

Full-Time and Part-Time Retirement and RMT Plans

 ${\sf December~31,2023~Performance~Report}$

Rasch Cousineau
Senior Consultant
rcousineau@hyasgroup.com

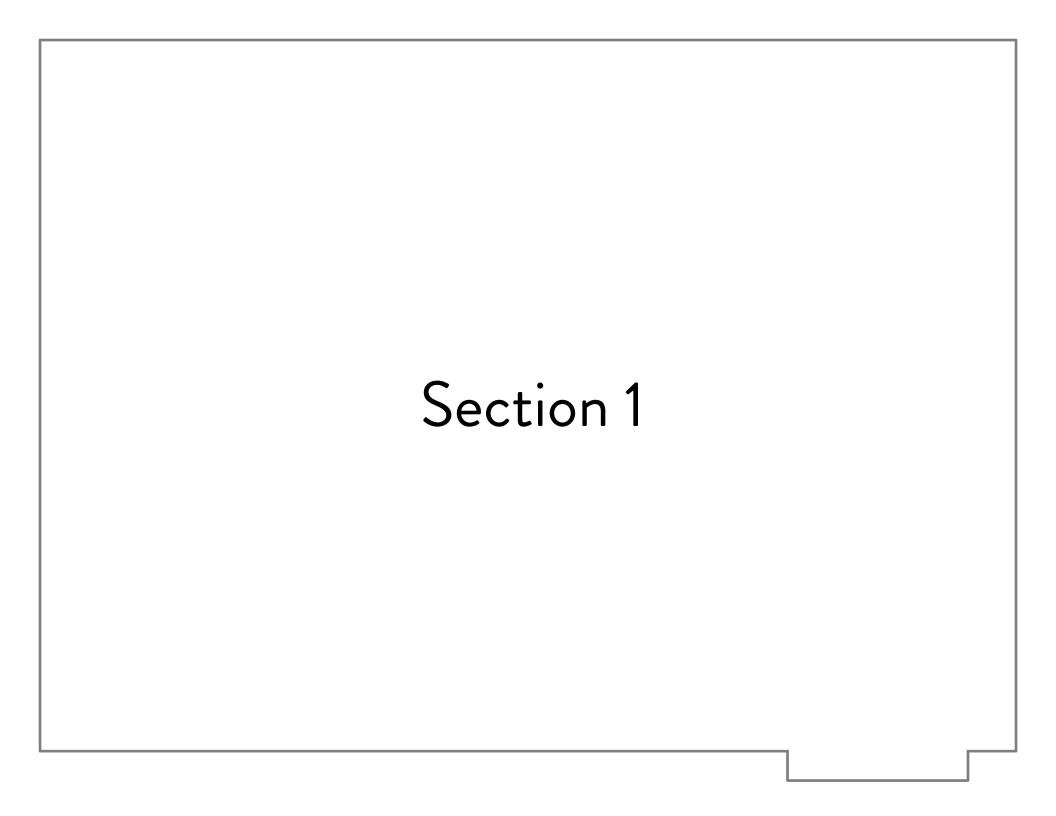
Geoff Hildreth
Performance Analyst
ghildreth@hyasgroup.com

TABLE OF CONTENTS

Section 7

Fund Attribution

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





FOURTH QUARTER 2023 MARKETS AND ECONOMIC UPDATE

GLOBAL ECONOMIC LANDSCAPE

- Minutes from the Federal Reserve Open Market Committee's (FOMC) December meeting gave pause to the growing expectation that interest rate reductions may be coming soon. These minutes noted the general consensus among the committee that rates are at or near their peak for this tightening cycle and acknowledged that projections show cuts by the end of 2024. However, committee members also see policy potentially remaining restrictive for some time and "several also observed that circumstances might warrant keeping the target range at its current value for longer than they currently anticipated."
- Year-end payroll readings for the US came in above expectations, pointing to a labor market that showed some re-acceleration from November. Upside in payrolls reflected continued strength in government and healthcare hiring and warmer weather supporting construction jobs, offsetting a decline in transportation and warehousing employment. Average wages also increased at a healthy pace, albeit being offset in part by a reduction in hours worked. While there was some mixture in underlying data, the aggregation indicates a still-tight labor market which may support the Federal Reserve's inclination to keep short-term interest rates higher for longer.²
- In contrast to the more restrictive monetary approaches of the US and Europe, the Bank of Japan has maintained an expansionary, negative interest rate policy. While expectations continue to be for the Bank of Japan to eventually abandon this stance, near-term developments such as recent guidance by governors towards an increasingly gradual approach, the earthquake on Noto Peninsula, and turnover within the Prime Minister's cabinet appear to argue against a brisk pace of doing so.³
- Continuing on the theme of latent changes in central bank direction, markets and policy makers in the European Union and United Kingdom (UK) appear to be waiting for inflation to cool enough to warrant a reduction in monetary restraint. Within the European Union, year-end inflation did not show as strong a decline as in months prior, which, when combined with upward wage pressure, may imply that more time is needed before rate reductions can occur. Within the UK, year-end economic growth, Christmas consumer spending, and manufacturing activity surprising to the upside likewise supported the notion of a pushback in the timing of direction-change.⁴

FIXED INCOME MARKETS⁵

• Although yields ended 2023 virtually unchanged from the start, Treasuries experienced a long selloff (May to October), sandwiched between two rallies (March to May and October to December). Drivers of 2023's rate volatility included regional banking stress in March to May; much stronger macroeconomic growth, slower progress on inflation, and fiscal sustainability questions from May to October; and then softening data and an apparent Fed pivot into year-end. From a closing low of 3.34% on May 3 to a closing high of 4.99% on October 19, the US 10-year Treasury yield embedded higher real yields and term premiums on robust growth and an

¹ Source: Morgan Stanley, FOMC Minutes: Not Cutting Soon, January 3, 2024.

² Source: Morgan Stanley, December Employment – Tight Labor Market, January 5, 2024.

³ Source: Morgan Stanley, Expecting Status Quo and January MPM, January 3, 2024.

⁴ Source: Morgan Stanley, New Year, Same Old Questions, January 5, 2024.

⁵ Source: Morgan Stanley, Fixed Income Insights, January 3, 2024.

elevated Treasury supply. From late October, however, yields closely tracked the Citi Economic Surprise Index, as higher-for-longer rate expectations gave way to consensus view of multiple Fed cuts in 2024.

- Agency Mortgage-Backed Securities (MBS) sharply underperformed through October, buffeted by elevated rate volatility and challenging technical dynamics. As a result, agency MBS spreads reached extremely wide levels compared to their longer-term history. In line with other fixed income asset classes, November and December's rally allowed agency MBS to recover their previous underperformance and close the year on a higher note as spreads tightened to more normal levels.
- High yield debt benefited from its shorter duration and higher coupons—and support from stronger-than-expected economic growth and technical supply-demand tailwinds. Most notably, after the December FOMC meeting, high yield bond spreads and yields declined sharply, based on the dovish guidance. Fund flows turned positive in November and December, with over \$15 billion of inflows. All said, high yield bonds returned 13.4% for the year, with CCC-rated bonds (+19.8%) outperforming higher-quality B- (+13.8%) and BB-rated (+11.6%) cohorts.
- International investment-grade bonds returned 8.3% in 2023, outperforming their US counterparts. European bonds led the charge with strong returns from major Eurozone countries across both credit and government debt. Most of the gains came from a strong rally that began in late October, as investors started pricing in more robust monetary easing from the European Central Bank. Yields on German and French 10-year government bonds for example each fell by roughly 1% towards year-end.

EQUITY MARKETS

- 2024 marks the third straight year with the S&P 500 starting trailing price-to-earnings ratio above 20. When the market has begun at these points, subsequent 12-month returns have averaged just under 4%—materially below the long-run average of 7-8%. While earnings could surprise to the upside, the corresponding drop in multiples imply, judging by historical patterns, that corresponding gains on US stock indexes may only rival those available in other asset classes, such as non-US stocks, select fixed income, and alternatives.⁶
- After outperforming the S&P 500 by 131% between the start of 2021 and end of 2022, the energy sector lagged the broader market by 29% in 2023. That weakness came alongside rising economic uncertainty and softness in oil and gas prices, which has triggered a cycle of negative estimate revisions for companies in the sector. Even so, amid a more uncertain macro backdrop, the company-specific features have shown clear improvement. The energy sector's capital allocation framework has structurally changed from an emphasis on production growth to returns, free cash flow, and shareholder distributions. As a result, even if commodity prices are flat in 2024, it is estimated that cash flow and profit margins could expand in the quarters to come.⁷
- Though challenged (from a US investor's perspective) by currency headwinds, Japanese equities entered 2024 with several potential tailwinds. These include efforts by the Tokyo Stock Exchange to have its members better disclose efforts to improve returns on capital, a doubling in the maximum that individual Japanese investors can invest in local equities on a tax-free basis, high bank deposits which can serve as dry-powder to equity demand, and potential abatement of the Yen's relative weakness versus European and US currencies from central bank easing.⁸
- Developments over the course of 2023 indicated a pause in internal and external investor sentiment towards China. For example, according to China's State Administration of Foreign Exchange, last year, China recorded its first foreign direct investment (FDI) deficit since 1998 when the data began to be collected. Additionally, deposits in Chinese banks rose sharply in 2023, implying reduced consumer spending on the back of a disappointing recovery, high youth unemployment, and declining property values; all of which may portend to challenges in generating compelling corporate earnings growth.⁹

⁶ Source: Morgan Stanley, "2024 Outlook: Starting Points Matter", January 8, 2024

⁷ Source: Morgan Stanley, "2024 Outlook: Cash Comes Cheap", December 11, 2023.

⁸ Source: Morgan Stanley, "Keep It Simple—Add Japan and Avoid China", January 10, 2024

⁹ Source: ibid

ALTERNATIVE INVESTMENTS

- Artificial Intelligence (Al) private companies raised \$25 billion in 2023 a bright spot in an otherwise lackluster venture capital funding environment. Excluding Al and machine learning, venture capital hit a five-year low in 2023. Big tech has been a primary investor within this space, with corporate venture arms accounting for 90% of the applicable capital raised in 2023, up from about 40% on average over the past three years. In addition to investments, deep relationships appear to be forming between corporations and Al private companies, with three of the largest US public technology companies combining for over 20 partnerships.¹⁰
- US buyout and growth equity deals continued to slow into the second half of 2023, with deal value exhibiting an 18% decline between the second and third quarter and falling below \$200 billion for the first time in three years. While dry powder levels may still be significant, tighter lending conditions have forced buyers to use less debt to make financing deals more feasible, causing a greater portion of transactions to be financed via equity.¹¹
- After lagging for each month since February, Real Estate Investment Trusts (REITs) ended the year on a positive note, leading the S&P 500 by 1.3% and 5.3% in November and December respectively. After multiple quarters of economic headwinds and outflows, recent analysis on REITs suggests potential room for continued strength, due to aspects such as increasing demand for rate-sensitive equities, achievable consensus growth rates, and valuations versus stocks remaining at a discount to longer-term averages.¹²

¹⁰ Source: Morgan Stanley, "GenAl Privates: Where Are We Now and 12 Debates From Here", December 20, 2023.

¹¹ Source: Morgan Stanley, "Alternatives Quarterly, November 30, 2023.

¹² Source: Morgan Stanley, "The REIT Cheat Sheet", January 2, 2024.

Disclosure:

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

It is not an offer to buy or sell or a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. This material does not provide individually tailored investment advice and has been prepared without regard to the individual financial circumstances and objectives of persons who receive it.

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 selected by a client. Past performance does not guarantee future results.

In addition to the general risks associated with real estate investments, REIT investing entails other risks such as credit and interest rate risk. Real estate investment risks can include fluctuations in the value of underlying properties; defaults by borrowers or tenants; market saturation; changes in general and local economic conditions; decreases in market rates for rents; increases in competition, property taxes, capital expenditures, or operating expenses; and other economic, political or regulatory occurrences affecting the real estate industry. Investing in commodities entails significant risks. The commodities markets may fluctuate widely based on a variety of factors including changes in supply and demand relationships; governmental programs and policies; national and international political and economic events; war and terrorist events; changes in interest and exchange rates; trading activities in commodities and related contracts; pestilence; weather; technological change; and, the price volatility of a commodity. In addition, the commodities markets are subject to temporary distortions or other disruptions due to various factors, including lack of liquidity, participation of speculators and government intervention.

For further information please contact Tom Breaden (tbreaden@hyasgroup.com).

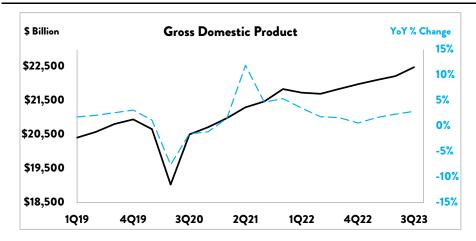
Hyas Group, 9755 SW Barnes Road, Suite 660, Portland, Oregon 97225; 503-634-1500

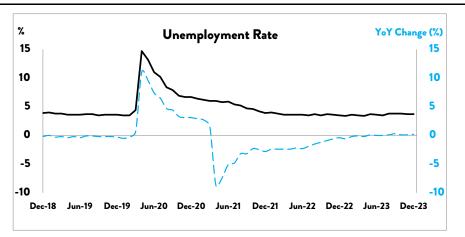
Hyas Group is a separate business unit within Morgan Stanley Institutional Investment Advisors LLC

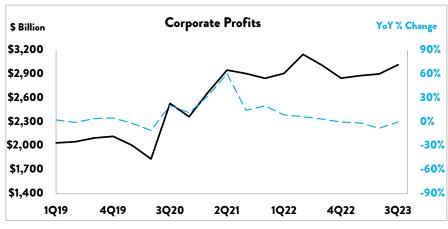
This report is being provided for informational purposed only. The information and opinions presented in this report do not constitute investment advice and have been obtained from sources believed by Hyas Group to be reliable. Hyas Group makes no representation as to their accuracy or completeness.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

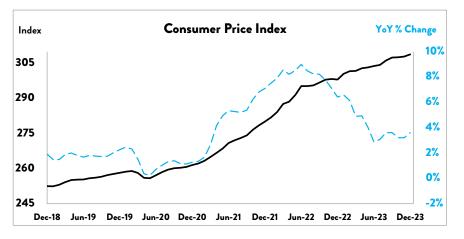
©Morgan Stanley, 2024 CRC 6214510-1/24

4Q2023 Economic Data









Key:	 Economic	Serie

 Year-(Over-1	ear	Change

Labor Mar	ket Statis	tics (Month	ıly)		
Category	Recent	5-Yr High	5-Yr Low	5-Yr Avg.	Date
Jobs Added/Lost Monthly	216,000	4,505,000	-20,493,000	114,517	Dec-23
Unemployment Rate	3.7%	14.7%	3.4%	4.9%	Dec-23
Median Unemployment Length (Weeks)	9.0	22.2	4.0	11.1	Dec-23
Average Hourly Earnings	\$34.27	\$34.27	\$27.60	\$30.76	Dec-23

Other Prices and Indexes (Monthly)										
Category	Recent	5-Yr High	5-Yr Low	% Off Peak	Date					
Gas: Price per Gallon	\$3.10	\$4.84	\$1.80	-35.8%	Dec-23					
Spot Oil	\$71.90	\$114.84	\$16.55	-37.4%	Dec-23					
Case-Shiller Home Price Index	320.3	320.3	213.8	49.8%*	Oct-23					
Medical Care CPI	556.1	557.4	489.9	13.5%*	Dec-23					

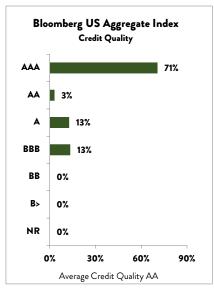
Source: Federal Reserve Bank of St. Louis and Bureau of Labor Statistics

*% Off Low Morningstar data as of 12/31/2023

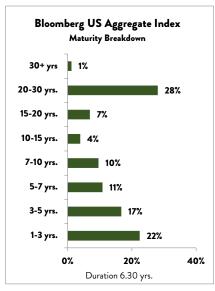
4Q2023 Bond Market Data

Index	QTR	YTD	1 yr.	3 yrs.	5 yrs.	10 yrs.
90-Day T-Bill	1.36%	5.27%	5.27%	2.44%	1.95%	1.31%
Bloomberg US Aggregate	6.82%	5.53%	5.53%	-3.31%	1.10%	1.81%
Bloomberg Short US Treasury	1.46%	5.09%	5.09%	2.01%	1.89%	1.28%
Bloomberg Int. US Treasury	3.99%	4.28%	4.28%	-1.86%	1.02%	1.25%
Bloomberg Long US Treasury	12.70%	3.06%	3.06%	-11.41%	-1.24%	2.28%
Bloomberg US TIPS	4.71%	3.90%	3.90%	-1.00%	3.15%	2.42%
Bloomberg US Credit	8.15%	8.18%	8.18%	-3.21%	2.45%	2.83%
Bloomberg US Mortgage-Backed	7.48%	5.05%	5.05%	-2.86%	0.25%	1.38%
Bloomberg US Asset-Backed	3.48%	5.54%	5.54%	0.22%	1.92%	1.81%
Bloomberg US 20-Yr Municipal	10.13%	7.78%	7.78%	-0.56%	2.68%	3.88%
Bloomberg US High Yield	7.16%	13.45%	13.45%	1.98%	5.37%	4.60%
Bloomberg Global	8.10%	5.72%	5.72%	-5.51%	-0.32%	0.38%
Bloomberg International	9.21%	5.72%	5.72%	-7.21%	-1.56%	-0.79%
Bloomberg Emerging Market	8.10%	9.09%	9.09%	-3.13%	1.84%	3.03%

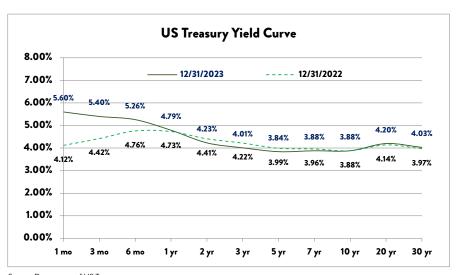
Source: Morningstar



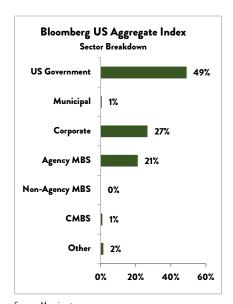
Source: Morningstar



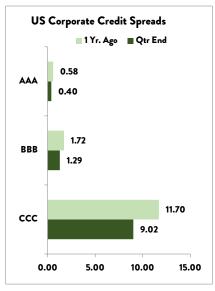
Source: Morningstar



Source: Department of US Treasury



Source: Morningstar



Source: Federal Reserve / Bank of America

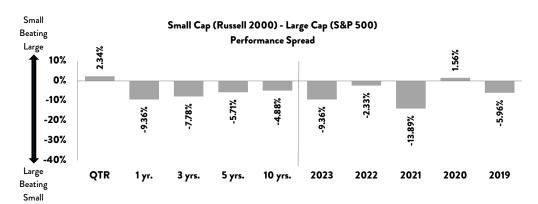
4Q2023 US Equity Market Data

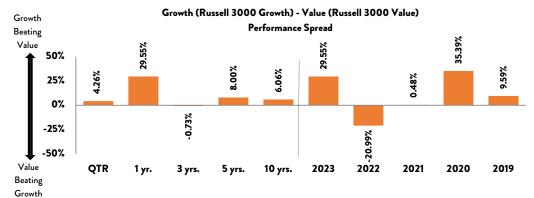
Se	ctors Weig	hts/Returns (ranked by quar	ter performanc	ce)	
	Wgt.	Sector	QTR	YTD	1 yr.
	3%	Real Estate	18.83%	12.36%	12.36%
	29%	Information Technology	17.17%	57.84%	57.84%
	13%	Financials	14.03%	12.15%	12.15%
dex	9%	Industrials	13.05%	18.13%	18.13%
S&P 500 Index	11%	Consumer Discretionary	12.42%	42.41%	42.41%
50	9%	Communication Services	10.95%	55.80%	55.80%
88	2%	Materials	9.69%	12.55%	12.55%
•	2%	Utilities	8.56%	-7.08%	-7.08%
	13%	Health Care	6.41%	2.06%	2.06%
	6%	Consumer Staples	5.54%	0.52%	0.52%
	4%	Energy	-6.94%	-1.33%	-1.33%
	Wgt.	Sector	QTR	YTD	1 yr.
	16%	Consumer Discretionary	17.31%	24.28%	24.28%
×	8%	Real Estate	15.46%	8.61%	8.61%
nde	16%	Financials	14.96%	8.19%	8.19%
0	7%	Materials	14.79%	16.53%	16.53%
S&P Midcap 400 Index	21%	Industrials	12.37%	31.43%	31.43%
dca	10%	Information Technology	10.30%	28.69%	28.69%
Ž	2%	Communication Services	10.13%	-7.49%	-7.49%
S 8	3%	Utilities	7.79%	-13.21%	-13.21%
	4%	Consumer Staples	6.70%	15.70%	15.70%
	8%	Health Care	5.37%	0.52%	0.52%
	5%	Energy	-4.71%	7.44%	7.44%
	Wgt.	Sector	QTR	YTD	1 yr.
	15%	Consumer Discretionary	22.57%	32.67%	32.67%
ě	19%	Financials	20.25%	5.19%	5.19%
S&P Smallcap 600 Index	17%	Industrials	16.83%	31.84%	31.84%
000	8%	Real Estate	16.75%	7.40%	7.40%
ap 6	6%	Materials	15.31%	19.98%	19.98%
allc	10%	Health Care	14.09%	-2.38%	-2.38%
S	3%	Communication Services	11.28%	13.88%	13.88%
88 P	4%	Consumer Staples	10.83%	14.99%	14.99%
	12%	Information Technology	10.24%	20.95%	20.95%
	2%	Utilities	9.33%	-7.57%	-7.57%
	4%	Energy	-8.13%	5.02%	5.02%

Source: Morningstar

Index Performance Data

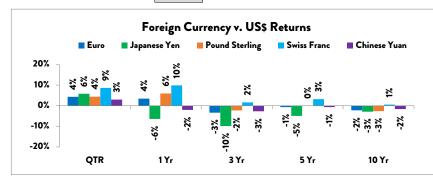
					Annualized	
Index	QTR	YTD	1 yr.	3 yrs.	5 yrs.	10 yrs.
S&P 500	11.69%	26.29%	26.29%	10.00%	15.69%	12.03%
Russell 1000 Value	9.50%	11.46%	11.46%	8.86%	10.91%	8.40%
Russell 1000 Growth	14.16%	42.68%	42.68%	8.86%	19.50%	14.86%
Russell Mid Cap	12.82%	17.23%	17.23%	5.92%	12.68%	9.42%
Russell Mid Cap Value	12.11%	12.71%	12.71%	8.36%	11.16%	8.26%
Russell Mid Cap Growth	14.55%	25.87%	25.87%	1.31%	13.81%	10.57%
Russell 2000	14.03%	16.93%	16.93%	2.22%	9.97%	7.16%
Russell 2000 Value	15.26%	14.65%	14.65%	7.94%	10.00%	6.76%
Russell 2000 Growth	12.75%	18.66%	18.66%	-3.50%	9.22%	7.16%
Russell 3000	12.07%	25.96%	25.96%	8.54%	15.16%	11.48%
DJ US Select REIT	16.35%	13.96%	13.96%	7.18%	6.12%	7.00%





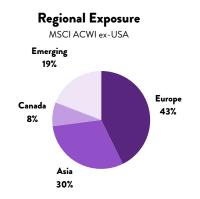
4Q2023 International Market Data

Index Performance Data (net)						
Index (US\$)	QTR	YTD	1 yr.	3 yrs.	5 yrs.	10 yrs.
MSCI ACWI ex-US	9.75%	15.62%	15.62%	1.55%	7.08%	3.83%
MSCI EAFE	10.42%	18.24%	18.24%	4.02%	8.16%	4.28%
Europe	11.05%	19.89%	19.89%	5.80%	9.09%	4.13%
United Kingdom	6.86%	14.09%	14.09%	8.76%	6.87%	2.49%
Germany	13.04%	22.98%	22.98%	0.20%	6.27%	1.99%
France	10.31%	21.40%	21.40%	7.94%	10.47%	5.72%
Pacific	9.25%	15.27%	15.27%	0.95%	6.55%	4.62%
Japan	8.19%	20.32%	20.32%	0.66%	6.91%	4.97%
Hong Kong	3.42%	-14.77%	-14.77%	-7.93%	-1.84%	2.03%
Australia	15.23%	14.79%	14.79%	5.97%	9.72%	4.99%
Canada	11.23%	15.44%	15.44%	8.21%	11.22%	4.60%
MSCI EM	7.86%	9.83%	9.83%	-5.08%	3.69%	2.66%
MSCI EM Latin America	17.55%	32.71%	32.71%	9.93%	6.11%	2.11%
MSCI EM Asia	6.71%	7.76%	7.76%	-6.90%	4.32%	4.13%
MSCI EM Eur/Mid East	6.91%	10.63%	10.63%	-3.93%	-0.45%	-2.60%
MSCI ACWI Value ex-US	8.43%	17.30%	17.30%	5.80%	6.34%	2.92%
MSCI ACWI Growth ex-US	11.13%	14.03%	14.03%	-2.67%	7.49%	4.55%
MSCI ACWI Sm Cap ex-US	10.12%	15.66%	15.66%	1.49%	7.89%	4.88%



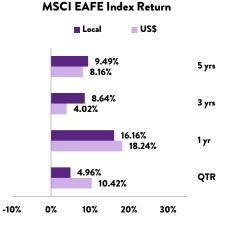
Exchange Rates	QTR	3Q23	2Q23	1Q23	4Q22	3Q22
Japanese Yen	140.92	149.43	144.47	132.75	131.81	144.71
Euro	0.90	0.94	0.92	0.92	0.93	1.02
British Pound	0.78	0.82	0.79	0.81	0.83	0.90
Swiss Franc	0.84	0.91	0.89	0.91	0.92	0.98
Chinese Yuan	7.10	7.30	7.25	6.87	6.90	7.11

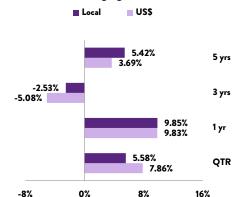
Source: Federal Reserve Bank of St. Louis



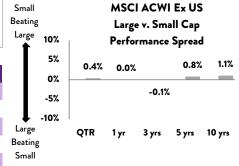
Top 10 Countries (MSCI AC World	d ex-USA)
Japan	15%
UK	9%
France	8%
Canada	8%
China	7%
Switzerland	6%
Germany	6%
Australia	5%
India	5%
Taiwan	4%

Source: Morningstar





MSCI Emerging Index Return





Performance Source: Morningstar

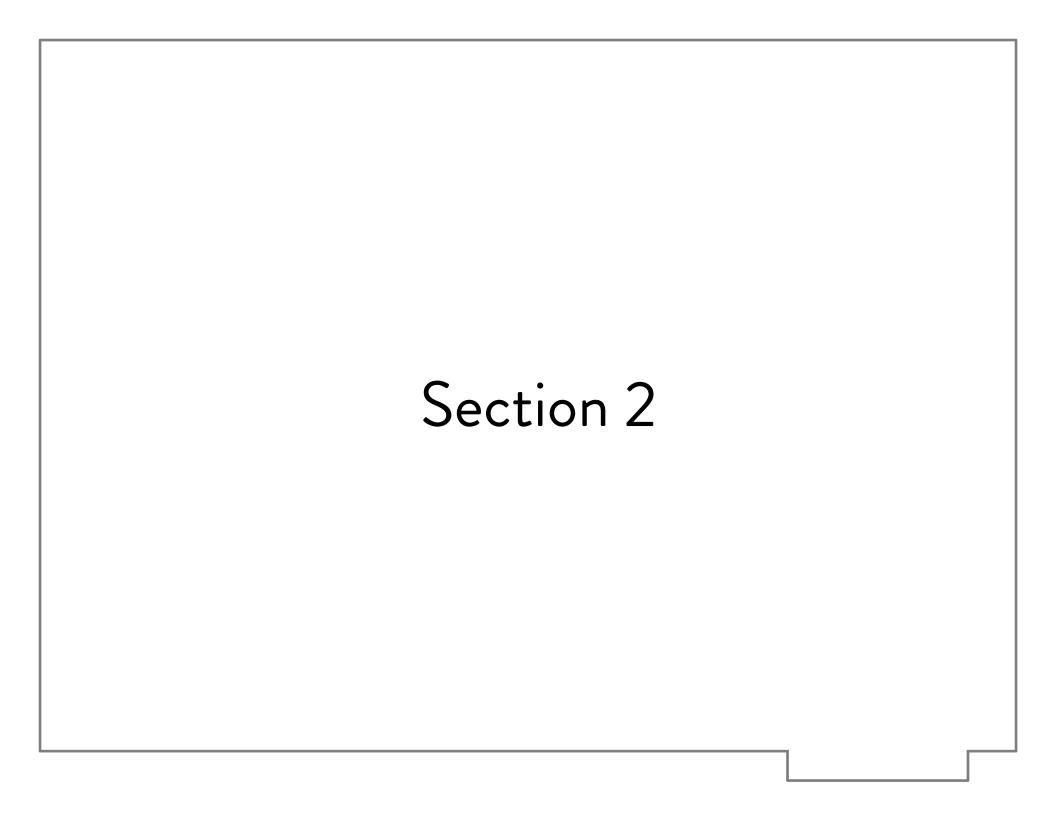
Historical Market Returns

Ranked by Performance

2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	4Q23
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%	Large Cap 26.29%	Small Cap 14.03%
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 6.54%	Mid Cap 17.23%	Mid Cap 12.82%
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%	Small Cap 16.93%	Large Cap 11.69%
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%	Global Balanced 16.35%	Intl 9.75%
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%	Intl 15.62%	Global Balanced 9.75%
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%	High Yield 13.45%	Global Bonds 8.10%
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%	Emerging Markets 9.83%	Emerging Markets 7.86%
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%	Global Bonds 5.72%	High Yield 7.16%
Commod35.65%	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%	US Bonds 5.53%	US Bonds 6.82%
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%	Cash 5.27%	TIPS 4.71%
Mid Cap -41.46%	US Bonds 5.93%	TIPS 6.31%	Commod13.32%	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%	TIPS 3.90%	Cash 1.36%
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%	Commod. -7.91%	Commod4.63%
Emerging Markets -53.33%	Core Real Estate -30.40%	Cash 0.15%	Emerging Markets -18.42%	Commod1.06%	Commod9.52%	Commod17.00%	Commod24.60%	Cash 0.25%	Cash 0.71%	Emerging Markets -14.58%	Cash 2.30%	Commod3.12%	Global Bonds -4.71%	Small Cap -20.44%	Core Real Estate -12.74%	Core Real Estate -5.01%

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



Aggressive Allocation Portfolio

PLAN ASSET ALLOCATION

Full-Time Plans - Combined Fourth Quarter 2023

Fixed Income	Ticker	Assets	%	Asset Allocation	Ticker	Assets	%
Stabilizer	-	\$269,861,626	16.7%	Vanguard Target Retirement Income Trust I	-	\$4,527,072	0.3%
Voya Fixed Account	-	\$90,466,442	5.6%	Vanguard Target Retirement 2020 Trust I	-	\$19,777,024	1.2%
Voya Government Money Market A	VYAXX	\$894,541	0.1%	Vanguard Target Retirement 2025 Trust I	-	\$3,928,376	0.2%
Sterling Capital Total Return Bond R6	STRDX	\$32,940,569	2.0%	Vanguard Target Retirement 2030 Trust I	-	\$47,768,246	3.0%
Fidelity US Bond Index	FXNAX	\$10,632,718	0.7%	Vanguard Target Retirement 2035 Trust I	-	\$6,232,465	0.4%
Fidelity Intermediate Treasury Bond Index	FUAMX	\$2,674,620	0.2%	Vanguard Target Retirement 2040 Trust I	-	\$60,341,132	3.7%
	Total	\$407,470,515	25.2%	Vanguard Target Retirement 2045 Trust I	-	\$4,907,739	0.3%
				Vanguard Target Retirement 2050 Trust I	-	\$61,894,411	3.8%
Large Cap	Ticker	Assets	%	Vanguard Target Retirement 2055 Trust I	-	\$4,365,287	0.3%
Fidelity 500 Index	FXAIX	\$192,894,942	11.9%	Vanguard Target Retirement 2060 Trust I	-	\$3,634,107	0.2%
Hartford Core Equity R6	HAITX	\$153,436,571	9.5%	Vanguard Target Retirement 2065 Trust I	-	\$1,696,689	0.1%
	Total	\$346,331,513	21.4%	Vanguard Target Retirement 2070 Trust I	-	\$186,990	0.0%
				Vanguard Target Retirement Income	VTINX	\$2,504,376	0.2%
Mid Cap	Ticker	Assets	%	Vanguard Target Retirement 2020	VTWNX	\$17,270,671	1.1%
Fidelity Mid Cap Index	FSMDX	\$82,265,095	5.1%	Vanguard Target Retirement 2025	VTTVX	\$2,549,669	0.2%
Baron Growth Instl	BGRIX	\$51,551,915	3.2%	Vanguard Target Retirement 2030	VTHRX	\$41,069,585	2.5%
	Total	\$133,817,010	8.3%	Vanguard Target Retirement 2035	VTTHX	\$3,382,053	0.2%
				Vanguard Target Retirement 2040	VFORX	\$32,508,115	2.0%
Small Cap	Ticker	Assets	%	Vanguard Target Retirement 2045	VTIVX	\$879,227	0.1%
Hartford Schroders US Small Cap Opps SDR	SCURX	\$12,106,479	0.7%	Vanguard Target Retirement 2050	VFIFX	\$11,250,858	0.7%
Fidelity Small Cap Index	FSSNX	\$48,928,296	3.0%	Vanguard Target Retirement 2055	VFFVX	\$21,027	0.0%
	Total	\$61,034,775	3.8%	Vanguard Target Retirement 2060	VTTSX	\$5,747	0.0%
				Vanguard Target Retirement 2065	VLXVX	\$14,810	0.0%
International	Ticker	Assets	%	Vanguard Target Retirement 2070	VSVNX	\$0	0.0%
MFS International Diversification R6	MDIZX	\$60,282,777	3.7%		Sub-Total	\$330,715,676	20.4%
Fidelity Total International Index	FTIHX	\$40,570,183	2.5%		Total	\$529,878,165	32.7%
	Total	\$100,852,960	6.2%				
				Miscellaneous	Ticker	Assets	%
Asset Allocation	Ticker	Assets	%	Self-Directed Brokerage Account	-	\$8,452,074	0.5%
Conservative Allocation Portfolio	-	\$39,828,074	2.5%	Participant Loans	-	\$31,058,112	1.9%
Moderate Allocation Portfolio	-	\$90,629,266	5.6%		Total	\$39,510,186	2.4%

TOTAL PLAN ASSETS

\$1,618,895,124

4.2%

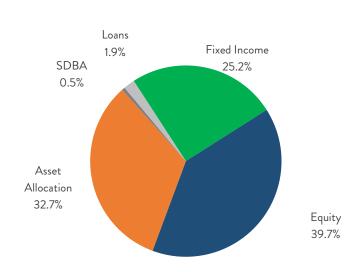
12.3%

\$68,705,150

\$199,162,489

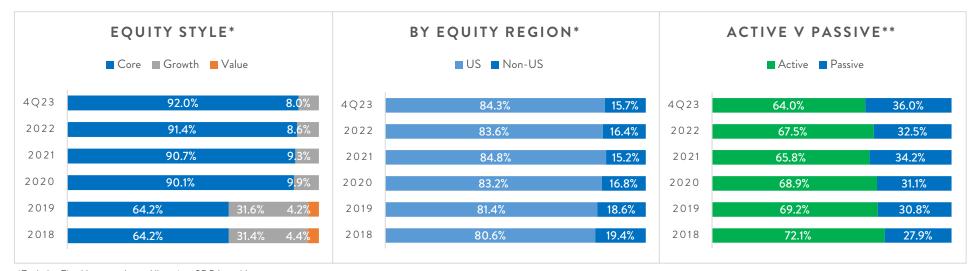
Sub-Total

Full-Time Plans - Combined Fourth Quarter 2023



HISTORICAL PLAN ALLOCATION

Asset Class	4Q23	2022	2021	2020	2019	2018	2017	2016
Fixed Income	25.2%	29.0%	25.7%	29.1%	29.9%	33.8%	N/A	N/A
Large Cap	21.4%	19.6%	21.9%	20.4%	20.2%	19.0%	N/A	N/A
Mid Cap	8.3%	8.4%	9.7%	9.3%	8.5%	4.9%	N/A	N/A
Small Cap	3.8%	3.9%	4.2%	4.1%	4.3%	6.7%	N/A	N/A
International	6.2%	6.3%	6.4%	6.8%	7.5%	7.3%	N/A	N/A
Asset Allocation	32.7%	30.5%	29.9%	27.9%	26.7%	25.0%	N/A	N/A
SDBA	0.5%	0.4%	0.4%	0.3%	0.2%	0.2%	N/A	N/A
Loans	1.9%	2.0%	1.8%	2.2%	2.7%	3.0%	N/A	N/A



^{*}Excludes Fixed Income, Asset Allocation, SDBA, and Loan assets

^{**}Excludes Asset Allocation, SDBA, and Loan assets

Full-Time Plans - Combined Fourth Quarter 2023

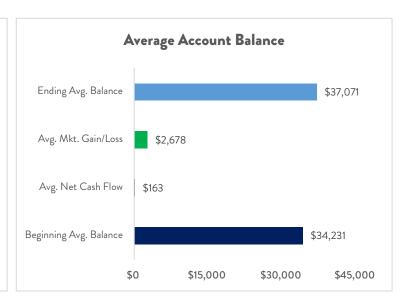
PLAN LEVEL CASH FLOWS

		Cash Flow	Cash Flow		Market	
	Beginning Value	(+)	(-)	Transfer	Gain/Loss	Ending Value
Fixed Income	\$405,324,555	\$10,851,042	(\$10,736,126)	(\$2,955,129)	\$4,986,173	\$407,470,515
Large Cap	\$306,322,627	\$4,722,513	(\$5,004,208)	\$4,228,861	\$36,061,719	\$346,331,513
Mid Cap	\$122,568,181	\$2,128,236	(\$1,881,821)	(\$2,067,651)	\$13,070,065	\$133,817,010
Small Cap	\$54,399,538	\$1,221,911	(\$952,061)	(\$916,284)	\$7,281,671	\$61,034,775
International	\$91,896,153	\$1,784,706	(\$1,387,641)	\$14,492	\$8,545,250	\$100,852,960
Asset Allocation	\$478,324,318	\$13,249,185	(\$7,019,518)	\$1,227,402	\$44,096,778	\$529,878,165
SDBA	\$7,326,452	\$0	\$0	\$468,309	\$657,313	\$8,452,074
Total	\$1,466,161,823	\$33,957,595	(\$26,981,374)	\$0	\$114,698,969	\$1,587,837,012

HISTORICAL PLAN CASH FLOWS

			Market	
	Beginning Value	Net Cash Flow	Gain/Loss	Ending Value
4Q23	\$1,466,161,823	\$6,976,220	\$114,698,969	\$1,587,837,012
YTD	\$1,371,842,650	\$27,671,375	\$188,322,987	\$1,587,837,012
2022	\$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





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

PLAN ASSET ALLOCATION

457 Deferred Compensation Plan

Fourth Quarter 2023

Fixed Income	Ticker	Assets	%
Stabilizer	-	\$222,511,807	19.6%
Sterling Capital Total Return Bond R6	STRDX	\$27,848,386	2.5%
Fidelity US Bond Index	FXNAX	\$9,646,325	0.8%
Fidelity Intermediate Treasury Bond Index	FUAMX	\$1,939,630	0.2%
	Total	\$261,946,147	23.1%

23.1%	
0.2%	
0.8%	
2.5%	F
19.6%	1

0.2%	
23.1%	Asset
	Conserv
%	Modera

Large Cap	Ticker	Assets	%
Fidelity 500 Index	FXAIX	\$151,493,952	13.3%
Hartford Core Equity R6	HAITX	\$120,318,338	10.6%
	Total	\$271,812,290	23.9%

Mid Cap	Ticker	Assets	%
Fidelity Mid Cap Index	FSMDX	\$64,615,588	5.7%
Baron Growth Instl	BGRIX	\$40,058,659	3.5%
	Total	\$104,674,247	9.2%

Small Cap	Ticker	Assets	%
Hartford Schroders US Small Cap Opps SDR	SCURX	\$9,916,222	0.9%
Fidelity Small Cap Index	FSSNX	\$38,883,578	3.4%
	Total	\$48,799,800	4.3%

International	Ticker	Assets	%
MFS International Diversification R6	MDIZX	\$50,502,968	4.4%
Fidelity Total International Index	FTIHX	\$34,903,799	3.1%
	Total	\$85,406,767	7.5%

Asset Allocation	Ticker	Assets	%
Conservative Allocation Portfolio	-	\$28,261,565	2.5%
Moderate Allocation Portfolio	-	\$71,306,948	6.3%
Aggressive Allocation Portfolio	-	\$59,242,278	5.2%
Vanguard Target Retirement Income Trust I	-	\$3,691,726	0.3%
Vanguard Target Retirement 2020 Trust I	-	\$14,426,074	1.3%
Vanguard Target Retirement 2025 Trust I	-	\$2,762,952	0.2%
Vanguard Target Retirement 2030 Trust I	-	\$33,036,946	2.9%
Vanguard Target Retirement 2035 Trust I	-	\$4,168,062	0.4%
Vanguard Target Retirement 2040 Trust I	-	\$45,661,645	4.0%
Vanguard Target Retirement 2045 Trust I	-	\$3,119,887	0.3%
Vanguard Target Retirement 2050 Trust I	-	\$53,835,617	4.7%
Vanguard Target Retirement 2055 Trust I	-	\$3,150,909	0.3%
Vanguard Target Retirement 2060 Trust I	-	\$3,107,994	0.3%
Vanguard Target Retirement 2065 Trust I	-	\$1,530,096	0.1%
Vanguard Target Retirement 2070 Trust I	-	\$181,279	0.0%
	Total	\$327,483,978	28.9%

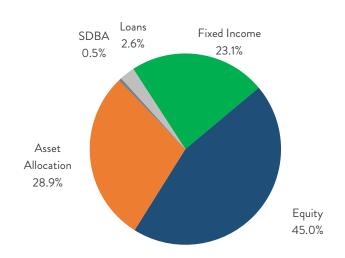
Miscellaneous	Ticker	Assets	%
Self-Directed Brokerage Account	-	\$5,864,707	0.5%
Participant Loans	-	\$29,056,432	2.6%
	Total	\$34,921,139	3.1%

TOTAL PLAN ASSETS

\$1,135,044,368

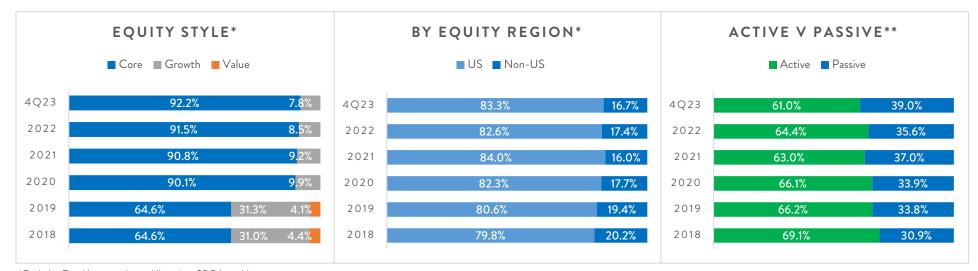
Fourth Quarter 2023

457 Deferred Compensation Plan



HISTORICAL PLAN ALLOCATION

Asset Class	4Q23	2022	2021	2020	2019	2018	2017	2016
Fixed Income	23.1%	26.5%	23.2%	26.4%	26.5%	30.2%	N/A	N/A
Large Cap	23.9%	22.1%	24.5%	22.7%	22.6%	21.4%	N/A	N/A
Mid Cap	9.2%	9.4%	10.8%	10.4%	9.5%	8.3%	N/A	N/A
Small Cap	4.3%	4.4%	4.7%	4.6%	4.9%	4.7%	N/A	N/A
International	7.5%	7.6%	7.6%	8.1%	8.9%	8.7%	N/A	N/A
Asset Allocation	28.9%	26.9%	26.4%	24.6%	24.0%	22.5%	N/A	N/A
SDBA	0.5%	0.4%	0.4%	0.3%	0.2%	0.3%	N/A	N/A
Loans	2.6%	2.7%	2.4%	2.8%	3.5%	3.9%	N/A	N/A



^{*}Excludes Fixed Income, Asset Allocation, SDBA, and Loan assets

^{**}Excludes Asset Allocation, SDBA, and Loan assets

457 Deferred Compensation Plan

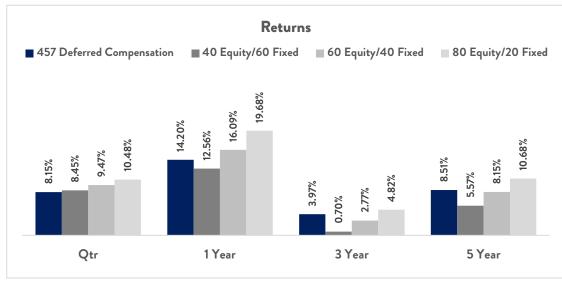
Fourth Quarter 2023

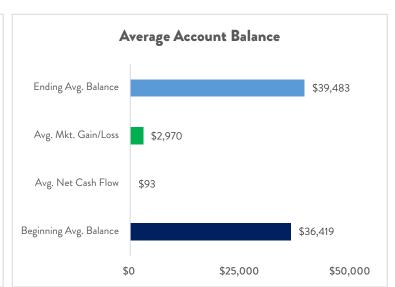
PLAN LEVEL CASH FLOWS

		Cash Flow	Cash Flow		Market	
	Beginning Value	(+)	(-)	Transfer	Gain/Loss	Ending Value
Fixed Income	\$260,073,788	\$3,705,260	(\$7,139,553)	\$1,550,899	\$3,755,753	\$261,946,147
Large Cap	\$241,073,032	\$3,724,663	(\$3,835,416)	\$2,529,852	\$28,320,159	\$271,812,290
Mid Cap	\$95,916,097	\$1,639,771	(\$1,539,102)	(\$1,586,593)	\$10,244,074	\$104,674,247
Small Cap	\$43,465,687	\$942,598	(\$722,967)	(\$708,749)	\$5,823,230	\$48,799,800
International	\$77,836,518	\$1,525,240	(\$1,166,350)	(\$36,888)	\$7,248,247	\$85,406,767
Asset Allocation	\$296,602,308	\$10,702,472	(\$5,219,103)	(\$1,868,682)	\$27,266,984	\$327,483,978
SDBA	\$5,198,473	\$0	\$0	\$120,162	\$546,072	\$5,864,707
Total	\$1,020,165,903	\$22,240,005	(\$19,622,491)	\$0	\$83,204,519	\$1,105,987,936

HISTORICAL PLAN CASH FLOWS

	Beginning		Market	
	Value	Net Cash Flow	Gain/Loss	Ending Value
4Q23	\$1,020,165,903	\$2,617,514	\$83,204,519	\$1,105,987,936
YTD	\$959,676,649	\$9,382,133	\$136,929,153	\$1,105,987,936
2022	\$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





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

PLAN ASSET ALLOCATION

401(a) Defined Contribution Plan

Fourth Quarter 2023

Fixed Income	Ticker	Assets	%
Stabilizer	-	\$2,511,237	5.3%
Sterling Capital Total Return Bond R6	STRDX	\$252,431	0.5%
Fidelity US Bond Index	FXNAX	\$32,643	0.1%
Fidelity Intermediate Treasury Bond Index	FUAMX	\$27,998	0.1%
	Total	\$2,824,309	6.0%

Large Cap	Ticker	Assets	%
Fidelity 500 Index	FXAIX	\$1,907,568	4.0%
Hartford Core Equity R6	HAITX	\$887,973	1.9%
	Total	\$2,795,541	5.9%

Mid Cap	Ticker	Assets	%
Fidelity Mid Cap Index	FSMDX	\$719,794	1.5%
Baron Growth Instl	BGRIX	\$572,906	1.2%
	Total	\$1,292,700	2.7%

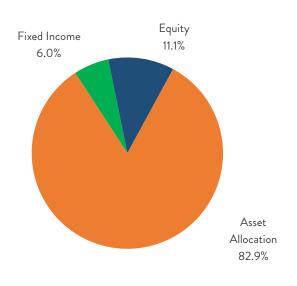
Small Cap	Ticker	Assets	%
Hartford Schroders US Small Cap Opps SDR	SCURX	\$183,891	0.4%
Fidelity Small Cap Index	FSSNX	\$448,018	0.9%
	Total	\$631,909	1.3%

International	Ticker	Assets	%
MFS International Diversification R6	MDIZX	\$234,717	0.5%
Fidelity Total International Index	FTIHX	\$314,117	0.7%
	Total	\$548,834	1.2%

Asset Allocation	Ticker	Assets	%
Conservative Allocation Portfolio	-	\$1,106,059	2.3%
Moderate Allocation Portfolio	-	\$1,584,624	3.3%
Aggressive Allocation Portfolio	-	\$1,542,563	3.3%
Vanguard Target Retirement Income Trust I	-	\$710,451	1.5%
Vanguard Target Retirement 2020 Trust I	-	\$3,959,249	8.4%
Vanguard Target Retirement 2025 Trust I	-	\$667,114	1.4%
Vanguard Target Retirement 2030 Trust I	-	\$10,031,309	21.2%
Vanguard Target Retirement 2035 Trust I	-	\$1,044,382	2.2%
Vanguard Target Retirement 2040 Trust I	-	\$10,647,257	22.5%
Vanguard Target Retirement 2045 Trust I	-	\$1,209,137	2.6%
Vanguard Target Retirement 2050 Trust I	-	\$5,185,153	11.0%
Vanguard Target Retirement 2055 Trust I	-	\$1,008,001	2.1%
Vanguard Target Retirement 2060 Trust I	-	\$491,438	1.0%
Vanguard Target Retirement 2065 Trust I	-	\$58,521	0.1%
Vanguard Target Retirement 2070 Trust I	-	\$3,968	0.0%
	Total	\$39,249,227	82.9%

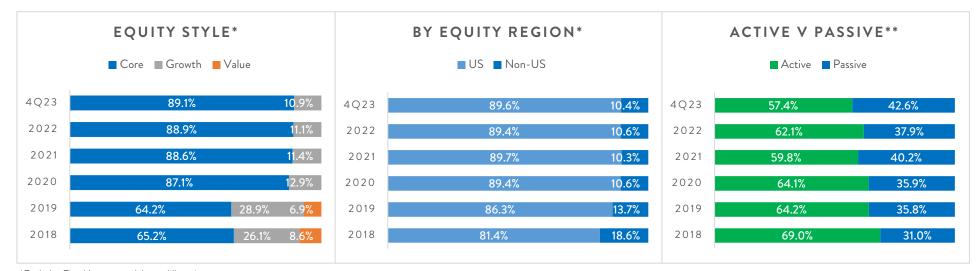
TOTAL PLAN ASSETS \$47,342,520

401(a) Defined Contribution Plan Fourth Quarter 2023



HISTORICAL PLAN ALLOCATION

Asset Class	4Q23	2022	2021	2020	2019	2018	2017	2016
Fixed Income	6.0%	7.5%	6.2%	7.3%	6.7%	8.7%	N/A	N/A
Large Cap	5.9%	5.2%	5.5%	5.2%	4.9%	4.3%	N/A	N/A
Mid Cap	2.7%	2.7%	2.8%	3.0%	2.6%	2.0%	N/A	N/A
Small Cap	1.3%	1.4%	1.5%	1.3%	1.4%	1.2%	N/A	N/A
International	1.2%	1.1%	1.1%	1.1%	1.4%	1.7%	N/A	N/A
Asset Allocation	82.9%	82.0%	82.9%	82.0%	83.1%	82.0%	N/A	N/A



^{*}Excludes Fixed Income and Asset Allocation assets

^{**}Excludes Asset Allocation assets

Fourth Quarter 2023

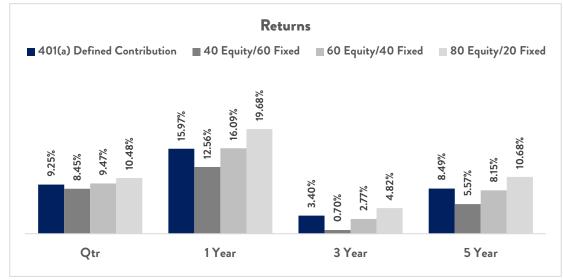
401(a) Defined Contribution Plan

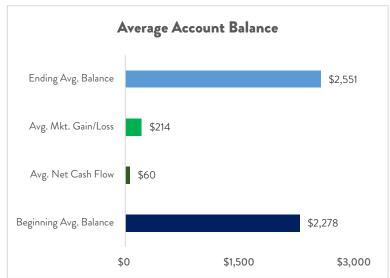
PLAN LEVEL CASH FLOWS

	Cash Flow	Cash Flow		Market	
Beginning Value	(+)	(-)	Transfer	Gain/Loss	Ending Value
\$2,838,932	\$63,417	(\$121,074)	\$8,814	\$34,220	\$2,824,309
\$2,433,409	\$77,088	(\$41,119)	\$36,246	\$289,917	\$2,795,541
\$1,150,860	\$37,144	(\$5,819)	(\$11,427)	\$121,943	\$1,292,700
\$545,019	\$23,411	(\$3,616)	(\$6,207)	\$73,302	\$631,909
\$484,569	\$16,119	(\$942)	\$1,964	\$47,124	\$548,834
\$34,814,828	\$1,313,687	(\$245,899)	(\$29,389)	\$3,396,000	\$39,249,227
\$42,267,617	\$1,530,866	(\$418,469)	\$0	\$3,962,506	\$47,342,520
	\$2,838,932 \$2,433,409 \$1,150,860 \$545,019 \$484,569 \$34,814,828	Beginning Value (+) \$2,838,932 \$63,417 \$2,433,409 \$77,088 \$1,150,860 \$37,144 \$545,019 \$23,411 \$484,569 \$16,119 \$34,814,828 \$1,313,687	Beginning Value (+) (-) \$2,838,932 \$63,417 (\$121,074) \$2,433,409 \$77,088 (\$41,119) \$1,150,860 \$37,144 (\$5,819) \$545,019 \$23,411 (\$3,616) \$484,569 \$16,119 (\$942) \$34,814,828 \$1,313,687 (\$245,899)	Beginning Value (+) (-) Transfer \$2,838,932 \$63,417 (\$121,074) \$8,814 \$2,433,409 \$77,088 (\$41,119) \$36,246 \$1,150,860 \$37,144 (\$5,819) (\$11,427) \$545,019 \$23,411 (\$3,616) (\$6,207) \$484,569 \$16,119 (\$942) \$1,964 \$34,814,828 \$1,313,687 (\$245,899) (\$29,389)	Beginning Value (+) (-) Transfer Gain/Loss \$2,838,932 \$63,417 (\$121,074) \$8,814 \$34,220 \$2,433,409 \$77,088 (\$41,119) \$36,246 \$289,917 \$1,150,860 \$37,144 (\$5,819) (\$11,427) \$121,943 \$545,019 \$23,411 (\$3,616) (\$6,207) \$73,302 \$484,569 \$16,119 (\$942) \$1,964 \$47,124 \$34,814,828 \$1,313,687 (\$245,899) (\$29,389) \$3,396,000

HISTORICAL PLAN CASH FLOWS

			Market	
	Beginning Value	Net Cash Flow	Gain/Loss	Ending Value
4Q23	\$42,267,617	\$1,112,397	\$3,962,506	\$47,342,520
YTD	\$37,275,963	\$3,807,619	\$6,258,938	\$47,342,520
2022	\$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





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

PLAN ASSET ALLOCATION

Assets

401(k) Defined Contribution Plan

Fourth Quarter 2023

Fixed Income	Ticker	Assets	%
Stabilizer	-	\$44,838,582	20.8%
Sterling Capital Total Return Bond R6	STRDX	\$4,123,835	1.9%
Fidelity US Bond Index	FXNAX	\$909,620	0.4%
Fidelity Intermediate Treasury Bond Index	FUAMX	\$598,847	0.3%
	Total	\$50,470,884	23.4%

	Total	\$13,380,567	6.2%
Fidelity Total International Index	FTIHX	\$4,718,126	2.2%
MFS International Diversification R6	MDIZX	\$8,662,441	4.0%

Ticker

Large Cap	Ticker	Assets	%
Fidelity 500 Index	FXAIX	\$35,017,467	16.3%
Hartford Core Equity R6	HAITX	\$28,024,444	13.0%
	Total	\$63,041,911	29.3%

Assets	%	
\$35,017,467	16.3%	
\$28,024,444	13.0%	
\$63,041,911	29.3%	

International

Mid Cap	Ticker	Assets	%
Fidelity Mid Cap Index	FSMDX	\$14,203,573	6.6%
Baron Growth Instl	BGRIX	\$8,524,450	4.0%
	Total	\$22,728,023	10.6%

Small Cap	Ticker	Assets	%
Hartford Schroders US Small Cap Opps SDR	SCURX	\$1,631,873	0.8%
Fidelity Small Cap Index	FSSNX	\$7,899,850	3.7%

Total

\$9,531,722

4.4%

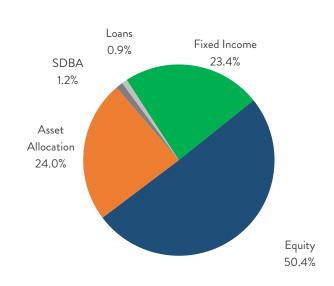
Asset Allocation	Ticker	Assets	%
Conservative Allocation Portfolio	-	\$10,460,449	4.9%
Moderate Allocation Portfolio	-	\$17,737,694	8.2%
Aggressive Allocation Portfolio	-	\$7,920,309	3.7%
Vanguard Target Retirement Income Trust I	-	\$124,894	0.1%
Vanguard Target Retirement 2020 Trust I	-	\$1,391,701	0.6%
Vanguard Target Retirement 2025 Trust I	-	\$498,310	0.2%
Vanguard Target Retirement 2030 Trust I	-	\$4,699,991	2.2%
Vanguard Target Retirement 2035 Trust I	-	\$1,020,020	0.5%
Vanguard Target Retirement 2040 Trust I	-	\$4,032,230	1.9%
Vanguard Target Retirement 2045 Trust I	-	\$578,714	0.3%
Vanguard Target Retirement 2050 Trust I	-	\$2,873,641	1.3%
Vanguard Target Retirement 2055 Trust I	-	\$206,377	0.1%
Vanguard Target Retirement 2060 Trust I	-	\$34,675	0.0%
Vanguard Target Retirement 2065 Trust I	-	\$108,072	0.1%
Vanguard Target Retirement 2070 Trust I	-	\$1,743	0.0%
	Total	\$51,688,822	24.0%

Miscellaneous	Ticker	Assets	%
Self-Directed Brokerage Account	-	\$2,587,367	1.2%
Participant Loans	-	\$2,001,680	0.9%
	Total	\$4,589,047	2.1%

TOTAL PLAN ASSETS

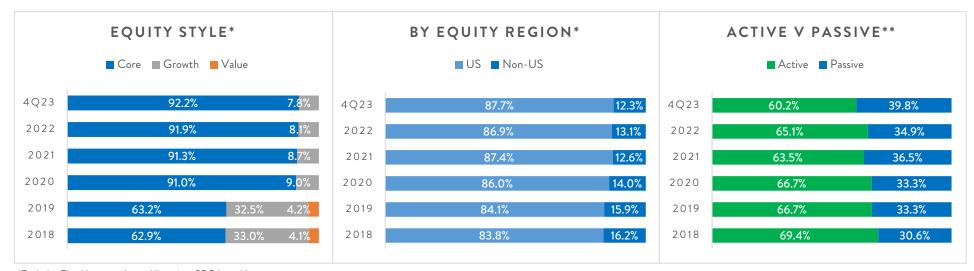
\$215,430,977

401(k) Defined Contribution Plan Fourth Quarter 2023



HISTORICAL PLAN ALLOCATION

Asset Class	4Q23	2022	2021	2020	2019	2018	2017	2016
Fixed Income	23.4%	28.8%	25.3%	29.0%	29.7%	32.9%	N/A	N/A
Large Cap	29.3%	25.4%	27.7%	25.5%	24.8%	23.1%	N/A	N/A
Mid Cap	10.6%	10.6%	11.6%	10.3%	9.6%	8.7%	N/A	N/A
Small Cap	4.4%	4.4%	4.8%	4.4%	4.8%	4.5%	N/A	N/A
International	6.2%	6.1%	6.3%	6.6%	7.4%	7.0%	N/A	N/A
Asset Allocation	24.0%	23.1%	22.9%	22.5%	22.1%	22.1%	N/A	N/A
SDBA	1.2%	0.6%	0.6%	0.6%	0.3%	0.3%	N/A	N/A
Loans	0.9%	0.9%	0.8%	1.1%	1.3%	1.4%	N/A	N/A



^{*}Excludes Fixed Income, Asset Allocation, SDBA, and Loan assets

^{**}Excludes Asset Allocation, SDBA, and Loan assets

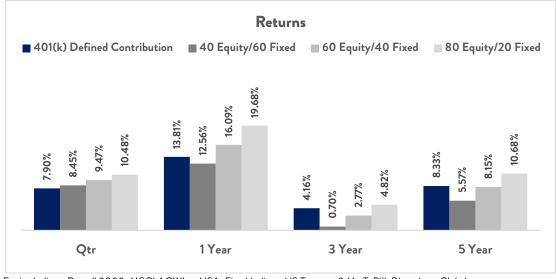
401(k) Defined Contribution Plan Fourth Quarter 2023

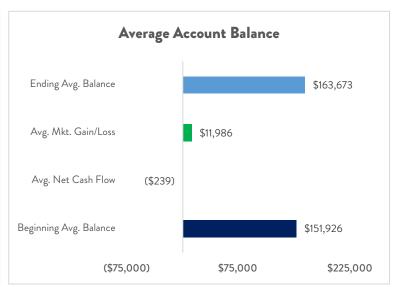
PLAN LEVEL CASH FLOWS

		Cash Flow	Cash Flow		Market	
	Beginning Value	(+)	(-)	Transfer	Gain/Loss	Ending Value
Fixed Income	\$52,234,806	\$516,350	(\$1,871,373)	(\$1,047,003)	\$638,104	\$50,470,884
Large Cap	\$55,191,368	\$920,761	(\$1,015,783)	\$1,391,064	\$6,554,501	\$63,041,911
Mid Cap	\$20,716,605	\$450,497	(\$275,294)	(\$383,174)	\$2,219,389	\$22,728,023
Small Cap	\$8,609,525	\$255,903	(\$206,830)	(\$266,663)	\$1,139,789	\$9,531,722
International	\$12,217,903	\$243,347	(\$198,417)	(\$5,517)	\$1,123,252	\$13,380,567
Asset Allocation	\$47,012,720	\$1,233,027	(\$364,154)	(\$36,854)	\$3,844,082	\$51,688,822
SDBA	\$2,127,978	\$0	\$0	\$348,147	\$111,241	\$2,587,367
Total	\$198,110,905	\$3,619,884	(\$3,931,852)	\$0	\$15,630,359	\$213,429,297

HISTORICAL PLAN CASH FLOWS

			Market	
	Beginning Value	Net Cash Flow	Gain/Loss	Ending Value
4Q23	\$198,110,905	(\$311,967)	\$15,630,359	\$213,429,297
YTD	\$186,410,520	\$1,151,629	\$25,867,148	\$213,429,297
2022	\$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





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

PLAN ASSET ALLOCATION

Retirement Medical Trust Fourth Quarter 2023

Fixed Income	Ticker	Assets	%
Voya Fixed Account	-	\$90,466,442	40.9%
Voya Government Money Market A	VYAXX	\$894,541	0.4%
Sterling Capital Total Return Bond R6	STRDX	\$715,918	0.3%
Fidelity US Bond Index	FXNAX	\$44,130	0.0%
Fidelity Intermediate Treasury Bond Index	FUAMX	\$108,145	0.0%
	Total	\$92,229,175	41.7%

Large Cap	Ticker	Assets	%
Fidelity 500 Index	FXAIX	\$4,475,954	2.0%
Hartford Core Equity R6	HAITX	\$4,205,816	1.9%
	Total	\$8,681,770	3.9%

Mid Cap	Ticker	Assets	%
Fidelity Mid Cap Index	FSMDX	\$2,726,140	1.2%
Baron Growth Instl	BGRIX	\$2,395,900	1.1%
	Total	\$5,122,040	2.3%

Small Cap	Ticker	Assets	%
Hartford Schroders US Small Cap Opps SDR	SCURX	\$374,494	0.2%
Fidelity Small Cap Index	FSSNX	\$1,696,850	0.8%
	Total	\$2,071,344	0.9%

International	Ticker	Assets	%
MFS International Diversification R6	MDIZX	\$882,650	0.4%
Fidelity Total International Index	FTIHX	\$634,142	0.3%
	Total	\$1,516,792	0.7%
Asset Allocation	Ticker	Assets	%
Vanguard Target Retirement Income	VTINX	\$2,504,376	1.1%
Vanguard Target Retirement 2020	VTWNX	\$17,270,671	7.8%

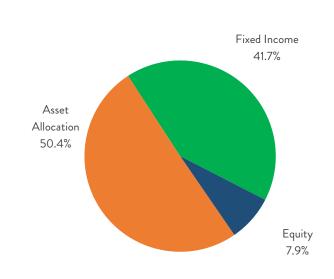
Asset Allocation	Ticker	Assets	%
Vanguard Target Retirement Income	VTINX	\$2,504,376	1.1%
Vanguard Target Retirement 2020	VTWNX	\$17,270,671	7.8%
Vanguard Target Retirement 2025	VTTVX	\$2,549,669	1.2%
Vanguard Target Retirement 2030	VTHRX	\$41,069,585	18.6%
Vanguard Target Retirement 2035	VTTHX	\$3,382,053	1.5%
Vanguard Target Retirement 2040	VFORX	\$32,508,115	14.7%
Vanguard Target Retirement 2045	VTIVX	\$879,227	0.4%
Vanguard Target Retirement 2050	VFIFX	\$11,250,858	5.1%
Vanguard Target Retirement 2055	VFFVX	\$21,027	0.0%
Vanguard Target Retirement 2060	VTTSX	\$5,747	0.0%
Vanguard Target Retirement 2065	VLXVX	\$14,810	0.0%
Vanguard Target Retirement 2070	VSVNX	\$0	0.0%
·	Total	\$111,456,138	50.4%

TOTAL PLAN ASSETS

\$221,077,260

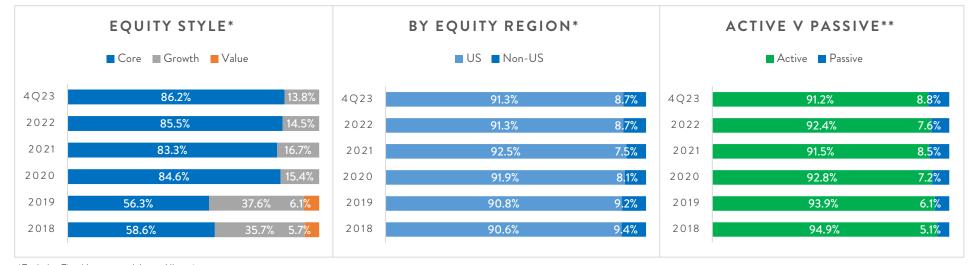
PLAN ASSET ALLOCATION

Retirement Medical Trust Fourth Quarter 2023



HISTORICAL PLAN ALLOCATION

Asset Class	4Q23	2022	2021	2020	2019	2018	2017	2016
Fixed Income	41.7%	46.3%	44.6%	49.4%	54.2%	59.5%	N/A	N/A
Large Cap	3.9%	3.5%	4.1%	3.7%	3.3%	2.8%	N/A	N/A
Mid Cap	2.3%	2.4%	3.0%	2.7%	2.4%	2.0%	N/A	N/A
Small Cap	0.9%	0.9%	0.9%	0.8%	0.9%	0.7%	N/A	N/A
International	0.7%	0.7%	0.6%	0.6%	0.7%	0.6%	N/A	N/A
Asset Allocation	50.4%	46.2%	46.8%	42.7%	38.6%	34.3%	N/A	N/A



^{*}Excludes Fixed Income and Asset Allocation assets

^{**}Excludes Asset Allocation assets

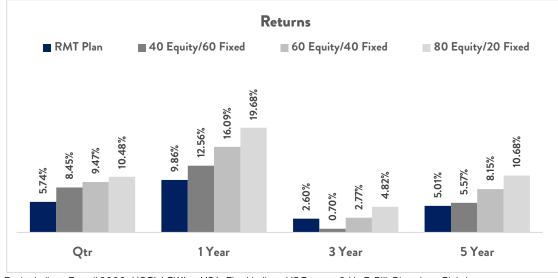
Retirement Medical Trust Fourth Quarter 2023

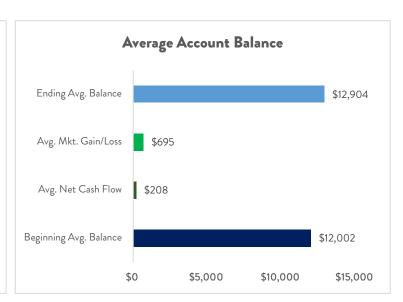
PLAN LEVEL CASH FLOWS

HISTORICAL PLAN CASH FLOWS

		Cash Flow	Cash Flow		Market		
	Beginning Value	(+)	(-)	Transfer	Gain/Loss	Ending Value	
Fixed Income	\$90,177,029	\$6,566,015	(\$1,604,125)	(\$3,467,839)	\$558,095	\$92,229,175	4Q23
Large Cap	\$7,624,818	\$0	(\$111,890)	\$271,700	\$897,142	\$8,681,770	YTD
Mid Cap	\$4,784,619	\$824	(\$61,606)	(\$86,456)	\$484,659	\$5,122,040	2022
Small Cap	\$1,779,308	\$0	(\$18,648)	\$65,335	\$245,349	\$2,071,344	2021
International	\$1,357,163	\$0	(\$21,931)	\$54,934	\$126,627	\$1,516,792	2020
Asset Allocation	\$99,894,462	\$0	(\$1,190,362)	\$3,162,327	\$9,589,712	\$111,456,138	2019
Total	\$205,617,398	\$6,566,839	(\$3,008,563)	\$0	\$11,901,586	\$221,077,260	

	Beginning Value	Net Cash Flow	Market Gain/Loss	Ending Value
4Q23	\$205,617,398	\$3,558,276	\$11,901,586	\$221,077,260
YTD	\$188,479,518	\$13,329,994	\$19,267,748	\$221,077,260
2022	\$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





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

Section 3

Fourth Quarter 2023

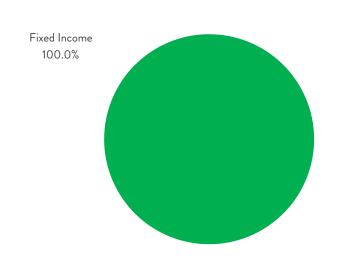
HISTORICAL PLAN CASH FLOWS

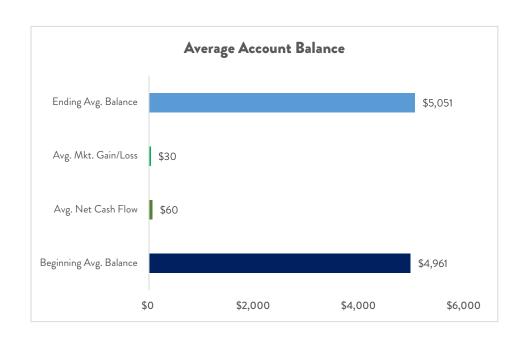
Fixed Income	Ticker	Assets	%
Stabilizer	-	\$50,008,033	100.0%
	Total	\$50,008,033	100.0%

	Beginning Value	Net Cash Flow	Market Gain/Loss	Ending Value
4Q23	\$49,114,249	\$597,086	\$296,697	\$50,008,033
YTD	\$47,281,493	\$1,586,457	\$1,140,083	\$50,008,033
2022	\$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

TOTAL PLAN ASSETS

\$50,008,033





Section 4

INVESTMENT POLICY STATEMENT COMPLIANCE REPORT

All Plans - Combined Fourth Quarter 2023

Proposed	Investment	Policy	y Status
----------	------------	--------	----------

Key: P Pass / ● Fail
Stabilizer
Voya Fixed Account

Voya Government Money Market A
Sterling Capital Total Return Bond R6
Fidelity US Bond Index
Fidelity Intermediate Treasury Bond Index

Performance	Qualitative
Factors	Factors
P	P
•	P
P	P
P	P
P	P
P	P

. reposed investine	,
On-Watch	
Information	Notes
-	
1Q23 (Performance)	Trailing Benchmark and Peer Group for 5 year period. Performance out of compliance as of 3Q22.
-	
-	
-	
-	

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

P	P
•	P
P	P
P	P
•	P
P	P
P	P
P	P

-	
-	Trailing Benchmark and Peer Group for 5 year period. Performance out of compliance as of 4Q23.
-	
-	
-	Trailing Benchmark and Peer Group for 5 year period. Performance out of compliance as of 4Q23.
-	
-	
-	

Conservative Allocation Portfolio
Moderate Allocation Portfolio
Aggressive Allocation Portfolio
Vanguard Target Retirement Income Trust I
Vanguard Target Retirement 2020 Trust I
Vanguard Target Retirement 2025 Trust I
Vanguard Target Retirement 2030 Trust I
Vanguard Target Retirement 2035 Trust I

P	P
P	P
P	P
P	P
P	P
P	P
P	P
P	P

-	
3Q21 (Performance)	Performance in compliance as of 2Q22.
4Q21 (Performance)	Performance in compliance as of 1Q23.
-	
-	
-	
-	
-	

INVESTMENT POLICY STATEMENT COMPLIANCE REPORT

All Plans - Combined Fourth Quarter 2023

Proposed Investment Policy Status

Key: 🕑	Pass /	Fail

Vanguard Target Retirement 2040 Trust I	
Vanguard Target Retirement 2045 Trust I	
Vanguard Target Retirement 2050 Trust I	
Vanguard Target Retirement 2055 Trust I	
Vanguard Target Retirement 2060 Trust I	
Vanguard Target Retirement 2065 Trust I	
Vanguard Target Retirement 2070 Trust I	

Vanguard Target Retirement 2070 Trust I
Vanguard Target Retirement Income
Vanguard Target Retirement 2020
Vanguard Target Retirement 2025
Vanguard Target Retirement 2030
Vanguard Target Retirement 2035
Vanguard Target Retirement 2040
Vanguard Target Retirement 2045
Vanguard Target Retirement 2050
Vanguard Target Retirement 2055
Vanguard Target Retirement 2060
Vanguard Target Retirement 2060
Vanguard Target Retirement 2065
Vanguard Target Retirement 2070

Performance	Qualitative
Factors	Factors
P	P
P	P
P	P
P	P
P	P
P	P
P	P
P	P
P	P
P	P
P	P
P	P
P	P
P	P
P	P
P	P
P	P
P	P
P	P

On-Watch	
Information	Notes
-	
-	
-	
-	
-	
-	
-	
-	
-	
-	
-	
-	
-	
-	
-	
-	
-	
-	
-	

PERFORMANCE REVIEW

All Plans - Combined Fourth Quarter 2023

	Annualized											
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2022	2021	2020	2019	2018	2017
Stabilizer	0.61	2.39	2.39	1.94	2.17	2.26	1.80	1.64	2.42	2.59	2.50	N/A
5 Yr Constant Maturity US Treasury Yield	1.09	4.06	4.06	2.63	2.07	1.96	3.00	0.85	0.54	1.96	2.75	1.91
+/- Index	(0.48)	(1.67)	(1.67)	(0.69)	0.10	0.30	(1.20)	0.79	1.88	0.63	(0.25)	-
US Stable Value	54	55	55	34	20	9	29	24	4	7	6	N/A
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2022	2021	2020	2019	2018	2017
Voya Fixed Account	0.56	2.13	2.13	1.52	1.59	1.85	1.00	1.50	1.40	1.85	1.90	N/A
5 Yr Constant Maturity US Treasury Yield	1.09	4.06	4.06	2.63	2.07	1.96	3.00	0.85	0.54	1.96	2.75	1.91
+/- Index	(0.53)	(1.93)	(1.93)	(1.11)	(0.48)	(0.11)	(2.00)	0.65	0.86	(0.11)	(0.85)	-
US Stable Value	69	75	75	72	75	32	90	36	86	82	42	N/A
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2022	2021	2020	2019	2018	2017
Voya Government Money Market A	1.27	4.81	4.81	2.10	1.69	1.03	1.43	0.10	0.27	1.88	1.51	0.26
US 90 Day T-Bill	1.30	5.07	5.07	2.35	1.89	1.27	2.01	0.04	0.36	2.06	1.94	0.93
+/- Index	(0.03)	(0.26)	(0.26)	(0.25)	(0.20)	(0.24)	(0.58)	0.06	(0.09)	(0.18)	(0.43)	(0.67)
US Money Market - Taxable	57	51	51	30	38	45	27	2	52	45	44	77
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2022	2021	2020	2019	2018	2017
Sterling Capital Total Return Bond R6	6.70	5.97	5.97	-3.10	1.70	2.27	-13.15	-1.12	9.35	9.37	-0.27	4.33
Bloomberg US Aggregate Bond Index	6.82	5.53	5.53	-3.31	1.10	1.81	-13.01	-1.54	7.51	8.72	0.01	3.54
+/- Index	(0.12)	0.44	0.44	0.21	0.60	0.46	(0.14)	0.42	1.84	0.65	(0.28)	0.79
US Fund Intermediate Core Bond	49	28	28	26	12	8	34	28	15	18	42	10
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2022	2021	2020	2019	2018	2017
Fidelity US Bond Index	6.64	5.56	5.56	-3.40	1.06	1.78	-13.03	-1.79	7.80	8.48	0.01	3.50
Bloomberg US Aggregate Bond Index	6.82	5.53	5.53	-3.31	1.10	1.81	-13.01	-1.54	7.51	8.72	0.01	3.54
+/- Index	(0.18)	0.03	0.03	(0.09)	(0.04)	(0.03)	(0.02)	(0.25)	0.29	(0.23)	0.00	(0.04)
US Fund Intermediate Core Bond	61	51	51	47	51	41	29	65	50	48	26	43

PERFORMANCE REVIEW

All Plans - Combined Fourth Quarter 2023

	Annualized											
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2022	2021	2020	2019	2018	2017
Fidelity Intermediate Treasury Bond Index	5.75	4.07	4.07	-4.13	0.61	1.54	-12.72	-3.00	9.10	7.25	1.23	2.20
Bloomberg US Treasury 5-10 Year Index	5.98	4.11	4.11	-4.06	0.70	1.62	-12.58	-2.97	9.09	7.48	1.22	2.17
+/- Index	(0.23)	(0.04)	(0.04)	(0.07)	(0.09)	(80.0)	(0.14)	(0.03)	0.01	(0.23)	0.01	0.03
US Fund Intermediate Government	82	52	52	86	22	10	76	92	8	1	2	16
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2022	2021	2020	2019	2018	2017
Fidelity 500 Index	11.69	26.29	26.29	9.99	15.68	12.02	-18.13	28.69	18.40	31.47	-4.40	21.81
S&P 500 Index	11.69	26.29	26.29	10.00	15.69	12.03	-18.11	28.71	18.40	31.49	-4.38	21.83
+/- Index	0.00	0.00	0.00	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)	0.00	(0.01)	(0.02)	(0.02)
US Fund Large Blend	44	23	23	24	17	7	49	21	33	22	22	32
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2022	2021	2020	2019	2018	2017
Hartford Core Equity R6	11.75	21.57	21.57	7.22	14.35	11.91	-18.65	24.62	18.49	33.89	-1.55	22.17
S&P 500 Index	11.69	26.29	26.29	10.00	15.69	12.03	-18.11	28.71	18.40	31.49	-4.38	21.83
+/- Index	0.06	(4.72)	(4.72)	(2.78)	(1.34)	(0.12)	(0.54)	(4.09)	0.09	2.40	2.83	0.34
US Fund Large Blend	42	66	66	83	53	10	61	72	31	5	5	28
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2022	2021	2020	2019	2018	2017
Fidelity Mid Cap Index	12.79	17.21	17.21	5.92	12.68	9.41	-17.28	22.56	17.11	30.51	-9.05	18.47
Russell Mid Cap Index	12.82	17.23	17.23	5.92	12.68	9.42	-17.32	22.58	17.10	30.54	-9.06	18.52
+/- Index	(0.03)	(0.02)	(0.02)	0.00	0.00	(0.01)	0.04	(0.02)	0.01	(0.03)	0.01	(0.05)
US Fund Mid-Cap Blend	23	29	29	59	30	14	67	66	24	24	25	26
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2022	2021	2020	2019	2018	2017
Baron Growth Instl	7.70	14.97	14.97	2.34	14.92	10.24	-22.40	20.15	33.05	40.50	-2.67	27.35
Russell Mid Cap Growth Index	14.55	25.87	25.87	1.31	13.81	10.57	-26.72	12.73	35.59	35.47	-4.75	25.27
+/- Index	(6.85)	(10.90)	(10.90)	1.03	1.11	(0.33)	4.32	7.42	(2.53)	5.03	2.08	2.09
US Fund Mid-Cap Growth	95	82	82	20	14	29	13	16	61	8	28	32

PERFORMANCE REVIEW

All Plans - Combined Fourth Quarter 2023

	Annualized											
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2022	2021	2020	2019	2018	2017
Hartford Schroders US Small Cap Opps SDR	11.41	8.71	8.71	3.66	9.73	7.62	-16.67	22.98	8.14	32.06	-10.72	14.81
Russell 2000 Index	14.03	16.93	16.93	2.22	9.97	7.16	-20.44	14.82	19.96	25.52	-11.01	14.65
+/- Index	(2.62)	(8.22)	(8.22)	1.44	(0.24)	0.46	3.77	8.16	(11.82)	6.53	0.29	0.16
US Fund Small Blend	73	95	95	72	74	39	49	51	67	3	32	27
					-14							
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2022	2021	2020	2019	2018	2017
Fidelity Small Cap Index	14.05	17.12	17.12	2.32	10.07	7.32	-20.27	14.71	19.99	25.71	-10.88	14.85
Russell 2000 Index	14.03	16.93	16.93	2.22	9.97	7.16	-20.44	14.82	19.96	25.52	-11.01	14.65
+/- Index	0.02	0.19	0.19	0.10	0.10	0.16	0.17	(0.11)	0.03	0.18	0.14	0.20
US Fund Small Blend	19	38	38	84	66	50	79	89	12	36	34	26
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2022	2021	2020	2019	2018	2017
MFS International Diversification R6	8.85	14.44	14.44	0.77	8.29	5.48	-17.02	7.78	15.43	26.09	-10.92	30.25
MSCI ACWI Ex-USA (Net) Index	9.75	15.62	15.62	1.55	7.08	3.83	-16.00	7.82	10.65	21.51	-14.20	27.19
+/- Index	(0.90)	(1.18)	(1.18)	(0.78)	1.21	1.65	(1.02)	(0.04)	4.78	4.58	3.27	3.05
US Fund Foreign Large Blend	76	70	70	76	33	6	62	70	20	20	9	9
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2022	2021	2020	2019	2018	2017
THE TABLE COLUMN	-											
Fidelity Total International Index	9.97	15.51	15.51	1.61	7.20	2.07	-16.28	8.47	11.07	21.48	-14.38	27.63
MSCI ACWI Ex-USA IMI (Net) Index	9.81	15.62	15.62	1.53	7.19	3.97	-16.58	8.53	11.12	21.63	-14.76	27.81
+/- Index	0.16	(0.11)	(0.11)	0.08	0.01	-	0.30	(0.06)	(0.04)	(0.16)	0.37	(0.18)
US Fund Foreign Large Blend	48	59	59	63	69	-	55	65	42	62	39	27
	OTP	YTD	1V	2V	5Yr	10V-	2022	2021	2020	2019	2018	2017
C C All C D C	QTR 3.74		1Yr	3Yr		10Yr		2021				2017
Conservative Allocation Portfolio		7.69	7.69	3.38	5.46	4.49	-3.85	6.71	7.74	9.55	-0.82	N/A
Dow Jones Moderately Conservative Index	8.32	9.81	9.81	-0.52	4.35	3.82	-14.42	4.76	10.08	14.14	-3.15	10.91
+/- Index	(4.58)	(2.12)	(2.12)	3.90	1.11	0.67	10.57	1.95	(2.34)	(4.59)	2.33	- N1/A
US Fund Allocation30% to 50% Equity	98	87	87	13	48	40	2	81	62	100	1	N/A

PERFORMANCE REVIEW

	Annualized											
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2022	2021	2020	2019	2018	2017
Moderate Allocation Portfolio	8.21	13.93	13.93	3.55	7.73	5.92	-12.41	11.27	10.15	18.64	-6.01	N/A
Dow Jones Moderate Index	9.18	12.70	12.70	1.59	6.89	5.49	-14.97	9.40	12.24	18.60	-5.21	15.15
+/- Index	(0.97)	1.23	1.23	1.96	0.84	0.43	2.56	1.87	(2.09)	0.04	(0.80)	-
US Fund Allocation50% to 70% Equity	81	47	47	45	60	53	25	76	71	66	56	N/A
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2022	2021	2020	2019	2018	2017
Aggressive Allocation Portfolio	10.39	17.66	17.66	4.24	9.53	6.79	-16.14	14.78	12.42	23.80	-8.33	N/A
Dow Jones Moderately Aggressive Index	9.90	15.59	15.59	3.63	9.30	6.94	-15.59	14.05	14.14	22.84	-7.33	19.08
+/- Index	0.49	2.07	2.07	0.61	0.23	(0.15)	(0.55)	0.73	(1.72)	0.96	(1.00)	-
US Fund Allocation70% to 85% Equity	29	37	37	53	46	46	50	66	60	26	59	N/A
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2022	2021	2020	2019	2018	2017
Vanguard Target Retirement Income Trust I	7.32	10.70	10.70	0.57	4.87	4.15	-12.70	5.25	10.10	13.27	-1.99	8.68
Vanguard Retirement Income Index	7.33	10.81	10.81	0.76	5.13	4.32	-12.44	5.43	10.70	13.40	-1.98	8.67
+/- Index	(0.01)	(0.11)	(0.11)	(0.19)	(0.26)	(0.17)	(0.26)	(0.18)	(0.60)	(0.13)	(0.01)	0.01
US Fund Target-Date Retirement	58	44	44	40	39	19	49	64	29	44	18	45
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2022	2021	2020	2019	2018	2017
Vanguard Target Retirement 2020 Trust I	8.00	12.54	12.54	1.51	6.66	5.60	-14.14	8.24	12.12	17.73	-4.18	14.18
Vanguard Retirement 2020 Index	7.97	12.65	12.65	1.74	6.98	5.80	-13.77	8.43	12.86	17.87	-4.14	14.22
+/- Index	0.03	(0.11)	(0.11)	(0.23)	(0.32)	(0.20)	(0.37)	(0.19)	(0.74)	(0.14)	(0.04)	(0.04)
US Fund Target-Date 2020	63	27	27	40	33	14	40	60	37	32	45	19
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2022	2021	2020	2019	2018	2017
Vanguard Target Retirement 2025 Trust I	8.88	14.57	14.57	2.11	7.66	6.20	-15.44	9.91	13.41	19.78	-5.06	16.02
Vanguard Retirement 2025 Index	8.85	14.73	14.73	2.39	8.01	6.43	-15.02	10.10	14.19	19.93	-5.01	16.08
+/- Index	0.03	(0.16)	(0.16)	(0.28)	(0.35)	(0.23)	(0.42)	(0.19)	(0.78)	(0.15)	(0.05)	(0.06)
US Fund Target-Date 2025	31	5	5	22	16	8	48	45	29	17	43	20

PERFORMANCE REVIEW

				-	Annualize	d						
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2022	2021	2020	2019	2018	2017
Vanguard Target Retirement 2030 Trust I	9.53	16.04	16.04	2.75	8.46	6.68	-16.15	11.48	14.19	21.18	-5.77	17.61
Vanguard Retirement 2030 Index	9.51	16.27	16.27	3.05	8.83	6.92	-15.71	11.65	14.96	21.33	-5.74	17.65
+/- Index	0.02	(0.23)	(0.23)	(0.30)	(0.37)	(0.24)	(0.44)	(0.17)	(0.77)	(0.15)	(0.03)	(0.04)
US Fund Target-Date 2030	37	6	6	27	28	14	43	52	33	34	36	33
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2022	2021	2020	2019	2018	2017
Vanguard Target Retirement 2035 Trust I	9.89	17.22	17.22	3.43	9.29	7.16	-16.52	13.08	14.93	22.76	-6.52	19.22
Vanguard Retirement 2035 Index	9.86	17.43	17.43	3.72	9.64	7.40	-16.22	13.24	15.67	22.76	-6.48	19.24
+/- Index	0.03	(0.21)	(0.21)	(0.29)	(0.35)	(0.24)	(0.30)	(0.16)	(0.74)	0.00	(0.04)	(0.02)
US Fund Target-Date 2035	61	25	25	39	37	22	35	74	37	40	28	36
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2022	2021	2020	2019	2018	2017
Vanguard Target Retirement 2040 Trust I	10.22	18.38	18.38	4.09	10.07	7.61	-16.95	14.70	15.59	23.97	-7.27	20.82
Vanguard Retirement 2040 Index	10.20	18.60	18.60	4.38	10.43	7.87	-16.51	14.85	16.31	24.19	-7.22	20.87
+/- Index	0.02	(0.22)	(0.22)	(0.29)	(0.36)	(0.26)	(0.44)	(0.15)	(0.72)	(0.22)	(0.05)	(0.05)
US Fund Target-Date 2040	74	43	43	52	42	24	33	78	39	44	31	26
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2022	2021	2020	2019	2018	2017
Vanguard Target Retirement 2045 Trust I	10.58	19.55	19.55	4.76	10.83	7.99	-17.33	16.34	16.26	25.10	-7.86	21.52
Vanguard Retirement 2045 Index	10.54	19.78	19.78	5.03	11.20	8.25	-16.84	16.45	17.03	25.36	-7.77	21.54
+/- Index	0.04	(0.23)	(0.23)	(0.27)	(0.37)	(0.26)	(0.49)	(0.11)	(0.77)	(0.26)	(0.09)	(0.02)
US Fund Target-Date 2045	67	38	38	39	30	19	30	61	35	34	39	21
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2022	2021	2020	2019	2018	2017
Vanguard Target Retirement 2050 Trust I	10.81	20.25	20.25	5.00	11.01	8.07	-17.44	16.60	16.45	25.07	-7.82	21.48
Vanguard Retirement 2050 Index	10.78	20.46	20.46	5.27	11.37	8.34	-17.07	16.77	17.18	25.36	-7.77	21.54
+/- Index	0.03	(0.21)	(0.21)	(0.27)	(0.36)	(0.27)	(0.37)	(0.17)	(0.73)	(0.29)	(0.05)	(0.06)
US Fund Target-Date 2050	64	37	37	34	27	16	28	62	35	41	31	27

PERFORMANCE REVIEW

	Annualized											
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2022	2021	2020	2019	2018	2017
Vanguard Target Retirement 2055 Trust I	10.81	20.23	20.23	5.00	11.01	8.06	-17.43	16.61	16.42	25.09	-7.83	21.48
Vanguard Retirement 2055 Index	10.78	20.46	20.46	5.27	11.37	8.34	-17.07	16.77	17.18	25.36	-7.77	21.54
+/- Index	0.03	(0.23)	(0.23)	(0.27)	(0.36)	(0.28)	(0.36)	(0.16)	(0.76)	(0.27)	(0.06)	(0.06)
US Fund Target-Date 2055	65	42	42	36	30	21	25	67	38	42	31	36
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2022	2021	2020	2019	2018	2017
Vanguard Target Retirement 2060 Trust I	10.82	20.23	20.23	5.01	11.03	8.07	-17.39	16.60	16.49	25.07	-7.81	21.51
Vanguard Retirement 2060 Index	10.78	20.46	20.46	5.27	11.37	8.34	-17.07	16.77	17.18	25.36	-7.77	21.54
+/- Index	0.04	(0.23)	(0.23)	(0.26)	(0.34)	(0.27)	(0.32)	(0.17)	(0.69)	(0.29)	(0.04)	(0.03)
US Fund Target-Date 2060	68	44	44	37	34	11	23	72	38	50	27	34
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2022	2021	2020	2019	2018	2017
Vanguard Target Retirement 2065 Trust I	10.79	20.22	20.22	5.00	11.02	-	-17.39	16.56	16.48	25.10	-7.69	-
Vanguard Retirement 2065 Index	10.78	20.46	20.46	5.27	11.37	-	-17.07	16.77	17.18	25.36	-7.77	-
+/- Index	0.01	(0.24)	(0.24)	(0.27)	(0.35)	-	(0.32)	(0.21)	(0.70)	(0.26)	0.08	-
US Fund Target-Date 2065+	65	51	51	34	70	-	18	63	49	59	6	-
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2022	2021	2020	2019	2018	2017
Vanguard Target Retirement 2070 Trust I	10.79	20.28	20.28	-	-	-	-	-	-	-	-	-
Vanguard Retirement 2070 Index	10.78	20.46	20.46	-	-	-	-	-	-	-	-	-
+/- Index	0.01	(0.18)	(0.18)	-	-	-	-	-	-	-	-	-
US Fund Target-Date 2065+	65	49	49	-	-	-	-	-	-	-	-	-
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2022	2021	2020	2019	2018	2017
Vanguard Target Retirement Income	7.26	10.65	10.65	0.54	4.82	4.08	-12.74	5.25	10.02	13.16	-1.99	8.47
Vanguard Retirement Income Index	7.33	10.81	10.81	0.76	5.13	4.32	-12.44	5.43	10.70	13.40	-1.98	8.67
+/- Index	(0.07)	(0.16)	(0.16)	(0.22)	(0.31)	(0.24)	(0.30)	(0.18)	(0.68)	(0.24)	(0.01)	(0.19)
US Fund Target-Date Retirement	59	46	46	41	42	23	49	64	30	48	18	50

PERFORMANCE REVIEW

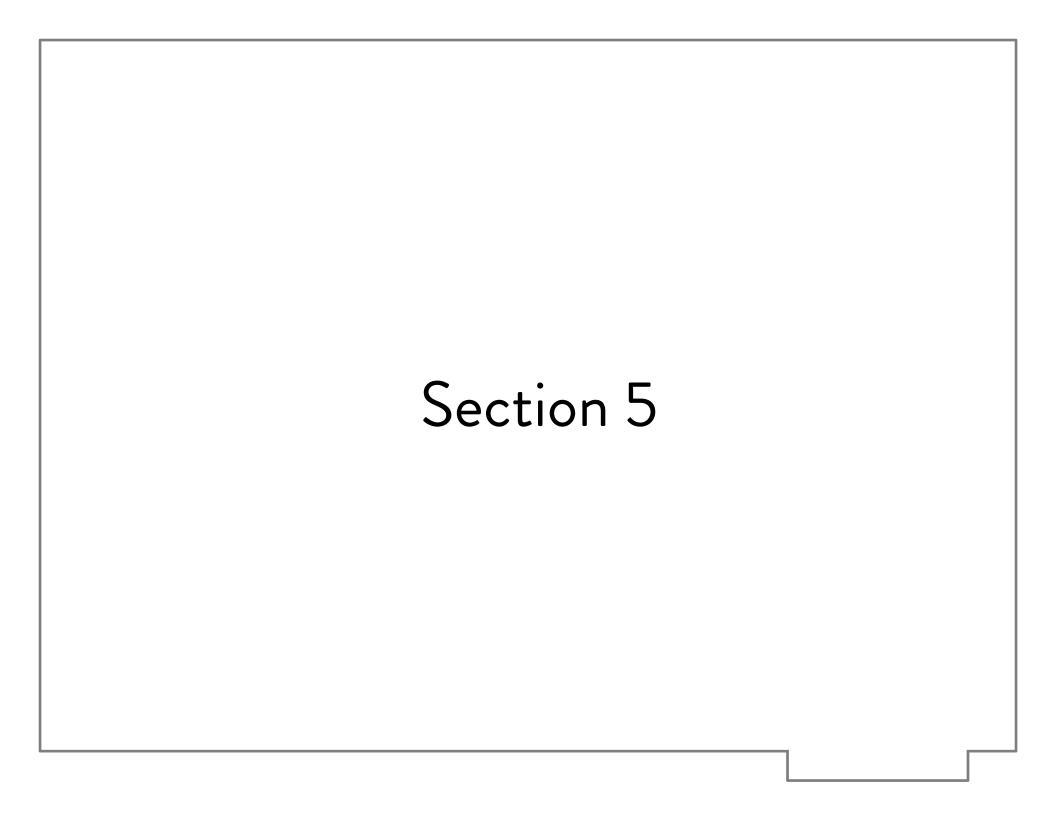
	Annualized											
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2022	2021	2020	2019	2018	2017
Vanguard Target Retirement 2020	8.00	12.51	12.51	1.47	6.61	5.52	-14.15	8.17	12.04	17.63	-4.24	14.08
Vanguard Retirement 2020 Index	7.97	12.65	12.65	1.74	6.98	5.80	-13.77	8.43	12.86	17.87	-4.14	14.22
+/- Index	0.03	(0.14)	(0.14)	(0.27)	(0.37)	(0.28)	(0.38)	(0.26)	(0.82)	(0.24)	(0.10)	(0.14)
US Fund Target-Date 2020	63	28	28	43	35	19	40	62	41	32	47	23
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2022	2021	2020	2019	2018	2017
Vanguard Target Retirement 2025	8.87	14.55	14.55	2.03	7.56	6.10	-15.55	9.80	13.30	19.63	-5.15	15.94
Vanguard Retirement 2025 Index	8.85	14.73	14.73	2.39	8.01	6.43	-15.02	10.10	14.19	19.93	-5.01	16.08
+/- Index	0.02	(0.18)	(0.18)	(0.36)	(0.45)	(0.33)	(0.53)	(0.30)	(0.89)	(0.30)	(0.14)	(0.14)
US Fund Target-Date 2025	31	6	6	25	21	10	52	47	34	20	48	22
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2022	2021	2020	2019	2018	2017
Vanguard Target Retirement 2030	9.50	15.99	15.99	2.65	8.37	6.58	-16.27	11.38	14.10	21.07	-5.86	17.52
Vanguard Retirement 2030 Index	9.51	16.27	16.27	3.05	8.83	6.92	-15.71	11.65	14.96	21.33	-5.74	17.65
+/- Index	(0.01)	(0.28)	(0.28)	(0.40)	(0.46)	(0.34)	(0.56)	(0.27)	(0.86)	(0.26)	(0.12)	(0.13)
US Fund Target-Date 2030	40	7	7	34	32	19	47	54	35	37	39	37
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2022	2021	2020	2019	2018	2017
Vanguard Target Retirement 2035	9.87	17.14	17.14	3.33	9.17	7.06	-16.62	12.96	14.79	22.44	-6.58	19.12
Vanguard Retirement 2035 Index	9.86	17.43	17.43	3.72	9.64	7.40	-16.22	13.24	15.67	22.76	-6.48	19.24
+/- Index	0.01	(0.29)	(0.29)	(0.39)	(0.47)	(0.34)	(0.40)	(0.28)	(0.87)	(0.33)	(0.10)	(0.12)
US Fund Target-Date 2035	62	26	26	46	45	27	38	78	38	49	31	40
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2022	2021	2020	2019	2018	2017
Vanguard Target Retirement 2040	10.23	18.34	18.34	4.02	9.99	7.52	-16.98	14.56	15.47	23.86	-7.32	20.71
Vanguard Retirement 2040 Index	10.20	18.60	18.60	4.38	10.43	7.87	-16.51	14.85	16.31	24.19	-7.22	20.87
+/- Index	0.03	(0.26)	(0.26)	(0.36)	(0.44)	(0.35)	(0.47)	(0.29)	(0.83)	(0.33)	(0.11)	(0.16)
US Fund Target-Date 2040	72	44	44	57	44	29	34	80	39	49	35	30

PERFORMANCE REVIEW

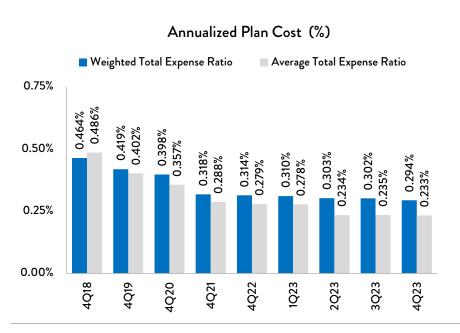
		Annualized										
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2022	2021	2020	2019	2018	2017
Vanguard Target Retirement 2045	10.57	19.48	19.48	4.68	10.76	7.91	-17.36	16.16	16.30	24.94	-7.90	21.42
Vanguard Retirement 2045 Index	10.54	19.78	19.78	5.03	11.20	8.25	-16.84	16.45	17.03	25.36	-7.77	21.54
+/- Index	0.03	(0.30)	(0.30)	(0.35)	(0.44)	(0.34)	(0.52)	(0.29)	(0.73)	(0.42)	(0.13)	(0.11)
US Fund Target-Date 2045	68	41	41	45	34	23	31	65	34	40	41	24
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2022	2021	2020	2019	2018	2017
Vanguard Target Retirement 2050	10.79	20.17	20.17	4.91	10.93	7.99	-17.46	16.41	16.39	24.98	-7.90	21.39
Vanguard Retirement 2050 Index	10.78	20.46	20.46	5.27	11.37	8.34	-17.07	16.77	17.18	25.36	-7.77	21.54
+/- Index	0.01	(0.29)	(0.29)	(0.36)	(0.44)	(0.35)	(0.39)	(0.36)	(0.79)	(0.38)	(0.13)	(0.14)
US Fund Target-Date 2050	65	39	39	38	33	21	29	70	35	45	37	31
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2022	2021	2020	2019	2018	2017
Vanguard Target Retirement 2055	10.78	20.16	20.16	4.92	10.92	7.97	-17.46	16.44	16.32	24.98	-7.89	21.38
Vanguard Retirement 2055 Index	10.78	20.46	20.46	5.27	11.37	8.34	-17.07	16.77	17.18	25.36	-7.77	21.54
+/- Index	0.00	(0.30)	(0.30)	(0.35)	(0.45)	(0.37)	(0.39)	(0.33)	(0.86)	(0.38)	(0.12)	(0.16)
US Fund Target-Date 2055	66	44	44	37	36	26	26	75	40	47	35	39
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2022	2021	2020	2019	2018	2017
Vanguard Target Retirement 2060	10.79	20.18	20.18	4.92	10.92	7.97	-17.46	16.44	16.32	24.96	-7.87	21.36
Vanguard Retirement 2060 Index	10.78	20.46	20.46	5.27	11.37	8.34	-17.07	16.77	17.18	25.36	-7.77	21.54
+/- Index	0.01	(0.28)	(0.28)	(0.35)	(0.45)	(0.37)	(0.39)	(0.33)	(0.85)	(0.40)	(0.10)	(0.18)
US Fund Target-Date 2060	68	47	47	41	41	11	25	77	41	56	30	43
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2022	2021	2020	2019	2018	2017
Vanguard Target Retirement 2065	10.79	20.15	20.15	4.95	10.91	-	-17.39	16.46	16.17	24.96	-7.95	-
Vanguard Retirement 2065 Index	10.78	20.46	20.46	5.27	11.37	-	-17.07	16.77	17.18	25.36	-7.77	-
+/- Index	0.01	(0.31)	(0.31)	(0.32)	(0.46)	-	(0.32)	(0.31)	(1.00)	(0.39)	(0.18)	
US Fund Target-Date 2065+	65	54	54	35	70		18	67	56	59	12	

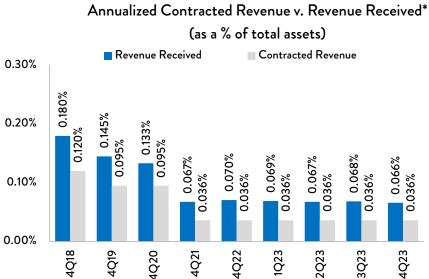
PERFORMANCE REVIEW

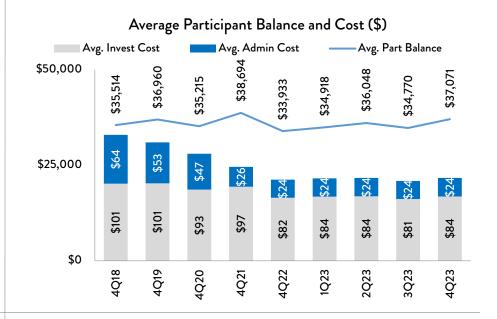
	Annualized											
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	2022	2021	2020	2019	2018	2017
Vanguard Target Retirement 2070	10.83	20.24	20.24	-	-	-	-	-	-	-	-	-
Vanguard Retirement 2070 Index	10.78	20.46	20.46	-	-	-	-	-	-	-	-	-
+/- Index	0.05	(0.22)	(0.22)	-	-	-	-	-	-	-	-	-
US Fund Target-Date 2065+	64	50	50	-	-	-	-	-	-	-	-	-

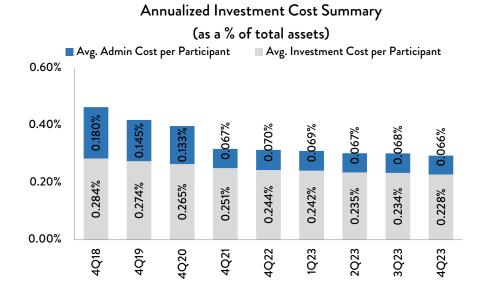


Full-Time Plans - Combined









^{*}Revenue received is 0.066% annually on all assets excluding SDBA. Contracted revenue is 0.036% annually on all assets excluding SDBA.

Full-Time Plans - Combined

PLAN FEE ANALYSIS

Fourth Quarter 2023

Annualized

					Est. Total Invest.	Est. Total Admin.
Fund	Ticker	Quarter End Assets	Net Expense Ratio	Admin Fee	Cost	Cost
Stabilizer	-	\$269,861,626	0.340%	0.066%	\$917,530	\$177,138
Voya Fixed Account**	-	\$90,466,442	0.410%	0.066%	\$370,912	\$59,382
Voya Government Money Market A	VYAXX	\$894,541	0.400%	0.066%	\$3,578	\$587
Sterling Capital Total Return Bond R6	STRDX	\$32,940,569	0.350%	0.066%	\$115,292	\$21,622
Fidelity US Bond Index	FXNAX	\$10,632,718	0.025%	0.066%	\$2,658	\$6,979
Fidelity Intermediate Treasury Bond Index	FUAMX	\$2,674,620	0.030%	0.066%	\$802	\$1,756
Fidelity 500 Index	FXAIX	\$192,894,942	0.015%	0.066%	\$28,934	\$126,617
Hartford Core Equity R6	HAITX	\$153,436,571	0.360%	0.066%	\$552,372	\$100,716
Fidelity Mid Cap Index	FSMDX	\$82,265,095	0.025%	0.066%	\$20,566	\$53,999
Baron Growth InstI*	BGRIX	\$51,551,915	0.890%	0.066%	\$458,812	\$33,839
Hartford Schroders US Small Cap Opps SDR	SCURX	\$12,106,479	0.950%	0.066%	\$115,012	\$7,947
Fidelity Small Cap Index	FSSNX	\$48,928,296	0.025%	0.066%	\$12,232	\$32,117
MFS International Diversification R6	MDIZX	\$60,282,777	0.730%	0.066%	\$440,064	\$39,570
Fidelity Total International Index	FTIHX	\$40,570,183	0.060%	0.066%	\$24,342	\$26,630
Conservative Allocation Portfolio	-	\$39,828,074	0.250%	0.066%	\$99,570	\$26,143
Moderate Allocation Portfolio*	-	\$90,629,266	0.160%	0.066%	\$145,007	\$59,489
Aggressive Allocation Portfolio*	-	\$68,705,150	0.100%	0.066%	\$68,705	\$45,098
Vanguard Target Retirement Income Trust I	-	\$4,527,072	0.065%	0.066%	\$2,943	\$2,972
Vanguard Target Retirement 2020 Trust I	-	\$19,777,024	0.065%	0.066%	\$12,855	\$12,982
Vanguard Target Retirement 2025 Trust I	-	\$3,928,376	0.065%	0.066%	\$2,553	\$2,579
Vanguard Target Retirement 2030 Trust I	-	\$47,768,246	0.065%	0.066%	\$31,049	\$31,355
Vanguard Target Retirement 2035 Trust I	-	\$6,232,465	0.065%	0.066%	\$4,051	\$4,091
Vanguard Target Retirement 2040 Trust I	-	\$60,341,132	0.065%	0.066%	\$39,222	\$39,608
Vanguard Target Retirement 2045 Trust I	-	\$4,907,739	0.065%	0.066%	\$3,190	\$3,221
Vanguard Target Retirement 2050 Trust I	-	\$61,894,411	0.065%	0.066%	\$40,231	\$40,628
Vanguard Target Retirement 2055 Trust I	-	\$4,365,287	0.065%	0.066%	\$2,837	\$2,865
Vanguard Target Retirement 2060 Trust I	-	\$3,634,107	0.065%	0.066%	\$2,362	\$2,385
Vanguard Target Retirement 2065 Trust I	-	\$1,696,689	0.065%	0.066%	\$1,103	\$1,114

Full-Time Plans - Combined

PLAN FEE ANALYSIS

Fourth Quarter 2023

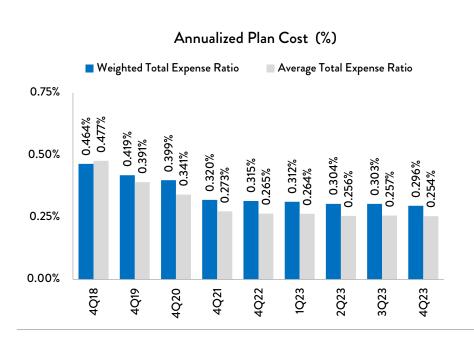
ınnuai	

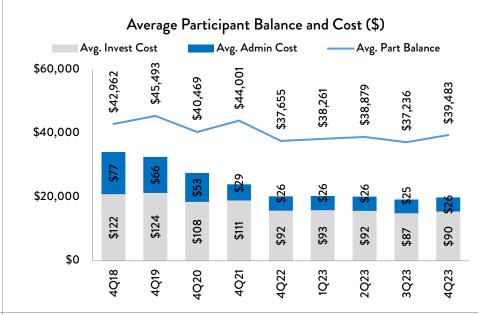
					Est. Total Invest.	Est. Total Admin.
Fund	Ticker	Quarter End Assets	Net Expense Ratio	Admin Fee	Cost	Cost
Vanguard Target Retirement 2070 Trust I	-	\$186,990	0.065%	0.066%	\$122	\$123
Vanguard Target Retirement Income	VTINX	\$2,504,376	0.080%	0.066%	\$2,004	\$1,644
Vanguard Target Retirement 2020	VTWNX	\$17,270,671	0.080%	0.066%	\$13,817	\$11,337
Vanguard Target Retirement 2025	VTTVX	\$2,549,669	0.080%	0.066%	\$2,040	\$1,674
Vanguard Target Retirement 2030	VTHRX	\$41,069,585	0.080%	0.066%	\$32,856	\$26,958
Vanguard Target Retirement 2035	VTTHX	\$3,382,053	0.080%	0.066%	\$2,706	\$2,220
Vanguard Target Retirement 2040	VFORX	\$32,508,115	0.080%	0.066%	\$26,006	\$21,338
Vanguard Target Retirement 2045	VTIVX	\$879,227	0.080%	0.066%	\$703	\$577
Vanguard Target Retirement 2050	VFIFX	\$11,250,858	0.080%	0.066%	\$9,001	\$7,385
Vanguard Target Retirement 2055	VFFVX	\$21,027	0.080%	0.066%	\$17	\$14
Vanguard Target Retirement 2060	VTTSX	\$5,747	0.080%	0.066%	\$5	\$4
Vanguard Target Retirement 2065	VLXVX	\$14,810	0.080%	0.066%	\$12	\$10
Vanguard Target Retirement 2070	VSVNX	\$0	0.080%	0.066%	\$0	\$0
Self-Directed Brokerage Account	-	\$8,452,074	-	0.000%	-	\$0
TOTAL	1	\$1,587,837,012	1		\$3,608,073	\$1,036,714

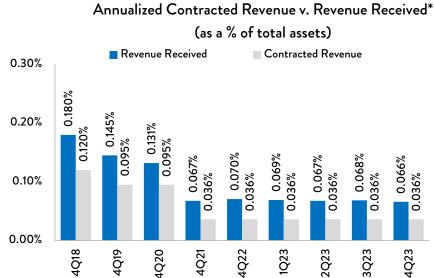
Plan Administration Cost	Quarter	Annualized
Contracted Revenue to Voya (3.6 bps excluding SDBA - est):	\$142,145	\$568,579
Additional Administrative Allowance (\$505,000 pro-rated - est):	\$117,034	\$468,135
Total Plan Administration Cost (6.8 bps excluding SDBA - est):	\$259,178	\$1,036,714

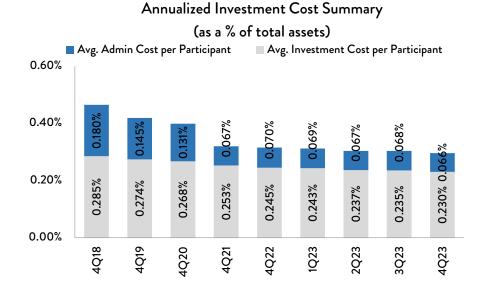
^{*}Revenue derived from funds credited to participant accounts in which they are held. For fee reporting purposes, the credit has been used to offset the reported fund expense ratio.

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









^{*}Revenue received is 0.066% annually on all assets excluding SDBA. Contracted revenue is 0.036% annually on all assets excluding SDBA.

457 Deferred Compensation Plan

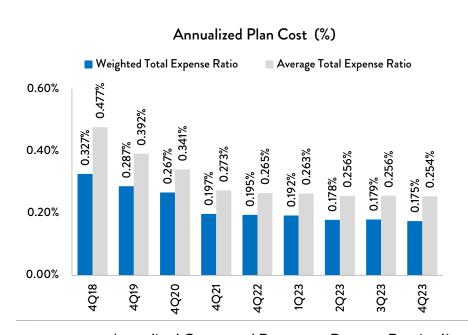
Fourth Quarter 2023

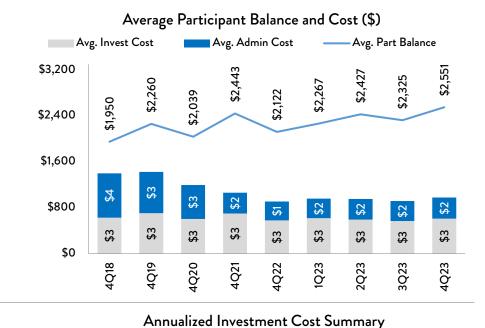
Annualized

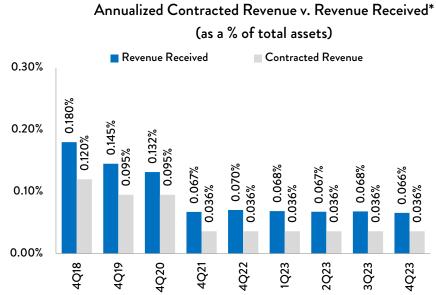
					Est. Total Invest.	Est. Total Admin.
Fund	Ticker	Quarter End Assets	Net Expense Ratio	Admin Fee	Cost	Cost
Stabilizer	-	\$222,511,807	0.340%	0.066%	\$756,540	\$146,027
Sterling Capital Total Return Bond R6	STRDX	\$27,848,386	0.350%	0.066%	\$97,469	\$18,276
Fidelity US Bond Index	FXNAX	\$9,646,325	0.025%	0.066%	\$2,412	\$6,331
Fidelity Intermediate Treasury Bond Index	FUAMX	\$1,939,630	0.030%	0.066%	\$582	\$1,273
Fidelity 500 Index	FXAIX	\$151,493,952	0.015%	0.066%	\$22,724	\$99,420
Hartford Core Equity R6	HAITX	\$120,318,338	0.360%	0.066%	\$433,146	\$78,961
Fidelity Mid Cap Index	FSMDX	\$64,615,588	0.025%	0.066%	\$16,154	\$42,405
Baron Growth Instl*	BGRIX	\$40,058,659	0.890%	0.066%	\$356,522	\$26,289
Hartford Schroders US Small Cap Opps SDR	SCURX	\$9,916,222	0.950%	0.066%	\$94,204	\$6,508
Fidelity Small Cap Index	FSSNX	\$38,883,578	0.025%	0.066%	\$9,721	\$25,518
MFS International Diversification R6	MDIZX	\$50,502,968	0.730%	0.066%	\$368,672	\$33,143
Fidelity Total International Index	FTIHX	\$34,903,799	0.060%	0.066%	\$20,942	\$22,906
Conservative Allocation Portfolio	-	\$28,261,565	0.250%	0.066%	\$70,654	\$18,547
Moderate Allocation Portfolio*	-	\$71,306,948	0.160%	0.066%	\$114,091	\$46,796
Aggressive Allocation Portfolio*	-	\$59,242,278	0.100%	0.066%	\$59,242	\$38,879
Vanguard Target Retirement Income Trust I	-	\$3,691,726	0.065%	0.066%	\$2,400	\$2,423
Vanguard Target Retirement 2020 Trust I	-	\$14,426,074	0.065%	0.066%	\$9,377	\$9,467
Vanguard Target Retirement 2025 Trust I	-	\$2,762,952	0.065%	0.066%	\$1,796	\$1,813
Vanguard Target Retirement 2030 Trust I	-	\$33,036,946	0.065%	0.066%	\$21,474	\$21,681
Vanguard Target Retirement 2035 Trust I	-	\$4,168,062	0.065%	0.066%	\$2,709	\$2,735
Vanguard Target Retirement 2040 Trust I	-	\$45,661,645	0.065%	0.066%	\$29,680	\$29,966
Vanguard Target Retirement 2045 Trust I	-	\$3,119,887	0.065%	0.066%	\$2,028	\$2,047
Vanguard Target Retirement 2050 Trust I	-	\$53,835,617	0.065%	0.066%	\$34,993	\$35,330
Vanguard Target Retirement 2055 Trust I	-	\$3,150,909	0.065%	0.066%	\$2,048	\$2,068
Vanguard Target Retirement 2060 Trust I	-	\$3,107,994	0.065%	0.066%	\$2,020	\$2,040
Vanguard Target Retirement 2065 Trust I	-	\$1,530,096	0.065%	0.066%	\$995	\$1,004
Vanguard Target Retirement 2070 Trust I	-	\$181,279	0.065%	0.066%	\$118	\$119
Self-Directed Brokerage Account	-	\$5,864,707	-	0.000%	-	\$0
TOTAL	<u>'</u>	\$1,105,987,936	•		\$2,532,713	\$721,971

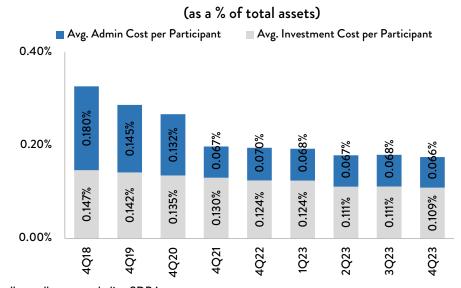
Plan Administration Cost		Quarter	Annualized
	Plan Generated Revenue (est):	\$180,493	\$721,971
	Contracted Revenue (est):	\$99,011	\$396,044
	Net Excess/(Deficit) (est):	\$81,482	\$325,927

^{*}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.









^{*}Revenue received is 0.066% annually on all assets excluding SDBA. Contracted revenue is 0.036% annually on all assets excluding SDBA.

401(a) Defined Contribution Plan

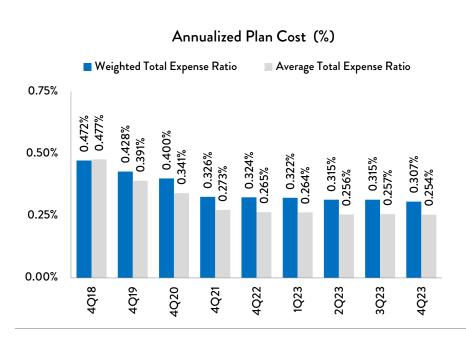
Fourth Quarter 2023

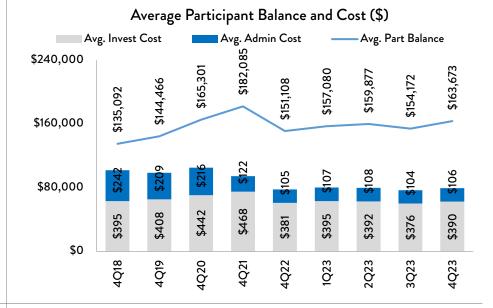
Annualized

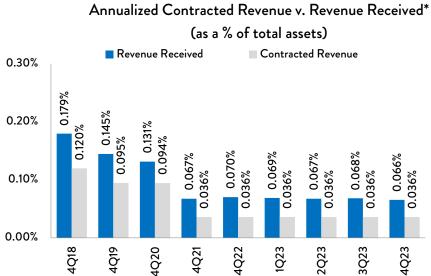
					Est. Total Invest.	Est. Total Admin.
Fund	Ticker	Quarter End Assets	Net Expense Ratio	Admin Fee	Cost	Cost
Stabilizer	-	\$2,511,237	0.340%	0.066%	\$8,538	\$1,649
Sterling Capital Total Return Bond R6	STRDX	\$252,431	0.350%	0.066%	\$884	\$166
Fidelity US Bond Index	FXNAX	\$32,643	0.025%	0.066%	\$8	\$21
Fidelity Intermediate Treasury Bond Index	FUAMX	\$27,998	0.030%	0.066%	\$8	\$18
Fidelity 500 Index	FXAIX	\$1,907,568	0.015%	0.066%	\$286	\$1,252
Hartford Core Equity R6	HAITX	\$887,973	0.360%	0.066%	\$3,197	\$583
Fidelity Mid Cap Index	FSMDX	\$719,794	0.025%	0.066%	\$180	\$473
Baron Growth Instl*	BGRIX	\$572,906	0.890%	0.066%	\$5,099	\$376
Hartford Schroders US Small Cap Opps SDR	SCURX	\$183,891	0.950%	0.066%	\$1,747	\$121
Fidelity Small Cap Index	FSSNX	\$448,018	0.025%	0.066%	\$112	\$294
MFS International Diversification R6	MDIZX	\$234,717	0.730%	0.066%	\$1,713	\$154
Fidelity Total International Index	FTIHX	\$314,117	0.060%	0.066%	\$188	\$206
Conservative Allocation Portfolio	-	\$1,106,059	0.250%	0.066%	\$2,765	\$726
Moderate Allocation Portfolio*	-	\$1,584,624	0.160%	0.066%	\$2,535	\$1,040
Aggressive Allocation Portfolio*	-	\$1,542,563	0.100%	0.066%	\$1,543	\$1,013
Vanguard Target Retirement Income Trust I	-	\$710,451	0.065%	0.066%	\$462	\$466
Vanguard Target Retirement 2020 Trust I	-	\$3,959,249	0.065%	0.066%	\$2,574	\$2,599
Vanguard Target Retirement 2025 Trust I	-	\$667,114	0.065%	0.066%	\$434	\$438
Vanguard Target Retirement 2030 Trust I	-	\$10,031,309	0.065%	0.066%	\$6,520	\$6,586
Vanguard Target Retirement 2035 Trust I	-	\$1,044,382	0.065%	0.066%	\$679	\$686
Vanguard Target Retirement 2040 Trust I	-	\$10,647,257	0.065%	0.066%	\$6,921	\$6,990
Vanguard Target Retirement 2045 Trust I	-	\$1,209,137	0.065%	0.066%	\$786	\$794
Vanguard Target Retirement 2050 Trust I	-	\$5,185,153	0.065%	0.066%	\$3,370	\$3,404
Vanguard Target Retirement 2055 Trust I	-	\$1,008,001	0.065%	0.066%	\$655	\$662
Vanguard Target Retirement 2060 Trust I	-	\$491,438	0.065%	0.066%	\$319	\$323
Vanguard Target Retirement 2065 Trust I	-	\$58,521	0.065%	0.066%	\$38	\$38
Vanguard Target Retirement 2070 Trust I	-	\$3,968	0.065%	0.066%	\$3	\$3
TOTAL		\$47,342,520			\$51,564	\$31,082

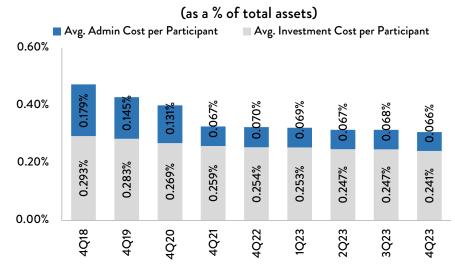
Plan Administration Cost		Quarter	Annualized
	Plan Generated Revenue (est):	\$7,771	\$31,082
	Contracted Revenue (est):	\$4,261	\$17,043
	Net Excess/(Deficit) (est):	\$3,510	\$14,039

^{*}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 Investment Cost Summary

^{*}Revenue received is 0.066% annually on all assets excluding SDBA. Contracted revenue is 0.036% annually on all assets excluding SDBA.

401(k) Defined Contribution Plan

Fourth Quarter 2023

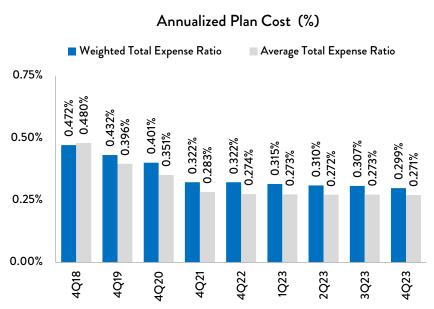
Annualized

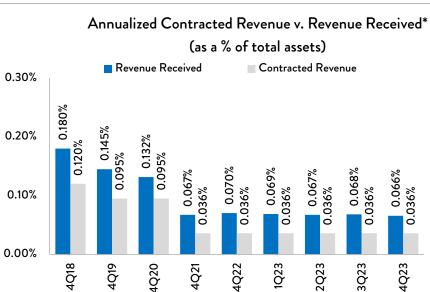
					Est. Total Invest.	Est. Total Admin.
Fund	Ticker	Quarter End Assets	Net Expense Ratio	Admin Fee	Cost	Cost
Stabilizer	-	\$44,838,582	0.340%	0.066%	\$152,451	\$29,405
Sterling Capital Total Return Bond R6	STRDX	\$4,123,835	0.350%	0.066%	\$14,433	\$2,704
Fidelity US Bond Index	FXNAX	\$909,620	0.025%	0.066%	\$227	\$597
Fidelity Intermediate Treasury Bond Index	FUAMX	\$598,847	0.030%	0.066%	\$180	\$393
Fidelity 500 Index	FXAIX	\$35,017,467	0.015%	0.066%	\$5,253	\$22,965
Hartford Core Equity R6	HAITX	\$28,024,444	0.360%	0.066%	\$100,888	\$18,378
Fidelity Mid Cap Index	FSMDX	\$14,203,573	0.025%	0.066%	\$3,551	\$9,315
Baron Growth Instl*	BGRIX	\$8,524,450	0.890%	0.066%	\$75,868	\$5,590
Hartford Schroders US Small Cap Opps SDR	SCURX	\$1,631,873	0.950%	0.066%	\$15,503	\$1,070
Fidelity Small Cap Index	FSSNX	\$7,899,850	0.025%	0.066%	\$1,975	\$5,181
MFS International Diversification R6	MDIZX	\$8,662,441	0.730%	0.066%	\$63,236	\$5,681
Fidelity Total International Index	FTIHX	\$4,718,126	0.060%	0.066%	\$2,831	\$3,094
Conservative Allocation Portfolio	-	\$10,460,449	0.250%	0.066%	\$26,151	\$6,860
Moderate Allocation Portfolio*	-	\$17,737,694	0.160%	0.066%	\$28,380	\$11,632
Aggressive Allocation Portfolio*	-	\$7,920,309	0.100%	0.066%	\$7,920	\$5,194
Vanguard Target Retirement Income Trust I	-	\$124,894	0.065%	0.066%	\$81	\$82
Vanguard Target Retirement 2020 Trust I	-	\$1,391,701	0.065%	0.066%	\$905	\$913
Vanguard Target Retirement 2025 Trust I	-	\$498,310	0.065%	0.066%	\$324	\$327
Vanguard Target Retirement 2030 Trust I	-	\$4,699,991	0.065%	0.066%	\$3,055	\$3,082
Vanguard Target Retirement 2035 Trust I	-	\$1,020,020	0.065%	0.066%	\$663	\$669
Vanguard Target Retirement 2040 Trust I	-	\$4,032,230	0.065%	0.066%	\$2,621	\$2,644
Vanguard Target Retirement 2045 Trust I	-	\$578,714	0.065%	0.066%	\$376	\$380
Vanguard Target Retirement 2050 Trust I	-	\$2,873,641	0.065%	0.066%	\$1,868	\$1,885
Vanguard Target Retirement 2055 Trust I	-	\$206,377	0.065%	0.066%	\$134	\$135
Vanguard Target Retirement 2060 Trust I	-	\$34,675	0.065%	0.066%	\$23	\$23
Vanguard Target Retirement 2065 Trust I	-	\$108,072	0.065%	0.066%	\$70	\$71
Vanguard Target Retirement 2070 Trust I	-	\$1,743	0.065%	0.066%	\$1	\$1
Self-Directed Brokerage Account	-	\$2,587,367	-	0.000%	-	\$0
TOTAL		\$213,429,297			\$508,968	\$138,271

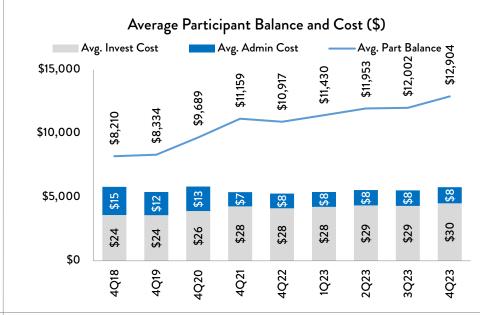
Plan Administration Cost		Quarter	Annualized
	Plan Generated Revenue (est):	\$34,568	\$138,271
	Contracted Revenue (est):	\$18,976	\$75,903
	Net Excess/(Deficit) (est):	\$15,592	\$62,368

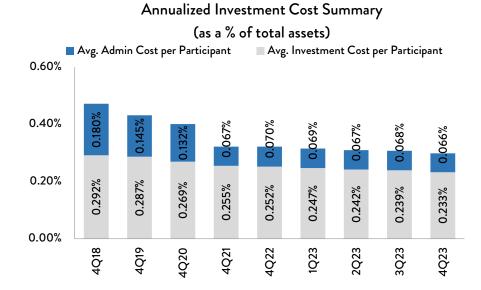
^{*}Revenue derived from funds credited to participant accounts in which they are held. For fee reporting purposes, the credit has been used to offset the reported fund expense ratio.

Retirement Medical Trust









^{*}Revenue received is 0.066% annually on all assets excluding SDBA. Contracted revenue is 0.036% annually on all assets excluding SDBA.

Retirement Medical Trust

Fourth Quarter 2023

Annualized

					Est. Total Invest.	Est. Total Admin.
Fund	Ticker	Quarter End Assets	Net Expense Ratio	Admin Fee	Cost	Cost
Voya Fixed Account**	-	\$90,466,442	0.410%	0.066%	\$370,912	\$59,494
Voya Government Money Market A	VYAXX	\$894,541	0.400%	0.066%	\$3,578	\$588
Sterling Capital Total Return Bond R6	STRDX	\$715,918	0.350%	0.066%	\$2,506	\$471
Fidelity US Bond Index	FXNAX	\$44,130	0.025%	0.066%	\$11	\$29
Fidelity Intermediate Treasury Bond Index	FUAMX	\$108,145	0.030%	0.066%	\$32	\$71
Fidelity 500 Index	FXAIX	\$4,475,954	0.015%	0.066%	\$671	\$2,944
Hartford Core Equity R6	HAITX	\$4,205,816	0.360%	0.066%	\$15,141	\$2,766
Fidelity Mid Cap Index	FSMDX	\$2,726,140	0.025%	0.066%	\$682	\$1,793
Baron Growth Instl*	BGRIX	\$2,395,900	0.890%	0.066%	\$21,324	\$1,576
Hartford Schroders US Small Cap Opps SDR	SCURX	\$374,494	0.950%	0.066%	\$3,558	\$246
Fidelity Small Cap Index	FSSNX	\$1,696,850	0.025%	0.066%	\$424	\$1,116
MFS International Diversification R6	MDIZX	\$882,650	0.730%	0.066%	\$6,443	\$580
Fidelity Total International Index	FTIHX	\$634,142	0.060%	0.066%	\$380	\$417
Vanguard Target Retirement Income	VTINX	\$2,504,376	0.080%	0.066%	\$2,004	\$1,647
Vanguard Target Retirement 2020	VTWNX	\$17,270,671	0.080%	0.066%	\$13,817	\$11,358
Vanguard Target Retirement 2025	VTTVX	\$2,549,669	0.080%	0.066%	\$2,040	\$1,677
Vanguard Target Retirement 2030	VTHRX	\$41,069,585	0.080%	0.066%	\$32,856	\$27,009
Vanguard Target Retirement 2035	VTTHX	\$3,382,053	0.080%	0.066%	\$2,706	\$2,224
Vanguard Target Retirement 2040	VFORX	\$32,508,115	0.080%	0.066%	\$26,006	\$21,379
Vanguard Target Retirement 2045	VTIVX	\$879,227	0.080%	0.066%	\$703	\$578
Vanguard Target Retirement 2050	VFIFX	\$11,250,858	0.080%	0.066%	\$9,001	\$7,399
Vanguard Target Retirement 2055	VFFVX	\$21,027	0.080%	0.066%	\$17	\$14
Vanguard Target Retirement 2060	VTTSX	\$5,747	0.080%	0.066%	\$5	\$4
Vanguard Target Retirement 2065	VLXVX	\$14,810	0.080%	0.066%	\$12	\$10
Vanguard Target Retirement 2070	VSVNX	\$0	0.080%	0.066%	\$0	\$0
TOTAL	1	\$221,077,260			¢51/ 929	¢1//5 200

TOTAL \$221,077,260 \$514,828 \$145,389

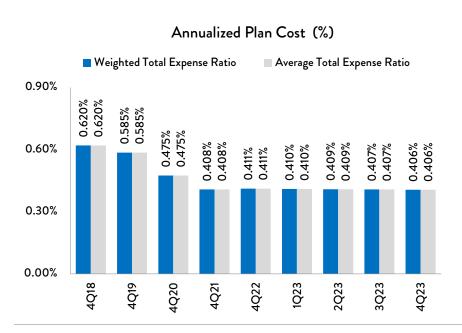
Plan Administration Cost		Quarter	Annualized
	Plan Generated Revenue (est):	\$36,347	\$145,389
	Contracted Revenue (est):	\$19,897	\$79,588
	Net Excess/(Deficit) (est):	\$16,450	\$65,802

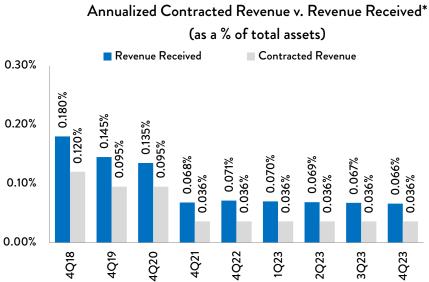
^{*}Revenue derived from funds credited to participant accounts in which they are held. For fee reporting purposes, the credit has been used to offset the reported fund expense ratio.

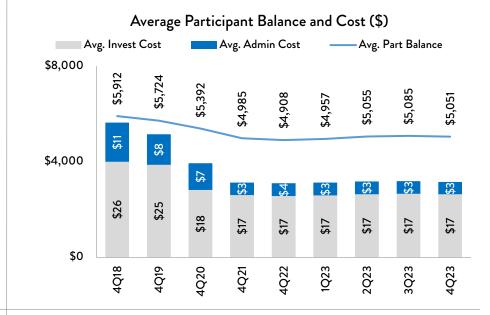
^{**}No explicit expense ratio given for the Voya Fixed Account. An expense ratio of 0.41% is assumed for reporting purposes.

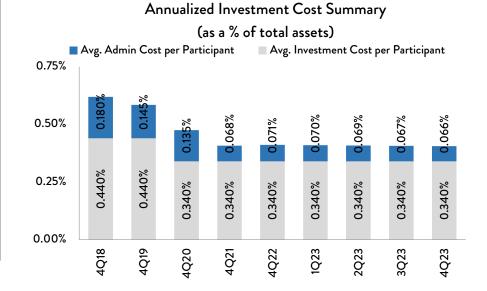
Section 6

Fourth Quarter 2023









PST Deferred Compensation Retirement Plan

PLAN FEE ANALYSIS

Fourth Quarter 2023

Annualized

Fund	Ticker	Quarter End Assets	Net Expense Ratio	Admin Fee
Stabilizer	=	\$50,008,033	0.34%	0.066%
TOTAL		\$50,008,033		

Est. Total Invest.	Est. Total Admin.
Cost	Cost
\$170,027	\$33,001
\$170.027	\$33,001

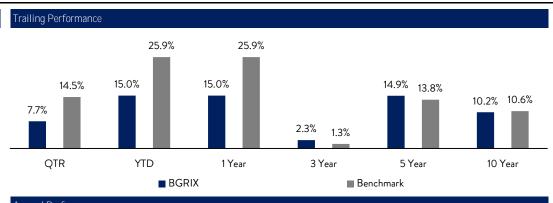
Plan Administration Cost		Quarter	Annualized
	Plan Generated Revenue (est):	\$8,250	\$33,001
	Contracted Revenue (est):	\$4,501	\$18,003
	Net Excess/(Deficit) (est):	\$3,750	\$14,999

Section 7

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	29.08 Years
Fund Size	\$7,865,839,650

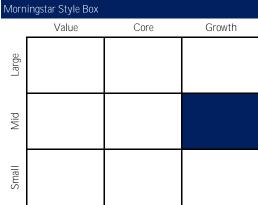
Fund Characteristics	BGRIX	+/- Category
% Assets in Top 10 Holdings	63.46%	37.57%
Average Market Cap (mil)	\$15,513	-\$5,458
P/E Ratio (TTM)	27.26	-0.70
P/B Ratio (TTM)	4.68	-0.93
Est. Dividend Yield	1.24%	0.58%

Sector Allocations	BGRIX	Category	+/- Category
Materials	0.0%	2.1%	-2.1%
Communication Services	4.0%	3.6%	0.4%
Consumer Discretionary	15.6%	12.2%	3.4%
Consumer Staples	0.9%	2.7%	-1.8%
Healthcare	10.0%	18.7%	-8.7%
Industrials	1.1%	17.1%	-16.0%
Real Estate	10.9%	2.8%	8.2%
Technology	15.6%	27.0%	-11.4%
Energy	0.0%	3.2%	-3.2%
Financial Services	42.0%	10.1%	31.8%
Utilities	0.0%	0.5%	-0.5%
Other	0.0%	0.0%	0.0%









Fund Fact Sheet
Data as of 12/31/2023

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year	5-Year Quarterly				
• BGRIX	7.70%	14.97%	14.97%	2.34%	14.92%	10.24%	Performance	4Q23	3Q23	2Q23	1Q23
Benchmark	14.55%	25.87%	25.87%	1.31%	13.81%	10.57%	• BGRIX	7.70%	-3.66%	2.71%	7.88%
+/- Benchmark	-6.84%	-10.90%	-10.90%	1.04%	1.10%	-0.33%	 Benchmark 	14.55%	-5.22%	6.23%	9.14%
Peer Group Rank	94	82	82	21	14	29	+/- Benchmark	-6.84%	1.56%	-3.52%	-1.26%
Annual Performance	2023	2022	2021	2020	2019	2018	5-Year Quarterly				
• BGRIX	14.97%	-22.40%	20.15%	33.05%	40.50%	-2.67%	Performance	4Q22	3Q22	2Q22	1Q22
• Benchmark	25.87%	-26.72%	12.73%	35.59%	35.47%	-4.75%	• BGRIX	11.93%	-1.61%	-18.69%	-13.33%
+/- Benchmark	-10.90%	4.32%	7.42%	-2.53%	5.03%	2.08%	• Benchmark	6.90%	-0.65%	-21.07%	-12.58%
Peer Group Rank	82	13	14	66	8	29	+/- Benchmark	5.03%	-0.96%	2.38%	-0.75%
	01/2019 -	10/2018 -	07/2018 -	04/2018 -	01/2018 -	10/2017 -	5-Year Quarterly				
Rolling 5-Year Performance	12/2023	09/2023	06/2023	03/2023	12/2022	09/2022	Performance	4Q21	3Q21	2021	1Q21
• BGRIX	14.92%	8.68%	11.18%	12.30%	11.15%	9.81%	• BGRIX	6.56%	3.63%	7.80%	0.94%
• Benchmark	13.81%	6.97%	9.71%	9.07%	7.64%	7.62%	• Benchmark	2.85%	-0.76%	11.07%	-0.57%
+/- Benchmark	1.10%	1.71%	1.46%	3.23%	3.51%	2.19%	+/- Benchmark	3.71%	4.39%	-3.27%	1.50%
Peer Group Rank	14	11	11	6	7	13					
							5-Year Quarterly				
Risk Statistics	3 .	Year	5`	Year	10	Year	Performance	4Q20	3Q20	2Q20	1Q20
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark	• BGRIX	21.10%	10.95%	27.46%	-22.30%
Alpha	0.94	0.00	1.37	0.00	-0.04	0.00	Benchmark	19.02%	9.37%	30.26%	-20.04%
Beta	0.92	1.00	0.98	1.00	0.99	1.00	+/- Benchmark	2.08%	1.57%	-2.81%	-2.26%
Standard Deviation	20.58	21.36	22.66	22.30	18.67	18.04					
Sharpe Ratio	0.09	0.05	0.64	0.60	0.55	0.58	5-Year Quarterly				
Information Ratio	0.16	-	0.18	-	-0.06	-	Performance	4Q19	3Q19	2Q19	1Q19
Treynor Ratio	-0.18	-1.20	13.18	11.81	9.00	9.23	• BGRIX	8.65%	-0.69%	7.03%	21.67%
Upside Capture Ratio	97.80	100.00	101.67	100.00	100.38	100.00	• Benchmark	8.17%	-0.67%	5.40%	19.62%
Downside Capture Ratio	94.34	100.00	98.52	100.00	102.14	100.00	+/- Benchmark	0.48%	-0.02%	1.62%	2.05%

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.

Baron Growth Inst! (USD) Morning

Russell Mid Cap Growth US Fund Mid-Cap Growth

ġ.

Baron Growth Insti 42,933

Category Average 35,693Standard Index 47,838

Growth of \$10,000

Category Index

Morningstar Cat

Performance 12-31-2023	-31-2023				
Quarterly Returns	1st Otr	2nd Otr	3rd Otr	4th Otr	Total %
2021	0.94	7.80	3.63	6.56	20.15
2022	-13.33	-18.69	-1.61	11.93	-22.40
2023	7.88	2.71	-3.66	7.70	14.97
Trailing Returns	1Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	14.97	2.34	14.92	10.24	13.87
Std 12-31-2023	14.97		14.92	10.24	13.87
Total Return	14.97	2.34	14.92	10.24	13.87
+/- Std Index	-11.32	-7.66	-0.77	-1.79	1
+/- Cat Index	-10.90	1.04	1.10	-0.33	
% Rank Cat	83	27	15	29	
No. in Cat	553	523	492	395	
7 1 . V: 11		Sı	Subsidized	Unsı	Unsubsidized

30-day SEC Yield 7-day 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.

-10.90

+/- Category Index % Rank Cat

Performance Quartile (within category)

No. of Funds in Cat

55.2

101.08

12-23

Investment Style Equity/Stocks %

100

-11.32 14.97

+/- Standard Index Total Return %

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 800-992-2766 or visit www.baronfunds.com.

Fees and Expenses

	Risk and Return Profile
1.04	Gross Expense Ratio %
0.00	12b1 Expense %
1.00	Management Fees %
	Fund Expenses

			12-Month Yield
92.32	9	83.19	R-Squared
0.96	7	1.07	Beta
0.26	9	-7.29	Alpha
Morningstar US Mid Brd Grt TR USD			
Best Fit Index		Standard Index	MPT Statistics
0.55	0.64	0.09	Sharpe Ratio
10.24	14.92	2.34	Mean
18.67	22.66	20.58	Standard Deviation
10 Yr	5 Yr	3 Yr	
+Avg	+Avg	+Avg	Morningstar Return
+Avg	+Avg	Avg	Morningstar Risk
3★	4⊁	4 ★	Morningstar Rating™
395 funds	492 funds	523 funds 4	

	1 1 1 1	- L	:					
Morningstar Medalist Rad Silver			2012	97	54.06 16.74	0.74	0.94 24	737
Morningstar Medalist Rating [™] Silver 07-27-2023		1	2013	95	73.12 38.69	6.30	2.94 19	703
		1	2014	96	73.24 4.66	-9.03	-7.24 73	749
Analyst-Driven % 100.00 Data Coverage % 100.00			2015	98	64.31 -4.06	-5.44	-3.86 79	733
)	\$	2016	99	60.82 6.31	-5.65	-1.02 44	644
Morningstar Rating** **** 523 US Fund Mid- Cap Growth		1	2017	10 📗	69.55 27.35	5.52	2.09 25	617
Rating Mid-	}		2018	99	63.17 -2.67	1.72	2.08 22	605
:	1		2019	100	85.69 40.50	9.02	5.03	618
Standard Index S&P 500 TR USD	1		2020	100	108.85 33.05	14.66	-2.53 52	604
SD *	N.		2021	100	121.65 20.15	-8.55	7.42 20	588
Category Russell I TR USD	\{\}		2022	100	89.49 -22.40	-4.29	4.32 18	586
Category Russell N TR USD			12-	1 ⊞ 6	101.0	III	-10.9	

:: 1 2 ::: 20k

Portfolio Analysis 12-31-2023	12-31-2023				
Asset Allocation %	Net %	Long %	오	Short %	Share Chg
Cash	0.00	0.01		0.01	since
US Stocks	99.82	99.82		0.00	09-2023
Non-US Stocks	0.00	0.00		0.00	1
Bonds	0.00	0.00		0.00	
Other/Not Clsfd	0.18	0.18		0.00	1
Total	100.00	100.01		0.01	
Equity Style	Portfolio Statistics		Rel	윤	
Value Blend Growth	P/E Ratio TTM	27.3	1.15	0.97	
пде	P/C Ratio TTM			0.95	Ð
biM	P/B Ratio TTM	4.7	1.12	0.83	(
us	Geo Avg Mkt Cap	15513 (0.06 0.74	0.74	

		Εđ	pexi					40.00	Value	Ė
		Mod	-inco					50100	Rland	quity otyre
		Ø	ixed-Income Style					o o o o o	Growth	q
beM	ЧбіН	•	¥	llem	S	biM	arge	7		
Avg Wtd Price	Avg Eff Duration Avg Wtd Counon	Avg Eff Maturity		\$mil	Geo Avg Mkt Cap	P/B Ratio TTM	P/C Ratio TTM	P/E Ratio TTM		Follotto otationes
					15513	4.7	20.4	27.3	Avg	-
					0.06	1.12	1.25	1.15	Index	<u></u>
					0.74	0.83	0.95	0.97	Cat	g

	Ī	
Fixed-Income Style	¥	
Ltd Mod Ext		Avg Eff Maturity —
	БіН	Avg Eff Duration —
	Ч	Ava Wtd Coupon —
	beM	Avg Wtd Price —
	γοη	
Credit Quality Breakdown —	reak	down — Bond %
AAA		
AA		
A		
	į	

					.td Mod	xed-Inc	
ality R					d Ext	xed-Income Style	
reak.	ľ	γοη	baM	цбiH		ψle	llem
edit Ouality Breakdown —			Avg Wtd Price	Avg Eff Duration Avg Wtd Coupon	Avg Eff Maturity		\$mil
Rond %			1	1 1			
_		S	①				<u> </u>

3 Υ

10 Yr

wo			Sector Weighti
Credit Quality Breakdown —		Rond %	∿ Cyclical
AAA			-
AA			Consume
Α			Financial
BBB		1	Real Esta
BB			₩ Sensitive
В			⊆ Communi
Below B			Energy
NR			: Industria
Regional Exposure	Stocks %	Rel Std Index	Technolo
Americas	100.0	1.01	→ Defensiv
Greater Europe	0.0	0.00	Consume
Greater Asia	0.0	0.00	Healthca
			Othirida

0.0	n ka	on ty	Lap tics	et % 0.00 0.00 0.00 0.00 0.18
į	B		Port Rel Avg Index 27.3 1.15 20.4 1.25 4.7 1.12 15513 0.06	
1.01 0.00 0.00	Bond %		lel Rel ex Cat 15 0.97 25 0.95 12 0.83 16 0.74	
Defensi Consum Healthc Utilities	Wellcan Consume Consume Consume Consume Consume Consume Consume Communi	520,000 5 mi 925,000	① ⊕	Share Chg since 09-2023
Defensive Consumer Defensive Healthcare Utilities	Basic Materials Consumer Cyclical Consumer Cyclical Financial Services Real Estate Sensitive Communication Se Energy Industrials Technology	520,000 5 mil 925,000 3 mil sightings	2 mil 1 mil 3 mil 1 mil 8 mil 2 mil	Share Amount 2 mil 2 mil 2 mil 9 mil 1 mil 5 mil
ensive	Basic Materials Consumer Cyclical Financial Services Real Estate Sensitive Communication Services Energy Industrials Fechnology	IDEXX Laboratories Inc Garning and Leisure Properties Inc Morningstar Inc Bio-Techne Corp	Vail Resorts Inc Ansys Inc Choice Hotels International Inc Kinsale Capital Group Inc Iridium Communications Inc Primerica Inc	Holdings: 38 Total Stocks, 0 Total Fixed-Income 2% Tumover Ratio MSCI Inc Gartner Inc Arch Capital Group Ltd FactSet Research Systems Inc CoStar Group Inc
10.8 0.9 10.0 0.0	20.7 4.0 15.6 42.0 10.9 20.7 4.0 0.0 1.1 15.6	Properties Inc Stocks %	ational Inc ip Inc ions Inc	ived-Income, .td stems Inc
0.51 0.14 0.79 0.00	2.43 0.00 1.42 3.35 4.35 0.47 0.07 0.00 0.13 0.52	3.65 3.36 3.35 2.86 Rel Std Index	5.40 4.59 4.34 4.24 4.01 3.91	Net Assets % 10.81 8.62 8.50 7.24 5.71

U.S. Securities and Exchange Commission. This report is supplemental sales literature. If appli	tion, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investm	ired by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting	gstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided	of Morningstar, (2) may include, or be derived from, account informa	Aorningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its	

Objective:

Manager: Family: Tenure:

Multiple Growth 29.1 Years

Ticker:

Incept:

Purchase Constraints:

A 05-29-2009

Base Currency:

Minimum Initial Purchase:

\$1 mil US0682787041

Total Assets:

\$7,865.84 mil

Baron Capital Group, Inc.

Operations

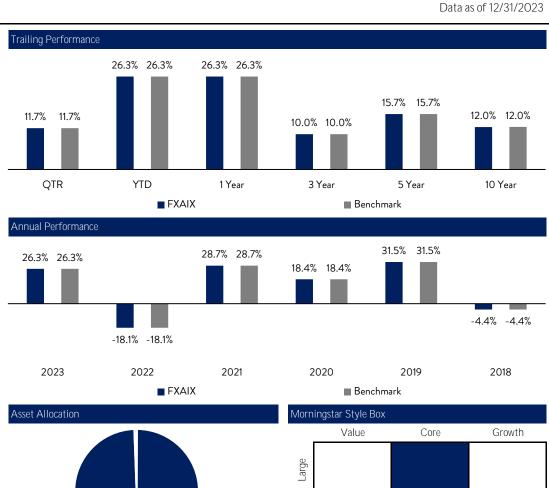
Potential Cap Gains Exp

83.06%

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	15.00 Years
Fund Size	\$471,907,030,083

Fund Characteristics	FXAIX	+/- Category
% Assets in Top 10 Holdings	31.54%	-18.97%
Average Market Cap (mil)	\$237,554	-\$45,106
P/E Ratio (TTM)	22.64	-0.03
P/B Ratio (TTM)	4.00	-0.67
Est. Dividend Yield	1.66%	0.13%

Sector Allocations	FXAIX	Category	+/- Category
Materials	2.2%	2.8%	-0.6%
Communication Services	8.6%	8.1%	0.5%
Consumer Discretionary	10.9%	10.2%	0.7%
Consumer Staples	6.3%	6.4%	-0.1%
Healthcare	12.7%	13.6%	-0.9%
Industrials	8.2%	10.0%	-1.8%
Real Estate	2.4%	2.2%	0.3%
Technology	29.7%	27.2%	2.5%
Energy	4.1%	4.3%	-0.2%
Financial Services	12.5%	13.2%	-0.7%
Utilities	2.4%	2.2%	0.2%
Other	0.0%	0.0%	0.0%





Fund Fact Sheet Data as of 12/31/2023

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year	5-Year Quarterly				
• FXAIX	11.69%	26.29%	26.29%	9.99%	15.68%	12.02%	Performance	4Q23	3Q23	2Q23	1Q23
Benchmark	11.69%	26.29%	26.29%	10.00%	15.69%	12.03%	• FXAIX	11.69%	-3.27%	8.73%	7.50%
+/- Benchmark	0.00%	0.00%	0.00%	-0.01%	-0.01%	-0.01%	Benchmark	11.69%	-3.27%	8.74%	7.50%
Peer Group Rank	45	24	24	25	18	8	+/- Benchmark	0.00%	0.01%	-0.01%	0.00%
reel Gloup Natik	45	24	24	25	10	0	17- Denchinark	0.00%	0.01%	-0.01%	0.00%
Annual Performance	2023	2022	2021	2020	2019	2018	5-Year Quarterly				
• FXAIX	26.29%	-18.13%	28.69%	18.40%	31.47%	-4.40%	Performance	4Q22	3Q22	2022	1Q22
• Benchmark	26.29%	-18.11%	28.71%	18.40%	31.49%	-4.38%	• FXAIX	7.56%	-4.89%	-16.10%	-4.60%
+/- Benchmark	0.00%	-0.02%	-0.01%	0.00%	-0.01%	-0.02%	• Benchmark	7.56%	-4.88%	-16.10%	-4.60%
Peer Group Rank	24	50	23	37	24	26	+/- Benchmark	-0.01%	0.00%	0.00%	0.00%
	01/2019 -	10/2018 -	07/2018 -	04/2018 -	01/2018 -	10/2017 -	5-Year Quarterly				
Rolling 5-Year Performance	12/2023	09/2023	06/2023	03/2023	12/2022	09/2022	Performance	4Q21	3Q21	2Q21	1Q21
• FXAIX	15.68%	9.90%	12.29%	11.18%	9.41%	9.23%	• FXAIX	11.02%	0.58%	8.55%	6.18%
• Benchmark	15.69%	9.92%	12.31%	11.19%	9.42%	9.24%	• Benchmark	11.03%	0.58%	8.55%	6.17%
+/- Benchmark	-0.01%	-0.01%	-0.01%	-0.01%	-0.01%	-0.01%	+/- Benchmark	-0.01%	-0.01%	0.00%	0.00%
Peer Group Rank	18	16	15	15	20	16					
							5-Year Quarterly				
Risk Statistics	3	Year	5`	Year	10	Year	Performance	4Q20	3Q20	2Q20	1Q20
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark	• FXAIX	12.14%	8.94%	20.53%	-19.59%
Alpha	-0.01	0.00	-0.01	0.00	-0.01	0.00	• Benchmark	12.15%	8.93%	20.54%	-19.60%
Beta	1.00	1.00	1.00	1.00	1.00	1.00	+/- Benchmark	-0.01%	0.01%	-0.01%	0.00%
Standard Deviation	17.54	17.54	18.52	18.52	15.19	15.19					
Sharpe Ratio	0.49	0.49	0.77	0.78	0.74	0.74	5-Year Quarterly				
Information Ratio	-0.84	-	-0.78	-	-0.63	-	Performance	4Q19	3Q19	2Q19	1Q19
Treynor Ratio	7.48	7.49	13.67	13.68	10.68	10.69	• FXAIX	9.06%	1.69%	4.30%	13.65%
Upside Capture Ratio	99.96	100.00	99.97	100.00	99.97	100.00	• Benchmark	9.07%	1.70%	4.30%	13.65%
Downside Capture Ratio	99.99	100.00	99.99	100.00	100.01	100.00	+/- Benchmark	-0.01%	0.00%	0.00%	0.00%

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

Fidelity 500 Index (USD)

US Fund Large Blend Morningstar Cat

Unsubsidized	Unsı	Subsidized	Sı		-
	897	1191	1298	1430	No. in Cat
	9	20	26	26	% Rank Cat
1	0.22	0.16	1.02	-0.24	+/- Cat Index
	-0.01	-0.01	-0.01	0.00	+/- Std Index
12.67	12.02	15.68	9.99	26.29	Total Return
12.67	12.02	15.68		26.29	Std 12-31-2023
12.67	12.02	15.68	9.99	26.29	Load-adj Mthly
Incept	10 Yr	5 Yr	3 Yr	1 Yr	Trailing Returns
26.29	11.69	-3.27	8.73	7.50	2023
-18.13	7.56	-4.89	-16.10	-4.60	2022
28.69	11.02	0.58	8.55	6.18	2021
Total %	4th Otr	3rd Otr	2nd Otr	1st Otr	Quarterly Returns
				-31-2023	Performance 12-31-2023

30-day SEC Yield 7-day Yield Subsidized

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 Front-End Load % Deferred Load %	N N
Fund Expenses	
Management Fees %	0.02
12b1 Expense %	NA
Gross Expense Ratio %	0.02

Sharpe Ratio 0.49 0.78 0	Mean 9.99 15.68 12	Standard Deviation 17.54 18.52 15	3 Yr 5 Yr 1	Morningstar Return +Avg +Avg H	Morningstar Risk Avg Avg /	Morningstar Rating [™] 4★ 4★	1,298 funds 1,191 funds	3 Yr 5 Yr 1	Risk and Return Profile	Gross Expense Ratio % 0	12b1 Expense %	Management Fees % 0
0.74	12.02	15.19	10 Yr	High	Avg	5 ⊁	897 funds	10 Yr		0.02	NA	0.02

39.12%			Potential Cap Gains Exp
I			12-Month Yield
100.00		100.00	R-Squared
1.00		1.00	Beta
-0.01		-0.01	Alpha
S&P 500 TR USD	S&P 50		- 000000000
Best Fit Index	Bes	Standard Index	MPT Statistics
0.74	0.78	0.49	Sharpe Ratio
12.02	15.68	9.99	Mean
15.19	18.52	17.54	Standard Deviation

1686 1559	35 41	-0.43 -0.74			50.49 65.49 15.99 32.37	99	2012 2013					11-30-2023	Morningstar Medalist Rating
1568	18	0.42		-0.03	72.85 13.66	99	2014		1			Data Co 100.00	Analyst g™ 100.00
1606	20	0.47		0.00	71.80	99	2015		}			Data Coverage % 100.00	Analyst-Driven % Morningstar Rating" 100.00 ******
1409	26	-0.09		0.01	78.35 11.97	ī 1	2016						% Mo. ★★
1396	28	0.12		-0.02	93.45	99	2017					1,298 US Fund Large Blend	Morningstar
1402	25	0.38		-0.02	87.10 -4.40	ī —	2018					nd -	Rating
1387	23	0.05		-0.01	112.02 31.47	99	2019		}				Stand S&P
1363	37	-2.57		0.00	130.17 18.40	100	2020		<			=	Standard Index S&P 500 TR USD
1382	23	2.24		-0.01	165.32 28.69	100	2021					_	SD *
1358	2	1.00		-0.02	133.12 -18.13	100	2022			**		=	Cate Russ
1430	26	-0.24		0.00	165.49 26.29	100	12-23	10k	20k	40k			Category Index Russell 1000 TR USD
No. of Funds in Cat	% Rank Cat	+/- Category Index	Performance Quartile (within category)	+/- Standard Index	NAV/Price Total Return %	Equity/Stocks %	Investment Style		Standard Index 47,838	47,779 — Category Average	Growth of \$10,000 Fidelity 500 Index		Morningstar Cat USD US Fund Large B

Portfolio Analysis 11-30-2023	s 11-30-2023						
Asset Allocation %	Net %	Long %	Short %	Share Chg	Share	Holdings:	Net Assets
Cash	0.04	0.09	0.05	since	Amount	503 Total Stocks, 0 Total Fixed-Income,	%
US Stocks	99.38	99.38	0.00	0.2023	-	3% Luliover nauo	1
Non-US Stocks	0.58	0.58	0.00	①	IIM /8	Microsoft Corp	7.33
Bonds	0.00	0.00	0.00	•	171 mil	Apple Inc	7.27
Other/Not Clsfd	0.00	0.00	0.00	①	106 mil	Amazon.com Inc	3.45
Total	100.00	100.05	0.05	①	29 mil	NVIDIA Corp	3.01
. !				⊕	69 mil	Alphabet Inc Class A	2.05
Equity Style	Portollo Stausucs	Avg Index	Cat	•	26 mil	Meta Platforms Inc Class A	1.89
Laine	P/E Ratio TTM	22.6 0.96	1.00	•	59 mil	Alphabet Inc Class C	1.76
96.1	P/C Ratio TTM			•		Tesla Inc	1.73
biM	P/B Ratio I IM			•	21 mil	Berkshire Hathaway Inc Class B	1.71
llem2	\$mil	3/334 0.30	0.04	⊕	11 mil	UnitedHealth Group Inc	1.33
				•	9 mil	Eli Lilly and Co	1.23
Fixed-Income Style				Ð	34 mil	JPMorgan Chase & Co	1.18
Ltd Mod Ext	Avg Eff Maturity			Đ (Exxon Mobil Corp	1.08
чвін	Avg Wtd Coupon			(+) (Visa Inc Class A	1.07
beM	Avg Wtd Price			(5 mil	5 mil Broadcom Inc	1.06

dit Quality Breakdown —		Low	рөМ	ИдіН	Mod Ext	ed-Income Style		lle
lown —			Avg Wtd Price	Avg Eff Duration Avg Wtd Coupon	Avg Eff Maturity			\$MII
Bond %			1					
P cyclical	?	Sector Weightings	(+)	⊕ ⊕	€	₽ (Đ	Э
. IICal	-	eightings	5 mil	19 mil	47 mil	34 mil	9 mil	

Stocks %

Rel Std Index

0.99

28.0 2.2 10.9 12.5 2.4

1.00 0.99 1.00 0.97

Parallia Danal Li		2	∿ Cyclical
AAA		BUIU %	Basic Materials
A }			Consumer Cyclical
Þ.			Financial Services
BBB			Real Estate
BB		1	√ Sensitive
₩.			Communication Services
Below B			Energy
NR			ndustrials
Regional Exposure	Stocks %	Rel Std Index	Technology
Americas	99.4	1.00	→ Defensive
Greater Europe	0.5	1.02	Lipolyhogo

29.7

1.00

1.01

50.6 8.6 4.1 8.2

1.00 1.00 1.06 0.97

|--|

1.02 1.03

to climate the control of the contro	I deliance the control of the contro	ngstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a securit	s contained herein (1) include the confidential and proprietary information of Morningstar. (2) may include, or be derived from, account information provided by your financial professional wh	©2024 Mormingstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and
--	--	--	---	--

Objective:

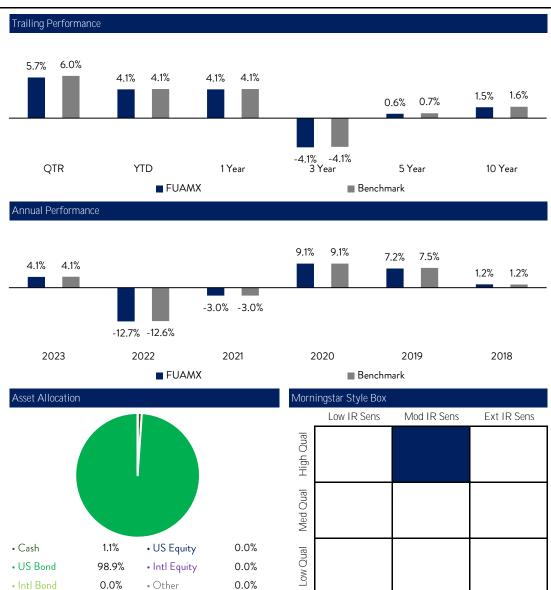
Growth and Income 15.0 Years Multiple Fidelity Investments

Manager: Tenure: Family: Operations

Product Details	
Name	Fidelity Interm 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	9.67 Years
Fund Size	\$8,192,042,391

Fund Characteristics	FUAMX	+/- Category
% Assets in Top 10 Holdings	42.39%	-15.91%
Average Eff Duration	6.17	0.98
Average Eff Maturity	-	-
Average Credit Quality	AAA	AA (Cat Avg.)
Average Coupon	2.57%	-0.61%

Sector Allocations	FUAMX	Category	+/- Category
Government	98.9%	49.8%	49.1%
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%	0.7%	-0.7%
Preferred Stock	0.0%	0.0%	0.0%
Agency MBS	0.0%	43.5%	-43.5%
Non-Agency RMBS	0.0%	0.2%	-0.2%
Commercial MBS	0.0%	0.1%	-0.1%
Asset-Backed	0.0%	1.0%	-1.0%
Cash & Equivalents	1.1%	4.6%	-3.5%
Other	0.0%	0.1%	-0.1%



Trailing Performance	QTR	VID -	1 Voor	2 Voor	E Voor	10 Voor	5.1/ 0				
		YTD	1 Year	3 Year	5 Year	10 Year	5-Year Quarterly	4022	2022	2022	1000
• FUAMX	5.75%	4.07%	4.07%	-4.13%	0.61%	1.54%	Performance	4Q23	3Q23	2Q23	1Q23
• Benchmark	5.98%	4.11%	4.11%	-4.06%	0.70%	1.62%	• FUAMX	5.75%	-3.06%	-1.82%	3.41%
+/- Benchmark	-0.23%	-0.04%	-0.04%	-0.07%	-0.09%	-0.08%	 Benchmark 	5.98%	-3.14%	-1.71%	3.19%
Peer Group Rank	79	54	54	87	23	8	+/- Benchmark	-0.23%	0.08%	-0.11%	0.22%
Annual Performance	2023	2022	2021	2020	2019	2018	5-Year Quarterly				
• FUAMX	4.07%	-12.72%	-3.00%	9.10%	7.25%	1.23%	Performance	4Q22	3Q22	2Q22	1Q22
• Benchmark	4.11%	-12.58%	-2.97%	9.09%	7.48%	1.22%	• FUAMX	0.91%	-4.79%	-3.38%	-5.97%
+/- Benchmark	-0.04%	-0.14%	-0.03%	0.01%	-0.23%	0.01%	• Benchmark	1.18%	-4.86%	-3.41%	-5.99%
Peer Group Rank	54	78	92	6	1	3	+/- Benchmark	-0.27%	0.07%	0.02%	0.01%
	01/2019 -	10/2018 -	07/2018 -	04/2018 -	01/2018 -	10/2017 -	5-Year Quarterly				
Rolling 5-Year Performance	12/2023	09/2023	06/2023	03/2023	12/2022	09/2022	Performance	4Q21	3Q21	2Q21	1Q21
• FUAMX	0.61%	0.18%	0.70%	1.05%	0.06%	-0.21%	• FUAMX	-0.23%	-0.14%	1.84%	-4.40%
• Benchmark	0.70%	0.20%	0.74%	1.07%	0.13%	-0.19%	• Benchmark	-0.23%	-0.06%	1.84%	-4.45%
+/- Benchmark	-0.09%	-0.02%	-0.04%	-0.02%	-0.08%	-0.03%	+/- Benchmark	0.00%	-0.07%	-0.01%	0.05%
Peer Group Rank	23	12	14	12	19	18					
							5-Year Quarterly				
Risk Statistics	3	Year	5`	Year	10	Year	Performance	4Q20	3Q20	2Q20	1Q20
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark	• FUAMX	-0.81%	0.26%	0.74%	8.91%
Alpha	-0.10	0.00	-0.08	0.00	-0.08	0.00	• Benchmark	-0.80%	0.35%	0.86%	8.66%
Beta	1.00	1.00	1.00	1.00	1.01	1.00	+/- Benchmark	0.00%	-0.09%	-0.12%	0.25%
Standard Deviation	7.18	7.20	6.47	6.46	5.45	5.39					
Sharpe Ratio	-0.91	-0.90	-0.18	-0.17	0.06	0.08	5-Year Quarterly				
Information Ratio	-0.27	-	-0.29	-	-0.25	-	Performance	4Q19	3Q19	2Q19	1Q19
Treynor Ratio	-6.67	-6.57	-1.39	-1.31	0.20	0.28	• FUAMX	-0.91%	2.16%	3.46%	2.40%
Upside Capture Ratio	99.66	100.00	99.99	100.00	100.70	100.00	Benchmark	-0.76%	2.12%	3.53%	2.44%
Downside Capture Ratio	100.39	100.00	101.02	100.00	102.11	100.00	+/- Benchmark	-0.15%	0.04%	-0.06%	-0.04%
1											

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)

Government TR USD Bloomberg US Category Index

Government US Fund Intermediate Morningstar Cat

.....100k

Growth of \$10,000

Fidelity Interm Trs Bd Index 11,483

4

- Category Average 10,982 - Standard Index 12,216

Performance 12-31-2023	31-2023				
Quarterly Returns	1st Otr	2nd Otr	3rd Otr	4th Otr	Total %
2021	-4.40	1.84	-0.14	-0.23	-3.00
2022	-5.97	.:ა :38	-4.79	0.91	-12.72
2023	3.41	-1.82	-3.06	5.75	4.07
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	4.07	-4.13	0.61	1	0.62
Std 12-31-2023	4.07		0.61	I	0.62
Total Return	4.07	-4.13	0.61	1.54	0.62
+/- Std Index	-1.46	-0.82	-0.49	-0.27	
+/- Cat Index	-0.01	-0.39	0.05	0.27	
% Rank Cat	72	90	25	4	
No. in Cat	228	220	209	170	

7-day Yield 30-day SEC Yield 12-31-23

4.00

4.85

Subsidized

Unsubsidized

-12.72

4.07

9.75

NAV/Price

0.29 9.58 99

-1.46

+/- Standard Index Total Return % Investment Style Fixed-Income/Bond %

99

2022

12-23

4

-0.40

-0.01

+/- Category Index

Performance Quartile (within category)

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

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

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

www.institutional.fidelity.com.

Gross Expense Ratio % Management Fees % Deferred Load % Front-End Load % 12b1 Expense % Fund Expenses Fees and Expenses 0.03 NA 0.03 ₹ ₹

MPT Statistics Alpha	Standard Deviation Mean Sharpe Ratio	Morningstar Rating™ Morningstar Risk Morningstar Return	Risk and Return Profile
Standard Index -1.04	3 Yr 7.18 -4.13 -0.91	3 Yr 220 funds 2★ Avg -Avg	
dex Be Blo Governme	5 Yr 6.47 0.61 -0.18	5 Yr 209 funds 3★ High +Avg	
Best Fit Index Bloomberg US Government TR USD 0.58	10 Yr 5. 45 1. 54 0. 06	10 Yr 170 funds 5☆ High High	

R-Squared

0.97 94.57

1.15 97.86

Potential Cap Gains Exp

2.19% -12.45%

12-Month Yield

Morningstar Analyst-Driven % Morningstar Rating Standarr Medalist Rating 10.00 *** *** *** *** *** *** ***	Analys 10.00 Data C 83.00	Analyst-Driven % 10.00 Data Coverage % 83.00	***** % 220 U! Interm Goven	Morningstar Rating** *** 220 US Fund Intermediate Government	Rating w	Stands Bloom Bond 1	Standard Index Bloomberg US Agg Bond TR USD	Agg
								(
2012 2013	2014	2015	2016	2017	2018	2019	2020	2021
100	98	100	100	1 00	100	97	100	100
	6.41	1.67	0.97	10.67 2.20	10.56	11.08 7.25	11.72 9.10	11.15 -3.00
-0.81 -2.67	0.45	1.12	-1.68	-1.34	1.22	-1.47	1.60	-1.46
1.39 -2.10	1.50	0.81	-0.08	-0.10	0.35	0.42	1.16	-0.73

: 10 10 10 :-20k

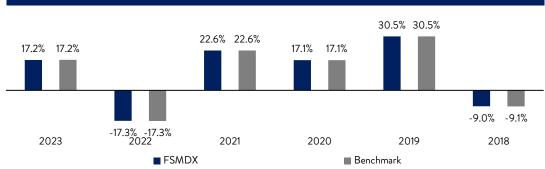
矣	X	analyses and camot be verified by camot be verified by yo sell a security, m, or related to, this of Morningstar, Inc. e it must be preceded	al distributor is based. The information, data rovided by your financial professional which purposes and therefore are not an offer to bu listions, damages or other losses resulting for search is produced and issued by subscidentes t is supplemental sales literature. If applicable t is supplemental sales literature. If applicable	nly in the country in which its origin derived from, account information p ten provided salely for informational r be responsible for any trading the range without notice. Investment decrings without notice. Investment results to the responsible for any trading the range of the results of t	arate agreement, you may use this report or ition of Morningstar, (2) may include, or be of strengt advice offered by Morningstar, (5) and wrise required by law, Morningstar shall no its of the date written and are subject to drial with and governed by the U.S. Securities and with a security of the security of the work of the security of the work of the work of the work of the work of the work of the work of work	©2024 Morningstar. All flights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein! It include the confidential and proprietary information of Morningstar. (3) may include on the expired to make the provided by your financial professional which cannot have been supported by the proprietary information of Morningstar. (3) may not be expired to make the provided by your financial professional which cannot not a contract of the provided by the pr	©2024 Morningstar. A opinions contained her Morningstar, (3) may n. and (6) are not warrant information, data, analingular to the containing of the containing of the containing that the containing that the containing the containing that the conta
	2.04 mil	\$8,192.04 r	Total Assets:	\$0	Minimum Initial Purchase:	Government Bond - Treasury	Objective:
		MF	Type:	US31635V2575	ISIN:	9.7 Years	Tenure:
	-2017	10-04-201	Incept:	FUAMX	Ticker:	Multiple	Manager:
		A	Purchase Constraints:	USD	Base Currency:	Fidelity Investments	Family:

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	12.33 Years
Fund Size	\$31,271,041,677

Fund Characteristics	FSMDX	+/- Category
% Assets in Top 10 Holdings	5.22%	-10.25%
Average Market Cap (mil)	\$18,325	\$6,752
P/E Ratio (TTM)	17.51	1.31
P/B Ratio (TTM)	2.60	-0.15
Est. Dividend Yield	1.91%	0.38%

Sector Allocations	FSMDX	Category	+/- Category
Materials	4.6%	5.1%	-0.5%
Communication Services	3.7%	2.4%	1.3%
Consumer Discretionary	10.9%	13.9%	-3.0%
Consumer Staples	3.3%	4.1%	-0.7%
Healthcare	10.4%	9.8%	0.6%
Industrials	18.3%	19.5%	-1.2%
Real Estate	8.0%	6.3%	1.6%
Technology	16.4%	16.2%	0.2%
Energy	5.3%	5.2%	0.1%
Financial Services	13.7%	14.3%	-0.6%
Utilities	5.4%	3.2%	2.2%
Other	0.0%	0.0%	0.0%









Fund Fact Sheet Data as of 12/31/2023

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year	E Voor Questorie				
• FSMDX	12.79%	17.21%	17.21%	5.92%	12.68%	9.41%	5-Year Quarterly Performance	4Q23	3Q23	2Q23	1Q23
Benchmark	12.79%	17.21%	17.21%	5.92%	12.68%	9.41%	• FSMDX	12.79%	-4.65%	4.75%	4.05%
+/- Benchmark	-0.03%	-0.01%	-0.01%	0.00%	0.00%	-0.01%	• Benchmark	12.82%	-4.68%	4.76%	4.06%
Peer Group Rank	24	30	30	60	31	15	+/- Benchmark	-0.03%	0.03%	-0.01%	0.00%
Annual Performance	2023	2022	2021	2020	2019	2018	5-Year Quarterly				
• FSMDX	17.21%	-17.28%	22.56%	17.11%	30.51%	-9.05%	Performance	4Q22	3Q22	2Q22	1Q22
• Benchmark	17.23%	-17.32%	22.58%	17.10%	30.54%	-9.06%	• FSMDX	9.21%	-3.42%	-16.85%	-5.69%
+/- Benchmark	-0.01%	0.03%	-0.02%	0.01%	-0.03%	0.01%	• Benchmark	9.18%	-3.44%	-16.85%	-5.68%
Peer Group Rank	30	67	60	28	29	33	+/- Benchmark	0.03%	0.02%	0.00%	-0.01%
	01/2019 -	10/2018 -	07/2018 -	04/2018 -	01/2018 -	10/2017 -	5-Year Quarterly				
Rolling 5-Year Performance	12/2023	09/2023	06/2023	03/2023	12/2022	09/2022	Performance	4Q21	3Q21	2Q21	1Q21
• FSMDX	12.68%	6.40%	8.47%	8.06%	7.10%	6.48%	• FSMDX	6.44%	-0.93%	7.47%	8.15%
Benchmark	12.68%	6.38%	8.46%	8.05%	7.10%	6.48%	Benchmark	6.44%	-0.93%	7.50%	8.14%
+/- Benchmark	0.00%	0.02%	0.01%	0.01%	0.00%	0.00%	+/- Benchmark	0.00%	0.00%	-0.03%	0.01%
Peer Group Rank	31	30	27	30	32	28					
							5-Year Quarterly				
Risk Statistics	3	Year	5`	Year	10	Year	Performance	4Q20	3Q20	2Q20	1Q20
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark	• FSMDX	19.89%	7.49%	24.55%	-27.04%
Alpha	0.00	0.00	0.00	0.00	0.00	0.00	Benchmark	19.91%	7.46%	24.61%	-27.07%
Beta	1.00	1.00	1.00	1.00	1.00	1.00	+/- Benchmark	-0.02%	0.03%	-0.06%	0.03%
Standard Deviation	19.38	19.38	21.49	21.50	17.23	17.25					
Sharpe Ratio	0.26	0.26	0.57	0.57	0.53	0.53	5-Year Quarterly				
Information Ratio	0.06	-	-0.03	-	-0.11	-	Performance	4Q19	3Q19	2Q19	1Q19
Treynor Ratio	3.41	3.41	10.67	10.67	8.08	8.08	• FSMDX	7.06%	0.44%	4.14%	16.53%
Upside Capture Ratio	99.95	100.00	99.92	100.00	99.85	100.00	• Benchmark	7.06%	0.48%	4.13%	16.54%
Downside Capture Ratio	99.93	100.00	99.89	100.00	99.82	100.00	+/- Benchmark	0.00%	-0.04%	0.01%	0.00%
·											

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

(USD) Fidelity Mid Cap Index

Performance 12-31-2023	31-2023				
Quarterly Returns	1st Otr	2nd Otr	3rd Qtr	4th Otr	Total %
2021	8.15	7.47	-0.93	6.44	22.56
2022	-5.69	-16.85	-3.42	9.21	-17.28
2023	4.05	4.75	-4.65	12.79	17.21
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	17.21	5.92	12.68	9.41	12.05
Std 12-31-2023	17.21	1	12.68	9.41	12.05
Total Return	17.21	5.92	12.68	9.41	12.05
+/- Std Index	-9.07	-4.08	-3.01	-2.62	
+/- Cat Index	-0.01	0.00	0.00	-0.01	
% Rank Cat	34	66	32	17	
No. in Cat	420	385	363	241	

Performance Disclosure
The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year 30-day SEC Yield 7-day Yield

Subsidized

Unsubsidized

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

(if applicable) Morningstar metrics.

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.

Front-End Load % Sales Charges Fees and Expenses

₹ ₹

Deferred Load %	NA
Fund Expenses	
Management Fees %	0.03
12b1 Expense %	NA
Gross Expense Ratio %	0.03

Fixe

10.94%			12-Month Yield Potential Cap Gains Exp
100.00		89.94	R-Squared
1.00		1.05	Beta
0.00		-3.90	Alpha
Best Fit Index Russell Mid Cap TR	B Russell	Standard Index	MPT Statistics
0.53	0.57	0.26	Sharpe Ratio
9.41	12.68	5.92	Mean
17.23	21.49	19.38	Standard Deviation
10 Yr	5Yr	3 Yr	
+Avg	+Avg	Avg	Morningstar Return
Avg	Avg	Avg	Morningstar Risk
4⊁	3 ★	3 ★	Morningstar Rating™
10 Yr 241 funds	5 Yr 363 funds	3 Yr 385 funds 36	
			Risk and Return Profile
0.03			Gross Expense Ratio %

AAA

Credit Quality Breakdown

-	-0.06 0		11.96 15 17.22 34 1.21 2	99	2012 2					11-30-2023	Morningstar Medalist Rating™
399	0.02		15.83 34.78 2.39	99	2013		1			_	r xting™
369	-0.10 7		17.45 13.11 -0.57	98	2014		}			Data Cc 100.00	Analys 100.00
432	0.00		16.32 -2.44 -3.83	99	2015		}			Data Coverage % 100.00	t-Driven
427	0.07		18.17 13.86 1.90	99	2016						% Mo:
443	-0.05 24		20.98 18.47 -3.36	1 00 1 00	2017					385 US Fund Mid- Cap Blend	Morningstar ★★★★
464	0.01		18.63 -9.05 -4.67	98	2018					Mid	Analyst-Driven% Morningstar Rating™ 100.00 ★★★★
404	-0.03		23.63 30.51 -0.98	99	2019		}				Standa S&P 5
407	0.01 21		27.01 17.11 -1.29	100	2020		1				Standard Index S&P 500 TR USD
391	-0.02 67		31.99 22.56 -6.14	ī0 =	2021						c SD
405	0.03 76		25.92 -17.28 0.83	100	2022					USD	Cate Russ
420	-0.01 34		29.95 17.21 -9.07	100	12-23	AL IOK	20k	24 0k			Category Index Russell Mid Cap TR
No. of Funds in Cat	+/- Category Index % Rank Cat	Performance Quartile (within category)	NAV/Price Total Return % +/- Standard Index	Equity/Stocks %	Investment Style		Standard Index 47,838	38,847 — Category Average	Growth of \$10,000 — Fidelity Mid Cap Index		Morningstar Cat R US Fund Mid-Cap Blend

Portfolio Analysis 11-30-2023	is 11-30-2023					
Asset Allocation %	Net %	Long %	Short %	Share Chg	Share	Holdings:
Cash	0.04	0.15	0.11	since	Amount	814 Total Stocks, 0 Total Fixed-Income,
US Stocks	98.41	98.41	0.00	10-2023	<u>-</u>	9% Turnover Haulo
Non-US Stocks	1.55	1.55	0.00	①	m	Phillips 66
Bonds	0.00	0.00	0.00	•	369,328	Parker Hannifin Corp
Other/Not Clsfd	0.00	0.00	0.00	•	2 mil	Amphenol Corp Class A
Total	100.00	100.11	0.11	⊕ ⊕	611,943 658.079	Arthur J. Gallagher & Co Trane Technologies PLC Class A
Equity Style	Portfolio Statistics					
Value Blend Growth	D/F Datio TTM	Avg Index		•		IransDigm Group Inc
	P/E Ratio I IM			⊕	608,325	CrowdStrike Holdings Inc Class A
36	P/C Ratio I IM			⊕	2 mil	Aflac Inc
ÞiM				⊕	2 mil	KKR & Co Inc Ordinary Shares
Small	\$mil	10020 0.00	.00	•	2 mil	Apollo Global Management Inc Class
				⊕	250,398	250,398 Cintas Corp
-				(

	γοη	beM	и́ві́Н	Mod Ext	d-Income Style
		Avg Wtd Price	Avg Eff Duration	Avg Eff Maturity	
n. Cveli	Sector Wei	'	 ⊕	 ⊕ ⊕	•

				<u>-</u>	ĕ		
				ΕX	ome Style		
	MOη	beM	qвіH		γle		lls
		Avg Wtd Price	Avg Eff Duration	Avg Eff Maturity			\$1111
O. Cyclical	Sector Weightings	•	⊕ ④	€ (9 (Ð	(
ב מ	eightings	2 mil	1 E	1 mi	2 mil	250 398	1

2.32	5.4	Utilities		i
0.82	10.4	Healthcare	5.61	0.2
0.55	3.3	Consumer Defensive	1.69	0.9
0.91	19.1	 Defensive 	0 99 -	98.9
0.55	16.4	Technology	Rel Std Index	cks %
2.19	18.3	Industrials		
1.35	5.3	Energy		
0.43	3.7	Communication Services		
0.86	43.7	Sensitive		
3.16	8.0	Real Estate	 	
1.10	13.7	Financial Services		
0.99	10.9	Consumer Cyclical		
2.10	4.6	Basic Materials	20	
1.32	37.2	Cyclical	Bond %	
Rel Std Index	Stocks %	Sector Weightings	S	
0.45	ology Inc	2 mil Microchip Technology Inc	 +	
0.46		1 mil Welltower Inc	 (+)	on :
0.47		1 mil PACCAR Inc	 +	ĭ 4
0.48	ogy Inc	2 mil Marvell Technology Inc	 ⊕	₹
			(-	

Below B

R

Greater Asia Greater Europe

Americas Regional Exposure

Stoc

©2024 Morningstar, opinions contained hy Morningstar, (3) may and (6) are not warra information, data, an including, but not him or accompanied by a	Operations Family: Manager: Tenure: Objective:
©2024 Monningster. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the coopinions contained herein (1) include the confidential and proprietary information of Morningster. (2) may include, or be derived fron Opinions contained herein (1) include the confidential and proprietary information of Morningster. (3) may include, or be derived fron Morningster. (3) may not be copied or redistributed. (4) do not constitute investment advice offered by Morningster. (5) are provided and (6) are not warranted to be correct, complete or excurate. Except as otherwise required by law, Morningster shall not be responsification, the contained of the contained to the contained to the contained to provide the contained to provide the contained to provide the contained to the contained to Morningster Research Services LLC, registered with had governed by the U.S. Securities and Exchange or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.	Fidelity Investments Multiple 12.3 Years Growth
a separate agreement, you may use this reproformation of Morningstar, (2) may include, of the investment advice offered by Morningstar, is otherwise required by law, Morningstar six offerwise required to the date written and are subject to trend with and governed by the U.S. Securitie trend with and governed by the U.S. Securitie and the proformant offered by the U.S. Securities at the element of the U.S. Securities are the element of the U.S. Securities and the second of the U.S. Securities are second or the second of the U.S. Securities and the element of the U.S. Securities are second or the second of the U.S. Securities are second or the U.S. Securities and the second of the U.S. Securities are second or the U.S. Securities and the U.S. Securities are second or the U.S. Securities and the U.S. Securities are second or the U.S. Securities and the U.S. Securities are second or the U.S. Securities and the U.S. Securities are second or the U.S. Securities and the U.S. Securities are second or the U.S. Securities and the U.S. Securities are second or the U.S. Securities are seco	Base Currency: Ticker: ISIN: Minimum Initial Purchase:
ort only in the country in which its originate defined from, account information (5) are provided solely for informational in orther responsible for any rading so dange without notice. Investment reasonable is and Exahange Commission. This report of of this report.	USD FSMDX US3161462656
©2/24 Morningster. All Rights Reserved. Uhless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data analyses and opinions contained herein (1) include the confidential and proprietary information of Morningster. (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningster, (3) may not be copied or redistributed. (4) do not constitute investment advice offered by Morningsters, (3) may include sub-ly for information provided sub-ly for information provided sub-ly for information provided sub-ly for information complete or excurate. Except as so otherwise required by law, Morningsters hall not be responsible for any trading descious, clamages or other losses resulting from, or related to, the second sections, clamages or other losses resulting from, or related to, the formation, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningster, Inc. including, but not limited to, Morningster Research Services LLD, registered with had governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be preceded or this report.	Purchase Constraints: Incept: Type: Total Assets:
la vass and by riself as the verified by riself a security, virself as cuttiffy, virself as the	— 09-08-2011 MF \$31,271.04 mil

61

0.50 0.51 0.60 0.56 0.53

0.48 0.50 0.49

0.48

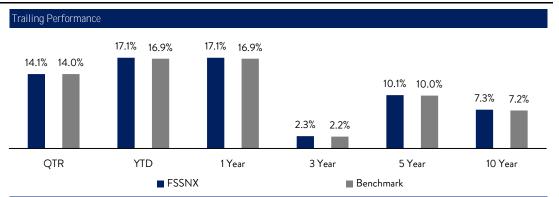
Net Assets %

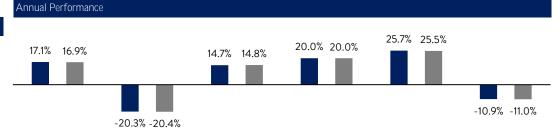
2018

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	12.33 Years
Fund Size	\$25,414,910,985

Fund Characteristics	FSSNX	+/- Category
% Assets in Top 10 Holdings	3.63%	-18.73%
Average Market Cap (mil)	\$2,032	-\$3,028
P/E Ratio (TTM)	11.46	-4.63
P/B Ratio (TTM)	1.61	-0.73
Est. Dividend Yield	2.22%	0.26%

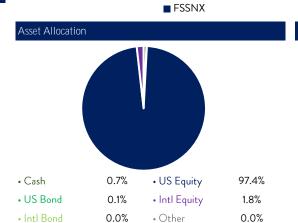
Sector Allocations	FSSNX	Category	+/- Category
Materials	4.7%	5.1%	-0.3%
Communication Services	2.2%	2.2%	0.0%
Consumer Discretionary	10.1%	12.4%	-2.2%
Consumer Staples	4.4%	4.3%	0.2%
Healthcare	14.4%	12.0%	2.3%
Industrials	15.5%	18.6%	-3.2%
Real Estate	7.3%	6.6%	0.7%
Technology	15.5%	15.0%	0.5%
Energy	8.4%	5.9%	2.6%
Financial Services	14.5%	15.7%	-1.2%
Utilities	3.0%	2.3%	0.7%
Other	0.0%	0.0%	0.0%





2021

2020



2022

2023



2019

■ Benchmark

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year	C Veen Owentenby				
• FSSNX	14.05%	17.12%	17.12%	2.32%	10.07%	7.32%	5-Year Quarterly Performance	4Q23	3Q23	2Q23	1Q23
Benchmark	14.03%	16.93%	16.93%	2.22%	9.97%	7.16%	• FSSNX	14.05%	-5.09%	5.24%	2.81%
+/- Benchmark	0.02%	0.19%	0.19%	0.09%	0.10%	0.16%	Benchmark	14.03%	-5.13%	5.21%	2.74%
Peer Group Rank	21	40	40	84	66	51	+/- Benchmark	0.02%	0.04%	0.03%	0.07%
Annual Performance	2023	2022	2021	2020	2019	2018	5-Year Quarterly				
• FSSNX	17.12%	-20.27%	14.71%	19.99%	25.71%	-10.88%	Performance	4Q22	3Q22	2Q22	1Q22
Benchmark	16.93%	-20.44%	14.82%	19.96%	25.52%	-11.01%	• FSSNX	6.25%	-2.08%	-17.18%	-7.47%
+/- Benchmark	0.19%	0.16%	-0.11%	0.03%	0.18%	0.14%	• Benchmark	6.23%	-2.19%	-17.20%	-7.53%
Peer Group Rank	40	79	89	16	39	37	+/- Benchmark	0.02%	0.10%	0.02%	0.05%
	01/2019 -	10/2018 -	07/2018 -	04/2018 -	01/2018 -	10/2017 -	5-Year Quarterly				
Rolling 5-Year Performance	12/2023	09/2023	06/2023	03/2023	12/2022	09/2022	Performance	4Q21	3Q21	2Q21	1Q21
• FSSNX	10.07%	2.49%	4.31%	4.81%	4.22%	3.65%	• FSSNX	2.10%	-4.40%	4.26%	12.73%
• Benchmark	9.97%	2.40%	4.21%	4.71%	4.13%	3.55%	• Benchmark	2.14%	-4.36%	4.29%	12.70%
+/- Benchmark	0.10%	0.09%	0.10%	0.10%	0.09%	0.09%	+/- Benchmark	-0.04%	-0.04%	-0.04%	0.03%
Peer Group Rank	66	73	69	68	64	55					
							5-Year Quarterly				
Risk Statistics	3,	Year	5 \	/ear	10 Year		Performance	4Q20	3Q20	2Q20	1Q20
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark	• FSSNX	31.28%	4.98%	25.49%	-30.62%
Alpha	0.09	0.00	0.09	0.00	0.15	0.00	Benchmark	31.37%	4.93%	25.42%	-30.61%
Beta	1.00	1.00	1.00	1.00	1.00	1.00	+/- Benchmark	-0.09%	0.05%	0.07%	-0.01%
Standard Deviation	21.41	21.41	24.21	24.22	20.24	20.24					
Sharpe Ratio	0.09	0.09	0.44	0.43	0.39	0.38	5-Year Quarterly				
Information Ratio	0.97	-	1.06	-	1.65	-	Performance	4Q19	3Q19	2Q19	1Q19
Treynor Ratio	-0.19	-0.28	8.06	7.96	5.98	5.81	• FSSNX	10.01%	-2.34%	2.13%	14.56%
Upside Capture Ratio	100.12	100.00	100.12	100.00	100.29	100.00	Benchmark	9.94%	-2.40%	2.10%	14.58%
Downside Capture Ratio	99.81	100.00	99.85	100.00	99.73	100.00	+/- Benchmark	0.07%	0.06%	0.04%	-0.02%

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

(USD) Fidelity Small Cap Index

Performance 12-31-2023	31-2023				
Quarterly Returns	1st Otr	2nd Otr	3rd Qtr	4th Otr	Total %
2021	12.73	4.26	-4.40	2.10	14.71
2022	-7.47	-17.18	-2.08	6.25	-20.27
2023	2.81	5.24	-5.09	14.05	17.12
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	17.12	2.32	10.07	7.32	10.73
Std 12-31-2023	17.12		10.07	7.32	10.73
Total Return	17.12	2.32	10.07	7.32	10.73
+/- Std Index	-9.17	-7.68	-5.62	-4.72	
+/- Cat Index	0.19	0.10	0.10	0.16	
% Rank Cat	46	87	71	54	
No. in Cat	615	593	557	391	

30-day SEC Yield 7-day 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.

662 8

737 | 780 |

750

802

769

702

671

630

611

615

No. of Funds in Cat

Net Assets

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. does not guarantee future results. The investment return and The performance data quoted represents past performance and

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 % Deferred Load %	N N
Fund Expenses	
Management Fees %	0.03
12b1 Expense %	NA
	3

Fund Expenses Management Foos %
12b1 Expense % N

-2.43%			12-Month Yield Potential Cap Gains Exp
1.00	128	1.02 70.28	Beta R-Squared
0.09	76	-6.76	Alpha
Best Fit Index Russell 2000 TR		Standard Index	MPT Statistics
20.24 7.32 0.39	24.21 10.07 0.44	21.41 2.32 0.10	Standard Deviation Mean Sharpe Ratio
10 Yr	5Yr	3 Yr	
10 Yr 391 funds 3★ +Avg Avg	5 Yr 557 funds 2★ Avg -Avg	3 Yr 593 funds 2★ +Avg -Avg	Morningstar Rating™ Morningstar Risk Morningstar Return
9.6			Risk and Return Profile
0.03 NA			Management Fees % 12b1 Expense % Gross Expense Ratio %

88 88

AAA

Below B

묾

34	0.03		12.15 16.38 0.38	2012	}	Morningstar Medalist Rav Bronze 11-30-2023
జ	0.20		16.54 39.02 6.64	2013	1	Morningstar Medalist Rating" Bronze
40	0.30		16.79 5.19 -8.50	2014 99		
44	0.17		15.46 -4.24 -5.63	2015	}	Analyst-Driven % Morningstar Rating T 100.00 *** Data Coverage % 593 US Fund Small 100.00 Blend
40	0.32		18.36 21.63 9.67	2016 83	\	% Mornii *** % 593 U
22	0.20		20.32 14.85 -6.98	2017		Morningstar Rating *** 593 US Fund Small Blend
33	0.14		17.24 -10.88 -6.49	2018		Rating [™] d Small
30	0.18		21.03 25.71 -5.78	2019 100	**	Standa S&P 5
14	0.03		24.98 19.99 1.59	2020	₹	Standard Index S&P 500 TR USD
93	-0.11		27.56 14.71 -13.99	2021		SD *
84	0.16		21.70 -20.27 -2.16	2022	\$	Cate Russ
46	0.19		25.04 17.12 -9.17	12-23 199	40k 20k	Category Index Russell 2000 TR USD
% Rank Cat	+/- Category Index	Performance Quartile (within category)	NAV/Price Total Return % +/- Standard Index	Investment Style Equity/Stocks %	Growth of \$10,000 Fidelity Small Cap Index 32,781 Category Average 30,302 Standard Index 47,838	Morningstar Cat US Fund Small Blend

Equity Style Portfolio Statistics Port Rel Rel 879,300 Light & Won
Light & Wonder Inc Ordinary Shares

n. Cwolinal	•			
Sector Weightings	Sect	wo	WO	_
353,870		Avg Wtd Price —	1 paw	
371,810	•		цбі	_
1 mil	•	= Ava Eff Duration	Ltd Mod Ext	_
810,610	①		Fixed-Income Style	_
2 mil	①			
165′189		\$mil	llem	_

Credit Quality Breakdown —	MOT	beM	и́ріН	Ltd Mod Ext	Fixed-Income Style	lleu
down —		Avg Wtd Price	Avg Eff Duration Avg Wtd Coupon	Avg Eff Maturity		\$mil
Bond %						
• e	Sector	•	⊕ (⊕⊕	•	Œ
b Cyclical	Sector Weightings	353,870	371,810	810,610	2 mil	180,000

0.30 0.32 0.32 0.31 0.32

	1	1		1	1		l	- Wild	D 00 00						
1	Industrials	Energy	Communication Services	₩ Sensitive	Real Estate	Financial Services	Consumer Cyclical	Basic Materials	Դ Cyclical	Sector Weightings	353,870	371,810	⊕ 1 mil		⊕ 2 mil
			n Services			ices	lical	ls			SPS Commerce Inc	Applied Industrial Technologies Inc	Rambus Inc	HealthEquity Inc	ChampionX Corp
1	15.5	8.4	2.2	41.6	7.3	14.5	10.1	4.7	36.7	Stocks %		chnologies Inc			
0	1.85	2.17	0.25	0.82	2.91	1.16	0.92	2.16	1.30	Rel Std Index	0.28	0.28	0.28	0.29	0.29

II-oqualeu	70.20	100.00	- Section - Sect	000000	0.000		2
12-Month Yield			Americas	99.1	1.00	→ Derensive	21.8
Potential Cap Gains Exp	XD.	-2.43%	Greater Europe	0.6	1.19	L Consumer Detensive	4.4
	Ť	!	Greater Asia	0.3	6.73	Healthcare	14.4
				;		Utilities	3.0
Operations							
Family:	Fidelity Investments		Base Currency:	USD		Purchase Constraints:	I
Manager:	Multiple		Ticker:	FSSNX		Incept:	09-08-2011
Tenure:	12.3 Years		ISIN:	US3161461823		Type:	MF
Objective:	Small Company		Minimum Initial Purchase:	\$0		Total Assets:	\$25,414.91 mil

Americas Regional Exposure

Stocks % 99.1 0.6

Rel Std Index

Technology

15.5

0.52

1.03 0.73 1.13 1.27

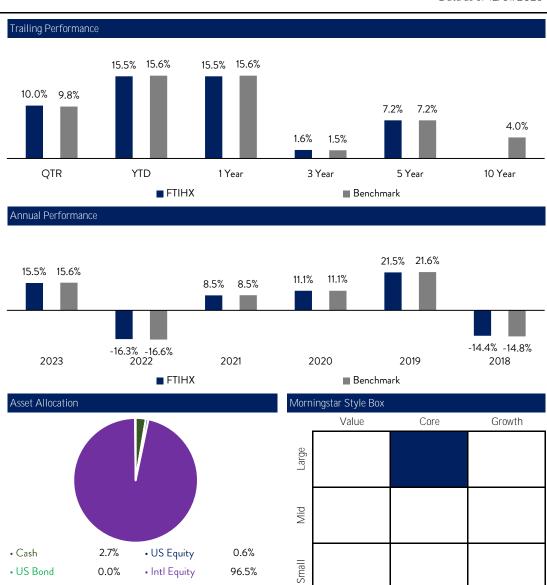
0.33 0.59 0.71

Fidelity Total International Index FTIHX

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	7.58 Years
Fund Size	\$11,519,091,576

Fund Characteristics	FTIHX	+/- Category
% Assets in Top 10 Holdings	11.07%	-4.15%
Average Market Cap (mil)	\$28,892	-\$27,684
P/E Ratio (TTM)	13.21	-0.18
P/B Ratio (TTM)	1.59	-0.19
Est. Dividend Yield	3.60%	0.22%

Sector Allocations	FTIHX	Category	+/- Category
Materials	8.1%	7.0%	1.1%
Communication Services	5.4%	4.4%	1.0%
Consumer Discretionary	11.2%	11.2%	0.0%
Consumer Staples	7.8%	9.0%	-1.3%
Healthcare	9.3%	11.6%	-2.3%
Industrials	14.3%	16.4%	-2.1%
Real Estate	3.0%	1.7%	1.3%
Technology	12.7%	11.6%	1.1%
Energy	5.7%	5.5%	0.2%
Financial Services	19.5%	18.9%	0.6%
Utilities	3.0%	2.7%	0.4%
Other	0.0%	0.0%	0.0%



0.0%

• Other

0.1%

• Intl Bond

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year	5-Year Quarterly				
• FTIHX	9.97%	15.51%	15.51%	1.61%	7.20%	-	Performance	4Q23	3Q23	2Q23	1Q23
• Benchmark	9.81%	15.62%	15.62%	1.53%	7.19%	3.97%	• FTIHX	9.97%	-3.98%	2.48%	6.75%
+/- Benchmark	0.16%	-0.12%	-0.12%	0.07%	0.01%	-	• Benchmark	9.81%	-3.49%	2.38%	6.56%
Peer Group Rank	50	61	61	64	69	-	+/- Benchmark	0.16%	-0.49%	0.10%	0.18%
Annual Performance	2023	2022	2021	2020	2019	2018	5-Year Quarterly				
• FTIHX	15.51%	-16.28%	8.47%	11.07%	21.48%	-14.38%	Performance	4Q22	3Q22	2Q22	1Q22
• Benchmark	15.62%	-16.58%	8.53%	11.12%	21.63%	-14.76%	• FTIHX	14.78%	-10.45%	-13.16%	-6.21%
+/- Benchmark	-0.12%	0.31%	-0.06%	-0.04%	-0.16%	0.37%	• Benchmark	14.15%	-9.69%	-14.28%	-5.60%
Peer Group Rank	61	57	69	42	63	43	+/- Benchmark	0.63%	-0.76%	1.12%	-0.61%
	01/2019 -	10/2018 -	07/2018 -	04/2018 -	01/2018 -	10/2017 -	5-Year Quarterly				
Rolling 5-Year Performance	12/2023	09/2023	06/2023	03/2023	12/2022	09/2022	Performance	4Q21	3Q21	2Q21	1Q21
• FTIHX	7.20%	2.59%	3.50%	2.37%	0.96%	-0.83%	• FTIHX	2.01%	-3.02%	5.53%	3.91%
• Benchmark	7.19%	2.57%	3.38%	2.35%	0.85%	-0.78%	• Benchmark	1.64%	-2.56%	5.60%	3.77%
+/- Benchmark	0.01%	0.02%	0.11%	0.02%	0.12%	-0.04%	+/- Benchmark	0.36%	-0.46%	-0.06%	0.14%
Peer Group Rank	69	63	65	68	61	44					
							5-Year Quarterly				
Risk Statistics	3,	Year	5	Year	10	Year	Performance	4Q20	3Q20	2Q20	1Q20
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark	• FTIHX	16.81%	6.78%	17.41%	-24.15%
Alpha	0.14	0.00	0.01	0.00	-	0.00	 Benchmark 	17.22%	6.80%	16.96%	-24.11%
Beta	1.02	1.00	1.01	1.00	-	1.00	+/- Benchmark	-0.41%	-0.01%	0.45%	-0.05%
Standard Deviation	16.88	16.36	18.26	18.03	-	15.22					
Sharpe Ratio	0.03	0.02	0.36	0.37	-	0.24	5-Year Quarterly				
Information Ratio	0.03	-	0.01	-	-	-	Performance	4Q19	3Q19	2Q19	1Q19
Treynor Ratio	-0.88	-0.97	5.15	5.18	-	2.62	• FTIHX	9.02%	-1.68%	2.85%	10.19%
Upside Capture Ratio	103.71	100.00	101.70	100.00	-	100.00	Benchmark	9.20%	-1.72%	2.74%	10.31%
Downside Capture Ratio	103.49	100.00	102.11	100.00	-	100.00	+/- Benchmark	-0.18%	0.04%	0.11%	-0.12%

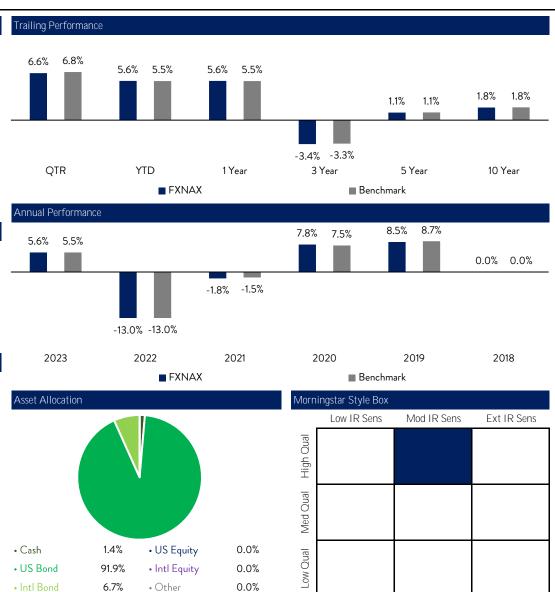
Operations Family: Manager: Tenure: Objective: F	MPT Statistics Alpha Beta R-Squared 12-Month Yield Potential Cap Gains Exp	Risk and Return Profile Risk and Return Profile Morningstar Rating TM Morningstar Risk Morningstar Return Standard Deviation Mean Sharpe Ratio	does not guarantee future results. The investment result and principal value of an investment exit mand principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-544-8944 or visit www.institutional.fidelity.com. Fees and Expenses Sales Charges Front-End Load % Deferred Load % Fund Expenses Management Fees % 1.00 1.2b1 Expense \$\% N.01 1.2b1 Expense \$\% N.01	Performance 12-31-2023	Release date 12-31-2023 Fidelity Total
Fidelity Investments Multiple 7.6 Years Foreign Stock	Standard Index Best Fit Index MSCI ACWI Fx USA. IN RUSD 0.14 0.14 1.03 1.03 98.77 98.77 -9.20%	3 Yr 698 funds 6 2★ -Avg -Avg -Ayg 16.88 1.61 0.03	sults. The investment return ent will fluctuate; thus an in ent will fluctuate; thus an in ed. may be worth more or le lower or higher than return to the data current to the most. \$44.8544 or visit m.	Medalist Rating Medalist R	<u>ਕ</u> ੇ
	xt Fit Index WI Ex USA NR USD 0.14 1.03 98.77 -9.20%	10 Yr 421 funds ————————————————————————————————————	and and and and and and and data recent NA NA NA NA NA NA NA NA NA N	Otr Total % 01 8.47 78 -16.28 97 15.51 0.00 6.00 6.00 6.00 6.00 6.00 6.00 6.0	
Base Currency: Ticker: ISIN: Minimum Initial Purchase:	Below B NR Regional Exposure Americas Greater Europe Greater Asia	Fixed-Income Style Ltd Mod Err Avg Avg Credit Quality Breakdown AAAA AAAA BBB BBB	Portfolio Analys Asset Allocation % Cash US Stocks Non-US Stocks Bonds Other/Not Clsfd Total Equity Style Value Bland Growth Bland Growth Bland Growth	2012 2017	Morningstar
ency: Initial Pu	xposure wrope	me Style			tar
rchase:		Avg Eff Maturity Avg Eff Duration Avg Wtd Coupon Avg Wtd Price	\$ 11-30-2023 Net % -0.07 -0.07 0.67 99.22 0.00 0.18 100.00 Portfolio Statistics P/E Ratio TTM P/C Ratio TTM P/B Ratio TTM Geo Avg Mkt Cap \$mil	100.00 Data Coverage % 100.00 2014 2015 2014 2015	\nalyst-Dr
USD FTIHX US31635V6386 \$0	Stocks % 10.6 44.4 45.0	laturity uration Coupon Price	23 Net % -0.07 0.67 0.69 99.22 0.00 0.18 100.00 Statistics TTM TTM TTM TTM TTM TTM TTM TTM TTM TT	: : O : to +	iven % N
5V6386			Long % 2.73 0.67 99.22 0.00 0.19 102.81 Port Avg Ir 13.2 8.7 1.6 28892 0.28	### ### ##############################	Analyst-Driven % Morningstar Rating
	Rel Std Index 0.97 0.98	Bond %	% Short % 3 2.80 7 0.00 2 0.00 0 0.00 1 2.81 1 2.81 1 2.81 1 2.81 1 0.04 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00 0 0.00	2018 2018 2018 2018 2018 49 -0.19 49 741	r Rating"
Purcha Incept: Type: Total A				MSCI A USD USD 2019 2019 25 12.42 21.48 -0.03 53 732	Standard Index
Purchase Constraints: Incept: Type: Total Assets:	Communication Services Energy Industrials Technology Defensive Consumer Defensive Healthcare Utilities	4 mil Toy 3769,160 No 582,965 Ast 257,051 Roc Sector Weightings Cyclical Basic Materials Consumer Cyclical Financial Services Real Estate	Share Amount 3 284 mil 2,065 9 mil 1 mil 1 mil 1 mil 1 mil 1 1 51,634 2 mil 1,952 3 mil 1,952 3 mil 1,952 3 mil 1,952	MSCI ACWI Ex USA NR USD USD 2020 2019 2020 2021 2019 2020 2021 2019 30 30 42 31 32 32 33 32 33 33 34 35 36 37 37 37 37 38 38 38 38 38 38	d Index
traints:	ation Ser y Defensiv	vici iali			
	vices	Toyota Motor Corp Novartis AG Registered Shares AstraZeneca PLC Roche Holding AG Stocks 41 8 8 11 12 28 3	Holdings: 5.082 Total Stocks, 0 Total Fixed-In 4% Turnover Ratio Fidelity® Cash Central Fund MSCI EAFE Index Future Dec Taiwan Semiconductor Man Novo Nordisk A/S Class B Nestle SA Tencent Holdings Ltd ASML Holding NV Samsung Electronics Co Ltd MSCI Emerging Markets Ind Shell PLC Lvmh Moet Hennessy Louis \	O CI A	Category Index
06-07 MF \$11,5		· Corp · Aegistere PLC g AG	io Total io th Centra dex Futur conducto A/S Clas ings Ltd g NV g NV gt NV g Marker		
— 06-07-2016 MF \$11,519.09 mil	5.4 5.7 14.3 12.7 20.1 7.8 9.3 3.0	d Shares Stocks % 41.8 8.1 11.2 19.5 3.0	Holdings: 5,02 Total Stocks, 0 Total Fixed-Income, 4% Tumover Ratio Fridelity® Cash Central Fund MSCI EAFE Index Future Dec 23 Taiwan Semiconductor Manufacturing Novo Nordisk A/S Class B Nestle SA Tencent Holdings Ltd ASML Holding NV Samsung Electronics Co Ltd MSCI Emerging Markets Index Future Shell PLC Lvmh Moet Hennessy Louis Vuitton SE	USA NR US Fund Foreign Large Blend ** Growth of \$10,000	
	1.02 1.03 1.05 0.97 0.99 0.99 0.98 0.99	0.70 0.70 0.69 0.64 Rel Std Index 1.00 1.02 1.03 0.93 1.36	Net Assets % 2.63 2.03 1.56 1.16 1.06 0.97 0.98 0.75	gn Large	at

Fidelity U.S. Bond Index FXNAX

Product Details	
Name	Fidelity U.S. 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	9.67 Years
Fund Size	\$58,461,972,707

Fund Characteristics	FXNAX	+/- Category
% Assets in Top 10 Holdings	8.72%	-38.59%
Average Eff Duration	6.03	0.04
Average Eff Maturity	-	-
Average Credit Quality	AA	A (Cat Avg.)
Average Coupon	3.07%	-0.44%

Sector Allocations	FXNAX	Category	+/- Category
Government	43.3%	31.4%	12.0%
Municipal	0.5%	1.0%	-0.5%
Bank Loan	0.0%	0.0%	0.0%
Convertible	0.0%	0.0%	0.0%
Corporate Bond	26.4%	24.4%	2.0%
Preferred Stock	0.0%	0.2%	-0.2%
Agency MBS	27.3%	31.6%	-4.3%
Non-Agency RMBS	0.0%	0.5%	-0.5%
Commercial MBS	0.9%	0.4%	0.5%
Asset-Backed	0.4%	5.0%	-4.6%
Cash & Equivalents	1.3%	4.0%	-2.7%
Other	0.0%	1.6%	-1.5%



Fidelity U.S. Bond Index FXNAX

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year	5-Year Quarterly				
• FXNAX	6.64%	5.56%	5.56%	-3.40%	1.06%	1.78%	Performance	4Q23	3Q23	2Q23	1Q23
• Benchmark	6.82%	5.53%	5.53%	-3.31%	1.10%	1.81%	• FXNAX	6.64%	-3.15%	-0.83%	3.06%
+/- Benchmark	-0.17%	0.03%	0.03%	-0.08%	-0.04%	-0.03%	 Benchmark 	6.82%	-3.23%	-0.84%	2.96%
Peer Group Rank	60	52	52	46	51	41	+/- Benchmark	-0.17%	0.08%	0.02%	0.09%
Annual Performance	2023	2022	2021	2020	2019	2018	5-Year Quarterly				
• FXNAX	5.56%	-13.03%	-1.79%	7.80%	8.48%	0.01%	Performance	4Q22	3Q22	2022	1022
• Benchmark	5.53%	-13.01%	-1.54%	7.51%	8.72%	0.01%	• FXNAX	1.68%	-4.69%	-4.66%	-5.88%
+/- Benchmark	0.03%	-0.02%	-0.25%	0.29%	-0.23%	0.00%	• Benchmark	1.87%	-4.75%	-4.69%	-5.93%
Peer Group Rank	52	31	64	49	49	28	+/- Benchmark	-0.19%	0.06%	0.04%	0.06%
	01/2019 -	10/2018 -	07/2018 -	04/2018 -	01/2018 -	10/2017 -	5-Year Quarterly				
Rolling 5-Year Performance	12/2023	09/2023	06/2023	03/2023	12/2022	09/2022	Performance	4Q21	3Q21	2Q21	1Q21
• FXNAX	1.06%	0.11%	0.77%	0.89%	-0.02%	-0.28%	• FXNAX	-0.12%	0.02%	1.85%	-3.48%
• Benchmark	1.10%	0.10%	0.77%	0.91%	0.02%	-0.27%	• Benchmark	0.01%	0.05%	1.83%	-3.37%
+/- Benchmark	-0.04%	0.01%	0.00%	-0.02%	-0.04%	-0.01%	+/- Benchmark	-0.13%	-0.03%	0.02%	-0.11%
Peer Group Rank	51	41	41	42	40	43					
							5-Year Quarterly				
Risk Statistics	3,	Year	5`	Year	10	Year	Performance	4Q20	3Q20	2Q20	1Q20
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark	• FXNAX	0.75%	0.43%	2.77%	3.66%
Alpha	-0.09	0.00	-0.04	0.00	-0.03	0.00	 Benchmark 	0.67%	0.62%	2.90%	3.15%
Beta	1.00	1.00	1.00	1.00	1.01	1.00	+/- Benchmark	0.08%	-0.19%	-0.13%	0.51%
Standard Deviation	7.24	7.24	6.17	6.16	4.81	4.76					
Sharpe Ratio	-0.80	-0.79	-0.12	-0.12	0.11	0.12	5-Year Quarterly				
Information Ratio	-0.38	-	-0.14	-	-0.10	-	Performance	4Q19	3Q19	2Q19	1Q19
Treynor Ratio	-5.91	-5.82	-0.94	-0.90	0.44	0.47	• FXNAX	0.06%	2.27%	2.97%	2.96%
Upside Capture Ratio	99.91	100.00	100.25	100.00	100.92	100.00	Benchmark	0.18%	2.27%	3.08%	2.94%
Downside Capture Ratio	100.67	100.00	100.81	100.00	101.75	100.00	+/- Benchmark	-0.12%	0.00%	-0.11%	0.01%

(USD) Fidelity U.S. Bond Index

Bloomberg US Agg

Category Index

Bond TR USD

Core Bond US Fund Intermediate Morningstar Cat

.....80k

Growth of \$10,000

4

. 20k

Standard Index 12,216 Category Average 12,340 Fidelity U.S. Bond Index 12,166

Performance 12-31-2023	31-2023					
Quarterly Returns	1st Otr	2nd Otr	3rd Otr	4th Otr	Total %	
2021	-3.48	1.85	0.02	-0.12	-1.79	
2022	-5.88	-4.66	-4.69	1.68	-13.03	
2023	3.06	-0.83	-3.15	6.64	5.56	
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept	
Load-adj Mthly	5.56	-3.40	1.06	1.78	2.01	
Std 12-31-2023	5.56		1.06	1.78	2.01	
Total Return	5.56	-3.40	1.06	1.78	2.01	
+/- Std Index	0.03	-0.08	-0.04	-0.03		
+/- Cat Index	0.03	-0.08	-0.04	-0.03		
% Rank Cat	54	49	48	36		
No. in Cat	471	425	385	277		

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

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

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

Asset Allocation %

Portfolio Analysis 11-30-2023

423 සු

No. of Funds in Cat

% Rank Cat +/- Category Index (within category)

-0.02

0.03

ည္သ

11.98 -1.79 -0.25

10.43

-13.03 10.18

Total Return % NAV/Price

-0.02

0.03 5.56

Performance Quartile +/- Standard Index 99

99 - 2021

2022

12-23

Fixed-Income/Bond %

nvestment Style

4

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

Non

www.institutional.fidelity.com.

Fees and Expenses

Front-End Load % Deferred Load %		N N
Fund Expenses		
Management Fees %		0.03
12b1 Expense %		NA
Gross Expense Ratio %		0.03
Risk and Return Profile		

Risk and Return Profile			
	3 Yr 425 funds	5 Yr 385 funds	10 Yr 277 funds
Morningstar Rating™		3⊁	3⊁
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	Avg	Avg	Avg
	3 Yr	5 Yr	10 Yr
Standard Deviation	7.24	6.17	4.81
Mean	-3.40	1.06	1.78
Sharpe Ratio	-0.80	-0.12	0.11
MPT Statistics	Standard Index	Bloor	Best Fit Index Bloomberg US Agg Bond TR USD
۸lpha	-0.09		-0.09
3eta .	1.00	00	1.00
R-Squared	99.91	3	99.91
12-Month Yield			

^ ≥

AAA

88 88

Below B

93 11.89 4.23 0.02 0.02 82 1165	2012	Morningstar Medalist Rad Sold
98 11.36 -2.19 -0.17 -0.17 69 1079	2013	Morningstar Medalist Rating ^{**} Sold 11-30-2023
96 11.73 5.99 0.02 0.02 0.02 26	2014	
99 11.49 0.63 0.08 0.08	2015	Analyst-Driven % 90.00 Data Coverage % 99.00
99 11.49 2.52 -0.13 -0.13 66 985	2016	
97 11.59 3.50 -0.04 -0.04 -0.04 -986	2017	Morningstar Rating™ ★★★ 425 US Fund Intermediate Core Bond
99 11.28 0.01 0.00 0.00 0.00 29	2018	Rating"
96 11.91 8.48 -0.23 -0.23 49	2019	Stand: Bloom Bond
98 12.45 7.80 0.29 0.29 0.29 41	2020	Standard Index Bloomberg US Agg Bond TR USD
98 111.98 -1.79 -0.29 -0.29 -0.29	202	Agg

ed-Income Style		llem2	biM	ıde	e digital	ty Styl	al	er/Not Clsfd	nds	n-US Stocks	Stocks	šh	et Allocation %
		\$mil	P/B Ratio TTM	P/C Ratio TTM	P/E Ratio TTM	Portfolio Statistics	100.00	0.00	98.64	0.00	0.00	1.36	Net %
			 		 	Port Rel Rel Avg Index Cat	100.00 0.00	0.00 0.00	98.64 0.00	0.00 0.00	0.00 0.00	1.36 0.00	Long % Short %
}	***			(•		1			1) 10-2023	SINCE	Share Chg

眶 Tota Oth:

_	Bond %	Credit Quality Breakdown 11-30-2023	Credit Qualit
_			
ωı		мод	
	89.49	Avg Wtd Price	
	0.00	Avg Wtd Coupon	
	n 03	Avg Eff Direction	Ltd Mod
			Fixed-Income Style
Μį			

334 mil 356 mil 396 mil

Fidelity® Cash Central Fund

0.64 0.70 414 mil 430 mil 444 mil 480 mil 461 mil

United States Treasury Notes 0.5% United States Treasury Notes 3.5%

0.76 0.72 0.72

United States Treasury Notes 3.875% United States Treasury Notes 1.5% United States Treasury Notes 3% Federal Home Loan Mortgage Corp. 2% United States Treasury Notes 2.625% United States Treasury Notes 1.5%

United States Treasury Notes 4.125%

			00	Std Index	0.00	0.00	0.00	0.01	10.86	12.38	4.80	71.95	Rond %		89.49	8	6 O3		
Utilities	→ Healthcare	Consumer Defensive	→ Defensive	Technology	Industrials	♦ Energy	Communication Services	✓ Sensitive	⚠ Real Estate	Financial Services	Consumer Cyclical	Basic Materials	Դ Cyclical	Sector Weightings	337 mil United States T	353 mil United States T	334 mil United States T	362 mil United States T	AA
	I	I	I		I	I	1	I	Ι	I	I	I	I	Stocks %	United States Treasury Notes 2.25%	United States Treasury Notes 0.375%	United States Treasury Notes 4%	United States Treasury Notes 2.75%	
	I		I					I	1	I	1	I	I	Rel Std Index	0.56	0.58	0.59	0.61	

	9004 Maniporter All Birks Doround Halos abhasis a graded in a source and an analysis of the control of the cont	anks in the country in which its orig	a constate agreement was more use this report	II Dights Described III loss otherwise provided in	©2024 Morningstor All
\$58,461.98 mil	Total Assets:	\$0	Minimum Initial Purchase:	Multisector Bond	Objective:
MF.	Туре:	US3161463563	ISIN:	9.7 Years	Tenure:
05-04-2011	Incept:	FXNAX	Ticker:	Multiple	Manager:
A	Purchase Constraints:	USD	Base Currency:	Fidelity Investments	Family:
					Operations

Potential Cap Gains Exp

-13.50%

Americas Regional Exposure

Rel S

Greater Asia Greater Europe

0.78

0.98

1.09

638 mil 603 mil

724 mil 798 mil

Share Amount

Holdings : 0 Total Stocks , 8,908 Total Fixed-Income, 34% Turnover Ratio

Net Assets

United States Treasury Notes 2.75%

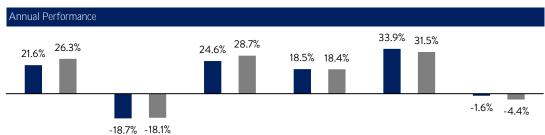
2018

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	25.75 Years
Fund Size	\$9,591,502,185

Fund Characteristics	HAITX	+/- Category
% Assets in Top 10 Holdings	39.42%	-11.09%
Average Market Cap (mil)	\$293,019	\$10,360
P/E Ratio (TTM)	25.90	3.23
P/B Ratio (TTM)	4.84	0.17
Est. Dividend Yield	1.30%	-0.22%

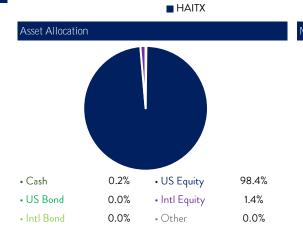
Sector Allocations	HAITX	Category	+/- Category
Materials	1.5%	2.8%	-1.3%
Communication Services	9.1%	8.1%	1.0%
Consumer Discretionary	10.7%	10.2%	0.5%
Consumer Staples	5.6%	6.4%	-0.8%
Healthcare	14.8%	13.6%	1.2%
Industrials	7.7%	10.0%	-2.3%
Real Estate	1.7%	2.2%	-0.4%
Technology	28.6%	27.2%	1.4%
Energy	3.6%	4.3%	-0.7%
Financial Services	13.9%	13.2%	0.7%
Utilities	2.9%	2.2%	0.8%
Other	0.0%	0.0%	0.0%





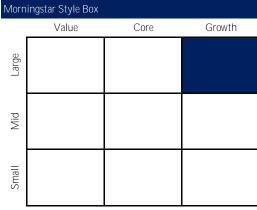
2021

2020



2022

2023



2019

■ Benchmark

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year	5-Year Quarterly				
• HAITX	11.75%	21.57%	21.57%	7.22%	14.35%	11.91%	Performance	4Q23	3O23	2Q23	1023
• Benchmark	11.69%	26.29%	26.29%	10.00%	15.69%	12.03%	• HAITX	11.75%	-3.57%	7.00%	5.42%
+/- Benchmark	0.06%	-4.72%	-4.72%	-2.78%	-1.33%	-0.12%	• Benchmark	11.69%	-3.27%	8.74%	7.50%
Peer Group Rank	42	65	65	83	53	12	+/- Benchmark	0.06%	-0.29%	-1.74%	-2.07%
Annual Performance	2023	2022	2021	2020	2019	2018	5-Year Quarterly				
• HAITX	21.57%	-18.65%	24.62%	18.49%	33.89%	-1.55%	Performance	4Q22	3Q22	2Q22	1Q22
• Benchmark	26.29%	-18.11%	28.71%	18.40%	31.49%	-4.38%	• HAITX	7.00%	-4.14%	-15.16%	-6.51%
+/- Benchmark	-4.72%	-0.54%	-4.08%	0.09%	2.41%	2.83%	• Benchmark	7.56%	-4.88%	-16.10%	-4.60%
Peer Group Rank	65	62	75	35	7	6	+/- Benchmark	-0.57%	0.74%	0.94%	-1.91%
	01/2019 -	10/2018 -	07/2018 -	04/2018 -	01/2018 -	10/2017 -	5-Year Quarterly				
Rolling 5-Year Performance	12/2023	09/2023	06/2023	03/2023	12/2022	09/2022	Performance	4Q21	3Q21	2Q21	1Q21
• HAITX	14.35%	9.02%	11.44%	10.55%	9.63%	9.78%	• HAITX	10.24%	0.26%	7.78%	4.61%
• Benchmark	15.69%	9.92%	12.31%	11.19%	9.42%	9.24%	• Benchmark	11.03%	0.58%	8.55%	6.17%
+/- Benchmark	-1.33%	-0.89%	-0.86%	-0.64%	0.20%	0.55%	+/- Benchmark	-0.78%	-0.33%	-0.76%	-1.56%
Peer Group Rank	53	42	38	34	15	7					
							5-Year Quarterly				
Risk Statistics	3 .	Year	5	Year	10	Year	Performance	4Q20	3Q20	2Q20	1Q20
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark	• HAITX	12.49%	9.77%	19.10%	-19.42%
Alpha	-2.23	0.00	-0.59	0.00	0.45	0.00	Benchmark	12.15%	8.93%	20.54%	-19.60%
Beta	0.94	1.00	0.95	1.00	0.94	1.00	+/- Benchmark	0.34%	0.84%	-1.45%	0.17%
Standard Deviation	16.56	17.54	17.66	18.52	14.44	15.19					
Sharpe Ratio	0.35	0.49	0.74	0.78	0.76	0.74	5-Year Quarterly				
Information Ratio	-1.47	-	-0.67	-	-0.05	-	Performance	4Q19	3Q19	2Q19	1Q19
Treynor Ratio	5.01	7.49	13.01	13.68	11.24	10.69	• HAITX	9.06%	2.49%	5.44%	13.61%
Upside Capture Ratio	90.12	100.00	93.62	100.00	94.31	100.00	Benchmark	9.07%	1.70%	4.30%	13.65%
Downside Capture Ratio	98.10	100.00	95.11	100.00	91.12	100.00	+/- Benchmark	-0.01%	0.79%	1.14%	-0.04%

Analyst-Driven % Morningstar Rating ***

Standard Index

Category Index

Morningstar Cat

(USD) Hartford Core Equity R6

Performance 12-31-2023	-31-2023				
Quarterly Returns	1st Otr	2nd Otr	3rd Otr	4th Otr	Total %
2021	4.61	7.78	0.26	10.24	24.62
2022	-6.51	-15.16	-4.14	7.00	-18.65
2023	5.42	7.00	-3.57	11.75	21.57
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	21.57	7.22	14.35		11.38
Std 12-31-2023	21.57		14.35		11.38
Total Return	21.57	7.22	14.35	11.91	11.38
+/- Std Index	-4.72	-2.78	-1.33	-0.12	I
+/- Cat Index	-4.96	-1.75	-1.17	0.10	
% Rank Cat	64	83	57	13	
No. in Cat	1430	1298	1191	897	

30-day SEC Yield 7-day Yield Subsidized Unsubsidized

Performance Disclosure

principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year does not guarantee future results. The investment return and The performance data quoted represents past performance and (if applicable) Morningstar metrics.

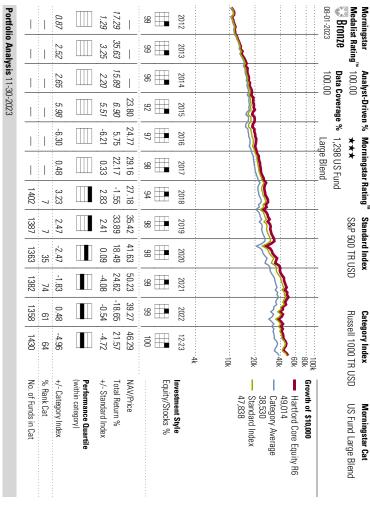
Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 888-843-7824 or visit

their original cost.

Front-End Load % Deferred Load % Sales Charges Fees and Expenses ž ĸ

10 Yr	5Yr	3 Yr	
+Avg	Avg	-Avg	Morningstar Return
-Avg	-Avg	-Avg	Morningstar Risk
5☆	3⊁	2★	Morningstar Rating [™]
897 funds	1,191 funds	1,298 funds 1,191 funds	
10 Yr	5Yr	3 Yr	
			Risk and Return Profile
0.36			Gross Expense Ratio %
NA			12b1 Expense %
0.33			Management Fees %
			runa expenses

Morningstar HISK	-Avg	-Avg	-Avg
Morningstar Return	-Avg	Avg	+Avg
	3 Yr	5Yr	10 Yr
Standard Deviation	16.56	17.66	14.44
Mean	7.22	14.35	11.91
Sharpe Ratio	0.35	0.74	0.76
MPT Statistics	Standard Index	Best	Best Fit Index
		S&P 50	S&P 500 TR USD
Alpha	-2.23		-2.23
Beta	0.94		0.94
R-Squared	99.09		99.09
12-Month Yield			
Potential Cap Gains Exp			35.71%



		(!
481,270 Mastercard	481,270	D					
Eli Lilly and	353,314	①(1.00	1.17	Geo Avg Mkt Cap 282710 \$mil	Geo Avg M \$mil	llsm2
.IPMorgan C	1 :	D (1.01	1.13	M	P/B Ratio TTM	ΡΙΜ
Procter & Ga	1 mii	D (1.17	1.18		P/C Ratio TTM	иде
Meta Platfo	776,317	1	<u>-</u>	1.06		P/E Ratio TTM	
UnitedHealt	506,915	1	Cat	Port Rel Avg Index		Portfolio Statistics	Equity Style
NVIDIA Corp	713,241	①			'		
Amazon.com	3 mil	1	0	100.00	100.00 1		Total
Alphabet Inc	4 mil	1	0.00	0.00	0.00		Other/Not Clsfd
Apple Inc	3 mil	1	0.00	0.00	_		Bonds
MICIOSOILO	2	1	0.00	1.42			Non-US Stocks
Mineranti C	ა !) 10-2023	0.00	98.30			US Stocks
62 Turnover I	Amount	SINCE	0.00	0.28			Cash
Holdings:		Share Cho	Short %	Long % S	Net %		Asset Allocation %

			ller	\$MII		
Fixed-Income Style		me St	≦ │			- 1
ద	Mod	Ext		Avg Eff Maturity	rity –	1
			біН	Avg Eff Duration	ion –	1
			Ч	Avg Wtd Coupor	pon –	1
			beM	Avg Wtd Price	(b)	1
			γοη			
Credi	Qua	ity Br	eakd	Credit Quality Breakdown —	Bond %	8
AAA					ı	I
A					1	1
⊳					I	1
BBB					1	1
88					I	1
- Β						: 1

≾	<u>≅</u> .							
	t Qual							
	lity B							
	reak		W	Pγ	baN	ı	ųl	
	edit Quality Breakdown —				Avg Wtd Price	Jah Anto Conbon	Ava Wtd Coupon	
	Bond %							
B	Ģ	•	Se	ĺ		(D	

dit Quality Breakdown —		Bond %
Þ		
		1
7		
		1
		1
		1
low B		1
		1
gional Exposure	Stocks %	Rel Std Index
nericas	98.6	0.99
eater Europe	1.4	2.72
eater Asia	0.0	0.00

몱踞

Rel Std Index	Stocks %	Sector Weightings	Sector				
1.51	Bank of America Corp	5 mil					
1.71	EOG Resources Inc	1 mi	1				ĭ :
1.72	Merck & Co Inc	2 mil	1				⇒ ₹
1.76	Broadcom Inc	175,424	1				₹
2.16	Mastercard Inc Class A	481,270	1				
2.27	Eli Lilly and Co	353,314	1		-	7027	5
2.28	JPMorgan Chase & Co	1 mil	1	3 :) 1.13	4./ an 282710	5
2.34	Procter & Gamble Co	1 mil	1	1		. P. Z	
2.76	Meta Platforms Inc Class A	776,317	1	1 1		25.	
3.05	UnitedHealth Group Inc	506,915	1	Cat	g Index	Avg	5
3.63	NVIDIA Corp	713,241	1	<u> </u>	<u> </u>		;
4.85	Amazon.com Inc	3 mil	1	0.00		100.00	8
5.14	Alphabet Inc Class A	4 mil	1	0.00	0.00		
6.17	Apple Inc	3 mil	1	0.00	00		
7.72	Microsoft Corp	2 mil	1	0.00	1.42		.42
%	Amount 62 Total Stocks , 0 Total Fixed-Income, 19% Turnover Ratio		since 10-2023	0.00	0.28 98.30		38

USD HAITX US41664R1840 \$0		Stocks % Rel Std Index	Bond %
Purchase Constraints: Incept: Type: Total Assets:	Defensive Consumer Defensive Healthcare Utilities	 W Sensitive Communication Services Industrials Technology 	% Basic Materials Consumer Cyclical Financial Services Real Estate
A 03-31-2015 MF \$9,591.50 mil	24.5 6.5 15.0 2.9	49.4 9.1 3.7 7.4 29.1	26.1 1.1 10.7 12.7 1.6
	1.16 1.07 1.19 1.25	0.98 1.06 0.95 0.89 0.98	0.92 0.52 0.97 1.02 0.62

Manager:

Multiple 25.8 Years

Ticker:

Base Currency:

Hartford Mutual Funds

Operations

Tenure: Family:

Objective:

Growth

Minimum Initial Purchase:

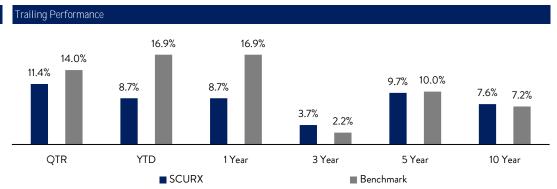
Net Assets

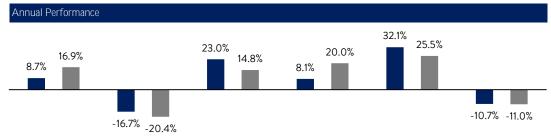
Hartford Schroders US Small Cap Opps SDR SCURX

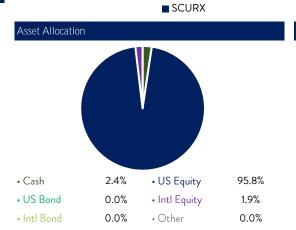
Product Details	
Name	Hartford Schroders US Small Cap Opps SDR
Ticker	SCURX
Expense Ratio	0.950%
Morningstar Category	US Fund Small Blend
Benchmark	Russell 2000 TR USD
Inception Date	9/28/2015
Longest Tenured Manager	Joanna Wald
Longest Manager Tenure	10.08 Years
Fund Size	\$275,642,307

Fund Characteristics	SCURX	+/- Category
% Assets in Top 10 Holdings	17.79%	-4.58%
Average Market Cap (mil)	\$3,012	-\$2,049
P/E Ratio (TTM)	19.87	3.78
P/B Ratio (TTM)	2.15	-0.19
Est. Dividend Yield	1.14%	-0.83%

Sector Allocations	SCURX	Category	+/- Category
Materials	8.5%	5.1%	3.4%
Communication Services	2.6%	2.2%	0.4%
Consumer Discretionary	8.5%	12.4%	-3.8%
Consumer Staples	3.4%	4.3%	-0.8%
Healthcare	12.8%	12.0%	0.7%
Industrials	15.3%	18.6%	-3.3%
Real Estate	2.8%	6.6%	-3.8%
Technology	22.6%	15.0%	7.7%
Energy	5.1%	5.9%	-0.8%
Financial Services	15.2%	15.7%	-0.5%
Utilities	3.1%	2.3%	0.8%
Other	0.0%	0.0%	0.0%









■ Benchmark

Hartford Schroders US Small Cap Opps SDR SCURX

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year	5-Year Quarterly				
• SCURX	11.41%	8.71%	8.71%	3.66%	9.73%	7.62%	Performance	4Q23	3Q23	2Q23	1Q23
• Benchmark	14.03%	16.93%	16.93%	2.22%	9.97%	7.16%	• SCURX	11.41%	-6.98%	1.31%	3.53%
+/- Benchmark	-2.62%	-8.22%	-8.22%	1.44%	-0.24%	0.47%	 Benchmark 	14.03%	-5.13%	5.21%	2.74%
Peer Group Rank	75	94	94	73	74	39	+/- Benchmark	-2.62%	-1.85%	-3.89%	0.79%
Annual Performance	2023	2022	2021	2020	2019	2018	5-Year Quarterly				
• SCURX	8.71%	-16.67%	22.98%	8.14%	32.06%	-10.72%	Performance	4Q22	3Q22	2Q22	1Q22
• Benchmark	16.93%	-20.44%	14.82%	19.96%	25.52%	-11.01%	• SCURX	10.04%	-6.04%	-13.33%	-7.01%
+/- Benchmark	-8.22%	3.77%	8.16%	-11.82%	6.53%	0.29%	 Benchmark 	6.23%	-2.19%	-17.20%	-7.53%
Peer Group Rank	94	50	51	75	3	34	+/- Benchmark	3.81%	-3.85%	3.86%	0.51%
	01/2019 -	10/2018 -	07/2018 -	04/2018 -	01/2018 -	10/2017 -	5-Year Quarterly				
Rolling 5-Year Performance	12/2023	09/2023	06/2023	03/2023	12/2022	09/2022	Performance	4Q21	3Q21	2Q21	1Q21
• SCURX	9.73%	3.46%	5.86%	6.56%	5.49%	4.30%	• SCURX	6.92%	-1.21%	2.84%	13.20%
Benchmark	9.97%	2.40%	4.21%	4.71%	4.13%	3.55%	• Benchmark	2.14%	-4.36%	4.29%	12.70%
+/- Benchmark	-0.24%	1.06%	1.65%	1.85%	1.37%	0.74%	+/- Benchmark	4.78%	3.15%	-1.45%	0.50%
Peer Group Rank	74	53	37	31	36	41					
							5-Year Quarterly				
Risk Statistics	3,	Year	5`	Year	10	Year	Performance	4Q20	3Q20	2020	1Q20
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark	• SCURX	26.06%	4.86%	21.22%	-32.51%
Alpha	1.31	0.00	0.41	0.00	1.01	0.00	 Benchmark 	31.37%	4.93%	25.42%	-30.61%
Beta	0.89	1.00	0.91	1.00	0.88	1.00	+/- Benchmark	-5.32%	-0.07%	-4.20%	-1.90%
Standard Deviation	19.96	21.41	22.74	24.22	18.29	20.24					
Sharpe Ratio	0.15	0.09	0.44	0.43	0.42	0.38	5-Year Quarterly				
Information Ratio	0.22	-	-0.04	-	0.09	-	Performance	4Q19	3Q19	2Q19	1Q19
Treynor Ratio	1.30	-0.28	8.49	7.96	7.16	5.81	• SCURX	9.33%	0.72%	6.02%	13.12%
Upside Capture Ratio	93.37	100.00	94.23	100.00	90.39	100.00	• Benchmark	9.94%	-2.40%	2.10%	14.58%
Downside Capture Ratio	88.44	100.00	93.45	100.00	86.22	100.00	+/- Benchmark	-0.61%	3.12%	3.92%	-1.47%

(USD) Small Cap Opps SDR **Hartford Schroders US**

Performance 12-31-2023	-31-2023				
Quarterly Returns	1st Otr	2nd Otr	3rd Otr	4th Otr	Total %
2021	13.20	2.84	-1.21	6.92	22.98
2022	-7.01	-13.33	-6.04	10.04	-16.67
2023	3.53	1.31	-6.98	11.41	8.71
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	8.71	3.66	9.73	I	8.92
Std 12-31-2023	8.71		9.73		8.92
Total Return	8.71	3.66	9.73	7.62	8.92
+/- Std Index	-17.58	-6.34	-5.96	-4.41	
+/- Cat Index	-8.22	1.44	-0.24	0.47	
% Rank Cat	94	79	78	41	
No. in Cat	615	593	557	391	

30-day SEC Yield	7-day 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 888-843-7824 or visit

Fees and Expenses

Sales Charges	
Front-End Load %	₹
Deferred Load %	¥
Fund Expenses	

Fund Expenses Management Fees % 12b1 Expense % Gross Expense Ratio % Risk and Return Profile	3 Yr 593 funds	5 Yr	0.90 NA 0.99 10 Yr
Morningstar Rating ⁿ Morningstar Risk	3 Yr 593 funds 2★ -Avg	5 Yr 557 funds 3★ -Avg	10 Yr 391 funds 4☆ -Avg
Standard Deviation Mean Sharpe Ratio	3 Yr 19.96 3.66 0.15	5 Yr 22.74 9.73 0.44	10 Yr 18.29 7.62 0.42

Alpha

Below B NR

ВВ

₽

AA

Credit Quality Breakdown

мот рам цбіН

R-Squared

Potential Cap Gains Exp

3.04%

Greater Europe Americas Regional Exposure

Stocks % 99.6 0.0 0.4

Greater Asia

12-Month Yield

MPT Statistics

01-18-2024	👺 Silver	Medalist Rating	Morningstar
100.00	Data Coverage %	100.00	Analyst-Driven % Morni
Blend	593 U	***	Morni







ingstar Rating™ Standard Index





Russell 2000 TR USD Category Index

US Fund Small Blend Morningstar Cat

	<i>z.</i> ⊞⊞	. <i>1</i> :		.
1 1	-3.90	-3.55	2012	
11	-4.20	34.62 2.23	2013	\
1	3.60	8.50 -5.19	94	}
11	3.04	22.92 -1.37 -2.75	92	}
63 750	-1.82	25.91 19.49 7.53	2016 92	1
1 1	0.16	27.27 14.81 -7.03	93	
32 769	0.29	22.03 -10.72 -6.34	2018	§
	6.53	27.65 32.06 0.57	2019	}
67 671	-11.82	29.84 8.14 -10.26	96	
59 630	8.16	32.94 22.98 -5.73	2021)
54 611	3.77	27.19 -16.67 1.44	2022	\$ {
94 615	-8.22	29.49 8.71 -17.58	12-23 95	3
% Rank Cat No. of Funds in Cat	Performance Quartile (within category) +/- Category Index	NAV/Price Total Return % +/- Standard Index	Investment Style Equity/Stocks %	Growth of \$10,000 Hartford Schroders US Small Cap Opps SDR 31,561 Category Average 30,302 Standard Index 47,838

Dauffalia Analysi	11 00 0000						
i diadio Allalysis i i do zozo	0 1 1 00 2020						
Asset Allocation %	Net %	Long %	Short %	Share Chg	Share		Net A
Cash	4.51	4.51	0.00	since	Amount	88 Total Stocks , 15 Total Fixed-Income,	
US Stocks	94.00	94.00	0.00	0-2023		42% IUIIIUVEI NAUU	
Non-US Stocks	1.49	1.49	0.00	①	IIM ZI	Morgan Stanley InstiLqdty TrsSecs	
Bonds	0.00	0.00	0.00		181,119	LiveRamp Holdings Inc	
Other/Not Clsfd	0.00	0.00	0.00		79,832	Hexcel Corp	
Total	100.00	100.00	0.00	1	187,268	The Chefs' Warehouse Inc	
Equity Style	Portfolio Statistics	Port Rel	Rel	0	00,010		
Value Blend Growth	P/E Ratio TTM			①	53,746 182,618	ASGN Inc Box Inc Class A	
M eg	P/C Ratio TTM	11.5 0.70 20 0.47	0 1.05	①	100,323	Stericycle Inc	
biA	Geo Ava Mkt Can	_			51,513	Albany International Corp	
llsm2	\$mil			•	210,707	Element Solutions Inc	
					59.811	CommVault Systems Inc	
Fixed-Income Style						Valvoline Inc	
Ltd Mod Ext	Avg Eff Maturity					Kemper Corn	
чрін	Avg Eff Duration					Caven Industries Inc	
ĐΜ	Avg wta coupon					Steven Madden I td	
pi	Avy vviu Flice						

	3 0			Port Avg In 18.1 0 11.5 0 2.0 0 2751 0
	el Stc			Rel Index 0.77 0.70 0.47 0.01
1.00 0.82 0.00	Rel Std Index	Bond %		Rel Cat 1.12 1.05 0.84 0.54
		B B B C B C	Sector	• • •
Defensive Consumer Defensive Healthcare Utilities	Sensitive Communication Services Energy Industrials Technology	Cyclical Basic Materials Consumer Cyclical Financial Services Real Estate	127,243 98,198 15,265 109,662 Sector Weightings	53,746 182,618 100,323 51,513 210,707
ensive	n Services	s lical ces	Valvoline Inc Kemper Corp Cavco Industries Inc Steven Madden Ltd	ASGN Inc Box Inc Class A Stericycle Inc Albany International Corp Element Solutions Inc CommVault Systems Inc
20.1 3.9 13.0 3.2	2.5 5.5 14.7 21.9	35.3 8.6 9.2 14.6 2.8	Stocks %	orp
0.95 0.64 1.02 1.37	0.29 0.29 1.42 1.76 0.73	1.25 3.94 0.84 1.16 1.13	1.57 1.57 1.56 1.50	1.73 1.73 1.70 1.60 1.60

©2024 Morningstar. All opinions contained herei opinions contained herei Morningstar, (3) may not and (6) are not warrante information, data, analy including, but not limited or accompanied by a pro	Operations Family: Manager: Tenure: Objective:
©2024 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the copinions contained herein (1) include the confidential and proprietary information of Morningstar. (2) may include, or be derived from Morningstar. (3) may not the copied or redistributed, (4) do not constitute investment advice offered by Morningstar. (3) may not the copied or redistributed, (4) do not constitute investment advice offered by Morningstar (3) may not make the provided of the constituted of the cons	Hartford Mutual Funds Multiple 10.1 Years Growth
separate agreement, you may use this report to maction of Morningstar, (2) may include, or be restiment advice effected by Morningstar, (3) a theories required by leav. Morningstar shall or theories required by leav. Morningstar shall be to as of the date written and are subject to shir or as of the date written and are subject to shall be subject to shall be dwith and governed by the U.S. Securities an Please see important disclosures at the end of Please see important disclosures at the end of	Base Currency: Ticker: ISIN: Minimum Initial Purchase:
only in the country in which its origin derived from, account information p are provided selley from information are provided selley for informational and to be responsible for any trading decarge without notice. Investment result Exchange Commission. This report of Exchange Commission.	USD SCURX US41665H2682 \$5 mil
©2024 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinious contained berein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Worthingstar, (3) may not be copied or and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar sell in the responsible for any trading decisions, damages or other losses resulting from or related to, this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, hor including, but not limited to, Morningstar Research Services (Services Lar. agreement). Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be preseder or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.	Purchase Constraints: Incept: Type: Total Assets:
ss and we verified by a security, ated to, this singstar, inc. t be preceded	A 09-28-2015 MF \$275.64 mil

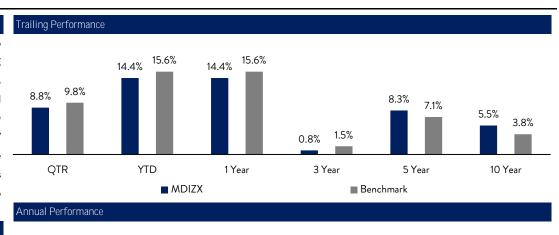
4.51 2.17 2.00 2.00 1.82 1.80

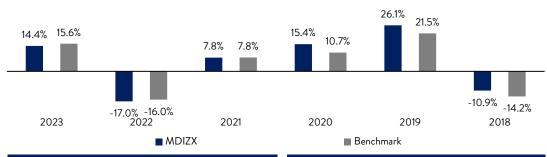
Growth

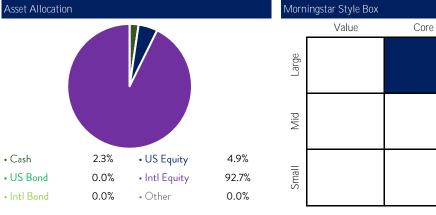
Product Details	
Name	MFS Intl Diversification R6
Ticker	MDIZX
Expense Ratio	0.730%
Morningstar Category	US Fund Foreign Large Blend
Benchmark	MSCI ACWI Ex USA NR USD
Inception Date	10/2/2017
Longest Tenured Manager	Camille Humphries Lee
Longest Manager Tenure	5.33 Years
Fund Size	\$37,069,881,675

Fund Characteristics	MDIZX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$36,615	-\$19,961
P/E Ratio (TTM)	14.39	1.00
P/B Ratio (TTM)	1.87	0.09
Est. Dividend Yield	3.39%	0.01%

Sector Allocations	MDIZX	Category	+/- Category
Materials	9.6%	7.0%	2.5%
Communication Services	4.2%	4.4%	-0.2%
Consumer Discretionary	9.4%	11.2%	-1.8%
Consumer Staples	10.6%	9.0%	1.6%
Healthcare	9.0%	11.6%	-2.7%
Industrials	15.7%	16.4%	-0.7%
Real Estate	1.7%	1.7%	0.0%
Technology	14.1%	11.6%	2.6%
Energy	5.1%	5.5%	-0.3%
Financial Services	18.7%	18.9%	-0.2%
Utilities	2.0%	2.7%	-0.7%
Other	0.0%	0.0%	0.0%







Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year	5-Year Quarterly				
• MDIZX	8.85%	14.44%	14.44%	0.77%	8.29%	5.48%	Performance	4Q23	3Q23	2Q23	1Q23
Benchmark	9.75%	15.62%	15.62%	1.55%	7.08%	3.83%	• MDIZX	8.85%	-4.83%	2.66%	7.61%
+/- Benchmark	-0.91%	-1.18%	-1.18%	-0.77%	1.21%	1.65%	Benchmark	9.75%	-3.77%	2.44%	6.87%
Peer Group Rank	76	71	-1.16 <i>7</i> ₆	-0.77 <i>%</i>	33	7	+/- Benchmark	-0.91%	-1.06%	0.23%	0.74%
reel Gloup Rank	70	/1	/1	//	33	,	+/- Denominark	-0.51/6	-1.00%	0.23%	0.74%
Annual Performance	2023	2022	2021	2020	2019	2018	5-Year Quarterly				
• MDIZX	14.44%	-17.02%	7.78%	15.43%	26.09%	-10.92%	Performance	4Q22	3Q22	2Q22	1Q22
• Benchmark	15.62%	-16.00%	7.82%	10.65%	21.51%	-14.20%	• MDIZX	14.74%	-9.35%	-12.36%	-8.97%
+/- Benchmark	-1.18%	-1.02%	-0.05%	4.78%	4.58%	3.27%	• Benchmark	14.28%	-9.91%	-13.73%	-5.44%
Peer Group Rank	71	64	74	20	22	10	+/- Benchmark	0.45%	0.56%	1.37%	-3.53%
	01/2019 -	10/2018 -	07/2018 -	04/2018 -	01/2018 -	10/2017 -	5-Year Quarterly				
Rolling 5-Year Performance	12/2023	09/2023	06/2023	03/2023	12/2022	09/2022	Performance	4Q21	3Q21	2Q21	1Q21
• MDIZX	8.29%	3.85%	5.16%	4.56%	3.00%	1.35%	• MDIZX	3.24%	-2.39%	5.01%	1.84%
• Benchmark	7.08%	2.58%	3.52%	2.47%	0.88%	-0.81%	• Benchmark	1.82%	-2.99%	5.48%	3.49%
+/- Benchmark	1.21%	1.27%	1.64%	2.08%	2.12%	2.16%	+/- Benchmark	1.43%	0.60%	-0.47%	-1.65%
Peer Group Rank	33	19	17	11	10	9					
							5-Year Quarterly				
Risk Statistics	3	Year	5`	Year	10	Year	Performance	4Q20	3Q20	2Q20	1Q20
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark	• MDIZX	13.65%	7.97%	17.21%	-19.74%
Alpha	-0.74	0.00	1.41	0.00	1.75	0.00	• Benchmark	17.01%	6.25%	16.12%	-23.36%
Beta	0.99	1.00	0.93	1.00	0.91	1.00	+/- Benchmark	-3.37%	1.72%	1.09%	3.61%
Standard Deviation	16.52	16.30	16.93	17.80	14.21	15.11					
Sharpe Ratio	-0.02	0.02	0.44	0.36	0.35	0.24	5-Year Quarterly				
Information Ratio	-0.23	-	0.34	-	0.46	-	Performance	4Q19	3Q19	2Q19	1Q19
Treynor Ratio	-1.75	-0.96	6.74	5.07	4.52	2.49	• MDIZX	9.37%	-1.15%	4.11%	12.02%
Upside Capture Ratio	98.58	100.00	99.70	100.00	96.13	100.00	• Benchmark	8.92%	-1.80%	2.98%	10.31%
Downside Capture Ratio	101.97	100.00	94.44	100.00	87.18	100.00	+/- Benchmark	0.45%	0.65%	1.13%	1.71%

R6 (USD) MFS Intl Diversification

Performance 12-31-2023	31-2023				
Quarterly Returns	1st Otr	2nd Otr	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	7.61	2.66	-4.83	8.85	14.44
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	14.44	0.77	8.29		5.58
Std 12-31-2023	14.44		8.29		5.58
Total Return	14.44	0.77	8.29	5.48	5.58
+/- Std Index	-1.18	-0.77	1.21	1.65	
+/- Cat Index	-1.18	-0.77	1.21	1.65	
% Rank Cat	77	<u>ფ</u>	32	8	
No. in Cat	744	698	642	421	

30-day SEC Yield 7-day Yield Performance Disclosure Subsidized Unsubsidized

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

Portfolio Analysis 12-31-2023

741 732 785

767 | 744 | 744

% Rank Cat

No. of Funds in Cat

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-225-2606 or visit

their original cost.

Management Fees % Fund Expenses 12b1 Expense % Deferred Load % Front-End Load % Sales Charges Fees and Expenses 0.00 R Ζ ĸ

Gross Expense Ratio %			0.74
Risk and Return Profile			
	3 Yr	5Yr	10 Yı
	698 funds	642 funds	421 funds
Morningstar Rating™	2★	4	5 ☆
Morningstar Risk	-Avg	-Avg	Low
Morningstar Return	-Avg	+Avg	High
	3 Yr	5Yr	10 Yı
Standard Deviation	16.52	16.93	14.21
Mean	0.77	8.29	5.48
Sharpe Ratio	-0.02	0.44	0.35
MPT Statistics	Standard Index		Best Fit Index MSCI ACWI Ex USA
Alpha	-0.74	4	-0.74
Beta	0.99	99	0.99
R-Squared	95.74	4	95.74

% Rank Cat	77	69	74	14	10	5	ı	1	ı	ı	ı	
+/- Category Index	-1.18	-1.02	-0.05	4.78	4.58	3.27	3.05	-2.03	5.77	0.00	1.97	1.56
Performance Quartile (within category)												
Total Return % +/- Standard Index		-17.02 -1.02		15.43	26.09	-10.92 3.27		2.47 -2.03	0.11 5.77	-3.86 0.00	17.26 1.97	18.39 1.56
NAV/Price	22 22	20 24	25.07	23 91	21.07	17 14	19.87	١			L	ı
Equity/Stocks %	98	98	88	97	88	95	97	97	98	97	97	97
Investment Style		2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
	10k											
Standard Index	20k	4		1	}}	\int	1	3	}		\	}
Growth of \$10,000 MFS Intl Diversification R6 23,658 — Category Average 20,196												
טופוע	100k	030				je Blend	Foreign Large Blend	•		100.00		05-18-2023
Category Index Morningstar Cat MSCI ACWI Ex USA NR US Fund Foreign Large	Category Index MSCI ACWI Ex US!		Standard Index MSCI ACWI Ex USA NR	Standard Index MSCI ACWI Ex		`Rating"	Morningstar	% Mornii ***	Analyst-Driven % Morningstar Rating™ 100.00 ★★★ Data Coverage % 600 HS 5md		Morningstar Medalist Rating™ ≅} Silver	Morningstar Medalist Rat

Asset Allocation % 11-30-2023	1-30-2023	Net %	Long %		Short %	Share Chg
Cash		2.15	2.1	7	0.02	since
US Stocks		4.83	4.83	ω	0.00	11-2023
Non-US Stocks		93.02	93.0	12	0.00	①
Bonds		0.00	0.00	_	0.00	①
Other/Not Clsfd		0.00	0.00	U	0.00	1
Total		100.00	100.02	2	0.02	①
Equity Style	Portfolio Statistics	atistics		Rel	Rel) (
Value Blend Growth	7			Index	of Cat	1
бле 7	P/E Ratio I IIVI	Ī		1.05	1 .	Contra Mai
IW	P/B Ratio TTM	Z :	1.9	1.10		n Cyclic
	Geo Avg Mkt Cap			0.81	0.65	Basic
llen	\$mil					Consu
Fixed-Income Style						FIIIII

		IIE	SIIII
Fixed-Income Style	ne Sty	6	
Ltd Mod	Εά		Avg Eff Maturity —
		HgiH	Avg Eff Duration —
		ı	Avg vvia coupon
		baN	Avg Wtd Price —
		γνοη	

Fixed-income Style		I
Ltd Mod Ext Avg Eff Maturity		₽ Rea
Avg Eff Duration		₩ Se
Avg Wtd Price		
лоп		
Credit Quality Breakdown —	Bond %	<u> </u>
AAA	1	↓ De
AA		<u>.</u>
Α	1	□ He:
BBB		Ut:
BB	I	

Rel Std Index	Stocks %	eightings	Sector Weightings
10.06	118 mil MFS International New Discovery R6	118 mil	0
14.99	420 mil MFS International Large Cap Value	420 mil	1
15.00	MFS International Growth R6	139 mil	1
15.02	MFS International Intrinsic Value	136 mil	1
17.27	MFS Emerging Markets Equity R6	198 mil	⊕
27.44	MFS Research International R6	469 mil	1
%	Amount 601 Total Stocks , 0 Total Fixed-Income, 7% Turnover Ratio	Amount	since 11-2023
Net Assets	Share Holdings:	Share	Share Chg
	0-2023	Top Holdings 11-30-2023	Top Hold

79

tor Weightings	Stocks %	Rel Std Index
Cyclical	39.3	0.94
Basic Materials	9.6	1.20
Consumer Cyclical	9.4	0.86
Financial Services	18.7	0.89
Real Estate	1.7	0.79
Sensitive	39.2	1.04
Communication Services	4.2	0.79
Energy	5.1	0.90
Industrials	15.7	1.15
Technology	14.1	1.08
Defensive	21.5	1.06
Consumer Defensive	10.6	1.34
Healthcare	9.0	0.95
Utilities	2.0	0.65

Growth	5.3 Years	Multiple	MFS	xp
				6.55%
Minimum Initial Purchase:	ISIN:	Ticker:	Base Currency:	Greater Europe Greater Asia
\$0	US5527435441	MDIZX	USD	49.8 38.9
Total Assets:	Туре:	Incept:	Purchase Constraints:	1.10 0.89
\$37,069.88 mil	MF	10-02-2017	⊳	

Manager:

Operations

Potential Cap Gains Exp

Americas Regional Exposure

Stocks %

Rel Std Index

11.3

1.03

Below B NR

888 8

12-Month Yield

Tenure: Family:

Objective:

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

September 30, 2023: 0.08% Investment advisory fee for period ended

12b-1 fee: 0.00%

Other expenses: 0.04%

September 30, 2023: 0.12% waivers or reductions for period ended Total fund annual expenses without

reductions: -0.02% Total waivers, recoupments, and

Net fund annual expenses after waivers

Turnover rate: 13%

September 30, 2023: 0.10% or reductions for period ended

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

Important Information

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

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

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

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

> information is included in the retirement program. More

current version of the Disclosure and Glossary at You may always access the most package for additional information. contained in your plan's eligibility Disclosure and Glossary document Please refer to the Morningstar

fundonepagerscolor/DisclosureGloss w.voyaretirementplans.com

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

Investment Objective

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

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

> developed and emerging stock markets correspond to the total return of foreign provide investment results that International Index Fund which seeks to 32% in the Fidelity® Total

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

Principal Risks

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

80

States companies. of stocks of small-capitalization United

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.

Category: Lifestyle Asset Class: Asset Allocation

FUND FACTS

Inception Date: October 1, 2004

September 30, 2023: 0.01% Investment advisory fee for period ended

12b-1 fee: 0.00%

Other expenses: 0.24%

waivers or reductions for period ended September 30, 2023: 0.25% Total fund annual expenses without

reductions: 0.00% Total waivers, recoupments, and

September 30, 2023: 0.25% or reductions for period ended Net fund annual expenses after waivers

Turnover rate: 1%

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

Important Information

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

This Portfolio is not a registered Strategy section San Bernardino and detailed within the percentage allocations designated by Lifestyle Portfolio, based upon the underlying investment options within the weighted blend of fees charged by the Investment advisory fee reflects a

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

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

> enrollment material. information is included in the

current version of the Disclosure and package for additional information. You may always access the most contained in your plan's eligibility Glossary at Disclosure and Glossary document Please refer to the Morningstar

https://www.voyaretirementplans.com/ fundonepagerscolor/DisclosureGloss

Investment Objective

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

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

- traded in the United States results that correspond to the total return which seeks to provide investment performance of common stocks publicly 13% in the Fidelity® 500 Index Fund
- of stocks of mid-capitalization United States companies. results that correspond to the total return Fund which seeks to provide investment 3% in the Fidelity® Mid Cap Index

results that correspond to the total return Fund which seeks to provide investment 2% in the Fidelity® Small Cap Index

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

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

Principal Risks

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

81

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.

Category: Lifestyle Asset Class: Asset Allocation

FUND FACTS

Inception Date: October 1, 2004

September 30, 2023: **0.07%** Investment advisory fee for period ended

12b-1 fee: 0.00%

Other expenses: 0.11%

September 30, 2023: 0.18% waivers or reductions for period ended Total fund annual expenses without

Total waivers, recoupments, and

reductions: -0.02%

September 30, 2023: 0.16% or reductions for period ended Net fund annual expenses after waivers

Turnover rate: 12%

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

Important Information

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

This Portfolio is not a registered Strategy section San Bernardino and detailed within the percentage allocations designated by Lifestyle Portfolio, based upon the underlying investment options within the weighted blend of fees charged by the Investment advisory fee reflects a

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

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

> enrollment material. information is included in the

current version of the Disclosure and package for additional information. You may always access the most contained in your plan's eligibility Glossary at Disclosure and Glossary document Please refer to the Morningstar

https://www.voyaretirementplans.com /fundonepagerscolor/DisclosureGloss

Investment Objective

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

active and passive investments in the following proportions: Portfolio is to invest in a combination of The strategy for the Moderate Allocation .20% in the San Bernardino Stable

a higher interest rate from time to time.
The current rate is subject to change, but minimum will never fall below the guaranteed guarantees a minimum rate of interest Value Option where stability of principal is the primary objective. Stabilizer $^{\rm SM}$ for the life of the contract, and may credit

income and a competitive total return.
--- 26% in the Fidelity® 500 Index Fund Fund which seeks to provide investment traded in the United States which seeks to provide investment --- 20% in the Sterling Capital Total Return Bond Fund - Class R6 Shares of stocks of mid-capitalization results that correspond to the total return performance of common stocks publicly results that correspond to the total return which seeks a high level of current 6% in the Fidelity® Mid Cap Index

> results that correspond to the total return States companies. of stocks of small-capitalization United --- 24% in the Fidelity® Total Fund which seeks to provide investment -- 4% in the Fidelity® Small Cap Index

provide investment results that developed and emerging stock markets. correspond to the total return of foreign International Index Fund which seeks to

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

Principal Risks

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

San Bernardino Stable Value Option

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

Important Information

Voya Retirement Insurance and Annuity Company One Orange Way

One Orange Way Windsor, CT 06095-4774

www.voyaretirementplans.com

Please refer to the Morningstar Disclosure and Glossary document contained in your plan's eligibility package for additional information. You may always access the most

https://www.voyaretirementplans.com/fundonepagerscolor/DisclosureGlossary.pdf

current version of the Disclosure and

What is the stable value option?

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

What is Stabilizer?

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

What does it invest in?

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

Potential Risks

Under some scenarios it is possible for participants to lose money even in a stable value option. Those situations are unlikely and rarely occur, but they can happen. It's important for investors to be aware of these potential risks. Withdrawals resulting from employer-initiated events, such as withdrawals following mass

layoffs, employer bankruptcy or full or partial plan termination are not always covered by Stabilizer's guarantees and may be restricted or subject to market value adjustment. Your stable value account balance is not guaranteed by the Federal Deposit Insurance Corporation (FDIC), by any other government agency or by your plan.

What is the objective?

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

How is the rate of interest stated?

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

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

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

How does it benefit me?

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

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

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

Asset Class: Stability of Principal

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 09/30/2023)

Dominion Energy Inc	BHP Group Ltd	Southern Company (The)	National Rural Utilities Cooperative	Royal Bank of Canada	DTE Energy Company	Wells Fargo & Company	Morgan Stanley	JPMorgan Chase & Co	Bank of America Corp
0.30	0.30	0.33	0.35	0.42	0.43	0.49	0.86	0.65	1.50

Sector Holdings (as of 09/30/2023)

Agency Mortgages	36.4
Asset Backed Securities	3.2
Commercial Mortgage Backed Securities	7.0
Emerging Markets	0.1
Government Related	0.1
HY Corporates	0.0
IG Corporates	24.5
Non-Agency RMBS and SF CRT	1.8
Other	0.0
US Treasury & Cash	27.0

83

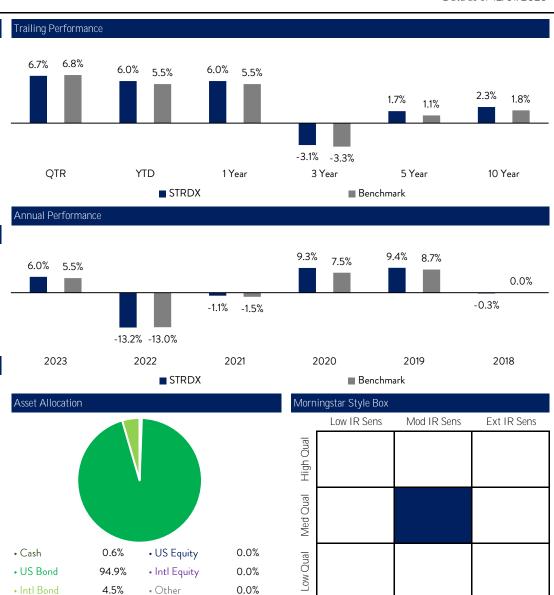
Statistical Data (as of 09/30/2023) Portfolio Duration (years) 4

Average Life (years)	Yield to Maturity	FOITIOHO DIMAHOH (YEARS)
5.732	5.64%	4.51

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	16.00 Years
Fund Size	\$1,433,649,474

Fund Characteristics	STRDX	+/- Category
% Assets in Top 10 Holdings	28.60%	-18.71%
Average Eff Duration	6.21	0.22
Average Eff Maturity	8.85	0.29
Average Credit Quality	AA	A (Cat Avg.)
Average Coupon	4.03%	0.53%

Sector Allocations	STRDX	Category	+/- Category
Government	21.7%	31.4%	-9.6%
Municipal	4.1%	1.0%	3.1%
Bank Loan	0.0%	0.0%	0.0%
Convertible	0.0%	0.0%	0.0%
Corporate Bond	26.3%	24.4%	1.9%
Preferred Stock	0.0%	0.2%	-0.2%
Agency MBS	30.8%	31.6%	-0.8%
Non-Agency RMBS	0.0%	0.5%	-0.5%
Commercial MBS	7.1%	0.4%	6.7%
Asset-Backed	9.4%	5.0%	4.4%
Cash & Equivalents	0.6%	4.0%	-3.4%
Other	0.0%	1.6%	-1.6%



Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year	5-Year Quarterly				
• STRDX	6.70%	5.97%	5.97%	-3.10%	1.70%	2.27%	Performance	4Q23	3Q23	2Q23	1Q23
• Benchmark	6.82%	5.53%	5.53%	-3.31%	1.10%	1.81%	• STRDX	6.70%	-3.08%	-0.53%	3.01%
+/- Benchmark	-0.12%	0.44%	0.44%	0.22%	0.60%	0.46%	 Benchmark 	6.82%	-3.23%	-0.84%	2.96%
Peer Group Rank	50	29	29	25	12	8	+/- Benchmark	-0.12%	0.15%	0.32%	0.05%
Annual Performance	2023	2022	2021	2020	2019	2018	5-Year Quarterly				
• STRDX	5.97%	-13.15%	-1.12%	9.35%	9.37%	-0.27%	Performance	4Q22	3Q22	2Q22	1Q22
• Benchmark	5.53%	-13.01%	-1.54%	7.51%	8.72%	0.01%	• STRDX	1.57%	-4.42%	-4.69%	-6.15%
+/- Benchmark	0.44%	-0.14%	0.42%	1.84%	0.65%	-0.28%	 Benchmark 	1.87%	-4.75%	-4.69%	-5.93%
Peer Group Rank	29	36	26	17	17	45	+/- Benchmark	-0.30%	0.33%	0.01%	-0.21%
	01/2019 -	10/2018 -	07/2018 -	04/2018 -	01/2018 -	10/2017 -	5-Year Quarterly				
Rolling 5-Year Performance	12/2023	09/2023	06/2023	03/2023	12/2022	09/2022	Performance	4Q21	3Q21	2Q21	1Q21
• STRDX	1.70%	0.61%	1.29%	1.36%	0.48%	0.29%	• STRDX	-0.26%	0.04%	2.16%	-3.00%
• Benchmark	1.10%	0.10%	0.77%	0.91%	0.02%	-0.27%	 Benchmark 	0.01%	0.05%	1.83%	-3.37%
+/- Benchmark	0.60%	0.50%	0.52%	0.46%	0.46%	0.56%	+/- Benchmark	-0.27%	-0.02%	0.33%	0.37%
Peer Group Rank	12	14	11	12	12	10					
							5-Year Quarterly				
Risk Statistics	3	Year	5	Year	10	Year	Performance	4Q20	3Q20	2Q20	1Q20
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark	• STRDX	1.67%	1.59%	5.10%	0.73%
Alpha	-0.16	0.00	0.57	0.00	0.48	0.00	 Benchmark 	0.67%	0.62%	2.90%	3.15%
Beta	0.94	1.00	0.97	1.00	0.96	1.00	+/- Benchmark	1.00%	0.97%	2.21%	-2.42%
Standard Deviation	6.85	7.24	6.15	6.16	4.69	4.76					
Sharpe Ratio	-0.80	-0.79	-0.02	-0.12	0.22	0.12	5-Year Quarterly				
Information Ratio	0.22	-	0.40	-	0.40	-	Performance	4Q19	3Q19	2Q19	1Q19
Treynor Ratio	-5.99	-5.82	-0.31	-0.90	0.97	0.47	• STRDX	0.14%	2.19%	3.53%	3.23%
Upside Capture Ratio	92.23	100.00	105.57	100.00	102.78	100.00	Benchmark	0.18%	2.27%	3.08%	2.94%
Downside Capture Ratio	92.66	100.00	98.33	100.00	94.71	100.00	+/- Benchmark	-0.04%	-0.08%	0.45%	0.29%

Return Bond R6 (USD) Sterling Capital Total

Me Ne 11-3

Bond TR USD Bloomberg US Agg Category Index

US Fund Intermediate Core Bond

Morningstar Cat

:::::100k 4....4ek . 20k

Growth of \$10,000

Sterling Capital Total Return
Bond R6
13,158

Performance 12-31-2023 Quarterly Returns 1st Otr 2021 -3.00	31-2023 1st Otr -3.00	2nd Otr 2.16	3rd Otr 0.04	4th Otr -0.26	Total %
2022 2023	-6.15 3.01	-4.69 -0.53	-4.42 -3.08	1.57 6.70	-13.15 5.97
Trailing Returns Load-adj Mthly	1 Yr 5.97	3 Yr -3.10	5 Yr 1.70	10 Yr	Incept 1.58
Std 12-31-2023	5.97		1.70		
Total Return	5.97	-3.10	1.70	2.27	
+/- Std Index	0.44	0.22	0.60	0.46	
+/- Cat Index	0.44	0.22	0.60	0.46	
% Rank Cat	33	29	=	7	
No. in Cat	471	425	385	277	

1. Contractual waiver; Expires 01-31-2024

1.93

1.05

0.03

-0.01

1.10

0.79

-0.28

1.84 1

0.42

-0.14

0.44

+/- Category Index

Performance Quartile (within category)

23

40

ည္သ

No. of Funds in Cat % Rank Cat -0.14 9.18

+/- Standard Index Total Return %

-13.15

9.38 0.44 5.97

NAV/Price

98

99

Fixed-Income/Bond % Investment Style 2022

12-23

4

Category Average 12,340Standard Index 12,216

0.65 17 430

The Overall Morningstar flating 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 their original cost. shares, when sold or redeemed, may be worth more or less than

quoted herein. For performance data current to the most recent month-end, please call 800-228-1872 or visit www.sterlingcapitalfunds.com. Current performance may be lower or higher than return data

 Front-End Load %	Sales Charges	Fees and Expenses	

0.48	Gross Expense Ratio %
0.00	12b1 Expense %
0.25	Management Fees %
	Fund Expenses
NA	Deferred Load %
NA	Front-End Load %

Gross Expense Ratio %			0.48
Risk and Return Profile			
	3 Yr	5 Yr	10 Yr
Morningstar Rating™		4★	5☆
Morningstar Risk	-Avg	Avg	-Avg
Morningstar Return	+Avg	+Avg	High
	3 Yr	5 Yr	10 Yr
Standard Deviation	6.85	6.15	4.70
Mean	-3.10	1.70	2.27
Sharpe Ratio	-0.80	-0.02	0.22
MPT Statistics	Standard Index		Best Fit Index Morningstar US Core Bd TR USD
Alpha	-0.16	0,	0.02
Beta	0.94	4	0.95
R-Squared	98.29	9	98.38
12-Month Yield			3.57%
Potential Cap Gains Exp			-19.17%

888

 $^{\triangleright} \not \geq$

Greater Europe Greater Asia

Americas Regional Exposure Below B NR

d on pre-inception returns. Please read disclosure for more information Morningstar Analyst-Driven % Morningstar Rating Standar Medalist Rating 10.00 **** Neutral Data Coverage % 425 US Fund Bond TF 1130-2023 100.00 Intermediate Core	Analyst 10.00 Data Co 100.00	returns. Please rea Analyst-Driven % 10.00 Data Coverage % 100.00	ead disc Mor * * * Mor 1nte	Morningstar Rating **** 425 US Fund Intermediate Core	Rating [™] Core	Standa Standa Bloom Bond 1	ormation. Standard Index Bloomberg US Agg Bond TR USD	Agg
)					// 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
2012 2013	2014	2015	2016	2017	2018	2019	2020	
6.14 -0.97 1.93 1.05	5.99	0.54	3.75 1.10	4.33 0.79	10.22 -0.27 -0.28	10.82 9.37 0.65	11.35 9.35 1.84	10.87 -1.12 0.42

	Sector Weightings	Fixed-Income Style Avg Eff Maturity Avg Eff Duration Avg Wtd Coupon Avg Wtd Coupon Avg Wtd Price Avg Wtd Price Avg Wtd Price 95.04 12 mil Federa 12 mil Federa 12 mil FoRD	Value Blend Growth Value Statis TTM P/E Ratio TTM P/B Ratio TTM Geo Avg Mkt Cap Smil Final Geo Avg Mkt Cap Tamil Final Tamil ONEN	Analysis 12:31:2023 Net % Long % Short % Share Chg Share Chg Share Chg 0.58 0.58 0.00 since Amount 0.00 0.00 0.00 0.11:2023 195 mil 0cks 0.00 0.00 0.00 ⊕ 79 mil Clsfd 0.00 0.00 0.00 ⊕ 35 mil Clsfd 100.00 100.00 0.00 ⊕ 20 mil Clsfd 100.00 100.00 0.00 ⊕ 20 mil 21 mil 100.00 100.00 0.00 ⊕ 21 mil
Bond %		8.85 6.21 4.03 95.04		Short % 0.00 0.00 0.00 0.00
℃ Cyclical Basic Ma	Sector Wo		0 00	Share Chg since 11-2023
Cyclical Basic Materials	eightings			
	Stocks %	Federal Home Loan Mortgage Corp. 0 Government National Mortgage Assoc Federal Home Loan Mortgage Corp. 4% FORD CREDIT AUTO OWNER TRUST 1.53% Fnma Pass-Thru I 3.5%	Fnma Pass-Thru 15% Federal Home Loan Mortgage Corp. 5 HERTZ VEHICLE FINANCING III LLC 1. Fnma Pass-Thru I ONEMAIN DIRECT AUTO RECEIVABLES TR	Holdings: 0 Total Stocks , 312 Total Fixed-Income, 48% Turmover Ratio United States Treasury Notes 4.125% United States Treasury Bonds 2.5% United States Treasury Notes 2.625% Finma Pass-Thru I 6% ONEMAIN FINANCIAL ISSUANCE TRUST 1
	Rel Std Index	0.87 0.84 0.80 0.77 0.75	1.20 1.19 1.01 0.97 0.92	Net Assets % 14.00 4.22 2.30 1.49 1.32

	l			Rel Std Index	0.00	0.00	0.12	0.03	12.25	12.92	35.08	39 60	Bond %		95.04
▼ Utilities	◆ Healthcare	Consumer Defensive	→ Defensive	■ Technology	ndustrials	▶ Energy	Communication Services	∨ Sensitive	Real Estate	Financial Services	Consumer Cyclical	Basic Materials	Դ Cyclical	Sector Weightings	12 mil Fnma Pass-Thru I 3.5%
1			I					Ι	l			I	I	Stocks %	J
I			1		1			Ι	1			1	1	Rel Std Index	0.75

Sterling Capital Total Return Bond R6 (USD)

Morningstar Analyst-Driven % Morningstar Rating ™ 10.00 ★★★★
Neutral Data Coverage % 425 US Fund 11-30-2023

Data Coverage % 425 US Fund 100.00 Intermediate

Intermediate Core

Bond

Bond TR USD Bloomberg US Agg

Standard Index

Bond TR USD Category Index

Bloomberg US Agg

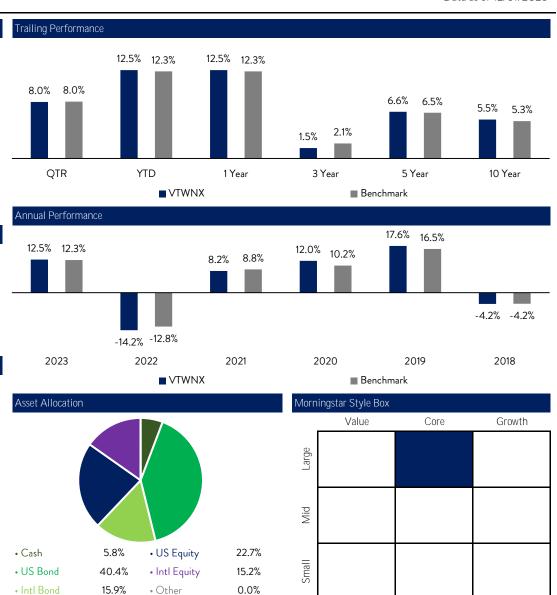
Core Bond US Fund Intermediate Morningstar Cat

Vanguard Target Retirement 2020 Fund VTWNX

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	Walter Nejman
Longest Manager Tenure	10.92 Years
Fund Size	\$38,939,832,474

Fund Characteristics	VTWNX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$76,698	-\$8,028
P/E Ratio (TTM)	17.86	-0.52
P/B Ratio (TTM)	2.45	-0.20
Est. Dividend Yield	2.32%	0.15%

Sector Allocations	VTWNX	Category	+/- Category
Materials	4.7%	4.8%	-0.1%
Communication Services	6.8%	6.5%	0.3%
Consumer Discretionary	11.0%	10.6%	0.5%
Consumer Staples	6.4%	6.0%	0.3%
Healthcare	11.2%	11.6%	-0.4%
Industrials	11.7%	11.1%	0.6%
Real Estate	3.2%	4.4%	-1.2%
Technology	22.3%	21.6%	0.7%
Energy	4.6%	5.4%	-0.9%
Financial Services	15.6%	15.5%	0.0%
Utilities	2.6%	2.3%	0.3%
Other	0.0%	0.0%	0.0%



Vanguard Target Retirement 2020 Fund VTWNX

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year	5-Year Quarterly				
• VTWNX	8.00%	12.51%	12.51%	1.47%	6.61%	5.52%	Performance	4Q23	3Q23	2Q23	1Q23
• Benchmark	8.04%	12.32%	12.32%	2.12%	6.47%	5.28%	• VTWNX	8.00%	-2.65%	2.15%	4.77%
+/- Benchmark	-0.04%	0.19%	0.19%	-0.65%	0.14%	0.24%	• Benchmark	8.04%	-2.73%	2.25%	4.53%
Peer Group Rank	63	27	27	42	35	18	+/- Benchmark	-0.04%	0.08%	-0.10%	0.24%
Annual Performance	2023	2022	2021	2020	2019	2018	5-Year Quarterly				
• VTWNX	12.51%	-14.15%	8.17%	12.04%	17.63%	-4.24%	Performance	4Q22	3Q22	2Q22	1Q22
• Benchmark	12.32%	-12.81%	8.76%	10.24%	16.52%	-4.16%	• VTWNX	4.97%	-5.12%	-9.20%	-5.06%
+/- Benchmark	0.19%	-1.34%	-0.60%	1.80%	1.11%	-0.08%	• Benchmark	5.77%	-4.59%	-9.33%	-4.72%
Peer Group Rank	27	38	74	48	40	38	+/- Benchmark	-0.80%	-0.54%	0.13%	-0.35%
	01/2019 -	10/2018 -	07/2018 -	04/2018 -	01/2018 -	10/2017 -	5-Year Quarterly				
Rolling 5-Year Performance	12/2023	09/2023	06/2023	03/2023	12/2022	09/2022	Performance	4Q21	3Q21	2Q21	1Q21
• VTWNX	6.61%	3.58%	4.62%	4.30%	3.22%	2.91%	• VTWNX	2.91%	-0.41%	4.20%	1.28%
• Benchmark	6.47%	3.44%	4.49%	4.26%	3.14%	2.64%	• Benchmark	3.42%	-0.24%	3.90%	1.46%
+/- Benchmark	0.14%	0.14%	0.13%	0.05%	0.08%	0.27%	+/- Benchmark	-0.51%	-0.18%	0.30%	-0.18%
Peer Group Rank	35	28	35	38	39	28					
							5-Year Quarterly				
Risk Statistics	3	Year	5 '	Year	10	Year	Performance	4Q20	3Q20	2Q20	1Q20
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark	• VTWNX	7.86%	4.48%	11.40%	-10.76%
Alpha	-0.64	0.00	0.07	0.00	0.16	0.00	 Benchmark 	7.37%	3.74%	10.65%	-10.55%
Beta	0.99	1.00	1.02	1.00	1.02	1.00	+/- Benchmark	0.49%	0.74%	0.76%	-0.21%
Standard Deviation	10.04	10.05	10.35	10.14	8.49	8.29					
Sharpe Ratio	-0.05	0.01	0.48	0.47	0.52	0.50	5-Year Quarterly				
Information Ratio	-0.68	-	0.15	-	0.32	-	Performance	4Q19	3Q19	2Q19	1Q19
Treynor Ratio	-1.04	-0.38	4.52	4.46	4.10	3.94	• VTWNX	4.46%	1.19%	3.21%	7.82%
Upside Capture Ratio	98.10	100.00	102.26	100.00	102.85	100.00	• Benchmark	4.19%	1.17%	2.88%	7.45%
Downside Capture Ratio	102.70	100.00	102.32	100.00	101.82	100.00	+/- Benchmark	0.27%	0.02%	0.33%	0.38%

(USD) Vanguard Target Retirement 2020 Fund

renominance 12-31-2023	C-207-10-7				
Quarterly Returns	1st Otr	2nd Otr	3rd Otr	4th Otr	Total %
2021	1.28	4.20	-0.41	2.91	8.17
2022	-5.06	-9.20	-5.12	4.97	-14.15
2023	4.77	2.15	-2.65	8.00	12.51
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	12.51	1.47	6.61	5.52	5.91
Std 12-31-2023	12.51		6.61	5.52	5.91
Total Return	12.51	1.47	6.61	5.52	5.91
+/- Std Index	-0.71	-0.60	-0.78	-0.20	
+/- Cat Index	1.20	1.13	0.46	0.52	1
% Rank Cat	38	48	40	19	
No. in Cat	144	133	128	64	

Performance Disclosure

30-day SEC Yield 01-23-24

7-day Yield

Subsidized 2.98

Unsubsidized 2.98

> 12.35 23.83

ట్ట

2012

0.31

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.

-0.18

208 36

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

Portfolio Analysis 12-31-2023

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 % Deferred Load %	N N
Fund Expenses	
Management Fees %	0.00
12b1 Expense %	NA
Gross Expense Ratio %	0.08

.0

Risk and Return Profile			
		5 Yr	10 Y
Morningstar Rating™	3 H	3*	4 4
Morningstar Risk	-Avg	Avg	Avg
Morningstar Return	Avg	Avg	+Avg
	3 Yr	5 Yr	10 Yı
Standard Deviation	10.04	10.35	8.49
Mean	1.47	6.61	5.52
Sharpe Ratio	-0.05	0.48	0.52
MPT Statistics	Standard Index		Best Fit Index Morningstar US
		Mod Cor	Mod Con Tgt Alloc NR USD
Alpha	-0.78	ω	0.15
Beta	0.80	_	1.02
R-Squared	97.94		99.39
12-Month Yield			2.85%
Potential Cap Gains Exp			13.84%

03-01-2023	🕎 Silver	Medalist Rating 100.00	Morningstar
100.00	Data Coverage % 133 US Fund	100.00	Analyst-Driven %
Target-Date 2020	133 US Fund	***	Analyst-Driven % Morningstar Rating **





Risk TR USD Morningstar Mod Tgt



Category Index

Mod 2020 TR USD Morningstar Lifetime

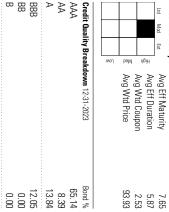
US Fund Target-Date Morningstar Cat

222	18	2.87		1.54		27.11 2	36	2013	
228	_	1.24		2.22	7.11	28.46	38	2014	<u> </u>
237	23	1.20		11	-0.68	27.15	40	2015	}
221	29	-0.71		-1.62	6.95	28.26	42	2016	\
234	17	1.29		-0.58	14.08	31.38	చి 📅	2017	
250	42	-0.08		0.52	-4.24	28.63	47	2018)
233	28	-0.10		-1.39	17.63	32.53	£ —	2019	}
178	46	-1.28		-0.78	12.04	34.29	50	2020	1
171	68	-0.87		-2.02		31.02	52	2021	
150	39	2.62		0.62	-14.15	25.36	53	2022	*
144	88	1.20		-0.71	12.51	26.87	S T	12-23	20k
No. of Funds in Cat	% Rank Cat	+/- Category Index	Performance Quartile (within category)	+/- Standard Index	Total Return %	NAV/Price	Investment Style Fixed-Income/Bond %		Growth of \$10,000 Vanguard Target Retirement 2020 Fund 22,275 Category Average 19,451 Standard Index 22,334

Sm2 Ilsm2	P!W	96,10		Diameter Comments	Equity Style P	Total	Other/Not Clsfd	Bonds	Non-US Stocks	US Stocks	Cash	Asset Allocation %
\$mil		P/C Ratio TTM	P/E Ratio TTM		Portfolio Statistics	100.00	0.04	58.49	15.67	23.44	2.36	Net %
76088						110.59	0.04	58.54	15.67	23.44	12.89	Long %
1.52 0.91		1.05 0.94	1.04 0.97	ndex Cat		10.59	0.00	0.05	0.00	0.00	10.54	Short %
1 I) i	¢	- 5	S	(⊕	1	1	Œ) [Since	Shar

Equity Style	Styl	е		Portfolio Statistics	Port	Rel	ᇎ
Value	D	Crossit			Avg	Index	G
eniev	pierio urowir	GLOWIN	η	P/E Ratio TTM	17.9	1.04	0.9
			эбле	P/C Ratio TTM	12.1	1.05	0.9
			biM	P/B Ratio TTM	2.4	1.10	0.9
			llem2	Geo Avg Mkt Cap \$mil	76698	1.52	0.9
			-				





Rel Std Index	Stocks %	Sector Weightings	Sector
11.67	191 mil Vanguard Shrt-Term Infl-Prot Sec I	191 mil	•
14.61	Vanguard Total Intl Bd II Idx Insl	214 mil	①
16.05	Vanguard Total Intl Stock Index Inv	336 mil	1
23.56	Vanguard Total Stock Mkt Idx Instl	42 mil	1
33.35	Vanguard Total Bond Market II ldx	1,355 mil	•
%	10,206 Total Stocks , 18,351 Total Fixed-Income, 3% Turnover Ratio	Amount	since 11-2023
Net Assets	Holdings:	Chg Share	Share Chg

õ	ctor Weightings	Stocks %	Rel Std Index
-	Cyclical	34.5	0.87
	Basic Materials	4.7	0.91
- 2	Consumer Cyclical	11.0	1.00
	Financial Services	15.6	0.96
_	Real Estate	3.2	0.45
•	Sensitive	45.3	1.16
	Communication Services	6.8	1.20
_	Energy	4.6	0.93
•	Industrials	11.7	0.95
	Technology	22.3	1.39
•	Defensive	20.2	0.94
	Consumer Defensive	6.4	0.93
_	Healthcare	11.2	0.97
	Utilities	2.6	0.83

	Rel Std Index 1.03 0.99 0.92	12.05 0.00 0.00 0.00 0.38 0.21	65.14 8.39 13.84	Bond %	93.93	7.65 5.87 2.53	
Purchase Constraints: Incept:				→ Defensive Consumer Defensive	ا اسا	SensitiveCommunication ServicesEnergy	Real Estate
			11.2 2.6	20.2 6.4	11.7 22.3	45.3 6.8 4.6	3.2
			0.97 0.83	0.94 0.93	0.95 1.39	1.16 1.20 0.93	0.45

Below B NR

Objective:

Asset Allocation

Minimum Initial Purchase:

\$1,000 XNWTV US92202E8057

Total Assets: Type:

\$38,939.83 mil

Tenure: Manager: Family:

Multiple 10.9 Years Vanguard

Ticker:

Base Currency:

Greater Asia Greater Europe Americas Regional Exposure

Stocks %

63.9 17.6 18.4

ISIN:

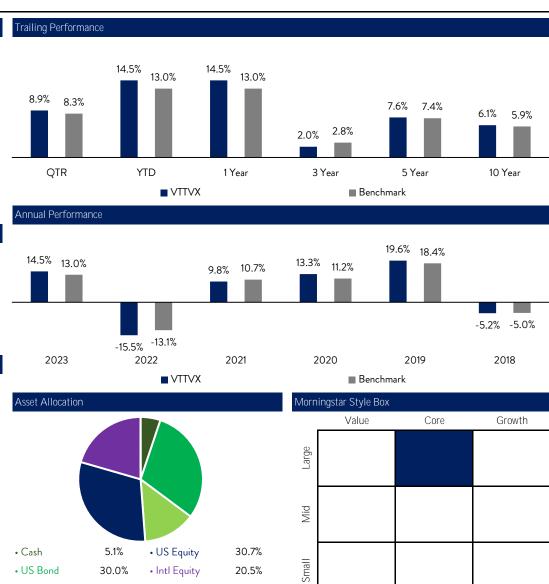
Operations

Vanguard Target Retirement 2025 Fund VTTVX

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	Walter Nejman
Longest Manager Tenure	10.92 Years
Fund Size	\$76,495,542,748

Fund Characteristics	VTTVX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$76,785	-\$12,505
P/E Ratio (TTM)	17.86	-0.65
P/B Ratio (TTM)	2.45	-0.19
Est. Dividend Yield	2.32%	0.11%

Sector Allocations	VTTVX	Category	+/- Category
Materials	4.7%	4.4%	0.3%
Communication Services	6.8%	6.7%	0.1%
Consumer Discretionary	11.0%	10.7%	0.4%
Consumer Staples	6.4%	6.1%	0.3%
Healthcare	11.2%	11.5%	-0.3%
Industrials	11.7%	10.9%	0.8%
Real Estate	3.2%	4.9%	-1.8%
Technology	22.3%	22.0%	0.2%
Energy	4.6%	5.0%	-0.4%
Financial Services	15.6%	15.2%	0.3%
Utilities	2.6%	2.6%	0.1%
Other	0.0%	0.0%	0.0%



13.6%

• Other

0.0%

• Intl Bond

Vanguard Target Retirement 2025 Fund VTTVX

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year	5-Year Quarterly				
• VTTVX	8.87%	14.55%	14.55%	2.03%	7.56%	6.10%	Performance	4Q23	3Q23	2Q23	1Q23
Benchmark	8.28%	12.99%	12.99%	2.80%	7.42%	5.85%	• VTTVX	8.87%	-2.99%	3.02%	5.28%
+/- Benchmark	0.59%	1.56%	1.56%	-0.77%	0.14%	0.25%	• Benchmark	8.28%	-2.80%	2.52%	4.72%
Peer Group Rank	31	5	5	25	20	9	+/- Benchmark	0.59%	-0.19%	0.50%	0.55%
Annual Performance	2023	2022	2021	2020	2019	2018	5-Year Quarterly				
• VTTVX	14.55%	-15.55%	9.80%	13.30%	19.63%	-5.15%	Performance	4Q22	3Q22	2Q22	1Q22
• Benchmark	12.99%	-13.13%	10.67%	11.22%	18.38%	-5.02%	• VTTVX	6.03%	-5.59%	-10.72%	-5.51%
+/- Benchmark	1.56%	-2.42%	-0.87%	2.08%	1.25%	-0.13%	• Benchmark	6.34%	-4.57%	-10.05%	-4.83%
Peer Group Rank	5	50	53	38	24	41	+/- Benchmark	-0.31%	-1.02%	-0.66%	-0.68%
	01/2019 -	10/2018 -	07/2018 -	04/2018 -	01/2018 -	10/2017 -	5-Year Quarterly				
Rolling 5-Year Performance	12/2023	09/2023	06/2023	03/2023	12/2022	09/2022	Performance	4Q21	3Q21	2Q21	1Q21
• VTTVX	7.56%	4.06%	5.26%	4.77%	3.58%	3.15%	• VTTVX	3.55%	-0.65%	4.79%	1.86%
• Benchmark	7.42%	4.02%	5.17%	4.91%	3.75%	3.24%	• Benchmark	3.85%	-0.33%	4.43%	2.38%
+/- Benchmark	0.14%	0.04%	0.09%	-0.14%	-0.18%	-0.09%	+/- Benchmark	-0.30%	-0.32%	0.35%	-0.52%
Peer Group Rank	20	17	22	28	33	30					
							5-Year Quarterly				
Risk Statistics	3	Year	5`	Year	10	Year	Performance	4Q20	3Q20	2Q20	1Q20
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark	• VTTVX	9.33%	5.17%	13.20%	-12.95%
Alpha	-0.72	0.00	-0.14	0.00	0.04	0.00	 Benchmark 	9.01%	4.39%	12.25%	-12.93%
Beta	1.08	1.00	1.06	1.00	1.05	1.00	+/- Benchmark	0.32%	0.77%	0.96%	-0.02%
Standard Deviation	11.60	10.69	12.05	11.31	9.82	9.31					
Sharpe Ratio	0.02	0.08	0.50	0.51	0.52	0.52	5-Year Quarterly				
Information Ratio	-0.56	-	0.12	-	0.26	-	Performance	4Q19	3Q19	2Q19	1Q19
Treynor Ratio	-0.44	0.29	5.23	5.41	4.53	4.51	• VTTVX	5.22%	1.10%	3.35%	8.82%
Upside Capture Ratio	105.04	100.00	105.49	100.00	104.82	100.00	• Benchmark	4.97%	1.04%	2.99%	8.37%
Downside Capture Ratio	111.20	100.00	107.36	100.00	105.10	100.00	+/- Benchmark	0.25%	0.06%	0.36%	0.45%

(USD) Vanguard Target Retirement 2025 Fund

I difficiliance 17-01-7050	7-01-2020				
Quarterly Returns	1st Otr	2nd Otr	3rd Otr	4th Otr	Total %
2021	1.86	4.79	-0.65	3.55	9.80
2022	-5.51	-10.72	-5.59	6.03	-15.55
2023	5.28	3.02	-2.99	8.87	14.55
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	14.55	2.03	7.56	6.10	6.53
Std 12-31-2023	14.55	1	7.56	6.10	6.53
Total Return	14.55	2.03	7.56	6.10	6.53
+/- Std Index	1.32	-0.04	0.18	0.38	
+/- Cat Index	2.40	1.44	0.89	0.69	l
% Rank Cat	=	3	28	10	
No. in Cat	208	194	177	104	

2.79	2.79	30-day SEC Yield 01-23-24
		7-day Yield
Unsubsidized	Subsidized	

13.59 13.29

70

2012

1.25

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.

-0.37 43 154

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.

Portfolio Analysis 12-31-2023

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

Deferred Load % Front-End Load % Sales Charges

₹ ₹

Avg High	Avg +Avg	Avg +Avg	Morningstar Risk Morningstar Return
104 funds 4 ★	177 funds	194 funds ★	Morningstar Rating™
10 %	л <	ن ج	Risk and Return Profile
0.08			Gross Expense Ratio %
NA			12b1 Expense %
0.00			Management Fees %
			Fund Expenses

Risk and Return Profile			
	3 Yr 194 funds	5 Yr 177 funds	10 Yr 104 funds
Morningstar Rating™	3 ⊁	4★	4⊁
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	+Avg	+Avg	High
	3 Yr	5Yr	10 Yr
Standard Deviation	11.60	12.05	9.82
Mean	2.03	7.56	6.10
Sharpe Ratio	0.02	0.50	0.52
MPT Statistics	Standard Index	<u> </u>	Best Fit Index Morningstar Gbl
Alpha	-0.10		0.34
Beta	0.93	ಜ	0.90
R-Squared	98.58	38	99.30
12-Month Yield			2.72%
Potential Cap Gains Exp			16.43%

Morningstar Medalist Ratin 03-01-2023

		g	
100.00	Data Coverage %	* 100.00	Analyst-Driven %
Target-Date 2025	194 US Fund	***	Morningstar Rating™
	Т	$\overline{}$	m







Morningstar Mod Tgt





Category Index

Mod 2025 TR USD Morningstar Lifetime

US Fund Target-Date Morningstar Cat

1.87 24 181	15.75 18.14 3.83	2013	1
1.13 4 185	16.53 7.17 2.28	2014	
1.21 24 206	15.62 -0.85 0.94	2015)
-0.91 23 195	16.35 7.48 -1.09	2016	1
1.40 21 208	18.50 15.94 1.28	2017	
-0.25 42 226	17.01 -5.15 -0.39	2018	\$
0.26 22 232	19.84 19.63 0.60	2019	}
-0.37 40 214	21.54 13.30 0.47	2020	1
-0.30 57 220	20.34 9.80 -0.39	2021	
2.03 52 219	16.68 -15.55 -0.77	2022	*
2.40 11 208	18.38 14.55 1.32	12-23	100k 80k 60k 40k 20k
+/- Category Index % Rank Cat No. of Funds in Cat	NAV/Price Total Return % +/- Standard Index Performance Quartile (within category)	Investment Style Equity/Stocks %	Growth of \$10,000 Vanguard Target Retirement 2025 Fund 24,199 Category Average 21,570 Standard Index 22,334

15.18				D A
61.65	_			AAA
Bond %			down 11-30-2023	Credit Quality Breakdown 11-30-2023
_				мод
93.51			Avg Wtd Price	beM
2.68			Avg Ett Duration Avg Wtd Coupon	цбiH
8.08			Avg err Maturity	Ltd Mod Ext
_				Fixed-Income Style
		7 3424	\$mil	llsm2
0.93	1.10	2.5	P/B Ratio TTM	biM
_	1.04	12.1	P/C Ratio TTM	961
	1.04	17.8	P/E Ratio TTM	Value Blend Growth
윤	Rel	Port	Portfolio Statistics	Equity Style
9.02 (12	109.02	100.00	Total
0.00	ਯ	0.05	0.05	Other/Not Clsfd
0.04 	∞	45.1	45.14	Bonds
	72	21.02	21.02	Non-US Stocks
	ಜ	31.E	31.53	US Stocks
8.97 since	.4	11.24	2.27	Cash
Short % Share		Long %	Net %	Asset Allocation %

	d-Income Style	₩ style IE	Avg Eff Maturity Avg Eff Duration	8.08
Avg Eff Duration Avg Wtd Coupon Avg Wtd Price			Avg Eff Maturity	8.08
Avg Wtd Coupon Avg Wtd Price		біН	Avg Eff Duration	6.13
Avg Wtd Price		Ч	Avg Wtd Coupon	2.68
woŢ		baM	Avg Wtd Price	93.51
		мοη		

		В			⊳	Ē.			-	
) La				
						ŧγBr				
						eako	том	baM	Ч	6iH
						dit Quality Breakdown 11-30-2023		Avg Wtd Price	Avg Wtd Coupon	Avg Eff Duration
0 00	0.00	13.35	15.18	9.19	61.65	Bond %		93.51	2.68	6.13

_	50 25 214 250 215 200	7	_	720	_	-	002	NO. OF FUHAS III CAL	
3 %	ort % Share Chg		Sha	i ii	Hold 10,6	Share Holdings : Amount 10,644 Total	Stocks.	18.173 Total Fixed-Income.	Net Asse
8.97	since 11-2023		Amou	Ħ	10,6 6% 1	10,644 Total Stocks 6% Turnover Ratio	Stocks , Ratio	Amount 10,644 Total Stocks, 18,173 Total Fixed-Income, 6% Turnover Ratio	
)		ò	-	-	-		- H O	2

5.03	161 mil Vanguard Shrt-Term Infl-Prot Sec I	161 mil	
12.44	Vanguard Total Intl Bd II Idx Insl	358 mil	
21.52	Vanguard Total Intl Stock Index Inv	885 mil	
28.34	Vanguard Total Bond Market II Idx	2,261 mil	
31.69	Vanguard Total Stock Mkt Idx Instl	112 mil	
%	10,644 Total Stocks , 18,173 Total Fixed-Income, 6% Turnover Ratio	Amount	эе 2023
Net Assets	Holdings:	Share	are Chg

93

or Weightings	Stocks %	Rel Std Index
Cyclical	34.1	0.86
Basic Materials	4.6	0.89
Consumer Cyclical	11.0	1.00
Financial Services	15.4	0.95
Real Estate	3.1	0.44
Sensitive	45.4	1.17
Communication Services	6.9	1.23
Energy	4.8	0.97
Industrials	11.4	0.93
Technology	22.3	1.39
Defensive	20.4	0.95
Consumer Defensive	6.5	0.96
Healthcare	11.2	0.97
Utilities	2.6	0.84

Minimum Initial Purchase:	ISIN:	Ticker:	Base Currency:
\$1,000	US92202E4098	VTTVX	USD
Total Assets:	Туре:	Incept:	Purchase Constraints:
\$76,495.54 mil	MF	10-27-2003	

tial Purchase: \$1,000			×
\$1,000	US92202E4098	VITVX	USD
Total Assets:	Туре:	Incept:	Purchase Constraints:
\$7(≨	10	ı

Objective:

Asset Allocation

Tenure: Manager:

Multiple 10.9 Years Vanguard

Family:

Operations

Greater Europe Greater Asia

Americas Regional Exposure

Stocks %

Rel Std Index

0.42 0.21

64.0 17.6 18.4

1.03 0.98 0.92

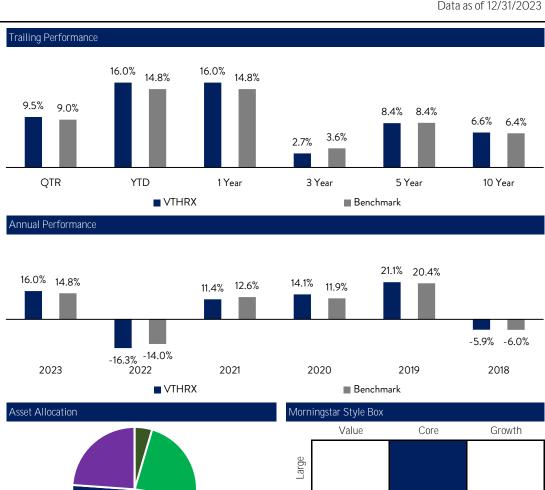
Below B NR

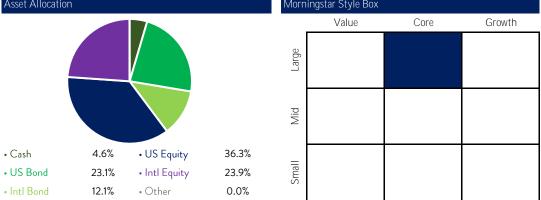
Vanguard Target Retirement 2030 Fund VTHRX

Product Details	
Name	Vanguard Target Retirement 2030 Fund
Ticker	VTHRX
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	Walter Nejman
Longest Manager Tenure	10.92 Years
Fund Size	\$88,434,732,479

Fund Characteristics	VTHRX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	=
Average Market Cap (mil)	\$77,313	-\$14,006
P/E Ratio (TTM)	17.91	-0.51
P/B Ratio (TTM)	2.46	-0.23
Est. Dividend Yield	2.31%	0.13%

Sector Allocations	VTHRX	Category	+/- Category
Materials	4.7%	4.4%	0.3%
Communication Services	6.8%	6.6%	0.2%
Consumer Discretionary	11.0%	11.0%	0.1%
Consumer Staples	6.4%	6.2%	0.1%
Healthcare	11.2%	11.7%	-0.5%
Industrials	11.7%	11.5%	0.2%
Real Estate	3.2%	3.3%	-0.1%
Technology	22.3%	22.2%	0.2%
Energy	4.6%	5.0%	-0.5%
Financial Services	15.5%	15.6%	-0.1%
Utilities	2.6%	2.5%	0.1%
Other	0.0%	0.0%	0.0%





Vanguard Target Retirement 2030 Fund VTHRX

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year	5-Year Quarterly				
• VTHRX	9.53%	16.03%	16.03%	2.66%	8.37%	6.58%	Performance	4Q23	3Q23	2Q23	1Q23
• Benchmark	9.02%	14.80%	14.80%	3.61%	8.42%	6.44%	• VTHRX	9.53%	-3.20%	3.56%	5.67%
+/- Benchmark	0.52%	1.23%	1.23%	-0.94%	-0.05%	0.14%	 Benchmark 	9.02%	-2.98%	3.19%	5.18%
Peer Group Rank	37	6	6	33	32	17	+/- Benchmark	0.52%	-0.22%	0.36%	0.50%
Annual Performance	2023	2022	2021	2020	2019	2018	5-Year Quarterly				
• VTHRX	16.03%	-16.27%	11.38%	14.10%	21.07%	-5.86%	Performance	4Q22	3Q22	2Q22	1Q22
• Benchmark	14.80%	-13.96%	12.61%	11.91%	20.38%	-5.99%	• VTHRX	6.81%	-5.93%	-11.67%	-5.65%
+/- Benchmark	1.23%	-2.30%	-1.23%	2.19%	0.70%	0.14%	 Benchmark 	7.27%	-4.98%	-11.21%	-4.93%
Peer Group Rank	6	47	60	40	43	30	+/- Benchmark	-0.46%	-0.95%	-0.45%	-0.72%
	01/2019 -	10/2018 -	07/2018 -	04/2018 -	01/2018 -	10/2017 -	5-Year Quarterly				
Rolling 5-Year Performance	12/2023	09/2023	06/2023	03/2023	12/2022	09/2022	Performance	4Q21	3Q21	2Q21	1Q21
• VTHRX	8.37%	4.46%	5.78%	5.21%	3.94%	3.43%	• VTHRX	4.06%	-0.78%	5.25%	2.49%
• Benchmark	8.42%	4.51%	5.80%	5.43%	4.17%	3.58%	• Benchmark	4.44%	-0.46%	4.92%	3.24%
+/- Benchmark	-0.05%	-0.05%	-0.02%	-0.22%	-0.24%	-0.15%	+/- Benchmark	-0.38%	-0.32%	0.33%	-0.75%
Peer Group Rank	32	24	28	35	42	39					
							5-Year Quarterly				
Risk Statistics	3,	Year	5`	Year	10	Year	Performance	4Q20	3Q20	2020	1Q20
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark	• VTHRX	10.52%	5.70%	14.58%	-14.76%
Alpha	-0.93	0.00	-0.17	0.00	0.04	0.00	 Benchmark 	10.52%	5.02%	13.94%	-15.38%
Beta	1.05	1.00	1.02	1.00	1.02	1.00	+/- Benchmark	0.00%	0.68%	0.64%	0.62%
Standard Deviation	12.65	12.01	13.27	12.90	10.85	10.57					
Sharpe Ratio	0.07	0.15	0.52	0.54	0.52	0.52	5-Year Quarterly				
Information Ratio	-0.72	-	-0.04	-	0.15	-	Performance	4Q19	3Q19	2Q19	1Q19
Treynor Ratio	0.15	1.10	6.21	6.41	5.13	5.10	• VTHRX	5.95%	0.89%	3.41%	9.54%
Upside Capture Ratio	101.91	100.00	102.12	100.00	102.34	100.00	Benchmark	5.81%	0.88%	3.09%	9.39%
Downside Capture Ratio	108.10	100.00	103.53	100.00	102.40	100.00	+/- Benchmark	0.14%	0.01%	0.31%	0.15%

(USD) Vanguard Target Retirement 2030 Fund

Performance 12-31-2023	31-2023				
Quarterly Returns	1st Otr	2nd Otr	3rd Otr	4th Otr	Total %
2021	2.49	5.25	-0.78	4.06	11.38
2022	-5.65	-11.67	-5.93	6.81	-16.27
2023	5.67	3.56	-3.20	9.53	16.03
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	16.03	2.66	8.37	6.58	6.57
Std 12-31-2023	16.03		8.37	6.58	6.57
Total Return	16.03	2.66	8.37	6.58	6.57
+/- Std Index	2.80	0.60	0.99	0.86	
+/- Cat Index	2.70	1.39	0.93	0.65	
% Rank Cat	12	ജ	39	16	
No. in Cat	211	196	175	102	

		P
2.66	2.66	30-day SEC Yield 01-23-24
		7-day Yield
Unsubsidized	Subsidized	

14.24 23.38

78

2012

2.20

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

-0.43

208

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

Deferred Load % Front-End Load % Sales Charges

ž

+Avg	Avg	Avg	Morningstar Return
Avg	Avg	Avg	Morningstar Risk
4★	3⊁	3★	Morningstar Rating [™]
10 Yr 102 funds	5 Yr 175 funds	3 Yr 196 funds	!
			Risk and Return Profile
0.08			Gross Expense Ratio %
NA			12b1 Expense %
0.00			Management Fees %
			Fund Expenses

Risk and Return Profile			
	3 Yr 196 funds	5 Yr 175 funds	10 Yı 102 funds
Morningstar Rating™	3 ⊁	3 ⊁	4⊁
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	Avg	Avg	+Avg
	3 Yr	5Yr	10 Yı
Standard Deviation	12.65	13.27	10.85
Mean	2.66	8.37	6.58
Sharpe Ratio	0.07	0.52	0.52
MPT Statistics	Standard Index		Best Fit Index Morningstar Gb
Alpha	0.62		Allocation TR USD 1.10
Beta	1.02	12	0.98
R-Squared	98.71	1	99.33
12-Month Yield			2.59%
Potential Cap Gains Exp			15.05%

Below B NR

Americas Regional Exposure

Stocks %

Rel Std Index

0.46 0.23

Morningstar	Analyst-Driven%	Analyst-Driven% Morningstar Rating™
Medalist Rating™ 100.00	100.00	***
Silver Silver	Data Coverage % 196 US Fund	196 US Fund
03-01-2023	100.00	Target-Date 2030







Risk TR USD Standard Index





Mod 2030 TR USD Morningstar Lifetime

US Fund Target-Date Morningstar Cat

222 228	25 5	0.85 1.16		6.18 2.28		27.64 29.04	76 74	2013 2014			\					
3 237	ω.	1.27		0.76		1 27.72	73	1 2015			1				-	-
221	32	-1.41		-0.72	7.85	29.20	71	2016			1					
234	34	0.93		2.87	17.52	33.63	70	2017				\				
239	37	-0.03		-1.10	-5.86	30.82	68	2018								
241	32	-0.17		2.05	21.07	36.45	88	2019								
224	88	0.41		1.28	14.10	40.55	68	2020			•					
221	61	-0.31		1.19		38.42	ස 📜	2021				N				
221	44	1.67		-1.49	-16.27	31.37	61	2022				{				
211	12	2.70		2.80	16.03	35.48	60	12-23	4	JUK		20k	4UK	60k	X08	T100k
No. of Funds in Cat	% Rank Cat	+/- Category Index	Performance Quartile (within category)	+/- Standard Index	Total Return %	NAV/Price	Investment Style Equity/Stocks %			22,334	Standard Index	Category Average 23 142	26,042	Vanguard Target Retirement 2030 Fund	Gr	

Cradit Cinality Broakdown 12 21 2022	→ Defensive	93.15	Avg Wtd Coupon 2.94	ЭÜН	Avg Eff Maturity 8.83 Communication Services	Fixed-Income Style vw Sensitive	♣ \$mil ♠ Real Estate	Geo Avg Mkt Cap 77313 1.53	2.5 1.10	1 12.2 1.05	Value Blend Growth P/E Ratio TTM 179 105 097 % Cyclical		Total 100.00 107.99 7.99 ⊕ 367 mil Van	0.05 0.00 ① 1,188 mil	36.29 36.33 0.04 ⊕ 2,361 mil	ocks 24.40 24.40 0.00 🛈 153 mil	23	Allocation % Net % Long % Short % Share Chg Share	Portfolio Analysis 12-31-2023
Bond %		90						1.53	1.10	1.05	1 ndex							Sh	
Bond %	11:	_	2.94	6.67	_	{	E	0.85	0.91	0.94	ام و المام م			_		_	_ 0		
Consumer Det	Defensive	Technology	Industrials	Energy	Communicatio		_	Financial Serv	Consumer Cyc	Basic Materia	Cyclical	ctor Weightings	367 mil	1,188 mil			23	Chg	
ensive					n Services			ices	lical	ls			367 mil Vanguard Total Intl Bd II Idx Insl	Vanguard Total I	Vanguard Total Bond Market II ldx	Vanguard Total S	3% Turnover Ratio	Holdings : 10 821 Total Stocks	
6.4 11.2	20.2	22.3	11.7	4.6	6.8	45.4	3.2	15.5	11.0	4.7	34.4	Stocks %	ntl Bd II ldx Insl	Vanguard Total Intl Stock Index Inv	3 and Market II ldx	Vanguard Total Stock Mkt Idx Instl		Holdings: 10.821 Total Stocks 18.035 Total Fixed-Income	
0.93 0.97	0.94	1.40	0.94	0.92	1.21	1.17	0.45	0.95	1.00	0.91	0.87	Rel Std Index	11.03	24.98	25.58	37.43	ě	Net Assets	

			0.00						Ф
			0.00						ВВ
			14.81					₿	BBB
			16.97						Þ
	0.5	Otilities	10.24						A
	1 0		57.29					⊳	AAA
	11 2	■ Healthcare	Bond %		Credit Quality Breakdown 12-31-2023	Break	ality	dit On	Cre
	6.4	Consumer Defensive					:	;	'
	20.2	→ Defensive				γon			
	22.3	Technology	93.15		Avg Wtd Price	pəl			Т
	11.7	ndustrials	2.94		Avg Wtd Coupon	N			Т
	4.6	★ Energy	6.67		Avg Eff Duration	цбiH			
	6.8	Communication Services	8.83		Avg Eff Maturity]*	d Ext	d Mod	듄
	45.4	Sensitive				Style	ome	Fixed-Income Style	Ξ:
						L		-	ΙΓ
	3.2	▶ Real Estate			\$mil	llen			
	15.5	Financial Services	1.53 0.85	77313	Geo Avg Mkt Cap	IS	+		T
	11.0	Consumer Cyclical	1.10 0.91	2.5	P/B Ratio TTM	P!M			
	4./	Basic Materials	1.05 0.94	12.2	P/C Ratio TTM	ague			
	4.7		1.05 0.97	17.9	P/E Ratio TTM	_			٦
	34 4	ባ _ሎ Cyclical		Avg		¥ħ	nd Grow	Value Blend Growth	<u></u>
Rel	Stocks %	Sector Weightings		Port	Portfolio Statistics		ě	Equity Style	ᄪ

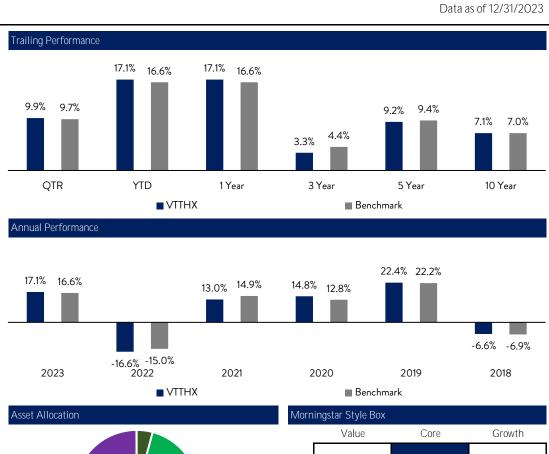
		.98	
Greater Asia	18.2 0	.91	
Base Currency:	USD	Purchase Constraints:	
Ticker:	VTHRX	Incept:	06-07-2006
	US92202E8883	Туре:	MF
Minimum Initial Purchase:	\$1,000	Total Assets:	\$88,434.74 mil
	15.05% Greater Europe Greater Asia Base Currency: Ticker: ISIN: Minimum Initial Purchase:	Greater Europe 17.4 Greater Asia 18.2 Base Currency: USD Ticker: VTHRX ISIN: US92202E8883 Minimum Initial Purchase: \$1,000	Greater Europe 17.4 0.98 Greater Asia 18.2 0.91 Base Currency: USD Ticker: VTHRX ISIN: US92202E8883 Minimum Initial Purchase: \$1,000

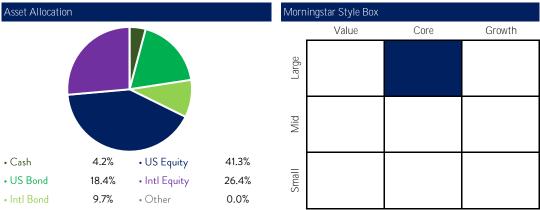
Vanguard Target Retirement 2035 Fund VTTHX

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	Walter Nejman
Longest Manager Tenure	10.92 Years
Fund Size	\$90,413,933,992

Fund Characteristics	VTTHX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$78,176	-\$10,526
P/E Ratio (TTM)	17.97	-0.46
P/B Ratio (TTM)	2.47	-0.18
Est. Dividend Yield	2.30%	0.12%

Sector Allocations	VTTHX	Category	+/- Category
Materials	4.6%	4.4%	0.2%
Communication Services	6.8%	6.7%	0.1%
Consumer Discretionary	11.0%	10.9%	0.1%
Consumer Staples	6.4%	6.2%	0.1%
Healthcare	11.3%	11.7%	-0.4%
Industrials	11.6%	11.2%	0.5%
Real Estate	3.2%	3.8%	-0.6%
Technology	22.4%	22.3%	0.2%
Energy	4.5%	5.0%	-0.4%
Financial Services	15.5%	15.3%	0.1%
Utilities	2.6%	2.5%	0.1%
Other	0.0%	0.0%	0.0%





Vanguard Target Retirement 2035 Fund VTTHX

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year	5-Year Quarterly				
• VTTHX	9.87%	17.14%	17.14%	3.33%	9.17%	7.06%	Performance	4Q23	3Q23	2Q23	1Q23
• Benchmark	9.68%	16.63%	16.63%	4.45%	9.44%	7.04%	• VTTHX	9.87%	-3.33%	4.10%	5.94%
+/- Benchmark	0.20%	0.51%	0.51%	-1.12%	-0.27%	0.02%	• Benchmark	9.68%	-3.14%	3.88%	5.68%
Peer Group Rank	61	26	26	46	45	26	+/- Benchmark	0.20%	-0.19%	0.21%	0.26%
Annual Performance	2023	2022	2021	2020	2019	2018	5-Year Quarterly				
• VTTHX	17.14%	-16.62%	12.96%	14.79%	22.44%	-6.58%	Performance	4Q22	3Q22	2Q22	1Q22
• Benchmark	16.63%	-14.99%	14.93%	12.79%	22.18%	-6.88%	• VTTHX	7.45%	-6.09%	-12.41%	-5.66%
+/- Benchmark	0.51%	-1.63%	-1.96%	2.00%	0.26%	0.30%	• Benchmark	8.31%	-5.50%	-12.55%	-5.02%
Peer Group Rank	26	39	85	44	57	25	+/- Benchmark	-0.86%	-0.59%	0.14%	-0.64%
	01/2019 -	10/2018 -	07/2018 -	04/2018 -	01/2018 -	10/2017 -	5-Year Quarterly				
Rolling 5-Year Performance	12/2023	09/2023	06/2023	03/2023	12/2022	09/2022	Performance	4Q21	3Q21	2Q21	1Q21
• VTTHX	9.17%	4.92%	6.35%	5.68%	4.34%	3.78%	• VTTHX	4.55%	-0.87%	5.65%	3.17%
• Benchmark	9.44%	5.07%	6.48%	5.99%	4.63%	3.92%	Benchmark	5.21%	-0.61%	5.45%	4.22%
+/- Benchmark	-0.27%	-0.16%	-0.13%	-0.31%	-0.29%	-0.14%	+/- Benchmark	-0.66%	-0.26%	0.20%	-1.05%
Peer Group Rank	45	34	32	40	45	40					
							5-Year Quarterly				
Risk Statistics	3 \	Year	5 \	/ear	10	Year	Performance	4Q20	3Q20	2020	1Q20
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark	• VTTHX	11.62%	6.29%	15.90%	-16.52%
Alpha	-1.06	0.00	-0.14	0.00	0.06	0.00	Benchmark	12.20%	5.70%	15.55%	-17.69%
Beta	0.99	1.00	0.98	1.00	0.99	1.00	+/- Benchmark	-0.58%	0.58%	0.36%	1.18%
Standard Deviation	13.48	13.50	14.37	14.58	11.81	11.86					
Sharpe Ratio	0.13	0.21	0.55	0.56	0.53	0.52	5-Year Quarterly				
Information Ratio	-0.91	-	-0.24	-	0.02	-	Performance	4Q19	3Q19	2Q19	1Q19
Treynor Ratio	0.83	1.94	7.29	7.44	5.76	5.70	• VTTHX	6.68%	0.70%	3.42%	10.20%
Upside Capture Ratio	96.92	100.00	98.21	100.00	99.96	100.00	• Benchmark	6.61%	0.73%	3.18%	10.27%
Downside Capture Ratio	102.37	100.00	98.83	100.00	99.78	100.00	+/- Benchmark	0.07%	-0.03%	0.24%	-0.07%

(USD) Vanguard Target Retirement 2035 Fund

Periorillance 12-31-2023	21-2023				
Quarterly Returns	1st Otr	2nd Otr	3rd Otr	4th Otr	Total %
2021	3.17	5.65	-0.87	4.55	12.96
2022	-5.66	-12.41	-6.09	7.45	-16.62
2023	5.94	4.10	-3.33	9.87	17.14
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	17.14	3.33	9.17	7.06	7.32
Std 12-31-2023	17.14		9.17	7.06	7.32
Total Return	17.14	3.33	9.17	7.06	7.32
+/- Std Index	3.92	1.27	1.79	1.34	
+/- Cat Index	2.31	0.95	0.76	0.57	
% Rank Cat	35	£	49	30	
No. in Cat	207	187	174	101	

2012

2.56	2.56	30-day SEC Yield 01-23-24
		7-day Yield
Unsubsidized	Subsidized	

15.16 14.09 3.12

89

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.

-0.20

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

Deferred Load % Front-End Load % Sales Charges

ž ₹

		Risk and Return Profile	Gross Expense Ratio %	12b1 Expense %	Management Fees %	Fund Expenses
187 funde	3 Yr					
174 funde	5 Yr					
101 funde	10 Yr		0.08	NA	0.00	

Fixed-Income Style

nisk allu neturii Froille			
	3 Yr	5 Yr	10 Yr
	187 funds 1	174 funds	101 funds
Morningstar Rating™	3 ⊁	3 ≯	4★
Morningstar Risk	-Avg	-Avg	-Avg
Morningstar Return	Avg	Avg	+Avg
	3 Yr	5 Yr	10 Yr
Standard Deviation	13.48	14.37	11.81
Mean	3.33	9.17	7.06
Sharpe Ratio	0.13	0.55	0.53
MPT Statistics	Standard Index		Best Fit Index Morningstar Gbl
Alnha	1 .35		1 86
Beta	1.08	-	1.05
R-Squared	98.63	55	99.14
12-Month Yield			2.48%
Potential Cap Gains Exp			18.28%

Morningstar Analyst-Driven % Medalist Rating 100.00 Silver Data Coverage % 03-01-2023 Data Coverage % 100.00 187 US Fund Morningstar Rating™ *** Target-Date 2035



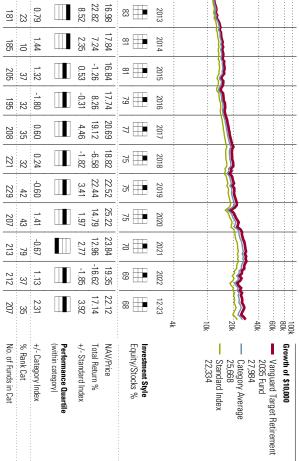
Risk TR USD Standard Index

Morningstar Mod Tgt



Mod 2035 TR USD Morningstar Lifetime

US Fund Target-Date Morningstar Cat



0.44	3.1	Real Estate			\$mil	llsm
0.94	ices 15.4	Financial Services	1.60 0.91	80902 1.60	Geo Avg Mkt Cap	S
1.00		Consumer Cyclical	0.93	2.5 1.11	P/B Ratio TTM	P!W
0.00	4.0	basic Materials	0.95	12.2 1.05	P/C Ratio TTM	абл
0.00		Docio Metarial	0.97	17.9 1.05	P/E Ratio TTM	vanda Gigwan
Rel Std Index	Stocks %	Sector Weightings	Rel	Port Rel Avg Index	Portfolio Statistics	Equity Style
8.77	299 mil Vanguard Total Intl Bd II ldx Insl	⊕ 299 mil	6.36	106.36	100.00	Total
20.32	Vanguard Total Bond Market II ldx	⊕ 1,917 mil	0.00	0.05	0.05	Other/Not Clsfd
27.47	Vanguard Total Intl Stock Index Inv	⊕ 1,335 mil	0.03	28.87	28.84	Bonds
42.35	Vanguard Total Stock Mkt Idx Insti	①	0.00	26.83	26.83	Non-US Stocks
0	- Wildingwei nauc		0.00	42.13	42.13	US Stocks
%	10,949 lotal Stocks , 17,714 lotal Fixed-Income,	since Amount	6.32	8.47	2.15	Cash
Net Assets	Holdings:	Chg Share	Short %	Long %	Net %	Asset Allocation %
					s 12-31-2023	Portfolio Analysis 12-31-2023

rixed-income style			0
Ltd Mod Ext	Avg Eff Maturity		Collinalication Services
	Avg Eff Duration		→ Energy
		n 2.91	₽
	Avg Wtd Price	93.08	
	гом		→ Defensive
Credit Quality Br	Credit Quality Breakdown 11-30-2023	Bond %	
AAA		57.38	3 E
AA		10.16	Officies
Þ		16.89	
BBB		14.87	
BB		0.00	
В		0.00	
Below B		0.46	
NR		0.23	
Regional Exposure		Stocks % Rel Std Index	
Americas		65.0 1.05	
Greater Europe		17.1 0.96	
Greater Asia		17.9 0.89	

	td Index 1.05 0.96 0.89	14.87 0.00 0.00 0.46 0.23	10.16	Bond %		93.08	6.56 2.91	8.73			0.91	0.93	0.97	Cat
Purchase Constraints: Incept: Type: Total Assets:			Utilities		→ Defensive Consumer Defensive		♠ Energy Industrials	_	₩ Sensitive	Real Estate			Basic Materials	∿ Cyclical
— 10-27-2003 MF \$90,413.94 mil			2.6	11.3	20.4 6.5	22.5	4.7 11.4	7.0	45.6	3.1	15.4	11.0	4.5	34.0
			0.83	0.97	0.95 0.95	1.40	0.96 0.92	1.23	1.17	0.44	0.94	1.00	0.88	0.86

Objective: Manager: Tenure:

Asset Allocation

Multiple 10.9 Years Vanguard

Ticker:

Base Currency:

ISIN:

Minimum Initial Purchase:

\$1,000 XHTX US92202E5087

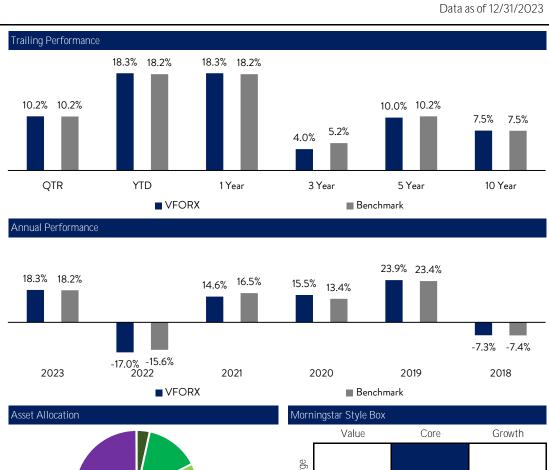
Family:

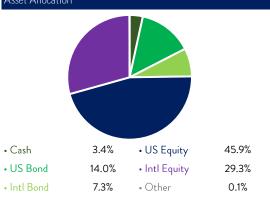
Operations

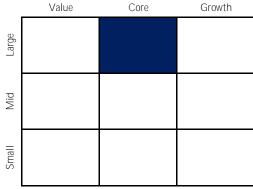
Product Details	
Name	Vanguard Target Retirement 2040 Fund
Ticker	VFORX
Expense Ratio	0.080%
Morningstar Category	US Fund Target-Date 2040
Benchmark	S&P Target Date 2040 TR USD
Inception Date	6/7/2006
Longest Tenured Manager	Walter Nejman
Longest Manager Tenure	10.92 Years
Fund Size	\$79,409,724,739

Fund Characteristics	VFORX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$78,184	-\$8,299
P/E Ratio (TTM)	17.97	-0.37
P/B Ratio (TTM)	2.47	-0.19
Est. Dividend Yield	2.30%	0.13%

Sector Allocations	VFORX	Category	+/- Category
Materials	4.6%	4.5%	0.1%
Communication Services	6.8%	6.6%	0.2%
Consumer Discretionary	11.0%	11.0%	0.1%
Consumer Staples	6.4%	6.2%	0.2%
Healthcare	11.3%	11.9%	-0.6%
Industrials	11.6%	11.4%	0.3%
Real Estate	3.2%	3.5%	-0.4%
Technology	22.4%	21.8%	0.6%
Energy	4.5%	5.2%	-0.6%
Financial Services	15.5%	15.5%	0.0%
Utilities	2.6%	2.5%	0.1%
Other	0.0%	0.0%	0.0%







Vanguard Target Retirement 2040 Fund VFORX

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year	5-Year Quarterly				
• VFORX	10.23%	18.34%	18.34%	4.02%	9.99%	7.52%	Performance	4Q23	3Q23	2Q23	1Q23
• Benchmark	10.19%	18.16%	18.16%	5.16%	10.22%	7.49%	• VFORX	10.23%	-3.34%	4.57%	6.21%
+/- Benchmark	0.04%	0.17%	0.17%	-1.14%	-0.23%	0.03%	• Benchmark	10.19%	-3.23%	4.47%	6.08%
Peer Group Rank	72	44	44	57	45	29	+/- Benchmark	0.04%	-0.10%	0.10%	0.13%
Annual Performance	2023	2022	2021	2020	2019	2018	5-Year Quarterly				
• VFORX	18.34%	-16.98%	14.56%	15.47%	23.86%	-7.32%	Performance	4Q22	3Q22	2Q22	1Q22
• Benchmark	18.16%	-15.56%	16.55%	13.37%	23.37%	-7.41%	• VFORX	8.20%	-6.33%	-13.17%	-5.66%
+/- Benchmark	0.17%	-1.42%	-1.99%	2.11%	0.49%	0.08%	• Benchmark	9.17%	-5.83%	-13.50%	-5.03%
Peer Group Rank	44	35	85	46	55	31	+/- Benchmark	-0.97%	-0.50%	0.34%	-0.63%
	01/2019 -	10/2018 -	07/2018 -	04/2018 -	01/2018 -	10/2017 -	5-Year Quarterly				
Rolling 5-Year Performance	12/2023	09/2023	06/2023	03/2023	12/2022	09/2022	Performance	4Q21	3Q21	2Q21	1Q21
• VFORX	9.99%	5.37%	6.88%	6.12%	4.74%	4.11%	• VFORX	5.02%	-0.98%	6.11%	3.82%
• Benchmark	10.22%	5.53%	7.00%	6.42%	4.97%	4.16%	• Benchmark	5.73%	-0.70%	5.79%	4.93%
+/- Benchmark	-0.23%	-0.15%	-0.12%	-0.29%	-0.23%	-0.05%	+/- Benchmark	-0.71%	-0.29%	0.33%	-1.11%
Peer Group Rank	45	35	33	34	42	35					
							5-Year Quarterly				
Risk Statistics	3`	Year	5`	Year	10	Year	Performance	4Q20	3Q20	2Q20	1Q20
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark	• VFORX	12.76%	6.80%	17.29%	-18.25%
Alpha	-1.05	0.00	-0.07	0.00	0.05	0.00	 Benchmark 	13.36%	6.14%	16.66%	-19.24%
Beta	0.97	1.00	0.98	1.00	1.00	1.00	+/- Benchmark	-0.60%	0.65%	0.62%	0.99%
Standard Deviation	14.30	14.60	15.47	15.75	12.76	12.76					
Sharpe Ratio	0.17	0.25	0.57	0.57	0.53	0.53	5-Year Quarterly				
Information Ratio	-0.89	-	-0.19	-	0.03	-	Performance	4Q19	3Q19	2Q19	1Q19
Treynor Ratio	1.55	2.65	8.15	8.21	6.20	6.14	• VFORX	7.38%	0.49%	3.46%	10.96%
Upside Capture Ratio	95.64	100.00	98.14	100.00	100.63	100.00	• Benchmark	7.15%	0.60%	3.27%	10.82%
Downside Capture Ratio	100.41	100.00	98.38	100.00	100.71	100.00	+/- Benchmark	0.22%	-0.11%	0.19%	0.13%

(USD) Vanguard Target Retirement 2040 Fund

Performance 12-31-2023	31-2023				
Quarterly Returns	1st Otr	2nd Otr	3rd Otr	4th Otr	Total %
2021	3.82	6.11	-0.98	5.02	14.56
2022	-5.66	-13.17	-6.33	8.20	-16.98
2023	6.21	4.57	-3.34	10.23	18.34
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	18.34	4.02	9.99	7.52	7.22
Std 12-31-2023	18.34	I	9.99	7.52	7.22
Total Return	18.34	4.02	9.99	7.52	7.22
+/- Std Index	5.11	1.95	2.61	1.80	
+/- Cat Index	2.00	0.51	0.69	0.57	
% Rank Cat	47	57	49	33	
No. in Cat	205	190	175	102	

Performance Disclosure

30-day SEC Yield 01-23-24

7-day Yield

Subsidized 2.46

Unsubsidized 2.46

23.18

89

89

2012

2013

15.56 3.52

24.37 28.32 10.07

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.

-0.15

204

1.32 15 218

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

Deferred Load % Front-End Load % Sales Charges

₹ ₹

Avg	Avg	Avg	Morningstar Return
-Avg	-Avg	-Avg	Morningstar Risk
4★	3★	3 ★	Morningstar Rating [™]
102 funds	175 funds	190 funds	
10 Yr	5 Yr	3 Yr	
			Risk and Return Profile
0.08			Gross Expense Ratio %
NA			12b1 Expense %
0.00			Management Fees %
			Fund Expenses

Risk and Return Profile			
	3 Yr 190 funds	5 Yr 175 funds	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	14.30	15.47	12.76
Mean	4.02	9.99	7.52
Sharpe Ratio	0.17	0.57	0.53
MPT Statistics	Standard Index	<	Best Fit Index MSCI ACWI NR
	3	ò	1 SD
Alpha	2.10	=	-1.38
Beta	1.15	15	0.86
R-Squared	98.37	37	99.39
12-Month Yield			2.38%
Potential Cap Gains Exp			18.87%

Morningstar Medalist Rating 03-01-2023 **Analyst-Driven %** 100.00 Data Coverage % 100.00 Morningstar Rating™ 190 US Fund **** Target-Date 2040



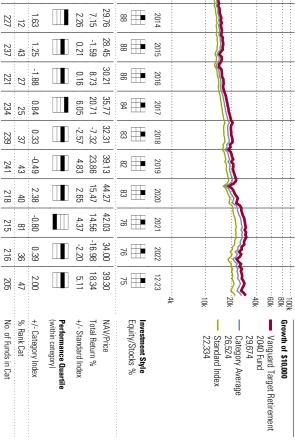


Morningstar Mod Tgt

Category Index



US Fund Target-Date Morningstar Cat



Equity Style Portfolio Statistics Port Avg Index Avg Index Cat Avg Ind	Portfolio Analysis 12-31-2023 Asset Allocation % Net % Long % Short % Share Chg Share Holdings : Cash 1.91 6.65 4.75 since Amount 11,048 Total Stocks US Stocks 46.58 46.58 0.00 11-2023 1% Tumover Ratio Non-US Stocks 29.67 29.67 0.00 ⊕ 1,297 mil Vanguard Total Stocks Bonds 21.79 21.81 0.02 ⊕ 1,297 mil Vanguard Total Stocks Other/Not Clsfd 0.05 0.06 0.00 ⊕ 1,277 mil Vanguard Total Stocks Total 100.00 104.77 4.77 ⊕ 197 mil Vanguard Total Stocks
Weightings Stooks % yclical 34.3 asic Materials 4.6 onsumer Cyclical 11.0 nancial Services 15.5 eal Estate 3.2	Amount 172 mil 1,297 mil 1,277 mil 197 mil
Rel Std Index 0.87 0.90 1.00 0.95 0.95	Net Assets % 46.83 30.36 15.40 6.58

102

Rel	Sector Weightings	Stocks %	Rel Std Index
Avg Index Cat	ე Cyclical	34.3	0.87
1	Basic Materials	4.6	0.90
	Consumer Cyclical	11.0	1.00
1.55	Financial Services	15.5	0.95
	Real Estate	3.2	0.45
	₩ Sensitive	45.5	1.17
8.83	■ Communication Services	6.8	1.21
6.67	▲ Energy	4.5	0.92
2.94	Industrials	11.6	0.94
93.14	Technology	22.4	1.40
	→ Defensive	20.2	0.94
Donal O	Consumer Defensive	6.4	0.93
57 39 57 39	◆ Healthcare	11.3	0.97
10.20	Utilities	2.6	0.83
16.94			
14.80			
0.00			
0.00			

Potential Can Gaine Evr	Fyn	18 87%	Americas	65.0	1.05	
ordinal out out	7	7	Greater Europe	17.1	0.96	
			Greater Asia	17.9	0.89	
Operations						
Family:	Vanguard		Base Currency:	USD	Purchase Constraints:	I
Manager:	Multiple		Ticker:	VFORX	Incept:	06-07-2006
Tenure:	10.9 Years		ISIN:	US92202E8701	Туре:	MF
Objective:	Asset Allocation		Minimum Initial Purchase:	\$1,000	Total Assets:	\$79,409.73 mil

ω	₽₽	l
	₽	ı
	<u> </u>	ı
	Y B	ı
	rea	ı
	蓋	ı
	QV	ı
	=	ı
	dit Quality Breakdown 12-31-2023 A	l
	1-2	l
	023	l
		l
		l
		l
		ı
		l

Below B NR

888

Regional Exposure

Stocks %

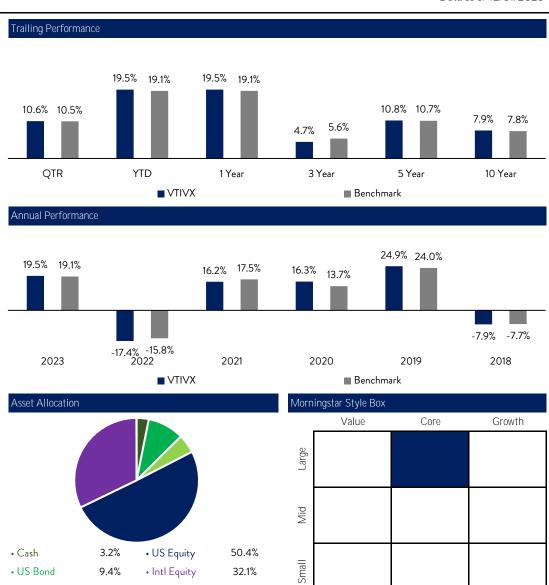
Rel Std Index

0.46 0.23

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	Walter Nejman
Longest Manager Tenure	10.92 Years
Fund Size	\$76,283,319,391

Fund Characteristics	VTIVX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$78,201	-\$5,990
P/E Ratio (TTM)	17.97	-0.40
P/B Ratio (TTM)	2.47	-0.16
Est. Dividend Yield	2.30%	0.12%

Sector Allocations	VTIVX	Category	+/- Category
Materials	4.6%	4.5%	0.1%
Communication Services	6.8%	6.7%	0.2%
Consumer Discretionary	11.0%	10.9%	0.2%
Consumer Staples	6.4%	6.2%	0.2%
Healthcare	11.3%	11.8%	-0.5%
Industrials	11.6%	11.2%	0.4%
Real Estate	3.2%	4.0%	-0.9%
Technology	22.5%	22.0%	0.4%
Energy	4.5%	5.0%	-0.5%
Financial Services	15.5%	15.3%	0.2%
Utilities	2.6%	2.5%	0.1%
Other	0.0%	0.0%	0.0%



4.9%

• Other

0.1%

• Intl Bond

Vanguard Target Retirement 2045 Fund VTIVX

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year	5-Year Quarterly				
• VTIVX	10.57%	19.48%	19.48%	4.68%	10.76%	7.91%	Performance	4Q23	3Q23	2Q23	1Q23
• Benchmark	10.53%	19.14%	19.14%	5.62%	10.68%	7.76%	• VTIVX	10.57%	-3.45%	5.10%	6.49%
+/- Benchmark	0.04%	0.35%	0.35%	-0.94%	0.08%	0.15%	 Benchmark 	10.53%	-3.33%	4.87%	6.33%
Peer Group Rank	68	40	40	45	35	22	+/- Benchmark	0.04%	-0.12%	0.24%	0.16%
Annual Performance	2023	2022	2021	2020	2019	2018	5-Year Quarterly				
• VTIVX	19.48%	-17.36%	16.16%	16.30%	24.94%	-7.90%	Performance	4Q22	3Q22	2Q22	1Q22
• Benchmark	19.14%	-15.84%	17.51%	13.66%	24.02%	-7.74%	• VTIVX	8.89%	-6.51%	-13.93%	-5.67%
+/- Benchmark	0.35%	-1.52%	-1.36%	2.64%	0.92%	-0.15%	• Benchmark	9.77%	-6.01%	-14.12%	-5.02%
Peer Group Rank	40	32	71	39	43	35	+/- Benchmark	-0.88%	-0.50%	0.19%	-0.65%
	01/2019 -	10/2018 -	07/2018 -	04/2018 -	01/2018 -	10/2017 -	5-Year Quarterly				
Rolling 5-Year Performance	12/2023	09/2023	06/2023	03/2023	12/2022	09/2022	Performance	4Q21	3Q21	2Q21	1Q21
• VTIVX	10.76%	5.87%	7.46%	6.59%	5.14%	4.42%	• VTIVX	5.49%	-1.08%	6.55%	4.47%
• Benchmark	10.68%	5.81%	7.33%	6.66%	5.16%	4.27%	• Benchmark	6.04%	-0.75%	6.00%	5.33%
+/- Benchmark	0.08%	0.06%	0.13%	-0.07%	-0.02%	0.15%	+/- Benchmark	-0.55%	-0.33%	0.55%	-0.86%
Peer Group Rank	35	28	25	26	29	25					
							5-Year Quarterly				
Risk Statistics	3	Year	5`	Year	10	Year	Performance	4Q20	3Q20	2Q20	1Q20
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark	• VTIVX	13.90%	7.36%	18.70%	-19.889
Alpha	-0.87	0.00	0.05	0.00	0.08	0.00	 Benchmark 	14.02%	6.44%	17.29%	-20.15
Beta	0.99	1.00	1.00	1.00	1.01	1.00	+/- Benchmark	-0.12%	0.93%	1.40%	0.28%
Standard Deviation	15.16	15.30	16.56	16.47	13.52	13.33					
Sharpe Ratio	0.21	0.27	0.58	0.58	0.53	0.53	5-Year Quarterly				
Information Ratio	-0.74	-	0.06	-	0.14	-	Performance	4Q19	3Q19	2Q19	1Q19
Treynor Ratio	2.20	3.11	8.72	8.67	6.49	6.41	• VTIVX	8.00%	0.26%	3.51%	11.48%
Upside Capture Ratio	97.63	100.00	100.78	100.00	101.77	100.00	Benchmark	7.48%	0.53%	3.32%	11.10%
Downside Capture Ratio	101.60	100.00	100.81	100.00	101.65	100.00	+/- Benchmark	0.52%	-0.28%	0.19%	0.38%

(USD) Vanguard Target Retirement 2045 Fund

I difficiliance 17-01-7050	7070-10-7				
Quarterly Returns	1st Otr	2nd Otr	3rd Otr	4th Otr	Total %
2021	4.47	6.55	-1.08	5.49	16.16
2022	-5.67	-13.93	-6.51	8.89	-17.36
2023	6.49	5.10	-3.45	10.57	19.48
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	19.48	4.68	10.76	7.91	7.97
Std 12-31-2023	19.48	I	10.76	7.91	7.97
Total Return	19.48	4.68	10.76	7.91	7.97
+/- Std Index	6.26	2.61	3.37	2.19	
+/- Cat Index	2.10	0.43	0.91	0.72	l
% Rank Cat	46	48	39	26	
No. in Cat	201	187	174	101	

2.37	2.37	30-day SEC Yield 01-23-24
		7-day Yield
Unsubsidized	Subsidized	

15.58 14.55

89

89 2013

3.54

10.06 17.76 24.37

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

-0.26

1.30 26 180

145 43

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. 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.

Fees and Expenses

Fund Expenses

+Avg	Avg	Avg	Morningstar Return
-Avg	-Avg	-Avg	Morningstar Risk
4★	4⋆	4★	Morningstar Rating [™]
101 funds	174 funds	187 funds	!
10 Yr	5 Yr	3 Yr	
			Risk and Return Profile
0.08			Gross Expense Ratio %
NA			12b1 Expense %
0.00			Management Fees %
			Fund Expenses

Fixed-Income Style

Kisk and Return Profile			
	3 Yr	5 Yr	10 Yr
	187 funds	174 funds	101 funds
Morningstar Rating™	4*	4⋆	4⊁
Morningstar Risk	-Avg	-Avg	-Avg
Morningstar Return	Avg	Avg	+Avg
	3 Yr	5 Yr	10 Yr
Standard Deviation	15.16	16.57	13.52
Mean	4.68	10.76	7.91
Sharpe Ratio	0.21	0.58	0.53
MPT Statistics	Standard Index		Best Fit Index MSCI ACWI NR
			USD
Alpha	2.84	84	-0.86
Beta	1.21	21	0.92
R-Squared	98.01	01	99.62
12-Month Yield			2.28%
Potential Cap Gains Exp			21.33%

 \exists

Credit Quality Breakdown 11-30-20 AAA

baM цвін

03-01-2023	=	Medalist Rating 100.00	Morningstar
100.00	Data Coverage % 187 US Fund	100.00	Analyst-Driven %
Target-Date 2045	187 US Fund	***	Analyst-Driven % Morningstar Rating"

		g ₁	
100.00	Data Coverage %	100.00	Analyst-Driven %
Target-Date 2045	187 US Fund	***	Analyst-Driven % Morningstar Rating **
	я	$\overline{}$	S







Morningstar Mod Tgt Risk TR USD









1.91 12 185	18.65 7.16 2.27	2014	1
.91 12		14	
1.45 42 206	17.78 -1.57 0.22	2015	<u> </u>
-1.97 28 195	18.89 8.87 0.30	2016	\
0.89 26 208	22.50 21.42 6.77	2017	N
0.27 43 221	20.21 -7.90 -3.14	2018	- 1
-0.03 43 229	24.70 24.94 5.91	2019	\
3.35 36 207	28.19 16.30 3.48	2020	1
-0.20 68 213	28.38 16.16 5.97	2021	
-0.29 31 212	22.82 -17.36 -2.58	2022	
2.10 46 201	26.66 19.48 6.26	12-23 82	100k 80k 60k 40k
+/- Category Index % Hank Cat No. of Funds in Cat	NAV/Price Total Return % +/- Standard Index Performance Quartile (within category)	Investment Style Equity/Stocks %	Growth of \$10,000 Vanguard Target Retirement 2045 Fund 30,766 Category Average 28,323 Standard Index 22,334

2012

Share Chg Share Holdings: since Amount 11,114 Total Stocks , 16,271 Total Fixed-Income 11,114 Total Stocks , 16,271 Total Fixed-Income 11,114 Total Stock M, 16,271 Total Fixed-Income 11,12023 180 mil Vanguard Total Stock Mkt Idx Instl 1,360 mil Vanguard Total Intl Stock Index Inv 1,360 mil Vanguard Total Intl Stock Index Inv 1,360 mil Vanguard Total Bond Market II Idx 1,200 mil Vanguard Total Intl Bd II Idx Insl 1,200 mil	Table Bend Gravith Value Bend Gravith P/E Ratio TTM P/C Ratio TTM 12.2 1.05 0.95 P/B Ratio TTM 2.5 1.11 0.94 Consume	0.06 0.00 ⊕ 103.15 3.15 ⊕	tocks 50.88 50.88 0.00 11.2023 US Stocks 32.38 32.38 0.00 ⊕ s 14.53 14.55 0.02 ⊕ 1.	Short %
	als	1 mil Vanguard Total Bond Market II Idx 5 mil Vanguard Total Intl Bd II Idx Insl		

-		1	- 1		풀	1		1		-311	•	١.	11					
Stocks %					akdown 11-30-2023			Avg Wtd Price	Avg Wtd Coupon	Avg Eff Duration	Avg Eff Maturity			5	P/B Ratio TTM	P/C Ratio TTM	P/E Ratio TTM	Portfolio Statistics
-														80929	2.5	12.2	AV9 17.9	Port
Rel Std Index				(ى س												1.05	- 1
Index	0.46 0.23	0.00	14.84	10.04	57 67				2.92	6.55	8.73			0.96	0.94	0.95	0.98	윤
				Utilities	♣ Healthcare	Consumer Defensive	→ Defensive	Technology	ndustrials	★ Energy	■ Communication Services	₩ Sensitive	Real Estate	Financial Services	Consumer Cyclical	Basic Materials	% Cyclical	Sector Weightings
				2.6	11.3	6.5	20.4	22.5	11.4	4.7	7.0	45.6	3.1	15.4	11.0	4.5	34.0	Stocks %
																		Rel S

0.95 0.95 0.97 0.83

©2024 Morningstar. opinions contained he opinions contained he Morningstar. (3) may and (6) are not warrar information, data, and including, but not lim or accompanied by a	Objective:	Tenure:	Manager:	Family:	
All Rights Reserved. Unless otherwise provide trein (1) include the confidential and proprieta rot be copied or redistributed (4) do not const ted to be correct, complete or accurate. Exep yakes or opinions or their use. Opinions sopre ted to, Momnigster Research Services LLC, et crospectus, or equivalent, and disclosure state prospectus, or equivalent, and disclosure state.	Asset Allocation	10.9 Years	Multiple	Vanguard	
©2024 Morningster. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the copinions contained herein (1) include the confidential and proprietary information of Morningster. (2) may include or be derived from Morningster. (3) may not be copied or redistributed. (4) to not constitute investment achieve fifteed by Morningster, (5) are provided and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law. Morningster that line to be responsification, data, analyses or opinions or their use. Opinious expressed are as of the date written and are subject to change without including, but not limited to. Morningster Research Servious LLC, registered with an dig overned by the U.S. Securities and Exchange or accompanied by a prospectus, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.	Minimum Initial Purchase:	ISIN:	Ticker:	Base Currency:	
rt only in the country in which its of be derived from, account informat of the derived from, account informat of the country	9: \$1,000	US92202E6077	VTIVX	USD	
©2024 Monningster. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningster. (2) may include, or he derived from account information provided by your financial professional which team of the verified by Morningster. (3) may not be copied or redistributed, (4) to not constitute investment achieve offered by Morningster (5) may not provided solely for information for information, the provided solely included by the provided solely for information approved and therefore are not an offer to buy or self a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningster (5) are provided solely for information, data, analyses or opinions or their use. Opinions expressed are as of the date written and as subject to change without notice. Investment research is produced and issued by subsidiaries of Morningster, Inc. including, but not limited to, Morningster Research Services LLC, neglistered with and governed by the US. Securities and Exchange Commission. This report is supplemental sales filterature. If applicable it must be preceded or accompanied by a prospecture, or equivalent, and disclosure statement. Please see important disclosures at the end of this report.	Total Assets:	Туре:	Incept:	Purchase Constraints:	
elyses and not be verified by rsell a security, r related to, this Volomingstar, Inc. must be preceded	\$76,283.32 mil	MF	10-27-2003	l	

Greater Europe Greater Asia

65.0 17.1 17.9

1.05 0.96 0.89

Americas

Regional Exposure

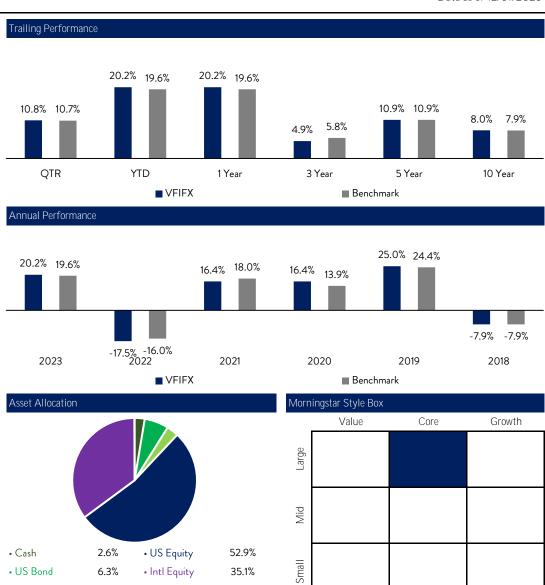
Below B NR

0.86
0.88
1.00
0.94
0.44
1.17
1.23
0.96
0.92

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	Walter Nejman
Longest Manager Tenure	10.92 Years
Fund Size	\$63,170,014,397

Fund Characteristics	VFIFX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$77,009	-\$4,763
P/E Ratio (TTM)	17.88	-0.49
P/B Ratio (TTM)	2.45	-0.18
Est. Dividend Yield	2.32%	0.14%

Sector Allocations	VFIFX	Category	+/- Category
Materials	4.7%	4.5%	0.2%
Communication Services	6.8%	6.6%	0.2%
Consumer Discretionary	11.0%	10.9%	0.1%
Consumer Staples	6.4%	6.2%	0.2%
Healthcare	11.2%	11.7%	-0.5%
Industrials	11.7%	11.3%	0.4%
Real Estate	3.2%	4.2%	-1.0%
Technology	22.3%	21.9%	0.4%
Energy	4.6%	5.0%	-0.5%
Financial Services	15.5%	15.3%	0.2%
Utilities	2.6%	2.4%	0.2%
Other	0.0%	0.0%	0.0%



3.1%

• Other

0.1%

• Intl Bond

Vanguard Target Retirement 2050 Fund VFIFX

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year	5-Year Quarterly				
• VFIFX	10.79%	20.17%	20.17%	4.91%	10.93%	7.99%	Performance	4Q23	3Q23	2Q23	1Q23
• Benchmark	10.70%	19.58%	19.58%	5.84%	10.92%	7.92%	• VFIFX	10.79%	-3.46%	5.36%	6.64%
+/- Benchmark	0.09%	0.58%	0.58%	-0.93%	0.01%	0.06%	Benchmark	10.70%	-3.36%	5.06%	6.40%
Peer Group Rank	65	39	39	38	33	21	+/- Benchmark	0.09%	-0.10%	0.30%	0.24%
Annual Performance	2023	2022	2021	2020	2019	2018	5-Year Quarterly				
• VFIFX	20.17%	-17.46%	16.41%	16.39%	24.98%	-7.90%	Performance	4Q22	3Q22	2Q22	1Q22
• Benchmark	19.58%	-15.97%	17.99%	13.86%	24.35%	-7.94%	• VFIFX	9.23%	-6.64%	-14.21%	-5.65%
+/- Benchmark	0.58%	-1.49%	-1.58%	2.53%	0.63%	0.05%	• Benchmark	10.01%	-6.07%	-14.39%	-5.02%
Peer Group Rank	39	29	73	41	49	32	+/- Benchmark	-0.78%	-0.57%	0.17%	-0.63%
	01/2019 -	10/2018 -	07/2018 -	04/2018 -	01/2018 -	10/2017 -	5-Year Quarterly				
Rolling 5-Year Performance	12/2023	09/2023	06/2023	03/2023	12/2022	09/2022	Performance	4Q21	3Q21	2Q21	1Q21
• VFIFX	10.93%	5.99%	7.58%	6.66%	5.18%	4.39%	• VFIFX	5.63%	-1.11%	6.61%	4.53%
• Benchmark	10.92%	5.93%	7.47%	6.78%	5.26%	4.35%	Benchmark	6.20%	-0.80%	6.08%	5.57%
+/- Benchmark	0.01%	0.06%	0.11%	-0.12%	-0.08%	0.04%	+/- Benchmark	-0.57%	-0.31%	0.52%	-1.04%
Peer Group Rank	33	25	22	25	28	26					
							5-Year Quarterly				
Risk Statistics		/ear		/ear		Year	Performance	4Q20	3Q20	2Q20	1Q20
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark	• VFIFX	14.01%	7.35%	18.67%	-19.86%
Alpha	-0.86	0.00	0.05	0.00	0.08	0.00	 Benchmark 	14.40%	6.53%	17.61%	-20.56%
Beta	0.99	1.00	0.99	1.00	1.00	1.00	+/- Benchmark	-0.39%	0.82%	1.06%	0.70%
Standard Deviation	15.53	15.61	16.77	16.81	13.64	13.65					
Sharpe Ratio	0.23	0.28	0.59	0.58	0.54	0.53	5-Year Quarterly				
Information Ratio	-0.70	-	0.01	-	0.06	-	Performance	4Q19	3Q19	2Q19	1Q19
Treynor Ratio	2.43	3.33	8.97	8.91	6.67	6.58	• VFIFX	8.01%	0.29%	3.47%	11.50%
Upside Capture Ratio	97.96	100.00	100.07	100.00	100.20	100.00	• Benchmark	7.65%	0.47%	3.32%	11.28%
Downside Capture Ratio	101.85	100.00	100.05	100.00	99.90	100.00	+/- Benchmark	0.36%	-0.18%	0.16%	0.22%

(USD) Vanguard Target Retirement 2050 Fund

Performance 12-31-2023	-31-2023				
Quarterly Returns	1st Otr	2nd Otr	3rd Otr	4th Otr	Total %
2021	4.53	6.61	-1.11	5.63	16.41
2022	-5.65	-14.21	-6.64	9.23	-17.46
2023	6.64	5.36	-3.46	10.79	20.17
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	20.17	4.91	10.93	7.99	7.51
Std 12-31-2023	20.17		10.93	7.99	7.51
Total Return	20.17	4.91	10.93	7.99	7.51
+/- Std Index	6.94	2.84	3.55	2.27	
+/- Cat Index	2.32	0.39	0.90	0.75	
% Rank Cat	45	41	40	23	
No. in Cat	202	188	175	102	
		,	-	=	-

		D
2.31	2.31	30-day SEC Yield 01-23-24
1		7-day Yield
Unsubsidized	Subsidized	

3.54

-0.35

177

4

23.09 15.58

89

2012

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

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

Front-End Load % Deferred Load % Sales Charges

Deletreu Loau %	_
Fund Expenses	
Management Fees %	0.
12b1 Expense %	_
Gross Expense Ratio %	0.

+Avg	Avg	n Avg	Morningstar Return
-Avg	-Avg	-Avg	Morningstar Risk
4⊁	4 ★	g™ 3 ★	Morningstar Rating TM
102 funds	175 funds	188 funds	
10 Yr	5 Yr	3 Yr	
		Profile	Risk and Return Profile
0.08		atio %	Gross Expense Ratio %
NA			12b1 Expense %
0.00		%	Management Fees %

Fixed-Income S

Kisk and Keturn Profile			
	3 Yr	5 Yr	10 Yr
	188 funds	175 funds	102 funds
Morningstar Rating™	3 ★	4⋆	4⊁
Morningstar Risk	-Avg	-Avg	-Avg
Morningstar Return	Avg	Avg	+Avg
	3 Yr	5Yr	10 Yr
Standard Deviation	15.53	16.77	13.64
Mean	4.91	10.93	7.99
Sharpe Ratio	0.23	0.59	0.54
MPT Statistics	Standard Index		Best Fit Index MSCI ACWI NR
			USD
Alpha	3.11	11	-0.68
Beta	1.24	24	0.94
R-Squared	97.94	94	99.67
12-Month Yield			2.22%
Potential Cap Gains Exp			18.04%

Below B NR

Greater Europe Americas Regional Exposure

Stocks %

Rel Std Index

0.43 0.22

64.1 17.5

0.98

1.03

88 88

 \geq AAA

Credit Quality B

03-01-2023	🕎 Silver	Medalist Rating™ 100.00	Morningstar	
100.00	Data Coverage % 188 US Fund	100.00	Analyst-Driven %	
Target-Date 2050	188 US Fund	***	Analyst-Driven % Morningstar Rating **	

		ji ji	
100.00	Data Coverage %	ing [™] 100.00	Analyst-Driven%
Target-Date 2050	188 US Fund	***	Analyst-Driven % Morningstar Rating ***
	ж	7	S





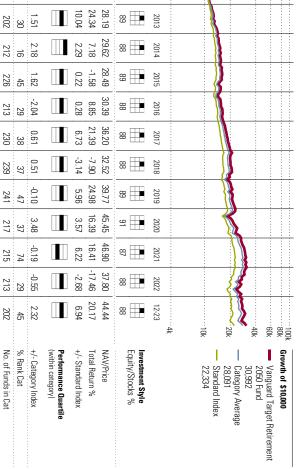
nauliy	yanınanın max
	Morningstar Mod
	Risk TR USD
2050	

Ţgt

Category Index

Mod 2050 TR USD Morningstar Lifetime

US Fund Target-Date Morningstar Cat



0.45	3.2	Real Estate			\$mil	llsm
0.95	ces 15.5	Financial Services	3 0.94	77009 1.53	Geo Avg Mkt Cap	IS
1.00		Consumer Cyclical	0.93	2.5 1.10	P/B Ratio TTM	P!W
4.83	-	Basic Materials	0.95	12.1 1.05	P/C Ratio TTM	ıtde
0.07		- Cycincal	5 0.97		P/E Ratio TTM	value blend Growth
Rel Std Index	Stocks %	Sector Weightings	x Rel	Port Rel Avg Index	Portfolio Statistics	Equity Style
2.72	65 mil Vanguard Total Intl Bd II Idx Insl	⊕ 65 mil	1.98	101.98	100.00	Total
6.85	Vanguard Total Bond Market II ldx	⊕ 452 mil	0.00	0.07	0.06	Other/Not Clsfd
36.07	Vanguard Total Intl Stock Index Inv	⊕ 1,226 mil	0.01	9.49	9.48	Bonds
23.50	vanguard Total Stock Mkt Tdx Insti	① (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	0.00	35.23	35.23	Non-US Stocks
3	Visional Total Ottal Mit Id. Issail	100	0.00	53.23	53.23	US Stocks
%	11,184 Turnovar Batio	since Amount	1.97	3.96	2.00	Cash
Net Assets	Holdings:	Chg Share	Short %	Long %	Net %	Asset Allocation %
					is 12-31-2023	Portfolio Analysis 12-31-2023

L			1000 10000
-			₩ Sensitive
otyle	Avg Eff Maturity	8.83	Communication Services
біН	Avg Eff Duration	6.65	∑ Energy
ı yı	Avg Wtd Coupon		ndustrials
bəM	Avg Wtd Price		
гом			→ Defensive
	12 21 2022		Consumer Defensive
DIGGN	DI GANGOWII 12-31-2023	_	◆ Healthcare
			• Utilities
		9.83	
		16.72	
		14.72	
		0.00	
		0.00	

0.91
1.00
0.95
0.45
1.16
1.21
0.92
0.95
1.39
0.94
0.93
0.97
0.83

Vanguard Multiple 10.9 Years Asset Allocation	
Base Currency: Ticker: ISIN: Minimum Initial Purchase:	Greater Asia
USD VFIFX US92202E8628 \$1,000	18.3
Purchase Constraints: Incept: Type: Total Assets:	0.91
—	

Family:

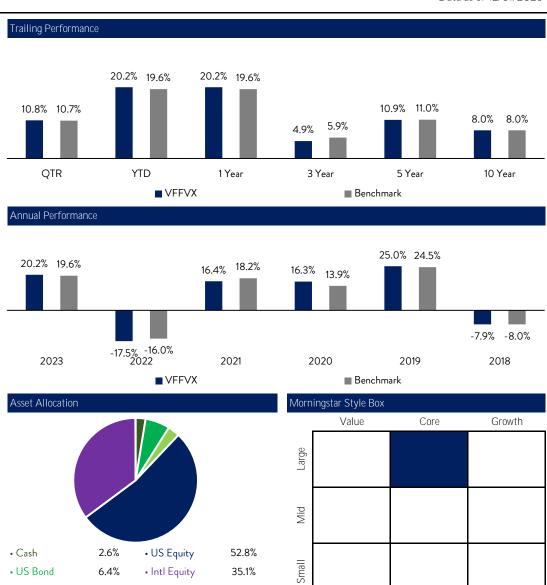
Operations

Objective: Tenure: Manager:

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	Walter Nejman
Longest Manager Tenure	10.92 Years
Fund Size	\$41,500,395,357

Fund Characteristics	VFFVX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$76,888	-\$3,177
P/E Ratio (TTM)	17.87	-0.36
P/B Ratio (TTM)	2.45	-0.18
Est. Dividend Yield	2.32%	0.16%

Sector Allocations	VFFVX	Category	+/- Category
Materials	4.7%	4.6%	0.1%
Communication Services	6.8%	6.7%	0.1%
Consumer Discretionary	11.0%	10.9%	0.1%
Consumer Staples	6.4%	6.0%	0.3%
Healthcare	11.2%	11.6%	-0.3%
Industrials	11.7%	11.4%	0.3%
Real Estate	3.2%	3.8%	-0.6%
Technology	22.3%	22.1%	0.2%
Energy	4.6%	5.1%	-0.5%
Financial Services	15.5%	15.5%	0.0%
Utilities	2.6%	2.4%	0.2%
Other	0.0%	0.0%	0.0%



3.1%

• Other

0.1%

• Intl Bond

Vanguard Target Retirement 2055 Fund VFFVX

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year	5-Year Quarterly				
• VFFVX	10.78%	20.16%	20.16%	4.92%	10.92%	7.97%	Performance	4Q23	3Q23	2Q23	1Q23
• Benchmark	10.71%	19.62%	19.62%	5.91%	10.98%	7.99%	• VFFVX	10.78%	-3.46%	5.36%	6.64%
+/- Benchmark	0.07%	0.54%	0.54%	-0.99%	-0.06%	-0.02%	 Benchmark 	10.71%	-3.36%	5.06%	6.42%
Peer Group Rank	66	44	44	37	36	25	+/- Benchmark	0.07%	-0.10%	0.30%	0.22%
Annual Performance	2023	2022	2021	2020	2019	2018	5-Year Quarterly				
• VFFVX	20.16%	-17.46%	16.44%	16.32%	24.98%	-7.89%	Performance	4Q22	3Q22	2Q22	1Q22
• Benchmark	19.62%	-15.97%	18.19%	13.86%	24.48%	-7.97%	• VFFVX	9.23%	-6.63%	-14.19%	-5.69%
+/- Benchmark	0.54%	-1.49%	-1.75%	2.46%	0.49%	0.09%	• Benchmark	10.11%	-6.07%	-14.47%	-5.01%
Peer Group Rank	44	27	78	45	50	32	+/- Benchmark	-0.88%	-0.55%	0.27%	-0.679
	01/2019 -	10/2018 -	07/2018 -	04/2018 -	01/2018 -	10/2017 -	5-Year Quarterly				
Rolling 5-Year Performance	12/2023	09/2023	06/2023	03/2023	12/2022	09/2022	Performance	4Q21	3Q21	2Q21	1Q21
• VFFVX	10.92%	5.99%	7.57%	6.66%	5.18%	4.38%	• VFFVX	5.65%	-1.11%	6.61%	4.54%
• Benchmark	10.98%	5.98%	7.52%	6.83%	5.31%	4.39%	• Benchmark	6.22%	-0.80%	6.15%	5.67%
+/- Benchmark	-0.06%	0.01%	0.05%	-0.17%	-0.14%	-0.01%	+/- Benchmark	-0.57%	-0.30%	0.46%	-1.13%
Peer Group Rank	36	27	24	28	31	29					
							5-Year Quarterly				
Risk Statistics	3`	Year	5`	Year	10	Year	Performance	4Q20	3Q20	2020	1Q20
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark	• VFFVX	13.97%	7.38%	18.64%	-19.89
Alpha	-0.91	0.00	0.03	0.00	0.06	0.00	 Benchmark 	14.56%	6.62%	17.76%	-20.84
Beta	0.99	1.00	0.99	1.00	0.99	1.00	+/- Benchmark	-0.59%	0.76%	0.88%	0.95%
Standard Deviation	15.53	15.68	16.77	16.94	13.64	13.78					
Sharpe Ratio	0.23	0.29	0.58	0.58	0.53	0.53	5-Year Quarterly				
Information Ratio	-0.73	-	-0.05	-	-0.02	-	Performance	4Q19	3Q19	2Q19	1Q19
Treynor Ratio	2.44	3.40	9.02	8.98	6.72	6.64	• VFFVX	8.02%	0.27%	3.48%	11.509
Upside Capture Ratio	97.48	100.00	99.37	100.00	99.09	100.00	• Benchmark	7.73%	0.46%	3.34%	11.31%
Downside Capture Ratio	101.52	100.00	99.36	100.00	98.77	100.00	+/- Benchmark	0.29%	-0.19%	0.14%	0.209

(USD) Vanguard Target Retirement 2055 Fund

Lenollique 15-31-5053	01-2020				
Quarterly Returns	1st Otr	2nd Otr	3rd Otr	4th Otr	Total %
2021	4.54	6.61	-1.11	5.65	16.44
2022	-5.69	-14.19	-6.63	9.23	-17.46
2023	6.64	5.36	-3.46	10.78	20.16
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	20.16	4.92	10.92	7.97	9.77
Std 12-31-2023	20.16		10.92	7.97	9.77
Total Return	20.16	4.92	10.92	7.97	9.77
+/- Std Index	6.94	2.85	3.54	2.25	
+/- Cat Index	2.26	0.42	0.91	0.79	1
% Rank Cat	49	40	43	25	
No. in Cat	201	187	174	87	

2.31	2.31	30-day SEC Yield 01-23-24
		7-day Yield
Unsubsidized	Subsidized	

-0.42

24.80

89

2012

15.58

<u>-</u> ν ω

3.54

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.

102 48

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 % Deferred Load %	
Fund Expenses	
Management Fees %	0
12b1 Expense %	_
Gross Expense Ratio %	0

+A	Avg	Avg	Morningstar Return
- Ā	-Avg	Low	Morningstar Risk
4	4★	3 ★	Morningstar Rating [™]
87 fun	174 funds	187 funds	!
10	5Yr	3 Yr	
			Risk and Return Profile
9.0			Gross Expense Ratio %
z			12b1 Expense %
0.0			Management Fees %
			Fund Expenses

Fixed-Income Style

2.18% 12.12%			12-Month Yield Potential Cap Gains Exp
99.67		97.96	R-Squared
0.94		1.24	Beta
-0.68		3.12	Alpha
Best Fit Index MSCI ACWI NR		Standard Index	MPT Statistics
0.53	0.59	0.23	Sharpe Ratio
7.97	10.92	4.92	Mean
13.64	16.77	15.53	Standard Deviation
10 Yr	5 Yr	3 Yr	
+Avg	Avg	Avg	Morningstar Return
-Avg	-Avg	Low	Morningstar Risk
4*	4★	3 ★	Morningstar Rating™
87 funds	174 funds	187 funds 1	
10 Yr	5Yr	3 Yr	
			Risk and Return Profile
0.08			Gross Expense Ratio %
NA			12b1 Expense %
0.00			Management Fees %

Below B

BB

 \mathbb{R} AA

Credit Quality Breakdown 11-30-2023

baM цбіН

Avg Eff Maturity Avg Eff Duration Avg Wtd Coupon Avg Wtd Price

 $\frac{1}{8}$

Americas Regional Exposure

Stocks %

Rel Std Index

0.43 0.22 0.00

Morningstar Medalist Ratin 03-01-2023

		ng T	
100.00	Data Coverage %	100.00	Analyst-Driven %
Target-Date 2055	187 US Fund	***	Analyst-Driven % Morningstar Rating ***



Risk TR USD

Morningstar Mod Tgt

Category Index

Mod 2055 TR USD Morningstar Lifetime

US Fund Target-Date Morningstar Cat



No. of Funds in Cat	201	212	213	207	229	221	206	193	238	156	130
% Rank Cat	49	24	78	41	57	37	48	27	ස	16	36
+/- Category Index	2.26	-0.53	-0.06	3.41	-0.07	0.68	0.43	-2.03	1.62	2.45	1.84
Performance Quartile (within category)											
Total Return % +/- Standard Index	20.16 6.94	-17.46 -2.68	16.44 6.25	16.32 3.50	24.98 5.95	-7.89 -3.13	21.38 6.72	8.88 0.31	-1.72 0.07	7.19 2.31	24.33 10.02
NAV/Price	49.59	42.17	52.22	49.34	43.19	35.30	39.23	32.91	30.83	31.98	30.35
Investment Style Equity/Stocks %	88	88	88	91	88	88	88	88	89	88	89
	12-23	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
	42										
- Standard Index 22,334	10k			<	}		N	1	}	1	1
30,940 — Category Average 29,195		{{	1	1	}	}					
Vanguard Target Retirement 2055 Fund	60k										
Growth of \$10,000	100k										

Portfolio Analysis 12-31-2023	is 12-31-2023						
Asset Allocation %	Net %	Long %	Short %	Share Chg	Share	Holdings:	Ne
Cash	1.96	3.92	1.96	since	Amount	11,184 Total Stocks , 14,977 Total Fixed-Income,	
US Stocks	53.10	53.10	0.00	11-2023		1% I ulliover hauto	
Non-US Stocks	35.28	35.28	0.00	•	102 mil	102 mil Vanguard Iotal Stock Mkt Idx Insti	
Bonds	9.59	9.60	0.01	•	807 mil	807 mil Vanguard Total Intl Stock Index Inv	
Other/Not Clsfd	0.06	0.07	0.00	•	302 mil	302 mil Vanguard Total Bond Market II ldx	
Total	100.00	101.97	1.97	•	42 mil	42 mil Vanguard Total Intl Bd II ldx Insl	
Equity Style	Portfolio Statistics		Rel	Sector Weightings	ightings	Stocks %	Rel S
Value Blend Growth	P/F Ratio TTM	Avg Index 17.8 1.04	- ^ - & - & - & - &	∿ Cyclical	ical	34.1	
agie.	P/C Ratio TTM			Basic	Basic Materials	lls 4.6	
P!W	P/B Ratio TTM	2.5 1.10	0.93	₽ Cons	Consumer Cyclical	slical 11.0	
S	Geo Avg Mkt Cap	79533 1.58	0.99	1. Finar	Financial Services	ices 15.4	
llem	\$mil			Real Estate	Estate	3.1	

ç				
- 1		Sector Weightings	Stocks %	Rel Std Index
g Index	Cat	∿ Cyclical	34.1	0.86
	9 6	Basic Materials	4.6	0.89
	0.93	Consumer Cyclical	11.0	1.00
	0.99	Financial Services	15.4	0.95
		Real Estate	3.1	0.44
		∨ Sensitive	45.5	1.17
	8.73	Communication Services	6.9	1.23
	6.54	♦ Energy	4.8	0.96
	2.93	ndustrials	11.4	0.93
		Technology	22.3	1.39
		→ Defensive	20.4	0.95
,	-	Consumer Defensive	6.5	0.96
<u>.</u> 8	Bond %	◆ Healthcare	11.2	0.97
	9 5	Utilities	2.6	0.84
=	16.57			
-	1.76			
_	0.00			

Base Currency: Ticker: ISIN: Minimum Initial Purchase:	Greater Asia	Greater Europe	Americas
USD VFFVX US92202E8479 \$1,000	18.4	17.5	64.0
Purchase Constraints: Incept: Type: Total Assets:	0.92	0.98	1.03

Objective:

Asset Allocation

Tenure: Manager:

Multiple 10.9 Years Vanguard

Family:

Operations

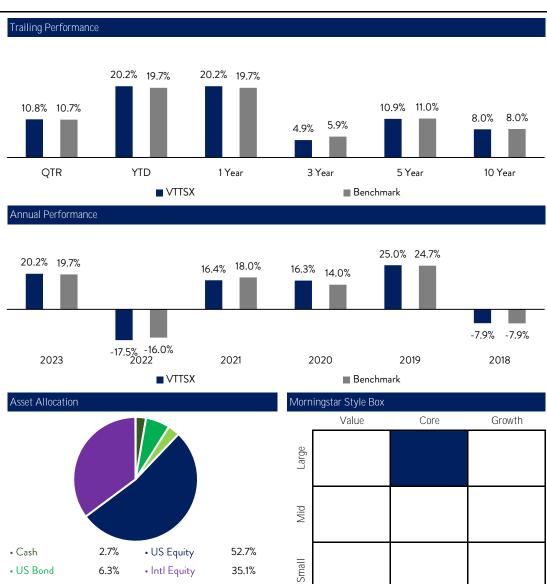
53.37 36.13 6.97 2.71

Vanguard Target Retirement 2060 Fund VTTSX

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	Walter Nejman
Longest Manager Tenure	10.92 Years
Fund Size	\$22,579,009,908

Fund Characteristics	VTTSX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$76,836	\$2,426
P/E Ratio (TTM)	17.87	-0.20
P/B Ratio (TTM)	2.45	-0.10
Est. Dividend Yield	2.32%	0.08%

Sector Allocations	VTTSX	Category	+/- Category
Materials	4.7%	5.0%	-0.3%
Communication Services	6.8%	6.5%	0.3%
Consumer Discretionary	11.0%	10.8%	0.2%
Consumer Staples	6.4%	6.2%	0.2%
Healthcare	11.2%	11.8%	-0.6%
Industrials	11.7%	11.7%	0.0%
Real Estate	3.2%	4.2%	-1.1%
Technology	22.3%	20.9%	1.4%
Energy	4.6%	5.2%	-0.7%
Financial Services	15.5%	15.4%	0.2%
Utilities	2.6%	2.3%	0.3%
Other	0.0%	0.0%	0.0%



3.1%

• Other

0.1%

• Intl Bond

Vanguard Target Retirement 2060 Fund VTTSX

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year	5-Year Quarterly				
• VTTSX	10.79%	20.18%	20.18%	4.92%	10.92%	7.97%	Performance	4Q23	3Q23	2Q23	1Q23
Benchmark	10.72%	19.74%	19.74%	5.89%	11.04%	8.04%	• VTTSX	10.79%	-3.48%	5.39%	6.64%
+/- Benchmark	0.07%	0.44%	0.44%	-0.96%	-0.12%	-0.07%	Benchmark	10.72%	-3.37%	5.12%	6.46%
Peer Group Rank	68	47	47	41	41	1	+/- Benchmark	0.07%	-0.11%	0.26%	0.19%
Annual Performance	2023	2022	2021	2020	2019	2018	5-Year Quarterly				
• VTTSX	20.18%	-17.46%	16.44%	16.32%	24.96%	-7.87%	Performance	4Q22	3Q22	2Q22	1Q22
• Benchmark	19.74%	-16.01%	18.05%	13.99%	24.73%	-7.95%	• VTTSX	9.23%	-6.64%	-14.19%	-5.68%
+/- Benchmark	0.44%	-1.45%	-1.60%	2.33%	0.23%	0.08%	Benchmark	10.12%	-6.09%	-14.48%	-5.02%
Peer Group Rank	47	25	78	46	58	27	+/- Benchmark	-0.89%	-0.54%	0.29%	-0.66%
	01/2019 -	10/2018 -	07/2018 -	04/2018 -	01/2018 -	10/2017 -	5-Year Quarterly				
Rolling 5-Year Performance	12/2023	09/2023	06/2023	03/2023	12/2022	09/2022	Performance	4Q21	3Q21	2Q21	1Q21
• VTTSX	10.92%	5.98%	7.58%	6.65%	5.18%	4.38%	• VTTSX	5.66%	-1.11%	6.61%	4.54%
Benchmark	11.04%	6.00%	7.56%	6.87%	5.35%	4.44%	• Benchmark	6.21%	-0.83%	6.12%	5.61%
+/- Benchmark	-0.12%	-0.02%	0.01%	-0.22%	-0.17%	-0.06%	+/- Benchmark	-0.55%	-0.29%	0.48%	-1.07%
Peer Group Rank	41	28	25	27	34	31					
							5-Year Quarterly				
Risk Statistics	3,	Year	5`	Year	10	Year	Performance	4Q20	3Q20	2Q20	1Q20
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark	• VTTSX	13.96%	7.39%	18.61%	-19.86%
Alpha	-0.87	0.00	0.01	0.00	0.04	0.00	Benchmark	14.56%	6.61%	17.93%	-20.86%
Beta	0.98	1.00	0.98	1.00	0.98	1.00	+/- Benchmark	-0.59%	0.77%	0.68%	0.99%
Standard Deviation	15.52	15.71	16.75	16.98	13.63	13.85					
Sharpe Ratio	0.23	0.28	0.59	0.59	0.53	0.53	5-Year Quarterly				
Information Ratio	-0.71	-	-0.10	-	-0.07	-	Performance	4Q19	3Q19	2Q19	1Q19
Treynor Ratio	2.46	3.38	9.05	9.03	6.75	6.70	• VTTSX	8.02%	0.28%	3.48%	11.48%
Upside Capture Ratio	97.29	100.00	98.97	100.00	98.49	100.00	Benchmark	7.81%	0.45%	3.37%	11.42%
Downside Capture Ratio	101.15	100.00	99.01	100.00	98.22	100.00	+/- Benchmark	0.20%	-0.18%	0.12%	0.06%

(USD) Vanguard Target Retirement 2060 Fund

renormance 12-31-2023	-31-2023				
Quarterly Returns	1st Otr	2nd Otr	3rd Otr	4th Otr	Total %
2021	4.54	6.61	-1.11	5.66	16.44
2022	-5.68	-14.19	-6.64	9.23	-17.46
2023	6.64	5.39	-3.48	10.79	20.18
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	20.18	4.92	10.92	7.97	9.52
Std 12-31-2023	20.18	I	10.92	7.97	9.52
Total Return	20.18	4.92	10.92	7.97	9.52
+/- Std Index	6.96	2.86	3.54	2.25	
+/- Cat Index	2.32	0.51	0.98	0.87	1
% Rank Cat	54	4	49	_	
No. in Cat	200	181	162	œ	

Performance Disclosure

30-day SEC Yield 01-23-24

7-day Yield

Subsidized 2.31

Unsubsidized

21.81 89

2.31

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

 Fund Expenses	Deferred Load %	Front-End Load %	Sales Charges

₹

0.00 ž

12h1 Eynonso %			2>
Gross Expense Ratio %			0.08
Risk and Return Profile			
	3 Yr	5Yr	10 Yr
	181 funds	162 funds	8 funds
Morningstar Rating™	3 ★	3 ★	1
Morningstar Risk	Low	-Avg	
Morningstar Return	Avg	Avg	I
	3 Yr	5Yr	10 Yr
Standard Deviation	15.52	16.75	13.63
Mean	4.92	10.92	7.97
Sharpe Ratio	0.23	0.59	0.53
MPT Statistics	Standard Index	3	Best Fit Index MSCI ACWI NR
Alpha	ω	3.12	-0.67
Beta	<u>.</u>	1.24	0.94
R-Squared	97.95	95	99.67
12-Month Yield			2.14%
Potential Cap Gains Exp			8.59%

03-01-2023	🕃 Silver	Medalist Rating™ 100.00	Morningstar
100.00	Data Coverage % 181 US Fund	100.00	Analyst-Driven %
Target-Date 2060	181 US Fund	**	Analyst-Driven % Morningstar Rating™

		og į	
100.00	Data Coverage %	ng " 100.00	Analyst-Driven %
Target-Date 2060	181 US Fund	***	Analyst-Driven % Morningstar Rating ***
	₽.	≤	St





lorningstar Mod Tgt









2.17	26.75 24.35 10.04	2013
2.63 1 9	28.20 7.16 2.27	2014
1.80 71 43	27.21 -1.68 0.11	2015
-2.03 21 106	29.04 8.84 0.27	2016
0.30 53 160	34.63 21.36 6.70	2017
0.82 34 201	31.18 -7.87 -3.11	2018
0.00 66 216	38.16 24.96 5.93	2019
3.43 42 257	43.59 16.32 3.50	91 2020
0.12 81 208	48.04 16.44 6.25	2021
-0.48 25 212	38.83 -17.46 -2.68	2022
2.32 54 200	45.69 20.18 6.96	100k 80k 60k 40k 12.23
+/- Category Index % Rank Cat No. of Funds in Cat	NAV/Price Total Return % +/- Standard Index Performance Quartile (within category)	Growth of \$10,000 Vanguard Target Retirement 2,060 Fund 29,464 Category Average 28,574 Standard Index 21,503 Investment Style Equity/Stocks %

2012

Portfolio Analysis 12-31-2023	s 12-31-2023						
Asset Allocation %	Net %	Long %	Short %	Chg		Holdings:	_
Cash	2.07	4.05	1.97		Amount	11,184 Total Stocks , 14,961 Total Fixed-Income,	
US Stocks	53.05	53.05	0.00	11-2023		-% -uniover nauo	
Non-US Stocks	35.31	35.31	0.00	①	56 mil	Vanguard Total Stock Mkt Idx Insti	
Bonds	9.51	9.52	0.01	43	9 mil	439 mil Vanguard Total Intl Stock Index Inv	
Other/Not Clsfd	0.06	0.07	0.00	16	162 mil	Vanguard Total Bond Market II ldx	
Total	100.00	101.99	1.99	⊕	m.	23 mil Vanguard Total Intl Bd II Idx Insl	
Equity Style	Portfolio Statistics			Sector Weightings	tings	Stocks %	Rel
Value Blend Growth	P/F Ratio TTM	Avg Index 17.8 1.04		Դ Cyclical	_	34.1	
эблед	P/C Ratio TTM	12.1 1.04		Basic Materials	laterial		
P!W	P/B Ratio TTM	2.5 1.10	0.96	Consumer Cyclical	ier Cycl	ical 11.0	
JS I	Geo Avg Mkt Cap	79477 1.58		Financial Services	al Servi	ces 15.4	
llen	\$mil			Real Estate	tate	3.1	

Equity Style	yle		Portfolio Statistics	Port	Rel	윤	Secto
Value Blos	Growth			Avg	Index	Cat	ج.
value biliti	biend Growth	7	P/E Ratio TTM	17.8	1.04	0.99	ç
		эсде	P/C Ratio TTM	12.1	1.04	0.96	ł
		biM	P/B Ratio TTM	2.5	1.10	0.96	Þ
		S	Geo Avg Mkt Cap	79477	1.58	1.07	4
		llem	\$mil				∌
Fixed-Income Style	ome Sty	е	A TEE Maturity			7	a {

		-	_	_				_		
	Ltd	ixed							Value	
	Mod	-Inco							value biend Growth	
	Ext	Fixed-Income Style							PLOWIN	-
6iH		γ̈́e	llen	S	F	iM	ııde	Pη		
Avg Eff Duration	Avg Eff Maturity		\$mil	Geo Avg Mkt Cap		P/B Ratio TTM	P/C Ratio TTM	P/E RATIO I IIVI	D/T Data TTM	
				/94//		2.5	12.1	۵./	1	ΑVG
				.58	1	1.10	1.04	.04	2	Index
6.54	8.73			1.0/	2	0.96	0.96	66.0	3	lea

Fixed-Income Style	e Style		
Ltd Mod	₽.	Avg Eff Maturity	8.73
	Эн	Avg Eff Duration	6.54
	ųξ	Ava Wtd Collings	2 q3
		JAB AA III COODO	1.00
	pay	Avg Wtd Price	1
	ΛOη		
	L		
Credit Qualit	y Brea	Credit Quality Breakdown 11-30-2023	Bond %
AAA			58.16
A			9.76
>			16.6/

0.44	0.00	0.00	14.78	16.64	9.76	58.16	ity Breakdown 11-30-2023 Bond %		ГОМ	_
7/	8	00	78	64		6][ţ	

0.96	0.96	n cat	Rel	1.99	0.00	0.01	0.00	ort % 1.97
Cons	📤 Basio	Դ Cyclical	Sector Weightings	⊕	⊕	⊕	①	Share Chg since 11-2023
Consumer Cyclical	Basic Materials	ical	ightings	23 mil	162 mil	439 mil	56 mil	Share Amount
ical 11.0	s 4.6	34.1	Stocks %	23 mil Vanguard Total Intl Bd II Idx Insl	Vanguard Total Bond Market II ldx	Vanguard Total Intl Stock Index Inv	Vanguard Total Stock Mkt Idx Instl	Holdings: 11,184 Total Stocks, 14,961 Total Fixed-Income, 1% Turnover Ratio
1.00	0.89	0.86	Rel Std Index	2.73	6.87	36.15	53.31	Net Assets %

Total Assets:	Туре:	Incept:	Purchase Constraints:	0.92	0.98
\$22,579.01 mil	MF	01-19-2012	l		

Objective:

Asset Allocation

Tenure: Manager:

Multiple 10.9 Years Vanguard

Ticker:

XSTTV US92202E8396

Base Currency:

ISIN:

Minimum Initial Purchase:

\$1,000

Family:

Operations

Greater Europe Greater Asia

Americas Regional Exposure

Stocks % 64.0 17.6

Rel Std Index

1.03

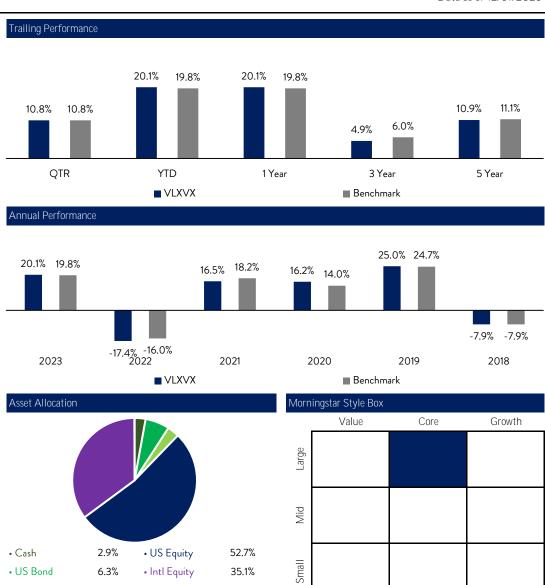
Below B NR

Vanguard Target Retirement 2065 Fund VLXVX

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	Walter Nejman
Longest Manager Tenure	6.50 Years
Fund Size	\$6,143,184,922

Fund Characteristics	VLXVX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	=
Average Market Cap (mil)	\$76,873	-\$27
P/E Ratio (TTM)	17.87	0.09
P/B Ratio (TTM)	2.45	-0.05
Est. Dividend Yield	2.32%	0.04%

Sector Allocations	VLXVX	Category	+/- Category
Materials	4.7%	4.9%	-0.2%
Communication Services	6.8%	6.7%	0.1%
Consumer Discretionary	11.0%	10.9%	0.1%
Consumer Staples	6.4%	6.2%	0.2%
Healthcare	11.2%	11.2%	0.0%
Industrials	11.7%	11.7%	0.0%
Real Estate	3.2%	3.4%	-0.3%
Technology	22.3%	21.4%	0.9%
Energy	4.6%	5.2%	-0.6%
Financial Services	15.5%	15.9%	-0.4%
Utilities	2.6%	2.4%	0.3%
Other	0.0%	0.0%	0.0%



3.1%

• Other

0.1%

• Intl Bond

Vanguard Target Retirement 2065 Fund VLXVX

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year	5-Year Quarterly				
• VLXVX	10.79%	20.15%	20.15%	4.95%	10.91%	-	Performance	4Q23	3Q23	2Q23	1Q23
• Benchmark	10.80%	19.84%	19.84%	5.98%	11.09%	-	• VLXVX	10.79%	-3.46%	5.34%	6.64%
+/- Benchmark	-0.02%	0.31%	0.31%	-1.03%	-0.19%	-	 Benchmark 	10.80%	-3.37%	5.19%	6.41%
Peer Group Rank	65	54	54	35	75	-	+/- Benchmark	-0.02%	-0.09%	0.16%	0.23%
Annual Performance	2023	2022	2021	2020	2019	2018	5-Year Quarterly				
• VLXVX	20.15%	-17.39%	16.46%	16.17%	24.96%	-7.95%	Performance	4Q22	3Q22	2Q22	1Q22
• Benchmark	19.84%	-15.95%	18.17%	13.99%	24.73%	-7.95%	• VLXVX	9.24%	-6.60%	-14.20%	-5.63%
+/- Benchmark	0.31%	-1.44%	-1.71%	2.18%	0.23%	0.00%	• Benchmark	10.03%	-6.04%	-14.44%	-4.98%
Peer Group Rank	54	19	69	63	100	1	+/- Benchmark	-0.79%	-0.56%	0.24%	-0.65%
	01/2019 -	10/2018 -	07/2018 -	04/2018 -	01/2018 -	10/2017 -	5-Year Quarterly				
Rolling 5-Year Performance	12/2023	09/2023	06/2023	03/2023	12/2022	09/2022	Performance	4Q21	3Q21	2Q21	1Q21
• VLXVX	10.91%	5.97%	7.55%	6.64%	5.15%	4.36%	• VLXVX	5.66%	-1.11%	6.61%	4.55%
• Benchmark	11.09%	6.04%	7.60%	6.90%	5.38%	4.50%	• Benchmark	6.25%	-0.80%	6.16%	5.61%
+/- Benchmark	-0.19%	-0.07%	-0.05%	-0.25%	-0.23%	-0.13%	+/- Benchmark	-0.59%	-0.31%	0.44%	-1.06%
Peer Group Rank	75	25	50	25	38	50					
							5-Year Quarterly				
Risk Statistics	3	Year	5`	Year	10	Year	Performance	4Q20	3Q20	2Q20	1Q20
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark	• VLXVX	13.95%	7.36%	18.59%	-19.92%
Alpha	-0.94	0.00	-0.06	0.00	-	-	 Benchmark 	14.56%	6.61%	17.93%	-20.86
Beta	0.98	1.00	0.99	1.00	-	-	+/- Benchmark	-0.61%	0.74%	0.66%	0.94%
Standard Deviation	15.52	15.70	16.76	16.97	-	-					
Sharpe Ratio	0.23	0.29	0.58	0.59	-	-	5-Year Quarterly				
Information Ratio	-0.78	-	-0.16	-	-	-	Performance	4Q19	3Q19	2Q19	1Q19
Treynor Ratio	2.48	3.47	9.03	9.09	-	-	• VLXVX	8.00%	0.27%	3.52%	11.47%
Upside Capture Ratio	97.16	100.00	98.86	100.00	-	-	• Benchmark	7.81%	0.45%	3.37%	11.42%
Downside Capture Ratio	101.29	100.00	99.17	100.00	-	-	+/- Benchmark	0.19%	-0.19%	0.16%	0.06%

(USD) Vanguard Target Retirement 2065 Fund

Performance 12-31-2023	31-2023				
Quarterly Returns	1st Otr	2nd Otr	3rd Otr	4th Otr	Total %
2021	4.55	6.61	-1.11	5.66	16.46
2022	-5.63	-14.20	-6.60	9.24	-17.39
2023	6.64	5.34	-3.46	10.79	20.15
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	20.15	4.95	10.91	1	8.44
Std 12-31-2023	20.15	I	10.91		8.44
Total Return	20.15	4.95	10.91	1	8.44
+/- Std Index	6.92	2.88	3.52		
+/- Cat Index	2.28	0.53	0.97	ı	1
% Rank Cat	ස	45	85	ı	
No. in Cat	175	123	9	1	

2.32	2.32	30-day SEC Yield 12-31-23
	I	7-day Yield
Unsubsidized	Subsidized	

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

 Fund Expenses	Deferred Load %	Front-End Load %	Sales Charges

Fund Expenses			
Management Fees %			0.0
12b1 Expense %			z
Gross Expense Ratio %			0.0
Risk and Return Profile			
	3 Υr	5Yr	10`
	123 funds	9 funds	,
Morningstar Rating™	3 ★	1	1
Morningstar Risk	Low		ı

2.08%		Potential Cap Gains Exp
2.06%		12-Month Yield
99.69	97.92	R-Squared
0.94	1.24	Beta
-0.65	3.14	Alpha
USD ACWI NA		
Best Fit Index	Standard Index	MPT Statistics
0.59 —	0.23 (Sharpe Ratio
10.91 —	4.95 10	Mean
16.77 —	15.52 16	Standard Deviation
5 Yr 10 Yr	3 Yr	
	Avg	Morningstar Return
	Low	Morningstar Risk
	3 ⊁	Morningstar Rating [™]
9 funds —	123 funds 9 fr	į.
5 Yr 10 Yr	3 Yr	
		Risk and Return Profile
0.08		Gross Expense Ratio %
NA		12b1 Expense %
0.00		Management Fees %

₽ AA

03-01-2023	👺 Silver	Medalist Rating 100.00	Morningstar
100.00	Data Coverage % 123 US Fund	100.00	Analyst-Driven %
Target-Date 2065+	123 US Fund	***	Analyst-Driven % Morningstar Rating **
	_	_	

		9	
100.00	Data Coverage %	100.00	Analyst-Driven %
Target-Date 2065+	123 US Fund	***	Analyst-Driven % Morningstar Rating **



tarnatilig	Standard Index
	Morningstar Mo
nd	Risk TR USD
ate 2065+	

1100

gt













2065+ US Fund Target-Date Morningstar Cat

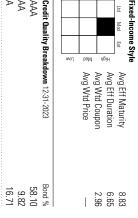
No. of Funds in Cat	% Rank Cat	+/- Category Index	Performance Quartile (within category)	+/- Standard Index	Total Return %	NAV/Price	Investment Style Equity/Stocks %		Remove \$10,000 Vanguard Target Retirement 2065 Fund 16,641 Category Average 16,411 Standard Index 14,343
175	ස	2.28		6.92	20.15	29.95	88	12-23	100 80k 60k 20k
162	16	-0.41		-2.62	-17.39	25.44	87	2022	*
134	76	0.13		6.26	16.46	31.42	88	2021	1
55	ස	3.28		3.35	16.17	27.50	90	2020	1
17	79	0.00		5.94	24.96	24.05	88	2019	}
16	25	0.75		-3.19	-7.95	19.61	88	2018	
	ı					21.70	88	2017	1
	ı				1		I I	2016	
	1	ı		1	ı		I	2015	
	1			1	ı		I III	2014	
	1						<u> </u>	2013	

2012

Dandalla Analysi	1001000					
I ditioned American 12-01-202	9 12-01-2020					
Asset Allocation %	Net %	Long %	Short %	Share Chg	Share	Holdings:
Cash	2.23	4.19	1.96		Amount	11,184 Total Stocks , 14,908 Total Fixed-Income,
US Stocks	53.00	53.00	0.00	11-2023		-% - uniover nauo
Non-US Stocks	35.23	35.23	0.00	①	15 mil	Vanguard Total Stock Mkt Idx Insti
Bonds	9.47	9.48	0.01		9 mil	119 mil Vanguard Total Intl Stock Index Inv
Other/Not Clsfd	0.06	0.07	0.00	+	44 mil	Vanguard Total Bond Market II ldx
Total	100.00	101.98	1.98	•	6 mil	6 mil Vanguard Total Intl Bd II Idx Insl
Equity Style	Portfolio Statistics	Port Rel	Rel	Sector Weightings	tings	Stocks %
Value Blend Growth	P/F Ratio TTM		4 1 00	∿ Cyclical	_	34.5
Гэгде	P/C Ratio TTM		4 0.98	Basic Materials	laterial	4.7
!W	P/B Ratio TTM	_	_	Consumer Cyclical	ıer Cycl	ical 11.0
S F	a b			Financial Services	al Servi	ces 15.5
llsm	\$mil			Real Estate	tate	3.2

Equity Style		Portfolio Statistics	Port	Rel	Rel	Sector
Value Bland Croust	Grounth		Avg	Index	Cat	2
_	┛.	P/E Ratio TTM	17.8	1.04	1.00	
	96,1	P/C Ratio TTM	12.1	1.04	0.98	
	ÞiM	P/B Ratio TTM	2.5	1.10	0.98	
	is .	Geo Avg Mkt Cap	79517	1.58	1.03	1 .
	llen	\$mil				B
Fixed-Income Style	ne Style				8	1 2 0 0

Cover	llem2 biM agreJ	P/E Ratio TTM P/C Ratio TTM P/B Ratio TTM Geo Avg Mkt Cap \$mil	17.8 12.1 2.5 79517	1.04 1.04 1.10 1.58	1.00 0.98 0.98 1.03
	ıde	P/C Ratio TTM	12.1	1.04	0.98
	biM	P/B Ratio TTM	2.5	1.10	0.98
	S	Geo Avg Mkt Cap	79517	1.58	1.03
	llem	\$mil			
ome Style	€				
Ţ.		Avg Eff Maturity			



Util	Sensiti Commu Energy Industr Techno	Sector W Cyc Bas Cor Fina Rea	since 11-2023
Defensive Consumer Defensive Healthcare Utilities	Sensitive Communicatic Energy Industrials Technology	Sector Weightings Cyclical Basic Materials Consumer Cyclical Financial Services Real Estate	Amount 15 mil 119 mil 44 mil 6 mil
fensive	Sensitive Communication Services Energy Industrials Technology	als Slical Vices	11, 184 Total Stocks , 14,908 Total Fixed-Income 1% Turmover Ratio Vanguard Total Stock Mkt Idx Inst! Vanguard Total Int! Stock Index Inv Vanguard Total Bond Market II Idx Vanguard Total Int! Bd II Idx Ins!
20.2 6.4 11.2 2.6	45.3 6.8 4.6 11.7 22.3	Stocks % 34.5 4.7 11.0 15.5 3.2	,908 Total Fixed-Income, ck Mkt Idx InstI Stock Index Inv id Market II Idx Bd II Idx InsI
0.94 0.93 0.97 0.83	1.16 1.20 0.92 0.95 1.39	Rel Std Index 0.87 0.91 1.00 0.95 0.45	% 53.27 36.07 6.85 2.72

Ticker: ISIN: Minimum Initial Purchase:	Base Currency:	Greater Asia	Greater Europe	Americas	Regional Exposure	NR	Below B	В	BB	BBB
VLXVX US92202E6804 \$1,000	USD	18.4	17.6	64.0	Stocks %					
		0.92	0.98	1.03	Rel Std Index	0.22	0.43	0.00	0.00	14.71
Incept: Type: Total Assets:	Purchase Constraints:									

Asset Allocation	6.5 Years	Multiple	Vanguard	
Minimum Initi	ISIN:	Ticker:	Base Currenc	Greater Asia

Family:

Operations

Tenure: Manager:

Objective:

\$1,000	Purchase:
US92202E6804	
VLXVX	
USD	

\$1,000	US92202E6804	VLXVX	USD
Ţ	J	ь	7

T-+- ^	Type:	Incept:	Purchase Constraints	
			ints:	

\$6,143.18 mil	MF	07-12-2017

Ξ	<
	`
1	쉺
Ī	€
2	3
2	록
	_

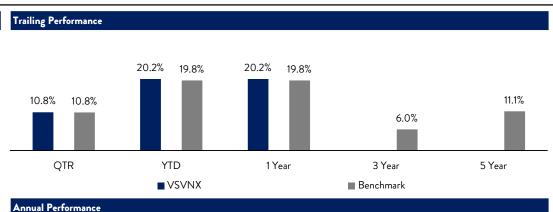
Vanguard Target Retirement 2070 Fund

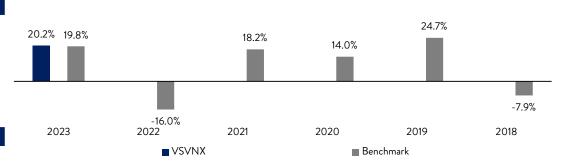
Fund Fact Sheet VSVNX Data as of 12/31/2023

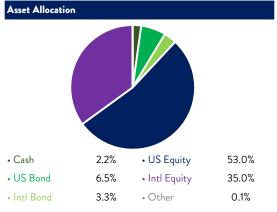
Product Details	
Name	Vanguard Target Retirement 2070 Fund
Ticker	VSVNX
Expense Ratio	0.080%
Morningstar Category	US Fund Target-Date 2065+
Benchmark	S&P Target Date 2065+ TR USD
Inception Date	6/28/2022
Longest Tenured Manager	Walter Nejman
Longest Manager Tenure	1.58 Years
Fund Size	\$460,423,985

Fund Characteristics	VSVNX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	-
Average Market Cap (mil)	\$77,167	\$267
P/E Ratio (TTM)	17.89	0.11
P/B Ratio (TTM)	2.46	-0.05
Est. Dividend Yield	2.31%	0.04%

Sector Allocations	VSVNX	Category	+/- Category
Materials	4.7%	4.9%	-0.3%
Communication Services	6.8%	6.7%	0.1%
Consumer Discretionary	11.0%	10.9%	0.1%
Consumer Staples	6.4%	6.2%	0.2%
Healthcare	11.2%	11.2%	0.0%
Industrials	11.7%	11.7%	0.0%
Real Estate	3.2%	3.4%	-0.3%
Technology	22.3%	21.4%	0.9%
Energy	4.6%	5.2%	-0.6%
Financial Services	15.5%	15.9%	-0.4%
Utilities	2.6%	2.4%	0.2%
Other	0.0%	0.0%	0.0%









Vanguard Target Retirement 2070 Fund VSVNX

Fund Fact Sheet
Data as of 12/31/2023

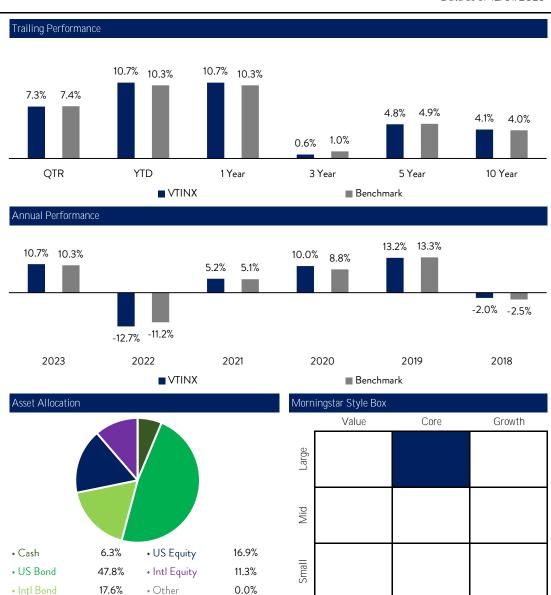
Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year	5-Year Quarterly				
• VSVNX	10.83%	20.24%	20.24%	-	-	-	Performance	4Q23	3Q23	2Q23	1Q23
Benchmark	10.80%	19.84%	19.84%	5.98%	11.09%	-	• VSVNX	10.83%	-3.47%	5.39%	6.64%
+/- Benchmark	0.03%	0.40%	0.40%	-	-	-	Benchmark	10.80%	-3.37%	5.19%	6.41%
Peer Group Rank	64	50	50	-	-	-	+/- Benchmark	0.03%	-0.10%	0.20%	0.24%
Annual Performance	2023	2022	2021	2020	2019	2018	5-Year Quarterly				
• VSVNX	20.24%	-	-	-	-	-	Performance	4Q22	3Q22	2Q22	1Q22
• Benchmark	19.84%	-15.95%	18.17%	13.99%	24.73%	-7.95%	• VSVNX	9.21%	-6.57%	-	-
+/- Benchmark	0.40%	-	-	-	-	-	Benchmark	10.03%	-6.04%	-14.44%	-4.98%
Peer Group Rank	50	-	-	-	-	-	+/- Benchmark	-0.81%	-0.52%	-	-
	01/2019 -	10/2018 -	07/2018 -	04/2018 -	01/2018 -	10/2017 -	5-Year Quarterly				
Rolling 5-Year Performance	12/2023	09/2023	06/2023	03/2023	12/2022	09/2022	Performance	4Q21	3Q21	2Q21	1Q21
• VSVNX	-	-	-	-	-	-	• VSVNX	-	-	-	-
• Benchmark	11.09%	6.04%	7.60%	6.90%	5.38%	4.50%	Benchmark	6.25%	-0.80%	6.16%	5.61%
+/- Benchmark	-	-	-	-	-	-	+/- Benchmark	-	-	-	-
Peer Group Rank	-	-	-	-	-	-					
							5-Year Quarterly				
Risk Statistics	3 \	Year	5`	Year	10	Year	Performance	4Q20	3Q20	2Q20	1Q20
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark	• VSVNX	-	-	-	-
Alpha	-	0.00	-	0.00	-	-	• Benchmark	14.56%	6.61%	17.93%	-20.86%
Beta	-	1.00	-	1.00	-	-	+/- Benchmark	-	-	-	-
Standard Deviation	-	15.70	-	16.97	-	-					
Sharpe Ratio	-	0.29	-	0.59	-	-	5-Year Quarterly				_
Information Ratio	-	-	-	-	-	-	Performance	4Q19	3Q19	2Q19	1Q19
Treynor Ratio	-	3.47	-	9.09	-	-	• VSVNX	-	-	-	-
Upside Capture Ratio	-	100.00	-	100.00	-	-	Benchmark	7.81%	0.45%	3.37%	11.42%

Operations Family: Manager: Tenure: Objective:	12-Month Yield Potential Cap Gains Exp	Beta R-Squared	MP1 Statistics Alpha	Sharpe Ratio	Standard Deviation Mean		Morningstar Return	Morningstar Rating™	Risk and Return Profile	Gross Expense Ratio %	12b1 Expense %	Management Fees %	Deterred Load %	Front-End Load %	Sales Charges	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	Current performance may b	shares, when sold or redee	does not guarantee future i principal value of an invest	The performance data quoted repre	Performance Disclosure The Overall Morningstar Raderived from a weighted av	30-day SEC Yield	7-day Viold	No. in Cat 175	% Rank Cat 58				Trailing Returns 1 Yr Load-adj Mthly 20.24	2023 6.64	2021 – 2022 –	Quarterly Returns 1st Otr	Performance 12-31-2023	Vanguard I Fund (USD)	licicase date 1z-31-zoz3
Vanguard Multiple 1.6 Years Asset Allocation	S	1 1	Standard Index E			3 Yr 5 Yr		123 funds 9 funds	3 Yr	%						ance data current to the mo 1-662-7447 or visit www.vai	Current performance may be lower or higher than return data	shares, when sold or redeemed, may be worth more or less than their original $\cos t$	does not guarantee future results. The investment return and principal value of an investment will fluctuate: thus an investor's	metrics. ted represents past perform	Performance Disclosure Performance Disclosure Gride Overal Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year transfer of three-, five-, and 10-year transfer of the three-, five-, and 10-year transfer of the three-, five-, and 10-year transfer of the three-, five-, and 10-year transfer of three-, and 10-year transfer	1	Subsidized (5	8		7		77 3 Yr 5 Yr 10 Yr	5.39 -3.47 1	6.57 9.21	tr 2nd Otr 3rd Otr 4th Otr	23	Target Ketirement 2070))	
	0.30%		Best Fit Index			10 Yr		1 1	10 Yr	0.08	NA	0.00	NA	¥.		nst recent nguard.com.	rn data	r less than	investor's	ance and	ted returns, ınd 10-year		Unsubsidized	ļ			 .	- 13.76 - 13.76	Yr Incept — 13.76	١	21 –	Ωtr Total %		tirem	•
Base Currency: Ticker: ISIN: Minimum Initial Purchase:	Regional Exposure Americas Greater Europe Greater Asia	NR	B BB	A BBB	AAA AAA	Credit Quality B			Ltd Mod Ext				Value Blend Growth	Equity Style	Total	Bonds Other/Not Clsfd	US Stocks	Asset Allocation % Cash	Portfolio Ana	<u> </u>	1 1		1 1	<u> </u>			2012 2013							ent 20,	2
r. al Purchase:	e ure					Credit Quality Breakdown 11-30-2023		Avg Wtd Coupon Avg Wtd Price					P/E Ratio TTM	Portfolio		fd «	0	п%	Portfolio Analysis 12-31-2023		1 1		1 1		 		2014								
USD VSVNX US92202E6648 \$1,000	Stocks % 64.2 17.5 18.3)-2023		Coupon Price	Maturity		ō					9.89 0.06				 	1 1		1 1	 			2015 2016							Silver 03-01-2023	-inactor Mode
648	Rel Std Index 1.03 0.98 0.91	0.45 0.23	0.00 0.00	16.74 14.82	57.83 9.93	Bond %			8.73		79829 1.58 1.04	1.10	17.9 1.04 1.00 17.1 1.05 0.98	윤		9.90 0.01 0.07 0.00		Long % Short % 3.64 2.10		<u> </u>	1 1		<u> </u>	<u> </u>			2017 2018								.II.at Dating™ A
Purchase Con Incept: Type: Total Assets	98 98	। ळ क	i:8 8	74 82			→ Defensive	■ 🗱 🗈	E0 .		≱ 4)	ے 🏿	Rel Sector Weightings	•	+ + (Share Chg since		<u> </u>	1 1		 	 			2019 2020							100.00 Data Coverage % 100.00	Morningstar Medalist Rating [™] Analyst-Driven %
Purchase Constraints: Incept: Type: Total Assets:					SS	Consumer Defensive Healthcare	sive	rials	Communication Services	five	Financial Services Real Estate	Consumer Cyclical	Cyclical Basic Materials	htings	506,584 Vangu		1 mil Vangu	Share Holding Amount 11,184		<u> </u>			1 1	20.02			2021 2022		•					Morningstar Mod Tgt Risk TR USD	Standard Index
— 06-28-2022 MF \$460.42 mil									ces						Vanguard Total Intl Bd II Idx Insl	Vanguard Total Intl Stock Index Inv Vanguard Total Bond Market II Idx	2% Turnover Hatto Vanguard Total Stock Mkt Idx Inst!	Holdings: 11,184 Total Stocks , 15,107 Total Fixed-Income,		- 175 N	ω ω		- 20.24 I - 7.02 +	23.70	88		7 12-23		10k	20k	40k	60k	~	O g	
2022 2 mil					2.6	6.5 11 3	20.4	11.4 22.4	6.9	45.5	3.1 3.1	11.0	34.1 4.6	Stocks %	ldx Insl	k Index Inv arket II Idx	kt ldx Instl	otal Fixed-Income,		No. of Funds in Cat	+/- Category Index % Rank Cat	Performance Quartile	lotal Return % +/- Standard Index	NAV/Price	-quity/Stocks %	Investment Style			11,479	12,250 Standard Index	2070 Fulid 12,270 — Category Ave	Vanguard Tan	Growth of \$10,000	1 2060	
					0.84	0.96 0.97	0.95	0.93 1.40	1.23	1.17	0.95 0.44	1.00	0.86 0.89	Rel Std Index	2.91	35.98 7.07	53.65	Net Assets %				tile							>	24 20	T ACID	Vanguard Target Retirement		US Fund Target-Date 2065+	Morningstar Cat

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	Walter Nejman
Longest Manager Tenure	10.92 Years
Fund Size	\$36,503,965,512

Fund Characteristics	VTINX	+/- Category
% Assets in Top 10 Holdings	N/A (Fund of Funds)	=
Average Market Cap (mil)	\$76,661	-\$1,403
P/E Ratio (TTM)	17.85	-0.15
P/B Ratio (TTM)	2.45	-0.06
Est. Dividend Yield	2.32%	-0.02%

Sector Allocations	VTINX	Category	+/- Category
Materials	4.7%	4.6%	0.1%
Communication Services	6.8%	6.4%	0.4%
Consumer Discretionary	11.0%	10.5%	0.5%
Consumer Staples	6.4%	5.9%	0.5%
Healthcare	11.2%	10.8%	0.4%
Industrials	11.7%	11.0%	0.7%
Real Estate	3.2%	6.0%	-2.8%
Technology	22.3%	21.5%	0.8%
Energy	4.6%	5.0%	-0.5%
Financial Services	15.6%	15.7%	-0.1%
Utilities	2.6%	2.6%	0.0%
Other	0.0%	0.0%	0.0%



Vanguard Target Retirement Income Fund VTINX

Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year	5-Year Quarterly				
• VTINX	7.34%	10.74%	10.74%	0.56%	4.83%	4.09%	Performance	4Q23	3Q23	2Q23	1Q23
Benchmark	7.39%	10.35%	10.35%	1.00%	4.90%	3.98%	• VTINX	7.34%	-2.35%	1.36%	4.23%
+/- Benchmark	-0.05%	0.39%	0.39%	-0.44%	-0.07%	0.11%	• Benchmark	7.39%	-2.61%	1.59%	3.85%
Peer Group Rank	57	40	40	40	41	21	+/- Benchmark	-0.05%	0.26%	-0.23%	0.37%
Annual Performance	2023	2022	2021	2020	2019	2018	5-Year Quarterly				
• VTINX	10.74%	-12.74%	5.25%	10.02%	13.16%	-1.99%	Performance	4Q22	3Q22	2Q22	1Q22
• Benchmark	10.35%	-11.17%	5.11%	8.81%	13.33%	-2.54%	• VTINX	3.74%	-4.64%	-7.37%	-4.77%
+/- Benchmark	0.39%	-1.57%	0.14%	1.21%	-0.17%	0.55%	• Benchmark	4.50%	-3.97%	-7.29%	-4.52%
Peer Group Rank	40	46	64	32	48	16	+/- Benchmark	-0.76%	-0.67%	-0.09%	-0.25%
	01/2019 -	10/2018 -	07/2018 -	04/2018 -	01/2018 -	10/2017 -	5-Year Quarterly				
Rolling 5-Year Performance	12/2023	09/2023	06/2023	03/2023	12/2022	09/2022	Performance	4Q21	3Q21	2Q21	1Q21
• VTINX	4.83%	2.69%	3.45%	3.26%	2.30%	1.96%	• VTINX	2.01%	-0.13%	3.23%	0.08%
• Benchmark	4.90%	2.59%	3.46%	3.27%	2.33%	1.88%	• Benchmark	1.99%	-0.03%	3.06%	0.03%
+/- Benchmark	-0.07%	0.09%	-0.01%	-0.02%	-0.03%	0.08%	+/- Benchmark	0.03%	-0.11%	0.17%	0.04%
Peer Group Rank	41	22	32	29	31	24					
							5-Year Quarterly				
Risk Statistics	3`	Year	5`	Year	10	Year	Performance	4Q20	3Q20	2Q20	1Q20
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark	• VTINX	5.15%	3.12%	7.84%	-5.91%
Alpha	-0.37	0.00	-0.08	0.00	0.11	0.00	 Benchmark 	4.93%	2.73%	8.18%	-6.69%
Beta	1.03	1.00	1.01	1.00	1.00	1.00	+/- Benchmark	0.22%	0.39%	-0.34%	0.77%
Standard Deviation	8.48	8.18	7.93	7.83	6.10	6.07					
Sharpe Ratio	-0.19	-0.14	0.39	0.40	0.47	0.45	5-Year Quarterly				
Information Ratio	-0.44	-	-0.08	-	0.15	-	Performance	4Q19	3Q19	2Q19	1Q19
Treynor Ratio	-1.89	-1.51	2.80	2.90	2.75	2.64	• VTINX	2.60%	1.52%	2.97%	5.50%
Upside Capture Ratio	102.09	100.00	101.04	100.00	100.36	100.00	• Benchmark	3.05%	1.32%	2.82%	5.57%
Downside Capture Ratio	106.23	100.00	102.40	100.00	98.89	100.00	+/- Benchmark	-0.45%	0.21%	0.15%	-0.07%

(USD) Vanguard Target Retirement Income Fund

Mod Incm TR USD Morningstar Lifetime Category Index

US Fund Target-Date Retirement

Morningstar Cat

4....4ek

Vanguard Target Retirement Income Fund 17,102

. 100k

Growth of \$10,000

₹:20k <u>.</u>

Category Average 16,437Standard Index 22,334

Performance 12-31-2023	31-2023				
Quarterly Returns	1st Otr	2nd Otr	3rd Otr	4th Otr	Total %
2021	0.08	3.23	-0.13	2.01	5.25
2022	-4.77	-7.37	-4.64	3.74	-12.74
2023	4.23	1.36	-2.35	7.34	10.74
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	10.74	0.56	4.83	4.09	4.87
Std 12-31-2023	10.74		4.83	4.09	4.87
Total Return	10.74	0.56	4.83	4.09	4.87
+/- Std Index	-2.49	-1.50	-2.55	-1.63	
+/- Cat Index	0.67	-0.74	-0.59	-0.09	
% Rank Cat	41	39	40	26	
No. in Cat	152	146	130	79	

30-day SEC Yield 01-23-24

7-day Yield

Subsidized 2.99

Unsubsidized

13.02 10.74 -2.49

65

2022

12-23

65

Fixed-Income/Bond %

nvestment Style

-12.74 12.24

Total Return %

2.03

2.99

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

281 293

167

61 ď

No. of Funds in Cat % Rank Cat

Net Assets

37.31

-0.5C

0.67

+/- Category Index (within category)

Performance Quartile +/- Standard Index

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

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

Fees and Expenses

Sales Charges Front-End Load % Deferred Load %	2 2
Fund Expenses	
Management Fees %	0.0
12b1 Expense %	z
Gross Expense Ratio %	2

10 Yr	5 Yr	3 Yr	
+Avg	Avg	Avg	Morningstar Return
-Avg	Avg	Avg	Morningstar Risk
4*	3 ★	3 ★	Morningstar Rating [™]
10 Yr 79 funds	5 Yr 130 funds	3 Yr 146 funds	<u>!</u>
			Risk and Return Profile
0.08			Gross Expense Ratio %
NA			12b1 Expense %
0.00			Management Fees %
			Fund Expenses
N			Deferred Load %
N			Front-End Load %

Avg Eff Maturity Avg Eff Duration Avg Wtd Coupon

Gross Expense Ratio %			0.08		llsm2	\$mil	
Risk and Return Profile				Fixed-Income Style	ome Style	_	
	3 Yr 146 funds	5 Yr 130 funds	10 Yr 79 funds	Ltd Mod	E E		ratio
Morningstar Rating™ Morningstar Risk	Ava ★	Ava ★	-Ava		рәМ	Avg Wtd Coupo	rice
Morningstar Return	Avg	Avg	+Avg		M01		
	3 Yr	5Yr	10 Yr	Credit Ou	ality Brea	Credit Onality Breakdown 11-30-2023	023
Standard Deviation	8.48	7.93	6.10	AAA	and block		2
Mean	0.56	4.83	4.09	A			
Sharpe Ratio	-0.19	0.39	0.47	A			
MPT Statistics	Standard Index	<u> </u>	Best Fit Index Morningstar US od Con Tgt Alloc	888			
Alnha	-1.78	20	-1.00	Below B			
Beta	0.67	7	0.86				
R-Squared	95.45	5	98.87	Regional Exposure	Exposure		Stor
12-Month Yield			2.95%	Americas	05		
Potential Cap Gains Exp			7.40%	Greater Europe	urope		
				Greater Asia	Asia		
Operations							
Family: Va	Vanguard			Base Currency:	rency:		OSD
Manager: Mu	Multiple			Ticker:			₹
Tenure: 10.	10.9 Years			ISIN:			US9

Stocks % 63.9 17.6 18.5

67 56	-0.56 -0.58	12.19 12.50 8.23 5.87 -3.82 -8.44	61 66	2012 2013			Morningstar Medalist Rating Silver 03-01-2023
19	1.45	12.91 5.54 0.65	66	2014	$\ $		
7	1.12	12.45 -0.17 1.62	68	2015	$\langle \rangle$		Analyst-Driven % 100.00 Data Coverage % 100.00
41	-0.73	12.81 5.25 -3.32	68	2016			
62	-0.07	13.55 8.47 -6.18	67	2017	1	\	Morningstar Rating ** **** 146 US Fund Target-Date Retirement
21	0.21	12.75 -1.99 2.77	69	2018		}	Rating
49	-0.11	14.05 13.16 -5.87	67	2019	1	}	Standa Morni Risk T
36	-0.54	14.93 10.02 -2.80	68	2020	1	K	Standard Index Morningstar Mod Tgt Risk TR USD
65	-2.37	14.46 5.25 -4.94	22	2021			And Tgt

Portfolio Analysis 12-31-2023	s 12-31-2023				
Asset Allocation %	Net %	Long %	Short %	Chg	
Cash	2.48	14.20	11.71	since Amount	
US Stocks	17.50	17.50	0.00	11-2023	
Non-US Stocks	11.71	11.71	0.00	① 1,420 mil	Vanguard Total Bond Market II Idx
Bonds	68.27	68.32	0.06	① 30 mil	30 mil Vanguard Total Stock Mkt Idx InstI
Other/Not Clsfd	0.04	0.04	0.00	⊕ 223 mil	223 mil Vanguard Total Intl Bd II Idx Insl
Total	100.00	111.77	11.77	⊕ 248 mil	248 mil Vanguard Shrt-Term Infl-Prot Sec I
Equity Style	Portfolio Statistics		Rel Rel		C
Value Blend Growth	P/F Ratio TTM	Avg Inc 17.8 1	Index Cat	Sector Weightings	Stocks %
эблед	P/C Ratio TTM		-	∿ Cyclical	34.2
οiM	P/B Ratio TTM	2.4 1.10	10 0.98	Basic Materials	als 4.6
is i	a	79291 1.57		Consumer Cyclical	clical 11.0
ller	\$mil			Financial Services	vices 15.5
					0

0.92	0.99	1.03	Rel Std Index	0.38	O 35	0.00	0.00	11.57	13.15	7.94	66.78	Bond %			93.99	2.42	5.63	7.34			1.57	1.10	1.04	Avg Index Cat 17.8 1.04 0.99		111.// 11.//	i			11./1
									Utilities	Healincare		Consumor Defension	→ Defensive	Technology	Industrials	Energy	Communication Services	∨ Sensitive	Real Estate	Financial Services	Consumer Cyclical	Basic Materials	Դ Cyclical	Sector Weightings	(-) 233 IIII Vanguaru lutat II	1111 044	248 mil	223 mil	 30 mil Vanguard Total S 	
									2.6	11.2	1 0.0	0 1	20.4	22.3	11.4	4.8	6.9	45.4	3.1	15.5	11.0	4.6	34.2	Stocks %	vangualu Total IIIti Stock IIIdex IIIv	-tl Otl. l - d - d - d	Vanguard Shrt-Term Infl-Prot Sec I	ntl Bd II Idx Insl	Vanguard Total Stock Mkt Idx Instl	
									0.84	0.97	0.90	30.0	0 95	1.39	0.93	0.97	1.23	1.17	0.44	0.95	1.00	0.89	0.86	Rel Std Index	11.33	11 00	16 20	16.22	17.58	

©2024 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar. (2) may include, or be derived from, account information provided by your financial professional which cannot be verified by Morningstar. (3) may not be copied or redistributed. (4) do not constitute investment advice offered by Morningstar. (3) may not provided supply for informational purposes and therefore a re not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from or related to, this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and as subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar (Baseach Services LLC, registered with and governed by the US. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be preceded or accompanied by a prospectus, or equivalent, and disclosure statement. Hease see important disclosures at the end of this report.

Objective:

Asset Allocation

Minimum Initial Purchase:

\$1,000 US92202E1029

> Type: Incept:

돆 10-27-2003

\$36,503.97 mil

Purchase Constraints:

Total Assets:





Vanguard Target Retirement 2020 Trust I

Balanced fund (stocks and bonds)

Fund facts

Risk level	Total net	Expense ratio	Inception	Fund
Low < High	assets	as of 03/31/23	date	number
1 2 3 4 5	\$6,083 MM	0.065%	06/22/07	1464

Investment objective

Vanguard Target Retirement 2020 Trust I seeks to provide capital appreciation and current income consistent with its current asset allocation.

Investment strategy

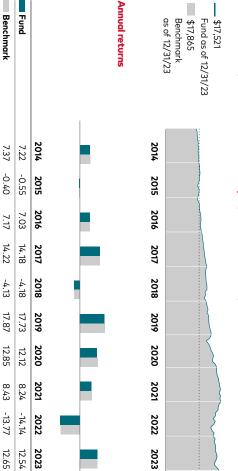
The trust invests in other Vanguard mutual funds and trusts according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2020 (the target year). The trust's asset allocation will become more conservative over time, meaning that the percentage of assets allocated to stocks will decrease while the percentage of assets allocated to bonds and other fixed income investments will increase. Within seven years after 2020, the trust's asset allocation should resemble that of the Target Retirement Income Trust I. The underlying holdings are: Vanguard Total Stock Market Index Fund, Vanguard Institutional Total International Stock Market Index Fund, and Vanguard Total Index Fund. Short-Term Inflation-Protected Securities Fund.

The trust's indirect bond holdings are a diversified mix of short-, intermediate-, and long-term U.S. government, U.S. agency, and investment-grade U.S. corporate bonds; inflation-protected public obligations issued by the U.S. Treasury; mortgage-backed and asset-backed securitizes; and government, agency, corporate, and securitized investment-grade foreign bonds issued in currencies other than the U.S. dollar (but hedged by Vanguard to minimize foreign currency exposure). The trust's indirect stock holdings are a diversified mix of U.S. and foreign large-, mid-, and small-capitalization stocks.

Benchmark

Target Retirement 2020 Composite Ix

Growth of a \$10,000 investment: January 31, 2014—December 31, 2023



Total returns

Ten years	Five years	Three years	One year	Year to date	uarter
Periods ended December 31, 2023	eriods ended D	ק			

124

	Quarter	Year to date	One year	Three years	Five years	Ten years
Fund	8.00%	12.54%	12.54%	1.51%	6.66%	5.60%
Benchmark	7.97%	12.65%	12.65%	1.74%	6.98%	5.81%

For performance data current to the most recent month-end, visit our website at less than their original cost. Current performance may be lower or higher than the performance data cited. The performance data shown represent past performance, which is not a guarantee of future results. Investment returns and principal value will fluctuate, so investors' shares, when sold, may be worth more or

investment, as you cannot invest directly in an index. <u>vanguard.com/performance</u>. The performance of an index is not an exact representation of any particular

returns. Performance figures include the reinvestment of all dividends and any capital gains distributions. All Figures for periods of less than one year are cumulative returns. All other figures represent average annual

Bloomberg U.S. Aggregate Float Adjusted Index thereafter, as well as the Bloomberg U.S. Treasury Inflation-Protected Securities (TIPS) 0-5 Year Index; for international bonds, the Bloomberg Global Aggregate ex-USD Float Adjusted RIC Capped Index Hedged beginning June 3, 2013; and for U.S. stocks, the MSCI US Broad Market Index through June 2, 2013, Target Retirement 2020 Composite Ix: Derived by applying the fund's target asset allocation to the results of the following benchmarks: for international stocks of developed markets, the MSCI EAFE Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for emerging-market stocks, the Select Emerging Markets Index through August 23, 2006, the MSCI Emerging Markets Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for U.S. bonds, the Bloomberg U.S. Aggregate Bond Index through December 31, 2009, and the

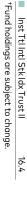
Vanguard Target Retirement 2020 Trust I

Balanced fund (stocks and bonds)

Allocation of underlying funds









Connect with Vanguard® • vanguard.com

Plain talk about risk

funds, the trust also is subject to asset allocation risk, which is the chance that the selection of underlying funds and the allocation of fund assets will cause the trust to underperform other trusts with a similar investment objective. Investments in Target Retirement Trusts are subject to the risks of their underlying funds. The year in the trust name refers to the approximate year 2020 when an investor in the trust would retire and leave the workforce. The trust will gradually shift its emphasis from more aggressive investments to more The trust is subject to several stock and bond market risks, any of which could cause an investor to lose money. However, based on the trust's current allocation between stocks and the less volatile asset class of bonds, the trust's overall level of risk should be higher than those trusts that invest mostly in bonds, but lower than those investing mostly in stocks. As conservative ones based on its target date. An investment in the Target Retirement Trust is not guaranteed at any time, including on or after the target date. the trust's allocation between underlying funds gradually changes, the trust's overall level of risk also will decline. In addition to the risks inherent in the asset classes of the underlying

Note on frequent trading restrictions

Participant Services at 800-523-1188 for additional information. Frequent trading policies may apply to those funds offered as investment options within your plan. Please log on to vanguard.com for your employer plans or contact

This investment is not a mutual fund. It is a collective trust available only to tax-qualified plans and their eligible participants.

This collective trust is managed by Vanguard Fiduciary Trust Company, a wholly owned subsidiary of The Vanguard Group, Inc., and is not a mutual fund. Investment objectives, risks, charges, expenses, and other important information should be considered carefully before investing.

For more information about Vanguard investments, see below for which situation is right for you.

please call 855-402-2646. If you receive your retirement plan statement from a service provider other than Vanguard or log on to a recordkeeper's website that is not Vanguard to view your plan, lf you receive your retirement plan statement from Vanguard or log on to Vanguard's website to view your plan, visit vanguard.com or call 800-523-1188



Vanguard Target Retirement 2025 Trust I

Balanced fund (stocks and bonds)

Fund facts

1465	06/28/07	0.065%	\$13,246 MM	1 2 3 4 5
number	date	as of 03/31/23	assets	Low < > High
Fund	Inception	Expense ratio	Total net	Risk level

Investment objective

Vanguard Target Retirement 2025 Trust I seeks to provide capital appreciation and current income consistent with its current asset allocation.

Investment strategy

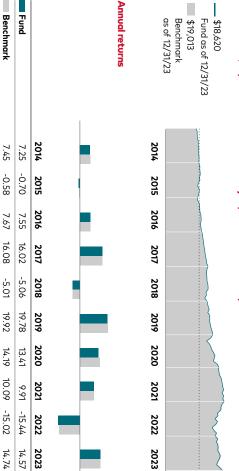
The trust invests in other Vanguard mutual funds and trusts according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2025 (the target year). The trust's asset allocation will become more conservative over time, meaning that the percentage of assets allocated to stocks will decrease while the percentage of assets allocated to bonds and other fixed income investments will increase. Within seven years after 2025, the trust's asset allocation should resemble that of the Target Retirement Income Trust I. The underlying holdings are: Vanguard Total Stock Market Index Fund, Vanguard Institutional Total International Stock Market Index Fund, and Vanguard Total Index Fund.

The trust's indirect bond holdings are a diversified mix of short-, intermediate-, and long-term U.S. government, U.S. agency, and investment-grade U.S. corporate bonds; inflation-protected public obligations issued by the U.S. Treasury; mortgage-backed and asset-backed securitize; and government, agency, corporate, and securitized investment-grade foreign bonds issued in currencies other than the U.S. dollar (but hedged by Vanguard to minimize foreign currency exposure). The trust's indirect stock holdings are a diversified mix of U.S. and foreign large-, mid-, and small-capitalization stocks.

Benchmark

Target Retirement 2025 Composite Ix

Growth of a \$10,000 investment: January 31, 2014—December 31, 2023



Total returns

Peri
eriods ended December 31, 2023
, 2023

126

	Quarter	Year to date	One year	Three years	Five years	Ten years
Fund	8.88%	14.57%	14.57%	2.11%	7.66%	6.20%
Benchmark	8.85%	14.74%	14.74%	2.39%	8.01%	6.43%
		_				•

For performance data current to the most recent month-end, visit our website at less than their original cost. Current performance may be lower or higher than the performance data cited. The performance data shown represent past performance, which is not a guarantee of future results. Investment returns and principal value will fluctuate, so investors' shares, when sold, may be worth more or

investment, as you cannot invest directly in an index. <u>vanguard.com/performance</u>. The performance of an index is not an exact representation of any particular

returns. Performance figures include the reinvestment of all dividends and any capital gains distributions. All Figures for periods of less than one year are cumulative returns. All other figures represent average annual

Target Retirement 2025 Composite Ix: Derived by applying the fund's target asset allocation to the results of the following benchmarks: for international stocks of developed markets, the MSCI EAFE Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for emerging-market stocks, the Select Emerging Markets Index through August 23, 2006, the MSCI Emerging Markets Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for U.S. bonds, the Bloomberg U.S. Aggregate Bond Index through December 31, 2009, and the Bloomberg U.S. Aggregate Float Adjusted Index thereafter, as well as the Bloomberg U.S. Treasury Inflation-Protected Securities (TIPS) 0-5 Year Index; for international bonds, the Bloomberg Global Aggregate ex-USD Float Adjusted RIC Capped Index Hedged beginning June 3, 2013; and for U.S. stocks, the Dow Jones U.S. Total Stock Market Index (formerly known as the Dow Jones Wilshire 5000 Index) through April 21, 2005, the MSCI US Broad Market Index through June 2, 2013, and the CRSP US Total Market Index thereafter. International stock benchmark returns are adjusted for withholding taxes

Vanguard Target Retirement 2025 Trust I

Balanced fund (stocks and bonds)

Allocation of underlying funds







Connect with Vanguard • vanguard.com

Plain talk about risk

funds, the trust also is subject to asset allocation risk, which is the chance that the selection of underlying funds and the allocation of fund assets will cause the trust to underperform other trusts with a similar investment objective. Investments in Target Retirement Trusts are subject to the risks of their underlying funds. The year in the trust name refers to the approximate year 2025 when an investor in the trust would retire and leave the workforce. The trust will gradually shift its emphasis from more aggressive investments to more The trust is subject to several stock and bond market risks, any of which could cause an investor to lose money. However, based on the trust's current allocation between stocks and the less volatile asset class of bonds, the trust's overall level of risk should be higher than those trusts that invest mostly in bonds, but lower than those investing mostly in stocks. As conservative ones based on its target date. An investment in the Target Retirement Trust is not guaranteed at any time, including on or after the target date. the trust's allocation between underlying funds gradually changes, the trust's overall level of risk also will decline. In addition to the risks inherent in the asset classes of the underlying

Note on frequent trading restrictions

Participant Services at 800-523-1188 for additional information. Frequent trading policies may apply to those funds offered as investment options within your plan. Please log on to vanguard.com for your employer plans or contact

This investment is not a mutual fund. It is a collective trust available only to tax-qualified plans and their eligible participants.

This collective trust is managed by Vanguard Fiduciary Trust Company, a wholly owned subsidiary of The Vanguard Group, Inc., and is not a mutual fund. Investment objectives, risks, charges, expenses, and other important information should be considered carefully before investing.

For more information about Vanguard investments, see below for which situation is right for you.

please call 855-402-2646. If you receive your retirement plan statement from a service provider other than Vanguard or log on to a recordkeeper's website that is not Vanguard to view your plan, lf you receive your retirement plan statement from Vanguard or log on to Vanguard's website to view your plan, visit vanguard.com or call 800-523-1188



Vanguard Target Retirement 2030 Trust I

Balanced fund (stocks and bonds)

Fund facts

1466	06/28/07	0.065%	\$17,633 MM	2 3 4 5	_
number	date	as of 03/31/23	assets	∕ → Hig	Low <
Fund	Inception	Expense ratio	Total net	evel	Riskle

Investment objective

Vanguard Target Retirement 2030 Trust I seeks to provide capital appreciation and current income consistent with its current asset allocation.

Investment strategy

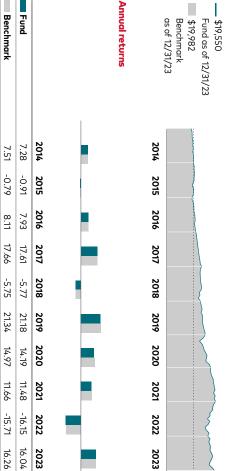
The trust invests in other Vanguard mutual funds and trusts according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2030 (the target year). The trust's asset allocation will become more conservative over time, meaning that the percentage of assets allocated to stocks will decrease while the percentage of assets allocated to bonds and other fixed income investments will increase. Within seven years after 2030, the trust's asset allocation should resemble that of the Target Retirement Income Trust I. The underlying holdings are: Vanguard Total Stock Market Index Fund, Vanguard Institutional Total International Stock Market Index Trust II, Vanguard Total International Bond II Index Fund, and Vanguard Short-Term Inflation-Protected Securities Fund.

The trust's indirect bond holdings are a diversified mix of short-, intermediate-, and long-term U.S. government, U.S. agency, and investment-grade U.S. corporate bonds; inflation-protected public obligations issued by the U.S. Treasury; mortgage-backed and asset-backed securitizes; and government, agency, corporate, and securitized investment-grade foreign bonds issued in currencies other than the U.S. dollar (but hedged by Vanguard to minimize foreign currency exposure). The trust's indirect stock holdings are a diversified mix of U.S. and foreign large-, mid-, and small-capitalization stocks.

Benchmark

Target Retirement 2030 Composite lx

Growth of a \$10,000 investment: January 31, 2014—December 31, 2023



Total returns

Periods ended December 31, 2023

128

	Quarter	Year to date	One year	Three years	Five years	Ten years
Fund	9.53%	16.04%	16.04%	2.75%	8.46%	6.68%
Benchmark	9.51%	16.26%	16.26%	3.05%	8.83%	6.92%

For performance data current to the most recent month-end, visit our website at less than their original cost. Current performance may be lower or higher than the performance data cited. The performance data shown represent past performance, which is not a guarantee of future results. Investment returns and principal value will fluctuate, so investors' shares, when sold, may be worth more or

investment, as you cannot invest directly in an index. <u>vanguard.com/performance</u>. The performance of an index is not an exact representation of any particular

returns. Performance figures include the reinvestment of all dividends and any capital gains distributions. All Figures for periods of less than one year are cumulative returns. All other figures represent average annual

Target Retirement 2030 Composite Ix: Derived by applying the fund's target asset allocation to the results of the following benchmarks: for international stocks of developed markets, the MSCI EAFE Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for emerging-market stocks, the Select Emerging Markets Index through August 23, 2006, the MSCI Emerging Markets Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for U.S. bonds, the Bloomberg U.S. Aggregate Bond Index through December 31, 2009, and the Bloomberg U.S. Aggregate Float Adjusted RIC Capped Index Hedged beginning June 3, 2013; and for U.S. stocks, the MSCI US Broad Market Index through June 2, 2013, and the CRSP US Total Market Index thereafter. International stock benchmark returns

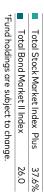
129

Vanguard Target Retirement 2030 Trust I

Balanced fund (stocks and bonds)

Allocation of underlying funds







Connect with Vanguard • vanguard.com

Plain talk about risk

funds, the trust also is subject to asset allocation risk, which is the chance that the selection of underlying funds and the allocation of fund assets will cause the trust to underperform other trusts with a similar investment objective. Investments in Target Retirement Trusts are subject to the risks of their underlying funds. The year in the trust name refers to the approximate year 2030 when an investor in the trust would retire and leave the workforce. The trust will gradually shift its emphasis from more aggressive investments to more The trust is subject to several stock and bond market risks, any of which could cause an investor to lose money. However, based on the trust's current allocation between stocks and the less volatile asset class of bonds, the trust's overall level of risk should be higher than those trusts that invest mostly in bonds, but lower than those investing mostly in stocks. As conservative ones based on its target date. An investment in the Target Retirement Trust is not guaranteed at any time, including on or after the target date. the trust's allocation between underlying funds gradually changes, the trust's overall level of risk also will decline. In addition to the risks inherent in the asset classes of the underlying

Note on frequent trading restrictions

Participant Services at 800-523-1188 for additional information. Frequent trading policies may apply to those funds offered as investment options within your plan. Please log on to vanguard.com for your employer plans or contact

This investment is not a mutual fund. It is a collective trust available only to tax-qualified plans and their eligible participants.

This collective trust is managed by Vanguard Fiduciary Trust Company, a wholly owned subsidiary of The Vanguard Group, Inc., and is not a mutual fund. Investment objectives, risks, charges, expenses, and other important information should be considered carefully before investing.

For more information about Vanguard investments, see below for which situation is right for you.

please call 855-402-2646. If you receive your retirement plan statement from a service provider other than Vanguard or log on to a recordkeeper's website that is not Vanguard to view your plan, lf you receive your retirement plan statement from Vanguard or log on to Vanguard's website to view your plan, visit vanguard.com or call 800-523-1188



Vanguard Target Retirement 2035 Trust I

Balanced fund (stocks and bonds)

Fund facts

1467	06/28/07	0.065%	\$16,826 MM	3 4 5	2	_
number	date	as of 03/31/23	assets	→ High	^	Low
Fund	Inception	Expense ratio	Total net	,	Risk level	Ris

Investment objective

Vanguard Target Retirement 2035 Trust I seeks to provide capital appreciation and current income consistent with its current asset allocation.

nvestment strategy

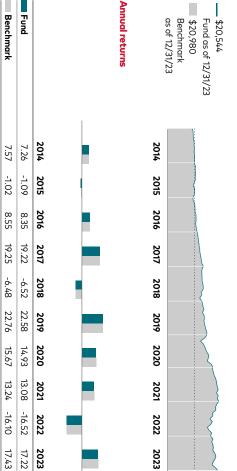
The trust invests in other Vanguard mutual funds and trusts according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2035 (the target year). The trust's asset allocation will become more conservative over time, meaning that the percentage of assets allocated to stocks will decrease while the percentage of assets allocated to bonds and other fixed income investments will increase. Within seven years after 2035, the trust's asset allocation should resemble that of the Target Retirement Income Trust I. The underlying holdings are: Vanguard Total Stock Market Index Fund, Vanguard Institutional Total International Stock Market Index Fund, and Vanguard Total Index Fund.

The trust's indirect bond holdings are a diversified mix of short-, intermediate-, and long-term U.S. government, U.S. agency, and investment-grade U.S. corporate bonds; inflation-protected public obligations issued by the U.S. Treasury; mortgage-backed and asset-backed securitizes; and government, agency, corporate, and securitized investment-grade foreign bonds issued in currencies other than the U.S. dollar (but hedged by Vanguard to minimize foreign currency exposure). The trust's indirect stock holdings are a diversified mix of U.S. and foreign large-, mid-, and small-capitalization stocks.

Benchmark

Target Retirement 2035 Composite Ix

Growth of a \$10,000 investment: January 31, 2014—December 31, 2023



Total returns

Ten vears	Five years	Three years	One year	Year to date	Quarter
Periods ended December 31, 2023	eriods ended De	ח			

130

	Quarter	Year to date	One year	Three years	Five years	Ten years
Fund	9.89%	17.22%	17.22%	3.43%	9.29%	7.16%
Benchmark	9.86%	17.43%	17.43%	3.72%	9.64%	7.40%

For performance data current to the most recent month-end, visit our website at less than their original cost. Current performance may be lower or higher than the performance data cited. The performance data shown represent past performance, which is not a guarantee of future results. Investment returns and principal value will fluctuate, so investors' shares, when sold, may be worth more or

investment, as you cannot invest directly in an index. <u>vanguard.com/performance</u>. The performance of an index is not an exact representation of any particular

returns. Performance figures include the reinvestment of all dividends and any capital gains distributions. All Figures for periods of less than one year are cumulative returns. All other figures represent average annual

Target Retirement 2035 Composite Ix: Derived by applying the fund's target asset allocation to the results of the following benchmarks: for international stocks of developed markets, the MSCI EAFE Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for emerging-market stocks, the Select Emerging Markets Index through August 23, 2006, the MSCI Emerging Markets Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for U.S. bonds, the Bloomberg U.S. Aggregate Bond Index through December 31, 2009, and the Bloomberg U.S. Aggregate Float Adjusted Index thereafter; for international bonds, the Bloomberg U.S. Aggregate ex-USD Float Adjusted RIC Capped Index Hedged beginning June 3, 2013, and for U.S. stocks, the Dow Jones U.S. Total Stock Market Index (formerly known as the Dow Jones Wilshire 5000 Index) through Page 12, 2005, the MSCI US Broad June 3, 2013; and for U.S. stocks, the Dow Jones U.S. Total Stock Market Index (formerly known as the Dow Jones Wilshire 5000 Index) through Page 12, 2005, the MSCI US Broad June 3, 2013; and for U.S. stocks, the Dow Jones U.S. Total Stock Market Index (formerly known as the Dow Jones Wilshire 5000 Index) through Page 12, 2005, the MSCI US Broad June 3, 2013; and for U.S. stocks, the Dow Jones U.S. Total Stock Market Index (formerly known as the Dow Jones Wilshire 5000 Index) through Page 12, 2005, the MSCI US Broad June 3, 2013; and for U.S. stocks, the Dow Jones U.S. Total Stock Market Index (formerly known as the Dow Jones Wilshire 5000 Index) through Page 12, 2005, the MSCI US Broad June 3, 2013; and for U.S. stocks, the Bloomer 15, 2015, the MSCI US Broad June 3, 2013; and for U.S. stocks, the Bloomer 15, 2015, the MSCI US Broad June 3, 2015, and 201 Market Index through June 2, 2013, and the CRSP US Total Market Index thereafter. International stock benchmark returns are adjusted for withholding taxes

Vanguard Target Retirement 2035 Trust I

Balanced fund (stocks and bonds)

Allocation of underlying funds[†]



Inst Ttl Intl Stk Idx Trust II	Total Stock Market Index Plus
28.0	42.4%



*Fund holdings are subject to change.

Connect with Vanguard • vanguard.com

Plain talk about risk

funds, the trust also is subject to asset allocation risk, which is the chance that the selection of underlying funds and the allocation of fund assets will cause the trust to underperform other trusts with a similar investment objective. Investments in Target Retirement Trusts are subject to the risks of their underlying funds. The year in the trust name refers to the approximate year 2035 when an investor in the trust would retire and leave the workforce. The trust will gradually shift its emphasis from more aggressive investments to more The trust is subject to several stock and bond market risks, any of which could cause an investor to lose money. However, based on the trust's current allocation between stocks and the less volatile asset class of bonds, the trust's overall level of risk should be higher than those trusts that invest mostly in bonds, but lower than those investing mostly in stocks. As conservative ones based on its target date. An investment in the Target Retirement Trust is not guaranteed at any time, including on or after the target date. the trust's allocation between underlying funds gradually changes, the trust's overall level of risk also will decline. In addition to the risks inherent in the asset classes of the underlying

Note on frequent trading restrictions

Participant Services at 800-523-1188 for additional information. Frequent trading policies may apply to those funds offered as investment options within your plan. Please log on to vanguard.com for your employer plans or contact

This investment is not a mutual fund. It is a collective trust available only to tax-qualified plans and their eligible participants.

This collective trust is managed by Vanguard Fiduciary Trust Company, a wholly owned subsidiary of The Vanguard Group, Inc., and is not a mutual fund. Investment objectives, risks, charges, expenses, and other important information should be considered carefully before investing.

For more information about Vanguard investments, see below for which situation is right for you.

please call 855-402-2646. If you receive your retirement plan statement from a service provider other than Vanguard or log on to a recordkeeper's website that is not Vanguard to view your plan, lf you receive your retirement plan statement from Vanguard or log on to Vanguard's website to view your plan, visit vanguard.com or call 800-523-1188



Vanguard Target Retirement 2040 Trust I

Balanced fund (stocks and bonds)

Fund facts

1468	06/28/07	0.065%	\$15,307 MM	ω 4 5	ω	1	_
number	date	as of 03/31/23	assets	→ High		ž 1	Low
Fund	Inception	Expense ratio	Total net	,	<u>u</u>	Risk leve	굕

Investment objective

Vanguard Target Retirement 2040 Trust I seeks to provide capital appreciation and current income consistent with its current asset allocation.

Investment strategy

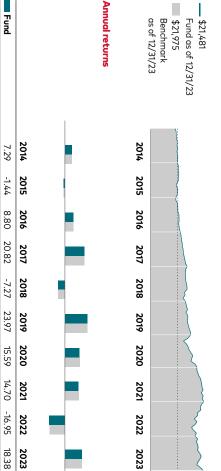
The trust invests in other Vanguard mutual funds and trusts according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2040 (the target year). The trust's asset allocation will become more conservative over time, meaning that the percentage of assets allocated to stocks will decrease while the percentage of assets allocated to bonds and other fixed income investments will increase. Within seven years after 2040, the trust's asset allocation should resemble that of the Target Retirement Income Trust I. The underlying holdings are: Vanguard Total Stock Market Index Fund, Vanguard Institutional Total International Stock Market Index Trust II, Vanguard Total International Bond II Index Fund, and Vanguard Short-Term Inflation-Protected Securities Fund.

The trust's indirect bond holdings are a diversified mix of short-, intermediate-, and long-term U.S. government, U.S. agency, and investment-grade U.S. corporate bonds; inflation-protected public obligations issued by the U.S. Treasury; mortgage-backed and asset-backed securitize; and government, agency, corporate, and securitized investment-grade foreign bonds issued in currencies other than the U.S. dollar (but hedged by Vanguard to minimize foreign currency exposure). The trust's indirect stock holdings are a diversified mix of U.S. and foreign large-, mid-, and small-capitalization stocks.

Benchmark

Target Retirement 2040 Composite lx

Growth of a \$10,000 investment: January 31, 2014—December 31, 2023



Total returns

Benchmark

7.61

-1.25

8.98

20.86

-7.23

24.19

16.31

14.84

-16.51

18.60

Periods ended December 31, 2023

	Quarter	Year to date	One year	Three years	Five years	Ten years
Fund	10.22%	18.38%	18.38%	4.09%	10.07%	7.61%
Benchmark	10.20%	18.60%	18.60%	4.38%	10.43%	7.87%
!						

For performance data current to the most recent month-end, visit our website at less than their original cost. Current performance may be lower or higher than the performance data cited. The performance data shown represent past performance, which is not a guarantee of future results. Investment returns and principal value will fluctuate, so investors' shares, when sold, may be worth more or

investment, as you cannot invest directly in an index. <u>vanguard.com/performance</u>. The performance of an index is not an exact representation of any particular

returns. Performance figures include the reinvestment of all dividends and any capital gains distributions. All Figures for periods of less than one year are cumulative returns. All other figures represent average annual

Target Retirement 2040 Composite Ix: Derived by applying the fund's target asset allocation to the results of the following benchmarks: for international stocks of developed markets, the MSCI EAFE Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for emerging-market stocks, the Select Emerging Markets Index through August 23, 2006, the MSCI Emerging Markets Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for U.S. bonds, the Bloomberg U.S. Aggregate Bond Index through December 31, 2009, and the Bloomberg U.S. Aggregate Float Adjusted RIC Capped Index Hedged beginning June 3, 2013; and for U.S. stocks, the MSCI US Broad Market Index through June 2, 2013, and the CRSP US Total Market Index thereafter. International stock benchmark returns

Allocation of underlying funds

Balanced fund (stocks and bonds)

Vanguard Target Retirement 2040 Trust I







133

Connect with Vanguard • vanguard.com

Plain talk about risk

funds, the trust also is subject to asset allocation risk, which is the chance that the selection of underlying funds and the allocation of fund assets will cause the trust to underperform other trusts with a similar investment objective. Investments in Target Retirement Trusts are subject to the risks of their underlying funds. The year in the trust name refers to the approximate year 2040 when an investor in the trust would retire and leave the workforce. The trust will gradually shift its emphasis from more aggressive investments to more The trust is subject to several stock and bond market risks, any of which could cause an investor to lose money. However, based on the trust's current allocation between stocks and the less volatile asset class of bonds, the trust's overall level of risk should be higher than those trusts that invest mostly in bonds, but lower than those investing mostly in stocks. As conservative ones based on its target date. An investment in the Target Retirement Trust is not guaranteed at any time, including on or after the target date. the trust's allocation between underlying funds gradually changes, the trust's overall level of risk also will decline. In addition to the risks inherent in the asset classes of the underlying

Note on frequent trading restrictions

Participant Services at 800-523-1188 for additional information. Frequent trading policies may apply to those funds offered as investment options within your plan. Please log on to vanguard.com for your employer plans or contact

This investment is not a mutual fund. It is a collective trust available only to tax-qualified plans and their eligible participants.

This collective trust is managed by Vanguard Fiduciary Trust Company, a wholly owned subsidiary of The Vanguard Group, Inc., and is not a mutual fund. Investment objectives, risks, charges, expenses, and other important information should be considered carefully before investing.

For more information about Vanguard investments, see below for which situation is right for you.

please call 855-402-2646. If you receive your retirement plan statement from a service provider other than Vanguard or log on to a recordkeeper's website that is not Vanguard to view your plan, lf you receive your retirement plan statement from Vanguard or log on to Vanguard's website to view your plan, visit vanguard.com or call 800-523-1188



Vanguard Target Retirement 2045 Trust I

Balanced fund (stocks and bonds)

Fund facts

1 2 3 4 5 \$14,224 MM	Low \(\tag{\text{assets}} \)	sk level Total net
0.065%	as of 03/31/23	Expense ratio
06/28/07	date	Inception
1469	number	Fund

Investment objective

Vanguard Target Retirement 2045 Trust I seeks to provide capital appreciation and current income consistent with its current asset allocation.

Investment strategy

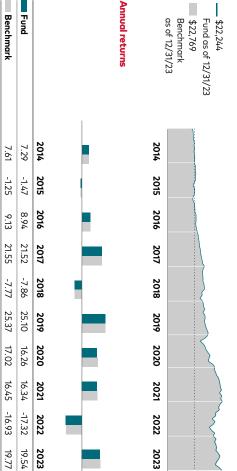
The trust invests in other Vanguard mutual funds and trusts according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2045 (the target year). The trust's asset allocation will become more conservative over time, meaning that the percentage of assets allocated to stocks will decrease while the percentage of assets allocated to bonds and other fixed income investments will increase. Within seven years after 2045, the trust's asset allocation should resemble that of the Target Retirement Income Trust I. The underlying holdings are: Vanguard Total Stock Market Index Fund, Vanguard Institutional Total International Stock Market Index Trust II, Vanguard Total International Bond II Index Fund, and Vanguard Short-Term Inflation-Protected Securities Fund.

The trust's indirect bond holdings are a diversified mix of short-, intermediate-, and long-term U.S. government, U.S. agency, and investment-grade U.S. corporate bonds; inflation-protected public obligations issued by the U.S. Treasury; mortgage-backed and asset-backed securitize; and government, agency, corporate, and securitized investment-grade foreign bonds issued in currencies other than the U.S. dollar (but hedged by Vanguard to minimize foreign currency exposure). The trust's indirect stock holdings are a diversified mix of U.S. and foreign large-, mid-, and small-capitalization stocks.

Benchmark

Target Retirement 2045 Composite Ix

Growth of a \$10,000 investment: January 31, 2014—December 31, 2023



Total returns

	רפווסטט פווספט ספכפוווספו טו, בסבט	Bariada andad Dasamhar 31 3033

134

۵	Quarter	Year to date	One year	Three years	Five years	Ten years
Fund 10	10.58%	19.54%	19.54%	4.76%	10.83%	7.99%
Benchmark 10	10.54%	19.77%	19.77%	5.03%	11.20%	8.25%

For performance data current to the most recent month-end, visit our website at less than their original cost. Current performance may be lower or higher than the performance data cited. The performance data shown represent past performance, which is not a guarantee of future results. Investment returns and principal value will fluctuate, so investors' shares, when sold, may be worth more or

investment, as you cannot invest directly in an index. <u>vanguard.com/performance</u>. The performance of an index is not an exact representation of any particular

returns. Performance figures include the reinvestment of all dividends and any capital gains distributions. All Figures for periods of less than one year are cumulative returns. All other figures represent average annual

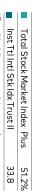
Target Retirement 2045 Composite Ix: Derived by applying the fund's target asset allocation to the results of the following benchmarks: for international stocks of developed markets, the MSCI EAFE Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for emerging-market stocks, the Select Emerging Markets Index through August 23, 2006, the MSCI Emerging Markets Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for U.S. bonds, the Bloomberg U.S. Aggregate Bond Index through December 31, 2009, and the Bloomberg U.S. Aggregate Float Adjusted Index thereafter; for international bonds, the Bloomberg Global Aggregate ex-USD Float Adjusted RIC Capped Index Hedged beginning June 3, 2013; and for U.S. stocks, the Dow Jones U.S. Total Stock Market Index (formerly known as the Dow Jones Wilshire 5000 Index) through April 22, 2005, the MSCI US Broad Index Through April 22, 2005, the MSCI US Broad Index Index (formerly known as the Dow Jones Wilshire 5000 Index) through April 22, 2005, the MSCI US Broad Index Index (formerly known as the Dow Jones Wilshire 5000 Index) through April 20, 2005, the MSCI US Broad Index Index (formerly known as the Dow Jones Wilshire 5000 Index) through April 20, 2005, the MSCI US Broad Index Index (formerly known as the Dow Jones Wilshire 5000 Index) through April 20, 2005, the MSCI US Broad Index Index (formerly known as the Dow Jones Wilshire 5000 Index) through April 20, 2005, the MSCI US Broad Index Index (formerly known as the Dow Jones Wilshire 5000 Index) through April 20, 2005, the MSCI US Broad Index Index (formerly known as the Dow Jones Wilshire 5000 Index) through April 20, 2005, the MSCI US Broad Index Index (formerly known as the Dow Jones Wilshire 5000 Index) through April 20, 2005, the MSCI US Broad Index Index (formerly known as the Dow Jones Wilshire 5000 Index) through April 20, 2005, the MSCI US Broad Inde Market Index through June 2, 2013, and the CRSP US Total Market Index thereafter. International stock benchmark returns are adjusted for withholding taxes

Vanguard Target Retirement 2045 Trust I

Balanced fund (stocks and bonds)

Allocation of underlying funds[†]







†Fund holdings are subject to change.

Connect with Vanguard® • vanguard.com

Plain talk about risk

funds, the trust also is subject to asset allocation risk, which is the chance that the selection of underlying funds and the allocation of fund assets will cause the trust to underperform other funds with a similar investment objective. Investments in Target Retirement Trusts are subject to the risks of their underlying funds. The year in the trust name refers to the approximate year 2045 when an investor in the trust would retire and leave the workforce. The trust will gradually shift its emphasis from more aggressive investments to more The trust is subject to several stock and bond market risks, any of which could cause an investor to lose money. However, based on the trust's current allocation between stocks and the less volatile asset class of bonds, the trust's overall level of risk should be higher than those funds that invest mostly in bonds, but lower than those investing mostly in stocks. As conservative ones based on its target date. An investment in the Target Retirement Trust is not guaranteed at any time, including on or after the target date. the trust's allocation between underlying funds gradually changes, the trust's overall level of risk also will decline. In addition to the risks inherent in the asset classes of the underlying

Note on frequent trading restrictions

Participant Services at 800-523-1188 for additional information. Frequent trading policies may apply to those funds offered as investment options within your plan. Please log on to vanguard.com for your employer plans or contact

This investment is not a mutual fund. It is a collective trust available only to tax-qualified plans and their eligible participants.

This collective trust is managed by Vanguard Fiduciary Trust Company, a wholly owned subsidiary of The Vanguard Group, Inc., and is not a mutual fund. Investment objectives, risks, charges, expenses, and other important information should be considered carefully before investing.

For more information about Vanguard investments, see below for which situation is right for you.

please call 855-402-2646. If you receive your retirement plan statement from a service provider other than Vanguard or log on to a recordkeeper's website that is not Vanguard to view your plan, lf you receive your retirement plan statement from Vanguard or log on to Vanguard's website to view your plan, visit vanguard.com or call 800-523-1188



Vanguard Target Retirement 2050 Trust I

Balanced fund (stocks and bonds)

Fund facts

1470	06/28/07	0.065%	\$12,399 MM	1 2 3 4 5
number	date	as of 03/31/23	assets	Low < > High
Fund	Inception	Expense ratio	Total net	Risk level

Investment objective

Vanguard Target Retirement 2050 Trust I seeks to provide capital appreciation and current income consistent with its current asset allocation.

Investment strategy

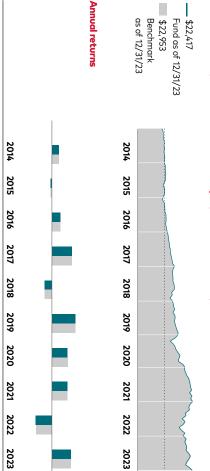
The trust invests in other Vanguard mutual funds and trusts according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2050 (the target year). The trust's asset allocation will become more conservative over time, meaning that the percentage of assets allocated to stocks will decrease while the percentage of assets allocated to bonds and other fixed income investments will increase. Within seven years after 2050, the trust's asset allocation should resemble that of the Target Retirement Income Trust I. The underlying holdings are: Vanguard Total Stock Market Index Fund, Vanguard Institutional Total International Stock Market Index Trust II, Vanguard Total International Bond II Index Fund, and Vanguard Short-Term Inflation-Protected Securities Fund.

The trust's indirect bond holdings are a diversified mix of short-, intermediate-, and long-term U.S. government, U.S. agency, and investment-grade U.S. corporate bonds; inflation-protected public obligations issued by the U.S. Treasury; mortgage-backed and asset-backed securitize; and government, agency, corporate, and securitized investment-grade foreign bonds issued in currencies other than the U.S. dollar (but hedged by Vanguard to minimize foreign currency exposure). The trust's indirect stock holdings are a diversified mix of U.S. and foreign large-, mid-, and small-capitalization stocks.

Benchmark

Target Retirement 2050 Composite lx

Growth of a \$10,000 investment: January 31, 2014—December 31, 2023



Total returns

Benchmark

7.29

-1.53 -1.25

9.13

21.48 21.55

-7.82 -7.77

25.07 25.37

16.45

16.60 16.75

136

17.17

-17.44 -17.07

20.25

7.61

	המוסמט מווממט למכמוווסמו טו, אסאט	Dorinds and all Documber 31 3033

	Quarter	Year to date	One year	Three years	Five years	Ten years
Fund	10.81%	20.25%	20.25%	5.00%	11.01%	8.07%
Benchmark	10.78%	20.48%	20.48%	5.27%	11.37%	8.34%

For performance data current to the most recent month-end, visit our website at less than their original cost. Current performance may be lower or higher than the performance data cited. The performance data shown represent past performance, which is not a guarantee of future results. Investment returns and principal value will fluctuate, so investors' shares, when sold, may be worth more or

investment, as you cannot invest directly in an index. <u>vanguard.com/performance</u>. The performance of an index is not an exact representation of any particular

returns. Performance figures include the reinvestment of all dividends and any capital gains distributions. All Figures for periods of less than one year are cumulative returns. All other figures represent average annual

Target Retirement 2050 Composite Ix: Derived by applying the fund's target asset allocation to the results of the following benchmarks: for international stocks of developed markets, the MSCI EAFE Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for emerging-market stocks, the Select Emerging Markets Index through August 23, 2006, the MSCI Emerging Markets Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for U.S. bonds, the Bloomberg U.S. Aggregate Bond Index through December 31, 2009, and the Bloomberg U.S. Aggregate Float Adjusted RIC Capped Index Hedged beginning June 3, 2013; and for U.S. stocks, the MSCI US Broad Market Index through June 2, 2013, and the CRSP US Total Market Index thereafter. International stock benchmark returns

137

Vanguard Target Retirement 2050 Trust I

Balanced fund (stocks and bonds)

Allocation of underlying funds[†]



⋣		
*Fund holdings are subject to change.	Inst Ttl Intl Stk Idx Trust II	Total Stock Market Index Plus
-	36.3	54.0%

Total Bond Market II Index 7.0
Total Intl Bnd II 2.7

Connect with Vanguard® • vanguard.com

Plain talk about risk

funds, the trust also is subject to asset allocation risk, which is the chance that the selection of underlying funds and the allocation of fund assets will cause the trust to underperform other funds with a similar investment objective. Investments in Target Retirement Trusts are subject to the risks of their underlying funds. The year in the trust name refers to the approximate year 2050 when an investor in the trust would retire and leave the workforce. The trust will gradually shift its emphasis from more aggressive investments to more The trust is subject to several stock and bond market risks, any of which could cause an investor to lose money. However, based on the trust's current allocation between stocks and the less volatile asset class of bonds, the trust's overall level of risk should be higher than those funds that invest mostly in bonds, but lower than those investing mostly in stocks. As conservative ones based on its target date. An investment in the Target Retirement Trust is not guaranteed at any time, including on or after the target date. the trust's allocation between underlying funds gradually changes, the trust's overall level of risk also will decline. In addition to the risks inherent in the asset classes of the underlying

Note on frequent trading restrictions

Participant Services at 800-523-1188 for additional information. Frequent trading policies may apply to those funds offered as investment options within your plan. Please log on to vanguard.com for your employer plans or contact

This investment is not a mutual fund. It is a collective trust available only to tax-qualified plans and their eligible participants.

This collective trust is managed by Vanguard Fiduciary Trust Company, a wholly owned subsidiary of The Vanguard Group, Inc., and is not a mutual fund. Investment objectives, risks, charges, expenses, and other important information should be considered carefully before investing.

For more information about Vanguard investments, see below for which situation is right for you.

please call 855-402-2646. If you receive your retirement plan statement from a service provider other than Vanguard or log on to a recordkeeper's website that is not Vanguard to view your plan, lf you receive your retirement plan statement from Vanguard or log on to Vanguard's website to view your plan, visit vanguard.com or call 800-523-1188



Vanguard Target Retirement 2055 Trust I

Balanced fund (stocks and bonds)

Fund facts

1488	10/05/10	0.065%	\$8,257 MM	3 4 5	1 2
number	date	as of 03/31/23	assets	→ High	Low <
Fund	Inception	Expense ratio	Total net	,	Risk level

Investment objective

consistent with its current asset allocation provide capital appreciation and current income Vanguard Target Retirement 2055 Trust I seeks to

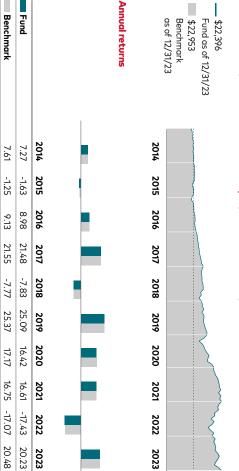
are: Vanguard Total Stock Market Index Fund, Vanguard Total Bond Market II Index Fund, to bonds and other fixed income investments will increase. Within seven years after 2055, the trust's become more conservative over time, meaning that the percentage of assets allocated to stocks will and trusts according to an asset allocation strategy designed for investors planning to retire and leave Inflation-Protected Securities Fund Market Index Trust II, Vanguard Total International Vanguard Institutional Total International Stock Retirement Income Trust I. The underlying holdings asset allocation should resemble that of the Target decrease while the percentage of assets allocated target year). The trust's asset allocation will the workforce in or within a few years of 2055 (the The trust invests in other Vanguard mutual funds and Vanguard Short-Term

small-capitalization stocks Vanguard to minimize foreign currency exposure). The trust's indirect stock holdings are a diversified government, U.S. agency, and investment-grade mix of U.S. and foreign large-, mid-, and currencies other than the U.S. dollar (but hedged by investment-grade foreign bonds issued in government, agency, corporate, and securitized mortgage-backed and asset-backed securities; and obligations issued by the U.S. Treasury; U.S. corporate bonds; inflation-protected public mix of short-, intermediate-, and long-term U.S The trust's indirect bond holdings are a diversified

Benchmark

Target Retirement 2055 Composite Ix

Growth of a \$10,000 investment: January 31, 2014—December 31, 2023



Total returns

Fund

138

Periods ended December 31, 2023
1, 2023

	Quarter	Year to date	One year	Three years	Five years	Ten years
Fund	10.81%	20.23%	20.23%	5.00%	11.01%	8.06%
Benchmark	10.78%	20.48%	20.48%	5.27%	11.37%	8.34%

For performance data current to the most recent month-end, visit our website at less than their original cost. Current performance may be lower or higher than the performance data cited. The performance data shown represent past performance, which is not a guarantee of future results. Investment returns and principal value will fluctuate, so investors' shares, when sold, may be worth more or

investment, as you cannot invest directly in an index. <u>vanguard.com/performance</u>. The performance of an index is not an exact representation of any particular

returns. Performance figures include the reinvestment of all dividends and any capital gains distributions. All Figures for periods of less than one year are cumulative returns. All other figures represent average annual

Target Retirement 2055 Composite Ix: Derived by applying the fund's target asset allocation to the results of the following benchmarks: for international stocks of developed markets, the MSCI EAFE Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for emerging-market stocks, the MSCI Emerging Markets Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for U.S. bonds, the Bloomberg U.S. Aggregate Float Adjusted Index; for international bonds, the Bloomberg Global Aggregate ex-USD Float Adjusted RIC Capped Index Hedged beginning June 3, 2013; and for U.S. stocks, the MSCI US Broad Market Index through June 2, 2013, and the CRSP US Total Market Index thereafter. International

139

Vanguard Target Retirement 2055 Trust I

Balanced fund (stocks and bonds)

Allocation of underlying funds[†]



Inst Ttl Intl Stk Idx Trust II	Total Stock Market Index Plus
36.3	54.0%

Total Bond Market II Index 7.0
Total Intl Bnd II 2.7

[†]Fund holdings are subject to change.

Connect with Vanguard® • vanguard.com Plain talk about risk

Plain talk about risk

funds, the trust also is subject to asset allocation risk, which is the chance that the selection of underlying funds and the allocation of fund assets will cause the trust to underperform other funds with a similar investment objective. Investments in Target Retirement Trusts are subject to the risks of their underlying funds. The year in the trust name refers to the approximate year 2055 when an investor in the trust would retire and leave the workforce. The trust will gradually shift its emphasis from more aggressive investments to more The trust is subject to several stock and bond market risks, any of which could cause an investor to lose money. However, based on the trust's current allocation between stocks and the less volatile asset class of bonds, the trust's overall level of risk should be higher than those funds that invest mostly in bonds, but lower than those investing mostly in stocks. As conservative ones based on its target date. An investment in the Target Retirement Trust is not guaranteed at any time, including on or after the target date. the trust's allocation between underlying funds gradually changes, the trust's overall level of risk also will decline. In addition to the risks inherent in the asset classes of the underlying

Note on frequent trading restrictions

Participant Services at 800-523-1188 for additional information. Frequent trading policies may apply to those funds offered as investment options within your plan. Please log on to vanguard.com for your employer plans or contact

This investment is not a mutual fund. It is a collective trust available only to tax-qualified plans and their eligible participants.

This collective trust is managed by Vanguard Fiduciary Trust Company, a wholly owned subsidiary of The Vanguard Group, Inc., and is not a mutual fund. Investment objectives, risks, charges, expenses, and other important information should be considered carefully before investing.

For more information about Vanguard investments, see below for which situation is right for you.

please call 855-402-2646. If you receive your retirement plan statement from a service provider other than Vanguard or log on to a recordkeeper's website that is not Vanguard to view your plan, lf you receive your retirement plan statement from Vanguard or log on to Vanguard's website to view your plan, visit vanguard.com or call 800-523-1188



Vanguard Target Retirement 2060 Trust I

Balanced fund (stocks and bonds)

Fund facts

	03/01/12	0.000%	##,630 Islan	
	03/01/12	0.045%	WW 95C 74	′ د
nimber	date inception	us of 03/31/23	Occupie C	Tow High
	in Continu	Evnonce retio	Total pot	Dick level

Investment objective

Vanguard Target Retirement 2060 Trust I seeks to provide capital appreciation and current income consistent with its current asset allocation.

nvestment strategy

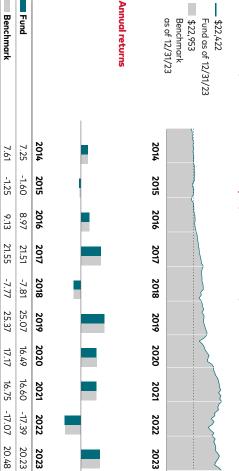
The trust invests in other Vanguard mutual funds and trusts according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2060 (the target year). The trust's asset allocation will become more conservative over time, meaning that the percentage of assets allocated to stocks will decrease while the percentage of assets allocated to bonds and other fixed income investments will increase. Within seven years after 2060, the trust's asset allocation should resemble that of the Target Retirement Income Trust I. The underlying holdings are: Vanguard Total Stock Market Index Fund, Vanguard Institutional Total International Stock Market Index Trust II, Vanguard Total International Bond II Index Fund, and Vanguard Short-Term Inflation-Protected Securities Fund.

The trust's indirect bond holdings are a diversified mix of short-, intermediate-, and long-term U.S. government, U.S. agency, and investment-grade U.S. corporate bonds; inflation-protected public obligations issued by the U.S. Treasury; mortgage-backed and asset-backed securitize; and government, agency, corporate, and securitized investment-grade foreign bonds issued in currencies other than the U.S. dollar (but hedged by Vanguard to minimize foreign currency exposure). The trust's indirect stock holdings are a diversified mix of U.S. and foreign large-, mid-, and small-capitalization stocks.

Benchmark

Target Retirement 2060 Composite lx

Growth of a \$10,000 investment: January 31, 2014—December 31, 2023



Total returns

		Upriode	
	כווסמי כוומכם שכככווושכו טו, בטבט		
	1, 1000		

140

	Quarter	Year to date	One year	Three years	Five years	Ten years
Fund	10.82%	20.23%	20.23%	5.01%	11.03%	8.07%
Benchmark	10.78%	20.48%	20.48%	5.27%	11.37%	8.34%

For performance data current to the most recent month-end, visit our website at less than their original cost. Current performance may be lower or higher than the performance data cited. The performance data shown represent past performance, which is not a guarantee of future results. Investment returns and principal value will fluctuate, so investors' shares, when sold, may be worth more or

investment, as you cannot invest directly in an index. <u>vanguard.com/performance</u>. The performance of an index is not an exact representation of any particular

returns. Performance figures include the reinvestment of all dividends and any capital gains distributions. All Figures for periods of less than one year are cumulative returns. All other figures represent average annual

Vanguard Target Retirement 2060 Trust I

Balanced fund (stocks and bonds)

Allocation of underlying funds[†]



Ę		
*Fund holdings are subject to change.	Inst Ttl Intl Stk Idx Trust II	Total Stock Market Index Plus
	36.4	53.9%



Plain talk about risk Connect with Vanguard • vanguard.com

funds, the trust also is subject to asset allocation risk, which is the chance that the selection of underlying funds and the allocation of fund assets will cause the trust to underperform other funds with a similar investment objective. Investments in Target Retirement Trusts are subject to the risks of their underlying funds. The year in the trust name refers to the approximate year 2060 when an investor in the trust would retire and leave the workforce. The trust will gradually shift its emphasis from more aggressive investments to more The trust is subject to several stock and bond market risks, any of which could cause an investor to lose money. However, based on the trust's current allocation between stocks and the less volatile asset class of bonds, the trust's overall level of risk should be higher than those funds that invest mostly in bonds, but lower than those investing mostly in stocks. As conservative ones based on its target date. An investment in the Target Retirement Trust is not guaranteed at any time, including on or after the target date. the trust's allocation between underlying funds gradually changes, the trust's overall level of risk also will decline. In addition to the risks inherent in the asset classes of the underlying

Note on frequent trading restrictions

Participant Services at 800-523-1188 for additional information. Frequent trading policies may apply to those funds offered as investment options within your plan. Please log on to vanguard.com for your employer plans or contact

This investment is not a mutual fund. It is a collective trust available only to tax-qualified plans and their eligible participants.

This collective trust is managed by Vanguard Fiduciary Trust Company, a wholly owned subsidiary of The Vanguard Group, Inc., and is not a mutual fund. Investment objectives, risks, charges, expenses, and other important information should be considered carefully before investing.

For more information about Vanguard investments, see below for which situation is right for you.

please call 855-402-2646. If you receive your retirement plan statement from a service provider other than Vanguard or log on to a recordkeeper's website that is not Vanguard to view your plan, lf you receive your retirement plan statement from Vanguard or log on to Vanguard's website to view your plan, visit vanguard.com or call 800-523-1188



Vanguard Target Retirement 2065 Trust I

Balanced fund (stocks and bonds)

Fund facts

1 2 3 4 5 \$1,246 MM 0.065% 07/21/17	Low \times High assets as of 03/31/23 date	Risk level Total net Expense ratio Inception
7/21/17 1793	date number	ception Fund

Investment objective

consistent with its current asset allocation. provide capital appreciation and current income Vanguard Target Retirement 2065 Trust I seeks to

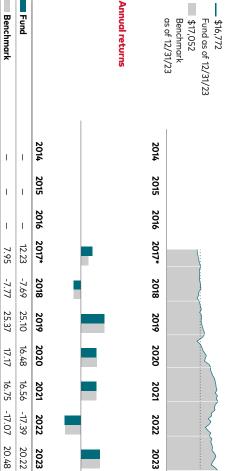
are: Vanguard Total Stock Market Index Fund, Vanguard Total Bond Market II Index Fund, to bonds and other fixed income investments will increase. Within seven years after 2065, the trust's become more conservative over time, meaning that the percentage of assets allocated to stocks will and trusts according to an asset allocation strategy designed for investors planning to retire and leave Inflation-Protected Securities Fund Market Index Trust II, Vanguard Total International Vanguard Institutional Total International Stock Retirement Income Trust I. The underlying holdings asset allocation should resemble that of the Target decrease while the percentage of assets allocated target year). The trust's asset allocation will the workforce in or within a few years of 2065 (the The trust invests in other Vanguard mutual funds and Vanguard Short-Term

small-capitalization stocks government, U.S. agency, and investment-grade mix of U.S. and foreign large-, mid-, and The trust's indirect stock holdings are a diversified Vanguard to minimize foreign currency exposure) currencies other than the U.S. dollar (but hedged by investment-grade foreign bonds issued in government, agency, corporate, and securitized mortgage-backed and asset-backed securities; and obligations issued by the U.S. Treasury; U.S. corporate bonds; inflation-protected public mix of short-, intermediate-, and long-term U.S The trust's indirect bond holdings are a diversified

Benchmark

Target Retirement 2065 Composite Ix

Growth of a \$10,000 investment: July 31, 2017—December 31, 2023



Total returns

	י מו וכמט מו וממט ד	Doring and of
	מווכמי מוומפט לימרמוווספו טו, אכאט	Josephor 21 2022

142

	Quarter	Year to date	One year	Three years	Five years	Since inception
Fund	10.79%	20.22%	20.22%	5.00%	11.02%	9.04%
Benchmark	10.78%	20.48%	20.48%	5.27%	11.37%	ı

The performance data shown represent past performance, which is not a guarantee of future results. Investment returns and principal value will fluctuate, so investors' shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than the performance data cited. For performance data current to the most recent month-end, visit our website at

investment, as you cannot invest directly in an index. <u>vanguard.com/performance</u>. The performance of an index is not an exact representation of any particular

returns. Performance figures include the reinvestment of all dividends and any capital gains distributions. All Figures for periods of less than one year are cumulative returns. All other figures represent average annual

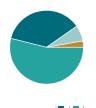
^{*} Partial return since fund started, July 21, 2017.

Target Retirement 2065 Composite Ix: Derived by applying the fund's target asset allocation to the results of the following benchmarks: the FTSE Global All Cap ex US Index for international stocks, the Bloomberg U.S. Aggregate Float Adjusted Index For U.S. bonds, the Bloomberg Global Aggregate ex-USD Float Adjusted RIC Capped Index Hedged for international bonds, and the CRSP US Total Market Index for U.S. stocks. International stock benchmark returns are adjusted for withholding taxes.

Vanguard Target Retirement 2065 Trust I

Balanced fund (stocks and bonds)

Allocation of underlying funds







Connect with Vanguard • vanguard.com

Plain talk about risk

funds, the trust also is subject to asset allocation risk, which is the chance that the selection of underlying funds and the allocation of fund assets will cause the trust to underperform other funds with a similar investment objective. Investments in Target Retirement Trusts are subject to the risks of their underlying funds. The year in the trust name refers to the approximate year 2065 when an investor in the trust would retire and leave the workforce. The trust will gradually shift its emphasis from more aggressive investments to more The trust is subject to several stock and bond market risks, any of which could cause an investor to lose money. However, based on the trust's current allocation between stocks and the less volatile asset class of bonds, the trust's overall level of risk should be higher than those funds that invest mostly in bonds, but lower than those investing mostly in stocks. As conservative ones based on its target date. An investment in the Target Retirement Trust 2065 is not guaranteed at any time, including on or after the target date the trust's allocation between underlying funds gradually changes, the trust's overall level of risk also will decline. In addition to the risks inherent in the asset classes of the underlying

Note on frequent trading restrictions

Participant Services at 800-523-1188 for additional information. Frequent trading policies may apply to those funds offered as investment options within your plan. Please log on to vanguard.com for your employer plans or contact

This investment is not a mutual fund. It is a collective trust available only to tax-qualified plans and their eligible participants.

This collective trust is managed by Vanguard Fiduciary Trust Company, a wholly owned subsidiary of The Vanguard Group, Inc., and is not a mutual fund. Investment objectives, risks, charges, expenses, and other important information should be considered carefully before investing.

For more information about Vanguard investments, see below for which situation is right for you.

please call 855-402-2646. If you receive your retirement plan statement from a service provider other than Vanguard or log on to a recordkeeper's website that is not Vanguard to view your plan, lf you receive your retirement plan statement from Vanguard or log on to Vanguard's website to view your plan, visit vanguard.com or call 800-523-1188

143



Vanguard Target Retirement 2070 Trust I

Balanced fund (stocks and bonds)

Fund facts

_	Low	Risk leve
2		evel
ω		
4		/
G	High	
\$82 MM	assets	Total net
0.065%	as of 03/31/23	Expense ratio
04/06/22	date	Inception
V005	number	Fund

Investment objective

Vanguard Target Retirement 2070 Trust I seeks to provide capital appreciation and current income consistent with its current asset allocation.

nvestment strategy

The trust invests in other Vanguard mutual funds and trusts according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2070 (the target year). The trust's asset allocation will become more conservative over time, meaning that the percentage of assets allocated to stocks will decrease while the percentage of assets allocated to bonds and other fixed income investments will increase. Within seven years after 2070, the trust's asset allocation should resemble that of the Target Retirement Income Trust I. The underlying holdings are: Vanguard Total Stock Market Index Fund, Vanguard Institutional Total International Stock Market Index Fund, and Vanguard Total International Bond II Index Fund, and Vanguard Short-Term Inflation-Protected Securities Fund.

The trust's indirect bond holdings are a diversified mix of short-, intermediate-, and long-term U.S. government, U.S. agency, and investment-grade U.S. corporate bonds; inflation-protected public obligations issued by the U.S. Treasury; mortgage-backed and asset-backed securities; and government, agency, corporate, and securitized investment-grade foreign bonds issued in currencies other than the U.S. dollar (but hedged by Vanguard to minimize foreign currency exposure). The trust's indirect stock holdings are a diversified mix of U.S. and foreign large-, mid-, and small-capitalization stocks.

Benchmark

Target Retirement 2070 Composite Index

Total returns

Fund	Quarter	Year to date		Periods ended December 31, 2023 r Since inception 3,83%
Fund	10.79%	20.28%	20.28%	3.83%
Benchmark	10.78%	20.48%	20.48%	Ι

For performance data current to the most recent month-end, visit our website at The performance data shown represent past performance, which is not a guarantee of future results. Investment returns and principal value will fluctuate, so investors' shares, when sold, may be worth more or <u>vanguard.com/performance</u>. The performance of an index is not an exact representation of any particular less than their original cost. Current performance may be lower or higher than the performance data cited.

returns. Performance figures include the reinvestment of all dividends and any capital gains distributions. All returns are net of expenses. Figures for periods of less than one year are cumulative returns. All other figures represent average annual investment, as you cannot invest directly in an index.

Allocation of underlying funds



Inst Ttl Intl Stk Idx Trust II	Total Stock Market Index Plus
36.	54.0



144

145

Vanguard Target Retirement 2070 Trust I

Balanced fund (stocks and bonds)

Connect with Vanguard • • vanguard.com

Plain talk about risk

other funds with a similar investment objective. Investments in Target Retirement Trusts are subject to the risks of their underlying funds. The year in the trust name refers to the approximate year 2070 when an investor in the trust would retire and leave the workforce. The trust will gradually shift its emphasis from more aggressive investments to more conservative ones based on its target date. An investment in the Target Retirement 2070 Trust I is not guaranteed at any time, including on or after the target date. funds, the trust also is subject to asset allocation risk, which is the chance that the selection of underlying funds and the allocation of fund assets will cause the trust to underperform the trust's allocation between underlying funds gradually changes, the trust's overall level of risk also will decline. In addition to the risks inherent in the asset classes of the underlying The trust is subject to several stock and bond market risks, any of which could cause an investor to lose money. However, based on the trust's current allocation between stocks and the less volatile asset class of bonds, the trust's overall level of risk should be higher than those funds that invest mostly in bonds, but lower than those investing mostly in stocks. As

Note on frequent trading restrictions

Participant Services at 800-523-1188 for additional information. Frequent trading policies may apply to those funds offered as investment options within your plan. Please log on to vanguard.com for your employer plans or contact

For more information about Vanguard funds or to obtain a prospectus, see below for which situation is right for you. This investment is not a mutual fund. It is a collective trust available only to tax-qualified plans and their eligible participants.

If you receive your retirement plan statement from Vanguard or log on to Vanguard's website to view your plan, visit vanguard.com or call 800-523-1188

please call 855-402-2646. If you receive your retirement plan statement from a service provider other than Vanguard or log on to a recordkeeper's website that is not Vanguard to view your plan,

Visit <u>vanguard.com</u> to obtain a prospectus or, if available, a summary prospectus. Investment objectives, risks, charges, expenses, and other important information about a fund are contained in the prospectus; read and consider it carefully before investing.



Vanguard Target Retirement Income Trust I

Balanced fund (stocks and bonds)

Fund facts

1461	06/22/07	0.065%	\$4,117 MM	4	2 3	_
number	date	as of 03/31/23	yh assets	→ High	^	Low
Fund	Inception	Expense ratio	Total net	,	Risk level	Rist

Investment objective

to provide current income and some capital Vanguard Target Retirement Income Trust I seeks

Investment strategy

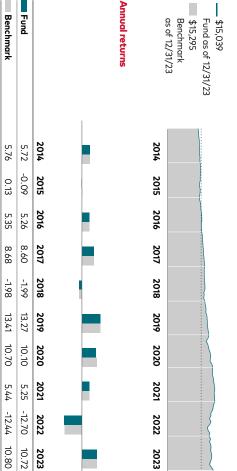
and trusts according to an asset allocation strategy designed for investors currently in retirement. The Vanguard Short-Term Inflation-Protected Total International Bond II Index Fund, and International Stock Market Index Trust II, Vanguard Index Fund, Vanguard Institutional Total underlying holdings are: Vanguard Total Stock Market Index Fund, Vanguard Total Bond Market II The trust invests in other Vanguard mutual funds

The trust's indirect stock holdings are a diversified mix of U.S. and foreign large-, mid-, and government, agency, corporate, and securitized investment-grade foreign bonds issued in obligations issued by the U.S. Treasury; government, U.S. agency, and investment-grade Vanguard to minimize foreign currency exposure) currencies other than the U.S. dollar (but hedged by mortgage-backed and asset-backed securities; and U.S. corporate bonds; inflation-protected public mix of short-, intermediate-, and long-term U.S. The trust's indirect bond holdings are a diversified

Benchmark

Target Retirement Income Compos. Ix

Growth of a \$10,000 investment: January 31, 2014—December 31, 2023



Total returns

	Quarter	Year to date	One year	Three years	Five years	Ten years
Fund	7.34%	10.72%	10.72%	0.57%	4.87%	4.15%
Benchmark	7.33%	10.80%	10.80%	0.76%	5.13%	4.32%

Periods ended December 31, 2023

For performance data current to the most recent month-end, visit our website at The performance data shown represent past performance, which is not a guarantee of future results. Investment returns and principal value will fluctuate, so investors' shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than the performance data cited.

investment, as you cannot invest directly in an index. <u>vanguard.com/performance</u>. The performance of an index is not an exact representation of any particular

returns. Performance figures include the reinvestment of all dividends and any capital gains distributions. All Figures for periods of less than one year are cumulative returns. All other figures represent average annual

Bloomberg U.S. Aggregate Float Adjusted Index thereafter, as well as the Bloomberg U.S. Treasury Inflation-Protected Securities Index through June 2, 2013, and the Bloomberg U.S. Treasury Inflation-Protected Securities (TIPS) 0–5 Year Index thereafter; for short-term reserves, the Citigroup Three-Month Treasury Bill Index through June 2, 2013; for international bonds, the Bloomberg Global Aggregate ex-USD Float Adjusted RIC Capped Index Hedged beginning June 3, 2013; and for U.S. stocks, the Dow Jones U.S. Total Stock Market Index (formerly known as the Dow Jones Wilshire 5000 Index) through April 22, 2005, the MSCI US Broad Market Index through June 2, 2013, and the CRSP US Total Target Retirement Income Compos. Ix: Derived by applying the fund's target asset allocation to the results of the following benchmarks: for international stocks of developed markets, the MSCI EAFE Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for emerging-market stocks, the Select Emerging Markets Index through August 23, 2006, the MSCI Emerging Markets Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for U.S. bonds, the Bloomberg U.S. Aggregate Bond Index through December 31, 2009, and the Market Index thereafter. International stock benchmark returns are adjusted for withholding taxes

Vanguard Target Retirement Income Trust I

Balanced fund (stocks and bonds)

Allocation of underlying funds[†]



STerm Inf Pro Sec Idx Fund	Total Stock Market Index Plus	Total Bond Market II Index
16.4	17.7	37.5%



147

*Fund holdings are subject to change.

Connect with Vanguard • vanguard.com

Plain talk about risk

The trust is subject to several stock and bond market risks, any of which could cause an investor to lose money. However, based on the trust's current allocation between stocks and the less volatile asset class of bonds, the trust's overall level of risk should be higher than those funds that invest mostly in bonds, but lower than those investing mostly in stocks. In addition to the risks inherent in the asset classes of the underlying funds, the trust also is subject to asset allocation risk, which is the chance that the selection of underlying funds and the allocation of fund assets will cause the fund to underperform other funds with a similar investment objective.

Note on frequent trading restrictions

Participant Services at 800-523-1188 for additional information. Frequent trading policies may apply to those funds offered as investment options within your plan. Please log on to vanguard.com for your employer plans or contact

This investment is not a mutual fund. It is a collective trust available only to tax-qualified plans and their eligible participants.

This collective trust is managed by Vanguard Fiduciary Trust Company, a wholly owned subsidiary of The Vanguard Group, Inc., and is not a mutual fund. Investment objectives, risks, charges, expenses, and other important information should be considered carefully before investing.

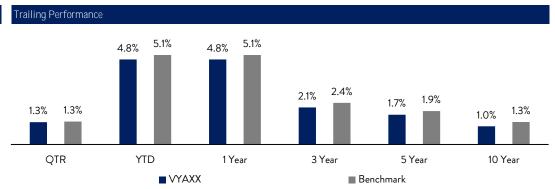
For more information about Vanguard investments, see below for which situation is right for you.

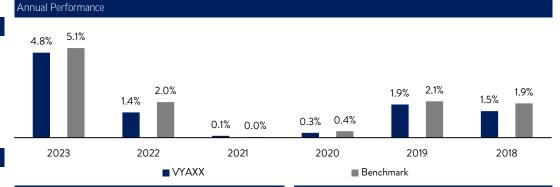
please call **855-402-2646** If you receive your retirement plan statement from a service provider other than Vanguard or log on to a recordkeeper's website that is not Vanguard to view your plan, lf you receive your retirement plan statement from Vanguard or log on to Vanguard's website to view your plan, visit vanguard.com or call 800-523-1188

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	19.17 Years
Fund Size	\$341,608,330

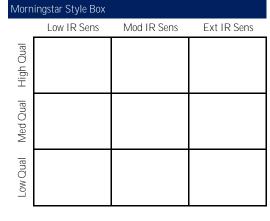
Fund Characteristics	VYAXX	+/- Category
% Assets in Top 10 Holdings	87.39%	81.80%
Average Eff Duration	0.04	-0.01
Average Eff Maturity	0.08	0.00
Average Credit Quality	-	-
Average Coupon	5.48%	0.11%

Sector Allocations	VYAXX	Category	+/- Category
Government	27.8%	58.2%	-30.4%
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%	4.2%	-4.2%
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%	0.1%	-0.1%
Cash & Equivalents	72.2%	37.5%	34.7%
Other	0.0%	0.0%	0.0%









Trailing Performance	QTR	YTD	1 Year	3 Year	5 Year	10 Year	5-Year Quarterly				
• VYAXX	1.27%	4.81%	4.81%	2.10%	1.69%	1.03%	Performance	4Q23	3Q23	2Q23	1Q23
• Benchmark	1.30%	5.07%	5.07%	2.35%	1.89%	1.27%	• VYAXX	1.27%	1.25%	1.18%	1.04%
+/- Benchmark	-0.03%	-0.25%	-0.25%	-0.26%	-0.21%	-0.24%	• Benchmark	1.30%	1.30%	1.24%	1.14%
Peer Group Rank	59	51	51	33	42	45	+/- Benchmark	-0.03%	-0.04%	-0.07%	-0.10%
Annual Performance	2023	2022	2021	2020	2019	2018	5-Year Quarterly				
• VYAXX	4.81%	1.43%	0.10%	0.27%	1.88%	1.51%	Performance	4Q22	3Q22	2Q22	1Q22
• Benchmark	5.07%	2.01%	0.04%	0.36%	2.06%	1.94%	• VYAXX	0.86%	0.48%	0.09%	0.00%
+/- Benchmark	-0.25%	-0.58%	0.06%	-0.09%	-0.18%	-0.43%	 Benchmark 	0.99%	0.66%	0.27%	0.08%
Peer Group Rank	51	36	2	54	48	47	+/- Benchmark	-0.14%	-0.18%	-0.18%	-0.08%
	01/2019 -	10/2018 -	07/2018 -	04/2018 -	01/2018 -	10/2017 -	5-Year Quarterly				
Rolling 5-Year Performance	12/2023	09/2023	06/2023	03/2023	12/2022	09/2022	Performance	4Q21	3Q21	2Q21	1Q21
• VYAXX	1.69%	1.53%	1.36%	1.19%	1.04%	0.89%	• VYAXX	0.00%	0.08%	0.00%	0.01%
• Benchmark	1.89%	1.75%	1.59%	1.43%	1.28%	1.14%	• Benchmark	0.01%	0.01%	0.01%	0.01%
+/- Benchmark	-0.21%	-0.22%	-0.23%	-0.24%	-0.24%	-0.25%	+/- Benchmark	-0.01%	0.07%	0.00%	0.00%
Peer Group Rank	42	40	41	42	42	45					
							5-Year Quarterly				
Risk Statistics	3	Year	5`	Year	10	Year	Performance	4Q20	3Q20	2Q20	1Q20
	Manager	Benchmark	Manager	Benchmark	Manager	Benchmark	• VYAXX	0.00%	0.00%	0.02%	0.25%
Alpha	-0.16	0.00	-0.13	0.00	-0.19	0.00	 Benchmark 	0.02%	0.03%	0.04%	0.28%
Beta	1.62	1.00	1.69	1.00	1.66	1.00	+/- Benchmark	-0.02%	-0.03%	-0.02%	-0.03%
Standard Deviation	0.62	0.64	0.52	0.55	0.43	0.45					
Sharpe Ratio	-3.50	-3.64	-3.23	-3.15	-3.39	-2.46	5-Year Quarterly				
Information Ratio	-2.65	-	-2.56	-	-3.01	-	Performance	4Q19	3Q19	2Q19	1Q19
Treynor Ratio	-0.25	-0.15	-0.19	-0.11	-0.19	-0.07	• VYAXX	0.32%	0.50%	0.53%	0.52%
Upside Capture Ratio	89.16	100.00	89.12	100.00	80.99	100.00	Benchmark	0.39%	0.49%	0.57%	0.59%
Downside Capture Ratio	-	-	-	-	-	-	+/- Benchmark	-0.07%	0.01%	-0.04%	-0.07%

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

data quoted herein. For performance data current to the most recent month-end please visit http://advisor.morningstar.com/familyinfo.asp. 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 The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will

reflect sales charges and ongoing fund expenses. Standardized Returns assume reinvestment of dividends and capital gains. They depict performance without adjusting for the effects of taxation, but are adjusted to

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 M&E risk charges, fund-level expenses such as management fees and operating fees, contract-level administration fees, and charges such as surrender, contract If adjusted for taxation, the performance quoted would be significantly reduced. For variable annuities, additional expenses will be taken into account, including

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 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 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 returns for exchange-traded funds are based on net asset value. 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 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

Money Market Fund Disclosures

it to the applicable disclosure below: 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

Institutional Money Market Funds (designated by an "S"):

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 expect that the sponsor will provide financial support to the fund at any time 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 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 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

Government Money Market Funds that have chosen to rely on the ability to impose liquidity fees and suspend redemptions (designated by an "L")

Retail Money Market Funds (designated by an "L"):

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 financial support to the fund at any time. 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 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 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

Government Money Market Funds that have chosen not to rely on the ability to impose liquidity fees and suspend redemptions (designated by an

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. 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 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

Annualized returns 12-31-2023											
Standardized Returns (%)	7-day Yield 7-day Yield Subsidized Unsubsidized as of date as of date	d 1Yr	5Yr	10Yr	Since Incer Inception	Inception Max Front Max Back Date Load % Load %	ont Ma:	k Back .oad %	Net Exp Ratio %	Gross Exp Max Ratio % Redemption %	Max emption %
Baron Growth Instl		- 14.97	14.92	10.24	13.87 05-29-200	2009	¥	N	1.04	1.04	NA
Fidelity 500 Index		- 26.29	15.68	12.02	12.67 05-04-201	_	¥	N A	0.02	0.02	N
Fidelity Interm Trs Bd Index	1	- 4.07	0.61		0.62 10-04-201	7	A	NA	0.03	0.03	NA
Fidelity Mid Cap Index		- 17.21	12.68	9.41	12.05 09-08-201	2011	¥	NA	0.03	0.03	NA
Fidelity Small Cap Index	1	- 17.12		7.32	10.73 09-08-201	_	A	NA	0.03	0.03	NA
Fidelity Total International Index		- 15.51	7.20	1	6.00 06-07-2010	016 I	₽	N A	0.06	0.06	N
Fidelity U.S. Bond Index	1	- 5.56	1.06	1.78	2.01 05-04-201	2011	¥	NA	0.03	0.03	NA

©2024 Morningstar. All fights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and princes contained therein in Interchain the confidential and propriets up information of Morningstar. (2) may not be copied or redistributed. (4) do not constitute investment advice affected by Morningstar. (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate the seap as otherwise required by law. Morningstar (8) in high terminal purposes and therefore are not an offer to buy or sell a security, information, data, analyses or opinions or their uses of princip seap as otherwise required by law. Morningstar high not be contained to the contained of the contained to the contained to the contained of the contained to the contained to the contained of the contained to the



Associated sources 12 24 2022												
Standardized Returns (%)	7-day Yield Subsidized Unsubsidized as of date as of date	'-day Yield subsidized as of date	1Yr	5Yr	10Yr	Since	Inception Max Front Max Back Date Load % Load %	Max Front Load %	Max Back Load %	Net Exp Ratio %	Gross Exp Ratio % Reden	p % Redemption %
Hartford Core Equity R6			21.57	14.35		11.38 (03-31-2015	NA	N	0.36	0.36	N N
Hartford Schroders US Small Cap Opps SDR			8.71	9.73			09-28-2015	NA	NA	0.951	0.99	N
MFS Intl Diversification R6	1	1	14.44	8.29	1	5.58	10-02-2017	NA	NA	0.73^{2}	0.74	N N
Sterling Capital Total Return Bond R6			5.97	1.70		1.58 (02-01-2018	NA	NA	0.35^{3}	0.48	N
Vanguard Target Retirement 2020 Fund			12.51	6.61	5.52	5.91 (06-07-2006	NA	NA	0.08	0.08	NA
Vanguard Target Retirement 2025 Fund	1	1	14.55	7.56	6.10	6.53	10-27-2003	NA	NA	0.08	0.08	NA
Vanguard Target Retirement 2030 Fund	1		16.03	8.37	6.58	6.57 (06-07-2006	NA	NA	0.08	0.08	NA
Vanguard Target Retirement 2035 Fund	1		17.14	9.17	7.06	7.32	10-27-2003	NA	NA	0.08	0.08	NA
Vanguard Target Retirement 2040 Fund	1	1	18.34	9.99	7.52	7.22 (06-07-2006	N	NA	0.08	0.08	Š
Vanguard Target Retirement 2045 Fund			19.48	10.76	7.91	7.97	10-27-2003	NA	NA	0.08	0.08	NA
Vanguard Target Retirement 2050 Fund			20.17	10.93	7.99		06-07-2006	NA	NA	0.08	0.08	NA
Vanguard Target Retirement 2055 Fund		I	20.16	10.92	7.97		08-18-2010	N	NA	0.08	0.08	N
Vanguard Target Retirement 2060 Fund			20.18	10.92	7.97	9.52 (01-19-2012	NA	NA	0.08	0.08	N
Vanguard Target Retirement 2065 Fund	1	1	20.15	10.91	1	8.44 (07-12-2017	N	NA	0.08	0.08	N N
Vanguard Target Retirement 2070 Fund	1		20.24			13.76 (06-28-2022	NA	NA	0.08	0.08	NA
Vanguard Target Retirement Income Fund	1		10.74	4.83	4.09	4.87	10-27-2003	N	NA	0.08	0.08	N
Bloomberg US Agg Bond TR USD			5.53	1.10	1.81		01-03-1980					
Bloomberg US Government TR USD			4.09	0.56	1.27		01-03-1989					
Morningstar GbI Allocation TR USD			15.46	7.08	5.41		06-18-2013					
Morningstar Lifetime Mod 2025 TR USD			12.15	6.67	5.41		02-18-2009					
Morningstar Lifetime Mod 2030 TR USD			13.33	7.44	5.93		02-18-2009					
Morningstar Lifetime Mod 2035 TR USD			14.84	8.41 20	6.49		02-18-2009					
Morningstar Lifetime Mod 2045 TR USD			17.39	9.84	7.19		02-18-2009					
Morningstar Lifetime Mod 2050 TR USD			17.85	10.03	7.23	0	02-18-2009					
Morningstar Lifetime Mod 2055 TR USD			17.90	10.01	7.18		02-18-2009					
Morningstar Lifetime Mod 2060 TR USD			17.86 10.07	9.94	11		06-23-2014					
USD			0.07	24.0	÷		02-10-2005					
Morningstar Mod Tgt Risk TR USD Morningstar US Core Bd TR USD			5.31		5.72		02-18-2009					
Morningstar US Mid Brd Grt TR USD			20.84	ı	1		12-21-2020					
Morningstar US Mod Con Tgt Alloc NR USD			13.04	ı	I		06-30-2020					
Morningstar US Sml Ext TR USD			19.42		1		12-21-2020					
MSCI ACWI EX USA NR USD			15.62 22.20	7.08 11.72	3.83 7.93		01-01-2001 01-01-2001					
MSCI EAFE NR USD			18.24	8.16	4.28		03-31-1986					
Russell 1000 TR USD			26.53	15.52	11.80		12-31-1978					
Russell Mid Cap Growth TR USD			25.87	13.81	10.57		02-01-1995					
Russell Mid Cap TR USD			17.23	12.68	9.42		12-31-1978					
S&P 500 TR USD			26.29	15.69	12.03		01-30-1970					
USTREAS T-Bill Auction Ave 3 Mon			5.41	2.01	1.34		02-28-1941					
1. Contractual waiver; Expires 02-29-2024												
3. Contractual waiver; Expires 01-31-2024												
D-4)		·		

©2024 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses and opinions contained herein (1) include the confidential and proprietary information of Morningstar, (2) may include, or be derived from, account information provided by your financial professional which cannot be wrifted by Morningstar, (3) may not be copied or redistributed, (1) do not constitute investment advice effect by Morningstar, (3) may not be copied or redistributed, (1) do not constitute investment advice offered by Morningstar, (3) may not provided by your financial purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law. Morningstar shall not be responsible for any trading decisions, damages or other issees resulting from or related to this information, data, analyses or opinions or their use. Opinions expressed are as of the date written and are subject to change without notice. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales iterature. If applicable it must be preceded or accompanied by a prospectus, or equivalent, and disclosure statement. Hease see important disclosures at the end of this report.

Fidelity Interm Trs Bd Index Fidelity Mid Cap Index

14.49 25.48 3.51 16.53 16.41

13.72 15.07 0.06 11.88 9.39

8.55 6.38

11.91 0.00 11.23 9.82

05-04-2011 10-04-2017 09-08-2011 09-08-2011

15.52 2.78 10.18 10.12

11.96 12.44 0.47 9.92 7.82

> 10Yr 7.95 9.68

11.60 10.39 Since Inception

7.37 5.56

0.39 9.86 8.64

11.31

10Yr 8.60

12.51

9.17

Fidelity Small Cap Index

Fidelity 500 Index

Baron Growth Instl

Return after Tax (%)

On Distribution

5Yr

Since Inception

Inception Date 05-29-2009

On Distribution and Sales of Shares

M CRINGSTAR®

Return after Tax (%)	On Distribution					On Distribution and Sales	n and Sales of Shares		
	1Yr	5Yr	10Yr	Since Inception	Inception Date	1Yr	5Yr	10Yr	Since Inception
Fidelity Total International Index	14.20	6.39		5.22	06-07-2016	9.16	5.42		4.47
Fidelity U.S. Bond Index	4.80	0.42	0.89	1.07	05-04-2011	3.78	0.81	1.11	1.25
Hartford Core Equity R6	20.47	13.43		10.40	03-31-2015	13.16	11.29		8.99
Hartford Schroders US Small Cap Opps SDR	8.61	8.82		7.30	09-28-2015	5.16	7.67		6.79
MFS Intl Diversification R6	12.83	7.33	I	4.57	10-02-2017	8.84	6.25	I	4.05
Sterling Capital Total Return Bond R6	4.41	0.33	1	0.21	02-01-2018	3.50	0.77	1	0.66
Vanguard Target Retirement 2020 Fund	10.59	4.49	3.93	4.74	06-07-2006	8.16	4.89	4.04	4.55
Vanguard Target Retirement 2025 Fund	13.22	5.94	4.80	5.56	10-27-2003	9.07	5.71	4.55	5.16
Vanguard Target Retirement 2030 Fund	15.11	6.91	5.43	5.68	06-07-2006	9.76	6.40	5.00	5.10
Vanguard Target Retirement 2035 Fund	16.28	7.65	5.85	6.45	10-27-2003	10.44	7.07	5.40	5.93
Vanguard Target Retirement 2040 Fund	17.52	8.46	6.38	6.37	06-07-2006	11.16	7.75	5.83	5.81
Vanguard Target Retirement 2045 Fund	18.71	9.46	6.88	7.20	10-27-2003	11.85	8.40	6.16	6.55
Vanguard Target Retirement 2050 Fund	19.42	9.76	7.06	6.77	06-07-2006	12.26	8.54	6.25	6.08
Vanguard Target Retirement 2055 Fund	19.43	9.89	7.15	9.01	08-18-2010	12.25	8.53	6.26	7.97
Vanguard Target Retirement 2060 Fund	19.46	10.09	7.25	8.82	01-19-2012	12.26	8.52	6.25	7.68
Vanguard Target Retirement 2065 Fund	19.46	10.32	1	7.87	07-12-2017	12.23	8.54	1	6.58
Vanguard Target Retirement 2070 Fund	19.71			13.24	06-28-2022	12.21			10.46
	9 24	3.43	2.87	3.71	10-27-2003	6.63	3.38	2.81	3.51



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.

between an ETF's holdings and those of its underlying index may cause its considered to be more tax-efficient when compared to similarly invested mutual account are subject to income tax. In many, but not all cases, ETFs are generally do not have 12b-1 fees or sales loads. Capital gains from funds held in a taxable and management fees, but does not take into account any brokerage costs. ETFs segments relating to their underlying indexes. Similarly, an imperfect match managed, so their value may be affected by a general decline in the U.S. market their NAV, they are said to be trading at a discount. ETFs are not actively said to be trading at a premium. Conversely, if they are trading at a price below secondary market and thus have a market price that may be higher or lower than index it is seeking to imitate. Like closed-end funds, an ETF can be traded on a striving to achieve a similar return as a particular market index. The ETF will ETF is an annual fee charged to a shareholder. It includes operating expenses performance to vary from that of its underlying index. The expense ratio of an its net asset value. If these shares trade at a price above their NAV, they are invest in either all or a representative sample of the securities included in the An ETF is an investment company that typically has an investment objective of

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.

153

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 is 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

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 class(es) 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.

Quantitatively-Driven Content

This report may contain a Morningstar Medalist RatingTM derived quantitatively ("Quantitatively-Driven Content"), meaning it was generated in whole or in part by a series of statistical models intended to replicate Morningstar's analyst output.

Mr. Lee Davidson, Chief Analytics Officer for Morningstar, Inc. is responsible for overseeing the methodology that supports the Quantitatively-Driven Content. Mr. Davidson is guided by the Morningstar, Inc. Code of Ethics in carrying out his responsibilities. Morningstar's Research, Investment, and Analytics Group includes manager research employees of various Morningstar, Inc. subsidiaries who prepare analysis on investment products and quantitative research employees of Morningstar, Inc. or its subsidiaries who aim to help investors by providing innovative research, models, and software. In the United States, research employees are employed by Morningstar Research Services LLC, which

is registered with the U.S. Securities and Exchange Commission.

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.

Analyst-Driven %

The Analyst-Driven % data point displays the weighted percentage of a vehicle's pillar ratings assigned directly or indirectly by analysts. For example, if the People and Parent ratings are assigned directly or indirectly by analysts but the Process rating is assigned algorithmically, the Analyst-Driven % for an actively managed vehicle would disclose that 55% of the pillar weight was assigned by analysts and the Analyst-Driven % for a passively managed vehicle would disclose that 20% of the pillar weight was assigned by analysts.

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.

154

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 of benefitting 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.)

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.

Data Coverage %

The Data Coverage % data point is a summary metric describing the level of data completeness used to generate the overall rating. If the pillar is assigned directly or indirectly by analysts, the pillar has complete data availability, as no model was used to estimate the pillar score. If the pillar is assigned directly by algorithm, Morningstar counts the number of data points feeding both the positive and negative models and counts whether the vehicle has strategy-specific data available. A simple percentage is calculated per pillar. The overall data coverage % is then scaled by pillar weights.

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.

155

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 Medalist Rating™

The Morningstar Medalist Rating is the summary expression of Morningstar's forward-looking analysis of investment strategies as offered via specific vehicles using a rating scale of Gold, Silver, Bronze, Neutral, and Negative. The Medalist Ratings indicate which investments Morningstar believes are likely to outperform a relevant index or peer group average on a risk-adjusted basis over time. Investment products are evaluated on three key pillars (People, Parent, and Process) which, when coupled with a fee assessment, forms the basis for Morningstar's conviction in those products' investment merits and determines the Medalist Rating they're assigned. Pillar ratings take the form of Low, Below Average, Average, Above Average, and High. Pillars may be evaluated via an



analyst's qualitative assessment (either directly to a vehicle the analyst covers or indirectly when the pillar ratings of a covered vehicle are mapped to a related uncovered vehicle) or using algorithmic techniques. Vehicles are sorted by their expected performance into rating groups defined by their Momingstar Category and their active or passive status. When analysts directly cover a vehicle, they assign the three pillar ratings based on their qualitative assessment, subject to the oversight of the Analyst Rating Committee, and monitor and reevaluate them at least every 14 months. When the vehicles are covered either indirectly by analysts or by algorithm, the ratings are assigned monthly. For more detailed information about the Medalist Ratings, including their methodology, please go to http://global.morningstar.com/managerdisclosures.

The Morningstar Medalist Ratings are not statements of fact, nor are they credit or risk ratings. The Morningstar Medalist Rating (i) should not be used as the sole basis in evaluating an investment product, (ii) involves unknown risks and uncertainties which may cause expectations not to occur or to differ significantly from what was expected, (iii) are not guaranteed to be based on complete or accurate assumptions or models when determined algorithmically, (iv) involve 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, tax rates, exchange rate changes, and/or changes in political and social conditions, and (v) should not be considered an offer or solicitation to buy or sell the investment product. A change in the fundamental factors underlying the Morningstar Medalist Rating can mean that the rating is subsequently no longer accurate.

Analysts do not have any other material conflicts of interest at the time of publication. Users wishing to obtain further information should contact their local Morningstar office or refer to the Analyst Conflicts of Interest and Other Disclosures for North America at

https://global.morningstar.com/managerdisclosures under "Methodology Documents and Disclosures".

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/managerdisclosures

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 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.

156

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/ocr/ocr-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



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 an input in Style Box calculation. This symbol is then used to map to a Style Box credit quality category of "low," "medium," or "high". Funds with a "low" credit quality category are those whose weighted-average credit quality is determined to be equivalent to the commonly used High Yield classification, meaning a rating below "BBB", portfolios assigned to the "high" credit category have either a "AAA" or "AA+" average credit quality value, while "medium" are those with an average rating of "AA" inclusive to "BBB-". It is expected and intended that the majority of portfolios will be assigned a credit category of "medium".

For assignment to an interest-rate sensitivity category Morningstar uses the average effective duration of the portfolio. From this value there are three distinct methodologies employed to determine assignment to category. Portfolios which are assigned to Morningstar municipal-bond categoriesemploy static breakpoints between categories. These breakpoints are "Limited" equal to 4.5 years or less.; (ii) "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, "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 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.

157

Quarterly Returns

Quarterly Return is calculated applying the same methodology as Total Return except it represents return through each quarter-end.

4-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 stocks included in these sectors generally have betas greater than 1. 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 experience 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 Risk Disclosures

Morningstar makes no representation concerning the appropriateness of any

investment or investment strategy. Other types of investments or investment strategies may be more appropriate depending upon an investor's specific situation, including the investor's investment objectives, financial status, tax situation, and risk tolerance. These disclosures cannot and do not list every conceivable factor that may affect the results of any investment or investment strategy. Additional risks will arise, and an investor must be willing and able to accept those risks. You should speak with your financial professional to understand the risks and limitations on investing in any particular investment or investment strategy, including those that are shown in this report, before making investment decisions.

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/units, when sold or redeemed, may be worth more or less than the original investment. Portfolio statistics change over time. Securities are not FDIC-insured, may lose value, and are not guaranteed by a bank or other financial institution. Portfolio statistics change over time.

The risks associated with investing are numerous and include, but are not limited to, those listed below:

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.

<u>Sector Strategies</u>: 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.

158

<u>Small Cap Equities:</u> Portfolios that invest in stocks of small companies involve additional risks. Smaller companies typically have a higher risk of failure, and 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.

<u>High-Yield Bonds:</u> 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.

<u>Tax-Free Municipal Bonds</u>: 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.

<u>Bonds</u>: 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.

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 EIFs: Levered 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 Fund objective). The leverage/gearing ratio is the amount of excess return that a levered investment is designed to achieve in comparison to its index performance (i.e. 200%, 300%, -200%, or -300% or 2X, 3X. -2X, -3X). 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.

<u>Short Positions:</u> 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.

<u>Long-Short:</u> 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.

<u>Liquidity Risk:</u> Closed-end fund, ETF, and HOLDR 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, HOLDRs, 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.

<u>Market Risk</u>: The market prices of ETFs and HOLDRs 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.

<u>Target-Date Funds:</u> 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 no 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 © 2024 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

Tracks the returns of U.S. Treasuries, agency bonds, and one- to three-year U.S. government obligations. Bloomberg Indexes and its associated data, Copyright © 2024 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.

159

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 Grt 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 Sml Ext TR USD

The index measures the performance of US small-cap stocks. These stocks fall 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.

160

MSCI ACWI NR USD

The index measures the performance of the large and mid cap segments of all country markets. It is free float-adjusted market-capitalization weighted. The constituents displayed for this index are from the following proxy: iShares MSCI ACWI ETF.

MSCI EAFE NR USD

This Europe, Australasia, and Far East index is a market-capitalization-weighted index of 21 non-U.S., industrialized country indexes.

This disclosure applies to all MSCI indices: Certain information included herein is derived by Morningstar in part from MSCI's Index Constituents (the "Index Data"). However, MSCI has not reviewed any information contained herein and does not endorse or express any opinion such information or analysis. MSCI does not make any express or implied warranties, representations or guarantees concerning the Index Data or any information or data derived therefrom, and in no event will MSCI have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) relating to any use of this information. The constituents displayed for this index are from the following proxy: Schwab International Index Fund®.

ussell 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.

Important Disclosures:

The material in this Report is not to be reproduced or distributed to any other persons (other than professional advisors of the investors) and is intended solely for the use of the persons to whom it has been delivered. This material is not for distribution to the general public.

This information is being provided as a service of your Hyas Group Consultant and does not supersede or replace your customer account statement provided by your custodian ("Custodial Statement"). Information in this Report may vary from the information in your Custodial Statement as a result of differences in accounting procedures, reporting dates, or valuation methodologies of certain securities. The market values reflected in this Report may vary slightly from the market values in your Custodial Statement. The information in this Report is as of the date(s) noted and subject to daily market fluctuation.

Sources of Information. Material in this Report has been obtained from sources that we believe to be reliable, but we do not guarantee its accuracy, completeness, or timeliness. The performance produced herein is calculated utilizing custodian data downloads and manually entered material. Although we take every precaution to ensure accuracy, we are not able to guarantee complete accuracy.

No Tax or Legal Advice. When Hyas Group, its affiliates and Hyas Group Consultants provide "investment advice" regarding a retirement or welfare benefit plan account, an individual retirement account or a Coverdell education savings account ("Retirement Account"), Hyas Group is a "fiduciary" as those terms are defined under the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), and/or the Internal Revenue Code of 1986 (the "Code"), as applicable. When Hyas Group provides investment education or otherwise does not provide "investment advice", Hyas Group will not be considered a "fiduciary" under ERISA and/or the Code. Tax laws are complex and subject to change. Hyas Group does not provide tax or legal advice.

Key Asset Class Risk Disclosures. Investing involves market risk, including possible loss of principal. Please refer to Hyas Group's Form ADV Brochure for more information about the risks associated with certain investment products. The Hyas Group's Form ADV Brochure is available upon request.

ALL MUTUAL FUND PRODUCTS AND EXCHANGE-TRADED FUNDS ARE SOLD BY PROSPECTUS, WHICH CONTAINS MORE COMPLETE INFORMATION ABOUT A FUND, ITS EXPENSES AND MATERIAL RISKS RELATED TO THAT FUND'S INVESTMENT STRATEGY.

PLEASE CONTACT YOUR HYAS GROUP CONSULTANT FOR A COPY OF A FUND'S PROSPECTUS.

PLEASE READ THE PROSPECTUS AND CONSIDER THE FUND'S INVESTMENT OBJECTIVES, RISKS, CHARGES AND EXPENSES CAREFULLY BEFORE INVESTING. THE PROSPECTUS CONTAINS THIS AND OTHER IMPORTANT INFORMATION ABOUT THE FUND.

Performance. Performance results illustrated herein do not reflect a deduction of any investment advisory fees charged by Hyas Group or any investment manager but do include the fund's internal expenses. Performance results are annualized for time periods greater than one year and include all cash and cash equivalents, realized and unrealized capital gains and losses, and dividends, interest, and income. The investment results depicted herein represent historical performance. As a result of recent market activity, current performance may vary from the figures shown. Past performance is not a guarantee of future results.

The underlying fund's internal expenses (also known as the expense ratio) generally covers investment management fees, marketing, and distribution fees (also known as 12b-1 fees) and other operating expenses of the fund. The expense ratios being displayed for mutual funds reflect each fund's prospectus "net" expenses as provided by Morningstar. Such "net" expenses are subject to change and may increase at any time.

To learn more about the Hyas Group advisory services, please see the Hyas Group ADV Brochure for more information. It is available from your Hyas Group Consultant.

Performance data quoted is historical. Past performance does not guarantee future results. Current performance may be higher or lower than the performance quoted. You can obtain performance data current to the most recent month-end for each fund by visiting the fund company website. The investment return and principal value of an investment will fluctuate such that an investor's shares, when redeemed, may be worth more or less than their original cost. Total returns include reinvestment of dividends and capital gains and are net of all fund fees and expenses.

Performance figures are based on Net Asset Value (NAV) within a qualified retirement plan. If an individual were to purchase shares outside of a qualified plan, they would likely be subject to all, or a portion of, any applicable sales charges. These charges would lower the performance indicated above.

The returns on a portfolio consisting primarily of Environmental, Social and Governance ("ESG") aware investments may be lower or higher than a portfolio that is more diversified or where decisions are based solely on investment considerations. Because ESG criteria exclude some investments, investors may not be able to take advantage of the same opportunities or market trends as investors that do not use such criteria. Diversification does not guarantee a profit or protect against loss in a declining financial market.

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.

The "Investment Policy Statement Compliance Report" indicates funds that are on the Plan's Watch List, as based on investment monitoring criteria which is provided to Hyas Group by the plan sponsor. The plan sponsor should inform its Hyas Group Consultant of any changes to the plan's investment policy.

Fund data provided by Morningstar.

Peer Groups. Peer Groups are a collection of similar investment strategies that essentially group investment products that share the same investment approach. Peer Groups are used for comparison purposes to compare and illustrate a clients investment portfolio versus its peer across various quantitative metrics like performance and risk. Peer Group comparison is conceptually another form of benchmark comparison whereby the actual investment can be ranked versus its peer across various quantitative metrics.

Peer Group Ranking Methodology. A percentile rank denotes the value of a product in which a certain percent of observations falls within a peer group. The range of percentile rankings is between 1 and 100, where 1 represents a high statistical value and 100 represents a low statistical value. The 30th percentile, for example, is the value in which 30% of the highest observations may be found, the 65th percentile is the value in which 65% of the highest observations may be found, and so on.

Percentile rankings are calculated based on a normalized distribution ranging from 1 to 100 for all products in each peer group, where a ranking of 1 denotes a high statistical value and a ranking of 100 denotes a low statistical value. It is important to note that the same ranking methodology applies to all statistics, implying that a ranking of 1 will always mean highest value across all statistics.

For example, consider a risk/return assessment using standard deviation as a measure of risk. A percentile ranking equal to 1 for return denotes highest return, whereas a percentile ranking of 1 for standard deviation denotes highest risk among peers.

In addition, values may be used to demonstrate quartile rankings. For example, the third quartile is also known as the 75th percentile, and the median is the 50th percentile.

Hyas Group is a separate business unit within Morgan Stanley Institutional Investment Advisors LLC. © Morgan Stanley, 2023.