

March 31, 2023 Performance Report

### **Table Of Contents**

Section	1	Market Overview
Section	2	Plan Overview
Section	3	Plan Review
Section	4	Fund Review Fee
Section	5	Review Fund
Section	6	Attributions

# **Section 1 | Market Overview**



### FIRST QUARTER 2023 MARKETS AND ECONOMIC UPDATE

#### **GLOBAL ECONOMIC LANDSCAPE**

- Following seven rate hikes in 2022, the Federal Open Markets Committee raised rates by a total of 0.50% in 1Q23 (0.25% in February and 0.25% again in March) while continuing its monetary tightening program. Together with more restrictive lending standards from banks, these monetary effects tighten financial conditions and threaten to slow economic activity<sup>1</sup>.
- Global markets have been faced with divergent central bank policies. On the contractionary side, the Federal Reserve and the European Central Bank (ECB) have embarked on aggressive tightening campaigns, seeking to curb inflationary pressures. Since February 2022, the Fed has unwound about \$530 billion of its balance sheet assets (a -6% change), while the ECB has unwound \$1.6 trillion of its balance sheet assets (a -16% change). However, the Bank of Japan (BoJ) and People's Bank of China's (PBoC) vigorous asset purchases have largely offset these actions. The PBOC added ~\$600 billion to its balance sheet (a +11% change) from October to December 2022, responding to the economic implications of lockdowns. The BoJ, hoping to maintain its yield curve control policy, bought \$850 billion worth of assets (a +18% change) from October 2022 to February 2023<sup>2</sup>.
- European headline inflation declined substantially during the first quarter of 2023. Welcome as this development may appear, much of it was due to declining energy prices while core inflation in areas like services and food remain high. Wages, which typically lag, are showing signs of rising. The overall composition and direction of inflation indicates its potential to stay higher for longer, reducing the probability for central bank policy easing<sup>3</sup>.
- China's property sector accounts for \$4.5 trillion of the country's GDP (versus \$3.4 trillion for the United States). After 17 months of decline due to the combination of quarantine and policy tightening, property prices increased by 0.3% in February 2023. Continued demand growth here may support commodity prices, considering that the country accounts for nearly half of the global demand for iron ore, aluminum, copper, nickel, zinc, and steel<sup>4</sup>.
- The US Banking system exhibited increasing funding pressure as yields on bank deposits struggled to compete with those of money market funds. In the first quarter of 2023, money market assets exceeded deposits of all domestically chartered banks for the first time since 2021 and by a substantial margin. This may place continued earnings stress on bank stocks, which in turn have been shown to be leading economic indicators<sup>5</sup>.

<sup>&</sup>lt;sup>1</sup> Source: Morgan Stanley, Portfolio Construction and Cross-Asset Strategy, April 4, 2023

<sup>&</sup>lt;sup>2</sup> Source: Morgan Stanley, Topics in Portfolio Construction, March 14, 2023

<sup>&</sup>lt;sup>3</sup> Source: Morgan Stanley, Euro Inflation Watch, March 31, 2023

<sup>&</sup>lt;sup>4</sup> Source: Morgan Stanley, China's Reopening and Property Sector Improvement Are Key to Commodity Demand, April 5, 2023

<sup>&</sup>lt;sup>5</sup> Source: Morgan Stanley, Weekly Warm-up: April 3, 2023

#### FIXED INCOME MARKETS<sup>6</sup>

- Bond market performance was broadly positive in 1Q23, with most bond sectors positing returns of low- to mid-single digits. Longer-term bonds were among the highest performs as rates fell on the expectation of an earlier end to the Federal Reserve's rate-hiking cycle. The thirty-year Treasury for example returned 5.99% versus 2.96% for the US Aggregate Bond Market.
- Yields across the US Treasury curve declined in largely parallel fashion in 1Q23, dropping from 0.3% to 0.4% for Treasurys maturing two-years and beyond. Only the very front-end of the yield curve increased during the quarter, with 3-month and one-year Treasury bills eclipsing year-end levels by smaller margins.
- 1Q23's general decline in yields notwithstanding, a broad range of fixed income indices ended the quarter at the upper end of their ten-year range, contrasting the more recent rate environment with the low-rate regime of the prior decade. While yields in most fixed income sectors stood between 1.5% to 3.5% above their trailing ten-year median, leveraged loans were notably higher, ending the quarter at 11.3% versus a median of 5.7%, suggesting a higher degree of market apprehension being priced into this sector.
- Credit spreads on US High Yield bonds continued to appear range-bound, ending the quarter at 4.99% versus a long-term average of 5.66%. Default rates ended the quarter below long-term averages as well but continued their upward trend. Although market commentators have communicated concern about how this sector may fare during a downturn, credit spreads are not yet at levels typically consistent with recessions.

#### **EQUITY MARKETS**

- By the end of 1Q23, equity indices improved, the growth style outperformed value, large-cap beat mid- and small-cap stocks, and information technology was the strongest performing sector. Interestingly, a smaller portion of the constituents of the S&P 500 Index outperformed it than in the preceding quarter, indicating a decline in market breadth<sup>7</sup>.
- The US equity risk premium (ERP), computed as the difference between the S&P 500's trailing earnings yield and the US 10-year Treasury yield, provides a proxy for how much equity investors may expect to receive in compensation for their additional risk versus bonds. A review of data since the early 1900s indicates that investors do not appear to be adequately compensated for assuming equity risk versus Treasurys. In fact, over the 120-year history, the ERP has rarely been lower than where it is today (excluding the unique periods of high Treasury yields in the 1970s to 1990s)<sup>8</sup>.

<sup>&</sup>lt;sup>6</sup> Source: JP Morgan Guide to the Markets, 2Q2023

<sup>&</sup>lt;sup>7</sup> Source: Morgan Stanley, Portfolio Construction and Cross-Asset Strategy, April 4, 2023

<sup>&</sup>lt;sup>8</sup> Source: Morgan Stanley, Topics in Portfolio Construction, March 14, 2023

- The MSCI Emerging Markets Index entered a bull market (up 20% from its trough) in mid-January. Features such as stabilization in earnings estimate revisions, fund flows showing relative strength, and China's re-opening bringing high savings amounts to markets support the view that Emerging Market Equities may have additional upside.
- The US Technology sector posted strong returns relative to the S&P 500 Index for 1Q23. This strong outperformance, in the context of increasing economic pessimism, has prompted the question of if the sector may be counted as defensive one alongside others that are typically categorized as such (for example Consumer Staples, Healthcare, and Utilities). Research indicates however, that Technology tends to perform strongly versus the broader market, including its defensive sectors, when US Bank Reserves are increasing, as has been the case towards the end of the quarter, suggesting that Technology's recent outperformance is more a product of liquidity rather than economic durability<sup>10</sup>.

#### **ALTERNATIVE INVESTMENTS**<sup>11</sup>

- With property prices posting negative year-over-year comparisons and the office vacancy rate nearing a 20-year high, the commercial real estate (CRE) market may be vulnerable to adverse developments in interest rates or bank lending. More than half of the nearly \$2.9 trillion in CRE mortgages will be up for refinancing in the next 24 months, and regional banks account for 70% to 80% of the loans. Even if current rates stay flat, the new lending rates may well be higher. For building owners themselves, secular headwinds from the embrace of remote/hybrid work options pose additional complications that may accelerate CRE markdowns.
- The collapse of Silicon Valley Bank puts the spotlight on venture capital (VC) appearing over-valued and exposed to liquidity shortages. At current burn rates, it is estimated that the median VC-backed company will run out of cash in the second half of this year. Limited partners, (that is, the funds' investors), face more than \$500 billion of capital calls at a time when many portfolios have been marked only modestly lower. The impact of the potential collision of a need for cash versus a dearth of attractive value opportunities could be economically significant. VC-backed companies employ upward of five million workers and drive revenue in important public companies.
- The Private Equity industry sits on roughly \$2.3 trillion of so-called "dry powder" and can certainly insert itself right now as an opportunistic provider of capital for new vintage funds. However, investments made during the past two years face valuation markdowns and may themselves need capital that has been previously provided through other funding channels. But with unfunded capital calls still in front of many asset allocators and recent distributions scant, the fundraising environment could get tougher. Prior cycles have had 50% peak-to-trough declines in new capital raised.

<sup>&</sup>lt;sup>9</sup> Source: Morgan Stanley, Asia EM Equity Strategy, April 6, 2023

<sup>&</sup>lt;sup>10</sup> Source: Morgan Stanley, From the Director of Global Research, Charts That Caught My Eye, April 4, 2023

<sup>&</sup>lt;sup>11</sup> Source: Morgan Stanley, Global Investment Committee Weekly, April 3, 2023

#### 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.

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

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

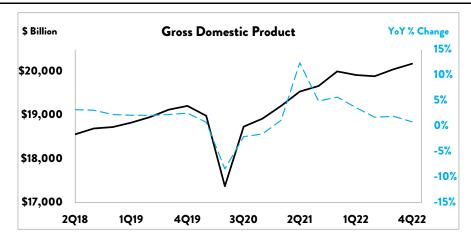
Hyas Group is a separate business unit within Morgan Stanley Institutional Investment Advisors LLC

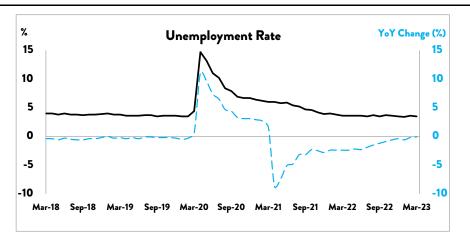
CRC 5620831 4/23

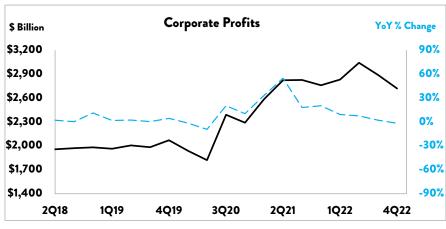
This report is being provided for informational purposed only. The information and opinions presented in this report do not constitute investment advice and have been obtained from sources believed by Hyas Group to be reliable. Hyas Group makes no representation as to their accuracy or completeness.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

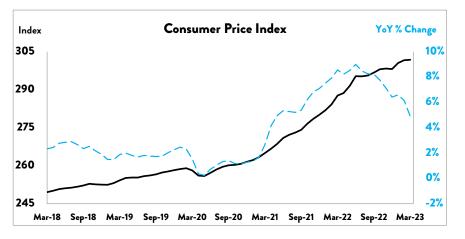
©Morgan Stanley, 2023

#### 1Q2023 Economic Data









Key: Economic Series
----------------------

ì	ear-C	Over-Y	ear	Change

Labor Market Statistics (Monthly)												
Category	Recent	5-Yr High	5-Yr Low	5-Yr Avg.	Date							
Jobs Added/Lost Monthly	236,000	4,505,000	-20,493,000	112,333	Mar-23							
Unemployment Rate	3.5%	14.7%	3.4%	4.9%	Mar-23							
Median Unemployment Length (Weeks)	9.6	22.2	4.0	11.1	Mar-23							
Average Hourly Earnings	\$33.18	\$33.18	\$26.89	\$29.77	Mar-23							

Other Prices and Indexes (Monthly)												
Category	Recent	5-Yr High	5-Yr Low	% Off Peak	Date							
Gas: Price per Gallon	\$3.40	\$4.84	\$1.80	-29.7%	Mar-23							
Spot Oil	\$73.28	\$114.84	\$16.55	-36.2%	Mar-23							
Case-Shiller Home Price Index	300.4	316.2	208.7	43.9%*	Jan-23							
Medical Care CPI	547.0	557.4	483.5	13.1%*	Mar-23							

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

\*% Off Low Morningstar data as of 3/31/2023

#### 1Q2023 Bond Market Data

Index	QTR	YTD	1 yr.	3 yrs.	5 yrs.	10 yrs.
90-Day T-Bill	1.16%	1.16%	3.17%	1.12%	1.46%	0.91%
Bloomberg US Aggregate	2.96%	2.96%	-4.78%	-2.77%	0.91%	1.36%
Bloomberg Short US Treasury	1.15%	1.15%	2.27%	0.76%	1.43%	0.91%
Bloomberg Int. US Treasury	2.27%	2.27%	-1.54%	-2.33%	1.06%	0.90%
Bloomberg Long US Treasury	6.17%	6.17%	-16.00%	-11.33%	-0.35%	1.45%
Bloomberg US TIPS	3.34%	3.34%	-6.06%	1.75%	2.94%	1.49%
Bloomberg US Credit	3.45%	3.45%	-5.31%	-0.70%	1.54%	2.18%
Bloomberg US Mortgage-Backed	2.53%	2.53%	-4.85%	-3.31%	0.20%	1.00%
Bloomberg US Asset-Backed	1.86%	1.86%	0.37%	0.58%	1.63%	1.41%
Bloomberg US 20-Yr Municipal	3.22%	3.22%	-1.02%	0.16%	2.32%	2.97%
Bloomberg US High Yield	3.57%	3.57%	-3.34%	5.91%	3.21%	4.10%
Bloomberg Global	3.01%	3.01%	-8.07%	-3.43%	-1.34%	0.07%
Bloomberg International	3.06%	3.06%	-10.72%	-4.13%	-3.17%	-0.99%
Bloomberg Emerging Market	2.15%	2.15%	-4.64%	0.06%	0.31%	2.07%

1 mo 3 mo

Source: Department of US Treasury

0.17%

7.00%

6.00%

5.00%

4.00% 3.00% 2.00%

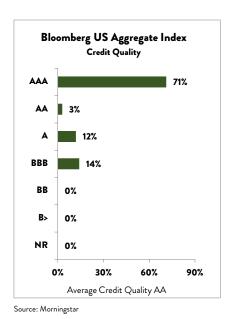
1.00%

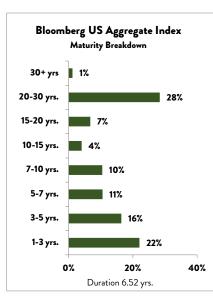
0.00%

-1.00%

4.74%

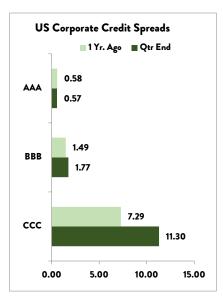






Bloomberg US Aggregate Index Sector Breakdown **US Government** Municipal Corporate 26% Agency MBS 21% Non-Agency MBS **CMBS** 0% Other 1% 0% 20% 40% 60%

4.85% 4.94%



Source: Morningstar

Source: Morningstar Source: Federal Reserve / Bank of America

**US Treasury Yield Curve** 

3.81%

---- 3/31/2022

2.42%

3.60% 3.55% 3.48%

2.40%

7 yr

2.32%

10 yr

3.81%

20 yr 30 yr

3.67%

3/31/2023

4.06%

2.28%

2 yr

4.64%

1.63%

1 yr

1.06%

0.52%

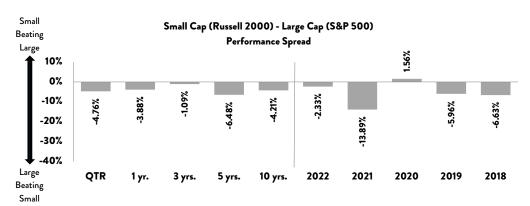
### 1Q2023 US Equity Market Data

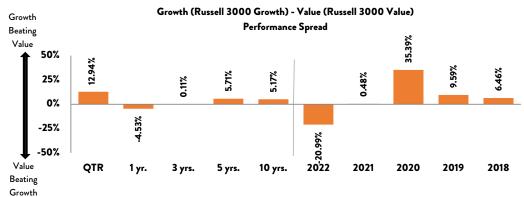
Sec	tors Weig	hts/Returns (ranked by quar	rter performanc	ce)	
	Wgt.	Sector	QTR	YTD	1 yr.
	26%	Information Technology	21.82%	21.82%	-4.55%
	8%	Communication Services	20.50%	20.50%	-17.76%
	10%	Consumer Discretionary	16.13%	16.13%	-19.62%
dex	3%	Materials	4.29%	4.29%	-6.28%
-	9%	Industrials	3.47%	3.47%	0.17%
S&P 500 Index	3%	Real Estate	1.95%	1.95%	-19.69%
8 8	7%	Consumer Staples	0.83%	0.83%	1.22%
•	3%	Utilities	-3.24%	-3.24%	-6.21%
	14%	Health Care	-4.31%	-4.31%	-3.70%
	5%	Energy	-4.67%	-4.67%	13.63%
	13%	Financials	-5.56%	-5.56%	-14.24%
	Wgt.	Sector	QTR	YTD	1 yr.
	10%	Information Technology	14.62%	14.62%	-0.83%
Ų.	22%	Industrials	8.55%	8.55%	4.07%
de	15%	Consumer Discretionary	8.00%	8.00%	-0.23%
0	7%	Materials	7.16%	7.16%	-3.49%
40	2%	Communication Services	4.42%	4.42%	-13.64%
dcap	4%	Consumer Staples	3.78%	3.78%	5.56%
S&P Midcap 400 Index	8%	Real Estate	0.98%	0.98%	-23.48%
80	9%	Health Care	0.42%	0.42%	-12.95%
	4%	Utilities	-2.44%	-2.44%	-4.12%
	15%	Financials	-7.54%	-7.54%	-9.39%
	4%	Energy	-8.46%	-8.46%	-7.69%
	Wgt.	Sector	QTR	YTD	1 yr.
	14%	Consumer Discretionary	12.73%	12.73%	-2.73%
×	2%	Communication Services	11.10%	11.10%	-20.63%
P	13%	Information Technology	10.10%	10.10%	-5.12%
S&P Smallcap 600 Index	6%	Materials	8.97%	8.97%	1.39%
9 de	5%	Consumer Staples	8.49%	8.49%	11.03%
a E	18%	Industrials	7.74%	7.74%	4.67%
SES	11%	Health Care	-0.45%	-0.45%	-18.25%
<b>∞</b>	2%	Utilities	-0.86%	-0.86%	-1.84%
S	7%	Real Estate	-3.61%	-3.61%	-29.55%
	5%	Energy	-8.46%	-8.46%	-5.68%
	16%	Financials	-11.51%	-11.51%	-19.75%
c					

Source: Morningstar

#### Index Performance Data

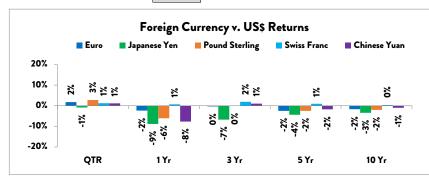
					Annualized	
Index	QTR	YTD	1 yr.	3 yrs.	5 yrs.	10 yrs.
S&P 500	7.50%	7.50%	-7.73%	18.60%	11.19%	12.24%
Russell 1000 Value	1.01%	1.01%	-5.91%	17.93%	7.50%	9.13%
Russell 1000 Growth	14.37%	14.37%	-10.90%	18.58%	13.66%	14.59%
Russell Mid Cap	4.06%	4.06%	-8.78%	19.20%	8.05%	10.05%
Russell Mid Cap Value	1.32%	1.32%	-9.22%	20.69%	6.54%	8.80%
Russell Mid Cap Growth	9.14%	9.14%	-8.52%	15.20%	9.07%	11.17%
Russell 2000	2.74%	2.74%	-11.61%	17.51%	4.71%	8.04%
Russell 2000 Value	-0.66%	-0.66%	-12.96%	21.01%	4.55%	7.22%
Russell 2000 Growth	6.07%	6.07%	-10.60%	13.36%	4.26%	8.49%
Russell 3000	7.18%	7.18%	-8.58%	18.48%	10.45%	11.73%
DJ US Select REIT	2.77%	2.77%	-20.98%	11.32%	4.66%	5.31%





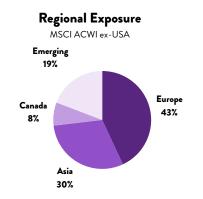
#### 1Q2023 International Market Data

Index Performance Data (net)						
Index (US\$)	QTR	YTD	1 yr.	3 yrs.	5 yrs.	10 yrs.
MSCI ACWI ex-US	6.87%	6.87%	-5.07%	11.80%	2.47%	4.17%
MSCI EAFE	8.47%	8.47%	-1.38%	12.99%	3.52%	5.00%
Europe	10.56%	10.56%	1.38%	15.00%	4.35%	5.36%
United Kingdom	6.11%	6.11%	-0.84%	14.59%	2.98%	3.43%
Germany	14.69%	14.69%	2.24%	12.76%	0.40%	4.06%
France	14.62%	14.62%	8.79%	19.48%	6.20%	7.54%
Pacific	4.71%	4.71%	-6.01%	9.49%	2.02%	4.40%
Japan	6.19%	6.19%	-5.23%	7.39%	1.27%	5.03%
Hong Kong	-2.39%	-2.39%	-5.27%	4.59%	-0.50%	4.16%
Australia	2.79%	2.79%	-9.19%	20.18%	5.96%	3.36%
Canada	4.31%	4.31%	-13.09%	18.50%	6.56%	4.02%
MSCI EM	3.96%	3.96%	-10.70%	7.83%	-0.91%	2.00%
MSCI EM Latin America	3.93%	3.93%	-11.05%	18.15%	-1.84%	-1.86%
MSCI EM Asia	4.81%	4.81%	-9.44%	7.15%	0.15%	4.18%
MSCI EM Eur/Mid East	-1.23%	-1.23%	-16.64%	1.96%	-4.65%	-3.88%
MSCI ACWI Value ex-US	5.16%	5.16%	-4.00%	13.82%	1.26%	3.06%
MSCI ACWI Growth ex-US	8.59%	8.59%	-6.35%	9.49%	3.36%	5.08%
MSCI ACWI Sm Cap ex-US	4.70%	4.70%	-10.37%	15.04%	1.67%	5.06%



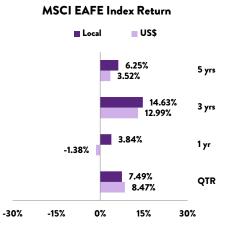
Exchange Rates	QTR	4Q22	3Q22	2Q22	1Q22	4Q21
Japanese Yen	132.75	131.81	144.71	135.69	121.44	115.17
Euro	0.92	0.93	1.02	0.96	0.90	0.88
British Pound	0.81	0.83	0.90	0.82	0.76	0.74
Swiss Franc	0.91	0.92	0.98	0.96	0.92	0.91
Chinese Yuan	6.87	6.90	7.11	6.70	6.34	6.37

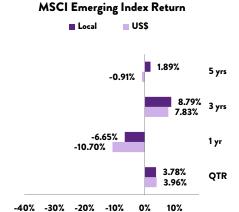
Source: Federal Reserve Bank of St. Louis

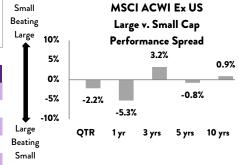


Top 10 Countries (MSCI AC World	rld ex-USA)
Japan	14%
UK	10%
China	9%
France	8%
Canada	8%
Switzerland	6%
Germany	6%
Australia	5%
Taiwan	4%
India	4%

Source: Morningstar









Performance Source: Morningstar

#### Historical Market Returns

Ranked by Performance

2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	YTD	1Q23
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 7.50%	Large Cap 7.50%
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%	Intl 6.87%	Intl 6.87%
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%	Global Balanced 5.75%	Global Balanced 5.75%
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%	Mid Cap 4.06%	Mid Cap 4.06%
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%	Emerging Markets 3.96%	Emerging Markets 3.96%
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 3.57%	High Yield 3.57%
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%	TIPS 3.34%	TIPS 3.34%
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 3.01%	Global Bonds 3.01%
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 2.96%	US Bonds 2.96%
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%	Small Cap 2.74%	Small Cap 2.74%
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%	Cash 1.16%	Cash 1.16%
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%	Core Real Estate -3.33%	Core Real Estate -3.33%
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%	Commod5.36%	Commod5.36%

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

Source: Morningstar; Core Real Estate Source: NCREIF

# **Section 2 | Plan Overview**

#### **Hyas Group Contact**

Market Value: \$219,903,097

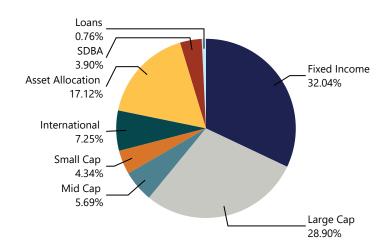
Vincent Galindo Senior Principal vgalindo@hyasgroup.com

#### **Plan Notes**

Fund: None at this time.

Governance: None at this time.

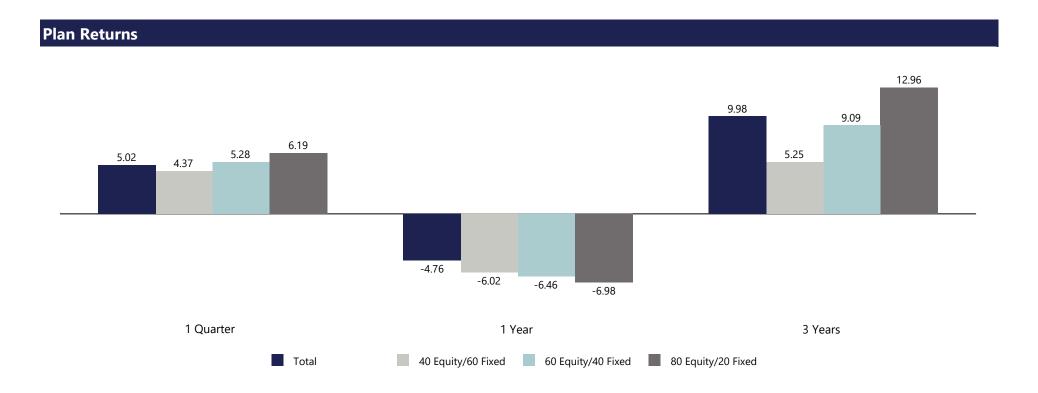
Vendor Mgmt: None at this time.



Fund Notes						
Fund Name	Watch Status	Cause	Comments	Recommendations	Fund Assets (\$)	Allocation (%)
Hotchkis & Wiley High Yield Z	4Q19	Performance	Trailing Benchmark and Peer Group for 5 year period. Sharpe ratio trailing median for 5 year period.		1,535,084	0.70
DFA US Large Cap Value I	4Q19	Performance	Trailing Benchmark and Peer Group for 5 year period. Sharpe ratio trailing median for 5 year period.		8,022,772	3.65
T. Rowe Price Large Cap Growth I			Trailing Benchmark and Peer Group for 5 year period.		17,269,354	7.85

# **Section 3 | Plan Review**

Cash Flow Summary												
	Beg Value (%) of the Plan	Beg Value \$	Cash Flow (+/-)	Gain/Loss	End Value (%) of the Plan	End Value \$						
Total	100.00	198,650,470	1,008,922	9,981,934	100.00	209,641,325						
Fixed Income	35.17	69,860,126	(117,731)	706,315	33.60	70,448,710						
Large Cap	29.16	57,922,605	800,002	4,823,730	30.31	63,546,337						
Mid Cap	6.03	11,971,657	(107,939)	653,201	5.97	12,516,918						
Small Cap	4.43	8,804,140	410,632	326,146	4.55	9,540,919						
International	7.50	14,906,719	(375,555)	1,415,834	7.61	15,946,999						
Asset Allocation	17.71	35,185,222	399,512	2,056,708	17.96	37,641,442						



					A3 0	1 Watch 51, 2025
	Asset-ID	Beg Balance \$	Cash Flow (+/-)	Gain/Loss	End Balance	Alloc %
Fixed Income		69,860,126	(117,731)	706,315	70,448,710	33.60
Nationwide Fixed Fund		62,329,404	(643,971)	456,294	62,141,727	29.64
Fidelity US Bond Index	FXNAX	2,471,481	225,092	79,637	2,776,210	1.32
Sterling Capital Total Return Bond R6	STRDX	3,643,656	238,387	113,646	3,995,689	1.91
Hotchkis & Wiley High Yield Z	HWHZX	1,415,585	62,761	56,738	1,535,084	0.73
Large Cap		57,922,605	800,002	4,823,730	63,546,337	30.31
DFA US Large Cap Value I	DFLVX	8,080,316	(93,008)	35,464	8,022,772	3.83
Fidelity 500 Index	FXAIX	34,402,962	1,230,232	2,621,017	38,254,211	18.25
T. Rowe Price Large Cap Growth I	TRLGX	15,439,327	(337,222)	2,167,249	17,269,354	8.24
Mid Cap		11,971,657	(107,939)	653,201	12,516,918	5.97
MFS Mid Cap Value R6	MVCKX	2,041,837	69,904	5,877	2,117,619	1.01
Fidelity Mid Cap Index	FSMDX	3,273,435	(155,842)	133,169	3,250,762	1.55
JPMorgan Mid Cap Growth R6	JMGMX	6,656,385	(22,001)	514,154	7,148,538	3.41
Small Cap		8,804,140	410,632	326,146	9,540,919	4.55
DFA US Targeted Value I	DFFVX	4,003,056	23,428	40,347	4,066,831	1.94
Fidelity Small Cap Index	FSSNX	1,889,802	119,077	49,905	2,058,783	0.98
Vanguard Small Growth Index Adm	VSGAX	2,911,282	268,127	235,895	3,415,305	1.63
International		14,906,719	(375,555)	1,415,834	15,946,999	7.61
Vanguard International Value Inv	VTIRX	3,477,463	(86,173)	296,927	3,688,217	1.76
Fidelity Total International Index	FTIHX	5,156,053	(130,065)	344,957	5,370,946	2.56
Vanguard International Growth Adm	VWILX	6,273,203	(159,317)	773,950	6,887,837	3.29
Asset Allocation		35,185,222	399,512	2,056,708	37,641,442	17.96
Vanguard Target Retirement Income	VTINX	1,544,413	(169,866)	63,831	1,438,378	0.69
Vanguard Target Retirement 2025	VTTVX	12,772,831	(131,676)	668,926	13,310,081	6.35
Vanguard Target Retirement 2030	VTHRX	1,090,113	32,246	62,485	1,184,844	0.57
Vanguard Target Retirement 2035	VTTHX	7,007,213	185,901	419,739	7,612,853	3.63
Vanguard Target Retirement 2040	VFORX	1,027,053	73,298	65,152	1,165,503	0.56
Vanguard Target Retirement 2045	VTIVX	8,356,134	215,433	545,232	9,116,799	4.35

### **Plan Review**

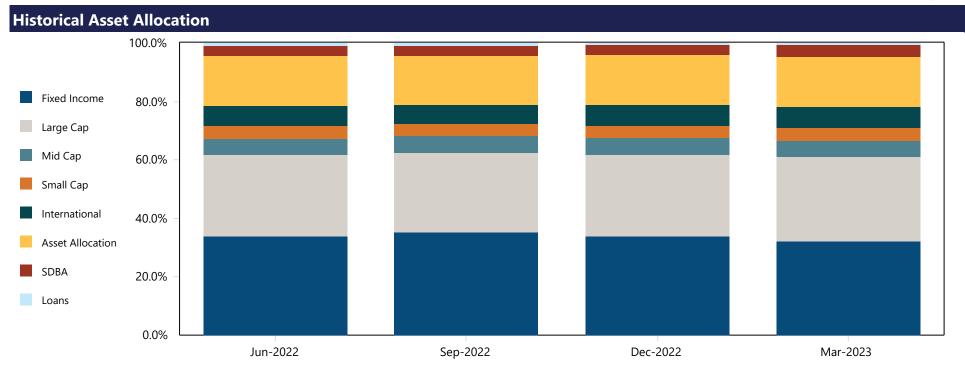
	Asset-ID	Beg Balance \$	Cash Flow (+/-)	Gain/Loss	End Balance	Alloc %
Vanguard Target Retirement 2050	VFIFX	1,020,792	76,446	69,311	1,166,549	0.56
Vanguard Target Retirement 2055	VFFVX	1,882,228	90,756	129,313	2,102,298	1.00
Vanguard Target Retirement 2060	VTTSX	481,701	26,524	32,527	540,752	0.26
Vanguard Target Retirement 2065	VLXVX	2,745	450	191	3,386	0.00
Vanguard Target Retirement 2070	VSVNX					0.00
Total		198,650,470	1,008,922	9,981,934	209,641,325	100.00

**Plan Review** 

Asset Alloca	Asset Allocation												
	Jun-2022		Sep-	2022	Dec-	2022	Mar-2023						
	Ending Market Value \$	Ending Market Value %											
Fixed Income	68,753,074	35.53	69,207,209	36.78	69,860,126	35.17	70,448,710	33.60					
Large Cap	56,206,954	29.05	53,655,612	28.51	57,922,605	29.16	63,546,337	30.31					
Mid Cap	11,489,808	5.94	11,143,093	5.92	11,971,657	6.03	12,516,918	5.97					
Small Cap	8,520,016	4.40	8,276,979	4.40	8,804,140	4.43	9,540,919	4.55					
International	14,325,839	7.40	13,151,973	6.99	14,906,719	7.50	15,946,999	7.61					
Asset Allocation	34,202,674	17.68	32,734,545	17.40	35,185,222	17.71	37,641,442	17.96					
Total	193,498,365	100.00	188,169,411	100.00	198,650,470	100.00	209,641,325	100.00					

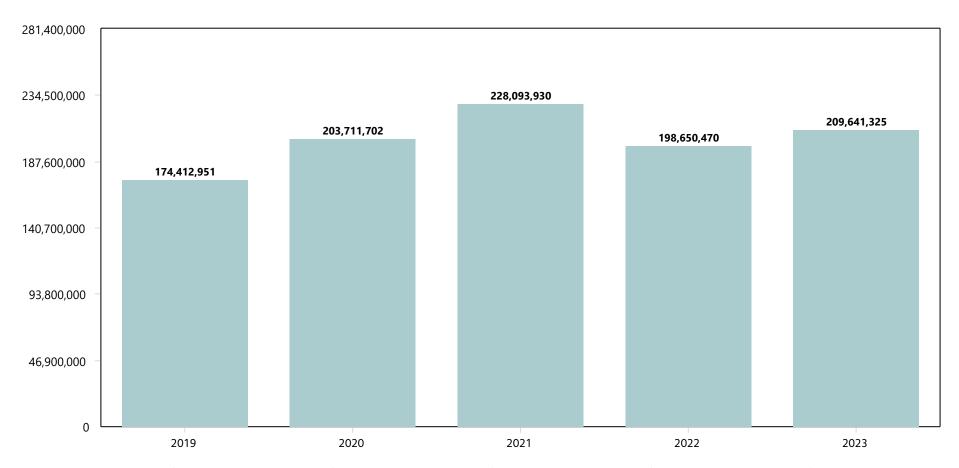
Cash Flow Summary										
	Jun-2022	Sep-2022	Dec-2022	Mar-2023						
Participants	1,337	1,348	1,354	1,355						
Calculated Return (%)	(10.84)	(3.30)	5.18	5.02						
Cash Flow (+/-) \$	1,010,689	1,049,828	741,746	1,008,922						
Market Adjustment \$	(23,409,907)	(6,378,783)	9,739,313	9,981,934						

Fee Summary												
	Jun-	2022	Sep-	Sep-2022 E		2022	Mar-2023					
	Current %	Est Asset \$										
Record Keeper Fees	0.020	38,700	0.020	37,634	0.020	39,730	0.020	41,928				
Weighted Investment Fees	0.264	510,421	0.267	501,553	0.261	518,316	0.258	541,387				

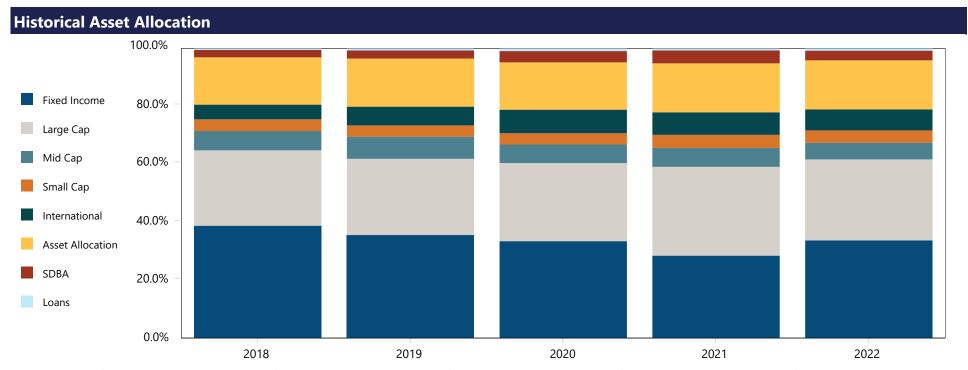


	Jun-	2022	Sep-	2022	Dec-	2022	Mar-2023		
	Ending Value \$	Ending Value %							
Fixed Income	68,753,074	33.9	69,207,209	35.2	69,860,126	33.7	70,448,710	32.0	
Large Cap	56,206,954	27.7	53,655,612	27.3	57,922,605	27.9	63,546,337	28.9	
Mid Cap	11,489,808	5.7	11,143,093	5.7	11,971,657	5.8	12,516,918	5.7	
Small Cap	8,520,016	4.2	8,276,979	4.2	8,804,140	4.2	9,540,919	4.3	
International	14,325,839	7.1	13,151,973	6.7	14,906,719	7.2	15,946,999	7.3	
Asset Allocation	34,202,674	16.9	32,734,545	16.6	35,185,222	17.0	37,641,442	17.1	
SDBA	7,283,785	3.6	6,795,198	3.5	6,861,670	3.3	8,584,057	3.9	
Loans	1,878,788	0.9	1,811,054	0.9	1,734,203	0.8	1,677,714	0.8	
Total	202,660,938	100.0	196,775,663	100.0	207,246,343	100.0	219,903,097	100.0	

### Plan Value Over Time



	2019	2020	2021	2022	2023
Beginning Market Value \$	150,093,203	174,412,951	203,711,702	228,093,930	198,650,470
Cash Flow (+/-) \$	(2,185,094)	3,320,382	(1,066,724)	2,016,434	1,008,922
Market Adjustment \$	26,504,842	25,978,370	25,448,953	(31,459,895)	9,981,934
Ending Market Value \$	174,412,951	203,711,702	228,093,930	198,650,470	209,641,325
Participants	1,278	1,312	1,323	1,354	1,355



	Dec-2018		Dec-2019		Dec-	Dec-2020		2021	Dec-2	2022
	Ending Value \$	Ending Value %								
Fixed Income	58,429,603	38.7	64,223,266	35.5	71,557,663	33.4	68,464,314	28.5	69,860,126	33.7
Large Cap	39,362,539	26.1	47,604,651	26.3	57,744,853	27.0	73,594,484	30.6	57,922,605	27.9
Mid Cap	10,042,648	6.7	13,890,428	7.7	13,797,623	6.4	15,716,450	6.5	11,971,657	5.8
Small Cap	6,113,551	4.1	6,991,789	3.9	8,317,744	3.9	10,939,582	4.5	8,804,140	4.2
International	7,660,460	5.1	11,694,003	6.5	17,376,817	8.1	18,734,126	7.8	14,906,719	7.2
Asset Allocation	24,644,645	16.3	30,008,815	16.6	34,917,002	16.3	40,644,974	16.9	35,185,222	17.0
SDBA	3,860,847	2.6	5,135,442	2.8	8,326,880	3.9	10,578,370	4.4	6,861,670	3.3
Loans	803,272	0.5	1,300,959	0.7	2,075,411	1.0	1,850,396	0.8	1,734,203	0.8
Total	150,917,564	100.0	180,849,352	100.0	214,113,993	100.0	240,522,696	100.0	207,246,343	100.0

# **Section 4 | Fund Review**

### **Manager Scorecard**

Fund Name	Asset-ID	Mgmt	5 Year Return Difference	5 Year Rank	Qualitative Factors	Quantitative Factors
Nationwide Fixed Fund		Active	-	-	•	-
Sterling Capital Total Return Bond R6	STRDX	Active	0.46	12	•	•
Hotchkis & Wiley High Yield Z	HWHZX	Active	-1.08	71	•	•
DFA US Large Cap Value I	DFLVX	Active	-1.03	79	•	•
T. Rowe Price Large Cap Growth I	TRLGX	Active	-3.47	55	•	•
MFS Mid Cap Value R6	MVCKX	Active	1.76	18	•	•
JPMorgan Mid Cap Growth R6	JMGMX	Active	1.66	11	•	•
DFA US Targeted Value I	DFFVX	Active	3.18	17	•	•
Vanguard International Value Inv	VTIRX	Active	1.93	24	•	•
Vanguard International Growth Adm	VWILX	Active	3.18	10	•	•

### Manager Scorecard

							713 01 11101111 3 1, 2023
Fund Name	Asset-ID	Mgmt	Expense Ratio	5 Year Return Difference	5 Year Rank	Qualitative Factors	Quantitative Factors
Fidelity US Bond Index	FXNAX	Passive	0.03	-0.02	41	•	
Fidelity 500 Index	FXAIX	Passive	0.02	-0.01	16	•	
Fidelity Mid Cap Index	FSMDX	Passive	0.03	0.01	29	•	•
Fidelity Small Cap Index	FSSNX	Passive	0.03	0.10	68	•	•
Vanguard Small Growth Index Adm	VSGAX	Passive	0.07	0.01	59	•	•
Fidelity Total International Index	FTIHX	Passive	0.06	0.02	67	•	•
Vanguard Target Retirement Income	VTINX	Passive	0.08	-0.27	29	•	•
Vanguard Target Retirement 2025	VTTVX	Passive	0.08	-0.44	27	•	•
Vanguard Target Retirement 2030	VTHRX	Passive	0.08	-0.44	33	•	•
Vanguard Target Retirement 2035	VTTHX	Passive	0.08	-0.44	38	•	•
Vanguard Target Retirement 2040	VFORX	Passive	0.08	-0.43	32	•	•
Vanguard Target Retirement 2045	VTIVX	Passive	0.08	-0.42	25	•	•
Vanguard Target Retirement 2050	VFIFX	Passive	0.08	-0.42	25	•	•
Vanguard Target Retirement 2055	VFFVX	Passive	0.08	-0.43	28	•	•
Vanguard Target Retirement 2060	VTTSX	Passive	0.08	-0.43	27	•	•
Vanguard Target Retirement 2065	VLXVX	Passive	0.08	-0.44	26	•	•
Vanguard Target Retirement 2070	VSVNX	Passive	0.08	-	-	-	-

Performance Review											
	Performance (%)										
	QTR	1 Yr	3 Yr	5 Yr	10 Yr	2022	2021	2020	2019	2018	2017
Nationwide Fixed Fund	0.74	3.00	3.17	-	-	3.00	3.13	3.50	3.50	-	-
US T-Bill CMT 5 Year	0.94	3.49	1.68	1.88	1.75	3.00	0.85	0.54	1.96	2.75	1.91
+/- Index	(0.20)	(0.49)	1.49	-	-	0.00	2.28	2.96	1.54	-	-
Fidelity US Bond Index	3.06	(4.78)	(2.91)	0.89	1.32	(13.03)	(1.79)	7.80	8.48	0.01	3.50
Blmbg. U.S. Aggregate Index	2.96	(4.78)	(2.77)	0.90	1.36	(13.01)	(1.55)	7.51	8.72	0.01	3.54
+/- Index	0.10	0.00	(0.14)	(0.01)	(0.04)	(0.02)	(0.24)	0.29	(0.24)	0.00	(0.04)
Intermediate Core Bond Rank	57	30	82	41	44	30	64	50	50	27	45
Sterling Capital Total Return Bond R6	3.01	(4.68)	(1.34)	1.36	1.85	(13.15)	(1.12)	9.35	9.37	(0.27)	4.33
Blmbg. U.S. Aggregate Index	2.96	(4.78)	(2.77)	0.90	1.36	(13.01)	(1.55)	7.51	8.72	0.01	3.54
+/- Index	0.05	0.10	1.43	0.46	0.49	(0.14)	0.43	1.84	0.65	(0.28)	0.79
Intermediate Core Bond Rank	60	25	14	12	7	35	26	16	17	42	12
Hotchkis & Wiley High Yield Z	3.90	(2.91)	7.90	2.13	3.52	(9.69)	6.83	3.83	9.77	(3.34)	8.24
Blmbg. U.S. Corp: High Yield Index	3.57	(3.34)	5.91	3.21	4.10	(11.19)	5.28	7.11	14.32	(2.08)	7.50
+/- Index	0.33	0.43	1.99	(1.08)	(0.58)	1.50	1.55	(3.28)	(4.55)	(1.26)	0.74
High Yield Bond Rank	11	34	7	71	38	30	12	75	87	65	13
DFA US Large Cap Value I	0.46	(5.00)	20.73	6.46	9.51	(5.78)	28.07	(0.61)	25.45	(11.65)	18.97
Russell 1000 Value Index	1.01	(5.91)	17.93	7.50	9.13	(7.54)	25.16	2.80	26.54	(8.27)	13.66
+/- Index	(0.55)	0.91	2.80	(1.04)	0.38	1.76	2.91	(3.41)	(1.09)	(3.38)	5.31
Large Value Rank	44	50	27	79	33	53	29	80	51	82	21
Fidelity 500 Index	7.50	(7.74)	18.59	11.18	12.23	(18.13)	28.69	18.40	31.47	(4.40)	21.81
S&P 500 Index	7.50	(7.73)	18.60	11.19	12.24	(18.11)	28.71	18.40	31.49	(4.38)	21.83
+/- Index	0.00	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)	0.00	(0.02)	(0.02)	(0.02)
Large Blend Rank	20	53	26	16	10	51	22	36	23	25	33

- · · · · · · · · · · · · · · · · · · ·										\ c of \ \ \ arch	21 2022
					Peri	formance (	%)		,	As of March	1 3 1, 2023
	QTR	1 Yr	3 Yr	5 Yr	10 Yr	2022	2021	2020	2019	2018	2017
T. Rowe Price Large Cap Growth I	14.18	(14.69)	13.89	10.19	14.45	(35.18)	23.18	39.56	28.49	4.32	37.82
Russell 1000 Growth Index	14.37	(10.90)	18.58	13.66	14.59	(29.14)	27.60	38.49	36.39	(1.51)	30.21
+/- Index	(0.19)	(3.79)	(4.69)	(3.47)	(0.14)	(6.04)	(4.42)	1.07	(7.90)	5.83	7.61
Large Growth Rank	34	71	61	55	9	77	40	34	84	8	4
MFS Mid Cap Value R6	0.60	(5.70)	22.03	8.30	9.66	(8.64)	31.00	4.40	31.08	(11.31)	13.84
Russell Midcap Value Index	1.32	(9.22)	20.69	6.54	8.80	(12.03)	28.34	4.96	27.06	(12.29)	13.34
+/- Index	(0.72)	3.52	1.34	1.76	0.86	3.39	2.66	(0.56)	4.02	0.98	0.50
Mid-Cap Value Rank	68	40	46	18	12	57	29	36	9	24	45
Fidelity Mid Cap Index	4.05	(8.74)	19.19	8.06	10.05	(17.28)	22.56	17.11	30.51	(9.05)	18.47
Russell Midcap Index	4.06	(8.78)	19.20	8.05	10.05	(17.32)	22.58	17.10	30.54	(9.06)	18.52
+/- Index	(0.01)	0.04	(0.01)	0.01	0.00	0.04	(0.02)	0.01	(0.03)	0.01	(0.05)
Mid-Cap Blend Rank	37	67	51	29	16	69	62	26	24	27	28
JPMorgan Mid Cap Growth R6	7.76	(10.80)	15.39	10.73	12.67	(26.96)	10.99	48.51	39.96	(4.97)	29.72
Russell Midcap Growth Index	9.14	(8.52)	15.20	9.07	11.17	(26.72)	12.73	35.59	35.47	(4.75)	25.27
+/- Index	(1.38)	(2.28)	0.19	1.66	1.50	(0.24)	(1.74)	12.92	4.49	(0.22)	4.45
Mid-Cap Growth Rank	50	49	39	11	9	40	59	25	9	43	15
DFA US Targeted Value I	0.96	(3.59)	31.63	7.72	9.16	(4.62)	38.80	3.77	21.47	(15.78)	9.59
Russell 2000 Value Index	(0.66)	(12.96)	21.01	4.55	7.22	(14.48)	28.27	4.63	22.39	(12.86)	7.84
+/- Index	1.62	9.37	10.62	3.17	1.94	9.86	10.53	(0.86)	(0.92)	(2.92)	1.75
Small Value Rank	55	17	11	17	16	12	9	46	55	56	48
Fidelity Small Cap Index	2.81	(11.41)	17.60	4.81	8.20	(20.27)	14.71	19.99	25.71	(10.88)	14.85
Russell 2000 Index	2.74	(11.61)	17.51	4.71	8.04	(20.44)	14.82	19.96	25.53	(11.01)	14.65
+/- Index	0.07	0.20	0.09	0.10	0.16	0.17	(0.11)	0.03	0.18	0.13	0.20
Small Blend Rank	54	80	80	68	50	81	90	14	34	34	26

									,	As of March	າ 31, 2023
						formance (	-				
	QTR	1 Yr	3 Yr	5 Yr	10 Yr	2022	2021	2020	2019	2018	2017
Vanguard Small Growth Index Adm	8.18	(12.03)	13.49	6.32	8.85	(28.39)	5.70	35.28	32.76	(5.68)	21.92
Vanguard Spliced Small Cap Growth Index (Net)	8.14	(12.11)	13.46	6.31	8.80	(28.44)	5.71	35.35	32.75	(5.68)	21.90
+/- Index	0.04	0.08	0.03	0.01	0.05	0.05	(0.01)	(0.07)	0.01	0.00	0.02
Small Growth Rank	23	53	66	59	65	52	67	58	35	56	51
Vanguard International Value Inv	8.67	1.16	15.30	3.19	4.96	(11.66)	7.97	8.99	20.39	(14.52)	27.96
MSCI AC World ex USA Value (Net)	5.16	(4.00)	13.82	1.26	3.06	(8.59)	10.46	(0.77)	15.72	(13.97)	22.66
+/- Index	3.51	5.16	1.48	1.93	1.90	(3.07)	(2.49)	9.76	4.67	(0.55)	5.30
Foreign Large Value Rank	26	38	44	24	23	72	87	6	30	29	9
Fidelity Total International Index	6.75	(4.71)	12.39	2.37	-	(16.28)	8.47	11.07	21.48	(14.38)	27.63
MSCI AC World ex USA IMI (Net)	6.56	(5.84)	12.20	2.35	4.28	(16.58)	8.53	11.12	21.63	(14.76)	27.81
+/- Index	0.19	1.13	0.19	0.02	-	0.30	(0.06)	(0.05)	(0.15)	0.38	(0.18)
Foreign Large Blend Rank	79	82	62	67	-	57	68	41	61	41	26
Vanguard International Growth Adm	12.50	(6.81)	13.48	6.54	8.79	(30.79)	(0.74)	59.74	31.48	(12.58)	43.16
MSCI AC World ex USA Growth (Net)	8.59	(6.35)	9.49	3.36	5.08	(23.05)	5.09	22.20	27.34	(14.43)	32.01
+/- Index	3.91	(0.46)	3.99	3.18	3.71	(7.74)	(5.83)	37.54	4.14	1.85	11.15
Foreign Large Growth Rank	14	68	8	10	5	82	89	3	22	34	7
Vanguard Target Retirement Income	4.23	(4.50)	3.83	3.26	3.79	(12.74)	5.25	10.02	13.16	(1.99)	8.47
Vanguard Target Income Composite Index (Net)	4.13	(4.45)	4.06	3.53	4.03	(12.44)	5.44	10.70	13.41	(1.97)	8.68
+/- Index	0.10	(0.05)	(0.23)	(0.27)	(0.24)	(0.30)	(0.19)	(0.68)	(0.25)	(0.02)	(0.21)
Target-Date Retirement Rank	34	31	51	29	29	50	64	27	47	14	53
Vanguard Target Retirement 2025	5.28	(5.91)	8.31	4.77	6.35	(15.55)	9.80	13.30	19.63	(5.15)	15.94
Vanguard Target 2025 Composite Index (Net)	5.21	(5.68)	8.68	5.21	6.68	(15.02)	10.09	14.19	19.93	(5.00)	16.08
+/- Index	0.07	(0.23)	(0.37)	(0.44)	(0.33)	(0.53)	(0.29)	(0.89)	(0.30)	(0.15)	(0.14)
Target-Date 2025 Rank	15	46	33	27	16	53	49	34	19	43	22

	•								A	s of March	1 31, 2023
					Perf	ormance (	%)				
	QTR	1 Yr	3 Yr	5 Yr	10 Yr	2022	2021	2020	2019	2018	2017
Vanguard Target Retirement 2030	5.67	(6.22)	9.67	5.21	6.89	(16.27)	11.38	14.10	21.07	(5.86)	17.52
Vanguard Target 2030 Composite Index (Net)	5.59	(6.00)	10.04	5.65	7.22	(15.71)	11.66	14.98	21.34	(5.72)	17.66
+/- Index	0.08	(0.22)	(0.37)	(0.44)	(0.33)	(0.56)	(0.28)	(88.0)	(0.27)	(0.14)	(0.14)
Target-Date 2030 Rank	17	40	45	33	23	47	54	34	32	34	35
Vanguard Target Retirement 2035	5.94	(6.36)	11.12	5.68	7.43	(16.62)	12.96	14.79	22.44	(6.58)	19.12
Vanguard Target 2035 Composite Index (Net)	5.87	(6.21)	11.48	6.11	7.76	(16.10)	13.24	15.67	22.76	(6.46)	19.25
+/- Index	0.07	(0.15)	(0.36)	(0.43)	(0.33)	(0.52)	(0.28)	(88.0)	(0.32)	(0.12)	(0.13)
Target-Date 2035 Rank	25	35	62	38	30	39	78	39	46	29	41
Vanguard Target Retirement 2040	6.21	(6.53)	12.58	6.12	7.91	(16.98)	14.56	15.47	23.86	(7.32)	20.71
Vanguard Target 2040 Composite Index (Net)	6.16	(6.43)	12.93	6.55	8.25	(16.51)	14.84	16.31	24.19	(7.22)	20.86
+/- Index	0.05	(0.10)	(0.35)	(0.43)	(0.34)	(0.47)	(0.28)	(0.84)	(0.33)	(0.10)	(0.15)
Target-Date 2040 Rank	34	33	64	32	25	34	80	38	44	31	27
Vanguard Target Retirement 2045	6.49	(6.70)	14.06	6.59	8.22	(17.36)	16.16	16.30	24.94	(7.90)	21.42
Vanguard Target 2045 Composite Index (Net)	6.44	(6.67)	14.38	7.01	8.56	(16.93)	16.45	17.02	25.37	(7.77)	21.55
+/- Index	0.05	(0.03)	(0.32)	(0.42)	(0.34)	(0.43)	(0.29)	(0.72)	(0.43)	(0.13)	(0.13)
Target-Date 2045 Rank	29	33	45	25	18	31	66	34	38	38	26
Vanguard Target Retirement 2050	6.64	(6.71)	14.17	6.66	8.26	(17.46)	16.41	16.39	24.98	(7.90)	21.39
Vanguard Target 2050 Composite Index (Net)	6.58	(6.71)	14.51	7.08	8.59	(17.07)	16.75	17.17	25.37	(7.77)	21.55
+/- Index	0.06	0.00	(0.34)	(0.42)	(0.33)	(0.39)	(0.34)	(0.78)	(0.39)	(0.13)	(0.16)
Target-Date 2050 Rank	25	28	45	25	20	29	70	34	41	33	33
Vanguard Target Retirement 2055	6.64	(6.67)	14.17	6.66	8.24	(17.46)	16.44	16.32	24.98	(7.89)	21.38
Vanguard Target 2055 Composite Index (Net)	6.58	(6.71)	14.51	7.08	8.59	(17.07)	16.75	17.17	25.37	(7.77)	21.55
+/- Index	0.06	0.04	(0.34)	(0.42)	(0.35)	(0.39)	(0.31)	(0.85)	(0.39)	(0.12)	(0.17)
Target-Date 2055 Rank	29	28	54	28	25	25	75	40	44	33	41

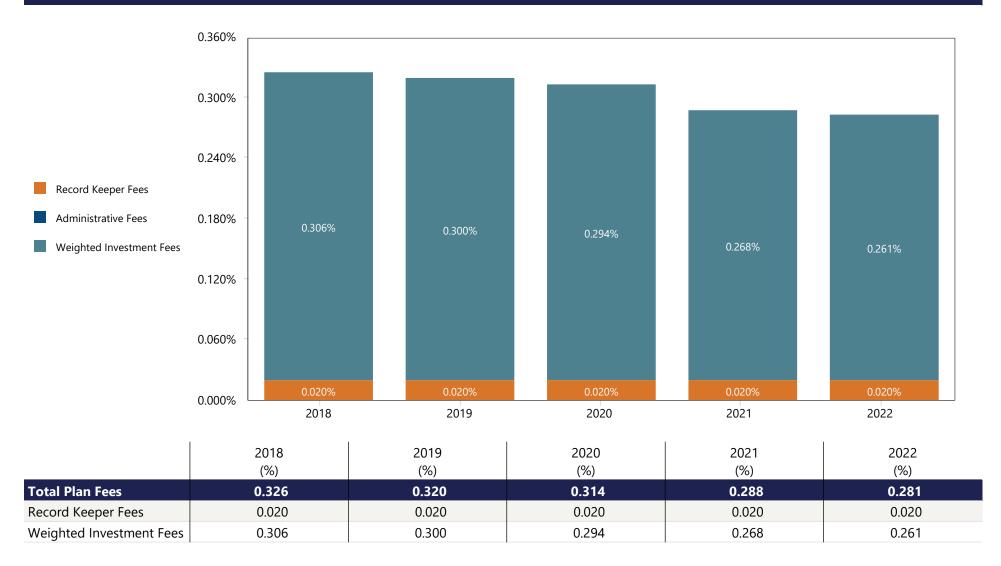
									Δ	s of March	31, 2023
		Performance (%)									
	QTR	1 Yr	3 Yr	5 Yr	10 Yr	2022	2021	2020	2019	2018	2017
Vanguard Target Retirement 2060	6.64	(6.67)	14.16	6.65	8.24	(17.46)	16.44	16.32	24.96	(7.87)	21.36
Vanguard Target 2060 Composite Index (Net)	6.58	(6.71)	14.51	7.08	8.59	(17.07)	16.75	17.17	25.37	(7.77)	21.55
+/- Index	0.06	0.04	(0.35)	(0.43)	(0.35)	(0.39)	(0.31)	(0.85)	(0.41)	(0.10)	(0.19)
Target-Date 2060 Rank	29	28	60	27	1	24	78	40	55	30	45
Vanguard Target Retirement 2065	6.64	(6.64)	14.17	6.64	-	(17.39)	16.46	16.17	24.96	(7.95)	-
Vanguard Target 2065 Composite Index (Net)	6.58	(6.71)	14.51	7.08	-	(17.07)	16.75	17.17	25.37	(7.77)	-
+/- Index	0.06	0.07	(0.34)	(0.44)	-	(0.32)	(0.29)	(1.00)	(0.41)	(0.18)	-
Target-Date 2065+ Rank	36	18	60	26	-	18	69	56	61	7	-
Vanguard Target Retirement 2070	6.64	-	-	-	-	-	-	-	-	-	-
Vanguard Target 2070 Composite Index (Net)	6.58	-	-	-	-	-	-	-	-	-	-
+/- Index	0.06	-	-	-	-	-	-	-	-	-	-
Target-Date 2065+ Rank	35	-	-	-	-	-	-	-	-	-	-

# **Section 5 | Fee Review**

### **Annualized Plan Cost**



#### **Annualized Plan Cost**



				713 01 11101111 3 17 2023
	Asset-ID	Market Value As of 03/31/2023 \$	Net Expense Ratio (%)	Net Estimated Expense \$
Nationwide Fixed Fund		62,141,727	0.400	248,567
Fidelity US Bond Index	FXNAX	2,776,210	0.025	694
Sterling Capital Total Return Bond R6	STRDX	3,995,689	0.350	13,985
Hotchkis & Wiley High Yield Z	HWHZX	1,535,084	0.600	9,211
DFA US Large Cap Value I	DFLVX	8,022,772	0.210	16,848
Fidelity 500 Index	FXAIX	38,254,211	0.020	7,651
T. Rowe Price Large Cap Growth I	TRLGX	17,269,354	0.550	94,981
MFS Mid Cap Value R6	MVCKX	2,117,619	0.620	13,129
Fidelity Mid Cap Index	FSMDX	3,250,762	0.025	813
JPMorgan Mid Cap Growth R6	JMGMX	7,148,538	0.700	50,040
DFA US Targeted Value I	DFFVX	4,066,831	0.290	11,794
Fidelity Small Cap Index	FSSNX	2,058,783	0.025	515
Vanguard Small Growth Index Adm	VSGAX	3,415,305	0.070	2,391
Vanguard International Value Inv	VTIRX	3,688,217	0.380	14,015
Fidelity Total International Index	FTIHX	5,370,946	0.060	3,223
Vanguard International Growth Adm	VWILX	6,887,837	0.340	23,419
Vanguard Target Retirement 2025	VTTVX	13,310,081	0.080	10,648
Vanguard Target Retirement 2030	VTHRX	1,184,844	0.080	948
Vanguard Target Retirement 2035	VTTHX	7,612,853	0.080	6,090
Vanguard Target Retirement 2040	VFORX	1,165,503	0.080	932
Vanguard Target Retirement 2045	VTIVX	9,116,799	0.080	7,293
Vanguard Target Retirement 2050	VFIFX	1,166,549	0.080	933
Vanguard Target Retirement 2055	VFFVX	2,102,298	0.080	1,682
Vanguard Target Retirement 2060	VTTSX	540,752	0.080	433
Vanguard Target Retirement 2065	VLXVX	3,386	0.080	3
Vanguard Target Retirement 2070	VSVNX	-	0.080	-

### **Plan Fee Analysis**

As of March 31, 2023

	Asset-ID	Market Value As of 03/31/2023 \$	Net Expense Ratio (%)	Net Estimated Expense \$
Vanguard Target Retirement Income	VTINX	1,438,378	0.080	1,151
Total		209,641,325	0.258	541,387

Plan Administration Cost				
	Rate (%)	Annualized Charge \$	Period Charge \$	Per Part Est Charge \$
Record Keeper Fees	0.020	41,928	10,482	31

No explicit expense ratio stated for Nationwide Fixed Fund. For reporting purposes, an expense of 0.40% is assumed.

# **Section 6 | Fund Attributions**

### **DFA US** (USD) **Large Cap Value**

Performance U4-3U-2U23	-30-2023				
Quarterly Returns	1st Otr	2nd Otr	3rd Otr	4th Otr	Total %
2021	14.72	5.22	-1.47	7.69	28.07
2022	-0.35	-12.13	-5.65	14.05	-5.78
2023	0.46				1.58
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	1.92	16.31	6.66	9.52	9.70
Std 03-31-2023	-5.00		6.46	9.51	9.69
Total Return	1.92	16.31	6.66	9.52	9.70
+/- Std Index	-0.75	1.79	-4.78	-2.68	ı
+/- Cat Index	0.70	1.93	-1.08	0.40	
% Rank Cat	46	జ	78	34	
No. in Cat	1221	1135	1087	806	

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 principal value of an investment will fluctuate; thus an investor's shares, when sold or redeemed, may be worth more or less than 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 888-576-1167 or visit

their original cost.

www.dimensional.com. Fees and Expenses Sales Charges Front-End Load % Deferred Load %			N N
Sales Charges Front-End Load % Deferred Load %			N N
Fund Expenses			
Management Fees %			0.29
12b1 Expense %			NA
Net Expense Ratio %			0.21
Gross Expense Ratio %			0.31
Risk and Return Profile			
	<	1	2

40.03%			Potential Cap Gains Exp
			12-Month Yield
97.04		76.30	R-Squared
1.09		0.91	Beta
0.81		2.94	Alpha
TR USD			
Best Fit Index	Bussell Be	Standard Index	MPT Statistics
0.56	0.34	0.83	Sharpe Ratio
9.52	6.66	16.31	Mean
17.01	21.31	18.72	Standard Deviation
10 Yr	5Yr	3 Yr	
Avg	-Avg	+Avg	Morningstar Return
+Avg	+Avg	+Avg	Morningstar Risk
3 <b>★</b>	2★	3 <b>⊁</b>	Morningstar Rating™
806 funds	37 funds	1,135 funds 1,087 funds	
10 Yr	5Yr	3 Yr	

Below B

몱

1 1208	6.05	22.90 22.05	2012		Silver 11-30-2022 99 1	Morningstar Medalist Rat
3 1213	7.94	31.62	2013		100	Morningstar Medalist Rating™
	-3.62	33.99	2014			<b>Analyst</b> 100.00
46 1378	-4.88 0.33	30.82	2015		Data Coverage % 100.00	Analyst-Driven % Morningstar Rating ****
14 1268	6.93	35.09 18.89	2016		% 1,13 Large	***
20 1260		39.12 18.97	2017		1,135 US Fund Large Value 98 99	ningstar
	-7.27 -3.38	32.14	2018		100 md	Rating
	-6.03	38.68	2019		88 🖽	
	-19.01 -3.40	37.53 -0.61	2020		99 🖽	Standard Index
31 1207	-0.63 2.91	46.06 28.07	2021		8 1	SD ×
51 1229	12.34 1.76	41.50 -5.78	2022		USD USD	Cate
 1245	-7.60 -0.95	41.92 1.58	04-23		99 🖽	Category Index Russell 1000 Value TR
					: 1100k : 80k : 60k : 40k : 20k	l <b>ex</b> TValue
% Rank Cat No. of Fund	+/- Sta +/- Cat	NAV/Price Total Retu	History	Perform (within		Ħ H
% Rank Cat No. of Funds in Cat	+/- Standard Index +/- Category Index	NAV/Price Total Return %	2	Performance Quartile (within category)	Investment Style Equity Stocks % Growth of \$10,000  DFA US Large ( 34,747  Category Avera 29,988  41,385	Morni U.S. F.III
ո Cat	ndex			Duartile	stment Style ity iks % wth of \$10,000 DFA US Large Cap 34,747 Category Average 29,988 Standard Index 41,355	Morningstar Cat
					stment Style ity iks %  wth of \$10,000  DFA US Large Cap Value 34,747  Category Average 29,958 Standard Index 41,355	Morningstar Cat
					<u> </u>	

Portfolio Analysis 03-31-2023	: n3-31-2023						
Asset Allocation %	Net %	Long %	Short %	Share Chg	Share	Holdings:	Net Assets
Cash	0.58		0.04			354 Total Stocks , 0 Total Fixed-Income	
US Stocks	97.46	97.46	0.00	02-2023		10% lumover Ratio	
Non-US Stocks	1.96	1.96	0.00	1	10 mil	Exxon Mobil Corp	4.75
Bonds	0.00	0.00	0.00	1	6 mil	JPMorgan Chase & Co	3.19
Other/Not Clsfd	0.00	0.00	0.00	1	4 mil	Chevron Corp	3.12
Total	100.00	100 04	0 02	① 	15 mil	Pfizer Inc	2.64
				①	2 mil	Berkshire Hathaway Inc Class B	3 2.18
Equity Style	Portfolio Statistics	Port Rel Avg Index	Cat	<b>D</b>	12 mil	Comcast Corp Class A	1.98
value Biend urowth	P/E Ratio TTM		0	① (		Verizon Communications Inc	1.68
эб.	P/C Ratio TTM	8.7 0.57		1	4 mil	ConocoPhillips	1.66
biM			0.89	① 	17 mil .	AT&T Inc	1.44
llsm2	\$mil	0,004 0.33		① 541	541,962	Thermo Fisher Scientific Inc	1.38
?				① 586	586,512	Elevance Health Inc	1.19
d-Incom	Avg Eff Maturity			①		Intel Corp	1.18
iH	Avg Eff Duration			1		Nucor Corp	1.1/
цб	Avg Wtd Coupon			① 791	791,748	The Goldman Sachs Group Inc	1.14
beM	Avg Wtd Price			1	3 mil	Morgan Stanley	1.07
мод				Sector Weightings	tings	Stocks %	% Rel Std Index
Cradit Ouglity Brask			Rond %	Դ Cyclical	_	33.3	.3 1.20
	TOWN		2	Basic Materials	laterials	8.4	.4 3.58
AA ?				Consumer Cyclical	er Cycli		.7 0.56
A				Financial Services	al Servio	æs 18.7	.7 1.48
BBB				Real Estate	ate	0.4	.4 0.16
BB				₩ Sensitive	e	45.8	
B				Commur	nication	Communication Services 9.1	.1 1.10
Below B				Energy		15.0	.0 3.20
NR					als	12.2	
Regional Exposure	Stocks %	Rel S	Rel Std Index	recnnology	ogy	9.5	.b U.3b

D LVX 2332038270	98.0 0.99 1.9 1.77 0.1 3.69
Purchase Constraints: Incept: Type: Total Assets:	✓ Sensitive  © Communication Services  Energy  Industrials  Technology  Lex  Defensive  German Consumer Defensive  Healthcare  Utilities
A 02-19-1993 MF \$22,081.77 mil	45.8 9.1 15.0 12.2 9.5 21.0 4.9 15.8 0.3
	0.96 1.10 3.20 1.49 0.36 0.85 0.67 1.09 0.10

©2023 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 provided by including the provided by your financial professional which cannot be verified by Morningstar. (3) may not be copied or redistributed. (4) do not constitute investment advice direct by Worningstar, (5) are provided solly for informational purposes and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by the Morningstar (state) into 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 withen 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 LUC, registered with and governed by the US. 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. Please see important disclosures at the end of this report.

Objective: Manager: Family:

Growth and Income 11.3 Years Multiple Dimensional Fund

Advisors

Base Currency:

USD

Ticker:

ISIN:

US233 DFLVX

Minimum Initial Purchase:

\$0

Greater Europe Greater Asia

Americas Regional Exposure

Tenure:



### (USD) DFA US Targeted Value I

	324	425	449	484	No. in Cat
	14	19	16	28	% Rank Cat
	2.07	3.37	8.93	8.07	+/- Cat Index
	-3.18	-4.41	9.84	-2.58	+/- Std Index
10.56	9.02	7.03	24.36	0.09	Total Return
10.71	9.16	7.72		-3.59	Std 03-31-2023
10.56	9.02	7.03	24.36	0.09	Load-adj Mthly
Incept	10 Yr	5 Yr	3 Yr	1 Yr	Trailing Returns
-1.31			1	0.96	2023
-4.62	12.63	-2.68	-12.88	-0.11	2022
38.80	7.06	-0.55	4.21	25.10	2021
Total %	4th Qtr	3rd Otr	2nd Otr	1st Otr	Quarterly Returns
				1-30-2023	Performance 04-30-2023

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

Fees and Expenses	www.dimensional.com.	month-end, please call 888-576-1167 or visit	quoted herein. For performance data current to the mo:
-------------------	----------------------	--	--

I coo ana Expenses	
Sales Charges	
Front-End Load %	Š
Deferred Load %	₹
Fund Expenses	
Management Fees %	0.27
12b1 Expense %	N <sub>P</sub>
Net Expense Ratio %	0.29
Gross Expense Ratio %	0.29

KISK and Keturn Profile			
	3 Yr	5Yr	10 Yr
	449 funds 4	425 funds	324 funds
Morningstar Rating™	<b>4★</b>	4⋆	4★
Morningstar Risk	+Avg	+Avg	+Avg
Morningstar Return	+Avg	+Avg	+Avg
	3 Yr	5 Yr	10 Yr
Standard Deviation	22.07	26.54	21.14
Mean	24.36	7.03	9.02
Sharpe Ratio	1.04	0.33	0.47
MPT Statistics	Standard Index		Best Fit Index Morningstar US Sm
		Brd Val	Brd Val Ext TR USD
Alpha	9.60	_	4.64
Beta	0.96	0,	0.97
R-Squared	61.72	10	98.27
12-Month Yield			1
Potential Cap Gains Exp			35.33%

88 88

⊳ Ş

Below B NR

No. of Funds in Cat	492	481	446	416	419	417	397	405	433	396	369	357
% Rank Cat	Ι	14	ವ	45	52	뗤	40	40	46	65	10	23
+/- Category Index	1.82	9.86	10.53	-0.87	-0.92	-2.92	1.75	-4.88	1.75	-1.28	8.50	1.14
+/- Standard Index	-10.48	13.49	10.10	-14.63	-10.01	-11.40	-12.24	14.90	-7.10	-10.75	10.64	3.18
Total Return %	-1.31	-4.62	38.80	3.77	21.47	-15.78	9.59	26.86	-5.72	2.94	43.03	19.19
NAV/Price	26.93	27.39	30.20	23.59	23.18	19.83	24.89	24.01	19.75	22.15	22.77	17.01
History	04-23	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Performance Quartile (within category)												
	4k											
1,000	10k											(
Standard Index				1				1			X	
— Category Average 26,005	) 20k	{	1	~	<b>}</b>							
DFA US Targeted Value I 31,902	<b>八</b> 4 4	<b>\{</b>	1	ζ								
Growth of \$10,000	60k											
Stocks %	99 100k	99	99	99	99	99	99	99	100	99	99	100
Investment Style												
						Joillall	je Uba kuli	Value	100.00 Value	100.00	ω <u>:</u>	1-19-2023
						2	10 E	% 440	overane	Data C	er	<u> </u>
TR US Fund Small Value	Category Index Russell 2000 Value TR	Russ	SD ^	S&P 500 TR USD		Kating	Morningstar Kating ★★★★	¥ №	Analyst-Driven % 100.00	" 100.00	Medalist Rating 1 1	Norningstar Nedalist Rat
	-	•		:				•	•	•		

AAA	Credit Quality Breakdown —	мор	рөм	цбіі Да :		Fixed-Income Style		llsm2	PiW	96				Total	Other/Not Clsfd	Bonds	Non-US Stocks	US Stocks	Cash	Asset Allocation %	Portfolio Analysis 03-31-2023
	<b>M</b>		Avg Wtd Price	Ava Wtd Coupon	Avg Eff Duration	or Eff Maturity		\$mil	P/B Ratio TTM	P/C Ratio TTM	P/E Ratio TTM	Portfolio Statistics	i	100.00	0.04	0.00	2.20	96.76	1.00	Net %	3-31-2023
									2009 0.02		8.4 0.39	Port Rel Avg Index		100.00	0.04	0.00	2.20	96.76	1.00	Long %	
	Bond %								0.86			Cat He		0.0	0.00	0.00	0.00	0.00	0.00	Short %	
Consumer Cyclical	Cyclical	Sector Weightings					①	①								袋	1	02-202	since	Share Chg	
Consumer Cyclic	ical Materia	ightings	2 mil	683,763	2 mil	4 mil	313,094	512,630	1 mil	1 m:	522,178	1 mi	662,932	750,740	2 mil	25,650	465,290		Amount	Share	
slical			Amkor Technology Inc	Builders FirstSource Inc	Unum Group	First Horizon Corp	First Solar Inc	AutoNation Inc	Toll Brothers Inc	HF Sinclair Corp	Penske Automotive Group Inc	Knight-Swift Transportation Holdin	Arrow Electronics Inc	Steel Dynamics Inc	BorgWarner Inc	Future on E-mini S&P 500 Futures	Reliance Steel & Aluminum Co	o % iuliovel nauo	1,409 Total Stocks , 0 Total Fixed-Income	Holdings:	
0.5	<b>48.1</b>	Stocks %									up Inc	ation Holdin				00 Futures	num Co	)	ixed-Income,		
3.32 1.40	1.73	Rel Std Index	0.50	0.51	0.52	0.57	0.57	0.57	0.59	0.60	0.62	0.65	0.69	0.71	0.71	0.89	1.00	2	%	Net Assets	

		31.09	0.23	1.00	Rel Std Index	1		I		1			8	Bond %	
Purchase Constraints:	Utilities	Healthcare	Consumer Defensive	→ Defensive	Technology	Industrials	Energy	Communication Services	₩ Sensitive	Real Estate	Financial Services	Consumer Cyclical	Basic Materials	Դ Cyclical	Sector Weightings
'	0.5	5.2	5.6	11.3	11.3	18.6	8.2	2.5	40.5	1.0	24.6	14.3	8.3	48.1	Stocks %
	0.19	0.36	0.77	0.46	0.43	2.27	1.75	0.30	0.85	0.37	1.95	1.40	3.52	1.73	Rel Std Index

exacts workingster. An ingine reserver, unless oriented in a separate agreement, you may use into cuty in the country in which is original distribution is based, the intornation, take, are layers and opinions contrained theen fill junction the control the conflict the conflicted had proprietely informational purposes. And the control that control the control the control the control the control the control the control that control the control that control the control the control that control the control that control the control the control that control the contro	a residual in a consecta agreement will receive this ground this the consectation which the agricultural is been distributed in the consectation of the consectation o
--	--

Objective:

Growth and Income 11.3 Years

Tenure: Manager: Family:

**Dimensional Fund Advisors** 

Ticker:

DFFVX US2332035953

Base Currency:

ISIN:

Minimum Initial Purchase:

\$0

Type: Total Assets: Incept:

\$11,053.61 mil

02-23-2000

Greater Europe Greater Asia

Americas

Regional Exposure

Stocks %

98.8 0.2 1.0

### (USD) Fidelity® 500 Index

Performance 04-30-2023				
1st Otr	2nd Otr	3rd Otr	4th Otr	Total %
6.18	8.55	0.58	11.02	28.69
-4.60	-16.10	-4.89	7.56	-18.13
7.50				9.17
1 Yr	3 Yr	5 Yr	10 Yr	Incept
2.65	14.51	11.43	12.19	12.05
-7.74	I	11.18	12.23	12.00
2.65	14.51	11.43	12.19	12.05
-0.02	-0.01	-0.01	-0.01	
0.83	0.29	0.3/	0.24	
36	32	19	10	
1405	1268	1169	867	
			2nd Orr 8.55 -16.10 -3 Yr 14.51 -0.01 0.29 32	2nd Or 3rd Or 8.55 0.58 -16.10 -4.89

30-day SEC Yield 7-day Yield Subsidized

Unsubsidized

The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year

Performance Disclosure

(if applicable) Morningstar metrics.

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

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

### Management Fees % Fund Expenses Gross Expense Ratio % Net Expense Ratio % 12b1 Expense % Deferred Load % Front-End Load % Sales Charges www.institutional.fidelity.com Fees and Expenses 0.02 0.02 0.02 ₹ ₹ Ϋ́

12-Month Yield Potential Cap Gains Exp	R-Squared	Alpha	MPT Statistics	Morningstar Rating <sup>TM</sup> Morningstar Risk Morningstar Return Standard Deviation Mean Sharpe Ratio	Dializated Datum Drofile
	100.00	-0.01	Standard Index	3 Yr 5 Yr 1,268 funds 1,169 funds 4 * 4 * 4 * 4 * 4 Y Avg Avg Avg +Avg 3 Yr 5 Yr 18.03 18.64 14.51 11.43 0.77 0.59	
		9	S&P B	5 Yr 99 funds 4* Avg +Avg +Avg 118.64 111.43 0.59	
39.12%	100.00	-0.01	Best Fit Index	10 Yr 867 funds 5★ Avg High 10 Yr 14.85 12.19 0.79	

1686	ဌ	-0.43	-0.01	15.99	50.49	2012		99	Morningstar Medalist Rat
1559	41	-0.74	-0.01	32.37	65.49	2013		8	Morningstar Analysi Medalist Rating™ 100.00
1568	≅	0.42	-0.03	13.66	72.85	2014		99	<b>Analys</b> 100.00
1606	20	0.47	0.00	1.38	71.80	2015		Data Coverage % 100.00 99 99 1	Analyst-Driven% Morningstar Rating™ 100.00 ★★★★★
1409	26	-0.09	0.01	11.97	78.35	2016			
1396	28	0.12	-0.02	21.81	93.45	2017		1,288 US Fund Large Blend 99	Morningstar ★★★★★
1402	25	0.38	-0.02	-4.40	87.10	2018		100 md	Rating
1387	23	0.05	-0.01	31.47	112.02	2019		8 📑	
1363	37	-2.57	0.00	18.40	130.17	2020		100	Standard Index S&P 500 TR USD
1382	23	2.24	-0.01	28.69	165.32	2021		100	ISD ×
1358	57	1.00	-0.02	-18.13	133.12	2022		100 🖽	Cate Russ
1464	1	0.38	0.00	9.17	144.78	04-23		100 100 100 80k 60k 40k	Category Index Russell 1000 TR USD
No. of Funds in Cat	% Rank Cat	+/- Category Index	+/- Standard Index	Total Return %	NAV/Price	History	Performance Quartile (within category)	vestnocks ocks ocks 41 41 41 41 41	R USD US Fund Large Blend

3	2		Hel Std Index	Kel	Stocks %	Regional Exposure
1.01	26.7	Technology	-		?	
1.03	8.4	Industrials	I			NR
0.98	4.6	Energy				Below B
0.98	Services 8.1	Communication Services	1			В
1.01	47.8	✓ Sensitive				BB
1.00	2.6	Real Estate	1			BBB
0.99		Financial Services				Þ
1.02		Consumer Cyclical				AA
1.01		Basic Materials				AAA
1.00	27.9	∿ Cyclical	Bond %		down —	Credit Quality Breakdown
Rel Std Index	Stocks %	Sector Weightings				мод
1.02	Procter & Gamble Co	⊕ 26 mil F	I		Avg Wtd Price	beM
1.06	Visa Inc Class A	⊕ 18 mil \			Avg Wtd Coupon	цві
1.11	JPMorgan Chase & Co	⊕ 32 mil √			Avg Eff Duration	Ltd Mod Ext
1.18	Johnson & Johnson				Ava Fff Maturity	d-Incom
1.28	UnitedHealth Group Inc	⊕ 10 mil \				!
1.31	Exxon Mobil Corp	⊕ 46 mil E			\$mil	llsm2
1.37	Meta Platforms Inc Class A	① 25 mil N	0 84	3.8 n 9.8	Gen Ava Mkt Can	biN
1.57	Alphabet Inc Class C	① 57 mil /			P/C Ratio I IIVI	V 9
1.62	Berkshire Hathaway Inc Class B	20 mil			P/E Ratio TTM	Біет
1.62	Tesla Inc	⊕ 30 mil 1		Avg Index	romono statistics	Value Blend Growth
1.79	Alphabet Inc Class A	⊕ 66 mil /	-		Poutolin Statistics	25.15
1.99	NVIDIA Corp	① 27 mil 1	0.13	100.13	100.00	Total
2.68	Amazon.com Inc	⊕ 99 mil /	0.00	0.00	0.00	Other/Not Clsfd
6.23	Microsoft Corp		0.00	0.00	0.00	Bonds
7.12	Apple Inc		0.00	1.09	1.09	Non-US Stocks
%	3% Turnover Ratio	02-2023 Amount 5	0.13 0.00	0.14 98.90	0.01 98.90	Cash US Stocks
Net Assets	Holdings:	Chg Share	Short %	Long %	Net %	Asset Allocation %
					s 03-31-2023	Portfolio Analysis 03-31-2023

Growth and Income	14.3 Years	Multiple	Fidelity Investments
Minimum Initial Purchase:	ISIN:		
\$0	US3159117502	FXAIX	USD
Total Assets:	Туре:	Incept:	Purchase Constraints:
\$388,628.81 mil	MF	05-04-2011	l

Greater Europe Greater Asia

Americas Regional Exposure

98.9 1.1 0.0

> 1.01 1.00

Healthcare Consumer Defensive Defensive Technology

14.3 2.9 **24.3** 7.2

**0.99** 0.98 0.99 1.00

Utilities

Objective:

Tenure: Manager: Family:

### (USD) Fidelity® Mid Cap Index 03-31

Performance 04-30-2023	30-2023				
Quarterly Returns	1st Otr	2nd Otr	3rd Otr	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		1		3.51
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-1.65	13.79	7.98	9.85	11.58
Std 03-31-2023	-8.74	1	8.06	10.05	11.72
Total Return	-1.65	13.79	7.98	9.85	11.58
+/- Std Index	-4.32	-0.73	-3.47	-2.35	
+/- Cat Index	0.04	0.01	0.01	0.00	
% Rank Cat	65	62	31	21	
No. in Cat	417	380	356	228	

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 The performance data quoted represents past performance and (if applicable) Morningstar metrics.

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

quoted herein. For performance data current to the most recent month-end, please call 800-544-8544 or visit

### Fund Expenses Deferred Load % Front-End Load % Sales Charges www.institutional.fidelity.com Fees and Expenses ž ĸ

I ullu Expellaca			
Management Fees %			0.03
12b1 Expense %			NA
Net Expense Ratio %			0.03
Gross Expense Ratio %			0.03
Risk and Return Profile			
	3 Yr 380 funds	5 Yr 356 funds	10 Yr 228 funds
Morningstar Rating™	3 <b>★</b>	3 <b>⊁</b>	4 <b>★</b>
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	Avg	+Avg	+Avg
	3 Yr	5Yr	10 Yr
Standard Deviation	19.00	21.10	16.54
Mean	13.79	7.98	9.85
Sharpe Ratio	0.71	0.40	0.59
MPT Statistics	Standard Index		Best Fit Index Russell Mid Cap TR
Alpha	-0.39	39	0.01
Beta	0.99	99	1.00
R-Squared	88.71	71	100.00
12-Month Yield			I

₽

Credit Quality Breakdown AAA

412	41	-0.06	1.21	17.22	11.96	2012							99		03-31-2023	Morningstar Medalist Rat
399	45	0.02	2.39	34.78	15.83	2013			1				99		. ಟ <b>್</b>	Morningstar Analyst Medalist Rating™ 100.00
369	7	-0.10	-0.57	13.11	17.45	2014			}				98		100.00	<b>Analys</b>
432	27	0.00	.ა 83	-2.44	16.32	2015			}				99		overage )	st-Driven
427	59	0.07	1.90	13.86	18.17	2016							99		. % 380 Cap	* * Mo:
443	24	-0.05	-3.36	18.47	20.98	2017							100		Data Coverage % 380 US Fund Mid- 100.00 Cap Blend	Morningstar
464	29	0.01	-4.67	-9.05	18.63	2018							98		Mid	Analyst-Driven % Morningstar Rating™ 100.00 ★★★★
404	18	-0.03	-0.98	30.51	23.63	2019				<b>}</b>			99			
407	21	0.01	-1.29	17.11	27.01	2020			<	V			100		-	Standard Index S&P 500 TR USD
391	67	-0.02	-6.14	22.56	31.99	2021				)	\		100			SD *
405	76	0.03	0.83	-17.28	25.92	2022				{			100		USD	Cate Russ
429	ı	0.00	-5.66	3.51	26.83	04-23		 10k	107	70,	10 so,	80k	99		. –	Category Index Russell Mid Cap TR
No. of Funds in Cat	% Rank Cat	+/- Category Index	+/- Standard Index	Total Return %	NAV/Price	History	Performance Quartile (within category)	1,220	Standard Index	Category Average 28.811	Fidelity® Mid Cap Index 34,306	Growth of \$10,000	Stocks %	Investment Style		Morningstar Cat TR US Fund Mid-Cap Blend

Rel Std Index	Stocks %	Sector Weightings	Sec				ГОМ
0.44	2 mil Fortinet Inc	2 mil	 ⊕			Ava Wtd Price	baM
0.44	Parker Hannifin Corp	349,851	 ⊕			Ava Wtd Coupon	цбі
0.45	Corteva Inc	2 mil	 ⊕			Avg Eff Duration	Ltd Mod Ext
0.45	MSCI Inc	212,376	 ⊕			Ava Eff Maturity	Fixed-Income Style
0.46	1 mil Microchip Technology Inc	1 mil	 ⊕				!   :   !
0.46	DexCom Inc	1 mil	<u>:</u>			\$mil	llsm2
0.48	AutoZone Inc	51,226	1 . 2 . 4 . 4 .	0./	17073	F/B Ratio I IIVI	P!W
0.48	Chipotle Mexican Grill Inc	75,134	÷		2.7	P/C Ratio I IIVI	ı əl
0.49	Motorola Solutions Inc	450,092	1.17 •		17.2	P/E Ratio TTM	ņeņ
0.49	Phillips 66	1 mil	Cat		Avg		Value Blend Growth
			æ ∷(	Rel	Port	Portfolio Statistics	Equity Style
0.49	Fidelity Revere Str Tr	131 mil	) D				
0.49	Amphenol Corp Class A	2 mil	0.47 +		100.47	100.00	Total
0.54	O'Reilly Automotive Inc	169,509	⊕	_	0.00	0.00	Other/Not Clsfd
0.59	Cadence Design Systems Inc	745,768	⊕		0.0	0.00	Bonds
0.61	Synopsys Inc	416,788	0.00 ⊕		0.98	0.98	Non-US Stocks
	D E / I unitovol i idado		_		98.9	98.98	US Stocks
%	815 Total Stocks , 0 Total Fixed-Income,	e Amount	47 since	2 0.47	0.5	0.04	Cash
Net Assets	Holdings:	Share Chg Share	•	% Short %	Long %	Net %	Asset Allocation %
						<b>s</b> 03-31-2023	Portfolio Analysis 03-31-2023

C	Healthcare	<sub>0.78</sub> Tonsume	1 00 → Defensive	Std Index	— the industrials	Energy	— Commun	— w Sensitive	Real Estate	Financial Services	Consume	Basic Materials		Sector Weightings
	re	Consumer Defensive	Te .	)gy	ls		Communication Services	Ф	ite	Services	Consumer Cyclical	aterials		ings
5.7	10.9	4.0	20.6	17.1	15.9	4.8	3.7	41.5	7.7	12.2	13.1	5.0	37.9	Stocks %
1.98	0.75	0.55	0.83	0.65	1.94	1.02	0.45	0.87	2.92	0.96	1.29	2.12	1.37	Rel Std Index

Below B 묾

888

Growth	11.7 Years	Multiple	Fidelity Investments
Minimum Initial Purchase:	ISIN:	Ticker:	Base Currency:
\$0	US3161462656	FSMDX	USD
Total Assets:	Туре:	Incept:	Purchase Constraints:
\$26,501.51 mil	MF	09-08-2011	Þ

Objective:

Tenure:

Manager: Family:

Potential Cap Gains Exp

16.53%

Greater Asia Greater Europe Americas Regional Exposure

99.1 0.8

Rel Std

### Fidelity® Small Cap ndex (USD)

Performance 04-30-2023	-30-2023				
Quarterly Returns	1st Otr	2nd Otr	3rd Otr	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	1			0.97
Trailing Returns	1Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-3.46	11.97	4.24	8.04	9.98
Std 03-31-2023	-11.41	I	4.81	8.20	10.22
Total Return	-3.46	11.97	4.24	8.04	9.98
+/- Std Index	-6.12	-2.55	-7.20	-4.16	
+/- Cat Index	0.19	0.07	0.09	0.16	1
% Rank Cat	64	22	71	53	
No. in Cat	619	595	551	377	

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 their original cost. does not guarantee future results. The investment return and The performance data quoted represents past performance and (if applicable) Morningstar metrics.

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

### Deferred Load % Front-End Load % Sales Charges Fees and Expenses ₹ ₹

Fund Expenses			
Management Fees %			0.03
12b1 Expense %			NA
Net Expense Ratio %			0.03
Gross Expense Ratio %			0.03
Risk and Return Profile			
	3 Yr	5Yr	10 Yr
714	595 funds	551 funds	377 funds
Morningstar Rating <sup>™</sup>	2★	2★	3⊁
Morningstar Risk	+Avg	Avg	Avg
Morningstar Return	-Avg	-Avg	Avg
	3 Yr	5Yr	10 Yr
Standard Deviation	21.72	23.92	19.46
Mean	11.97	4.24	8.04
Sharpe Ratio	0.57	0.23	0.45
MPT Statistics	Standard Index		Best Fit Index Russell 2000 TR
Alpha	-1.74	74	0.07
Beta	1.01	21	1.00
R-Squared	70.00	00	100.00
12-Month Yield			ı

No. of Funds in Cat	627	611	630	671	702	769	802	750	780	737	681	662
% Rank Cat	1	84	ස	14	30	జ	22	40	4	40	జ	34
+/- Category Index	0.08	0.16	-0.11	0.03	0.18	0.14	0.20	0.32	0.17	0.30	0.20	0.03
+/- Standard Index	-8.21	-2.16	-13.99	1.59	-5.78	-6.49	-6.98	9.67	-5.63	-8.50	6.64	0.38
Total Return %	0.97	-20.27	14.71	19.99	25.71	-10.88	14.85	21.63	-4.24	5.19	39.02	16.38
NAV/Price	21.91	21.70	27.56	24.98	21.03	17.24	20.32	18.36	15.46	16.79	16.54	12.15
History	04-23	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Performance Quartile (within category)												
Investment Style Equity Stocks % Growth of \$10,000  — Fidelity® Small Cap Index 28,260 — Category Average 26,394 — Standard Index 41,355	99 1000k 800 k 600 k 100 k	99 🖷	8 🖷	10 🖽	100	100	595 US Fund Small Blend		100.00 100.00 99 98	100.00 199	99	98
Morningstar Cat SD US Fund Small Blend	Category Index Russell 2000 TR USD	Cate Russ	ISD ×	Standard Index S&P 500 TR USD		Analyst-Driven % Morningstar Rating™ 100.00 ★★★	ningstar	% Morni	st-Driven		Morningstar Medalist Rating <sup>™</sup> Pronzo	Morningstar Medalist Rat

DOLLOS			0.00	(			
Other/Not Clsfd	0.00	0.00	0.00	<b>⊕</b>	393,542	EMCOR Group Inc	
Total	100.00	100.91	0.91	•	1 mil	Iridium Communications Inc	
				<b>⊕</b>	507,388	Crocs Inc	
Equity Style	Portfolio Statistics	Port Rel		Ð :	236 244	Insnire Medical Systems Inc	
Value Blend Growth	P/E Ratio TTM	11.7 0.55	0	_	222,453	Saia Inc	
96	P/C Ratio TTM			_	181,455	Kinsale Capital Group Inc	
biM	F/B Ratio I IVI	2211 0.51	0.87	•	560,448	Texas Roadhouse Inc	
llsm2	\$mil			<b>⊕</b>	298,242	ShockWave Medical Inc	
				<b>⊕</b>	238,810	RBC Bearings Inc	
Fixed-Income Style	Ava Eff Maturity			<b>⊕</b>	1 mil	Halozyme Therapeutics Inc	
Ltd Mod Ext	Ava Eff Duration			<b>⊕</b>	735,488	Agree Realty Corp	
цбі	Avg Wtd Coupon			•	785,430	Apellis Pharmaceuticals Inc	
baM	Avg Wtd Price		1	•	2 mil	ChampionX Corp	
том				Sector Weightings	ightings	Stocks %	Rel Std
Condit Ounliky Brook			0/	Դ Cyclical	cal	38.6	
AAA			M. DIIO	Basic	Basic Materials	ls 4.4	
> }				<b>₽</b> Cons	Consumer Cyclical	lical 10.9	
> }				Financial Services	cial Serv	ices 15.8	
>							

3	1.00 0.41 13.03	Rel Std Index	Bond %
Purchase Constraints: Incept: Type: Total Assets:	→ <b>Defensive</b> ☐ Consumer Defensive ☐ Healthcare ☐ Utilities	✓ Sensitive  ☐ Communication Services  ☐ Energy ☐ Industrials ☐ Technology	Sector Weightings  1. Cyclical  Basic Materials  Consumer Cyclical  Financial Services  Real Estate
A 09-08-2011 MF \$19,726.29 mil	<b>23.0</b> 4.1 15.8 3.1	<b>38.5</b> 2.6 6.3 15.6 14.0	Stocks % <b>38.6</b> 4.4 10.9 15.8 7.4
	<b>0.93</b> 0.56 1.09 1.08	<b>0.81</b> 0.31 1.35 1.90 0.53	Rel Std Index 1.39 1.88 1.07 1.25 2.82

Objective:

Small Company 11.7 Years Multiple Fidelity Investments

Tenure:

Manager: Family:

Ticker:

**FSSNX** OSD

Base Currency:

ISIN:

Minimum Initial Purchase:

\$0

US3161461823

Potential Cap Gains Exp

5.18%

Greater Europe Greater Asia

99.2 0.4 0.4

Americas

Regional Exposure

Stocks %

Below B NR

888

1.05 0.82 0.32 0.31 0.31

0.30 0.29 0.28 0.28 0.27 0.27 0.26 0.25 0.25

Performance 04-30-2023		International Index (USD)	Medalist Rating 100.00 ***	Fidelity® Total
	03-31-2023	€ 6010	Medalist Rating"	Morningstar
	100.00	Data Coverage %	100.00	Analyst-Driven o
	Foreign Large Blend	Data Coverage % 683 US Fund (	***	Morningstar Analyst-Driven % Morningstar Rating ** Standard Index
	-	USD	MSCI ACWI Ex USA NR MSCI ACWI	Standard Index
	-	USD	MSCI ACWI Ex USA NF	Category Index
vestment Style		Blend	Ex USA NR US Fund Foreign Large	Morningstar Cat

98

98

Stocks %

. 60k 80k 100k

Growth of \$10,000

Fidelity® Total International

4

I GITOIIII GIICG 04-30-2023	00-2020				
Quarterly Returns	1st Otr	2nd Otr	3rd Otr	4th Qtr	Total %
2021	3.91	5.53	-3.02	2.01	8.47
2022	-6.21	-13.16	-10.45	14.78	-16.28
2023	6.75				8.63
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	3.67	10.23	2.57	I	5.66
Std 03-31-2023	-4.71	1	2.37	I	5.46
Total Return	3.67	10.23	2.57	1	5.66
+/- Std Index	0.62	0.50	0.06		
+/- Cat Index	0.62	0.50	0.06		
% Rank Cat	80	66	67	1	
No. in Cat	733	683	622		

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

(if applicable) Morningstar metrics.

756

741 732

785

767

No. of Funds in Cat % Rank Cat +/- Category Index +/- Standard Index Total Return %

Net Assets

-16.28 11.71 2022

12.72 8.63

NAV/Price History

04-23

4

Performance Quartile (within category)

-0.27-0.27

-0.10

-0.10

60

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

Front-End Load %	Sales Charges	Fees and Expenses	www.institutional.fidelity.com.

Front-End Load % Deferred Load %			N N
Fund Expenses			
Management Fees %			0.06
12b1 Expense %			NA
Net Expense Ratio %			0.06
Gross Expense Ratio %			0.06
<b>Risk and Return Profile</b>			
	3 Yr	5 Yr	10 Yr
	683 funds	622 funds	413 funds

12-Month Yield	R-Squared	Beta	Alpha		MPT Statistics	Sharpe Ratio	Mean	Standard Deviation		Morningstar Return	Morningstar Risk	Morningstar Rating™			<b>Risk and Return Profile</b>
	98.77	1.03	0.25		Standard Index	0.57	10.23	17.59	3 Yr	Avg	-Avg	3★	3 Yr 683 funds	2	
	77	8	25			0.14	2.57	17.96	5 Yr	Avg	Avg	3 <b>★</b>	5 Yr 622 funds	1	
I	98.77	1.03	0.25	NR USD	Best Fit Index MSCI ACWI Ex USA	1	1		10 Yr			1	413 funds		

88 88

Below B

Americas Regional Exposure

Stocks %

Ве

					012	Ш			ı	Ш	31-2023	910g	dalist Rat	.
-	1			1	2013								rningstar dalist Rating™	
	1		1		2014						100.00			
	1		1	1	2015				1			Data Coverage %	Analyst-Driven % 100.00	
ı				10.00	2016		)		96		Fore			
22	0.44	0.44	27.63	12.53	2017		\		97		Foreign Large Blend	683 US Fund	mingstai	•
49	-0.19	-0.19	-14.38	10.50	2018		}		90		je Blend	0	Morningstar Kating ★★★	
55	-0.03	-0.03	21.48	12.42	2019		}		95			USD	MSCI	
32	0.42	0.42	11.07	13.57	2020		1		99		•		MSCI ACWI Ex USA N	
69	0.65	0.65	8.47	14.34	2021		}		97		•		× USA i	

· 20k

Category Average 14,979 Standard Index 15,254

2

Portfolio Analysis 03-31-2023	s 03-31-2023					
Asset Allocation %	Net %	Long %	Short %	Share Chg	Share	Holdings:
Cash	0.04	2.31	2.27	since	Amount	5,081 Total Stocks , 1 Total Fixed-Income ,
US Stocks	0.66	0.66	0.00	02-2023		3% Lutilover nauo
Non-US Stocks	99.14	99.14	0.00	<b>①</b>	710 mil	Fidelity Revere Str Ir
Bonds	0.00	0.00	0.00	袋	1,781	MSCI EAFE Index Future June 23
Other/Not CIsfd	0.16	0.16	0.00		8 mil	Taiwan Semiconductor Manufacturing
Total	100.00	102.27	2.27	D	945,579 2 mil	5,579 Nestle SA 2 mil Tencent Holdings I td
Equity Style	Portfolio Statistics	Port Bel		(	1	
Educt orbic	i ditiono dianones	_	Cat	1	139,145	ASML Holding NV
eq.	P/E Ratio TTM	12.6 0.95	5 0.94		570,161	Novo Nordisk A/S Class B
эБ.	P/C Ratio TTM	8.8 0.98	3 0.93		95,105	LVMH Moet Hennessy Louis Vuitton SE
biM		1.6 0.95	5 0.90		2 mil	Samsung Electronics Co Ltd
lism2	Geo Avg Mkt Cap \$mil	28396 0.65	0.54		533,649	AstraZeneca PLC
				從	1,437	1,437 MSCI Emerging Markets Index Future

	 	M. M.
Fixed-Income Style	de	) D <b>3</b>
Ltd Mod Ext	Avg Eff Maturity	1
	Avg Eff Duration	I
		I
	Avg Wtd Price	1
	мот	Sector W
Credit Quality Breakdown —	3akdown —	
AAA		
>		00.00

230,784 5 mil 743,289 2 mil

> Roche Holding AG Novartis AG

Alibaba Group Holding Ltd Ordinary

0.68

0.89 0.83 0.76 0.73 0.71 0.70

Shell PLC

	Sector Weightings	Stocks %	Rel Std Index
5	Դ Cyclical	41.9	
Bond %	Basic Materials	8.6	
	Consumer Cyclical	11.6	
	Financial Services	18.6	
I	Real Estate	3.1	
	₩ Sensitive	37.3	
	Communication Services	5.9	
	★ Energy	5.4	
	ndustrials	14.0	
ndev	Technology	12.0	
n qq	→ Defensive	20.8	
O :	Consumer Defensive	8.3	
1 S	♣ Healthcare	9.4	
	■ Utilities	3.1	

Beta R-Squared	1.03 98.77	1.03 98.77	Americas Greater Europe	10.5 44.8
12-Month Yield			Greater Asia	44.7
Potential Cap Gains Exp	s Exp	-18.74%		
Operations				
Family:	Fidelity Investments		Base Currency:	USD
Manager:	Multiple		Ticker:	TIHX
Tenure:	6.9 Years		ISIN:	US31635V6386
Objective:	Foreign Stock		Minimum Initial Purchase:	\$0

ise Currency:	USD	Purchase Constraints
cker:	XHITA	Incept:
Z.	US31635V6386	Type:
inimum Initial Purchase:	\$0	Total Assets:

06-07-2016

\$10,034.88 mil

0.97 1.08

1.91 1.52 1.18

### (USD) Fidelity® US Bond Index

> Bloomberg US Agg Bond TR USD

Core Bond US Fund Intermediate Morningstar Cat

Category Index

88

99

99

Investment Style
Fixed-Income
Bond %

Performance 04-30-2023	30-2023					
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		I	I	3.71	
Trailing Returns	1Yr	3 Yr	5 Yr	10 Yr	Incept	
Load-adj Mthly	-0.44	-3.24	1.19	1.29	1.97	
Std 03-31-2023	-4.78		0.89	1.32	1.93	
Total Return	-0.44	-3.24	1.19	1.29	1.97	
+/- Std Index	-0.02	-0.09	0.01	-0.04		
+/- Cat Index	-0.02	-0.09	0.01	-0.04		
% Rank Cat	32	74	34	37		
No. in Cat	461	416	380	282		

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

(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

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

Portfolio Analysis 03-31-2023

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.

# Fees and Expenses

Front-End Load %	NA
Deferred Load %	NA
Fund Expenses	
Management Fees %	0.03
12b1 Expense %	NA
Net Expense Ratio %	0.03
Gross Expense Ratio %	0.03
Disk and Datum Drofile	

Risk and Return Profile			
	3 Yr	5 Yr	10 Yr
	416 funds	380 funds	282 funds
Morningstar Rating™	2★	<b>4★</b>	3 <b>*</b>
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	-Avg	Avg	Avg
	3 Yr	5 Yr	10 Yr
Standard Deviation	6.21	5.47	4.42
Mean	-3.24	1.19	1.29
Sharpe Ratio	-0.71	-0.04	0.09
MPT Statistics	Standard Index	Bloor	Best Fit Index Bloomberg US Agg Bond TR USD
Alpha	-0.08	8	-0.08
Beta	1.00	00	1.00
R-Squared	99.86	86	99.86
12-Month Yield			I
Potential Cap Gains Exp			-0.01%

		_							ಧ	€.	3	≤
	0.02	11.89 4.23	2012	Ш			93		03-31-2023	<b>5010</b>	edalis	Morningstar
	-0.17 -0.17	11.36 -2.19	2013				98		ಬ	_	Medalist Rating	star
	0.02	11.73 5.99	2014				96		99.00	Data C	90.00	
;	0.08	11.49 0.63	2015				99			Data Coverage %		Analyst-Driven %
	-0.13 -0.13	11.49 2.52	2016				99	Bond	Inte		***	
	-0.04 -0.04	11.59 3.50	2017				97	ď	Intermediate Core	416 US Fund	*	Morningstar Rating™
	0.00	11.28 0.01	2018				99		Core	_		Rating <sup>™</sup>
,	-0.23 -0.23	11.91 8.48	2019				96			Bond .	Bloom	Standa
	0.29 0.29	12.45 7.80	2020				98			Bond TR USD	Bloomberg US Agg	Standard Index
	-0.25 -0.25	11.98	202				88				Agg	×

Bond % 74.07 4.55	Credit Quality Breakdown 03-31-2023 AAA AA	Credit Quality Bre
	мот	
91.79	Avg Wtd Price	
6.21	Avg Eff Duration  Avg Wtd Coupon	ИріН
	Avg Eff Maturity	Ltd Mod Ext
	6	Fixed-Income Style

M			Sector Weightings
Credit Quality Breakdown 03-31-2023	1-2023	Bond %	
AAA		74.07	Basic Materials
AA		4.55	Consumer Cyclical
<b>&gt;</b>		11.17	Financial Services
		3	Real Estate
888		10.20	
BB		0.01	✓ Sensitive
В		0.00	Communication Services
Below B		0.00	Energy
NR		0.00	Industrials
Regional Exposure	Stocks %	Rel Std Index	Technology
Americas		ı	→ Defensive
Greater Europe	I	1	Lonsumer Detensive
Greater Asia	I	I	Utilities

l Purchase:				
\$0	US3161463563	FXNAX	USD	

Objective:

Tenure: Manager: Family: Operations

9.0 Years Multiple Fidelity Investments

ISIN: Ticker:

Minimum Initial

Base Currency:

Multisector Bond

INO. OI FUIIUS III CAL	4/0	60.4	624	4	-	013	200	300	1042	-	0/0	- 00
No of Employee	476	AE3	3	115	300	1010	2000	000	10/3	1030	1070	1165
% Rank Cat		33	63	41	49	29	57	66	18	26	69	82
+/- Category Index	0.12	-0.02	-0.25	0.29	-0.23	0.00	-0.04	-0.13	0.08	0.02	-0.17	0.02
+/- Standard Index	0.12	-0.02	-0.25	0.29	-0.23	0.00	-0.04	-0.13	0.08	0.02	-0.17	0.02
Total Return %	3.71	-13.03	-1.79	7.80	8.48	0.01	3.50	2.52	0.63	5.99	-2.19	4.23
NAV/Price	10.46	10.18	11.98	12.45	11.91	11.28	11.59	11.49	11.49	11.73	11.36	11.89
History	04-23	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Performance Quartile (within category)												
	4k											
	10k											
11.991	*	{										
Standard Index	NO7											
— Category Average 12 115	2											
11,953	4UK											
Fidelity® US Bond Index	5											
Growth of \$10,000												
	100k											

				٠		
œ	Short %	Share Chg	Share	Holdings:		Net Assets
	0.68	since 02-2023	Amount	0 Total Stocks , 8,91 50% Turnover Ratio	0 Total Stocks , 8,914 Total Fixed-Income , 50% Turnover Ratio	%
	9 9	_	1,228 mil	United St	United States Treasury Notes 2.75%	1.92
	0.00		724 mil	United St	United States Treasury Notes 1.5%	1.06
	0.00		603 mil	United St	United States Treasury Notes 2.625%	0.95
	0 :	1	668 mil	Federal H	Federal Home Loan Mortgage Corpora	0.92
	,   ;		507 mil	United St	507 mil United States Treasury Notes 1.5%	0.78
호 호	Cat		461 mil	United St	United States Treasury Notes 3%	0.75
		<b>⊕</b>	414 mil	United St	United States Treasury Notes 3.5%	0.69
			396 mil	United St	United States Treasury Notes 4.125%	0.67
			430 mil	United St	430 mil United States Treasury Notes 0.5%	0.67

• •	724 mi 603 mi 668 mi 507 mi 461 mi 414 mi 396 mi 430 mi 410 mi	United States Treasury Notes 1.5% United States Treasury Notes 2.625% Federal Home Loan Mortgage Corpora United States Treasury Notes 1.5% United States Treasury Notes 3% United States Treasury Notes 3.5% United States Treasury Notes 4.125% United States Treasury Notes 1% United States Treasury Notes 3% United States Treasury Notes 3%
1	668 mil 507 mil	Federal Home Loan Mortg United States Treasury No
•	461 mil 414 mil 396 mil 430 mil 411 mil	United States Treasury No United States Treasury No United States Treasury No United States Treasury No United States Treasury No
①	362 mil 349 mil 334 mil 403 mil	United States Treasury Notes 2.75% United States Treasury Notes 1.5% United States Treasury Notes 4% Federal National Mortgage Associat
Sect	Sector Weightings	Stocks %
ے ہ	<b>Cyclical</b> Basic Materials	<u>s</u>
<b>a b</b>	Consumer Cyclical Financial Services	lical ices
<b>E</b>	Sensitive	
_		000000000000000000000000000000000000000

Total Assets:	Туре:	Incept:	Purchase Constraints:
\$59,813.52 mil	MF	05-04-2011	Α

### Hotchkis & Wiley High ield Z (USD)

Performance 04-30-2023	30-2023				
Quarterly Returns	1st Otr	2nd Otr	3rd Qtr	4th Otr	Total %
2021	2.04	2.87	0.71	1.07	6.83
2022	-3.36	-9.55	-1.29	4.66	-9.69
2023	3.90		I		5.12
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	1.13	7.07	2.27	I	2.32
Std 03-31-2023	-2.91	I	2.13	I	2.12
Total Return	1.13	7.07	2.27	3.45	2.32
+/- Std Index	1.56	10.22	1.09	2.13	
+/- Cat Index	0.08	2.20	-0.85	-0.49	1
% Rank Cat	43	œ	70	35	
No. in Cat	676	619	572	410	

	2023	1. Contractual waiver; Expires 08-31-2023
7.30	7.35 1	30-day SEC Yield 04-30-23
1	5.36 <sup>1</sup>	7-day Yield 05-10-23
Unsubsidized	Subsidized	

(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

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

Cash

Asset Allocation % Portfolio Analysi

711

676

678 | 682 | 687

No. of Funds in Cat

Performance Quartile (within category)

month-end, please call 866-493-8637 or visit www.hwcm.com quoted herein. For performance data current to the most recent Current performance may be lower or higher than return data

> Bonds US Stocks

Non-US Stocks

Other/Not Clsfd

Total

Equity Style

Deferred Load %	Front-End Load %	Sales Charges	rees and expenses
z	z		

	Risk and Return Profile
0.65	Gross Expense Ratio %
0.60	Net Expense Ratio %
NA	12b1 Expense %
0.55	Management Fees %
	Fund Expenses
NA	Deferred Load %
NA	Front-End Load %

Fixed-Income Style

llem2

biM

ЧбіН

baM

Mer expense name %			0.00
Gross Expense Ratio %			0.65
Risk and Return Profile			
	3 Yr	5Yr	10 Yr
	619 funds	572 funds	410 funds
Morningstar Rating™	5≯	2★	3☆
Morningstar Risk	+Avg	+Avg	+Avg
Morningstar Return	High	-Avg	Avg
	3 Yr	5 Yr	10 Yr
Standard Deviation	8.71	10.34	8.13
Mean	7.07	2.27	3.45
Sharpe Ratio	0.68	0.12	0.34
MPT Statistics	Standard Index	ICE	Best Fit Index ICE BofA US High
Alpha	10.07		2.21
Beta	0.96	96	0.97
R-Squared	45.75	75	95.64
12-Month Yield			5.67%
Potential Cap Gains Exp			-22.57%

	13.75 2.38	17.96	2012	ПП	i	A					90		01-25	👺 Silver	Med	Mor	sed on
: 1	38	96	12	шш		\			-		-		01-25-2023	N.	alist	Morningstar	pre-
1	10.73 1.29	<i>8.71</i>	2013			/ }					89		ω	<u> </u>	Medalist Rating <sup>™</sup>	star	nceptio
1	-4.87 -1.41	1.09	2014								83		100.00	Data C			n returns
1	-4.85 0.34	-4.30	2015								90			Data Coverage %		st-Driven	. Please
1	13.37 -1.47	16.02	2016								92		Yiel		***	Analyst-Driven % Morningstar Rating ™	sed on pre-inception returns. Please read disclosure for more information.
	4.70 0.76	8.24	2017								93		Yield Bond	619 US Fund High	*	ningstar	closure to
	-3.36 -1.08	11.16 - <i>3.34</i>	2018								92			High		Rating"	or more in
82	1.06 -4.64	11.54 9.77	2019			1					92			Bond .	Bloom	Standa	nformatio
71	-3.68 -2.34	11.29 3.83	2020				K				89		-	Bond TR USD	Bloomberg US Agg	Standard Index	on.
=======================================	8.37 1.47	11.52 6.83	2021								91				Agg	^	
31	3.32 1.53	9.86 -9.69	2022				<b>{</b>				90			TR USD	ICEE	Cate	
ı	1.53 0.40	10.17 5.12	04-23				M 202	90	40k	80k	87 100k			SD	ICE BofA US High Yield	Category Index	
% Rank Cat	+/- Stan +/- Cate	NAV/Price Total Return %	History	Performance Q (within category)		ı		I	ı			Investment Sty Fixed-Income					
Cat	+/- Standard Index +/- Category Index	ice sturn %	•	Performance Quarti (within category)		Standard Inde 11,991	16,016	17,406 Category Aver	Hotchkis & W Z	Growth of \$10,000	0	Investment Style Fixed-Income			US Fund Hi	Morningsta	

Category Average 16,016Standard Index 11,991

Hotchkis & Wiley High Yield

US Fund High Yield Bond Morningstar Cat

			<u>s.</u>
	Avg Eff Maturity Avg Eff Duration Avg Wtd Coupon Avg Wtd Price	Portfolio Statistics P/E Ratio TTM P/C Ratio TTM P/B Ratio TTM Geo Avg Mkt Cap \$mil	Net % 7.31 0.003 Net % 7.31 0.99 0.00 87.09 4.61 100.00
		Port Rel Avg Index	
	7.65 3.78 5.89 90.13	Cat	0 0 0 0 Shor
Sector Weightings		•	Share Chg since 02-2023
eightings	6 mil 6 mil 6 mil 7 mil	9 mil 22,361 6 mil 6 mil 7 mil	Share Amount 11 mil 142 10 mil 14 mil 116,127
Stocks %	Rain CII Carbon LLC / CII Carbon C CSC Holdings, LLC 5.75% Boardriders Inc Term Loan B Se Highlands Holdings Bond Issuer Lim Carnival Corporation 4%	CCO Holdings, LLC/ CCO Holdings Ca Iracore Investments Holdings Equitrans Midstream Corporation 7. Softbank Group Corp. 6% Voc Escrow Ltd 5%	Holdings: 4 Total Stocks , 196 Total Fixed-Income, 40% Turnover Ratio Virgin Media Sec Finance PLC 5.5% Ra Parent Inc Restricted Eq CCO Holdings, LLC/ CCO Holdings Ca Boardriders Pref Stk Horsehead Equity
Rel Std Index	0.67 0.67 0.67 0.66 0.65	0.85 0.77 0.70 0.68 0.68	Net Assets % 1.14 1.05 1.04 0.99

90.13	7 mil Carnival Corporation 4%	14%	0.65
	Sector Weightings	Stocks %	Rel Std Index
D 200 4 0/	Դ Cyclical	I	I
00 00 % Drives	Basic Materials		
0.00	Consumer Cyclical		
0.00	Financial Services		
4.54	Real Estate	I	1
44.23	₩ Sensitive	I	I
33.77	■ Communication Services		
5.19	★ Energy	I	1
12.27	Industrials	ļ	1
Ral Std Index	Technology	l	
-	→ Defensive	I	1
	Consumer Defensive		
	→ Healthcare	I	1
	Utilities		

IISD Pi	Corporate Bond - High Yield Mi		Multiple ISI	Hotchkis & Wiley Tid
urchase Constraints:	Min Auto Investment Plan: \$1 mil	Minimum Initial Purchase:	ISIN:	Ticker:
Α	\$1 mil	\$1 mil	US44134R5292	XZHWH
		Total Assets:	Туре:	Incept:
		\$885.83 mil	MF	03-29-2018

Manager:

Base Currency: Objective: Family:

Greater Europe Greater Asia

Americas Regional Exposure

Stocks %

Below B NR

Credit Quality Breakdown 03-31-2023 AAA

### **Growth R6 (USD)** JPMorgan Mid Cap

	386	497	527	570	No. in Cat
	7	=	51	42	% Rank Cat
: : : !	1.46	1.72	0.05	-2.82	+/- Cat Index
	0.10	-0.77	-5.26	-3.89	+/- Std Index
13.27	12.30	10.68	9.26	-1.23	Total Return
13.52	12.67	10.73		-10.80	Std 03-31-2023
13.27	12.30	10.68	9.26	-1.23	Load-adj Mthly
Incept	10 Yr	5 Yr	3 Yr	1 Yr	Trailing Returns
6.22	1	1	1	7.76	2023
-26.96	6.05	-1.70	-20.60	-11.75	2022
10.99	3.66	-1.50	7.25	1.34	2021
Total %	4th Otr	3rd Qtr	2nd Otr	1st Otr	Quarterly Returns
				-30-2023	Performance 04-30-2023

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.

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. 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 800-480-4111 or visit

www.jpmorganfunds.com.	
Fees and Expenses	
Sales Charges	
Front-End Load %	Š
Deferred Load %	Š
Fund Expenses	
Management Fees %	0.65

97.87	ω	77.28	R-Squared
0.97	10	1.02	Beta
0.28		-4.49	Alpha
Growth TR USD	Gro		
Best Fit Index		Standard Index	MPT Statistics
0.69	0.50	0.46	Sharpe Ratio
12.30	10.68	9.26	Mean
17.72	21.71	20.97	Standard Deviation
10 Yr	5 Yr	3 Yr	
High	+Avg	Avg	Morningstar Return
Avg	Avg	Avg	Morningstar Risk
5★	4	3 <b>★</b>	Morningstar Rating <sup>™</sup>
386 funds	5 Yr 497 funds	3 Yr 527 funds 4	
	1		Risk and Return Profile
0.75			Gross Expense Ratio %
0.70			Net Expense Ratio %
NA			12b1 Expense %
0.65			Management Fees %
			Fund Expenses

16.20 0.19 0.39 27 737	2012	Morningstar Medaliss Rar Bfonze 98-12-2022  99 99 9
42.59 10.20 6.85 6	2013	Medalist Rating"  Bronze  8-12-2022  99  98
11.24 -2.45 -0.66 16 749	2014	Analyst 100.00 Data Co 100.00 197
3.01 1.62 3.21 15 733	2015	t-Driven
0.37 -11.59 -6.96 89 644	2016	** Moi *** % 527 Cap 98
7.89 4.46 13 617	2017	Analyst-Driven % Morningstar Rating 100.00
-4.97 -0.59 -0.22 38 605	2018	d Mid-
39.96 8.48 4.49 618	2019	
48.51 30.11 12.92 22 604	2020	S&P 500 TR USD
10.99 -17.72 -1.74 -66 588	2021	88 <b>T</b>
-26.96 -8.85 -0.24 48	2022	Rus TRus
6.22 -2.95 -1.33 -1.33	04-23	Category Index  Russell Mid Cap Growth US Fund Mid-Cap Growt TR USD  Investment Style Equity 88 97 Stocks % Growth of \$10,000  - JPMorgan Mid Cap Growth R6 42,045 42,045 31,123 - Standard Index 41,355
		dex 1 Cap G 1
Total Return +/- Standaru +/- Categor % Rank Cat No. of Fund	Performa (within ca History	Investmer Equity Stocks % Growth of A2,0 — Cate 31,1; — Stan 41,3;
+/- Standard Index +/- Category Index +/- Category Index % Rank Cat	Performance Q (within category) History	Morningstar owth US Fund Mil Investment Style Equity Stocks % Stocks % JPN/organ Mid R6 42,045 42,045 Category Avera 31,123 Standard Index 41,335
idex idex	Performance Quartile (within category) History	Morningstar Cat th US Fund Mid-Ga th US Fund Mid-Ga th th th tsts %  xth of \$10,000  JPMorgan Mid Cap R6 R6 R6 A2,045 Category Average 31,123 Standard Index 41,335
		Morningstar Cat th US Fund Mid-Cap Grow tstment Style tity ks %  wth of \$10,000  JPMorgan Mid Cap Growth R6 42,045 Category Average 31,123 Standard Index 41,355
		wth

Portfolio Analysis 03-31-2023 Asset Allocation % Cash US Stocks	(0 -		Short % 0.00 0.00	Share Chg since 02-2023		Holdings: 107 Total Stocks , 8 Total Fixed-Income, 45% Tumover Ratio	Net Assets %
Non-US Stocks	0.57 0.00	0.57	0.00	⊕ ⊕	273 mil 1 mil	JPMorgan Prime Money Market Inst Quanta Services Inc	3.26 2.23
Other/Not Clsfd	0.00	0.00	0.00	•		Synopsys Inc	2.22
Total	100.00	100.00	0.00	<b>①</b>	962,525 2 mil	Trane Technologies PLC Class A Copart Inc	2.11 2.11
liews piy office	Portfolio Statistics P/E Ratio TTM P/C Ratio TTM P/B Ratio TTM P/B Ratio TTM Geo Avg Mkt Cap \$mil	Port Rel Avg Index 31.8 1.50 18.6 1.21 5.1 1.36 22926 0.12	Rel Cat 1.31 0.95 1.32 1.32	$0 \oplus \oplus \oplus \oplus$	822,238 1 mil 963,523 88,539 1 mil	Cadence Design Systems Inc DexCom Inc Cheniere Energy Inc Chipatle Mexican Grill Inc Hilton Worldwide Holdings Inc	2.06 1.98 1.81 1.80 1.72
Fixed-Income Style	Avg Eff Maturity Avg Eff Duration Avg Wtd Coupon Avg Wtd Price			$\oplus \oplus \oplus \oplus \oplus$	1 mil 2 mil 242,523 670,705 380,208	Agilent Technologies Inc The Trade Desk Inc Class A MSCI Inc Palo Alto Networks Inc Insulet Corp	1.71 1.62 1.62 1.60 1.45

	Financial Services	Consumer Cyclical	Basic Materials	% Cyclical	Sector Weightings	— ⊕ 380,208 Insu	⊕ 670,705 Palc	— ⊕ 242,523 MSCI Inc.	⊕ 2 mil The	— ⊕ 1 mil Agil	1 mil Hiltı	88,539		⊕ 1 mil	Cat ⊕ 822,238 Cad
1	9.2	14.2	0.6	24.0	Stocks %	Insulet Corp	Palo Alto Networks Inc	l Inc	The Trade Desk Inc Class A	Agilent Technologies Inc	Hilton Worldwide Holdings Inc	Chipotle Mexican Grill Inc	Cheniere Energy Inc	DexCom Inc	Cadence Design Systems Inc
	0.73	1.40	0.27	0.86	Rel Std Index	1.45	1.60	1.62	1.62	1.71	1.72	1.80	1.81	1.98	2.06

886	1.00 0.57 0.00	Rol Ctd Index	Band %
Purchase Constraints: Incept: Type: Total Assets:	→ <b>Defensive</b> ☐ Consumer Defensive ☐ Healthcare ☐ Utilities	✓ Sensitive  © Communication Services  Industrials  Technology	Sector Weightings  1. Cyclical  2. Basic Materials  3. Consumer Cyclical  4. Financial Services  6. Real Estate
A 11-01-2011 MF \$8,298.83 mil	<b>25.2</b> 1.3 23.8 0.0	<b>50.8</b> 1.1 3.9 17.0 28.9	Stocks % <b>24.0</b> 0.6 14.2 9.2 0.0
	1.02 0.18 1.65 0.00	1.07 0.13 0.83 2.07 1.09	Rel Std Index <b>0.86</b> 0.27 1.40 0.73 0.00

Objective:

Family: Tenure:

JPMorgan

Manager:

Multiple 18.7 Years Growth

Ticker:

Base Currency:

OSD

ISIN:

Minimum Initial Purchase:

\$15 mil

US4812C228 **JMGMX**  Potential Cap Gains Exp

4.61%

Greater Europe Greater Asia

99.4 0.6 0.0

Americas Regional Exposure

Stocks %

Below B

88 88

 $\mathbb{R}$ 

Credit Quality Breakdown

μOη

12-Month Yield



### (USD) MFS Mid Cap Value R6

Performance 04-30-2023	30-2023				
Quarterly Returns	1st Otr	2nd Otr	3rd Otr	4th Otr	Total %
2021	13.45	5.04	-0.26	10.22	31.00
2022	-2.53	-12.40	-4.51	12.06	-8.64
2023	0.60				1.56
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	0.64	17.61	8.29	9.65	10.08
Std 03-31-2023	-5.70		8.30	9.66	10.06
Total Return	0.64	17.61	8.29	9.65	10.08
+/- Std Index	-2.02	3.09	-3.16	-2.55	1
+/- Cat Index	4.12	1. 85	1.86	0.98	1
% Rank Cat	30	4	19	=	
No. in Cat	397	382	362	266	

Performance Disclosure
The Direction and Mariningstar Rating is based on risk-adjusted returns, of the three-, five-, and 10-year 30-day SEC Yield 7-day Yield

Subsidized

Unsubsidized

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.

(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 800-225-2606 or visit

http://www.mis.com.	
Fees and Expenses	
Sales Charges	
Front-End Load %	W
Deferred Load %	NA
Fund Expenses	
Management Fees %	0.61
12b1 Expense %	NA
Not Eynance Ratio %	0 R3

1			12-Month Yield
97.75	ಜ	78.83	R-Squared
0.95	39	0.89	Beta
2.27	2	4.22	Alpha
Value TR USD	V.		
Best Fit Index	₽	Standard Index	MPT Statistics
0.58	0.41	0.92	Sharpe Ratio
9.65	8.29	17.61	Mean
16.51	20.97	18.03	Standard Deviation
10 Yr	5Yr	3 Yr	
+Avg	+Avg	Avg	Morningstar Return
-Avg	-Avg	-Avg	Morningstar Risk
4★	4★	3 <b>★</b>	Morningstar Rating™
10 Yr 266 funds	5 Yr 362 funds	3 Yr 382 funds	
			<b>Risk and Return Profile</b>
0.63			Gross Expense Ratio %
0.62			Net Expense Ratio %
NA			12b1 Expense %
0.61			Management Fees %
			Fund Expenses

Credit Quality Breakdown – AAA

₽

	I	0.01	2.51	18.52	1	2012			1					97		12-11-2022	VIII 🚉	Medalist Rating 1	Morningstar
	1	3.18	4.25	36.63	19.73	2013			,	1				98		. 2	er	t Rating	star
460	<b>&amp;</b>	-4.46	-3.40	10.29	20.37	2014				}				97		100.00	Data C	100.00	Analys
471	20	2.64	-3.53	-2.14	19.00	2015				}				97			Data Coverage % 382 US Fund Mid-		t-Driven
399	66	-4.14	3.90	15.86	21.69	2016				1				97		Cap	<b>%</b> 382	*	Mor
405	44	0.50	-7.99	13.84	23.81	2017								98		Cap Value	US Fund	***	ningstar
417	32	0.98	-6.93	-11.31	19.86	2018								98			Mid-		Analyst-Driven % Morningstar Rating ***
422	7	4.02	-0.41	31.08	25.43	2019								98				S&P E	
415	40	-0.57	-14.00	4.40	26.25	2020				7				99		-		S&P 500 TR USD	Standard Index
413	ಜ	2.67	2.30	31.00	32.43	2021					1	1		98				SD	^
405	55	3.39	9.47	-8.64	28.12	2022					*	<b>\</b>		99			TR USD	Russ	Cate
401	ı	0.24	-7.61	1.56	28.56	04-23		4 <sub>k</sub>	10k	20k	7	4Qk	60k	98		•	JSD	Russell Mid Cap Value	Category Index
No. of Funds in Cat	% Rank Cat	+/- Category Index	+/- Standard Index	Total Return %	NAV/Price	History	Performance Quartile (within category)		41,355	- Standard Index	— Category Average	MFS Mid Cap Value R6 34,008	Growth of \$10,000	Stocks %	Investment Style			Value US Fund Mid-Cap Value	Morningstar Cat

Net %         Long %         Short %         Share Chg since A sinc	Rel Std	z mil Duront de Nemours Inc tings Stocks %	∠ MII	Sector Weightings	1		Price	Avg Wtd Price	wod bea		
%         Net %         Long %         Short %         Share Chg since Amount         Amount           92.93         92.93         92.93         0.00         ⊕         14 mil           5.06         5.06         0.00         ⊕         4 mil           0.00         0.00         0.00         ⊕         4 mil           0.00         100.00         0.00         ⊕         4 mil           100.00         100.00         0.00         ⊕         3 mil           Protfolio Statistics         Port Rel Aug Index Cat Index Index Cat Aug Index Cat Index Inde		Toll Brothers Inc	2 mil	•			Coupon	Avg Wtd	M deil		
%       Net %       Long %       Short %       Share Chg since Amount 22.02       Share Chg since Amount 22.02		AmerisourceBergen Corp					Vaturity uration	Avg Eff D		Mod	Ltd
% Net % Long % Short % Share Chg 2.02 2.02 0.00 esince 2.03 92.93 0.00 ⊕ 5.06 5.06 0.00 ⊕ 6.00 0.00 0.00 ⊕ 70.00 0.00 0		Westinghouse Air Brake Technologie		⊕ (			•		ne Style	l-Incon	Fixed
%         Net %         Long %         Short %         Share Chg since s		VICI Properties Inc Ordinary Shares	5 M:	<b>①</b>							
%         Net %         Long %         Short %         Share Chg since s		Life Storage Inc	1 mi	•		0.00		\$mil	llem2		
%         Net %         Long %         Short %         Share Chg since s		Arthur J. Gallagher & Co		<b>⊕</b>		Z.Z 0.58		Geo Ava I	biM		
%         Net %         Long %         Short %         Share Chg since s		Everest Re Group Ltd		<b>⊕</b>	1.7			P/C Katio	el		
%         Net %         Long %         Short %         Share Chg since s		Hess Corp		<b>⊕</b>	3		ī	P/E Hatio	_		
%         Net %         Long %         Short %         Share Chg since         Share Chg Amount           2.02         2.02         0.00         since Amount         Amount           92.93         92.93         0.00         02-2023         14 mil           5.06         5.06         0.00         0         4 mil           0.00         0.00         0.00         0         4 mil           100.00         100.00         0.00         0         3 mil           100.00         100.00         0.00         0         1 mil		Johnson Controls International PLC		<b>⊕</b>	Cat				Growth	Blend	Value
%         Net %         Long %         Short %         Share Chg         Amount           92.93         92.93         0.00         ex-2023         0.00         ex-2023         14 mil           5.06         5.06         0.00         ⊕         4 mil           0.00         0.00         0.00         ⊕         4 mil           100.00         100.00         0.00         ⊕         3 mil           1 mil         1 mil         1 mil         1 mil				(	R <sub>P</sub>		Statistics	Portfolio 9		v Style	F.
%         Net %         Long %         Short %         Share Chg         Share Amount           2.02         2.02         0.00         since         Amount           92.93         92.93         0.00         02-2023         14 mil           5.06         5.06         0.00         ⊕         4 mil           100         0.00         0.00         ⊕         4 mil           100         0.00         0.00         ⊕         3 mil		Eaton Corp PLC		Đ	0	0.00					0
%         Net %         Long %         Short %         Share Chg         Share Amount           2.02         2.02         0.00         since         Amount           92.93         92.93         0.00         02-2023         14 mil           5.06         5.06         0.00         ⊕         4 mil           0.00         0.00         0.00         ⊕         4 mil		The Hartford Financial Services Gr	3 mil	<b>①</b>	o 3	100 00				_	Tota
%         Net %         Long %         Short %         Share Chg         Share Amount           2.02         2.02         0.00         since one one one one one one one one one on		KBR Inc	4 mil	<b>⊕</b>	0.00	0.00	0.00		Clsfd	r/Not	Othe
% Net % Long % Short % Share Chg Share C 2.02 2.02 0.00 since Amount 92.93 92.93 0.00 ⊕ 14 mil 5.06 5.06 0.00 ⊕ 14 mil		LKU Corp	4 mil	<b>①</b>	0.00	0.00	0.00			Ś	Bono
ation %         Net %         Long %         Short %         Shere Chg         Share           2.02         2.02         0.00         since         Amount           92.93         92.93         0.00         02-2023		Pis&E Corp		•	0.00	5.06	5.06		ocks	·US St	Non-
Allocation%         Net %         Long %         Short %         Share Chg         Share		70 % Idillower Haddo		02-2023	0.00	92.93	92.93			tocks	SSN
Net % Long % Short % Share Chg Share		144 I otal Stocks , U Total Fixed-Income,	Amount	SINCE	0.00	2.02	2.02			_	Cash
		Holdings:		Share Chg	Short %		Net %		ation %	tAlloc	Asse

	1 Std Index 0.96 3.30 35.69		Bond %		Rel Rel lex Cat lex Cat 73 1.11 70 1.12 70 1.19 08 1.25
Purchase Constraints: Incept: Type: Total Assets:	☐ Technology  Defensive  Consumer Defensive  Healthcare  Utilities	Sensitive Communication Services Energy	Sector Weightings  Cyclical  Basic Materials  Consumer Cyclical  Financial Services  Real Estate	⊕ 5 mil ⊕ 2 mil ⊕ 940,209 ⊕ 2 mil ⊕ 2 mil	⊕ 3 mil ⊕ 1 mil ⊕ 480,710 ⊕ 868,668 ⊕ 1 mil
	ensive	n Services	lical	VICI Properties Inc Ordinary Shares Westinghouse Air Brake Technologie AmerisourceBergen Corp Toll Brothers Inc DuPont de Nemours Inc	Johnson Controls International PLC Hess Corp Everest Re Group Ltd Arthur J. Gallagher & Co Life Storage Inc
A 02-01-2013 MF \$14,958.71 mil	10.5 <b>20.8</b> 5.6 7.0 8.2	<b>35.6</b> 1.1 7.0 17.0	Stocks % 43.6 6.1 13.3 17.1 7.1	rdinary Shares rake Technologie Corp Inc	ternational PLC d 3 Co
	0.40 <b>0.84</b> 0.77 0.48 2.86	<b>0.75</b> 0.13 1.49 2.08	Rel Std Index 1.57 2.61 1.31 1.36 2.68	1.05 1.00 0.99 0.97 0.96	1.21 1.14 1.14 1.10 1.10

exacts writingster, An inglits neserveit, thress outerways provided in a septiate agreement, you ling use this report only in the country in which its original distribution is deset, the intumator, deal, altered by opinions contained there and 1) include the confident and proprietary information of writing the provided so provid	Manager All District Control of the
--	---

Objective:

Growth 14.5 Years

Minimum Initial Purchase:

\$0

Tenure:

Manager:

Family:

MFS Multiple

Ticker:

MVCKX OSD

US55273W4758

Base Currency:

ISIN:

Potential Cap Gains Exp

14.46%

Greater Europe Greater Asia

Americas

Regional Exposure

Stocks %

Rel

95.4 3.4 1.1

Below B

888

몱

1.47 1.34 1.34 1.34 1.29 1.29

### Nationwide **Fixed Account**

**Group Annuity Contract** 

**Retirement Solutions** 

Fact sheet

### AS OF 03/31/23

The Nationwide Fixed Account is a General Account Product that seeks to provide a low-risk, stable investment option offering consistently competitive returns for retirement plan investors.





(MVA) Subject to a market value adjustment

equity wash if

competing funds are

offered

### **Participant Liquidity** Fully liquid or with

- Subject to 90-day higher crediting rate restrictions for a
  - **Crediting Rates**
  - Quarterly reset Pooled investment
- Plans, Including: **Applicable Retirement** Contractually Available to All Governmental 457(b)

# Investment Objective & Strategy

The General Account is managed by a team of investment professionals with deep market knowledge, multi-asset class capabilities, and broad market cycle experience. The team uses a disciplined, research-driven approach, supported by a robust risk management framework, to provide diversification and strong risk-adjusted returns.

## Investment Information

94%	Market to Book Ratio <sup>2</sup>
5.99 Years	Effective Duration
9.2 Years	Weighted Average Life
11.5 Years	Weighted Average Maturity
A-	Average Quality
5,665	Total Number of Unique Holdings
\$49.80	Total Market Value (Billions)
01/10/1931	Fund inception

### Fees and Expenses

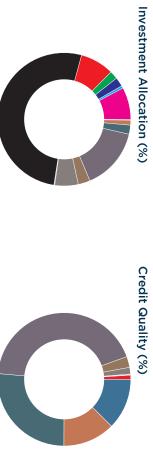
Spread-Based General Account

### Portfolio Manager

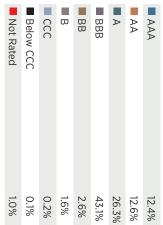
David Fritz, CFA, Tenure since 1999

### **Net Crediting Rate**

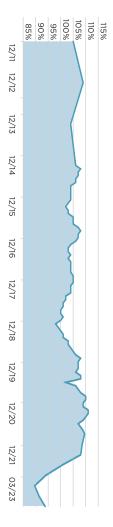
The rate currently being credited to your account can be found on your statement, on the web at NRSFORU.com or by contacting our solutions center at 1-877-677-3678.







# Market-to-Book Ratio Over Time (12/31/11-03/31/23)



A.M. Best

Affirmed 12/22/21

Affirmed 5/27/20 Moody's



Affirmed 5/7/21 Standard & Poor's

not a mutual fund. Nationwide Fixed Account is backed by the General Account of Nationwide Life Insurance Company and is backed solely by the claims paying ability of Nationwide Life Insurance Company Information about the securities held in the General Account does not imply ownership by plan participants or by plan sponsors as the owners of the group annuity contract. This account is

40

The market to book ratio is specific to the Nationwide Life Insurance Company and represents assets on an aggregate basis. However, each product contract experiences its own ratio that differs from the aggregate. The market to book ratio may fluctuate from time to time in accordance with market trends.

These ratings and rankings reflect Rating Agency assessment of the financial strength and claims-paying ability of Nationwide Life Insurance Company and are subject to change at any time. They are not intended to reflect the investment experience or financial strength of any variable account, which is subject to market risk. Because the dates are only updated when

there is a change in the rating, the dates reflect the most recent ratings we have received.
Your contract may contain liquidation (exchange and/or transfer) restrictions. The unregistered group variable and fixed annuity contracts are issued by Nationwide Life Insurance Company, Columbus, Ohio. For more information, please contact your Plan Sponsor.
Please contact the Solutions Center at 1-877-677-3678 for assistance.
Nationwide and the Nationwide N and Eagle are service marks of Nationwide Mutual Insurance Company © 2023 Nationwide

weighted average time until the return of all principal in years. AWL for this investment portfolio is weighted by book value. **Effective Duration:** effective duration specifically takes into account the way changes in yield will affect expected cash flows. **Market to Book Ratio:** market to book ratio is equal to market value divided by book value. **Exchange:** An exchange is the movement of money between the Nationwide Fixed Account and any other investment option available to the plan. **Transfer:** a transfer is the movement of money between product providers within the same plan or another financial institution. **DEFINITIONS:** Average Quality (AQ): the book value weighted average quality rating of the bond portfolio. The AQ of this investment portfolio is calculated using the second lowest of four (including internal), median of three, lowest of two, or one rating for each security including but not limited to the following NRSROs: S&P, Moody's, Fitch, and internal ratings. Asset Backed Securities, and Non-Agency Mortgage Backed Securities will only use internal rating. Average Maturity (AM): the book value weighted length of time (in years) to the stated maturity for fixed-income securities. Since this measure ignores the possibility of pre-payment, it generally overstates the average length of time to return of principal. The AM of this investment portfolio is based on scheduled maturities and does not reflect prepayments. **Average Weighted Life (AWL):** for debt securities, the dollar-

STAY CONNECTED





nationwidefunds.com @NWFinancial



Members: 1-877-677-3678



### Return Bond R6 (USD) Sterling Capital Total

Performance 04-30-2023	30-2023				
Quarterly Returns	1st Otr	2nd Otr	3rd Otr	4th Otr	Total %
2021	-3.00	2.16	0.04	-0.26	-1.12
2022	-6.15	-4.69	-4.42	1.57	-13.15
2023	3.01				3.63
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-0.69	-1.86	1.60		1.35
Std 03-31-2023	-4.68		1.36		1.25
Total Return	-0.69	-1.86	1.60	1.80	1.35
+/- Std Index	-0.27	1.29	0.43	0.48	
+/- Cat Index	-0.27	1.29	0.43	0.48	
% Rank Cat	53	15	13	7	
No. in Cat	461	416	380	282	

		Performance Disclosure
	2024	1. Contractual waiver; Expires 01-31-2024
3.78	3.83 1	30-day SEC Yield 04-30-23
I	3.40 1	7-day Yield 05-10-23
Unsubsidized	Subsidized	

(if applicable) Morningstar metrics. 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 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 The performance data quoted represents past performance and

Asse Cash US S Non-

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

> Tota 0the

### Sales Charges Fees and Expenses nt-End Load %

Deferred Load %	NA S
Fund Expenses	
Management Fees %	0.25
12b1 Expense %	0.00
Net Expense Ratio %	0.35
Gross Expense Ratio %	0.48
Bisk and Batum Bratila	

Fixed

1.00 1.03

KISK and Keturn Profile			
	3 Yr	5Yr	10 Yr
	416 funds	380 funds	282 funds
Morningstar Rating™	4★	4⋆	5☆
Morningstar Risk	-Avg	Avg	Avg
Morningstar Return	+Avg	+Avg	High
	3 Yr	5Yr	10 Yr
Standard Deviation	5.96	5.44	4.32
Mean	-1.86	1.60	1.80
Sharpe Ratio	-0.51	0.03	0.21
MPT Statistics	Standard Index		Best Fit Index Bloomberg US
		Unive	Universal TR USD
Alpha	1.07	07	0.42
Beta	0.94	94	0.95
R-Squared	95.78	78	97.08
12-Month Yield			3.05%
Potential Cap Gains Exp			-19.17%

Below B NR

Americas

Regional Exposure

Stocks %

Rel

Greater Asia Greater Europe Credit Quality Breakdown 03-31-2023

88 88

	03-31-2023		Medalist Rating 10.00	Morningstar
	100.00	Data Coverage % 416 US Fund	10.00	Analyst-Driven %
Bond	Intermediate Core	416 US Fund	****	Analyst-Driven % Morningstar Rating ** Standard Index
		Bond TR USD	Bloomberg US Agg	Standard Index

Bloomberg US Agg Bond TR USD

Core Bond US Fund Intermediate Morningstar Cat

Category Index

11	6.14 1.93 1.93	2012	97	
1 1	-0.97 1.05 1.05	2013	96	
1 1	5.99 0.03 0.03	2014	97	
11	0.54 -0.01 -0.01	2015	97	
11	3.75 1.10 1.10	2016	8 🗷	
11	4.33 0.79 0.79	2017	97	
1 1	10.22 -0.27 -0.28 -0.28	2018	88	
17 430	10.82 9.37 0.65 0.65	2019	8 🔣	
10 415	11.35 9.35 1.84 1.84	2020	96	-
23 423	10.87 -1.12 0.42 0.42	2021	99 🎹	
40 453	9.18 -13.15 -0.14 -0.14	2022	8 🎞	-
476	9.41 3.63 0.04 0.04	04-23	99 91 100k 80k 60k 40k 20k	-
% Rank Cat No. of Funds in Cat	NAV/Price Total Return % +/- Standard Index +/- Category Index	Performance Quartile (within category) History	Fixed-income Bond %  Growth of \$10,000  Sterling Capital Total Return Bond R6 12,868 Category Average 12,115  Standard Index 11,991	

rtfolio Analysis 04-30-2023	is 04-30-2023	<u>ـــ</u>			<b>Top Holdings</b> 03-31-2023	<b>ngs</b> 03-3	1-2023
et Allocation % 03-31-2023	03-31-2023	Net %	Long %	Short %	Share Chg	Share	Share Holdings:
'n		0.36	0.39	0.02	since	Amount	Amount 0 Total Stocks , 261 Total Fixed-Income,
Stocks		0.00	0.00	0.00	03-2023	-	+6% I UIIIUVei natio
n-US Stocks		0.00	0.00	0.00	1	IIII 6/	United States Treasury Bonds 1.375%
lds		99.37	99.37	0.00	<b>⊕</b>	40 mil	United States Treasury Notes 4.125%
er/Not Clsfd		0.26	0.26	0.00		52 mil	United States Treasury Bonds 2.5%
a		100.00	100.02	0.02	1		United States Treasury Notes 2.625%
etulo	Boutfolio Statistics	tiction .	D <sub>2</sub>			21 mil	ONEMAIN FINANCIAL ISSUANCE TRUST 1
e Blend Growth			=	ex Cat	1	16 mil	Fnma Pass-Thru I
	P/E Ratio TTM	Z				16 mil	HERTZ VEHICLE FINANCING III LLC 1.
96	P/C Ratio I IM	3	1			13 mil	ONEMAIN DIRECT AUTO RECEIVABLES TR
P!W	F/B Ratio I IVI	3			1	13 mil	Fnma Pass-Thru I
llem2	\$mil	vi cab			1	11 mil	Federal Home Loan Mortgage Corpora
					D	12 mil	Federal National Mortgage Associat
ed-Income Style					D (	11 ∭.	Fnma Pass-Thru I 3%
Mod Ext	Avg Eff Maturity	turity		9.00	D (	10 mil	Federal Home Loan Mortgage Corpora
чбін	Avg Eff Duration	ration		3 /8	<b>1</b>		Federal Home Loan Mortgage Corpora
рөМ	Avg Wtd Price	rice		91.45	1	10 mil	10 mil Federal Home Loan Mortgage Corpora
μου					Sector Weightings	nhtings	Stacks %

				Std Index	0.00	0.02	0.00	0.24	_	12.10	8.06	67 65	Bond %	**			_	9 M
Utilities	Healthcare	Consumer Defensive	→ Defensive	Technology	ndustrials	Energy	Communication Services	✓ Sensitive	Real Estate	Financial Services	Consumer Cyclical	Basic Materials	Դ Cyclical	Sector Weightings	<ul> <li>10 mil Federal Home</li> </ul>	<ul> <li>10 mil Federal Home</li> </ul>	<ul> <li>10 mil Federal Home</li> </ul>	① 11 mil Fnma Pass-Thru I 3%
1	1	1	I	1	I	I	1	1		1	I	ļ	1	Stocks %	Federal Home Loan Mortgage Corpora	Federal Home Loan Mortgage Corpora	Federal Home Loan Mortgage Corpora	ru I 3%
I		I	I				I	ı			I		1	Rel Std Index	0.97	0.98	0.99	1.00

2.88 4.03 4.05 4.58

1.43 1.35 1.26 1.21

Net Assets

### **Sterling Capital Total** Return Bond R6 (USD)

Morningstar Analyst-Driven % Morningstar Rating™
Medalist Rating™ 10.00 ★★★★
NeuTral Data Coverage % 416 US Fund
03-31-2023 100.00 Intermediate Core

Intermediate Core

Bond

Bond TR USD Bloomberg US Agg

Standard Index

Category Index

Bloomberg US Agg Bond TR USD

Core Bond US Fund Intermediate Morningstar Cat

Base Currency:	Objective:	Tenure:	Manager:	Family:
USD	Growth and Income	15.3 Years	Multiple	Sterling Capital Funds
Purchase Constraints:	Min Auto Investment Plan:	Minimum Initial Purchase:	ISIN:	Ticker:
Α	\$10 mil	\$10 mil	US85918D6242	STRDX
		Total Assets:	Туре:	Incept:
		\$1,028.71 mil	MF	02-01-2018

### (USD) T. Rowe Price Lrg Cp Gr I Morningstar Medalist Ration

Performance 04-30-2023	-30-2023				
Quarterly Returns	1st Otr	2nd Otr	3rd Otr	4th Otr	Total %
2021	3.66	12.53	-0.50	6.14	23.18
2022	-13.25	-22.92	-2.89	-0.18	-35.18
2023	14.18				17.33
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	1.94	9.54	10.35	14.66	10.53
Std 03-31-2023	-14.69	I	10.19	14.45	10.43
Total Return	1.94	9.54	10.35	14.66	10.53
+/- Std Index	-0.73	-4.98	-1.10	2.45	
+/- Cat Index	-0.40	-4.08	-3.45	0.19	
% Rank Cat	36	64	54	8	
No. in Cat	1228	1123	1042	798	

Performance Disclosure
The Direction and Mariningstar Rating is based on risk-adjusted returns, of the three-, five-, and 10-year 30-day SEC Yield 7-day Yield 05-10-23 Subsidized 0.00 Unsubsidized

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.

(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 800-638-5660 or visit

### Deferred Load % Front-End Load % Sales Charges Fees and Expenses ₹ ¥

Fund Expenses			
Management Fees %			0.55
12b1 Expense %			NA
Net Expense Ratio %			0.55
Gross Expense Ratio %			0.55
Risk and Return Profile			
	3 Yr 5 Yr 1,123 funds 1,042 funds	5 Yr 12 funds	10 Yr 798 funds
Morningstar Rating™	3 <b>⊁</b>	3 <b>⊁</b>	5≯
Morningstar Risk	Avg	Avg	+Avg
Morningstar Return	Avg	Avg	High
	3 Yr	5 Yr	10 Yr
Standard Deviation	21.65	20.86	17.24
Mean	9.54	10.35	14.66
Sharpe Ratio	0.47	0.50	0.83
MPT Statistics	Standard Index		Best Fit Index Morningstar US LM
-	1		Brd Growth TR USD
Alpha	-5.35		-1.31
Beta	1.11		0.96
R-Squared	86.28		97.20

25 1681	2.30	18.88 17.55	2012		© Silver 08-12-2022 99	Morningstar Medalist Rat
3 1712	10.95	27.26 44.44	2013		99 99	Morningstar Analyst Medalist Rating™ 100 00
66 1710	-4.33	27.48 8.72	2014		Data Co 100.00 99	<b>Analys</b>
7 1681	4.41	28.89 10.08	2015		Data Coverage % 100.00 99 98 8	t-Driven
52 1463	-4.22	29.24	2016		% 1,12 Large 97	.% Moi
1363	7.61	36.91 37.82	2017		1,123 US Fund Large Growth 97 99	Morningstar
1405	5.83	35.70 4.32	2018		98 H	Analyst-Driven % Morningstar Rating <sup>™</sup> 100 00
1360	-7.90	44.05 28.49	2019		8	
29 1289	1.07	61.21 39.56	2020		99 ==	Standard Index
1237	-5.52 -4.41	73.52	2021		9 III 8	? <b>*</b>
1235	-6.05	45.92 -35.18	2022		USD USD	Cate
1248	1.84	53.88 17.33	04-23		97 1000 000 97 1000 80k 80k 60k 40k	Category Index
% Rank Cat No. of Funds in Cat	+/- Category Index	NAV/Price Total Return %	History	Performance Quartile (within category)	Investment Style	Morningstar Cat

AA	Credit Chality Breakdown —	Credit Onelity Breakdown	мод	Avg Wtd Price	Avg Wtd Coupon	tid Mod Ext Avg Eff Duration	Fixed-Income Style		\$mil	PIW T/B NATIO LIVI		ŗsui	Value Blend Growth		Total 100.00	Other/Not Clsfd 2.25	Bonds 0.00	Non-US Stocks 3.38	tocks	Cash 0.25	Asset Allocation % Net %	Portfolio Analysis 03-31-2023
										0.3 1.67			Avg Index		100.00	2.25	0.00	3.38	94.12	0.25	Long %	
	— %	Dond of		1						1 0.98					0.00	0.00	0.00	0.00	0.00	0.00	Short %	
Consu	Basic	∿ Cyclical	Sector Weightings	•	<b>⊕</b>	①	①	<b>⊕</b>	1	<b>⊕</b>	1	①	•	<b>①</b>	1	1	<b>⊕</b>	•	12-2022	since	Share Chg	
Consumer Cyclical	Basic Materials	cal	ghtings	2 mil	10 mil	541,582	1 mil	2 mil	2 mil	1 mil	5 mil	1 mil	2 mil	m.	9 mil	10 mil			:	Amount	Share	
lical	S			Meta Platforms Inc Class A	Aggregate Miscellaneous Equity	ASML Holding NV ADR	Stryker Corp	Visa Inc Class A	The Cigna Group	Mastercard Inc Class A	Fiserv Inc	Intuit Inc	NVIDIA Corp	UnitedHealth Group Inc	Amazon.com Inc	Alphabet Inc Class A	Apple Inc	Microsoft Corp	16 % TutilOver nauo	56 Total Stocks , 0 Total Fixed-Income,	Holdings:	
12.8	0.3	18.7	Stocks %	s A	is Equity															-Income,		
1.26	0.12	0.67	Rel Std Index	2.14	2.25	2.32	2.50	2.54	2.71	2.93	3.20	3.61	3.97	4.16	5.80	6.25	8.86	13.03		%	Net Assets	

	0.98 2.27 34.00	Rel Std Index	Bond %
Purchase Constraints: Incept: Type: Total Assets:	→ <b>Defensive</b> Consumer Defensive  Healthcare  Utilities	✓ Sensitive  ☐ Communication Services  ☐ Technology	<ul> <li>Cyclical</li> <li>Basic Materials</li> <li>Consumer Cyclical</li> <li>Financial Services</li> <li>Real Estate</li> </ul>
— 10-31-2001 MF \$16,410.77 mil	<b>19.8</b> 1.6 18.2 0.0	<b>61.5</b> 12.1 0.0 2.8 46.6	<b>18.7</b> 0.3 12.8 5.6 0.0
	0.80 0.22 1.26 0.00	<b>1.29</b> 1.46 0.00 0.34 1.76	<b>0.67</b> 0.12 1.26 0.44 0.00

©2023 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 a malty opinions contained here in (1) include the confidential and proprietary information of Morningstar, (2) may not be opinion or redistributed. (4) do not constitute investment advice offered by Morningstar, (3) may not be opined 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 self a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise equired by law, Morningstar shall not be responsible for any trading decisions, damages or offer losses resulting from, or related to, this information, data, analyses or opinions or rheir use, Opiniones expressed are as of the other written and are subject to otherwise. The other conducted and issuant by subsidiaries of Morningstar, Inc. including, but not limited to Morningstar Research Services LLD, registered with and governed by the U.S. Securities and Exchange Commission. This report is supplemental sales literature. If applicable it must be preceded or necessarial confidence of the propriet of the confidence of the conf	
--	--

Objective:

Growth

Tenure:

Family:

T. Rowe Price

Manager:

Taymour Tamaddon 6.3 Years

Ticker:

TRLGX US45775L4086

USD

Base Currency:

ISIN:

Minimum Initial Purchase:

\$500,000

Potential Cap Gains Exp

34.43%

Greater Europe Greater Asia

96.5 2.4 1.1

Americas

Regional Exposure

Stocks %

Below B NR

88 88

12-Month Yield

### Vanguard International **Growth Adm (USD)**

Performance 04-30-2023	-30-2023				
Quarterly Returns	1st Otr	2nd Otr	3rd Otr	4th Otr	Total %
2021	-1.03	7.49	-4.05	-2.76	-0.74
2022	-16.45	-18.13	-10.16	12.62	-30.79
2023	12.50				10.69
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	3.16	8.92	6.24	8.31	7.51
Std 03-31-2023	-6.81		6.54	8.79	7.63
Total Return	3.16	8.92	6.24	8.31	7.51
+/- Std Index	0.11	-0.82	3.74	4.34	
+/- Cat Index	0.96	2.05	2.83	3.44	
% Rank Cat	69	46	19	6	
No. in Cat	449	403	350	234	

		Performance Disclosure
I		30-day SEC Yield
[	1	7-day Yield
Unsubsidized	Subsidized	

20.18 61.28

74.22

68.47

67.06 -0.54 0.71 5.12

67.33 1.84 -2.65 1.72

> 102.79 31.48 9.97

> > 160.29

139.30

2012

2013

2014

2015

2016

2018

2019

2020

2021

2022

3.<u>5</u>1

23.12 7.83 7.63 15

-2.86 -1.64 -5.51

11.15 15.97 43.16 95.58 2017

1.84 -12.58 79.22 1.61

4.14

37.54 49.09 59.74

-5.84

0.99

+/- Category Index

-14.79 -7.74 -30.79 90.40

-8.57 -0.74

65

278

341

361 67 3.35

(if applicable) Morningstar metrics.
The performance data quoted represents past performance and derived from a weighted average of the three-, five-, and 10-year 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

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

0.34 0.34	Net Expense Ratio % Gross Expense Ratio %
NA	12b1 Expense %
0.32	Management Fees %
	Fund Expenses
NA	Deferred Load %
NA	Front-End Load %
	Sales Charges

Morningstar Medalist Ra	06-30-2022	ଞ୍ଜ 🏪	}	
Morningstar Medalist Rating™ ∭SilVer	22	96	1	
	100.00	96	}	
Analyst-Driven % 100.00	)	95	<b>)</b>	
		93	\$	
Morningsta ***	Foreign Large Growth	8		
Morningstar Rating** ****	ge	95		
_	Col	97		

98

97

98

		_	Rating <sup>**</sup> 100.00	tar
	100.00	Data Coverage % 403 US Fund	100.00	Analyst-Driven %
Growth	Foreign Large	403 US Fund	***	Analyst-Driven % Morningstar Rating™
		USD	MSCI,	Standa



ılyst-Driven %	հlyst-Driven% Morningstar Rating <sup>™</sup>	Standa
.00	***	MSCI A
a Coverage %	403 US Fund	USD
Ē	Toroign Lorgo	



∕en%	Morningstar Rating™	Standar
	***	MSCI A
ıge %	403 US Fund	USD



### ĆW

### rd Index





102	outegoly much
Ex USA NR	MSCI ACWI Ex USA
	Growth NR USD





<u> </u>	<b>S</b>	
**	3	96
. 20k	4 60 K	200
<ul><li>Category Average</li><li>20,802</li><li>Standard Index</li></ul>	Growth of \$10,000  Vanguard International Growth Adm 28,303	Investment Style Equity Stocks %

	I	
18,443	Standard Index	208,02









Net % 2.57	363	12
Long % 2.98	399	6
Short % 0.41	439	<u>~</u>
	469	
Share Chg since /	447	4
Share Amount	450	89
Holdings : 121 Total :	443	82
Stocks , 0 T	450	1
Holdings: 121 Total Stocks , 0 Total Fixed-Income,	No. of Funds in Cat	% Rank Cat
Net Assets %		

Value Blend Growth	Portfolio Analysis 03-31-2023 Asset Allocation % Cash US Stocks Non-US Stocks Bonds Other/Not Clsfd Total
llem2 biM egred. ⇒	on % ks
Portfolio Statistics P/E Ratio TTM P/C Ratio TTM P/B Ratio TTM P/B Ratio TTM Geo Avg Mkt Cap \$mil	\$ 03-31-2023 Net % 2.57 11.76 84.82 0.00 0.85 100.00
Port Hell Avg Index 20.4 1.53 15.0 1.67 3.5 2.09 58206 1.34	1 4:82 2 8 2 8
Hell Rel x Cat 3 1.03 7 1.03 7 1.03 9 1.15 4 1.05	Short % 0.41 0.00 0.00 0.00 0.00 0.41 0.00 0.41
0 000	Share Chg since 01-2023
81 mil 2 mil 9 mil 2 mil 2 mil 30 mil	Share Amount 2 mil 4 mil 1 mil 31 mil 9 mil
81 mil Taiwan Semiconductor Manufacturing 2 mil Kering SA 9 mil Spotify Technology SA 2 mil Genmab A/S 30 mil Vestas Wind Systems A/S	Share Holdings: Amount 121 Total Stocks, 0 Total Fixed-Income, 15% Turnover Ratio 2 mil MercadoLibre Inc 4 mil ASML Holding NV 1 mil ASML Holding Std 31 mil Tencent Holdings Ltd 9 mil Moderna Inc
	Net A

Basic Materia	Bond %	down —	Credit Quality Breakdown —	it Qua	Cred
n. Cyclical					
Sector Weightings			γοον		
11117	1	Avg Wtd Price	рәу		
ء ا		Tag As to Cocho	V		
3 mil		Ava Wtd Coupon	ųl		
		Avg Eff Duration	ЭiН		
D ami		Avg ET Maturity	Ē	Mod	Εŧ
2 mil		And Title Noth with	rixeu-iliculle otyle	-110	TIXE
			24.15	-	
1) 48 mil					

Ferrari NV argenx SE Meituan Class B

1.90 1.89 1.72 1.64

Sector W  Cyc  Basi  Con	Bond %	Avy waried
--------------------------	--------	------------

			Sector Wei
Credit Ouglity Breakdown		Bond %	Դ Cycli
		DOILG /6	<b>.</b> Basic
AAA			
AA		1	Consi
A			<b>1.</b> Finan
			Real
BBB			
BB			₩ Sens
В			Comn
Below B		1	<b>→</b> Energ
NR			indus
			Techr
Regional Exposure	Stocks %	Rel Std Index	

<ul><li>→ Defensive</li><li>☑ Consumer Defensive</li><li>☑ Healthcare</li><li>☑ Utilities</li></ul>	Sensitive Communication Services Energy Industrials	Cy Cyclical  Basic Materials  Consumer Cyclical  Financial Services  Real Estate	3 mil Illumina Inc 2 mil L'Oreal SA
<b>22.6</b> 5.1 16.7 0.9	<b>42.3</b> 7.5 1.5 11.4 21.9	35.1 0.4 25.5 9.1 0.0	C*ook 0/
1.02 0.57 1.65 0.28	<b>1.17</b> 1.26 0.26 0.87 1.93	0.84 0.06 2.30 0.45 0.00	1.64 1.53

Objective:	Tenure:	Manager:	Family:	Operations
Foreign Stock	13.4 Years	Multiple	Vanguard	

Potential Cap Gains Exp

21.25%

Greater Asia Greater Europe

20.1 51.8 28.1

1.90 1.11 0.66

Americas

ISIN:	Ticker:	Base Currency:	
US92191050	VWILX	USD	

	USD
	VWILX
	US9219105015
hase:	\$50,000

Minimum Initial Purc

US9219105015 \$50,000	VWILX
--------------------------	-------

Total Assets:	Type:	Incept:	Purchase Constraints:	
v.			onstraints:	

ets:			Constraints:	
\$44,488.20 mil	MF	08-13-2001	Α	

3.30 3.16

5.45 5.26 3.77

3.09 3.08 2.72 2.03 1.90

### Value Inv (USD) Vanguard International

Performance 04-30-2023	30-2023				
Quarterly Returns	1st Otr	2nd Otr	3rd Qtr	4th Otr	Total %
2021	5.74	3.97	-3.66	1.95	7.97
2022	-5.10	-11.38	-9.27	15.76	-11.66
2023	8.67		1		10.13
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	8.57	13.11	3.34	4.60	8.27
Std 03-31-2023	1.16	1	3.19	4.96	8.25
Total Return	8.57	13.11	3.34	4.60	8.27
+/- Std Index	5.52	3.37	0.84	0.64	ı
+/- Cat Index	4.81	0.69	2.07	1.73	
% Rank Cat	40	48	25	24	
No. in Cat	364	329	307	193	

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.

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

Portfolio Analysis 03-31-2023

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

### **Deferred Load %** Front-End Load % Sales Charges **Fees and Expenses**

Front-End Load % Deferred Load %	N N
Fund Expenses	
Management Fees %	0.36
12b1 Expense %	NA
Net Expense Ratio %	0.38
Gross Expense Ratio %	0.38
Risk and Return Profile	

Risk and Return Profile			
	3 Yr	5Yr	10 Yr
	329 funds	307 funds	193 funds
Morningstar Rating™	3 <b>⊁</b>	<b>4★</b>	4⋆
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	Avg	+Avg	+Avg
	3 Yr	5Yr	10 Yr
Standard Deviation	18.95	19.15	15.88
Mean	13.11	3.34	4.60
Sharpe Ratio	0.68	0.19	0.30
MPT Statistics	Standard Index		Best Fit Index Morningstar GbI xUS Val TME NR USD
Alpha	2.62	22	-0.50
Beta	1.08	∞	1.05
R-Squared	93.14	4	95.61
12-Month Yield			
Potential Cap Gains Exp			-11.12%

No. of Funds in Cat	378	354	348	352	346	315	317	337	358	348	338	369
% Rank Cat	1	75	87	ഗ	21	34	<u></u>	30	79	ឌ	43	16
+/- Category Index	2.36	-3.07	-2.48	9.76	4.68	-0.55	5.30	-4.46	3.62	-1.59	7.11	3.21
+/- Standard Index	1.41	4.34	0.15	-1.67	-1.12	-0.33	0.77	-0.04	-0.78	-2.82	6.86	3.35
Total Return %	10.13	-11.66	7.97	8.99	20.39	-14.52	27.96	4.46	-6.44	-6.69	22.15	20.18
NAV/Price	39.36	35.74	41.58	40.25	37.53	32.10	39.88	31.75	31.09	33.95	37.38	31.18
History	04-23	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Performance Quartile (within category)												
	4k											
18,443	10k										:	1
- Standard Index		4		I		1	1	3	3		}	)
Category Average	?20k	Z	<b>}</b>		}	}	\			)		
20,180												
Vanguard International Value Inv	40k											
Growth of \$10,000	80k											
Stocks %	90 100k	90	ţ		g	4	ç	g	9	ū	90	g
Investment Style Equity	8	B ==	2	à <b>III</b>	R	2	2	3	2	2	P I	R <b>T</b>
						e Value	Foreign Large Value	Fore		100.00	- 12	10-13-2022
Value	Value NR USD	Valu			USD	_	Data Coverage % 329 US Fund	<b>%</b> 329	overage	Data C	nze	S Bronze
Morningstar Cat SA US Fund Foreign Large	Standard Index Category Index MSCI ACWI Ex USA NR MSCI ACWI Ex USA	Cate IR MSC	X USA N	Standard Index MSCI ACWI Ex	Stand: MSCI	Rating	Analyst-Driven % Morningstar Rating <sup>™</sup> 100.00 ****		st-Driven		Morningstar Medalist Rating™	Morningstar Medalist Rat

Value Blend Grawth P/E P/C Geo Smill		Other/Not Clsfd	Bonds	Non-US Stocks	US Stocks	Cash	Asset Allocation %
Patio TTM Ratio TTM Ratio TTM Ratio TTM Avg Mkt Cap	100.00	0.00	0.00	91.60	4.54	3.86	Net %
Avg 13.8 8.5 1.7 31297		0.00	0.00	91.60	4.52	3.86	Long %
1.04 0.95 1.00 0.72			_	_	_	٠,	
Cat 1.37 1.33 1.38 0.92	0.00	0.00	0.00	0.00	0.00	0.00	Short %
	1		•	Œ	) 5	SINCE	Shar

	lle	ĐIIII	
ixed-Inc	ixed-Income Style		
Ltd Mod	Ext	Avg Eff Maturity	
	БіН	Avg Eff Duration	ı
	ų	Ava Wtd Coupon	
	bəM	Avg Wtd Price	

Below B NR	В	BB	BBB	Α	AA	AAA	Credit Quality Breakdown —	мод	рөМ		ıgiH	Ltd Mod Ext /
							— пу		Avg Wtd Price	Avg Wtd Coupon	Avg Eff Duration	Avg Eff Maturity
1 1				1			Bond %		1	1		1

Bond %	,							0.72				Index	2	0			0 0		Š	
d %	-							0.32	0.38	3 23	1.37	Cat	2   3	0 :	0.00	0.00	0.00	9 9	3 %	
Basic Materials	∿ Cyclical	Sector Weightings		<b>⊕</b>									1			<b>⊕</b>	<b>⊕</b>	01-2023	Share Chg since	
Materia	cal	ghtings	877,445	517,506	534,429	44 mil	3 mil	2 mil	1 mil	3 mil	5 mil	20 mil	3 mil	35 mil	2 mil	39 mil	24 mil		Share Amount	
			Air Liquide SA	Roche Holding AG	POSCO	Sands China Ltd Shs Unitary 144A/R	TotalEnergies SE	Ryanair Holdings PLC ADR	Baidu Inc ADR	Tencent Holdings Ltd	RELX PLC	AIA Group Ltd	Holcim Ltd	BP PLC	Airbus SE	HSBC Holdings PLC	Alibaba Group Holding Ltd Ordinary	37% Turnover Ratio	Holdings: 191 Total Stocks, 0 Total Fixed-Income,	
11 0	43.5	Stocks %				ary 144A/R											Ordinary		ncome,	
1.38	1.04	Rel Std Index	1.07	1.08	1.10	1.12	1.15	1.16	1.19	1.22	1.25	1.56	1.57	1.62	1.64	1.94	2.25		Net Assets %	

Stocks %  43.5 11.0 17.5 14.3 0.7
Stocks % <b>43.5</b> 11.0 17.5 14.3 0.7

©2023 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:

Foreign Stock 13.0 Years Multiple Vanguard

Manager: Family:

Ticker:

Base Currency:

ISIN:

Minimum Initial Purchase:

\$3,000 VTRIX OSD

US9219392035

Greater Europe Greater Asia

10.4 49.7 39.9

0.10

Americas Regional Exposure

Stocks %

Rel Std Inc

Tenure:



### (USD) **Growth Index Admiral** Vanguard Small Cap

Performance 04-30-2023				
1st Otr	2nd Otr	3rd Otr	4th Otr	Total %
2.56	5.81	-3.16	0.58	5.70
-11.94	-20.44	-0.79	3.02	-28.39
8.18	1		1	6.71
1 Yr	3 Yr	5 Yr	10 Yr	Incept
-2.55	7.37	5.97	8.75	10.82
-12.03		6.32	8.85	11.03
-2.55	7.37	5.97	8.75	10.82
-5.21	-7.15	-5.47	-3.45	
-3.27	-0.44	1.98	0.32	1
47	73	60	70	
592	561	522	388	
		J. 63	2nd Otr 5.81 -20.44 - 3 Yr 7.37 - 7.37 -7.15 -0.44 -7.3 -7.3 -7.3 -7.3 -7.3 -7.3 -7.3 -7.3	2nd Orr 3rd Orr 4th Orr 5.81 -3.16 0.58 -20.44 -0.79 3.02 

0.60	0.60	30-day SEC Yield 05-09-23
		7-day Yield
Unsubsidized	Subsidized	

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.

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

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

Sales Charges

Deferred Load %	NA S
Fund Expenses	
Management Fees %	0.06
12b1 Expense %	NA
Net Expense Ratio %	0.07
Gross Expense Ratio %	0.07

Risk and Return Profile			
		5 Yr	10 Yr
	561 funds 5	522 funds	388 funds
Morningstar Rating™	3 <b>⋆</b>	3 <b>★</b>	3★
Morningstar Risk	Avg	Avg	-Avg
Morningstar Return	-Avg	Avg	-Avg
	3 Yr	5Yr	10 Yr
Standard Deviation	21.86	23.54	18.70
Mean	7.37	5.97	8.75
Sharpe Ratio	0.37	0.30	0.49
MPT Statistics	Standard Index		Best Fit Index Morningstar US Sml
Alpha	-6.20		-1.04
Beta	1.03		0.99
R-Squared	72.37		97.64
12-Month Yield			0.67%
Potential Cap Gains Exp			-17.17%

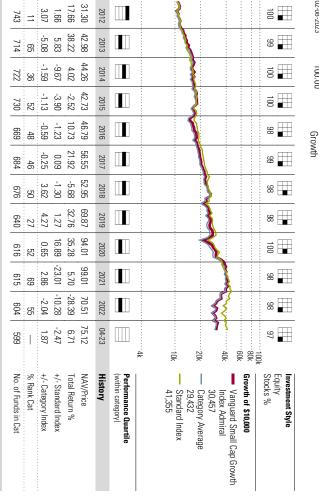
02-08-2023	<b>G</b> Gold	Medalist Rating™	Morningstar
100.00	Data Co	100.00	Analyst

### Data Coverage % 561 US Fund Small 100.00 -Driven % Morningstar Rating™

### S&P 500 TR USD

### Standard Index

### Russell 2000 Growth TR US Fund Small Growth Category Index Morningstar Cat



Rel Std Index	Stocks %	Sector Weightings	s I			мот	
0.57	3 mil Equity Lifestyle Properties Inc	3 mil			Avg Wtd Price	beM	
0.58	Nordson Corp	) 769,754	 (I)		Avg Wtd Coupon	цбіі	
0.59	Sarepta Therapeutics Inc	1 mil	 ①		Avg Eff Duration	H E	Ltd Mod
0.59	The Toro Co	) 2 mil	 ①		Ava Eff Maturity	ne Style	Fixed-Income Style
0.59	Bio-Techne Corp	2 mil	(I)				
0.60	Deckers Outdoor Corp	393,621	· (I)	3320 0.03	\$mil	Ilsm2	
0.62	Exact Sciences Corp	3 mil	1.9	5.5 0.92	F/B Ratio I IIVI	biM	
0.62	Graco Inc	3 mil			P/C Ratio I IM	96	
0.62	Entegris Inc	) 2 mil		22.2 1.05	P/E Ratio TTM	гэц	
0.67	Lattice Semiconductor Corp	e) 2 mil		Avg Index	FORHOLIO SCAUSICS	Srowth	Value Blend Growth
0.70		2	[] []		Bouldalin Statistics		Emilia Stude
0./3	Axon Enterprise Inc	956,814	0.00	100.00	100.00		Total
0.75	Liberty Formula One Group C	3 mil	0.00	0.00	0.00	Clsfd	Other/Not Clsfd
0.84	larga Resources Corp	3 mil	0.00	0.00	0.00		Bonds
0.86	Fair Isaac Corp	J.	0.00	0.71	0.71	ocks	Non-US Stocks
	Z+ /6 Idillovel Induo	.202	0.00	96.72	96.72		US Stocks
%	669 lotal Stocks , 0 lotal Fixed-Income,	Amount	0.00	2.57	2.57		Cash
Net Assets	Holdings:	Share Chg Share	Short % SI	Long %	Net %	ation %	Asset Allocation %
					Portfolio Analysis 03-31-2023	Analysi	Portfolio

→ Defensive	1.00	99.3		ricas	Americas
i ecilioiog)	Rel Std Index	Stocks %	Regional Exposure	inal E	Regi
					R
Energy	1			8 B	Below B
■ Communica					В
✓ Sensitive					88
E Real Estate					BBB
					⊳
					A
	1				AAA
_	Bond %	own —	Credit Quality Breakdown —	t Qual	Cred
?					
Sector Weighting			топ		
① 3 n		Avg Wtd Price	beM		
76		Avg Wtd Coupon	ИріН		
① ① 1n	1	Avg Eff Maturity	Ext	Mod	Etd

☐ Industrials ☐ Technology  → Defensive ☐ Consumer Defensive ☐ Healthcare ☐ Utilities	Bond %	• Consumer Cyclical  • Basic Materials  • Consumer Cyclical  • Financial Services  • Real Estate  • Sensitive  • Communication Services		242 242 23 12.2 3.6 6.1 51.8
© Communication Services  Industrials Technology  Defensive Consumer Defensive Healthcare Utilities	, <sub></sub> -			6.1 <b>51.8</b>
☐ Industrials ☐ Technology  → Defensive ☐ Consumer Defensive ☐ Healthcare ☐ Utilities		<ul><li>■ Communication Services</li><li>◆ Energy</li></ul>		3.0 4.9
→ Defensive     Consumer Defensive     Healthcare     Utilities		☐ Industrials		16.4 27.5
<ul><li>Consumer Defensive</li><li>Healthcare</li><li>Utilities</li></ul>		→ Defensive		23.9
<ul><li>♣ Healthcare</li><li>◆ Utilities</li></ul>		Consumer Defensive		3.8
		<ul><li>Healthcare</li><li>Utilities</li></ul>		19.8 0.4
		Incept:	09-27-2011	-2011
		Type:	≤F	
rt.		Total Assets:	\$13,13	\$13,131.30 mil

Objective: Tenure: Manager: Operations Family:

Small Company 18.4 Years Multiple Vanguard

Ticker:

Base Currency:

ISIN:

Minimum Initial Purchase:

\$3,000

US9219377101

Greater Europe Greater Asia

0.1

### (USD) Vanguard Target Retirement 2025 Fund

Periorillance 04-30-2023	0707-00				
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		1		6.24
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	0.93	6.12	4.94	6.26	6.35
Std 03-31-2023	-5.91		4.77	6.35	6.33
Total Return	0.93	6.12	4.94	6.26	6.35
+/- Std Index	0.42	-0.21	-0.03	0.58	
+/- Cat Index	2.14	1.30	0.48	0.71	
% Rank Cat	22	41	36	18	
No. in Cat	214	189	171	102	

2.25	2.25	30-day SEC Yield 05-10-23
	I	7-day Yield
Unsubsidized	Subsidized	

04-23

History

Performance Quartile (within category)

17.72 6.24

NAV/Price Total Return % +/- Standard Index

0.90 0.96

215

No. of Funds in Cat % Rank Cat +/- Category Index

Net Assets

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.

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

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

### Sales Charges Fees and Expenses

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

Fixed-Income Style

9 57	11 78	11 71	Standard Deviation
10 Yr	5Yr	3 Yr	
+Avg	Avg	Avg	Morningstar Return
Avg	+Avg	Avg	Morningstar Risk
4*	4*	3 <b>★</b>	Morningstar Rating™
102 funds	171 funds	189 funds	
10 Yr	5Yr	3 Yr	
			<b>Risk and Return Profile</b>
0.08			Gross Expense Ratio %
0.08			Net Expense Ratio %
NA			12b1 Expense %

beM ЧвіН

Risk and Return Profile			
	3 Yr	5Yr	10 Yr
	189 funds	171 funds	102 funds
Morningstar Rating™	3 <b>⊁</b>	4⋆	<b>4</b>
Morningstar Risk	Avg	+Avg	Avg
Morningstar Return	Avg	Avg	+Avg
	3 Yr	5Yr	10 Yr
Standard Deviation	11.71	11.78	9.57
Mean	6.12	4.94	6.26
Sharpe Ratio	0.45	0.34	0.58
MPT Statistics	Standard Index	≥	Best Fit Index Morningstar Gbl Allocation TR USD
Alpha	0.00		0.58
Beta	0.96	8	0.91
R-Squared	98.84	34	99.32
12-Month Yield			2.06%
Potential Cap Gains Exp			9.02%
Operations			

88 88

 $^{\triangleright} \not \geq$ 

**Credit Quality Breakdown** 03-31-2023 AAA

Below B

묾

### Mornii Medal Sii 03-01-2 Analyst-Driven %

Morningstar Lifetime Mod 2025 TR USD Category Index

> US Fund Target-Date Morningstar Cat

50

Investment Style Equity Stocks %

60 × 100 80 × 100

Growth of \$10,000

. 4

Vanguard Target Retirement 2025 Fund 22,443

Morningstar Medalist Rat Silver 03-01-2023	Morningstar Medalist Rating <sup>™</sup> Silver 03-01-2023		Analyst-Driven % 100.00 Data Coverage % 100.00		Morningstar Rating** **** 189 US Fund Target-Date 2025	<b>Rating</b> ***  2025	Standard Ind Morningstar Risk TR USD	Standard Index Morningstar Mod Tgt Risk TR USD	<b>∢</b> ∕lod Tgt	Categ Morr Mod
70	69	67	66	64	83	61	8	60	<b>2</b>	53
}		}	}	1				1		
2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
13.59	15.75	16.53	15.62	16.35	18.50	17.01	19.84	21.54	20.34	16.68
1.25	3.83	2.28	0.94	-1.09	1.28	-0.39	0.60	0.47		-0.77
-0.37	1.87	1.13	1.21	-0.91	1.40 21	-0.25	0.26	-0.37	-0.30	2.03
154	181	185	206	195	208	226	232	214	220	219
Portfoli	Portfolio Analysis 03-31-2023	is 03-3	1-2023							

: 1 2 8 . 20k

Category Average 20,227Standard Index 20,767

4

Portfolio Analysis 03-31-2023	<b>s</b> 03-31-2023				
Asset Allocation %	Net %	Long %	Short %	Share Chg Share	Holdings:
Cash	2.76	11.27	8.51	since Amount	10,843 Total Stocks , 17,576 Total Fixed-Income,
US Stocks	32.32	32.32	0.00	UZ-ZUZ3	14% lumover Rauo
Non-US Stocks	21.59	21.59	0.00	① 131 mil	131 mil Vanguard Total Stock Mkt Idx Insti
Bonds	43.30	43.40	0.10	① 2,166 mil	Vanguard Total Bond Market II ldx
Other/Not Clsfd	0.03	0.03	0.00	① 930 mil	930 mil Vanguard Total Intl Stock Index Inv
Total	100.00	108.61	8.61	⊕ 343 mil ⊕ 123 mil	343 mil Vanguard Total Intl Bd II ldx Insl 123 mil Vanguard Shrt-Term Infl-Prot Sec I
Equity Style	Portfolio Statistics	Port Rel		(	
Value Blend Growth	P/F Ratio TTM	Avg Index 15.9 1.01	0 97	Sector Weightings	Stocks %
agie	P/C Ratio TTM		0.96	∿ Cyclical	34.3
ρįΜ	P/B Ratio TTM	2.3 1.08	0.96	Basic Materials	lls 4.9
IS I	Geo Avg Mkt Cap	64354 1.41	0.90	Consumer Cyclical	slical 11.0
llem	\$mil			Financial Services	ices 15.0

Avg Eth Maturity Avg Eth Duration Avg Wtd Coupon Avg Wtd Price Avg Wtd Price Stocks  Stocks %  Stocks %	Avg Ett Maturity Avg Ett Quration Avg Wtd Coupon Avg Wtd Price Avg Wtd Price  akdown 03-31-2023	Avg Eth Maturity  Avg Eth Duration  Avg Wtd Coupon  Avg Wtd Price  Avg Wtd Price	Avg Eth Maturity Avg Eth Duration Avg Wtd Coupon Avg Wtd Price Avg Wtd Price akdown 03-31-2023	Avg Eth Maturity Avg Eth Duration Avg Wtd Coupon Avg Wtd Price Avg Wtd Price Avg Wtd Price Avg Wtd Price	Avg Eth Maturity Avg Eth Duration Avg Wtd Coupon Avg Wtd Price Avg Wtd Price	Avg Eff Duration Avg Eff Duration Avg Wtd Coupon Avg Wtd Price					Avg Eff Maturity	A F66 N - +	5	\$mi	Geo Avg Mkt Cap	P/B Ratio TTM	P/C Ratio TTM	P/E Ratio TTM	Portfolio Statistics
1.03	Rel Std Index	0.38 0.29	13.91 0.00 0.00	15.49	8.83	Bond % 61 10			92.56	2.45	6.46	8.38			1.41	1.08	1.05	Avg Index Cat 15.9 1.01 0.97	Rel
				Utilities	Healthcare	Consumer Defensive	→ Defensive	Technology	ndustrials	★ Energy	Communication Services	∨ Sensitive	★ Real Estate	Financial Services	Consumer Cyclical	Basic Materials	ე Cyclical	Sect	
				2.9	12.3	7.1	22.3	20.4	11.4	4.8	6.8	43.4	3.3	15.0	11.0	4.9	34.3	Stocks %	
				0.81	0.98	0.95	0.94	1.39	0.97	0.96	1.24	1.18	0.48	0.97	0.94	0.93	0.87	Rel Std Index	

inducing, but not limited to, Normitystar heesect services the registered wind and governed by the C.S. sectifies and extending commission, mis report is supplemental sales inelature, if applicable it must be presented or accompanied by an oxospectiva or equivalent and displacement fleases ese important displacements after bed of this report.	mation, 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 N	be correct, complete or accurate. Except as otherwise required by law, I	Morningstar, (3) may not be copied or redistributed, (4) do not constitute investment advice offered by Morningstar, (5) are provided solely for informational purposes and therefore are not an offer to buy or sell a security,	pinions 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	2023 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
--	--	--	---	--	---

Manager: Family: Tenure:

0.3 Year Multiple

Ticker:

XIIVX US92202E4098

Purchase Constraints: Incept:

10-27-2003

\$74,744.19 mil

Type: Total Assets:

Base Currency:

Greater Europe Greater Asia

Americas

Regional Exposure

Asset Allocation

Minimum Initial Purchase:

\$1,000

Objective:

3.95

22.16 12.12 27.95 32.82

### (USD) Vanguard Target Retirement 2030 Fund

Performance 04-30-2023	30-2023				
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	1		1	6.69
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	1.13	7.22	5.36	6.78	6.31
Std 03-31-2023	-6.22		5.21	6.89	6.28
Total Return	1.13	7.22	5.36	6.78	6.31
+/- Std Index	0.62	0.90	0.39	1.10	
+/- Cat Index	2.04	1.10	0.54	0.59	1
% Rank Cat	27	52	39	26	
No. in Cat	216	189	169	96	

### Performance Disclosure

30-day SEC Yield 05-10-23

7-day Yield

Subsidized 2.11

Unsubsidized 2.11

2012

2013

2014

2015

2016

2017

2018

2019

2020

23.38 14.24 2.20 -0.43

29.04 7.17

29.20

33.63 17.52

30.82 -5.86 -1.10

20.49 6.18 27.64

0.85

1.16 2.28

27.72 -1.03 0.76 1.27 31

7.85 -0.72 -1.41

2.87 0.93

21.07 2.05 -0.17 36.45

40.55 14.10 1.28 0.41

5

32

34

32

88

-0.03 37

222 25

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

### Front-End Load % Sales Charges Fees and Expenses

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

ci coo exponed in and /o			9
<b>Risk and Return Profile</b>			
	3 Yr	5Yr	10`
	189 funds	169 funds	96 func
Morningstar Rating™	3 <b>⋆</b>	3 <b>⊁</b>	4,
Morningstar Risk	Avg	Avg	Ą
Morningstar Return	Avg	Avg	+Av
	3 Yr	5Yr	10 \
Standard Deviation	12.81	13.01	10.5
Mean	7.22	5.36	6.7
Sharpe Ratio	0.51	0.35	0.5

Risk and Return Profile			
	3 Yr	5 Yr	10 Yr
Morningstar Rating™	3 <b>⊁</b>	3 <b>⊁</b>	<b>4</b>
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	Avg	Avg	+Avg
	3 Yr	5Yr	10 Yr
Standard Deviation	12.81	13.01	10.56
Mean	7.22	5.36	6.78
Sharpe Ratio	0.51	0.35	0.58
MPT Statistics	Standard Index		Best Fit Index Morningstar Gbl
		Allocatio	Allocation TR USD
Alpha	0.67		1.30
Beta	1.05	8	1.00
R-Squared	98.97	97	99.31
12-Month Yield			1.91%
Potential Cap Gains Exp			7.70%
Operations			

888

≥ ≥

Below B

묾

03-01-2023 100.00	Silver Data	Medalist Rating 100.00	Morningstar Anal	
00	Coverage %	00	yst-Driven %	
Target-Date 2030	Data Coverage % 189 US Fund	***	Analyst-Driven % Morningstar Ratin	

78

76

74

73

7

70

68

æ **■** 

68

ස **—** 

61

-			ting "	_
	100.00	Data Coverage % 189 US Fund	iting" 100.00	Analyst-Driven % Morningstar Rating
-	Target-I	% 189 US	****	% Morning
-	Target-Date 2030	Fund	4	ystar Rating™
-				_









### Mod 2030 TR USD Category Index

### Morningstar Lifetime



4	10k	20k	40k	80k	58
	— Standard Index 20,767	23,948 — Category Average 21,476	<ul> <li>Vanguard Target Retirement 2030 Fund</li> </ul>	Growth of \$10,000	Investment Style Equity Stocks %



2021	2022	04-23	History
38.42	31.37	33.47	NAV/Price
11.38	-16.27	6.69	Total Return %
1.19	-1.49	1.42	+/- Standard Index
-0.31	1.67	1.04	+/- Category Index
<u>61</u>	44		% Rank Cat
221	221 221	218	No. of Funds in Cat

Portfolio Analysis 03-31-2023	ω			2	La	2
Asset Allocation %	Net %		Short %	Share Chg Share since Amount	Holdings: 10,929 Total Stocks , 17,394 Total Fixed-Income,	Net Assets %
US Stocks	37.17	37.17	0 :	02-2023	11% Turnover Ratio	
Non-US Stocks	25.18	25.18	0.00	⊕ 164 mil	164 mil Vanguard Total Stock Mkt ldx Instl	37.74
Bonds	34.91	34.99	0.09	① 1,178 mil	1,178 mil Vanguard Total Intl Stock Index Inv	25.86
Other/Not Clsfd	0.03	0.03	0.00	⊕ 2,070 mil	2,070 mil Vanguard Total Bond Market II ldx	24.61
Total	100.00	107.64	7.64	⊕ 330 mil	330 mil Vanguard Total Intl Bd II ldx Insl	10.74
Equity Style	Portfolio Statistics	Port Rel	Be	Sector Weightings	Stocks %	Rel Std Index
Value Blend Growth	P/F Ratio TTM			Դ Cyclical	34.3	0.87
гэцдө	P/C Ratio TTM		0.95	Basic Materials	ls 5.0	0.93

<ul><li>Healthcare</li></ul>		_ (			,	ΔΔΑ
Consumer	Rond %			Credit Ouality Rreakdown 03-31-2023	uality Break	Credit 0
→ Defensive					W0.	
Technolog	92.03			Avg Wtd Price	l beh	
Industrials	2.63			Avg Wtd Coupon	ų ų	
Energy	6.84			Avg Eff Duration	БіН	
Communic Communic	8.93			Avg Eff Maturity	Mod Ext	Ltd N
-	I <				Fixed-Income Style	Fixed-Ir
Real Estat	<b>-</b>			\$mil	llen	
Financial S		1.40 0.89	64035	Geo Avg Mkt Cap	IS .	
Consumer	0.93	1.08	2.3	P/B Ratio TTM	P!W	
		1.0		-/01141011111		

==		Real Estate
		v Sensitive
g Eff Maturity	8.93	Communication Services
g Eff Duration	6.84	Energy
g Wtd Coupon	2.63	ndustrials
g Wtd Price	_	Technology
		→ Defensive
2000		Consumer Defensive
00 01 5050	E7 20	<ul> <li>Healthcare</li> </ul>
	9.69	Utilities
	16.97	
	15.22	
	0.00	
	0.00	
	0.42	
	0.32	
Stocks %	Rel Std Index	

Stocks %	Rel Sta Index
34.3	0.87
5.0	0.93
11.0	0.94
15.1	0.97
3.3	0.48
43.4	1.17
ommunication Services 6.8	1.24
4.8	0.96
11.4	0.97
20.4	1.39
22.3	0.94
7.1	0.95
12.2	0.98
2.9	0.81
7.1 12.2 2.9	0 0 0

Minimum Initial Purchase:	ISIN:	Ticker:	Base Currency:
\$1,000	US92202E8883	VTHRX	USD
Total Assets:	Туре:	Incept:	Purchase Constraints:
\$81,750.47 mil	MF	06-07-2006	

Manager: Family:

Tenure:

0.3 Year Multiple

Greater Europe Greater Asia

63.5 18.0 18.5

1.02 0.96 0.96

Americas

Regional Exposure

Asset Allocation

Objective:

### (USD) Vanguard Target Retirement 2035 Fund

Performance 04-30-2023	30-2023				
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	1		1	7.08
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	1.41	8.43	5.83	7.33	7.09
Std 03-31-2023	-6.36		5.68	7.43	7.06
Total Return	1.41	8.43	5.83	7.33	7.09
+/- Std Index	0.90	2.11	0.86	1.65	
+/- Cat Index	1.72	0.54	0.55	0.53	1
% Rank Cat	29	61	43	31	
No. in Cat	207	182	168	99	

		Porformanco Disolosuro
2.11	2.11	30-day SEC Yield 05-10-23
		7-day Yield
Unsubsidized	Subsidized	

15.16 3.12

16.98 22.82 8.52 0.79 23

16.84 -1.26 0.53 1.32

17.74 8.26 -0.31

19.12 4.46

18.82 -6.58 -1.82 0.24

22.52 22.44 3.41

-0.20

1.44 2.35 7.24

40

7

-1.80 32

35

32

-0.60 42

0.60

8

185

205

14.09

17.84

20.69

2012

2013

2014

2015

2016

2017

2018

2019

2020

2021

2022

04-23

### Terunimental bisk-iosar Reting is based on risk-adjusted returns. 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

Bonds

Other/Not Clsfd

Cash

Asset Allocation %

Portfolio Analysis 03-31-2023

**US Stocks** 

Non-US Stocks

### Deferred Front-End Sales Charg

Geo Avg Mkt Cap \$mil

		0.1
		-
		<u>.</u>
		<u>e</u>
3 Yr 182 funds	5 Yr 168 funds	10 99 fun
3★	3 <b>★</b>	4
-Avg	-Avg	÷.
Avg	Avg	+A
3 Yr	5Yr	10
13.78	14.16	11.5
8.43	5.83	7.:
0.56	0.36	0.
	3 Yr 182 funds 3 ** -Avg Avg 3 Yr 13.78 8.43 0.56	168

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

Expenses				Total		
es				2	5	
Load %			N		yie	
- N Pc-			2	Value Bler	Blend Growth	
Luau 70			Z			гэкдө
ses						!W
ent Fees %			0.00			3 1
nse %			N			llen
se Ratio %						
onso Datio %			9	Fixed-Inc	Fixed-Income Style	е
one induo /e			9	Ltd Mod	d Ext	
Return Profile						4βiH
	3 Yr	5Yr	10 Yr			V
	182 funds	168 funds	99 funds			beñ
ar Rating™	3 <b>⊁</b>	3 <b>⋆</b>	4★			γoη
ar Risk	-Avg	-Avg	-Avg			

Gross Expense riano /o			9
Risk and Return Profile			
	3 Yr 187 funds 11	5 Yr	10 Yr
Morningstar Rating™		3 <b>⊁</b>	<b>4★</b>
Morningstar Risk	-Avg	-Avg	-Avg
Morningstar Return	Avg	Avg	+Avg
	3 Yr	5 Yr	10 Yr
Standard Deviation	13.78	14.16	11.53
Mean	8.43	5.83	7.33
Sharpe Ratio	0.56	0.36	0.59
MPT Statistics	Standard Index	:	Best Fit Index
		Morni Allocati	Morningstar Gbl Allocation TR USD
Alpha	1.48		2.17
Beta	1.12		1.07
R-Squared	98.94		99.12
12-Month Yield			1.93%
Potential Cap Gains Exp			10.78%
Operations			
Family: Var	Vanguard		
Manager: Mu	Multiple		
	10 0 Vanis		

₽₿

Credit Quality Breakdown 03-31-2023 AAA

888

15.21 0.00

Below B

묾

03-01-2023	🕎 Silver	Medalist Rating 100.00	Morningstar
100.00	Data Coverage % 182 US Fund	100.00	Analyst-Driven %
Target-Date 2035	182 US Fund	***	Analyst-Driven % Morningstar Ratin

89

83

<u>8</u>

∞ 📗

79

77

75

75

75

70

69

65

		<u>g</u>	
100.00	Data Coverage %	ing" 100.00	Analyst-Driven %
Target-Date 2035	182 US Fund	****	Analyst-Driven % Morningstar Rating





Morningstar Mod Tgt Risk TR USD
------------------------------------







### Category Index

Mod 2035 TR USD Morningstar Lifetime

US Fund Target-Date Morningstar Cat

:	1 0 k	20k	40k	8 8	-100k
	— Standard Index 20,767	— Category Average 23,582	Vanguard Target Retirement 2035 Fund 25 580	Growth of \$10,000	Investment Style Equity Stocks %

History	Performance Quartile (within category)	
---------	--	--

4

History
---------

207	43	1.41	1.97	14.79	25.22
213	79	-0.67	2.77	12.96	23.84
212	37	1.13	-1.85	-16.62	19.35
214	1	1.11	1.80	7.08	20.72
No. of Funds in Cat	% Rank Cat	+/- Category Index	+/- Standard Index	Total Return %	NAV/Price

Geo Avg Mkt Cap	P/B Ratio TTM	P/C Ratio TTM	P/E Ratio TTM	9	Portfolio Statistics								is 03-31-2023
/lkt Cap	MII	MII	MLI		tatistics	100.00	0.04	27.81	28.04	41.20	2.91	Net %	ω
63933 1	2.3 1	11.7 1		Avg Ir		106.05	0.04	27.88	28.04	41.20	8.89	Long %	
63933 1.40 0.91	1.08 0.95	1.04 0.96		Index Cat	- 1	6.05	0.00	0.07	0.00	0.00	5.98	Short %	
<b>1.</b>	<b>)</b>	B	Ģ			•	•	1	•	02-202	since	Share Cho	
Financial Services	Consumer Cyclical	Basic Materials	G CYCIICAI	ادران	Sector Weightings	260 mil	1,645 mil	1,304 mil	i au mil		Amount	thg Share	
vices	clical	als	+			260 mil Vanguard Total Intl Bd II Idx Insl	,645 mil Vanguard Total Bond Market II ldx	Vanguard Total Intl Stock Index Inv		V/====================================	11,018 Total Stocks , 1	Holdings:	
15.1	11.0	5.0	ָּהָ בְּי	2	Stocks %	tl Bd II Idx Insl	ond Market II ldx	tl Stock Index Inv	tock ivikt idx insti		11,018 lotal Stocks , 17,100 lotal Fixed-Income,		
0.97	0.94	0.93		0.87	Rel Std Index	8.49	19.67	28.80	41.84		%	Net Assets	

		-	
	Sector Weightings	Stocks %	Rel Std Index
	<b>ე</b> Cyclical	34.3	0.87
0.96	Basic Materials	5.0	0.93
	Consumer Cyclical	11.0	0.94
	Financial Services	15.1	0.97
	Real Estate	3.3	0.48
	∨ Sensitive	43.4	1.17
8.93	■ Communication Services	6.8	1.24
6.84	<b>▲</b> Energy	4.8	0.96
2.63	Industrials	11.4	0.97
92.03	■ Technology	20.4	1.39
	→ Defensive	22.3	0.94
2	Consumer Defensive	7.1	0.95
57 /8	♣ Healthcare	12.2	0.98
9.64	Utilities	2.9	0.81
16.93			

Minimum Initial Purchase:	ISIN:	Ticker:	Base Currency:
\$1,000	US92202E5087	VTTHX	USD
Total Assets:	Туре:	Incept:	Purchase Constraints:
\$81,468.22 mil	MF	10-27-2003	I

Objective: Tenure:

Asset Allocation 10.3 Years

Greater Europe Greater Asia

Americas

Stocks % 63.4 18.1 18.5

1.02 0.97 0.96

Regional Exposure

Rel Std Index

0.32 0.42 0.00

### (USD) Vanguard Target Retirement 2040 Fund

Performance 04-30-2023	30-2023				
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	1		1	7.38
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	1.66	9.62	6.27	7.80	6.90
Std 03-31-2023	-6.53		6.12	7.91	6.87
Total Return	1.66	9.62	6.27	7.80	6.90
+/- Std Index	1.14	3.29	1.31	2.12	
+/- Cat Index	1.33	0.08	0.58	0.59	1
% Rank Cat	30	ස	40	31	
No. in Cat	211	183	169	96	

2.11	2.11	30-day SEC Yield 05-10-23
	I	7-day Yield
Unsubsidized	Subsidized	

3.52

10.07 28.32 24.37

29.76 7.15 2.26 1.63

1.32

5

23.18 15.56 -0.15

2012

2013

2014

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.

> 204  $\omega$

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

### Front-End Load % Sales Charges Fees and Expenses

Z

	Risk and Return Profile
0.08	Gross Expense Ratio %
0.08	Net Expense Ratio %
NA	12b1 Expense %
0.00	Management Fees %
	Fund Expenses
NA	Deferred Load %

Gross Expense Ratio %			0.0
Risk and Return Profile			
	3 Yr	5Yr	10 Y
	183 funds	169 funds	96 fund
Morningstar Rating™	3 <b>⊁</b>	3 <b>⊁</b>	44
Morningstar Risk	-Avg	-Avg	-Avi
Morningstar Return	Avg	Avg	+Avi
	3 Yr	5Yr	10 Y
Standard Deviation	14.75	15.32	12.4
Mean	9.62	6.27	7.80
Sharpe Ratio	0.61	0.37	0.59
MPT Statistics	Standard Index	3	Best Fit Inde

Risk and Return Profile			
	3 <b>Y</b> r	5Yr	10 Yr
	183 funds	169 funds	96 funds
Morningstar Rating™	3 <b>★</b>	3 <b>★</b>	<b>4</b>
Morningstar Risk	-Avg	-Avg	-Avg
Morningstar Return	Avg	Avg	+Avg
	3 Yr	5 Yr	10 Yr
Standard Deviation	14.75	15.32	12.47
Mean	9.62	6.27	7.80
Sharpe Ratio	0.61	0.37	0.59
MPT Statistics	Standard Index	Z	Best Fit Index MSCI ACWI NR
			USD
Alpha	2.28	28	-0.93
Beta	1.20	20	0.86
R-Squared	98.74	74	99.40
12-Month Yield			1.95%
Potential Cap Gains Exp			10.64%
Operations			
Family: Var	Vanguard		

03-01-2023	嬖 Silver	Medalist Rating™ 100.00	Morningstar
100.00	Data Coverage % 183 US Fund	100.00	Analyst-Driven %
Target-Date 2040	183 US Fund	***	Analyst-Driven % Morningstar Ratin

89

89	gstar st Rating™ /er 23
88	Analyst 100.00 Data Co 100.00
88	Analyst-Driven % 100.00 Data Coverage % 100.00
86	. % Mor ★★ % 183 Targ
8	Morningstar Rating  ****  183 US Fund  Target-Date 2040
83	Rating <sup>™</sup> 3
	<b>3</b> ≥ <b>3</b>



Aorningstar Mod Tgt lisk TR USD
------------------------------------

sk TR USD	orningstar Mod Tgt	





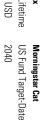








### Morningstar Lifetime Mod 2040 TR USD Category Index



-	-		10 11 10 11 10 11 10 11 11 11 11 11 11 1		
Portfolio Analysis 03-31-2023	is 03-31-2023				
Asset Allocation %	Net %	Long % Short %	Share Chg Share since Amount	Holdings : 11,057 Total Stocks , 16,594 Total Fixed-Income,	Net Assets %
US Stocks	45.61		02-2023	atto	
Non-US Stocks	30.54	30.54 0.00		174 mil Vanguard Total Stock Mkt Idx Instl	46.32
Bonds	20.75		<ul> <li>1,238 mil Vanguard T</li> </ul>	1,238 mil Vanguard Total Intl Stock Index Inv	31.36
Other/Not Clsfd	0.04		⊕ 1,075 mil Vanguard T	1,075 mil Vanguard Total Bond Market II ldx	14.75
Total	100.00	104.47 4.47	① 167 mil Vanguard T	167 mil Vanguard Total Intl Bd II Idx Insl	6.26
Equity Style	Portfolio Statistics		Sector Weightings	Stocks %	Rel Std Index
Value Blend Growth	P/F Ratio TTM	Avg Index Cat	∿ Cyclical	34.3	0.87
гэцве	P/C Ratio TTM	1.05	Basic Materials	4.9	0.93
!W	P/B Ratio TTM	1.08	Consumer Cyclical	11.0	0.94
S F		1.41	Financial Services	15.0	0.97
llem	\$mil		★ Real Estate	3.3	0.48
Fixed-Income Style			<b>y</b> ✓ Sensitive	43.4	1.18
rixeu-iliculle atyle	Ava Eff Maturity	CO 0	g ga Communication Services	D 20	1 24

rixed-income style			-
Ltd Mod Ext	Avg Eff Maturity	8.93	iii Comm
	]   ■ Avg Eff Duration	6.83	Energy
	Avg Wtd Coupon	2.64	Industr
	Avg Wtd Price	92.04	Techno
	мод		→ Defen
		2	<b>™</b> Consu
Credit Quality B	Credit Quality Breakdown 03-31-2023 AAA	57 65	Health
AA		9.56	Otilitie
A		16.87	
BBB		15.19	
<sup>P</sup> BB		0.00	
₩.		0.00	
Below B		0.41	
NR.		0.31	
Regional Exposure	ire Stocks %	Rel Std Index	

	A ,					-		
Purcha Incept: Type: Total A		•		<b> </b>		٥	<b>&gt;</b>	<b>≡</b> 0
Purchase Constraints: Incept: Type: Total Assets:		Utilities	Consumer Defensive Healthcare	Defensive	Technology	Industrials	Energy	Communication Services
 06-07-2006 MF \$71,024.21 mil		2.9	7.1 12.3	22.3	20.4	11.4	4.8	6.8
		0.81	0.95	0.94	1.39	0.97	0.96	1.24

Manager:

Tenure:

0.3 Year Multiple

Ticker:

**VFORX** US92202E8701

Base Currency:

Greater Europe Greater Asia

63.8 17.9 18.3

1.03 0.96 0.95

Americas

Asset Allocation

Minimum Initial Purchase:

\$1,000

Objective:

### (USD) Vanguard Target Retirement 2045 Fund

Performance 04-30-2023	30-2023				
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	1		1	7.76
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	1.91	10.84	6.75	8.12	7.69
Std 03-31-2023	-6.70		6.59	8.22	7.65
Total Return	1.91	10.84	6.75	8.12	7.69
+/- Std Index	1.40	4.51	1.78	2.44	
+/- Cat Index	1.14	0.27	0.82	0.74	1
% Rank Cat	33	42	33	21	
No. in Cat	207	182	168	99	

### Performance Disclosure

30-day SEC Yield 05-10-23

7-day Yield

Subsidized 2.10

Unsubsidized 2.10

18.65

2012

2013

2014

2015

2016

2017

2018

2019

2020

2021

2022

04-23

Performance Quartile (within category)

15.58 3.54 14.55

17.76 24.37 10.06 1.30

7.16 2.27

17.78 -1.57 0.22 1.45

18.89 8.87 0.30 -1.97

21.42 6.77 0.89 22.50

0.27

-0.03

83

 $\omega$ 

% Rank Cat +/- Category Index

20.21 -7.90 -3.14

28.38 16.16 5.97 -0.20

22.82 -17.36 -2.58 -0.29

24.59 7.76 2.48 1.32

Total Return % +/- Standard Index NAV/Price History

24.94 5.91 24.70

16.30 3.48 3.35

-0.26

1.91

42

28

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.

Cash

Asset Allocation %

Portfolio Analysis 03-31-2023

180 26

**US Stocks** 

Net % 3.17 50.09 33.35 13.36 0.04

Non-US Stocks

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

Bonds

Total Other/Not Clsfd

100.00

102.88

2.88

### Front-End Load % Sales Charges Fees and Expenses

Deferred Load %

₹

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

<b>Risk and Return Profile</b>			
	3 Yr	5Yr	10 \
		168 funds	99 func
Morningstar Rating™	3 <b>★</b>	4⊁	47
Morningstar Risk	-Avg	Avg	-Av
Morningstar Return	Avg	+Avg	+Av
	3 Yr	5 Yr	10 \
Standard Deviation	15.76	16.43	13.1
Mean	10.84	6.75	8.1
Sharpe Ratio	0.65	0.39	0.5
MPT Statistics	Standard Index		Best Fit Inde

Operations Vanguard Family: Vanguard Manager: Multiple Tenure: 0.3 Year Objective: Asset All	12-Month Yield Potential Cap Gains Exp	R-Squared	Beta	Alpha	MPT Statistics Star	Sharpe Ratio	Mean 1	Standard Deviation 1		Morningstar Return	Morningstar Risk	Morningstar Rating <sup>IM</sup>			<b>Kisk and Return Profile</b>
Vanguard Multiple 0.3 Year Asset Allocation		98.44	1.28	3.09	Standard Index	0.65	10.84	15.76	3 Yr	Avg	-Avg	3 <b>⊁</b>		3 ₩	
					Bes MSCI	0.39	6.75	16.43	5Yr	+Avg	Avg	<b>4</b> ★	168 funds	5 Yr	
	1.96% 13.04%	99.60	0.92	-0.35	Best Fit Index MSCI ACWI NR	0.59	8.12	13.18	10 Yr	+Avg	-Avg	4⊁	99 funds	10 Yr	

888

₹

03-01-2023	👺 Silver 💮 ı	Medalist Rating™ 100.00	Morningstar /
100.00	Data Coverage % 182 US Fund	100.00	Analyst-Driven %
Target-Date 204	182 US Fund	***	Analyst-Driven % Morningstar Rati

89

89

88

89

88

88

88

88

90

22

84





forningstar Mod Tgt isk TR USD
-----------------------------------

k TR USD	rningstar Mod Tgt









### Category Index

### Mod 2045 TR USD Morningstar Lifetime

US Fund Target-Date 2045 Morningstar Cat

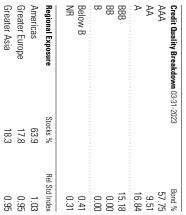
4 <sub>k</sub>	10k	20k	40k		81 100k
	— Standard Index 20,767	— Category Average 25,603	2045 Fund 27,746	Growth of \$10,000  Vanguard Target Retirement	Investment Style Equity Stocks %

102.88	0.04	13.39	33 2	6.01 50.09	Long %		208
2.88	0.00	0.03	0.00	2.84	Short %		221
•	•	<b>①</b>	<b>⊕</b>	since 02-2023		_	229
10	65	1,27	18	ω	Chg		207
0 mil	4 mil	2 mil	0 mil	Amount	Share		213
Vanguar	Vanguar	Vanguar	Vanguar	11,085 Total Stock 5% Turnover Ratio	Holdings:		221   229   207   213   212   208
d Total In	d Total B	d Total In	d Total S	al Stocks , er Ratio			208
100 mil Vanguard Total Intl Bd II Idx Insl	654 mil Vanguard Total Bond Market II Idx	1,272 mil Vanguard Total Intl Stock Index Inv	180 mil Vanguard Total Stock Mkt Idx Instl	11,085 Total Stocks , 15,522 Total Fixed-Income, 5% Turnover Ratio			No. of Funds in Cat
4.00	9.52	34.23	50.86	%	Net Assets		

Portfolio Statistics







023 Morningsta nions contained rningstar, (3) ma (6) are not war	erations mily: anager: nure: jective:
. All Rights Reserved. Unless otherwise provide herein (1) include the confidential and proprietar y not be copied or redistributed, (4) do not const artifact for be correct, complete or accurate. Exceptabless or opinions or their use. Opinions some	Vanguard Multiple 0.3 Year Asset Allocation
23. Momingstar. All flights fleserved. 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 increases a continuous provided by your financial professional which ingstar. (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 be file are not warranted to be correct, complete or accurate. Except as otherwise required by the Morningstar shall not be responsible for any trading decisions, damages or other tosses resulting fit of the second of the control	Base Currency: Ticker: ISIN: Minimum Initial Purchase:
only in the country in which its o derived from, account informatic are provided solely for informatic ot be responsible for any trading ange without notice. Investmen	USD VTIVX US92202E6077 \$1,000
iginal distributor is based. The information, data in provided by your financial professional which nal purposes and therefore are not an offer to decisions, damages or other losses resulting fit research is produced and issued by subsidiarie research is produced and issued by subsidiarie	Purchase Constraints: Incept: Type: Total Assets:

\$66,978.48 mil

10-27-2003

### (USD) Vanguard Target Retirement 2050 Fund

Performance 04-30-2023	30-2023				
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	1		1	7.94
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	2.06	10.96	6.83	8.16	7.14
Std 03-31-2023	-6.71		6.66	8.26	7.10
Total Return	2.06	10.96	6.83	8.16	7.14
+/- Std Index	1.55	4.63	1.86	2.48	ļ
+/- Cat Index	1.09	0.00	0.84	0.79	1
% Rank Cat	25	48	34	24	
No. in Cat	208	183	169	96	

### Performance Disclosure

30-day SEC Yield 05-10-23

7-day Yield

Subsidized 2.10

Unsubsidized 2.10

29.62

30.39

2012

2013

2014

2015

2016

2017

2018

15.58 3.54 23.09

10.04 28.19 24.34

7.18 2.29 2.18

28.49 -1.58 0.22 1.62

8.85 0.28

32.52 -7.90 -3.14

39.77 2019

21.39 6.73 0.61 36.20

-0.35

<u>.5</u>

-2.04

0.51

3.48 37 217

24.98 5.96 -0.10 47

4

6

29

37

230 38

215 74

213

No. of Funds in Cat % Rank Cat +/- Category Index

202 30

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

### Front-End Load % Sales Charges Fees and Expenses

Deferred Load %	NA
Fund Expenses	
Management Fees %	0.00
12b1 Expense %	NA
Net Expense Ratio %	0.08
Gross Expense Ratio %	0.08
Diale and Date Draftle	

<b>Risk and Return Profile</b>			
	3 Yr	5Yr	10 Yr
	183 funds	169 funds	96 funds
Morningstar Rating™	3 <b>★</b>	<b>4★</b>	4⊁
Morningstar Risk	-Avg	-Avg	-Avg
Morningstar Return	Avg	Avg	+Avg
	3 Yr	5 Yr	10 Yr
Standard Deviation	16.02	16.58	13.27
Mean	10.96	6.83	8.16
Sharpe Ratio	0.65	0.39	0.59
MPT Statistics	Standard Index		Best Fit Index

<b>Risk and Return Profile</b>			
	3 Yr	5Yr	10 Yr
	183 funds	169 funds	96 funds
Morningstar Rating™	3 <b>⊁</b>	4⋆	4*
Morningstar Risk	-Avg	-Avg	-Avg
Morningstar Return	Avg	Avg	+Avg
	3 Yr	5Yr	10 Yr
Standard Deviation	16.02	16.58	13.27
Mean	10.96	6.83	8.16
Sharpe Ratio	0.65	0.39	0.59
MPT Statistics	Standard Index		Best Fit Index MSCI ACWI NR
			USD
Alpha	3.13	ಪ	-0.38
Beta	1.30	8	0.93
R-Squared	98.44	14	99.61
12-Month Yield			1.97%
Potential Cap Gains Exp			9.24%
Operations			
Family: Va	Vanguard		
Manager: Mı	Multiple		
	00 < 0		

### Morningstar Medalist Ratin 03-01-2023

88

89

88

89

88

88

88

88

		g	
100.00	Data Coverage %	100.00	Analyst-Driven %
Target-Date 2050	183 US Fund	***	Analyst-Driven % Morningstar Ratin



### Risk TR USD

### Morningstar Mod Tgt







Mod 2050 TR USD Morningstar Lifetime Category Index

US Fund Target-Date Morningstar Cat

100k	91 87 88 86
20k ————————————————————————————————————	88 86
20k ————————————————————————————————————	86
Grow  Grow  Hist  NAV  Total  NAV  Total  +/-C  % Re	(о m <del>-</del>
Growth of \$10,000  Vanguard Ta 2,050 Fund 72,838  Category Ave 25,322  Standard Ind 20,767  Performance Quar (within category)  History  NAV/Price  Total Return % +/- Standard Index +/- Category Index +/	(A III —
van of \$10,000  Vanguard Target Retirement 2050 Fund 27,838 Category Average 25,322 Standard Index 20,767  Ory  Price Return % Return % tandard Index ategory Index	Investment Style Equity Stocks %

Credit Qualit AAA AA			Fixed-Income Style	Equity Style Value Blend Growth	Portfolio Analys Asset Allocation % Cash US Stocks Non-US Stocks Bonds Other/Not Clsfd
y Breal	μου	beM AgiH	le Style	llem2 biM agred.	tion % cks
Credit Quality Breakdown 03-31-2023 AAA AA		Avg Wtd Coupon Avg Wtd Price	Avg Eff Maturity	Portfolio Statistics P/E Ratio TTM P/C Ratio TTM P/B Ratio TTM P/B Ratio TTM Geo Avg Mkt Cap \$mil	Portfolio Analysis 03-31-2023  **Asset Allocation % Net % 3.17  **Dash 52.52  US Stocks 54.94  Non-US Stocks 34.94  3onds 9.33  **Dther/Not Clsfd 0.04  Total 100.00
				Port Rel Avg Index 15.9 1.01 11.7 1.05 2.3 1.08 64449 1.41	Long % 5.12 52.52 34.94 9.35 0.04 101.88
Bond % 58.05 9.36		2.64	8.93	Rel Pex Cat 9x Cat 11 0.98 15 0.97 18 0.97	Short % 1.96 0.00 0.00 0.02 0.02 1.98
<ul><li>♣ Healthcare</li><li>✔ Utilities</li></ul>	→ Defensive	Industrials Technology		Sector Weightings  1. Cyclical  2. Basic Materials  2. Consumer Cyclical  3. Financial Services  3. Real Estate	Share Chg Share since Amount 02-2023
elisive			on Services	ls lical ices	Share Holdings: Amount 11,098 Total Stocks , 14,383 Total Fixed-Income 4% Tumover Ratio 153 mil Vanguard Total Stock Mkt ldx Instl ,084 mil Vanguard Total Intl Stock Index Inv 374 mil Vanguard Total Bond Market II ldx 56 mil Vanguard Total Intl Bd II ldx Insl
7.1 12.3 2.9	<b>22.3</b>	4.0 11.4 20.4	<b>43.5</b> 6.8	Stocks %  34.3  4.9  11.0  15.0  3.3	3 Total Fixed-Income, Mkt Idx Instl ock Index Inv Market II Idx
0.98	<b>0.94</b>	0.97 1.39	<b>1.18</b> 1.24	Rel Std Index <b>0.87</b> 0.93 0.94 0.97	Net Assets % 53.34 35.87 6.71 2.73

WO			→ Defensive	22.3
			Consumer Defensive	7.1
Credit Quality Breakdown 03-31-2023	-2023	Bond %	Hoolthcare	12 3
AAA		58.05	I lealticale	12.0
AA		9.36	Utilities	2.9
A		16.73		
BBB		15.15		
BB		0.00		
В		0.00		
Below B		0.40		
NR		0.30		
Regional Exposure	Stocks %	Rel Std Index		
Americas	63.9	1.03		
Greater Europe	17.8	0.95		
Greater Asia	18.3	0.95		
Base Currency:	USD		Purchase Constraints:	l
Ticker:	VFIFX		Incept:	06-07-2006
ISIN:	US92202E8628		Type:	MF
Minimum Initial Purchase:	\$1,000		Total Assets:	\$54,522.12 mil

Tenure:

0.3 Year Multiple

Asset Allocation

Objective:

### (USD) Vanguard Target Retirement 2055 Fund

Performance 04-30-2023	30-2023				
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	1		1	7.94
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	2.08	10.97	6.82	8.14	9.39
Std 03-31-2023	-6.67		6.66	8.24	9.34
Total Return	2.08	10.97	6.82	8.14	9.39
+/- Std Index	1.57	4.64	1.86	2.46	ļ
+/- Cat Index	1.13	-0.04	0.91	0.85	1
% Rank Cat	29	51	35	26	
No. in Cat	207	182	168	81	

### Performance Disclosure 30-day SEC Yield 05-10-23

7-day Yield

Subsidized 2.10

Unsubsidized 2.10

2012

2013

2014

2015

2016

2017

2018

2019

2020

2021

2022

04-23

History

15.58 3.54 24.80

30.35 24.33 10.02

30.83 -1.72 0.07

35.30 -7.89 -3.13 0.68

> 24.98 5.95 43.19

16.32 3.50 49.34

16.44 6.25 52.22

-17.46 -0.53

45.52 7.94 2.67

42.17 -2.68

NAV/Price

8.88 0.31

21.38 6.72 0.43 39.23

31.98

32.91

-0.42

1.84

1.62

-2.03

-0.07

3.41

-0.06

1.42

+/- Category Index +/- Standard Index Total Return %

7.19 2.31 2.45

48

36

 $\Xi$ 

27

48

37

2

4

24

% Rank Cat

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.

Cash

Asset Allocatio Portfolio Ana

US Stocks

Non-US Stock

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

Bonds

Total Other/Not Cls

Equity Style

### Front-End Load % Sales Charges Fees and Expenses

Deferred Load %

₹

Risk and Return Profile	Gross Expense Ratio %	Net Expense Ratio %	12b1 Expense %	Management Fees %	Fund Expenses
	0.08	0.08	NA	0.00	

Fixed-Income Sty

<b>Risk and Return Profile</b>			
	3 Yr	5Yr	10`
	182 funds	168 funds	81 func
Morningstar Rating™	3 <b>★</b>	<b>4★</b>	4,
Morningstar Risk	-Avg	-Avg	-Av
Morningstar Return	Avg	Avg	+Av
	3 Yr	5Yr	10 \
Standard Deviation	16.02	16.57	13.2
Mean	10.97	6.82	8.1
Sharpe Ratio	0.65	0.39	0.5

	3 Yr	5Yr	10 Yr
	182 funds	168 funds	81 funds
Morningstar Rating™	3 <b>⊁</b>	4⊁	<b>4★</b>
Morningstar Risk	-Avg	-Avg	-Avg
Morningstar Return	Avg	Avg	+Avg
	3 Yr	5 Yr	10 Yr
Standard Deviation	16.02	16.57	13.27
Mean	10.97	6.82	8.14
Sharpe Ratio	0.65	0.39	0.58
MPT Statistics	Standard Index		Best Fit Index MSCI ACWI NR
			USD
Alpha	3.13	13	-0.37
Beta	1.30	30	0.93
R-Squared	98.46	46	99.61
12-Month Yield			1.94%
Potential Cap Gains Exp			2.34%
Operations			

Morningstar Medalist Rating™ ∭SilVer	Analyst-Driven % 100.00 Data Coverage %	Analyst-Driven % Morningstar Rating 100.00 ***** Data Coverage % 192118 Eurol
Medalist Rating™ 100.00	100.00	****
👺 Silver	Data Coverage % 182 US Fund	182 US Fund
03-01-2023	100.00	Target-Date 2055

88

89

88

89

88

88

88

		آو آو	
100.00	Data Coverage %	ing 100.00	Analyst-Driven %
Target-Date 2055	182 US Fund	***	Morningstar Rating



sk TR USD	orningstar Mod Tgt

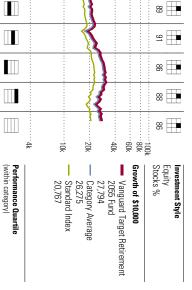


### Category Index



### Mod 2055 TR USD Morningstar Lifetime

### US Fund Target-Date Morningstar Cat



130   156   238	130   156	238   193	206	221	229	207	213	229   207   213   212   208	208	No. of Funds in Cat
cation %		Net %	Long %	Short %	Share Chg			Holdings:	-	
		3.10 52.58	5.05 57 58	1.95	since 02-2023		Amount 1	11,098 Total Stocks , 14,368 Total Fixed-Income, 4% Turnover Ratio	목모	Stocks
Stocks		34.97	34.97	0.00	•	97	97 mil \	Vanguard Total Stock Mkt Idx Instl	_	Total St
		9.31	9.33	0.02	<b>⊕</b>	989	686 mil \	/anguaro		Vanguard Total Intl Stock Index Inv
t Clsfd		0.04	0.04	0.00	1	236	236 mil \	/anguaro		Vanguard Total Bond Market II ldx
		100.00	101.98	1.98	•	35	5 mil 1	/anguarc		35 mil Vanguard Total Intl Bd II Idx Insl
ē	Portfo	Portfolio Statistics	Port Rel	e Rel	Secto	Sector Weightings	ings			
Growth	P/E R	P/E Ratio TTM	Avg Index 15.9 1.01	_ × 0.98	ځ	<b>∿</b> Cyclical				
экле	P/CR	P/C Ratio TTM	11.7 1.05	5 0.97	B	Basic Materials	aterials			
P!M		P/B Ratio TTM			<b>)</b>	Consumer Cyclical	er Cycli	cal		
nS		Geo Avg Mkt Cap	64452 1.41 1.00	1.00	1	Financial Services	Servic	ës		

<b>eakdown</b> 03-31-2023	WO.			≞ Avg E		le l	\$mil	
3-31-2023		Avg Wtd Price	Avg Wtd Coupon	Avg Eff Duration	Avg Eff Maturity			Geo Avg Mkt Cap
								64452 1.41 1.00
п								1.41
Bond %			2.64	6.83	8.93			1.00
	<b>7</b> ↓		٥	٥	⊞0.	ţ	Ð	1
Healthcare	Defensive	Technology	Industrials	Energy	Communication Services	Sensitive	Real Estate	Financial Services

43.5 6.8 4.8 11.4 20.4 20.4 7.1 12.3

0.94 0.95 0.98 0.81

1.24 1.24 0.96 0.97 1.39

3.3

0.48

	0.95	sia 18.3	Greater Asia
	0.95	urope 17.8	Greater Europe
	1.03	63.9	Americas
	Rel Std Index	xposure Stocks %	Regional Exposure
	0.30		NR
	0.40		Below B
	0.00		В
	0.00		BB
	15.15		BBB
	16.74		⊳
Otilities	9.37		A
I Hillitios	58.04		AAA
Healthca	Bond %	Credit Quality Breakdown 03-31-2023	Credit Oua
Consume			
→ Defensiv		MOT	
1 00111010		G.	
		P AVU VV IU T II CT	_

Total Assets:	Type:	Incept:	Purchase Constraints:	
\$34,706.26 mil	MF	08-18-2010	l	

Manager: Family:

0.3 Year Multiple

Ticker:

VFFVX US92202E8479

Base Currency:

Asset Allocation

Minimum Initial Purchase:

\$1,000

Objective: Tenure:

### (USD) Vanguard Target Retirement 2060 Fund

Performance 04-30-2023	30-2023				
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	1	1	1	7.96
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	2.07	10.98	6.82	8.14	9.07
Std 03-31-2023	-6.67		6.65	8.24	9.02
Total Return	2.07	10.98	6.82	8.14	9.07
+/- Std Index	1.56	4.65	1.85	2.46	1
+/- Cat Index	1.17	-0.01	1.00	0.93	
% Rank Cat	28	88	37	_	
No. in Cat	207	177	156	7	

2.10	2.10	30-uay SEC FIEID 03-10-23
2 10	2 10	on day CEC Viold DE 10 22
		7-day Yield
Unsubsidized	Subsidized	

26.75 24.35 10.04 2.17

27.21 -1.68 0.11 1.80

29.04 8.84 0.27

31.18 -7.87 -3.11 0.82

43.59 16.32 3.50 3.43

38.83 -17.46 -2.68 -0.48

48.04 16.44 6.25

41.92 7.96 2.68

Total Return % +/- Category Index +/- Standard Index

NAV/Price History

38.16 2019

7.16 2.27 2.63

21.36 6.70 0.30 34.63

24.96 5.93 0.00 66

0.12

1.43

<u>∞</u>

25

% Rank Cat

-2.03 21

2012

2013

2014

2015

2016

2017

2018

2020

2021

2022

04-23

(within category)

21.81

28.20

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

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

### Front-End Load % Fees and Expenses

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

	Morningstar Return	Morningstar Risk	Morningstar Rating™			Risk and Return Profile	Gross Expense Ratio %	Net Expense Ratio %	12b1 Expense %	Management Fees %	and Expenses
3 Yr	Avg	-Avg	3 <b>★</b>	177 funds	3 Yr						
5Yr	Avg	-Avg	<b>4★</b>	156 funds	5 Yr						
10	1	1	ı	7 fun	10		0.0	9.	z	0.0	

Fixed-Inco

cation Services

0.97 0.48 **1.18** 1.24 1.24 0.96 0.97

Risk and Return Profile			
		5Yr	10 Yr
	177 funds	156 funds	7 funds
Morningstar Rating™	3 <b>⊁</b>	<b>4★</b>	
Morningstar Risk	-Avg	-Avg	
Morningstar Return	Avg	Avg	I
	3 Yr	5 Yr	10 Yr
Standard Deviation	16.00	16.56	13.26
Mean	10.98	6.82	8.14
Sharpe Ratio	0.65	0.39	0.58
MPT Statistics	Standard Index		Best Fit Index MSCI ACWI NR
-		•	OSU
Alpha	3.14	4	-0.35
Beta	1.30	Ö	0.93
R-Squared	98.45	55	99.61
12-Month Yield			1.94%
Potential Cap Gains Exp			-2.09%
Operations			

03-01-2023 100	Silver Dar	Medalist Rating 100.00	Morningstar An
100.00	Data Coverage %	).00	alyst-Driven %
Target-Date 2060	177 US Fund	***	Analyst-Driven % Morningstar Ratin

88

88

88

89

88

88

		<u>g</u>	
100.00	Data Coverage % 177 US Fund	ing" 100.00	Analyst-Driven %
Target-Date 2060	177 US Fund	***	Analyst-Driven % Morningstar Rating **











### Mod 2060 TR USD Morningstar Lifetime Category Index

**US Fund Target-Date** Morningstar Cat

	10k	20k	40k	80k	89 91 86 87 86
Performance Quartile	Standard Index	25,467 — Category Average 25,702		Growth of \$10,000	Investment Style Equity Stocks %

0.48	ය. ය				\$mil	ller
0.97		Financial Services	11 1.02	64445 1.41	Geo Avg Mkt Cap	ns
0.94		Consumer Cyclical	0.97	2.3 1.08	P/B Ratio TTM	ÞiM
0.93		Basic Materials	0.97	11.7 1.05	P/C Ratio TTM	экде
0.87		Դ Cyclical	0.98	15.9 1.01	P/E Ratio TTM	Value Blend Growth
Rel Std Index	Stocks %	Sector Weightings	lel Rel		Portfolio Statistics	Equity Style
2.73	18 mil Vanguard Total Intl Bd II ldx Insl	⊕ 18 mil	1.98	101.98	100.00	Total
6.61	121 mil Vanguard Total Bond Market II ldx	① 121 mil	0.00	0.04	0.04	Other/Not Clsfd
35.92	355 mil Vanguard Iotal Intl Stock Index Inv	⊕ 355 mil	0.02	9.24	9.22	Bonds
25.41	SO IIII Vanguaru Total Stock Ivikt Tux Ilisti	· (+)	0.00	34.99	34.99	Non-US Stocks
	Victorians Tetal Stock Mit Ide Insti		0.00	52.60	52.60	US Stocks
%	Amount 11,098 lotal Stocks , 14,344 lotal Hixed-Income,	Since Amount	1.95	5.10	3.15	Cash
Net Assets	Holdings:	Chg	Short %	Long %	Net %	Asset Allocation %
					<b>s</b> 03-31-2023	Portfolio Analysis 03-31-2023
	Z IZ Z Z08 NO. DI FUIIUS III CAL	_     9	107	0   100	9 43 10	<u> </u>

ality Breakdown 03-31-2023	ГОМ	Avg Wtd Price	Avg Eff Duration  Avg Wtd Coupon		ome Style
Bond % 57.91 9.43			6.83 2.64	8.93	
Healthcare Utilities	- ' :		Energy Industrials		√ Sensitive

43.5 6.8 4.8 11.4 20.4 20.3 7.1 12.3

0.94 0.95 0.98 0.81

-		
Credit Quality Breakdown 03-31-2023	1-2023	Bond %
AAA		57.91
AA		9.43
Α		16.78
BBB		15.16
BB		0.00
В		0.00
Below B		0.41
NR		0.31
Regional Exposure	Stocks %	Rel Std Index
Americas	63.9	1.03
Greater Europe	17.8	0.95
Greater Asia	18.3	0.95

Total Assets:	Type:	Incept:	Purchase Constraints:	
\$18,062.76 mil	MF	01-19-2012	1	

Manager:

Family:

Tenure:

0.3 Year Multiple

Ticker:

Base Currency:

Asset Allocation

Minimum Initial Purchase:

\$1,000 XSTTV US92202E8396

Objective:

$\leq$
$\cap$
$\preceq$
<b>5</b>
SE
$\supset_{\scriptscriptstyle \otimes}$

### (USD) Vanguard Target Retirement 2065 Fund

Performance 04-30-2023	30-2023				
Quarterly Returns	1st Otr	2nd Otr	3rd Qtr	4th Otr	Total %
2021	4.55	6.61	<u>-1</u> .11	5.66	16.46
2022	-5.63	-14.20	-6.60	9.24	-17.39
2023	6.64	1	1		7.94
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	2.10	10.99	6.80		7.46
Std 03-31-2023	-6.64	I	6.64		7.34
Total Return	2.10	10.99	6.80		7.46
+/- Std Index	1.59	4.66	1.84		
+/- Cat Index	1.20	0.00	0.98	ı	1
% Rank Cat	29	89	50	l	
No. in Cat	157	65	9	1	

30-day SEC Yield 04-30-23 7-day Yield Subsidized 2.10 Unsubsidized 2.10

2012

The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year

Performance Disclosure

(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

0.08	Net Expense Ratio %
NA	12b1 Expense %
0.00	Management Fees %
	Fund Expenses
NA	Deferred Load %
NA	Front-End Load %
	Sales Charges

Morningstar Rating <sup>™</sup>		Risk and Return Profile	Gross Expense Ratio %	Net Expense Ratio %	12b1 Expense %	Management Fees %	Fund Expenses	
3 <b>★</b>	3 Yr 65 funds							
	5 Yr 9 funds							
	10 Yr		0.08	0.08	NA	0.00		

Gross Expense Kano %			0.00
Risk and Return Profile			
	3 Yr	5Yr	10 Yr
	65 funds	9 funds	ı
Morningstar Rating™	3 <b>★</b>		ı
Morningstar Risk	Low		ı
Morningstar Return	-Avg	1	ı
	3 Yr	5Yr	10 Yr
Standard Deviation	16.00	16.57	ı
Mean	10.99	6.80	ı
Sharpe Ratio	0.65	0.39	1
MPT Statistics	Standard Index	Best MSCI	Best Fit Index MSCI ACWI NR
			usu
Alpha	3.16		-0.35
Beta	1.30		0.93
R-Squared	98.43		99.62
12-Month Yield			1.86%
Potential Cap Gains Exp			-11.77%
Operations			

rningstar	Analyst-Driven % Morningstar Rati	Morningstar Rati
dalist Rating" 100.00	100.00	***
Silver	Data Coverage % 65 US Fund Targi	65 US Fund Targ
1-2023	100.00	Date 2065+

ing "

jet-Risk TR USD Standard Index

Morningstar Mod Tgt

Mod 2060 TR USD Morningstar Lifetime Category Index

2065+ **US Fund Target-Date** Morningstar Cat

Portfolio Analysis 03-31-2023	is 03-31-2023					
Asset Allocation %	Net %	Long %	Short %	Share Chg Share	Holdings:	Net Assets
Cash	3.38	5.39	2.01		Amount 11,098 Total Stocks , 14,350 Total Fixed-Income,	%
US Stocks	52.52	52.52	0.00		2% Turnover Rauo	!
Non-US Stocks	34.94	34.94	0.00	⊕ 12 mil	Vanguard Total Stock Mkt Idx Insti	53.33
Bonds	9.12	9.15	0.02	⊕ 87 mil	Vanguard Total Intl Stock Index Inv	35.87
Other/Not Clsfd	0.04	0.04	0.00	⊕ 29 mil	29 mil Vanguard Total Bond Market II Idx	6.42
Total	100.00	102.04	2.04	⊕ 5 mil	5 mil Vanguard Total Intl Bd II ldx Insl	2.82
Equity Style	Portfolio Statistics		· B	Sector Weightings	Stocks %	Rel Std Index
Value Blend Growth	P/F Ratio TTM	Avg Index 15.9 1.01	1 × 1 Cat	∿ Cyclical	34.3	0.87
Гэгде	P/C Ratio TTM		5 1.00	Basic Materials	ls 4.9	0.93
ρįΜ	P/B Ratio TTM		8 1.01	Consumer Cyclical	lical 11.0	0.94
S F	a		1 1.05	Financial Services	ices 15.0	0.97
Ilem	\$mil			Real Estate	ည	0.48

Avg Wtd Coupon 2. Avg Wtd Coupon 2. Avg Wtd Price 2. Avg Wtd Price 3. Avg Wtd Price 5.	15. 0.	0.; 0.;	Stocks % Bel Std Inc	Orogno 70	
5.04 2.63 2.63 80nd % 57.33 9.72 16.98	15.23 0.00		0.42 0.32	0.42 0.32 Rel Std Index	0.42 0.32 Rel Std Index

Purcha Incept: Tvpe:	1.03 0.95 0.95	16.98 15.23 0.00 0.00 0.42 0.32	9.72	ona %				_	6.84	8.93			1.05	
Purchase Constraints: Incept:			Utilities	Healthcare	Consumer Defensive	→ Defensive	_		<b>る</b> Energy	Communication Services	∨ Sensitive	Real Estate	Financial Services	Consumor Operior
— 07-12-2017			2.9	12.3	7.1	22.3	20.4	11.4	4.8	6.8	43.5	3.3	15.0	11.0
			0.81	0.98	0.95	0.94	1.39	0.97	0.96	1.24	1.18	0.48	0.97	0.0

Manager:

Family:

Objective: Tenure:

> 0.3 Year Multiple

> > Ticker:

Base Currency:

ISIN:

Asset Allocation

Minimum Initial Purchase:

\$1,000 VLX//X US92202E6804

Total Assets:

\$4,503.24 mil

2012 2013 2014 2015 2016	994 994 995 107 708 709 709 709 709 709 709 709 709 709 709	994 994 995 996 997 73 73 73 78 2012 2013 2014 2015 2016 2016 2017 2018 2014 2015 2016 2016 2016 2017 2018 2014 2015 2016 2016 2016 2017 2018 2014 2015 2016 2016 2016 2016 2017 2017 2018 2018 2014 2015 2016 2016 2016 2016 2016 2016 2016 2016	94 94 95 96 97 73 73 78 78 78 78 79 78 79 79 70 70 70 70 70 70 70 70 70 70 70 70 70	94	94	994 994 995 107 997 997 998 998 998 998 9998 9998 999	9.21 — 7.94 — 7.94 — 7.94 — 9.04 — 9.04 — 9.04 — 9.04 — 9.04 — 9.04 — 9.04 — 9.04 — 9.04 — 9.04 — 9.015 — 2016 — 9.016 — 9.016 — 9.016 — 9.016 — 9.016 — 9.017 — 9.017 — 9.018	94.  95.  96.  97.  98.  98.  99.  99.  99.  99.  99
2012 2013 2014 2015 2016 2017 2018	Portfolio Analysis 03-31-2023  Asset Allocation % Net % Long % Short % Cash 1.94 4.14 2.20 0.00 Non-US Stocks 34.96 3.496 0.00 Bonds 9.86 9.89 0.02 Total 100.00 102.22 2.22	Portfolio Analysis 03-31-2023  Portfolio Analysis 03-31-2023  Assert Allocation % Net % Long % Short % Cash 1.94 4.14 2.20 US Stocks 9.86 9.89 0.02 US Stocks 9.86 9.89 0.02 Other/Not Clsfd 0.04 0.04 0.00 Total 10.00 102.22 2.22 Equity Style Portfolio Statistics Port Rel Rel Avg Index Cat Avg Index Cat Avg Index Cat The P/C Ratio TTM 11.7 1.05 1.00	Portfolio Analysis 03-31-2023  Portfolio Stocks	Portfolio Analysis 03-31-2023  Portfolio Analysis 03-31-2023  Asset Allocation % Net % Long % Short % Cash 1.94 4.14 2.20  White Bend Growth P/C Ratio TTM 10.00 102.72 2.22  Equity Style Portfolio Statistics Avg Index Cat Smill Statistics Smill Avg Eff Maturity Syle Avg Eff Maturity Syle Avg Eff Maturity Syle Smill Avg Wtd Coupon Avg Wtd Price Sylva Avg Wtd Price Silva Satistics Avg Index Cat Avg Index Cat Smill Satistics Short % Shor	Portfolio Analysis 03-31-2023  Portfolio Analysis 03-31-2023  Asset Allocation % Net % Long % Short % Cash 1.94 4.14 2.20  White Bland Growth P/C Ratio TTM 1.00 102.22 2.22  Equity Style Portfolio Statistics Port Rel Avg Brized-Income Style Red Avg Wtd Coupon 4.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	### Portfolio Analysis 03-31-2023  ### Portfolio Analysis 03-31-2023  ### Asset Allocation % Net % Long % Short % Cash	### Portfolio Analysis 03-31-2023    Portfolio Analysis 03-31-2023	### Portfolio Analysis 03-31-2023    Portfolio Analysis 03-31-2023
2014 2015 2016 2017 2018 2019 2020								
2013     2014     2015     2016     2017     2018     2019     2020       —     —     —     —     —     —     —       —     —     —     —     —     —       —     —     —     —     —     —       —     —     —     —     —     —       —     —     —     —     —     —	2013   2014   2015   2016   2017   2018   2019   2020	2013   2014   2015   2016   2017   2018   2019	2013   2014   2015   2016   2017   2018   2019	2013   2014   2015   2016   2017   2018   2019	2013   2014   2015   2016   2017   2018   2019	### 2013 2014 2015 2016 2017 2018 2019	2013 2014 2015 2016 2017 2018 2019  ———————————————————————————————————	2013 2014 2015 2016 2017 2018 2019
		Portfolio Analysis 03-31-2023  Asset Allocation % Net % Long % Short % Shart Cash 1.94 4.14 2.20 since US Stocks 34.96 34.96 0.00 ⊕ 2.20 Non-US Stocks 93.86 9.89 0.02 ⊕ Bonds 9.86 9.89 0.02 ⊕ Total 100.00 102.22 2.22 ⊕  Equity Style Portfolio Statistics Port Rel Rel Rel Sect Name Bland Growth P/E Ratio TTM 11.7 1.05 1.00 ⊕ Section 1.01 1.01 1.01	Portfolio Analysis 03-31-2023	Portfolio Analysis 03-31-2023	Portfolio Analysis 03-31-2023	Portfolio Analysis 03-31-2023	Portfolio Analysis 03-31-2023  Asset Allocation % Net % Long % Short % Shart Also Cash 1.94 4.14 2.20 since Short Short % Shart Make Bend Growth    Portfolio Stocks   34.96 34.96 0.00 ⊕	Portfolio Analysis 03-31-2023
	Portfolio Analysis 03-31-2023           s         Asset Allocation %         Net %         Long %         Short %         Share Chg           Cash         1.94         4.14         2.20         02-2023           US Stocks         53.19         53.19         0.00         ⊕           Non-US Stocks         34.96         34.96         0.00         ⊕           Bonds         9.86         9.89         0.02         ⊕           "m. Other/Not Cisfd         0.04         0.04         0.00         ⊕           Total         100.00         102.22         2.22         ⊕         1	Portfolio Analysis 03-31-2023  Asset Allocation % Net % Long % Short % Shart of the Cash	Portfolio Analysis 03-31-2023    Asset Allocation %   Net % Long % Short % Shart % Cash   1.94	Portfolio Analysis 03-31-2023	Portfolio Analysis 03-31-2023	Portfolio Analysis 03-31-2023	Portfolio Analysis 03-31-2023	Portfolio Annalysis 03-31-2023

Objective:

Asset Allocation

Minimum Initial Purchase:

\$1,000

Total Assets:

\$165.60 mil

### (USD) Vanguard Target Retirement Income Fund

Performance 04-30-2023	30-2023				
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	I		4.96
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	0.42	2.61	3.43	3.74	4.75
Std 03-31-2023	-4.50		3.26	3.79	4.73
Total Return	0.42	2.61	3.43	3.74	4.75
+/- Std Index	-0.09	-3.72	-1.53	-1.94	
+/- Cat Index	0.56	-1.41	-0.45	-0.12	
% Rank Cat	27	51	34	39	
No. in Cat	156	139	122	81	

### 30-day SEC Yield 05-10-23

7-day Yield

Subsidized

Unsubsidized

12.19

12.50

12.91

12.45 -0.17 1.62

12.75 -1.99 2.77

14.46

12.80 04-23

NAV/Price

13.16 14.05 -5.87

10.02 -2.80 14.93 2020

-4.94 5.25

-0.50 -12.74 12.24 2.03

0.74 -0.31 4.96

+/- Standard Index Total Return % 2012

2013

2014

2015

2016

2017

2018

2019

2021

2022

History

Performance Quartile (within category)

8.23

5.54

2.72

2.72

-8.44 5.87

-0.56 -3.82

1.45 0.65

-0.73 5.25 -3.32 12.81

-0.07 -6.18 13.55 8.47

(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

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

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

rund Expenses			
Management Fees %			0.00
12b1 Expense %			NA
Net Expense Ratio %			0.08
Gross Expense Ratio %			0.08
Risk and Return Profile			
	3 Yr	5Yr	10 Yr
	139 funds	122 funds	81 funds
Morningstar Rating™	3 <b>★</b>	4⋆	4★
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	Avg	Avg	Avg
	3 Yr	5Yr	10 Yr
Standard Deviation	8.08	7.44	5.81
Mean	2.61	3.43	3.74
Sharpe Ratio	0.20	0.28	0.49
MPT Statistics	Standard Index	Momir	Best Fit Index Morningstar US Con
		Tgt All	Tgt Alloc NR USD

Credit Quality Breakdown 03-31-2023

orningstar	Analyst-Driven % Mornings	Mornings
edalist Rating" 100.00	100.00	***
Silver	Data Coverage %	139 US F
01-2023	100.00	Target-Da
		Retireme

8 **44 5** 

61

66

66

68

68

67

69

67

68

	_		ating" 1	,
	100.00	Data Coverage %	100.00	nalyst-Driven %
Retirement	Target-Date	139 US Fund	***	Analyst-Driven % Morningstar Rating



### Risk TR USD Morningstar Mod Tgt

### Category Index

### Mod Incm TR USD Morningstar Lifetime

### Retirement **US Fund Target-Date** Morningstar Cat

		ξ_	-			<u> </u>	
						64	
	<b>{</b>	{				65	
	1	1				61	
Ş	. 10	. 20k	4	ğ	<u>8</u> 8	100k	
20,767	15,640 — Standard Index	16,210 — Category Average	Income Fund	Vanguard Target Retirement	Growth of \$10,000	Bond %	Investment Style Fixed-Income

Asset Allocation 9	Portfolio Analysis 03-31-2020	281	67	-0.56
ocation %	o Analy	293	55	-0.58
•	<b>sis</b> 03-3	272	19	1.45
	1-2023	172	7	1.12
Net % 3 47		171	41	-0.73
Long %		281 293 272 172 171 175 187 183 168 167 161 157	41 62 21 49	-0.56
Short %		187	21	0.21
, Share Chg since		183	49	-0.11
		168	36	-0.54
hg Share Ho Amount 10		167	9	-2.37
Holdings: 10,047 Tot		161	36 65 54	-0.50
al Stocks		157	ı	0.74
Share Holdings: Net Assets Amount 10,047 Total Stocks , 17,871 Total Fixed-Income, %		No. of Funds in Cat	% Rank Cat	+/- Category Index

		!				9	w
lical	umer cyc	Consumer cyclical	1.01	1.40	63820	Geo Avg Mkt Cap	S
-							p
S	: Iviateria	Basic Materials	 	1.08	2.3	P/B Ratio TTM	!W
5	101010						
	Cal	Policy 4		1.04	11.7	P/C Ratio TTM	196
	-	2	0.50		0.0	F/E hatto i livi	Pη
	ightings	Sector Weightings	000	100	1 2	D/E Datio TTM	Value Blend Growth
			Rel	lndev	Port	Portfolio Statistics	Equity Style
252 mil Vanguard	252 mil	1					
-					111.4	100.00	1000
Vanguard T	229 mil	1	11 46		111 46	100 OO	Total
Vanguard	258 mil	1	0.00		0.02	0.02	Other/Not Clsfd
Vanguard	35 mil	•	0.13		67.90	67.77	Bonds
valigualu	11014,1	•	0.00		11.69	11.69	Non-US Stocks
Vanguard	110 2:1		0.00		17.09	17.09	US Stocks
19% Turnove		02-2023			1		
10,04/ lotal	Amount	since			14.75	3.42	Cash
Holdings:	Share	Share Chg	Short %		Long %	Net %	Asset Allocation %

_	100.00	111.46		11.46
ty Style	Portfolio Statistics	Port	Re	Re
Bland Growth		Avg	Index	Cat
	P/E Ratio TTM	15.9	1.01	0.98
эбле	P/C Ratio TTM	11.7	1.04	1. 01
Ρ!W	P/B Ratio TTM	2.3	1.08	1.01
	Geo Avg Mkt Cap	63820	1.40	1.01
llem	\$mil			

				÷			_
			Mod	inco			
			Ext	ed-Income Style			
γοη	baM	ηбiΗ		¥	llsm2	biM	
	Avg Wtd Price	Avg Eff Duration	Avg Eff Maturity		\$mil	P/B Ratio I IM	701000
					07020	2.3	;
					.4.	1.08	
	93.4	2 5 2 8	7.4		-	,	

Fixe

뭅

13.08	7.50	67 13	D D D D D D D D D D D D D D D D D D D		93.44	2.14	5.82	7.44				3 1.08 1.01		g Index Cat	t Rel Rel		46 11 46			.69 0.00		75 11.33
3 Utilities		Consumer Defensive	→ Defensive	Technology	industrials	<sup>1</sup>	2 Gommunication Services	↓ ✓ Sensitive	Real Estate	Financial Services	Consumer Cyclical	Basic Materials	ிு Cyclical	Sector Weightings		252 mil	. ⊕ 229 mil	) ① 258 mil	} ⊕ 35 mil	) ① 1,418 mil	02-2023	
		ensive					n Services			ices	lical	Is			ď	Vanguard Total Intl Stock Index Inv	Vanguard Total Intl Bd II Idx Insl	Vanguard Shrt-Term Infl-Prot Sec	Vanguard Total Stock Mkt Idx Instl	Vanguard Total Bond Market II ldx	19% Turnover Ratio	10,047 Total Stocks , 17,871 Total Fixed-Income,
2.9	12.2	7.1	22.3	20.4	11.4	4.8	6.8	43.4	3.3	15.1	11.0	5.0	34.3	Stocks %		Stock Index Inv	3d II Idx Insl	Infl-Prot Sec I	k Mkt Idx Instl	l Market II ldx		71 Total Fixed-Income,
0.81	0.98	0.95	0.94	1.39	0.97	0.96	1.24	1.17	0.48	0.97	0.94	0.94	0.87	Rel Std Index		12.01	16.15	16.62	17.36	36.58		%

	3.19%	2.71%
Base Currency: Ticker: ISIN: Minimum Initial Purchase:	Greater Asia	Greater Europe
USD VTINX US92202E1029 \$1,000	18.6	18.1
	0.97	0.97
Purchase Constraints: Incept: Type: Total Assets:		

10-27-2003

\$37,167.05 mil

Objective:

Tenure:

0.3 Year Asset Allocation

Multiple

Family:

Manager:

Potential Cap Gains Exp

12-Month Yield

R-Squared

-1.99 0.65 94.71

1.84 1.09 98.73

Regional Exposure

Stocks %

Rel Std Index

0.33

63.3

1.02

묾

Below B

88 88  $\triangleright$  $\begin{picture}(20,0) \put(0,0){\line(1,0){10}} \put(0,0$ 

11.71 0.00 0.00

Americas

# 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 03-31-2023										
Standardized Returns (%)	7-day Yield 7-day Yield Subsidized Unsubsidized as of date as of date	d 1Yr	5Yr	10Yr	Since Inception Inception Date	Inception Max Front Max Back Date Load % Load %	Max Back Load %	Net Exp Ratio %	Gross Exp Max Ratio % Redemption %	Max mption %
DFA US Large Cap Value I		5.00	6.46	9.51	9.69 02-19-1993	NA	NA	0.211	0.31	A
DFA US Targeted Value I	1	·	7.72	9.16	10.71 02-23-2000	NA	NA	0.29	0.29	N
Fidelity® 500 Index	 	7.74	11.18	12.23	12.00 05-04-2011	NA	NA	0.02	0.02	NA
Fidelity® Mid Cap Index		8.74	8.06	10.05	11.72 09-08-2011	NA	NA	0.03	0.03	NA
Fidelity® Small Cap Index		11.41		8.20	_	NA	NA	0.03	0.03	NA
Fidelity® Total International Index	1	4.71	2.37	1	5.46 06-07-2016	NA	NA	0.06	0.06	NA
Fidelity® US Bond Index	1	4.78	0.89	1.32	1.93 05-04-2011	NA	NA	0.03	0.03	NA

©2022 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 pprinces 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.

Morningstar, (3) may not be copied or redistributed. (4) do not constitute investment advice affected by Morningstar. (8) are provided solely for informational purposes and therefore are not an offer to buy or sell a security.

Morningstar, (3) may not be copied or redistributed. (4) do not constitute investment advice affected by Morningstar. (8) are provided solely for informational purposes and therefore are not an offer to buy or sell a security.

Morningstar, (3) may not be copied or redistributed. (4) do not constitute investment advice affected by Morningstar (8) are provided solely for informational purposes and therefore are not an offer to buy or sell a security.

Morningstar, (3) may not be copied or redistributed. (4) do not constitute investment advice affected by Morningstar (8) are provided solely for informational purposes and therefore are not an offer to buy or sell a security.

Morningstar, (8) may not to be correct, complete or advice and the effect of the copied.

Morningstar, (8) may not the copied or the copied or advice and the effect of the copied.

Morningstar (8) may not fine and power the copied of this eport.

Morningstar (8) may not fine and power the copied of this eport.

Morningstar (8) may not fine and power the copied of the copied of



				<b>— 12-31-1978</b>	<u>.</u>	5 10.05	-8.78 8.05	<b>.</b>		Russell Mid Cap TR USD
				<b>— 02-01-1995</b>	7 .	7 11.17	-8.52 9.07	<b>-</b>		Russell Mid Cap Growth TR USD
				<b>— 12-31-1978</b>		5 7.22	.96 4.55	-12.96		Russell 2000 Value TR USD
				<b>— 12-31-19/8</b>	4	1 8.04	.67 4.71	-11.61		Russell 2000 TR USD
				<b>— 12-31-19/8</b>				-10.60		Russell 2000 Growth IR USD
				<b>— 01-01-1987</b>						Russell 1000 Value TR USD
				<b>— 12-31-19/8</b>		_	_	. 4		Russell 1000 IR USD
				— 01-01-1987				. <del>.</del>		Russell 1000 Growth TR USD
				00-01-1000						MOGIFAL MILOSO
				03-31-1086	5 8	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5		<u>.</u> .		MSCI EASE NR HSD
				01 01 2001	, a			أد د		MCCI ACANI ND HCD
				01-01-2001				-6		MSCI ACWI Ex IISA Value NR IISD
				— 01-01-2001	7			ė,		MSCI ACWI Ex USA NR USD
				— 01-01-2001	<b>.</b>	6 5.08	-6.35 3.36	-6		MSGI ACWI Ex USA Growth NR USD
				- 12-21-2020		'	-9.10			Worningstar os sini brū vai ext ik USD
				13 31 3030			5	-		Mouningston HS Smill Bud Vol Eut TB
				<b>— 12-21-2020</b>		'	.02	-11.02		Morningstar US Sml Brd Grt Ext TR
										USD "
				<b>— 12-21-2020</b>		1	ස	-14.03		Morningstar US LM Brd Growth TR
				<b>— 05-01-2019</b>		1	-4.73 –	-4		Morningstar US Core Bd TR USD
				<b>—</b> 06-30-2020		1	-4.77 –	-4		Morningstar US Con Tgt Alloc NR USD
				<b>— 02-18-2009</b>	4	0 5./4	-6.22 4.80	-6		Morningstar Mod Tgt Risk TR USD
										USD
				<b>— 02-18-2009</b>		5 3.87	-5.19 3.75	<u>.</u>		Morningstar Lifetime Mod Incm TR
				<b>—</b> 06-23-2014				_		Morningstar Lifetime Mod 2060 TR USD
				05 20 200	2					Manual Process of the Control of the
				— 02-18-2009	5 ;			<u>.</u>		Morningstar I ifetime Mod 2055 TR IISD
				<b>— 02-18-2009</b>	7	2 7.47	-7.33 5.92			Morningstar Lifetime Mod 2050 TR USD
				<b>— 02-18-2009</b>		6 7.48	<b>-7.50</b> 5.86	-7		Morningstar Lifetime Mod 2045 TR USD
				<b>— 02-18-2009</b>		2 7.31	-7.81 5.62	-7		Morningstar Lifetime Mod 2040 TR USD
				— 0Z-18-Z009				. 4		Morningstar Lifetime Mod 2035 IR USD
				— 0Z-18-Z009				. 4		Morningstar Lifetime Mod 2030 IR USD
				<b>— 02-18-2009</b>						Morningstar Lifetime Mod 2025 TR USD
				- 11-24-2021						Morningstar GBI XOS VALLIME NA OSD
				- 00-10-2013		•	-/.23 3.30			Morningstar GDI Allocation in Cod
				- 08-29-1986		6 4.03				ICE BOTA US High Yield IK USD
				— 12-31-1998				. <b>.</b>		Bloomberg US Universal IK USD
				— U1-U3-1980						Bloomperg US Agg Bond IK USD
										Blankow IIC Arm Donk TD IICD
0.08 N	0.08	N A	Z	4.73 10-27-2003		6 3.79	4.50 3.26	-4	1	Vanguard Target Retirement Income Fund
0.08 NA	0.08	NA	NA	7.73 06-28-2022	<b>-</b> 7.	1		I		Vanguard Target Retirement 2070 Fund
0.08 N	0.08	NA	N	7.34 07-12-2017	<b>-</b> 7.	4	-6.64 6.64			Vanguard Target Retirement 2065 Fund
0.08 NA	0.08	NA	NA	9.02 01-19-2012		5 8.24	-6.67 6.65			Vanguard Target Retirement 2060 Fund
0.08 NA	0.08	NA	NA	9.34 08-18-2010		6 8.24	-6.67 6.66	 		Vanguard Target Retirement 2055 Fund
	0.08	NA	NA					 	1	Vanguard Target Retirement 2050 Fund
U.00	0.00	2	3	/.00 10-2/-2003			-0./0			valigualu Taiget netileliletit 2040 Fulid
	0.00	2 2	2 2						١	Vanguard Torret Betirement 2040 Fund
	0.08	2 2	3 3							Vanguard Target Retirement 2035 Fund
0.00 NA	0.00	2 2	3 3							Vallyualu Target Detirement 2020 Fund
	0.08	2 2	Z						I	Vanguard Target Retirement 2025 Fund
	3	;	; ;					1		varigation of the control of the con
	0.07	Z ;	3 3		_					Vanguard Small Can Growth Index Admiral
0.38 NA	28.0	Z ;	2 3							Vanguard International Value Inv
0.30 NA	2 2	2 3	3 3	7.63 08-13-2001		7 P 70	-6.81 6.54			1. Howe I like tilg op of 1
	0.50	2 2	2 2					1 4	١	T Remo Price I ra Co Co I
	) ]	<b>:</b>	•							
0.63 NA	0.624	Z :	N :			0 966				MES Mid Can Value B6
	0.50	2 Z 2 Z	Z Z	2.12 U3-29-2U18	_		-2.91 2.13 -10.80 10.73	-10		Hotonkis & VVIIey High Yield Z
		:	•		o	•				
Ratio % Redemption %	Ratio %	Load %	Load %		IIIcapuoi			as of date	as of date	
iross Exn Mi		Max Back	Max Front	ice Inception Wax Front Wax Back		rr IUYr	TYr 5Yr		/-day Yield /-day Yield	Standardized Returns (%)

©2023 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 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 be provided subject for information and therefore are not an offer to buy or sell a security, and (6) are not warranted to be correct, complete or accurate. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages or other losses resulting from, or related to, this information, data, analyses or opinions or their use. Opinions or their use, Opinion



						//4	-/-			
								7		
									as of date as of date	
Ratio % Redemption %	Ratio %	Load %	Load %	Date	Inception				Subsidized Unsubsidized	
Gross Exp Max	Net Exp	Max Back	Inception Max Front Max Back	Inception I	Since	10Yr	5Yr	1¥r	7-day Yield 7-day Yield	Standardized Returns (%)
										Annualized returns 03-31-2023

- Contractual waiver that may expire at any time
   Contractual waiver; Expires 08-31-2023
   Contractual waiver; Expires 10-31-2023
   Non-contractual waiver; Expires 01-31-2024
   Contractual waiver; Expires 01-31-2024

On Distribution					On Distributio	n and Sales of Shares		
1Yr	5Yr	10Yr	Since Inception	Inception Date	1Yr	5Yr	10Yr	Since Inception
-6.38	5.18	8.31	8.44	02-19-1993	-2.59	4.76	7.49	7.97
-5.03	6.33	7.71	9.16	02-23-2000	-1.55	5.76	7.06	8.66
-8.36	10.55	11.50	11.26	05-04-2011	-4.61	8.68	9.87	9.77
-9.43	7.26	9.18	10.91	09-08-2011	-5.12	6.17	7.96	9.56
-11.86	4.00	7.24	9.31	09-08-2011	-6.76	3.60	6.34	8.20
-5.67	1.66	1	4.77	06-07-2016	-2.83	1.64	1	4.08
-5.37	0.19	0.41	0.98	05-04-2011	-2.46	0.62	0.72	1.18
-5.13	-0.16		-0.16	03-29-2018	-1.76	0.65		0.65
-10.96	8.93	10.92	11.76	11-01-2011	-6.29	8.35	10.10	10.95
-7.14	6.92	8.24	8.66	02-01-2013	-2.84	6.10	7.35	7.72
-5.84	0.02	1	-0.08	02-01-2018	-2.78	0.52	1	0.44
-15.43	9.14	13.26	9.79	10-31-2001	-8.27	7.83	11.77	8.91
-8.21	5.06	7.74	6.65	08-13-2001	-3.17	5.10	7.02	6.22
0.47	2.19	4.08	6.33	05-16-1983	1.04	2.24	3.67	6.18
-12.20	6.15	8.58	10.75	09-27-2011	-7.05	4.91	7.14	9.15
-6.74	3.23	5.08	5.39	10-27-2003	-3.26	3.53	4.79	5.00
-6.91	3.78	5.73	5.41	06-07-2006	-3.46	3.91	5.28	4.96
-7.07	4.19	6.21	6.20	10-27-2003	-3.51	4.31	5.74	5.72
-7.21	4.64	6.76	6.02	06-07-2006	-3.61	4.69	6.19	5.52
-7.39	5.33	7.17	6.89	10-27-2003	-3.68	5.06	6.45	6.28
-7.31	5.52	7.31	6.36	06-07-2006	-3.73	5.11	6.49	5.72
-7.23	5.66	7.41	8.59	08-18-2010	-3.73	5.10	6.50	7.60
-7.21	5.84	7.52	8.34	01-19-2012	-3.74	5.07	6.49	7.23
-7.16	6.09	1	6.81	07-12-2017	-3.74	5.08		5.67
l	I	1	7.46	06-28-2022	I	1		4.68
-5.57	1.88	2.61	3.60	10-27-2003	-2.53	2.18	2.60	3.41
	On Distribution  1 Yr  -6.38 -5.03 -8.36 -9.43 -11.86 -5.67 -5.37 -5.13 -10.96 -7.14 -5.84 -15.43 -8.21 -0.47 -12.20 -6.74 -6.91 -7.07 -7.21 -7.31 -7.23 -7.21 -7.33 -7.21 -7.16 -7.16 -7.16 -7.16 -7.16		5YY 5.18 6.33 10.55 1 7.26 4.00 1.66 0.19 -0.16 8.93 1 6.92 9.14 1 5.06 2.19 6.15 3.23 3.78 4.19 4.64 5.33 5.52 5.66 5.84 6.09 1.88	5Yr 10Yr Since Inc. 5.18 8.31 6.33 7.71 10.55 11.50 7.26 9.18 4.00 7.24 1.66 — 0.19 0.41 -0.16 — 8.93 10.92 6.92 8.24 0.02 — 9.14 13.26 5.06 7.74 2.19 4.08 6.15 8.58 3.23 5.08 3.78 5.73 4.19 6.21 4.64 6.76 5.33 7.17 5.52 7.31 5.66 7.41 5.84 7.52 6.09 — — — — — — — — — — — — — — — — — — —	5Yr 10Yr Since Inception In 5.18 8.31 8.44 6.33 7.71 9.16 10.55 11.50 11.26 7.26 9.18 10.91 4.00 7.24 9.31 1.66 8.93 10.92 11.76 8.92 8.24 8.66 9.14 13.26 9.79 5.06 7.74 6.65 2.19 4.08 6.33 6.15 8.58 10.75 8.58 10.75 3.23 5.08 5.39 3.78 5.73 5.41 4.19 6.21 6.20 4.64 6.76 6.02 5.66 7.41 8.59 5.84 7.52 8.34 6.09 — 6.81 - 7.46 6.81 - 7.46 6.81 1.88 2.61 3.60	5Yr         10Yr         Since Inception         Inception Date           5.18         8.31         8.44         02-19-1993           6.33         7.71         9.16         02-23-2000           10.55         11.50         11.26         05-04-2011           7.26         9.18         10.91         09-08-2011           4.00         7.24         9.31         09-08-2011           1.66         —         4.77         06-07-2016           0.19         0.41         0.98         05-04-2011           -0.16         -0.29-2018         03-29-2018           8.93         10.92         11.76         11-01-2011           6.92         8.24         8.66         02-01-2013           9.14         13.26         9.79         10-31-2001           9.14         13.26         9.79         10-31-2001           5.06         7.74         6.65         08-13-2001           9.15         8.58         10.75         09-27-2011           3.23         5.08         5.39         10-27-2003           4.19         6.21         6.20         06-07-2006           5.33         7.17         6.89         10-27-2003      <	5Yr         10Yr         Since Inception         Inception Date         1Yr         518         8.31         8.44         02-19-1993         2.59         4.76           6.33         7,71         9.16         02-23-2000         -1.55         5.76           10.55         11.50         11.26         05-04-2011         -4.61         8.88           7.26         9.18         10.91         09-08-2011         -5.12         6.17           4,00         7.24         9.31         09-08-2011         -6.76         3.60           1,166         —         4.77         06-07-2016         -2.83         1.64           0,19         0.41         0.98         05-04-2011         -6.76         3.60           1,166         —         4.77         06-07-2016         -2.83         1.64           0,19         0.41         0.98         05-04-2011         -6.29         3.50           8.93         10.92         11.76         11-01-2011         -6.29         8.35           6.92         8.24         8.66         02-01-2013         -2.84         6.10           0.02         11.326         9.79         10-31-201         -8.27         3.37         5.10 </td <td>5Yr         10Yr         Since Inception         Inception Date         11Yr         5Yr           5.18         8.31         8.44         02-19-1993         -2.59         4.76           6.33         7.71         9.16         02-23-2000         -1.55         5.76           10.55         11.50         11.26         05-04-2011         -4.61         8.68           7.26         9.18         10.91         09-08-2011         -5.12         6.17           4.00         7.24         9.31         19-08-2011         -5.76         3.60           1.66         —         4.77         06-07-2016         -2.83         1.64           0.19         0.41         0.98         05-04-2011         -5.76         3.60           1.16         —         -0.16         03-29-2018         -1.76         0.62           -0.19         0.41         0.98         05-04-2011         -6.23         3.60           1.19         0.41         0.98         05-04-2011         -6.23         3.60           6.92         8.24         8.66         02-01-2013         -2.84         6.10           0.02         -1.76         8.62         9.79-2011         -7.05         <t< td=""></t<></td>	5Yr         10Yr         Since Inception         Inception Date         11Yr         5Yr           5.18         8.31         8.44         02-19-1993         -2.59         4.76           6.33         7.71         9.16         02-23-2000         -1.55         5.76           10.55         11.50         11.26         05-04-2011         -4.61         8.68           7.26         9.18         10.91         09-08-2011         -5.12         6.17           4.00         7.24         9.31         19-08-2011         -5.76         3.60           1.66         —         4.77         06-07-2016         -2.83         1.64           0.19         0.41         0.98         05-04-2011         -5.76         3.60           1.16         —         -0.16         03-29-2018         -1.76         0.62           -0.19         0.41         0.98         05-04-2011         -6.23         3.60           1.19         0.41         0.98         05-04-2011         -6.23         3.60           6.92         8.24         8.66         02-01-2013         -2.84         6.10           0.02         -1.76         8.62         9.79-2011         -7.05 <t< td=""></t<>

# 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.

An open-end fund is an investment company that issues shares on a continuous basis. Shares can be purchased from the open-end mutual fund itself, or through an intermediary, but cannot be traded on a secondary market, such as the New York Stock Exchange. Investors pay the open-end mutual fund's current net asset value plus any initial sales loads. Net asset value is calculated daily, at the close of business. Open-end mutual fund shares can be redeemed, or sold back to the fund or intermediary, at their current net asset value minus any deferred sales loads or redemption fees. The expense ratio for an open-end mutual fund is an annual fee charged to a shareholder. It includes operating expenses and management fees, but does not take into account any brokerage costs. Open-end funds may also have 12b-1 fees. Income distributions and capital gains of the open-end fund are subject to income tax, if held in a taxable account.

A unit investment trust (UIT) is an investment company organized under a trust agreement between a sponsor and trustee. UITs typically purchase a fixed portfolio of securities and then sell units in the trust to investors. The major difference between a UIT and a mutual fund is that a mutual fund is actively managed, while a UIT is not. On a periodic basis, UITs usually distribute to the unit holder their pro rata share of the trust's net investment income and net realized capital gains, if any. If the trust is one that invests only in tax-free securities, then the income from the trust is also tax-free. UITs generally make one public offering of a fixed number of units. However, in some cases, the sponsor will maintain a secondary market that allows existing unit holders to sell their units and for new investors to buy units. A one-time initial sales charge is deducted from an investment made into the trust. UIT investors may also pay creation and development fees, organization costs, and/or trustee and operation expenses. UIT units may be redeemed by the sponsor at their net



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.

### Performanc

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 Rating<sup>TM</sup> 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, Head of Manager and Quantitative Research is responsible for overseeing the methodology that supports the Quantitatively-Driven Content. As an employee of Morningstar Research Service LLC, Mr. Davidson is guided by the Morningstar Research Service Code of Ethics and Investment Research Integrity Policy in carrying out his responsibilities. Morningstar's Manager Research Group consists of 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, manager 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.

62

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 short 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.

Note that all other portfolio statistics presented in this report are based on the (or long rescaled) holdings of the fund only

### Average Effective Duration

securities within a portfolio. effective duration is a weighted average of the duration of the fixed-income Duration is a time measure of a bond's interest-rate sensitivity. Average

### Average Effective Maturity

in a portfolio Average Effective Maturity is a weighted average of the maturities of all bonds

### Average Weighted Coupon

weighted coupon is the asset-weighted coupon of each bond in the portfolio A coupon is the fixed annual percentage paid out on a bond. The average

### Average Weighted Price

expressed as a percentage of par (face) value. This number reveals if the discount securities respectively.) portfolio favors bonds selling at prices above or below par value (premium or Average Weighted Price is the asset-weighted price of bonds held in a portfolio,

### Best Fit Index

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 determined by Morningstar by calculating R-squared for the fund against be the fund's benchmark, nor does it necessarily contain the types of securities and a "best fit" index. The Best Fit Index identified in this report was that may be held by the fund or portfolio. Alpha, beta, and R-squared statistics are presented for a broad market index

the market, and a beta of less than 1 indicates less volatility than the market (proxied using an index.) A beta of greater than 1 indicates more volatility than Beta is a measure of a security or portfolio's sensitivity to market movements

### Credit Quality Breakdown

Bonds not rated by an NRSRO are included in the Other/Not-Classified category as assigned by a Nationally Recognized Statistical Rating Organization (NRSRO) percentage of fixed-income securities that fall within each credit-quality rating portfolio and depict the quality of bonds in the underlying portfolio. It shows the Credit Quality breakdowns are shown for corporate-bond holdings in the fund's

### Data Coverage %

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

### Deferred Load %

The back-end sales charge or deferred load is imposed when an investor

declines the longer the fund's shares are held by the investor. This charge, front-end load coupled with 12b-1 fees, commonly serves as an alternative to a traditional redeems shares of a fund. The percentage of the load charged generally

### Expense Ratio %

during the time period. included in the expense ratio. The expense ratio, which is deducted from the or brokerage costs, as well as front-end or deferred sales charges are not and all other asset-based costs incurred by the fund. Portfolio transaction fees fund's average net assets, is accrued on a daily basis. The gross expense ratio, including 12b-1 fees, management fees, administrative fees, operating costs, expresses the percentage of assets deducted each fiscal year for fund expenses in contrast to the net expense ratio, does not reflect any fee waivers in effect The expense ratio is the annual fee that all funds charge their shareholders. It

### Front-end Load %

investment in the fund and is generally based on the amount of the investment The initial sales charge or front-end load is a deduction made from each

# Geometric Average Market Capitalization

companies in which a portfolio invests. Geometric Average Market Capitalization is a measure of the size of the

### **Growth of 10,000**

graphed. For funds, this graph compares the growth of an investment of 10,000 (in the gains. If adjusted, effects of sales charges and taxation would reduce the ongoing fund expenses, and they assume reinvestment of dividends and capita reflect sales charges or the effects of taxation but are adjusted to reflect actua for all funds in its Morningstar Category. The total returns are not adjusted to base currency of the fund) with that of an index and/or with that of the average performance quoted. If pre-inception data is included in the analysis, it will be

63

The index in the Growth of 10,000 graph is an unmanaged portfolio of specified securities in the index. The index is chosen by Morningstar 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

### Management Fees %

services over the fund's prior fiscal year. represent the costs shareholders paid for management and administrative the Management Fees section of a fund's prospectus. Typically, these fees The management fee includes the management and administrative fees listed Ξ.

### Maximum Redemption Fee %

180, or 365 days). redeemed in a specific time period after the fund's purchase (for example, 30 The Maximum Redemption Fee is the maximum amount a fund may charge

Mean is the annualized geometric return for the period shown

# Morningstar Medalist Rating™

outperform a relevant index or peer group average on a risk-adjusted basis over Medalist Ratings indicate which investments Morningstar believes are likely to vehicles using a rating scale of Gold, Silver, Bronze, Neutral, and Negative. The forward-looking analysis of investment strategies as offered via specific Process) which, when coupled with a fee assessment, forms the basis for time. Investment products are evaluated on three key pillars (People, Parent, and The Morningstar Medalist Rating is the summary expression of Morningstar's

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 Morningstar 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.momingstar.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 Kank

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<sup>TM</sup>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.

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 https://www.sec.gov/ocr/ocr-learn-nrsros.html. Additionally, Morningstar will

https://www.sec.gov/ocr/ocr-learn-nrsros.html. Additionally, Momingstar 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



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 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, "Moderate" equals greater than 3.5 years but less than or equal to 6 years, "Extensive" is assigned to portfolios with effective durations of more than 6 years. Note: Interest-rate sensitivity for non-U.S. domiciled portfolios (excluding those in Morningstar convertible categories) may be assigned using average modified duration when average effective duration is not available.

For portfolios Morningstar classifies as U.S Taxable Fixed-Income, interest-rate sensitivity category assignment is based on the effective duration of the Morningstar Core Bond Index (MCBI). The classification assignment is dynamically determined relative to the benchmark index value. A "Limited" category will be assigned to portfolios whose average effective duration is between 25% to 75% of MCBI average effective duration, where the average effective duration is between 75% to 125% of the MCBI the portfolio will be classified as "Moderate", and those portfolios with an average effective duration value 125% or greater of the average effective duration of the MCBI will be classified as "Extensive".

### P/B Ratio TTM

The Price/Book Ratio (or P/B Ratio) for a fund is the weighted average of the P/B Ratio of the stocks in its portfolio. Book value is the total assets of a company, less total liabilities. The P/B ratio of a company is calculated by dividing the market price of its outstanding stock by the company's book value, and then adjusting for the number of shares outstanding. Stocks with negative book values are excluded from this calculation. It shows approximately how much an investor is paying for a company's assets based on historical valuations.

### P/C Ratio TTN

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.

### Quarterly Returns

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

### K-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.

66

<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.

<u>Hedge Funds</u>: 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



return under a variety of market conditions, hedge funds may involve a high hedge fund managers may be to reduce volatility and produce positive absolute who could bear the entire loss of their investment. degree of risk and are suitable only for investors of substantial financial means investing, and use of leverage, options and/or derivatives. Although the goal of strategies, using arbitrage (exploiting price inefficiencies), international

bank loans/senior debt are often highly leveraged, producing a high risk of risk. They are often non-investment grade; therefore, the risk of default is high return volatility associated with fixed income in general, including interest rate risk and default Bank Loan/Senior Debt: Bank loans and senior loans are impacted by the risks These securities are also relatively illiquid. Managed products that invest in

repayment of notes is subject to the issuer's ability to repay its obligations ETNs do not typically pay interest Exchange Traded Notes (ETNs): ETNs are unsecured debt obligations. Any

performance of the fund to be either greater or less than the index performance achieve in comparison to its index performance (i.e. 200%, 300%, -200%, or objectives on a daily basis (or other time period stated within the Fund return performance of the index they track and seek to meet their fund multiplied by the multiple stated within the funds objective over a stated time 300% or 2X, 3X, -2X, -3X). Compounding has the ability to affect the time period stated within the prospectus objective). The leverage/gearing ratio objective). The leverage/gearing ratio is the amount of excess return that a is the amount of excess return that a leveraged investment is designed to index they track and seek to meet their fund objectives on a daily basis (or other investments are designed to meet multiples of the return performance of the performance (i.e. 200%, 300%, -200%, or -300% or 2X, 3X. -2X, -3X).Leveraged levered investment is designed to achieve in comparison to its index Leveraged ETFs: Levered investments are designed to meet multiples of the

manager might have to close out a short position at an inopportune time to limit are theoretically unlimited. The broker may demand more collateral and a further losses. Short Positions: When a short position moves in an unfavorable way, the losses

derivatives, these funds may have greater risk, volatility, and expenses than but are not limited to leverage, short selling, short-term trading, and investing in those focusing on traditional investment strategies. <u>Long-Short:</u> Due to the strategies used by long-short funds, which may include

market conditions, impacting an investor's ability to sell a fund <u>Liquidity Risk:</u> Closed-end fund, ETF, and HOLDR trading may be halted due ₽

a premium or discount to the NAV, which will affect an investor's value. and thus independent of the NAV. This can result in the market price trading at 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

the impact it may have on the market price. several factors, such as security-specific factors or general investor sentiment. Market Risk: The market prices of ETFs and HOLDRs can fluctuate as a result of Therefore, investors should be aware of the prospect of market fluctuations and

withdrawing their money. A target-date fund's investment objective/strategy typically becomes more conservative over time, primarily by reducing its 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 Target-Date Funds: Target-date funds typically invest in other mutual funds and

> guaranteed at any time, including at the fund's target date mutual funds. An investor's principal value in a target-date fund is not allocation to equity mutual funds and increasing its allocations in fixed-income

making investment decisions. be the case. High returns for short time periods must not be a major factor when the result of extremely favorable market conditions, which may not continue to <u> High double- and triple-digit returns:</u> . High double- and triple-digit returns were

# Benchmark Disclosure

# Bloomberg US Agg Bond TR USD

any warranty, express or implied, as to the results to be obtained therefrom and dividends. Bloomberg Indexes and its associated data, Copyright © 2023 US Aggregate Bond ETF. constituents displayed for this index are from the following proxy: iShares Core to the maximum extent allowed by law, Bloomberg shall not have any liability or accuracy or completeness of any information herein, nor does Bloomberg make Bloomberg or Bloomberg's licensors own all proprietary rights in the Bloomberg of Bloomberg Finance L.P. and its affiliates (collectively "Bloomberg") Bloomberg Index Services Limited. Bloomberg® is a trademark and service mark publish for the index are total returns, which includes the daily reinvestment of Backed Securities Index, and the Asset-Backed Securities Index. The returns we responsibility for injury or damages arising in connection therewith. The Indices. Bloomberg does not approve or endorse this material or guarantee the This index is composed of the BarCap Government/Credit Index, the Mortgage-

# **Bloomberg US Universal TR USD**

67

debt, private placements, and non-dollar- denominated issues are excluded from the 144A Index, the Eurodollar Index, the Emerging Markets Index, the non-ERISA portion of the CMBS Index, and the CMBS High Yield Index. Municipal It is the union of the U.S. Aggregate Index, the U.S. High Yield Corporate Index the Universal Index. The constituents displayed for this index are from the increasingly popular "Core Plus" choice set used by many U.S.-dollar investors BarCap U.S. Universal Bond Index: The U.S. Universal Index mirrors the following proxy: iShares Core Total USD Bond Market ETF.

# ICE BofA US High Yield TR USD

is domiciled in a country having an investment grade foreign currency long-term grade US dollar-denominated corporate bonds publicly issued in the US outstanding of USD 100 million. debt rating. 144a issues are not included in the index until they are exchanged domestic market. "Yankee" bonds are included in the Index provided the issuer The US High Yield Master II Index tracks the performance of below investment remaining term to maturity, a fixed coupon schedule and a minimum amount for registered securities. Qualifying bonds must have at least one year

# Morningstar Gbl Allocation TR USD

risk and returns. This Index does not incorporate Environmental, Social, or equities, global bonds and cash. This portfolio is held in a static allocation that Governance (ESG) criteria. is appropriate for investors who seek average exposure to global equity market The index measures the performance of a multi-asset class portfolio of global

# Morningstar Gbl xUS Val TME NR USD

The index measures the performance of large and mid-cap stocks representing global markets excluding US stocks with lower valuations. This Index does not incorporate Environmental, Social, or Governance (ESG) criteria



# 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 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 Conservative Target Allocation Index seeks 22.5% exposure to global equity markets.

# 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 LM Brd Growth TR USD

The index provides a comprehensive depiction of the performance and fundamental characteristics of the Large-Mid Cap Growth segment of U.S. equity markets. It targets stocks representing the faster growing half of the U.S large- and mid-cap market. This Index does not incorporate Environmental, Social, or Governance (ESG) criteria.

# Morningstar US Sml Brd Grt Ext TR USD

The index provides a comprehensive depiction of the performance and fundamental characteristics of the Small Growth segment of U.S. equity markets. It targets stocks representing the faster growing half of the U.S. small-cap market. This Index does not incorporate Environmental, Social, or Governance (ESG) criteria.

# Morningstar US Sml Brd Val Ext TR USD

The index provides a comprehensive depiction of the performance and fundamental characteristics of the Small Value segment of U.S. equity markets. It targets stocks representing the cheaper half of the U.S. small-cap market. This Index does not incorporate Environmental, Social, or Governance (ESG) criteria.

# MSCI ACWI Ex USA Growth NR USD

The index measures the performance of the growth large and mid cap segments of the particular regions, excluding USA equity securities, including developed and emerging market. It is free float-adjusted market-capitalization weighted. The constituents displayed for this index are from the following proxy: iShares MSCI ACWI ETF.

### MSCI ACWI Ex USA NR USD

The MSCI AC World ex USA is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global developed and emerging markets. The index consists of 48 developed and emerging market country indices. The returns we publish for the index are total returns, which include reinvestment of dividends. The constituents displayed for this index are from the following proxy: iShares MSCI ACWI ex US ETF.

# MSCI ACWI Ex USA Value NR USD

The index measures the performance of the value large and mid cap segments of the particular regions, excluding USA equity securities, including developed



and emerging market. It is free float-adjusted market-capitalization weighted. The constituents displayed for this index are from the following proxy: iShares MSCI ACWI ETF.

### MSCI ACWI NR USD

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

### MSCI EAFE NR USD

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

This disclosure applies to all MSCI indices: Certain information included herein is derived by Morningstar in part from MSCI's Index Constituents (the "Index Data"). However, MSCI has not reviewed any information contained herein and does not endorse or express any opinion such information or analysis. MSCI does not make any express or implied warranties, representations or guarantees concerning the Index Data or any information or data derived therefrom, and in no event will MSCI have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) relating to any use of this information. The constituents displayed for this index are from the following proxy: Schwab International Index Fund®.

### Russell 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.

# Russell Mid Cap Value TR USD

Tracks the companies within the Russell Midcap Index having lower price-to-book ratios and lower forecasted growth values. The constituents displayed for this index are from the following proxy: iShares Russell Mid-Cap Value 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.

### Russell 1000 Growth TR USD

Tracks the companies within the Russell 1000 with higher price-to-book ratios and higher forecasted growth values. The constituents displayed for this index are from the following proxy: iShares Russell 1000 Growth ETF.

### Russell 1000 TR USD

Consists of the 1000 largest companies within the Russell 3000 index, which represents approximately 98% of the investable US equity market. Also known as the Market-Oriented Index, because it represents the group of stocks from which most active money managers choose. The constituents displayed for this index are from the following proxy: iShares Russell 1000 ETF.

69

### **Russell 1000 Value TR USD**

Tracks the companies within the Russell 1000 with lower price-to-book ratios and lower forecasted growth values. The constituents displayed for this index are from the following proxy: iShares Russell 1000 Value ETF.

### Russell 2000 Growth TR USD

Tracks the companies within the Russell 2000 Index that have higher price-to-book ratios and higher forecasted growth values. The constituents displayed for this index are from the following proxy: iShares Russell 2000 Growth 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 2000 Value TR USD

Tracks the companies within the Russell 2000 Index that have lower price-to-book ratios and lower forecasted growth values. The constituents displayed for this index are from the following proxy: iShares Russell 2000 Value 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.

### **Important Disclosures:**

The material in this Report is intended solely for the use of the persons to whom it has been delivered. This information is being provided as a part of the services you receive from your Hyas Group Consultant and does not supersede or replace your customer account statement provided by your custodian ("Custodial Statement"). Information in this Report may vary from the information in your Custodial Statement as a result of differences in accounting procedures, reporting dates, or valuation methodologies of certain securities. The market values reflected in this Report may vary slightly from the market values in your Custodial Statement. The information in this Report is as of the date(s) noted and subject to daily market fluctuation.

**Sources of Information.** Material in this Report has been obtained from sources that we believe to be reliable, but we do not guarantee its accuracy, completeness, or timeliness. The performance produced herein is calculated utilizing custodian data downloads and manually entered material. Although we take every precaution to ensure accuracy, we are not able to guarantee complete accuracy.

**No Tax or Legal Advice.** When Hyas Group, its affiliates and Hyas Group Consultants provide "investment advice" regarding a retirement or welfare benefit plan account, an individual retirement account or a Coverdell education savings account ("Retirement Account"), Hyas Group is a "fiduciary" as those terms are defined under the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), and/or the Internal Revenue Code of 1986 (the "Code"), as applicable. When Hyas Group provides investment education or otherwise does not provide "investment advice", Hyas Group will not be considered a "fiduciary" under ERISA and/or the Code. Tax laws are complex and subject to change. Hyas Group does not provide tax or legal advice.

**Key Asset Class Risk Disclosures.** Investing involves market risk, including possible loss of principal. Please refer to Hyas Group's Form ADV Brochure for more information about the risks associated with certain investment products. The Hyas Group's Form ADV Brochure is available upon request.

ALL MUTUAL FUND PRODUCTS AND EXCHANGE-TRADED FUNDS ARE SOLD BY PROSPECTUS, WHICH CONTAINS MORE COMPLETE INFORMATION ABOUT A FUND, ITS EXPENSES AND MATERIAL RISKS RELATED TO THAT FUND'S INVESTMENT STRATEGY.

PLEASE CONTACT YOUR HYAS GROUP CONSULTANT FOR A COPY OF A FUND'S PROSPECTUS.

PLEASE READ THE PROSPECTUS AND CONSIDER THE FUND'S INVESTMENT OBJECTIVES, RISKS, CHARGES AND EXPENSES CAREFULLY BEFORE INVESTING. THE PROSPECTUS CONTAINS THIS AND OTHER IMPORTANT INFORMATION ABOUT THE FUND.

**Performance**. Performance results illustrated herein do not reflect a deduction of any investment advisory fees charged by Hyas Group or any investment manager but do include the fund's internal expenses. Performance results are annualized for time periods greater than one year and include all cash and cash equivalents, realized and unrealized capital gains and losses, and dividends, interest, and income. The investment results depicted herein represent historical performance. As a result of recent market activity, current performance may vary from the figures shown. Past performance is not a guarantee of future results.

The underlying fund's internal expenses (also known as the expense ratio) generally covers investment management fees, marketing, and distribution fees (also known as 12b-1 fees) and other operating expenses of the fund. The expense ratios being displayed for mutual funds reflect each fund's prospectus "net" expenses as provided by Morningstar. Such "net" expenses are subject to change and may increase at any time.

To learn more about the Hyas Group advisory services, please see the Hyas Group ADV Brochure for more information. It is available from your Hyas Group Consultant.

Performance data quoted is historical. Past performance does not guarantee future results. Current performance may be higher or lower than the performance quoted. You can obtain performance data current to the most recent month-end for each fund by visiting the fund company website. The investment return and principal value of an investment will fluctuate such that an investor's shares, when redeemed, may be worth more or less than their original cost. Total

returns include reinvestment of dividends and capital gains and are net of all fund fees and expenses.

Performance figures are based on Net Asset Value (NAV) within a qualified retirement plan. If an individual were to purchase shares outside of a qualified plan, they would likely be subject to all, or a portion of, any applicable sales charges. These charges would lower the performance indicated above.

Each fund's performance may, from time to time, have been affected significantly by material market and economic conditions, including interest rates, market trends, and general business and economic cycles, which may or may not be repeated in the future. Also, keep in mind that any double-digit returns are highly unusual and cannot be sustained. Such returns are primarily achieved during favorable market conditions.

Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns include the reinvestment of all dividends, but do not reflect the payment of transaction costs, advisory fees or expenses that are associated with an investment. The indices selected by 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. All Peer Group data are provided by Investment Metrics, LLC. The URL below provides all the definitions and methodology about the various Peer Groups https://www.invmetrics.com/style-peer-groups

**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 Advisors LLC.