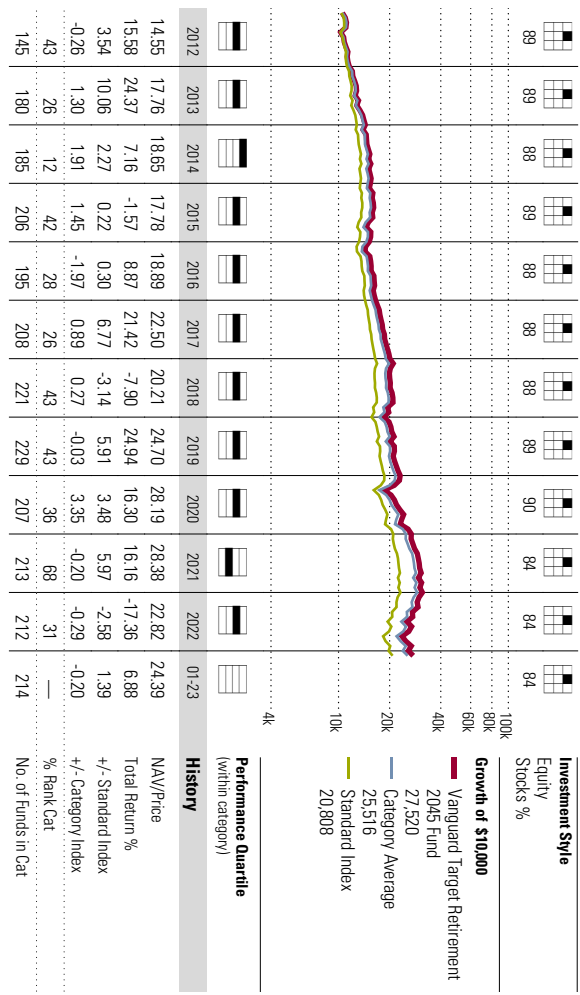
Fund Expenses	0.00
Management Fees %	0.00
12b1 Expense %	NA
Net Expense Ratio %	0.08
Gross Expense Ratio %	0.08

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

Standard Deviation	3 Yr	5 Yr	10 Yr
Mean	18.98	16.47	13.14
Sharpe Ratio	6.43	5.56	8.60
	0.37	0.33	0.63

MPT Statistics	Standard Index	Best Fit Index
Alpha	1.95	-0.09
Beta	1.34	0.93
R-Squared	98.60	99.60
12-Month Yield	1.98%	1.98%
Potential Cap Gains Exp	13.04%	13.04%

Operations	Vanguard
Family:	Multiple
Manager:	10.0 Years
Tenure:	Asset Allocation
Objective:	



Portfolio Analysis 01-31-2023					
Asset Allocation %	Net %	Long %	Short %	Share Clng	Share Holdings:
Cash	2.86	3.57	0.71	12-2022	11,104 Total Stocks, 15,222 Total Fixed-Income, 5% Turnover Ratio
US Stocks	49.95	49.95	0.00	⊕	177 mil Vanguard Total Stock Mkt Idx Instl
Non-US Stocks	34.29	34.29	0.00	⊕	1,260 mil Vanguard Total Intl Stock Index Inv
Bonds	12.87	12.88	0.01	⊖	625 mil Vanguard Total Bond Market II Idx
Other/Not Clsfd	0.04	0.04	0.00	⊕	97 mil Vanguard Total Intl Bd II Idx Instl
Total	100.00	100.72	0.72		

Equity Style	Portfolio Statistics	Part Avg Index	Rel Index	Rel Cat	Stocks %	Rel Std Index
Value	P/E Ratio TTM	15.6	1.03	1.01	35.1	0.86
Small Growth	P/C Ratio TTM	11.6	1.02	1.01	5.0	0.90
Large	P/B Ratio TTM	2.3	1.07	0.98	10.3	0.89
Mid	Geo Avg Mkt Cap	60110	1.37	0.97	16.3	0.98
Small					3.5	0.49

Fixed-Income Style	Avg Eff Maturity	Avg Eff Duration	Avg Wtd Coupon	Avg Wtd Price	Sensitive	41.1
High	8.83	6.75	2.48	—	Communication Services	6.4
Med	6.75	6.75	2.48	—	Energy	5.4
Low	2.48	2.48	—	—	Consumer Cyclical	5.4
	—	—	—	—	Financial Services	11.5
	—	—	—	—	Real Estate	17.9

Credit Quality Breakdown	12-31-2022	Bond %	Utilities	23.8
AAA	57.11	57.11	Consumer Defensive	7.4
AA	9.58	9.58	Healthcare	13.2
A	17.24	17.24	Utilities	3.1
BBB	15.27	15.27		
BB	0.00	0.00		
B	0.00	0.00		
Below B	0.44	0.44		
NR	0.36	0.36		

Regional Exposure	Stocks %	Rel Std Index	Defensive	1.05
Americas	63.3	1.08	Consumer Defensive	7.4
Greater Europe	17.9	0.98	Healthcare	13.2
Greater Asia	18.8	0.94	Utilities	3.1

Operations	USD	Purchase Constraints:
Base Currency:	USD	—
Ticker:	VTIVX	10-27-2003
SIIN:	US92202E6077	MFE
Minimum Initial Purchase:	\$1,000	Total Assets:
		\$65,129.80 mil

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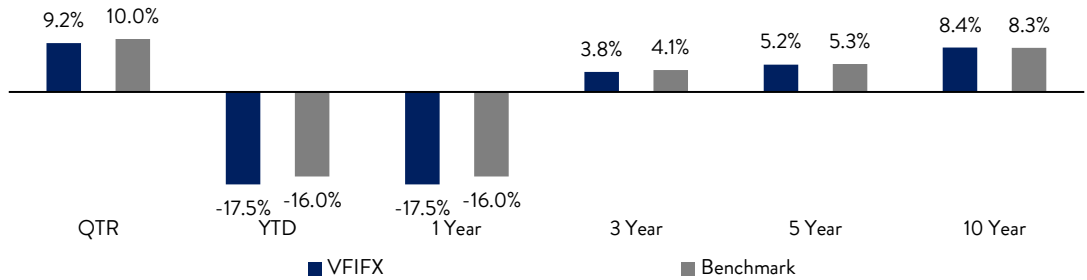
Vanguard Target Retirement 2050 Fund
VFIFX

Fund Fact Sheet
Data as of 12/31/2022

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	10.00 Years
Fund Size	\$52,646,988,158

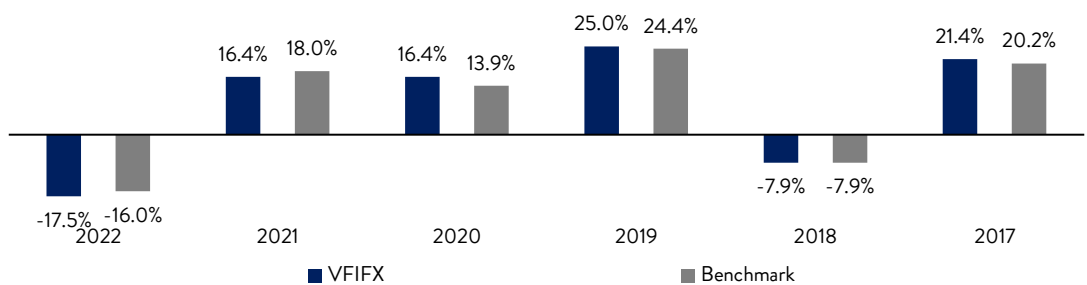
Trailing Performance



Fund Characteristics

	VFIFX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$60,248	-\$327
P/E Ratio (TTM)	15.63	0.08
P/B Ratio (TTM)	2.33	-0.05
Est. Dividend Yield	2.60%	0.06%

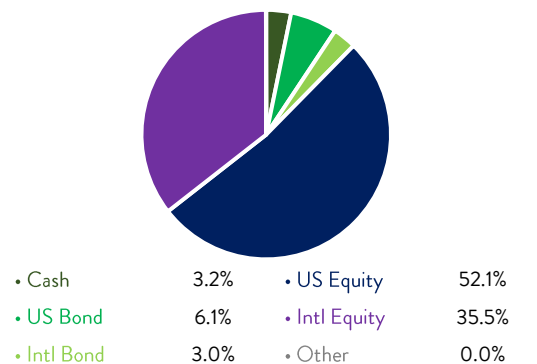
Annual Performance



Sector Allocations

Sector	VFIFX	Category	+/- Category
Materials	5.0%	4.5%	0.5%
Communication Services	6.4%	6.2%	0.2%
Consumer Discretionary	10.3%	10.8%	-0.5%
Consumer Staples	7.4%	7.0%	0.4%
Healthcare	13.2%	13.6%	-0.4%
Industrials	11.5%	10.9%	0.6%
Real Estate	3.5%	4.8%	-1.3%
Technology	17.9%	18.2%	-0.3%
Energy	5.4%	5.2%	0.2%
Financial Services	16.3%	15.7%	0.5%
Utilities	3.1%	3.1%	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 12/31/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VFIFX	9.23%	-17.46%	-17.46%	3.80%	5.18%	8.36%
• Benchmark	10.01%	-15.97%	-15.97%	4.12%	5.26%	8.33%
+/- Benchmark	-0.78%	-1.49%	-1.49%	-0.32%	-0.08%	0.03%
Peer Group Rank	43	29	29	32	27	20

5-Year Quarterly Performance	4Q22	3Q22	2Q22	1Q22
• VFIFX	9.23%	-6.64%	-14.21%	-5.65%
• Benchmark	10.01%	-6.07%	-14.39%	-5.02%
+/- Benchmark	-0.78%	-0.57%	0.17%	-0.63%

Annual Performance	2022	2021	2020	2019	2018	2017
• VFIFX	-17.46%	16.41%	16.39%	24.98%	-7.90%	21.39%
• Benchmark	-15.97%	17.99%	13.86%	24.35%	-7.94%	20.18%
+/- Benchmark	-1.49%	-1.58%	2.53%	0.63%	0.05%	1.22%
Peer Group Rank	29	69	38	47	35	32

5-Year Quarterly Performance	4Q21	3Q21	2Q21	1Q21
• VFIFX	5.63%	-1.11%	6.61%	4.53%
• Benchmark	6.20%	-0.80%	6.08%	5.57%
+/- Benchmark	-0.57%	-0.31%	0.52%	-1.04%

Rolling 5-Year Performance	01/2018 - 12/2022	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021
• VFIFX	5.18%	4.39%	6.81%	10.96%	13.62%	12.66%
• Benchmark	5.26%	4.35%	6.59%	10.72%	13.07%	12.19%
+/- Benchmark	-0.08%	0.04%	0.22%	0.24%	0.55%	0.47%
Peer Group Rank	27	24	24	33	40	38

5-Year Quarterly Performance	4Q20	3Q20	2Q20	1Q20
• VFIFX	14.01%	7.35%	18.67%	-19.86%
• Benchmark	14.40%	6.53%	17.61%	-20.56%
+/- Benchmark	-0.39%	0.82%	1.06%	0.70%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	-0.30	0.00	-0.06	0.00	0.06	0.00
Beta	0.99	1.00	0.99	1.00	1.00	1.00
Standard Deviation	18.82	18.89	16.47	16.51	13.12	13.15
Sharpe Ratio	0.25	0.26	0.31	0.31	0.62	0.61
Information Ratio	-0.24	-	-0.07	-	0.03	-
Treynor Ratio	2.96	3.27	3.86	3.92	7.58	7.51
Upside Capture Ratio	99.47	100.00	99.71	100.00	100.01	100.00
Downside Capture Ratio	100.66	100.00	100.02	100.00	99.83	100.00

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• VFIFX	8.01%	0.29%	3.47%	11.50%
• Benchmark	7.65%	0.47%	3.32%	11.28%
+/- Benchmark	0.36%	-0.18%	0.16%	0.22%

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• VFIFX	-11.79%	4.02%	0.94%	-0.55%
• Benchmark	-12.05%	3.87%	1.72%	-0.94%
+/- Benchmark	0.26%	0.15%	-0.78%	0.38%

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™ Overall Morningstar Rating™ Standard Index Category Index Morningstar Cat
Silver **★★★★** **★★★★** **★★★★** **★★★★**
 02-24-2022 189 US Fund Target-Date Tgt Risk TR USD Lifetime Mod 2050 2050
 2050 TR USD

Performance 01-31-2023

Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2021	4.53	6.61	-1.11	5.63	16.41
2022	-5.65	-14.21	-6.64	9.23	-17.46
2023	—	—	—	—	7.06

Trailing Returns

	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-7.51	6.56	5.64	8.64	7.20
Std 12-31-2022	-17.46	—	5.18	8.36	6.79
Total Return	-7.51	6.56	5.64	8.64	7.20
+/- Std Index	-0.93	2.69	1.35	2.56	—
+/- Cat Index	-1.47	0.55	0.45	0.70	—
% Rank Cat	32	39	41	21	—
No. in Cat	213	189	170	96	—

7-day Yield — Subsidized
 30-day SEC Yield 02-07-23 2.07 2.07

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.

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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

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

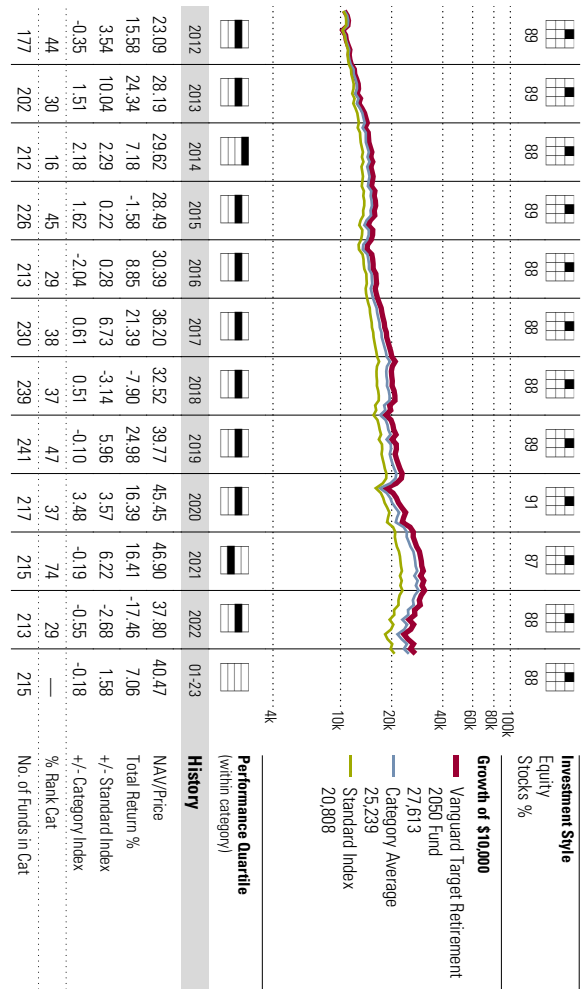
Risk and Return Profile

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

Standard Deviation 19.18 16.62 13.23
 Mean 6.56 5.64 8.64
 Sharpe Ratio 0.38 0.33 0.63

MPT Statistics Standard Index Best Fit Index
 Alpha 2.05 0.00 USD
 Beta 1.35 0.94
 R-Squared 98.88 99.62
 12-Month Yield 1.98%
 Potential Cap Gains Exp 9.24%

Operations
 Family: Vanguard
 Manager: Multiple
 Tenure: 10.0 Years
 Objective: Asset Allocation



Portfolio Analysis 01-31-2023

Asset Allocation %

Asset Class	Net %	Long %	Short %
Cash	2.74	3.24	0.50
US Stocks	52.35	52.35	0.00
Non-US Stocks	35.69	35.69	0.00
Bonds	9.17	9.18	0.01
Other/Not Cstfd	0.04	0.04	0.00
Total	100.00	100.51	0.51

Equity Style

Value	Brand	Growth	Port	Rel	Rel	
Large	Mid	Ext	Index	Index	Cat	
■	■	■	15.6	1.03	1.00	
■	■	■	11.6	1.02	1.00	
■	■	■	2.3	1.07	0.98	
■	■	■	Geo Avg Mkt Cap	60248	1.37	0.99

Portfolio Statistics

P/E Ratio TTM	8.83
P/C Ratio TTM	6.74
P/B Ratio TTM	2.49
Geo Avg Mkt Cap	60248

Fixed-Income Style

Value	Brand	Growth	Port	Rel	Rel
Large	Mid	Ext	Index	Index	Cat
■	■	■	8.83	8.83	—
■	■	■	6.74	6.74	—
■	■	■	2.49	2.49	—

Credit Quality Breakdown 12-31-2022

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

Regional Exposure

Region	Stocks %	Rel Std Index
Americas	63.5	1.08
Greater Europe	17.8	0.97
Greater Asia	18.7	0.93

NAV/Price 40.47
Total Return % -17.46
+/- Standard Index -2.68
+/- Category Index -0.55
% Rank Cat 29
No. of Funds in Cat 215

Net Assets

Share Cng	Share	Holdings	Net Assets %
since 12-2022	Amount	4% Turnover Ratio	
⊕	150 mil	Vanguard Total Stock Mkt Idx Instl	53.14
⊖	1,059 mil	Vanguard Total Intl Stock Index Inv	36.34
⊕	365 mil	Vanguard Total Bond Market II Idx	6.68
⊕	54 mil	Vanguard Total Intl Bd II Idx Instl	2.69

Sector Weightings

Sector	Stocks %	Rel Std Index
Cyclical	35.1	0.86
Basic Materials	5.0	0.90
Consumer Cyclical	10.3	0.89
Financial Services	16.3	0.98
Real Estate	3.5	0.49
Sensitive	41.1	1.13
Communication Services	6.4	1.17
Energy	5.4	1.04
Industrials	11.5	1.00
Technology	17.9	1.25
Defensive	23.8	1.06
Consumer Defensive	7.4	1.05
Healthcare	13.2	1.10
Utilities	3.1	0.91

Base Currency: USD
Minimum Initial Purchase: \$1,000

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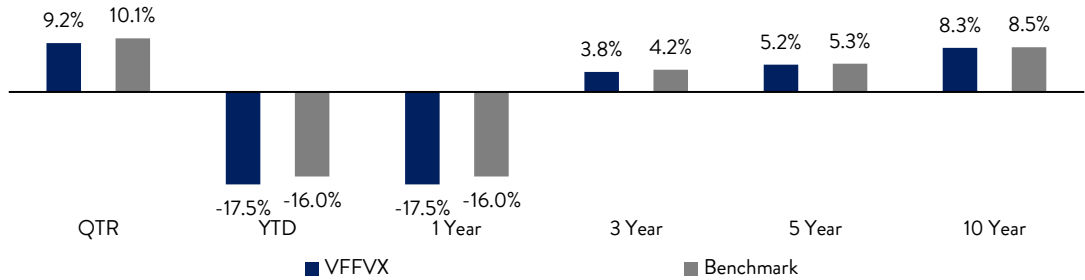
Vanguard Target Retirement 2055 Fund
VFFVX

Fund Fact Sheet
Data as of 12/31/2022

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	10.00 Years
Fund Size	\$32,934,026,341

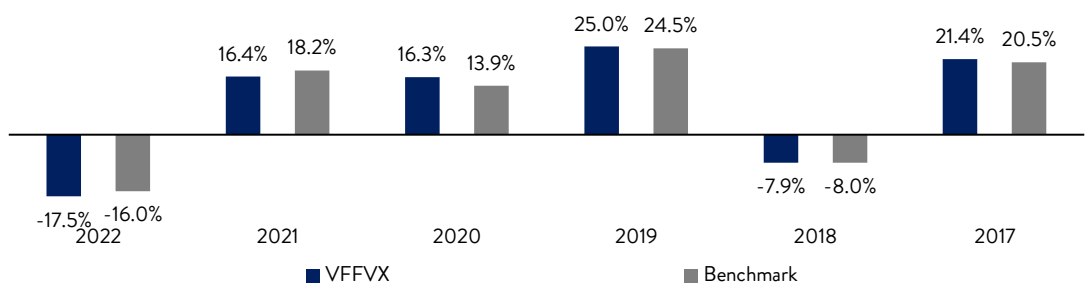
Trailing Performance



Fund Characteristics

	VFFVX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$60,308	\$8
P/E Ratio (TTM)	15.63	0.29
P/B Ratio (TTM)	2.33	0.00
Est. Dividend Yield	2.60%	0.02%

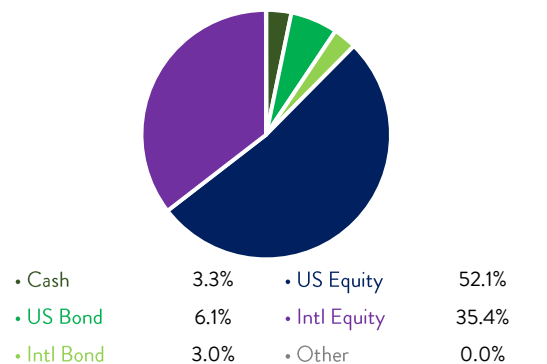
Annual Performance



Sector Allocations

	VFFVX	Category	+/- Category
Materials	5.0%	4.7%	0.3%
Communication Services	6.4%	6.3%	0.0%
Consumer Discretionary	10.3%	10.7%	-0.4%
Consumer Staples	7.4%	6.9%	0.5%
Healthcare	13.2%	13.4%	-0.2%
Industrials	11.5%	10.8%	0.7%
Real Estate	3.5%	4.9%	-1.4%
Technology	17.9%	18.0%	-0.2%
Energy	5.4%	5.3%	0.1%
Financial Services	16.3%	15.8%	0.5%
Utilities	3.1%	3.1%	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 12/31/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VFFVX	9.23%	-17.46%	-17.46%	3.79%	5.18%	8.34%
• Benchmark	10.11%	-15.97%	-15.97%	4.18%	5.31%	8.46%
+/- Benchmark	-0.88%	-1.49%	-1.49%	-0.39%	-0.14%	-0.12%
Peer Group Rank	47	25	25	36	29	25

5-Year Quarterly Performance	4Q22	3Q22	2Q22	1Q22
• VFFVX	9.23%	-6.63%	-14.19%	-5.69%
• Benchmark	10.11%	-6.07%	-14.47%	-5.01%
+/- Benchmark	-0.88%	-0.55%	0.27%	-0.67%

Annual Performance	2022	2021	2020	2019	2018	2017
• VFFVX	-17.46%	16.44%	16.32%	24.98%	-7.89%	21.38%
• Benchmark	-15.97%	18.19%	13.86%	24.48%	-7.97%	20.48%
+/- Benchmark	-1.49%	-1.75%	2.46%	0.49%	0.09%	0.90%
Peer Group Rank	25	74	42	48	32	41

5-Year Quarterly Performance	4Q21	3Q21	2Q21	1Q21
• VFFVX	5.65%	-1.11%	6.61%	4.54%
• Benchmark	6.22%	-0.80%	6.15%	5.67%
+/- Benchmark	-0.57%	-0.30%	0.46%	-1.13%

Rolling 5-Year Performance	01/2018 - 12/2022	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021
• VFFVX	5.18%	4.38%	6.80%	10.95%	13.61%	12.65%
• Benchmark	5.31%	4.39%	6.64%	10.80%	13.18%	12.33%
+/- Benchmark	-0.14%	-0.01%	0.16%	0.15%	0.43%	0.32%
Peer Group Rank	29	28	27	38	44	41

5-Year Quarterly Performance	4Q20	3Q20	2Q20	1Q20
• VFFVX	13.97%	7.38%	18.64%	-19.89%
• Benchmark	14.56%	6.62%	17.76%	-20.84%
+/- Benchmark	-0.59%	0.76%	0.88%	0.95%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	-0.35	0.00	-0.09	0.00	0.00	0.00
Beta	0.99	1.00	0.99	1.00	0.98	1.00
Standard Deviation	18.83	19.06	16.46	16.65	13.11	13.30
Sharpe Ratio	0.24	0.26	0.31	0.31	0.62	0.62
Information Ratio	-0.28	-	-0.12	-	-0.12	-
Treynor Ratio	2.98	3.33	3.88	3.97	7.65	7.64
Upside Capture Ratio	98.52	100.00	98.81	100.00	98.53	100.00
Downside Capture Ratio	99.85	100.00	99.19	100.00	98.53	100.00

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• VFFVX	8.02%	0.27%	3.48%	11.50%
• Benchmark	7.73%	0.46%	3.34%	11.31%
+/- Benchmark	0.29%	-0.19%	0.14%	0.20%

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• VFFVX	-11.76%	3.99%	0.95%	-0.56%
• Benchmark	-12.10%	3.88%	1.70%	-0.91%
+/- Benchmark	0.34%	0.11%	-0.76%	0.35%

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™ Overall Morningstar Rating™ Standard Index Category Index Morningstar Cat
Silver **★★★★** **188 US Fund Target-Date** **US Fund Target-Date**
 02-24-2022 **188 US Fund Target-Date** **IGT Risk TR USD** **Morningstar Mod** **US Fund Target-Date**
 2055 **2055** **TR USD** **Lifetime Mod 2055** **2055**

Performance 01-31-2023

Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2021	4.54	6.61	-1.11	5.65	16.44
2022	-5.69	-14.19	-6.63	9.23	-17.46
2023	—	—	—	—	7.07

Trailing Returns

	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-7.48	6.54	5.63	8.63	9.51
Std 12-31-2022	-17.46	—	5.18	8.34	8.97
Total Return	-7.48	6.54	5.63	8.63	9.51
+/- Std Index	-0.90	2.67	1.35	2.55	—
+/- Cat Index	-1.49	0.53	0.50	0.76	—
% Rank Cat	31	46	45	27	—
No. in Cat	212	188	167	81	—

7-day Yield — Subsidized — Unsubsidized —
 30-day SEC Yield 02-07-23 2.07 2.07

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**

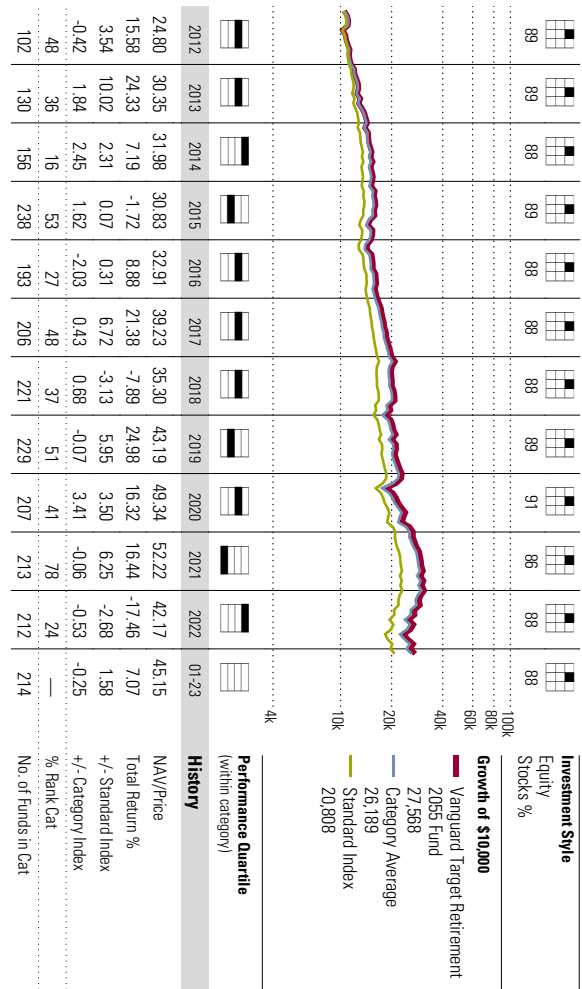
Risk and Return Profile

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

Standard Deviation 3 Yr 19.19 5 Yr 16.61 10 Yr 13.22
 Mean 6.54 5.63 8.63
 Sharpe Ratio 0.38 0.33

MPT Statistics Standard Index Best Fit Index
 Alpha 2.04 -0.02 USD
 Beta 1.35 0.94
 R-Squared 98.89 99.63
 12-Month Yield 1.96%
 Potential Cap Gains Exp 2.34%

Operations
 Family: Vanguard
 Manager: Multiple
 Tenure: 10.0 Years
 Objective: Asset Allocation



Portfolio Analysis 01-31-2023

Asset Allocation %

Asset Class	Net %	Long %	Short %
Cash	2.77	3.27	0.50
US Stocks	52.38	52.38	0.00
Non-US Stocks	35.60	35.60	0.00
Bonds	9.20	9.21	0.01
Other/Not Cstfd	0.04	0.04	0.00
Total	100.00	100.51	0.51

Equity Style

Value	Brand	Growth	Port	Rel	Rel
Large	Mid	Ext	Index	Index	Cat
High	Med	Ext	High	Med	Low
Low	Med	Small	High	Med	Low

Portfolio Statistics

Metric	Value
P/E Ratio TTM	15.6
P/C Ratio TTM	11.7
P/B Ratio TTM	2.3
Geo Avg Mkt Cap	60308
Avg Eff Maturity	8.83
Avg Eff Duration	6.74
Avg Wtd Coupon	2.49
Avg Wtd Price	—

Fixed-Income Style

Metric	Value
Credit Quality Breakdown 12-31-2022	AAA 57.58
AA 9.35	
A 17.06	
BBB 15.22	
BB 0.00	
B 0.00	
Below B 0.42	
NR 0.36	

Regional Exposure

Region	Stocks %	Rel Std Index
Americas	63.6	1.08
Greater Europe	17.8	0.97
Greater Asia	18.6	0.93

Base Currency: USD
Minimum Initial Purchase: \$1,000

Sector Weightings

Sector	Weighting %	Rel Std Index
Cyclical	35.1	0.86
Basic Materials	5.0	0.90
Consumer Cyclical	10.3	0.88
Financial Services	16.3	0.98
Real Estate	3.5	0.49
Sensitive	41.1	1.13
Communication Services	6.4	1.17
Energy	5.4	1.04
Industrials	11.5	1.00
Technology	17.9	1.25
Defensive	23.8	1.06
Consumer Defensive	7.4	1.05
Healthcare	13.2	1.10
Utilities	3.1	0.91

Performance Quartile (within category)

History

Metric	Value
NAV/Price	43.19
Total Return %	24.98
+/- Standard Index	3.50
+/- Category Index	-0.07
% Rank Cat	51
No. of Funds in Cat	207

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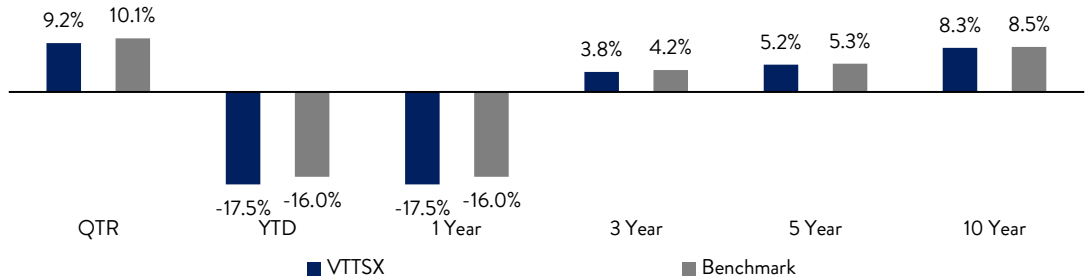
Vanguard Target Retirement 2060 Fund
VTTSX

Fund Fact Sheet
Data as of 12/31/2022

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	10.00 Years
Fund Size	\$16,773,267,087

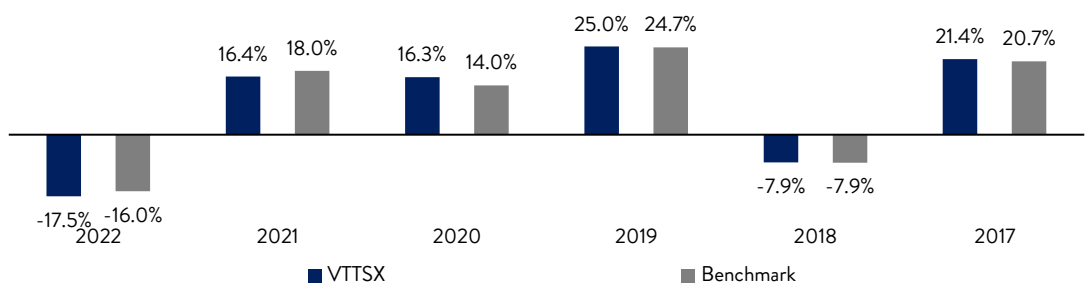
Trailing Performance



Fund Characteristics

	VTTSX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$60,476	-\$1,620
P/E Ratio (TTM)	15.65	0.09
P/B Ratio (TTM)	2.34	-0.05
Est. Dividend Yield	2.60%	0.05%

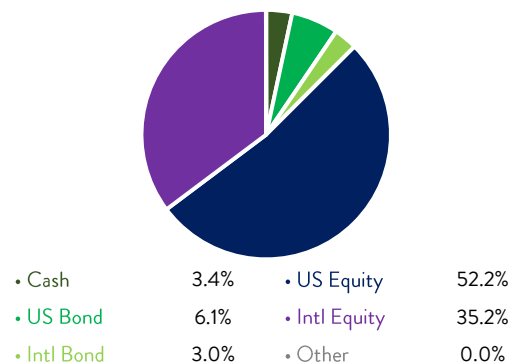
Annual Performance



Sector Allocations

	VTTSX	Category	+/- Category
Materials	5.0%	4.7%	0.3%
Communication Services	6.4%	6.4%	0.0%
Consumer Discretionary	10.3%	10.9%	-0.6%
Consumer Staples	7.4%	7.0%	0.4%
Healthcare	13.3%	13.8%	-0.5%
Industrials	11.5%	10.8%	0.6%
Real Estate	3.5%	4.6%	-1.1%
Technology	17.9%	18.0%	-0.1%
Energy	5.4%	5.3%	0.1%
Financial Services	16.3%	15.5%	0.8%
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 2060 Fund
VTTSX

Fund Fact Sheet
Data as of 12/31/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VTTSX	9.23%	-17.46%	-17.46%	3.79%	5.18%	8.34%
• Benchmark	10.12%	-16.01%	-16.01%	4.16%	5.35%	8.50%
+/- Benchmark	-0.89%	-1.45%	-1.45%	-0.38%	-0.17%	-0.17%
Peer Group Rank	52	24	24	38	33	1

5-Year Quarterly Performance	4Q22	3Q22	2Q22	1Q22
• VTTSX	9.23%	-6.64%	-14.19%	-5.68%
• Benchmark	10.12%	-6.09%	-14.48%	-5.02%
+/- Benchmark	-0.89%	-0.54%	0.29%	-0.66%

Annual Performance	2022	2021	2020	2019	2018	2017
• VTTSX	-17.46%	16.44%	16.32%	24.96%	-7.87%	21.36%
• Benchmark	-16.01%	18.05%	13.99%	24.73%	-7.95%	20.75%
+/- Benchmark	-1.45%	-1.60%	2.33%	0.23%	0.08%	0.61%
Peer Group Rank	24	76	43	56	29	42

5-Year Quarterly Performance	4Q21	3Q21	2Q21	1Q21
• VTTSX	5.66%	-1.11%	6.61%	4.54%
• Benchmark	6.21%	-0.83%	6.12%	5.61%
+/- Benchmark	-0.55%	-0.29%	0.48%	-1.07%

Rolling 5-Year Performance	01/2018 - 12/2022	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021
• VTTSX	5.18%	4.38%	6.79%	10.95%	13.61%	12.64%
• Benchmark	5.35%	4.44%	6.70%	10.87%	13.28%	12.46%
+/- Benchmark	-0.17%	-0.06%	0.09%	0.08%	0.32%	0.18%
Peer Group Rank	33	29	31	42	48	48

5-Year Quarterly Performance	4Q20	3Q20	2Q20	1Q20
• VTTSX	13.96%	7.39%	18.61%	-19.86%
• Benchmark	14.56%	6.61%	17.93%	-20.86%
+/- Benchmark	-0.59%	0.77%	0.68%	0.99%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	-0.33	0.00	-0.11	0.00	-0.01	0.00
Beta	0.98	1.00	0.98	1.00	0.98	1.00
Standard Deviation	18.81	19.09	16.45	16.70	13.11	13.36
Sharpe Ratio	0.24	0.26	0.31	0.32	0.62	0.62
Information Ratio	-0.26	-	-0.14	-	-0.16	-
Treynor Ratio	2.99	3.31	3.90	4.00	7.69	7.69
Upside Capture Ratio	98.37	100.00	98.34	100.00	98.00	100.00
Downside Capture Ratio	99.62	100.00	98.78	100.00	98.00	100.00

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• VTTSX	8.02%	0.28%	3.48%	11.48%
• Benchmark	7.81%	0.45%	3.37%	11.42%
+/- Benchmark	0.20%	-0.18%	0.12%	0.06%

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• VTTSX	-11.77%	4.00%	0.93%	-0.52%
• Benchmark	-12.22%	3.97%	1.77%	-0.90%
+/- Benchmark	0.45%	0.02%	-0.84%	0.38%

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Vanguard Target Retirement 2060 Fund (USD)

Morningstar Analyst Rating™ Overall Morningstar Rating™ Standard Index Category Index Morningstar Cat
Silver **★★★★** **183 US Fund Target-Date** **US Fund Target-Date**
 02-24-2022 **Tgt Risk TR USD** **Lifetime Mod 2060 2060**

Performance 01-31-2023

Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2021	4.54	6.61	-1.11	5.66	16.44
2022	-5.68	-14.19	-6.64	9.23	-17.46
2023	—	—	—	—	7.06

Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-7.50	6.54	5.63	8.62	9.19
Std 12-31-2022	-17.46	—	5.18	8.34	8.59
Total Return	-7.50	6.54	5.63	8.62	9.19
+/- Std Index	-0.92	2.67	1.34	2.54	—
+/- Cat Index	-1.50	0.58	0.57	0.85	—
% Rank Cat	33	48	47	1	—
No. in Cat	212	183	157	1	—

7-day Yield	Subsidized	Unsubsidized
30-day SEC Yield 02-07-23	2.07	2.07

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

Management Fees %	0.00
12b1 Expense %	NA

Net Expense Ratio % **0.08**
Gross Expense Ratio % **0.08**

Risk and Return Profile

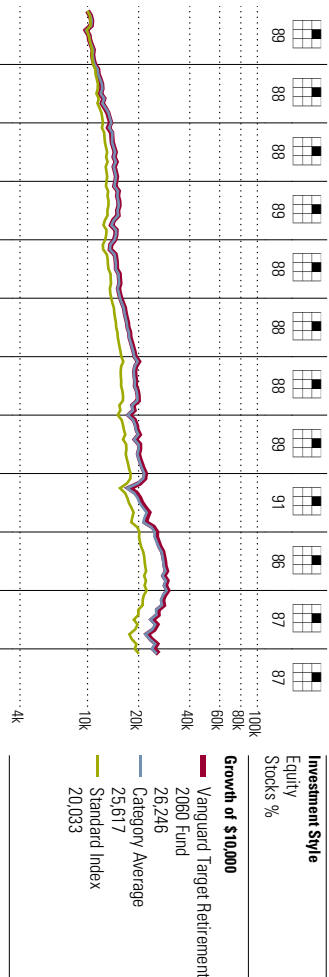
Morningstar Rating™	3 Yr	5 Yr	10 Yr
Morningstar Risk	3★	3★	—
Morningstar Return	-Avg	-Avg	Avg

Standard Deviation	3 Yr	5 Yr	10 Yr
Mean	19.16	16.60	13.22
Sharpe Ratio	6.54	5.63	8.62
	0.38	0.33	0.63

MFT Statistics

Alpha	2.04
Beta	1.35
R-Squared	98.88
12-Month Yield	1.96%
Potential Cap Gains Exp	-2.09%

Operations
 Family: Vanguard
 Manager: Multiple
 Tenure: 10.0 Years
 Objective: Asset Allocation



Portfolio Analysis 01-31-2023

Asset Allocation %	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	01-23
Cash	21.81	26.75	28.20	27.21	29.04	34.63	31.18	38.16	43.59	48.04	38.83	41.57
US Stocks	—	24.35	7.16	-1.68	8.84	21.36	-7.87	24.96	16.32	16.44	-17.46	7.06
Non-US Stocks	—	10.04	2.27	0.11	0.27	6.70	-3.11	5.93	3.50	6.25	-2.68	1.57
Bonds	—	2.17	2.63	1.80	-2.03	0.30	0.82	0.00	3.43	0.12	-0.48	-0.31
Other/Not Cstfd	—	1	1	71	21	53	34	66	42	81	25	—
Total	1	1	9	43	106	160	201	216	257	208	212	214

Net % Long % Short %

Net %	Long %	Short %
Cash	2.87	3.98
US Stocks	52.51	52.51
Non-US Stocks	35.38	35.38
Bonds	9.20	9.21
Other/Not Cstfd	0.04	0.04
Total	100.00	100.52

Equity Style

Value	Brand	Growth	P/E Ratio TTM	P/C Ratio TTM	P/B Ratio TTM	Geo Avg Mkt Cap
Large	High	High	15.6	1.04	1.01	156
Mid	Med	Med	11.7	1.02	1.01	11.7
Small	Low	Low	2.3	1.08	0.98	2.3
			60476	1.38	0.97	60476

Fixed-Income Style

Value	Brand	Growth	Avg Eff Maturity	Avg Eff Duration	Avg Wtd Coupon	Geo Avg Mkt Price
High	High	High	8.83	6.74	2.49	8.83
Med	Med	Med	6.74	6.74	2.49	6.74
Low	Low	Low	2.49	2.49	—	2.49

Credit Quality Breakdown 12-31-2022

AAA	AA	A	BBB	BB	B	Below B	NR
57.55	9.37	17.08	15.23	0.00	0.00	0.42	0.36

Regional Exposure

Americas	Greater Europe	Greater Asia
63.7	17.7	18.5

Operations
 Base Currency: USD
 Ticker: VTISSX
 SIIN: US92202E8396
 Minimum Initial Purchase: \$1,000

Purchase Constraints:
 Incept: 01-19-2012
 Type: MF
 Total Assets: \$16,773.27 mil

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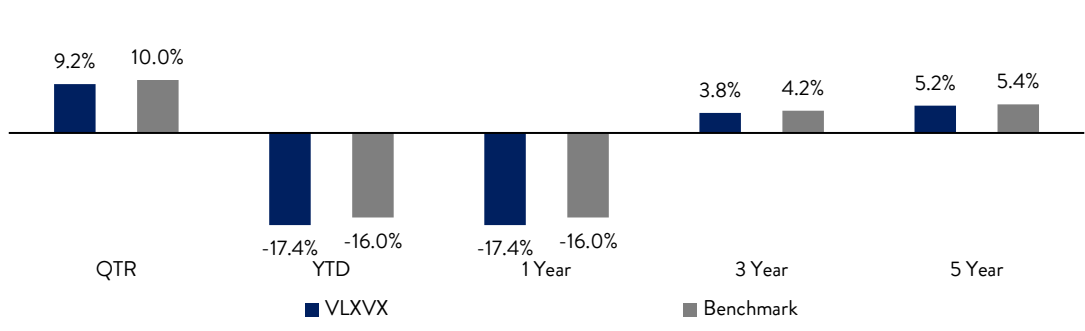
Vanguard Target Retirement 2065 Fund
VLXVX

Fund Fact Sheet
Data as of 12/31/2022

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	5.58 Years
Fund Size	\$4,007,075,402

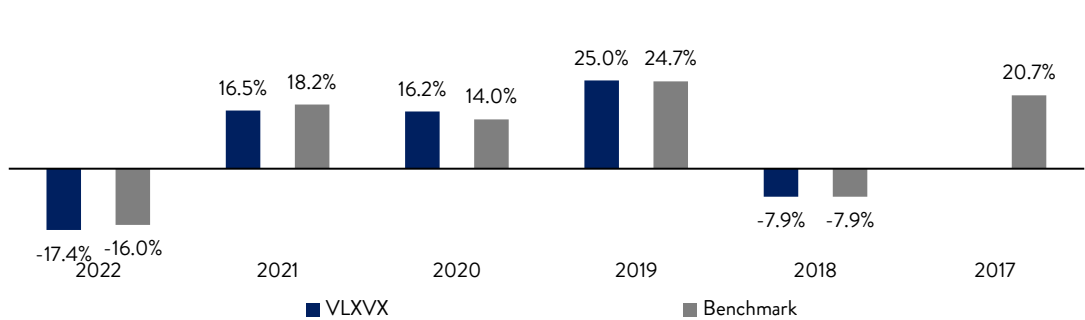
Trailing Performance



Fund Characteristics

	VLXVX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$60,710	\$1,542
P/E Ratio (TTM)	15.67	0.58
P/B Ratio (TTM)	2.34	0.05
Est. Dividend Yield	2.59%	-0.05%

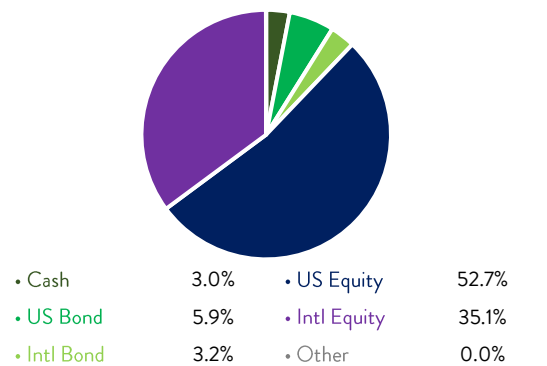
Annual Performance



Sector Allocations

	VLXVX	Category	+/- Category
Materials	5.0%	4.9%	0.1%
Communication Services	6.4%	6.4%	0.0%
Consumer Discretionary	10.3%	10.8%	-0.5%
Consumer Staples	7.4%	7.2%	0.2%
Healthcare	13.3%	13.3%	0.0%
Industrials	11.5%	11.1%	0.4%
Real Estate	3.5%	4.1%	-0.5%
Technology	17.9%	18.2%	-0.2%
Energy	5.4%	5.4%	0.0%
Financial Services	16.2%	15.8%	0.5%
Utilities	3.1%	3.0%	0.2%
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 12/31/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VLXVX	9.24%	-17.39%	-17.39%	3.78%	5.15%	-
• Benchmark	10.03%	-15.95%	-15.95%	4.22%	5.38%	-
+/- Benchmark	-0.79%	-1.44%	-1.44%	-0.45%	-0.23%	-
Peer Group Rank	51	18	18	31	22	-

5-Year Quarterly Performance	4Q22	3Q22	2Q22	1Q22
• VLXVX	9.24%	-6.60%	-14.20%	-5.63%
• Benchmark	10.03%	-6.04%	-14.44%	-4.98%
+/- Benchmark	-0.79%	-0.56%	0.24%	-0.65%

Annual Performance	2022	2021	2020	2019	2018	2017
• VLXVX	-17.39%	16.46%	16.17%	24.96%	-7.95%	-
• Benchmark	-15.95%	18.17%	13.99%	24.73%	-7.95%	20.75%
+/- Benchmark	-1.44%	-1.71%	2.18%	0.23%	0.00%	-
Peer Group Rank	18	66	56	57	1	-

5-Year Quarterly Performance	4Q21	3Q21	2Q21	1Q21
• VLXVX	5.66%	-1.11%	6.61%	4.55%
• Benchmark	6.25%	-0.80%	6.16%	5.61%
+/- Benchmark	-0.59%	-0.31%	0.44%	-1.06%

Rolling 5-Year Performance	01/2018 - 12/2022	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021
• VLXVX	5.15%	4.36%	-	-	-	-
• Benchmark	5.38%	4.50%	6.75%	10.91%	13.30%	12.47%
+/- Benchmark	-0.23%	-0.13%	-	-	-	-
Peer Group Rank	22	50	-	-	-	-

5-Year Quarterly Performance	4Q20	3Q20	2Q20	1Q20
• VLXVX	13.95%	7.36%	18.59%	-19.92%
• Benchmark	14.56%	6.61%	17.93%	-20.86%
+/- Benchmark	-0.61%	0.74%	0.66%	0.94%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	-0.40	0.00	-0.17	0.00	-	-
Beta	0.98	1.00	0.98	1.00	-	-
Standard Deviation	18.82	19.08	16.46	16.69	-	-
Sharpe Ratio	0.24	0.27	0.31	0.32	-	-
Information Ratio	-0.33	-	-0.20	-	-	-
Treynor Ratio	2.97	3.37	3.87	4.04	-	-
Upside Capture Ratio	98.31	100.00	98.28	100.00	-	-
Downside Capture Ratio	99.82	100.00	98.97	100.00	-	-

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• VLXVX	8.00%	0.27%	3.52%	11.47%
• Benchmark	7.81%	0.45%	3.37%	11.42%
+/- Benchmark	0.19%	-0.19%	0.16%	0.06%

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• VLXVX	-11.77%	3.95%	0.97%	-0.60%
• Benchmark	-12.22%	3.97%	1.77%	-0.90%
+/- Benchmark	0.45%	-0.03%	-0.80%	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 (USD)

Morningstar Analyst Rating™ Overall Morningstar Rating™ Standard Index Category Index Morningstar Cat
Silver **2065+** **52 US Fund Target-Date** **Morningstar Mod** **US Fund Target-Date**
 02-24-2022 **Tgt Risk TR USD** **Lifetime Mod 2060** **2065+**
 TR USD

Performance 01-31-2023

Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2021	4.55	6.61	-1.11	5.66	16.46
2022	-5.63	-14.20	-6.60	9.24	-17.39
2023	—	—	—	—	7.04

Trailing Returns

	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-7.46	6.51	5.61	—	7.63
Std 12-31-2022	-17.39	—	5.15	—	6.42
Total Return	-7.46	6.51	5.61	—	7.63
+/- Std Index	-0.88	2.64	1.32	—	—
+/- Cat Index	-1.46	0.55	0.56	—	—
% Rank Cat	25	65	49	—	—
No. in Cat	162	52	14	—	—

7-day Yield Subsidized Unsubsidized

30-day SEC Yield 01-31-23 2.06 2.06

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

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★	—	—
Morningstar Risk	-Avg	—	—
Morningstar Return	Avg	—	—

Standard Deviation 3 Yr 5 Yr 10 Yr

Mean 19.18 16.61 —

Sharpe Ratio 6.51 5.61 —

0.38 0.33 —

MPT Statistics Standard Index Best Fit Index

Alpha 2.01 -0.04 USD

Beta 1.35 0.94 —

R-Squared 98.66 99.63 —

12-Month Yield 1.87% -11.77%

Potential Cap Gains Exp — — —

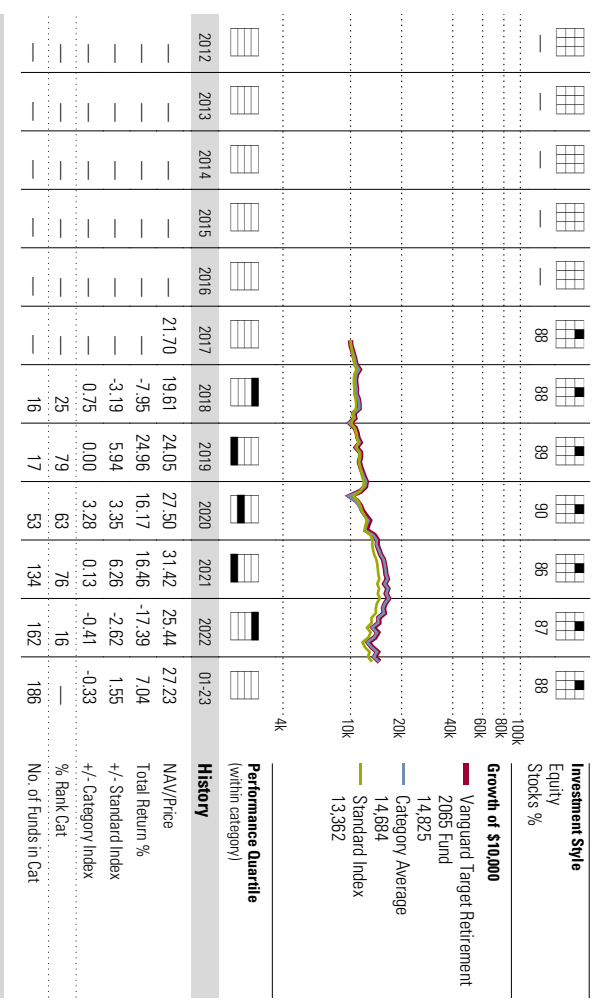
Operations

Family: Vanguard

Manager: Multiple

Tenure: 5.6 Years

Objective: Asset Allocation



Portfolio Analysis 01-31-2023

Asset Allocation %

Asset Class	Net %	Long %	Short %
Cash	2.52	3.06	0.54
US Stocks	53.01	53.01	0.00
Non-US Stocks	35.30	35.30	0.00
Bonds	9.13	9.14	0.01
Other/Not Cstfd	0.04	0.04	0.00
Total	100.00	100.55	0.55

Equity Style

Value	Brand	Growth	Port	Rel	Rel
Large	Mid	Ext	Index	Index	Cat
High	High	High	15.7	1.04	1.04
Med	Med	Med	11.7	1.02	1.04
Small	Small	Small	2.3	1.08	1.02
			60710	1.38	1.03

Fixed-Income Style

Value	Brand	Growth	Port	Rel	Rel
Large	Mid	Ext	Index	Index	Cat
High	High	High	8.83	6.76	6.76
Med	Med	Med	2.47	2.47	—
Low	Low	Low	—	—	—

Credit Quality Breakdown 12-31-2022

Rating	Bond %
AAA	56.28
AA	9.98
A	17.56
BBB	15.36
BB	0.00
B	0.00
Below B	0.46
NR	0.36

Regional Exposure

Region	Stocks %	Rel Std Index
Americas	64.0	1.04
Greater Europe	17.6	0.96
Greater Asia	18.4	0.92

Base Currency: USD

Ticker: VLXV

SIN: US92202E6804

Minimum Initial Purchase: \$1,000

Share Clng

Share since	Share Amount	Holdings: 11,109 Total Stocks, 14,205 Total Fixed-Income, 2% Turnover Ratio	Net Assets %
12-2022	12 mil	Vanguard Total Stock Mkt Idx Instl	53.81
+	80 mil	Vanguard Total Intl Stock Index Inv	35.92
+	27 mil	Vanguard Total Bond Market II Idx	6.40
+	4 mil	Vanguard Total Intl Bd II Idx Instl	2.93

Sector Weightings

Sector	Stocks %	Rel Std Index
Cyclical	35.0	0.85
Basic Materials	5.0	0.89
Consumer Cyclical	10.3	0.88
Financial Services	16.2	0.98
Real Estate	3.5	0.49
Sensitive	41.2	1.13
Communication Services	6.4	1.17
Energy	5.4	1.04
Industrials	11.5	1.00
Technology	17.9	1.25
Defensive	23.8	1.06
Consumer Defensive	7.4	1.05
Healthcare	13.3	1.10
Utilities	3.1	0.91

Purchase Constraints: —

Incept: 07-12-2017

Type: MF

Total Assets: \$4,007.08 mil

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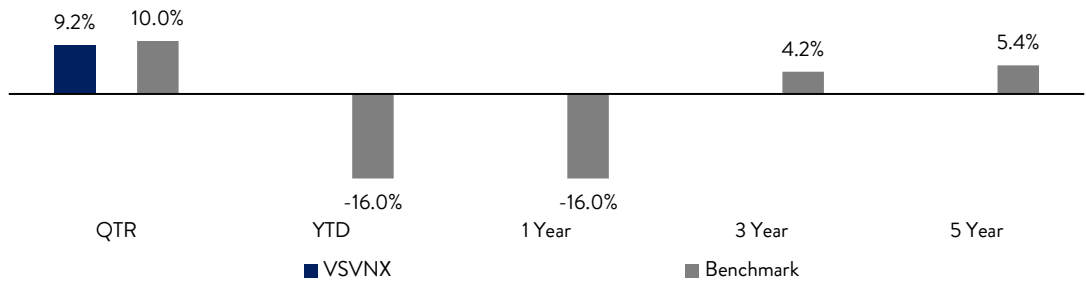
Vanguard Target Retirement 2070 Fund
VSVNX

Fund Fact Sheet
Data as of 12/31/2022

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	0.67 Years
Fund Size	\$99,011,779

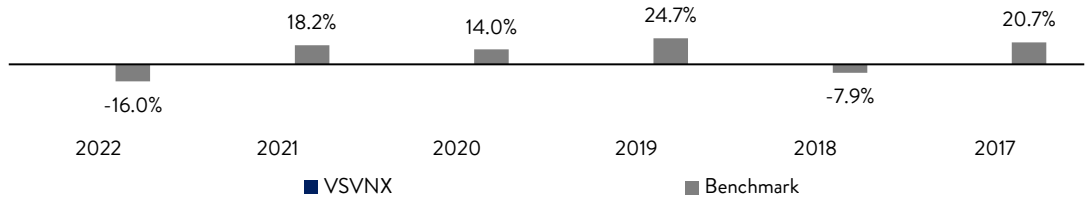
Trailing Performance



Fund Characteristics

	VSVNX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$60,709	\$1,541
P/E Ratio (TTM)	15.69	0.61
P/B Ratio (TTM)	2.34	0.04
Est. Dividend Yield	2.56%	-0.08%

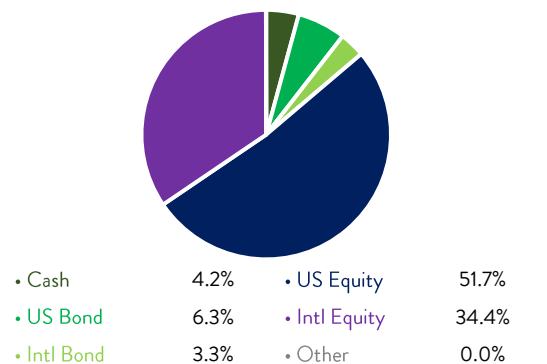
Annual Performance



Sector Allocations

	VSVNX	Category	+/- Category
Materials	5.1%	4.9%	0.2%
Communication Services	6.7%	6.4%	0.3%
Consumer Discretionary	10.9%	10.8%	0.2%
Consumer Staples	7.0%	7.2%	-0.2%
Healthcare	12.4%	13.3%	-0.8%
Industrials	11.3%	11.1%	0.2%
Real Estate	3.6%	4.1%	-0.5%
Technology	18.6%	18.2%	0.4%
Energy	5.2%	5.4%	-0.2%
Financial Services	16.3%	15.8%	0.5%
Utilities	2.9%	3.0%	0.0%
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 12/31/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VSVNX	9.21%	-	-	-	-	-
• Benchmark	10.03%	-15.95%	-15.95%	4.22%	5.38%	-
+/- Benchmark	-0.81%	-	-	-	-	-
Peer Group Rank	54	-	-	-	-	-

5-Year Quarterly Performance	4Q22	3Q22	2Q22	1Q22
• VSVNX	9.21%	-6.57%	-	-
• Benchmark	10.03%	-6.04%	-14.44%	-4.98%
+/- Benchmark	-0.81%	-0.52%	-	-

Annual Performance	2022	2021	2020	2019	2018	2017
• VSVNX	-	-	-	-	-	-
• Benchmark	-15.95%	18.17%	13.99%	24.73%	-7.95%	20.75%
+/- Benchmark	-	-	-	-	-	-
Peer Group Rank	-	-	-	-	-	-

5-Year Quarterly Performance	4Q21	3Q21	2Q21	1Q21
• VSVNX	-	-	-	-
• Benchmark	6.25%	-0.80%	6.16%	5.61%
+/- Benchmark	-	-	-	-

Rolling 5-Year Performance	01/2018 - 12/2022	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021
• VSVNX	-	-	-	-	-	-
• Benchmark	5.38%	4.50%	6.75%	10.91%	13.30%	12.47%
+/- Benchmark	-	-	-	-	-	-
Peer Group Rank	-	-	-	-	-	-

5-Year Quarterly Performance	4Q20	3Q20	2Q20	1Q20
• VSVNX	-	-	-	-
• Benchmark	14.56%	6.61%	17.93%	-20.86%
+/- 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	-	19.08	-	16.69	-	-
Sharpe Ratio	-	0.27	-	0.32	-	-
Information Ratio	-	-	-	-	-	-
Treynor Ratio	-	3.37	-	4.04	-	-
Upside Capture Ratio	-	100.00	-	100.00	-	-
Downside Capture Ratio	-	100.00	-	100.00	-	-

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• VSVNX	-	-	-	-
• Benchmark	7.81%	0.45%	3.37%	11.42%
+/- Benchmark	-	-	-	-

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• VSVNX	-	-	-	-
• Benchmark	-12.22%	3.97%	1.77%	-0.90%
+/- Benchmark	-	-	-	-

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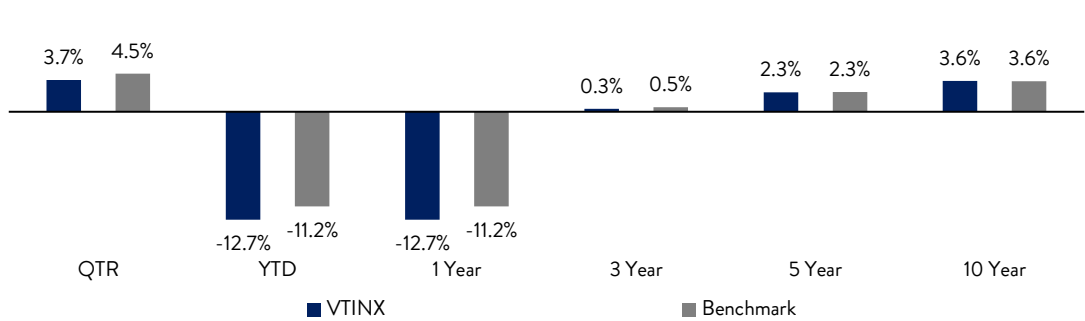
Vanguard Target Retirement Income Fund
VTINX

Fund Fact Sheet
Data as of 12/31/2022

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	10.00 Years
Fund Size	\$37,747,931,982

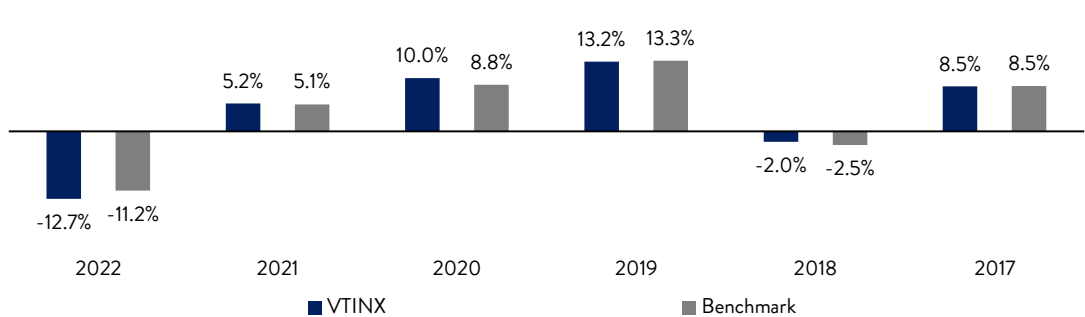
Trailing Performance



Fund Characteristics

	VTINX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$60,104	\$2,352
P/E Ratio (TTM)	15.61	0.53
P/B Ratio (TTM)	2.33	0.10
Est. Dividend Yield	2.61%	-0.20%

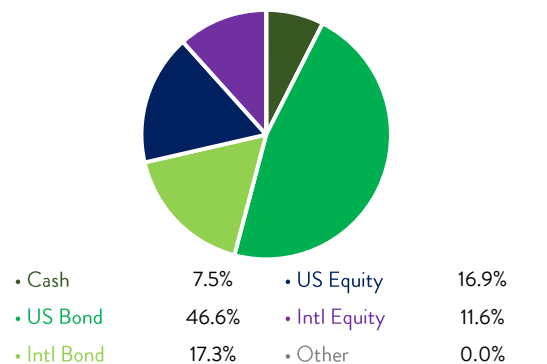
Annual Performance



Sector Allocations

	VTINX	Category	+/- Category
Materials	5.0%	4.4%	0.6%
Communication Services	6.4%	6.0%	0.4%
Consumer Discretionary	10.3%	9.8%	0.4%
Consumer Staples	7.4%	7.0%	0.4%
Healthcare	13.2%	12.7%	0.5%
Industrials	11.5%	10.2%	1.3%
Real Estate	3.5%	8.5%	-5.0%
Technology	17.9%	17.8%	0.1%
Energy	5.4%	5.1%	0.3%
Financial Services	16.3%	15.2%	1.1%
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 Income Fund
VTINX

Fund Fact Sheet
Data as of 12/31/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VTINX	3.74%	-12.74%	-12.74%	0.34%	2.30%	3.62%
• Benchmark	4.50%	-11.17%	-11.17%	0.53%	2.33%	3.59%
+/- Benchmark	-0.76%	-1.57%	-1.57%	-0.18%	-0.03%	0.03%
Peer Group Rank	62	50	50	31	31	29

5-Year Quarterly Performance	4Q22	3Q22	2Q22	1Q22
• VTINX	3.74%	-4.64%	-7.37%	-4.77%
• Benchmark	4.50%	-3.97%	-7.29%	-4.52%
+/- Benchmark	-0.76%	-0.67%	-0.09%	-0.25%

Annual Performance	2022	2021	2020	2019	2018	2017
• VTINX	-12.74%	5.25%	10.02%	13.16%	-1.99%	8.47%
• Benchmark	-11.17%	5.11%	8.81%	13.33%	-2.54%	8.54%
+/- Benchmark	-1.57%	0.14%	1.21%	-0.17%	0.55%	-0.07%
Peer Group Rank	50	63	30	48	18	52

5-Year Quarterly Performance	4Q21	3Q21	2Q21	1Q21
• VTINX	2.01%	-0.13%	3.23%	0.08%
• Benchmark	1.99%	-0.03%	3.06%	0.03%
+/- Benchmark	0.03%	-0.11%	0.17%	0.04%

Rolling 5-Year Performance	01/2018 - 12/2022	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021
• VTINX	2.30%	1.96%	3.34%	5.30%	6.85%	6.22%
• Benchmark	2.33%	1.88%	3.13%	5.08%	6.52%	5.94%
+/- Benchmark	-0.03%	0.08%	0.21%	0.23%	0.34%	0.28%
Peer Group Rank	31	23	29	42	49	45

5-Year Quarterly Performance	4Q20	3Q20	2Q20	1Q20
• VTINX	5.15%	3.12%	7.84%	-5.91%
• Benchmark	4.93%	2.73%	8.18%	-6.69%
+/- Benchmark	0.22%	0.39%	-0.34%	0.77%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	-0.16	0.00	-0.03	0.00	0.02	0.00
Beta	1.03	1.00	1.00	1.00	1.00	1.00
Standard Deviation	8.59	8.33	7.16	7.09	5.62	5.56
Sharpe Ratio	-0.02	0.00	0.17	0.17	0.51	0.51
Information Ratio	-0.19	-	-0.03	-	0.04	-
Treynor Ratio	-0.50	-0.33	0.95	0.99	2.79	2.77
Upside Capture Ratio	103.41	100.00	99.96	100.00	100.13	100.00
Downside Capture Ratio	105.16	100.00	100.29	100.00	99.68	100.00

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• VTINX	2.60%	1.52%	2.97%	5.50%
• Benchmark	3.05%	1.32%	2.82%	5.57%
+/- Benchmark	-0.45%	0.21%	0.15%	-0.07%

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• VTINX	-3.20%	1.33%	0.43%	-0.50%
• Benchmark	-3.92%	1.55%	0.70%	-0.80%
+/- Benchmark	0.72%	-0.22%	-0.27%	0.30%

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Vanguard Target Retirement Income Fund (USD)

Morningstar Analyst Rating™ Overall Morningstar Rating™ Standard Index Category Index Morningstar Cat
Silver **★★★★** **145 US Fund Target-Date** **Morningstar Mod** **US Fund Target-Date**
 02-24-2022 **Retirement** **145 US Fund Target-Date** **Tgt Risk TR USD** **Lifetime Mod Incm** **Retirement**
TR USD

Performance 01-31-2023

Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2021	0.08	3.23	-0.13	2.01	5.25
2022	-4.77	-7.37	-4.64	3.74	-12.74
2023	—	—	—	—	3.92

Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-6.94	1.38	2.87	3.91	4.76
Std 12-31-2022	-12.74	—	2.30	3.62	4.57
Total Return	-6.94	1.38	2.87	3.91	4.76
+/- Std Index	-0.37	-2.49	-1.42	-2.17	—
+/- Cat Index	-0.90	-1.24	-0.58	-0.14	—
% Rank Cat	55	43	35	39	—
No. in Cat	161	145	127	81	—

7-day Yield	Subsidized	Unsubsidized
30-day SEC Yield 02-07-23	2.80	2.80

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

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
Morningstar Risk	3★	4★	3★
Morningstar Return	Avg	-Avg	Avg

Standard Deviation	3 Yr	5 Yr	10 Yr
Mean	8.86	7.34	5.73
Sharpe Ratio	1.38	2.87	3.91
	0.09	0.23	0.55

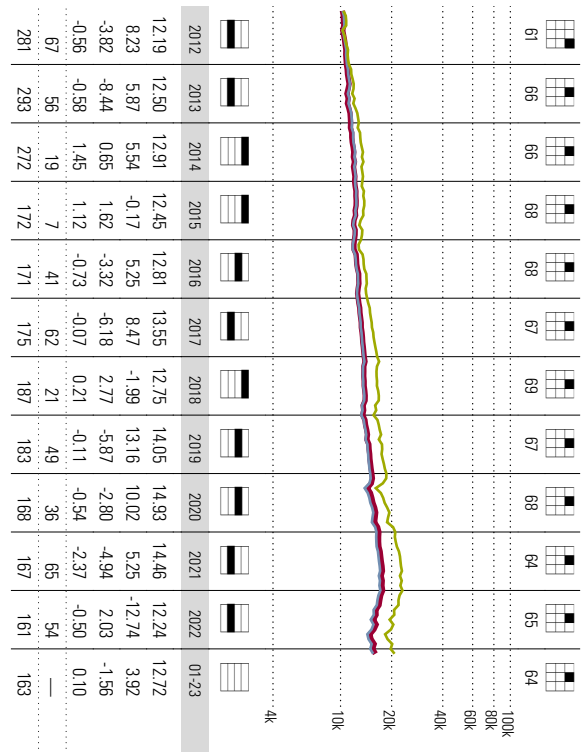
MPT Statistics

	Standard Index	Best Fit Index
Alpha	-1.54	Morningstar US
Beta	0.61	Mod Con Tgt-Alice
R-Squared	95.44	NR USD
12-Month Yield	2.60%	
Potential Cap Gains Exp	3.19%	

Operations
 Family: Vanguard
 Manager: Multiple
 Tenure: 10.0 Years
 Objective: Asset Allocation

Base Currency: USD
 Ticker: VTINX
 ISIN: US92202E1029
 Minimum Initial Purchase: \$1,000

Purchase Constraints: —
 Incept: 10-27-2003
 Type: MF
 Total Assets: \$37,747.93 mil



Performance Quartile (within category)

NAV/Price	12-2022	History
Total Return %	3.92	
+/- Standard Index	-1.56	
+/- Category Index	0.10	
% Rank Cat	—	
No. of Funds in Cat	163	

Portfolio Analysis 01-31-2023

Asset Allocation %	Net %	Long %	Short %
Cash	4.83	7.69	2.86
US Stocks	17.43	17.43	0.00
Non-US Stocks	11.97	11.97	0.00
Bonds	65.74	65.79	0.04
Other/Not Cstfd	0.02	0.02	0.00
Total	100.00	102.90	2.90

Equity Style

Value	Brand	Growth	Port	Rel	Index	Ret	Cap
Large	High	Med	15.6	1.03	1.04		
Med	High	Med	11.6	1.02	1.06		
Small	High	Med	2.3	1.07	1.04		
	High	Med	60104	1.37	1.04		

Fixed-Income Style

Value	Brand	Growth	Port	Rel	Index	Ret	Cap
High	High	Med	7.38	5.76			
Med	High	Med	2.05	2.05			
Low	High	Med	93.00				

Credit Quality Breakdown 12-31-2022

AAA	AA	A	BBB	BB	B	Below B	NR
66.57	7.51	13.43	11.85	0.00	0.00	0.34	0.29

Regional Exposure

Stocks %	Rel Std Index
Americas	63.3
Greater Europe	17.9
Greater Asia	18.8

Share Clng

Share Clng	Share Amount	Holdings	Net Assets %
12-2022	10,105	Total Stocks	17.605
		Total Fixed-Income,	
		19% Turnover Ratio	
⊖	1,442 mil	Vanguard Total Bond Market II Idx	36.84
⊖	36 mil	Vanguard Total Stock Mkt Idx Instl	17.69
⊖	260 mil	Vanguard Short-Term Intl-Prot Sec I	16.27
⊕	230 mil	Vanguard Total Intl Bd II Idx Intl	15.87
⊖	255 mil	Vanguard Total Intl Stock Index Inv	12.19

Sector Weightings

Sector	Stocks %	Rel Std Index
Cyclical	35.1	0.86
Basic Materials	5.0	0.90
Consumer Cyclical	10.3	0.89
Financial Services	16.3	0.98
Real Estate	3.5	0.49
Sensitive	41.1	1.13
Communication Services	6.4	1.17
Energy	5.4	1.04
Industrials	11.5	1.00
Technology	17.9	1.25
Defensive	23.8	1.05
Consumer Defensive	7.4	1.05
Healthcare	13.2	1.10
Utilities	3.1	0.91

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The Voya Fixed Account is available through a group annuity or other type of contract issued by Voya Retirement Insurance and Annuity Company ("VRIAC" or the "Company"). The Voya Fixed Account is an obligation of VRIAC'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 VRIAC, 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 VRIAC with this goal in mind. Therefore, VRIAC may impose restrictions on transfers and withdrawals involving the Voya Fixed Account if Competing Investment Options (as defined below) are offered. These restrictions help VRIAC 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.

VRIAC'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, VRIAC 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 VRIAC 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

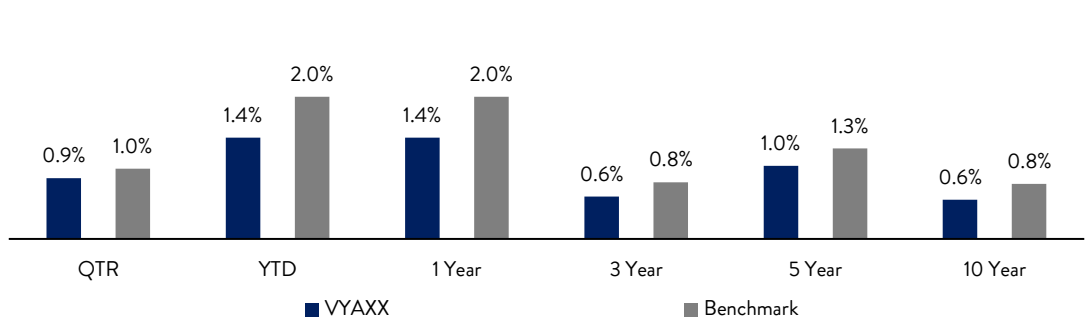
month in which such change was effective. The current rate for a plan's initial investment in the Voya Fixed Account may be in effect for less than a full three-month period.

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	18.25 Years
Fund Size	\$292,259,586

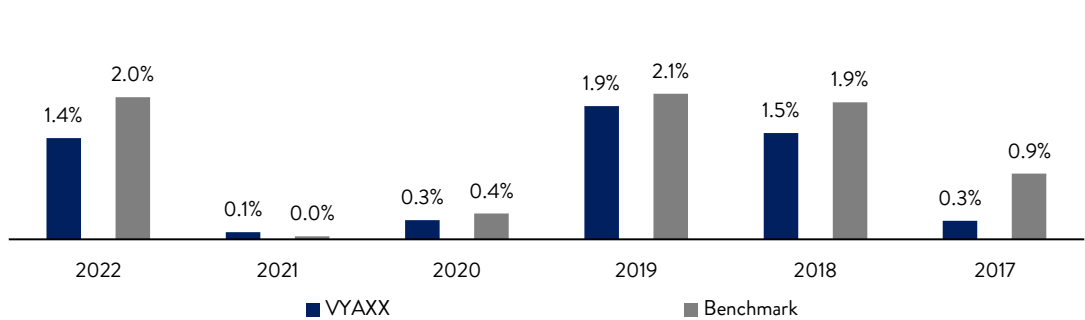
Trailing Performance



Fund Characteristics

	VYAXX	+/- Category
% Assets in Top 10 Holdings	100.00%	94.50%
Average Eff Duration	-	-
Average Eff Maturity	-	-
Average Credit Quality	-	BBB (Cat Avg.)
Average Coupon	-	-

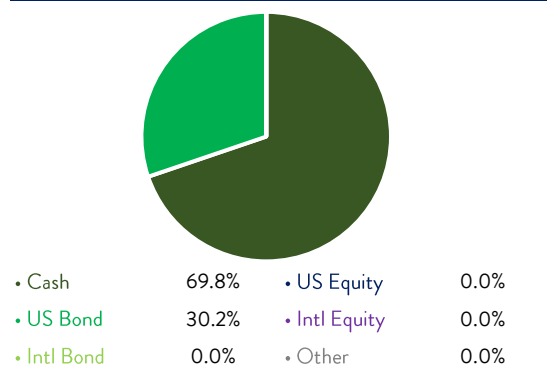
Annual Performance



Sector Allocations

	VYAXX	Category	+/- Category
Government	30.2%	20.6%	9.6%
Municipal	0.0%	0.2%	-0.2%
Bank Loan	0.0%	0.0%	0.0%
Convertible	0.0%	0.1%	-0.1%
Corporate Bond	0.0%	7.1%	-7.1%
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%	0.8%	-0.8%
Cash & Equivalents	69.8%	71.1%	-1.3%
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 12/31/2022

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year
• VYAXX	0.86%	1.43%	1.43%	0.60%	1.04%	0.56%
• Benchmark	0.99%	2.01%	2.01%	0.80%	1.28%	0.78%
+/- Benchmark	-0.14%	-0.58%	-0.58%	-0.20%	-0.24%	-0.22%
Peer Group Rank	21	33	33	27	40	44

5-Year Quarterly Performance	4Q22	3Q22	2Q22	1Q22
• VYAXX	0.86%	0.48%	0.09%	0.00%
• Benchmark	0.99%	0.66%	0.27%	0.08%
+/- Benchmark	-0.14%	-0.18%	-0.18%	-0.08%

Annual Performance	2022	2021	2020	2019	2018	2017
• VYAXX	1.43%	0.10%	0.27%	1.88%	1.51%	0.26%
• Benchmark	2.01%	0.04%	0.36%	2.06%	1.94%	0.93%
+/- Benchmark	-0.58%	0.06%	-0.09%	-0.18%	-0.43%	-0.67%
Peer Group Rank	33	2	54	47	47	79

5-Year Quarterly Performance	4Q21	3Q21	2Q21	1Q21
• VYAXX	0.00%	0.08%	0.00%	0.01%
• Benchmark	0.01%	0.01%	0.01%	0.01%
+/- Benchmark	-0.01%	0.07%	0.00%	0.00%

Rolling 5-Year Performance	01/2018 - 12/2022	10/2017 - 09/2022	07/2017 - 06/2022	04/2017 - 03/2022	01/2017 - 12/2021	10/2016 - 09/2021
• VYAXX	1.04%	0.89%	0.81%	0.80%	0.80%	0.80%
• Benchmark	1.28%	1.14%	1.06%	1.05%	1.06%	1.08%
+/- Benchmark	-0.24%	-0.25%	-0.25%	-0.25%	-0.26%	-0.28%
Peer Group Rank	40	44	48	51	53	52

5-Year Quarterly Performance	4Q20	3Q20	2Q20	1Q20
• VYAXX	0.00%	0.00%	0.02%	0.25%
• Benchmark	0.02%	0.03%	0.04%	0.28%
+/- Benchmark	-0.02%	-0.03%	-0.02%	-0.03%

Risk Statistics	3 Year		5 Year		10 Year	
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark
Alpha	-0.07	0.00	-0.08	0.00	-0.12	0.00
Beta	3.68	1.00	3.49	1.00	3.63	1.00
Standard Deviation	0.30	0.36	0.29	0.33	0.25	0.28
Sharpe Ratio	-2.23	-2.29	-3.23	-3.57	-2.87	-2.53
Information Ratio	-2.06	-	-2.91	-	-2.71	-
Treynor Ratio	-0.07	-0.05	-0.09	-0.06	-0.07	-0.04
Upside Capture Ratio	74.79	100.00	81.06	100.00	71.69	100.00
Downside Capture Ratio	-	-	-	-	-	-

5-Year Quarterly Performance	4Q19	3Q19	2Q19	1Q19
• VYAXX	0.32%	0.50%	0.53%	0.52%
• Benchmark	0.39%	0.49%	0.57%	0.59%
+/- Benchmark	-0.07%	0.01%	-0.04%	-0.07%

5-Year Quarterly Performance	4Q18	3Q18	2Q18	1Q18
• VYAXX	0.47%	0.40%	0.35%	0.27%
• Benchmark	0.57%	0.51%	0.46%	0.39%
+/- Benchmark	-0.10%	-0.10%	-0.11%	-0.12%

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.

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 12-31-2022												
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	—	—	-22.40	11.15	12.33	13.78	05-29-2009	NA	NA	1.04	1.04	NA
Fidelity@ 500 Index	—	—	-18.13	9.41	12.55	11.57	05-04-2011	NA	NA	0.02	0.02	NA
Fidelity@ Inerm Trs Bd Index	—	—	-12.72	0.06	—	-0.03	10-04-2017	NA	NA	0.03	0.03	NA
Fidelity@ Mid Cap Index	—	—	-17.28	7.10	10.95	11.60	09-08-2011	NA	NA	0.03	0.03	NA
Fidelity@ Small Cap Index	—	—	-20.27	4.22	9.17	10.19	09-08-2011	NA	NA	0.03	0.03	NA
Fidelity@ Total International Index	—	—	-16.28	0.96	—	4.62	06-07-2016	NA	NA	0.06	0.06	NA
Fidelity@ US Bond Index	—	—	-13.03	-0.02	1.01	1.71	05-04-2011	NA	NA	0.03	0.03	NA

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Annualized returns 12-31-2022												
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	—	—	-18.65	9.63	—	10.13	03-31-2015	NA	NA	0.36	0.36	NA
Hartford Schroders US Small Cap Opps SDR	—	—	-16.67	5.49	—	8.95	09-28-2015	NA	NA	0.95 ¹	0.99	NA
MFS Intl Diversification R6	—	—	-17.02	3.00	—	3.98	10-02-2017	NA	NA	0.72 ²	0.73	NA
STERLING Capital Total Return Bond R6	—	—	-13.15	—	—	0.71	02-01-2018	NA	NA	0.35 ³	0.48	NA
Vanguard Target Retirement 2020 Fund	—	—	-14.15	3.22	5.83	5.52	06-07-2006	NA	NA	0.08	0.08	NA
Vanguard Target Retirement 2025 Fund	—	—	-15.55	3.58	6.43	6.13	10-27-2003	NA	NA	0.08	0.08	NA
Vanguard Target Retirement 2030 Fund	—	—	-16.27	3.94	6.99	6.02	06-07-2006	NA	NA	0.08	0.08	NA
Vanguard Target Retirement 2035 Fund	—	—	-16.62	4.34	7.57	6.83	10-27-2003	NA	NA	0.08	0.08	NA
Vanguard Target Retirement 2040 Fund	—	—	-16.98	4.74	8.06	6.59	06-07-2006	NA	NA	0.08	0.08	NA
Vanguard Target Retirement 2045 Fund	—	—	-17.36	5.14	8.34	7.40	10-27-2003	NA	NA	0.08	0.08	NA
Vanguard Target Retirement 2050 Fund	—	—	-17.46	5.18	8.36	6.79	06-07-2006	NA	NA	0.08	0.08	NA
Vanguard Target Retirement 2055 Fund	—	—	-17.46	5.18	8.34	8.97	08-18-2010	NA	NA	0.08	0.08	NA
Vanguard Target Retirement 2060 Fund	—	—	-17.46	5.18	8.34	8.59	01-19-2012	NA	NA	0.08	0.08	NA
Vanguard Target Retirement 2065 Fund	—	—	-17.39	5.15	—	6.42	07-12-2017	NA	NA	0.08	0.08	NA
Vanguard Target Retirement 2070 Fund	—	—	—	—	—	1.02	06-28-2022	NA	NA	0.08	0.08	NA
Vanguard Target Retirement Income Fund	—	—	-12.74	2.30	3.62	4.57	10-27-2003	NA	NA	0.08	0.08	NA
Bloomberg US Agg Bond TR USD			-13.01	0.02	1.06	—	01-03-1980					
Bloomberg US Government TR USD			-12.32	-0.06	0.60	—	01-03-1989					
Bloomberg US Universal TR USD			-12.99	0.18	1.33	—	12-31-1998					
Morningstar Gbl Allocation TR USD			-17.10	2.86	—	—	06-18-2013					
Morningstar Lifetime Mod 2020 TR USD			-16.77	3.02	5.16	—	02-18-2009					
Morningstar Lifetime Mod 2025 TR USD			-17.58	3.20	5.79	—	02-18-2009					
Morningstar Lifetime Mod 2030 TR USD			-17.94	3.54	6.51	—	02-18-2009					
Morningstar Lifetime Mod 2035 TR USD			-17.75	3.97	7.14	—	02-18-2009					
Morningstar Lifetime Mod 2040 TR USD			-17.37	4.36	7.55	—	02-18-2009					
Morningstar Lifetime Mod 2045 TR USD			-17.06	4.58	7.70	—	02-18-2009					
Morningstar Lifetime Mod 2050 TR USD			-16.91	4.62	7.68	—	02-18-2009					
Morningstar Lifetime Mod 2055 TR USD			-16.33	4.55	7.59	—	02-18-2009					
Morningstar Lifetime Mod 2060 TR USD			-16.98	4.46	—	—	06-23-2014					
Morningstar Lifetime Mod Incm TR USD			-12.24	2.95	3.82	—	02-18-2009					
Morningstar Mod Tgt Risk TR USD			-14.77	3.73	5.82	—	02-18-2009					
Morningstar US Core Bd TR USD			-12.99	—	—	—	05-01-2019					
Morningstar US Mid Brd Grt TR USD			-25.83	—	—	—	12-21-2020					
Morningstar US Mod Con Tgt Alloc NR USD			-14.06	—	—	—	06-30-2020					
Morningstar US SmI Ext TR USD			-19.26	—	—	—	12-21-2020					
MSCI ACWI Ex USA NR USD			-16.00	0.88	3.80	—	01-01-2001					
MSCI ACWI NR USD			-18.36	5.23	7.98	—	01-01-2001					
MSCI EAFE NR USD			-14.45	1.54	4.67	—	03-31-1986					
Russell 1000 TR USD			-19.13	9.13	12.37	—	12-31-1978					
Russell 2000 TR USD			-20.44	4.13	9.01	—	12-31-1978					
Russell Mid Cap Growth TR USD			-26.72	7.64	11.41	—	02-01-1995					
Russell Mid Cap TR USD			-17.32	7.10	10.96	—	12-31-1978					
S&P 500 TR USD			-18.11	9.42	12.56	—	01-30-1970					
USTREAS T-Bill Auction Ave 3 Mon			2.14	1.34	0.82	—	02-28-1941					

- Contractual waiver, Expires 02-28-2023
- Contractual waiver, Expires 09-30-2023
- Contractual waiver, Expires 01-31-2024

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	-23.36	9.73	10.63	12.36	05-29-2009		-12.52	8.85	9.87	11.53		
Fidelity@ 500 Index	-18.68	8.79	11.82	10.82	05-04-2011		-10.73	7.26	10.18	9.38		
Fidelity@ Inerm Tts Bd Index	-13.07	-0.56	—	-0.66	10-04-2017		-7.31	-0.02	—	-0.10		
Fidelity@ Mid Cap Index	-17.91	6.31	10.08	10.77	09-08-2011		-10.17	5.41	8.77	9.44		

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Annualized returns 12-31-2022

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	-20.68	3.42	8.20	9.25	09-08-2011	-12.00	3.14	7.19	8.15
Fidelity® Total International Index	-17.12	0.26	—	3.91	06-07-2016	-9.64	0.58	—	3.42
Fidelity® US Bond Index	-13.54	-0.74	0.10	0.76	05-04-2011	-7.38	-0.09	0.48	1.02
Hartford Core Equity R6	-19.59	8.65	—	9.17	03-31-2015	-10.66	7.41	—	7.92
Hartford Schroders US Small Cap Opps SDR	-16.88	4.08	—	7.12	09-28-2015	-9.75	4.11	—	6.79
MFS Intl Diversification R6	-17.67	2.11	—	3.04	10-02-2017	-9.81	2.04	—	2.81
Sterling Capital Total Return Bond R6	-14.14	—	—	-0.62	02-01-2018	-7.77	—	—	0.05
Vanguard Target Retirement 2020 Fund	-15.36	1.25	4.34	4.39	06-07-2006	-7.92	2.33	4.38	4.26
Vanguard Target Retirement 2025 Fund	-16.29	2.05	5.15	5.18	10-27-2003	-8.95	2.64	4.89	4.84
Vanguard Target Retirement 2030 Fund	-16.88	2.52	5.82	5.14	06-07-2006	-9.40	2.96	5.40	4.75
Vanguard Target Retirement 2035 Fund	-17.25	2.87	6.35	5.96	10-27-2003	-9.57	3.31	5.90	5.53
Vanguard Target Retirement 2040 Fund	-17.58	3.28	6.90	5.73	06-07-2006	-9.79	3.66	6.36	5.29
Vanguard Target Retirement 2045 Fund	-17.97	3.89	7.29	6.63	10-27-2003	-9.98	3.97	6.59	6.07
Vanguard Target Retirement 2050 Fund	-18.00	4.06	7.41	6.05	06-07-2006	-10.08	3.99	6.61	5.47
Vanguard Target Retirement 2055 Fund	-17.96	4.19	7.50	8.21	08-18-2010	-10.11	3.97	6.62	7.28
Vanguard Target Retirement 2060 Fund	-17.94	4.38	7.61	7.90	01-19-2012	-10.12	3.93	6.60	6.87
Vanguard Target Retirement 2065 Fund	-17.85	4.61	—	5.88	07-12-2017	-10.09	3.92	—	4.94
Vanguard Target Retirement 2070 Fund	—	—	—	0.76	06-28-2022	—	—	—	0.72
Vanguard Target Retirement Income Fund	-13.67	0.94	2.44	3.43	10-27-2003	-7.40	1.47	2.49	3.28

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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

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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.)

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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

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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 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 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

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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 "A+" 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

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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

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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 © 2023 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 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. The constituents displayed for this index are from the following proxy: iShares Core US Aggregate Bond ETF.

Bloomberg US Government TR USD

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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

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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.

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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.

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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.

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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 Hyas Group to measure performance are representative of broad asset classes. Hyas 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.

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Fund data provided by Morningstar.

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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.

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