



**STATE OF NEVADA**  
**457(b) Deferred Compensation and OBRA Plans**  
June 30, 2023 Performance Report

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# Section 1

**GLOBAL ECONOMIC LANDSCAPE**

- Though marginally slowing, payroll growth in the United States has been surprisingly resilient and has contributed to the view that a soft-landing rather than an outright recession may be in the cards. Non-farm payrolls (averaged over the past six months) for example have consistently declined for the past two years, but at approximately 300,000 monthly gains, stand well above the estimated replacement-rate of 90,000. Other metrics such as high GDP per worker, high job openings particularly in the leisure and hospitality sectors, and public sector payrolls remaining below pre-COVID levels suggest ongoing support for the labor market.<sup>1</sup>
- Markets across much of the developed world (excluding Japan) priced in higher central bank rate expectations over the second quarter, ranging from increases of 0.30% to 0.40% for the United States and European Union to 1.75% in the United Kingdom (UK). A common foe – inflation – helps to explain these increases. Where inflation data surprised the most to the upside – the UK, followed by Australia, then Canada – there have been the largest repricing of market-implied central bank policy rates. Where inflation surprises were smallest (the US and Euro area), inflation stickiness and hawkish central bank rhetoric helped to reprice policy.<sup>2</sup>
- The balance sheet of the US consumer showed signs of continued shrinking into the second quarter of 2023. After peaking at \$2.1 trillion in mid-2021, excess household savings has since declined to \$0.4 trillion and the personal savings rate sits at 4.3% versus a long-term average of 8.9%. Revolving credit as a percentage of total income has also ticked up though it remains below longer-term levels. Consumer confidence has rebounded a bit from mid-2022 lows, though not to expansionary levels, again, creating questions about consumers' ability and willingness to continue spending.<sup>3</sup>
- After maintaining a stringent "COVID Zero" policy the Chinese economy reopened in force late last year. This transition took place in several stages, including the lifting of lockdown measures, domestic mobility normalization, and international travel and border reopening. From November 2022 to January 2023 Chinese equities rallied sharply on these reopening themes, with leadership in Apparel and Luxury Goods; Retail; Hotels and Leisure; and Travel and Transportation sectors. This rally has petered out since then, delivering a mixed signal on China's macro picture. Amid multiple uncertainties, there are several tailwinds that could support China's continued recovery, with attendant benefits for global growth. To safeguard the recovery, Beijing may enact more further easing measures, targeting housing, infrastructure and consumer spending.<sup>4</sup>

**FIXED INCOME MARKETS**

- Congressional approval of the Fiscal Responsibility Act (FRA) avoided a potentially disastrous default scenario by suspending the debt limit through January 1, 2025. Immediate relief notwithstanding, the US Treasury is expected to refill the Treasury General Account by issuing T-bills, with the influx of new supply acting as a quantitative tightening mechanism by removing liquidity from the markets. Higher deficits, due in part to rising interest costs (which are expected to increase from approximately 15% of government revenues today to 20% by 2032) may make the cost of capital higher for other borrowers and alter the composition of the US bond market.<sup>5</sup>

<sup>1</sup> Source: Morgan Stanley, New Work on the Labor Market Supports a Soft Landing, June 28, 2023.

<sup>2</sup> Source: Morgan Stanley, Battered and Bruised, Bonds Ready for a Comeback, July 9, 2023.

<sup>3</sup> Source: JP Morgan, Guide to the Markets, June 30, 2023.

<sup>4</sup> Source: Morgan Stanley, Topics in Portfolio Construction, June 15, 2023.

<sup>5</sup> Source: Morgan Stanley, US Policy Pulse, Fiscal Crisis Averted, Now What? June 29, 2023.

- Certain economic data points suggest caution may be warranted for the US high yield market. The Federal Reserve's Senior Loan Officer Opinion Survey indicates an intention among banks to raise lending standards while the US Conference Board Leading Indicator has declined for the trailing year. These statistics have tended to correlate with a weakening high yield marketplace; although its recent performance has remained temperate.<sup>6</sup>
- Historical data from the past twenty-five years indicate that intermediate- and long-duration US investment grade bonds may provide a competitive return should the economy experience a downturn. For example, the Bloomberg US Aggregate Bond Index has averaged a return of 5.8% during recessionary periods within this timeframe versus 0.8% for the Bloomberg US High Yield Corporate Index. Global bonds have also handed in competitive returns, with the Bloomberg Global Aggregate ex-USD Index returning an average of 7.9%.<sup>7</sup>

## **EQUITY MARKETS**

- 2023's bear market rally, during which the S&P 500 Index has risen roughly 15%, has come amid deteriorating economic data that has historically presaged a corporate profits recession. While first quarter profits were down 3% from the prior year and second quarter earnings may be down similarly, forecasts since March suggest a hockey-stick-shaped recovery, putting 2024 earnings estimates at an all-time high and in spite of some declining leading economic indicators.<sup>8</sup>
- The largest ten companies within the S&P 500 Index constituted 32% of its total weight as of June 30, 2023; the highest percentage in over twenty years. Earnings of the largest ten companies however comprise 22% of the S&P 500's total as of the same date. This divergence between stock prices and earnings drives has resulted in these largest companies trading at 145% of their longer-term average valuations versus 113% for the rest within the S&P 500 Index, indicating a divergence that may present an opportunity for active managers.<sup>9</sup>
- UK equities have a long-standing reputation for offering relatively attractive valuations; however, poor investor sentiment towards the general UK macro backdrop for much of the last five to 10 years has arguably left them even cheaper than normal. Poor sentiment and recent earnings growth notwithstanding, the UK has exhibited some of the strongest positive economic surprises and upgrades around the order of 1% to its GDP forecast, which may indicate the potential for an eventual improvement in equity market performance.<sup>10</sup>
- Mexico has been one of the most interesting international stock markets in 2023, substantially outperforming the United States as well as developed and emerging markets. The Mexican stock market has also exhibited a higher correlation with developed markets than emerging ones from 2020 through 2023. This distinct profile may be attributable to Mexico's relatively open economy, high number of regional trade agreements, and the economic tailwind of a strong US Dollar.<sup>11</sup>

## **ALTERNATIVE INVESTMENTS**

- The oil market has been widely forecast to tighten significantly in the second half of 2023. Yet, prices have been stubbornly range-bound. Outside some weakness in petrochemical-related demand, overall oil demand appears to be on track with prior expectations. Supply, however, has been remarkably robust. Non OPEC growth accelerated after the summer of last year and that strength has continued. In addition, the availability of discounted barrels (i.e. Russia, Venezuela, and Iran) has

<sup>6</sup> Source: Morgan Stanley, Topics in Portfolio Construction, June 15, 2023.

<sup>7</sup> Source: Morgan Stanley, Topics in Portfolio Construction, June 15, 2023.

<sup>8</sup> Source: Morgan Stanley, GIC Weekly, July 10, 2023

<sup>9</sup> Source: JP Morgan, Guide to the Markets, June 30, 2023.

<sup>10</sup> Source: Morgan Stanley, Is UK macro and market pessimism overdone? July 10, 2023.

<sup>11</sup> Source: Morgan Stanley, Mexico is Not Your Typical Emerging Market, June 28, 2023.

surprised on the upside. Demand growth appears likely to slow down as the post-COVID recovery tailwinds come to an end after 2023. Multi-year forecasts have wide uncertainty intervals but on current trends, and despite low investment, there appears to be little tightness on the horizon.<sup>12</sup>

- After hitting an all-time high in 2021, Initial Public Offerings (IPOs) hit their lowest level in at least twenty years in the second half of 2022. Substantial as this may be, prior market cycles show that IPO declines tend to trough between two and three years after peaking as private company operators may be looking to raise funds, indicating that an inflection point may be on the horizon.<sup>13</sup>
- Aspects of the US real estate market provide different indications of valuation and health. The capitalization rate spread (or yield advantage over US Treasury securities) of real estate started the second quarter of 2023 at 1.2%, its lowest level in over a decade, indicating only a moderate increase in expected returns over Treasuries. Vacancy rates also continue to differ by economic sector. Industrial and retail property vacancy rates for example continued to decline while office vacancies remained elevated as the working from home trend has continued.<sup>14</sup>

<sup>12</sup> Source: Morgan Stanley, The Force is Strong on the Supply Side, July 5, 2023.

<sup>13</sup> Source: Morgan Stanley, Venture Vision: Right on Cue...IPOs, June 27, 2023.

<sup>14</sup> Source: JP Morgan, Guide to the Markets, June 30, 2023.

#### Disclosure:

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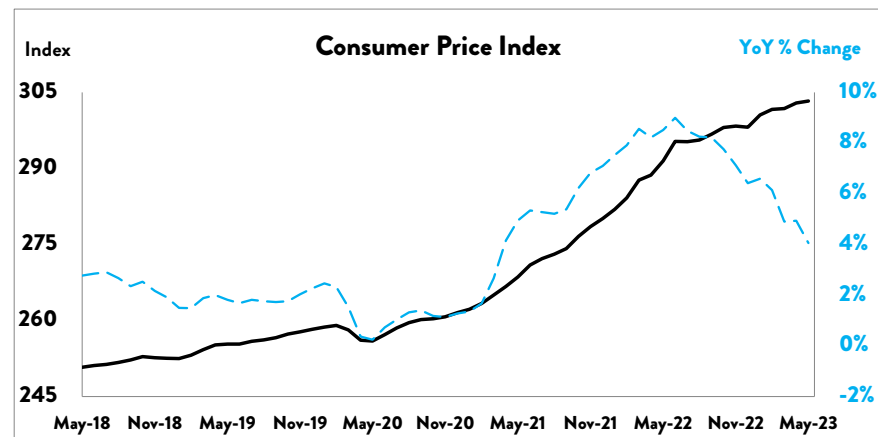
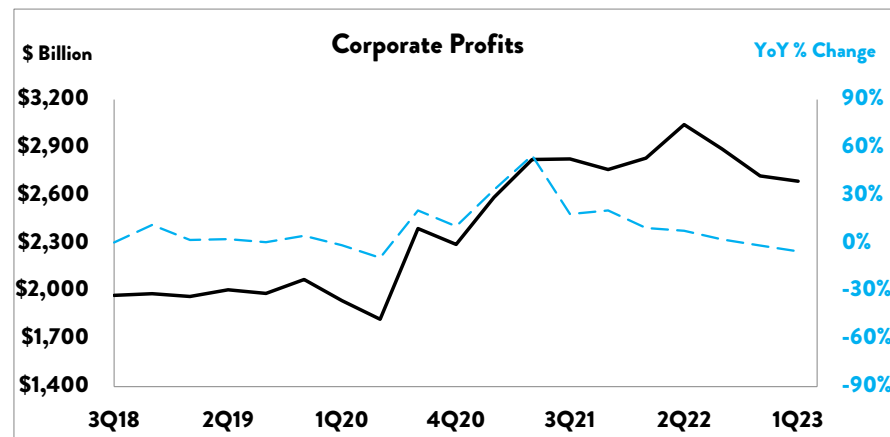
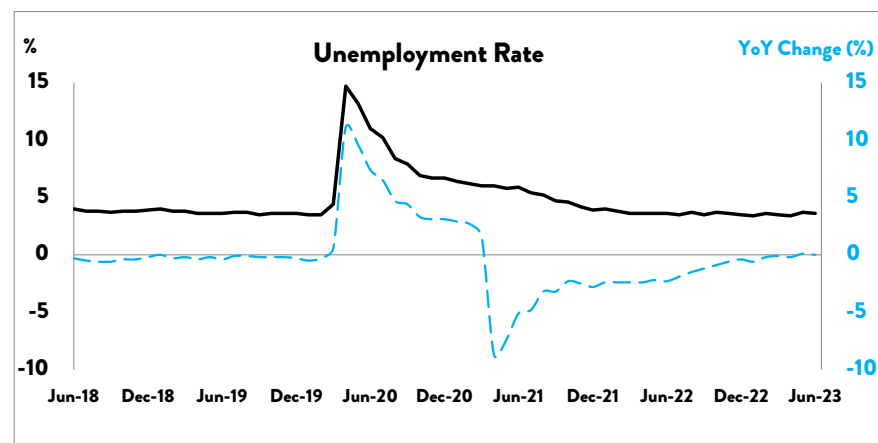
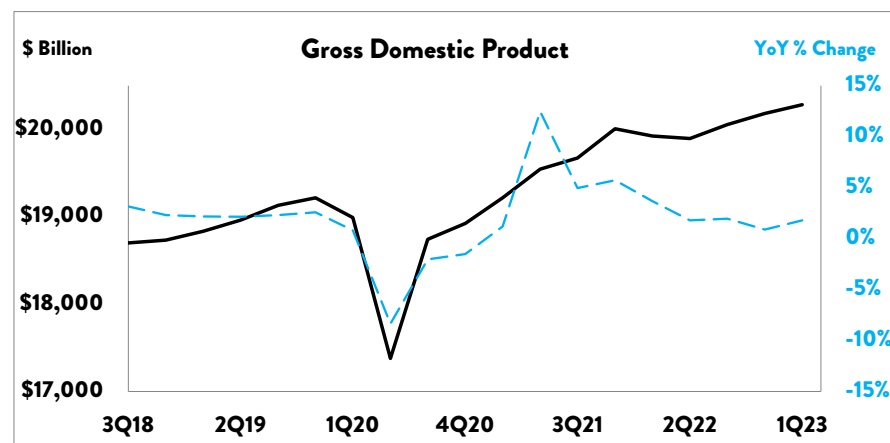
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## 2Q2023 Economic Data



Key: — Economic Series

- - - Year-Over-Year Change

Labor Market Statistics (Monthly)					
Category	Recent	5-Yr High	5-Yr Low	5-Yr Avg.	Date
Jobs Added/Lost Monthly	209,000	4,505,000	-20,493,000	111,333	Jun-23
Unemployment Rate	3.6%	14.7%	3.4%	4.9%	Jun-23
Median Unemployment Length (Weeks)	6.4	22.2	4.0	11.1	Jun-23
Average Hourly Earnings	\$33.58	\$33.58	\$27.10	\$30.09	Jun-23

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

Other Prices and Indexes (Monthly)					
Category	Recent	5-Yr High	5-Yr Low	% Off Peak	Date
Gas: Price per Gallon	\$3.53	\$4.84	\$1.80	-27.0%	Jun-23
Spot Oil	\$70.25	\$114.84	\$16.55	-38.8%	Jun-23
Case-Shiller Home Price Index	304.8	316.2	210.8	44.6%*	Apr-23
Medical Care CPI	547.3	557.4	484.3	13%*	May-23

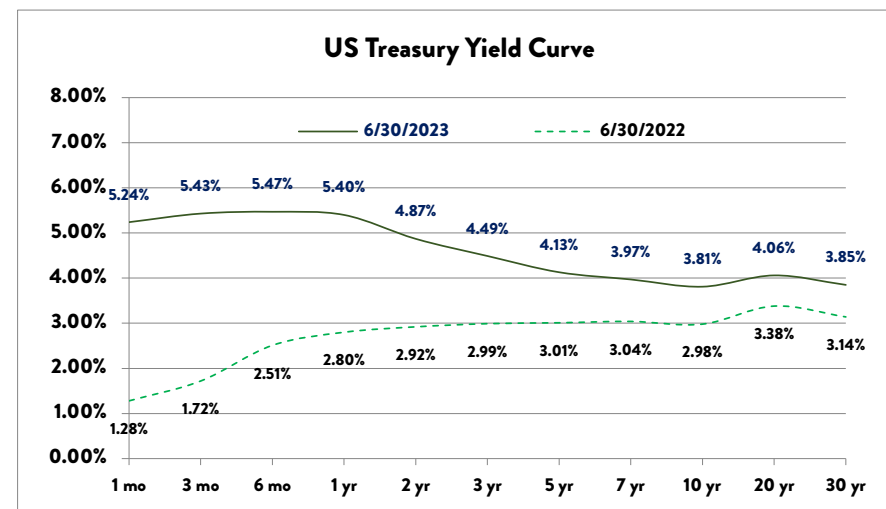
\*% Off Low

Morningstar data as of 6/30/2023

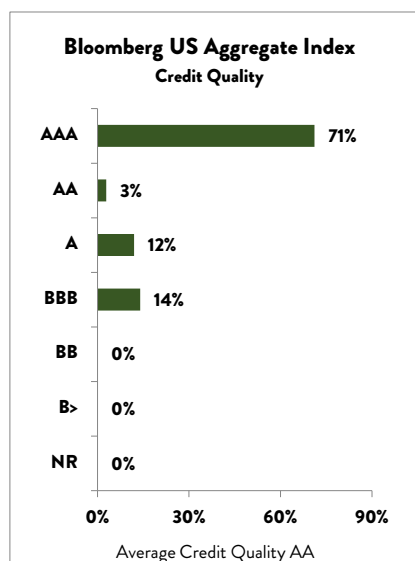
## 2Q2023 Bond Market Data

Index	QTR	YTD	1 yr.	3 yrs.	5 yrs.	10 yrs.
90-Day T-Bill	1.29%	2.46%	4.22%	1.54%	1.63%	1.04%
Bloomberg US Aggregate	-0.84%	2.09%	-0.94%	-3.96%	0.77%	1.52%
Bloomberg Short US Treasury	1.05%	2.21%	3.37%	1.10%	1.55%	1.01%
Bloomberg Int. US Treasury	-1.15%	1.10%	-1.02%	-2.88%	0.82%	0.93%
Bloomberg Long US Treasury	-2.30%	3.72%	-6.82%	-12.09%	-0.88%	1.80%
Bloomberg US TIPS	-1.42%	1.87%	-1.40%	-0.12%	2.49%	2.08%
Bloomberg US Credit	-0.31%	3.13%	1.39%	-3.38%	1.65%	2.51%
Bloomberg US Mortgage-Backed	-0.64%	1.87%	-1.52%	-3.73%	0.03%	1.13%
Bloomberg US Asset-Backed	-0.12%	1.74%	1.18%	-0.62%	1.53%	1.48%
Bloomberg US 20-Yr Municipal	0.34%	3.57%	4.22%	-0.56%	2.20%	3.43%
Bloomberg US High Yield	1.75%	5.38%	9.06%	3.13%	3.36%	4.43%
Bloomberg Global	-1.53%	1.43%	-1.32%	-4.96%	-1.09%	0.20%
Bloomberg International	-2.16%	0.83%	-1.83%	-5.87%	-2.65%	-0.90%
Bloomberg Emerging Market	1.12%	3.30%	5.64%	-2.71%	1.02%	2.73%

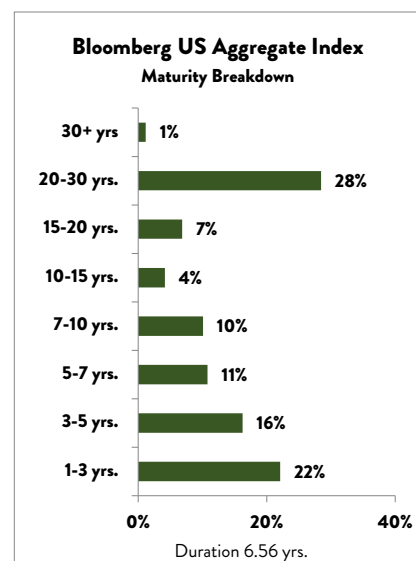
Source: Morningstar



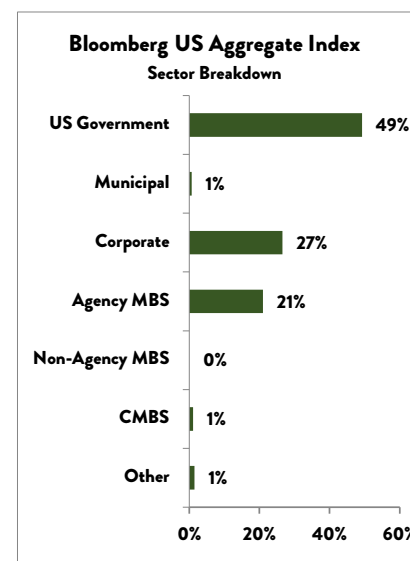
Source: Department of US Treasury



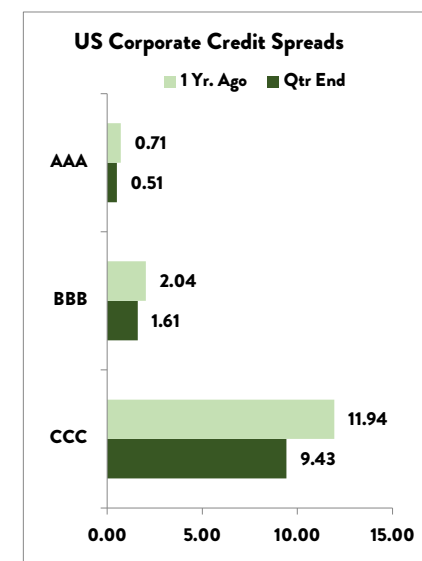
Source: Morningstar



Source: Morningstar



Source: Morningstar



Source: Federal Reserve / Bank of America



## 2Q2023 US Equity Market Data

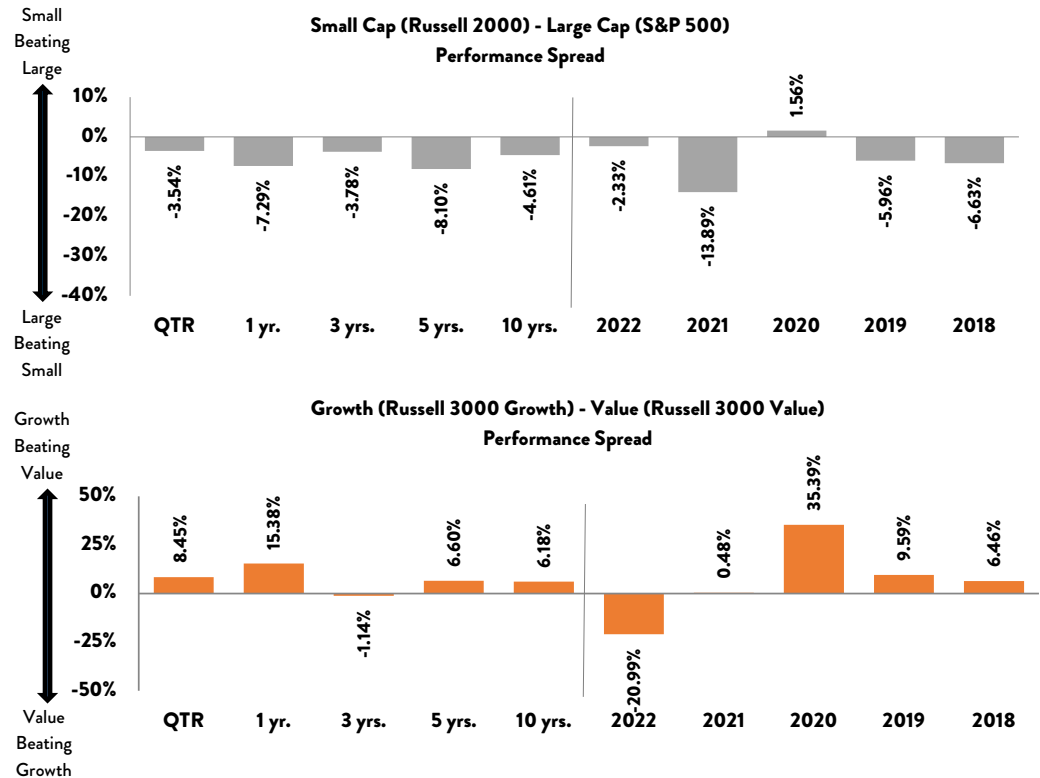
### Sectors Weights/Returns (ranked by quarter performance)

S&P 500 Index	Wgt.	Sector	QTR	YTD	1 yr.
	28%	Information Technology	17.20%	42.77%	40.26%
	11%	Consumer Discretionary	14.58%	33.06%	24.73%
	8%	Communication Services	13.06%	36.24%	17.28%
	8%	Industrials	6.49%	10.19%	25.16%
	12%	Financials	5.33%	-0.53%	9.50%
	2%	Materials	3.31%	7.74%	15.12%
	13%	Health Care	2.95%	-1.48%	5.37%
	2%	Real Estate	1.81%	3.79%	-4.13%
	7%	Consumer Staples	0.45%	1.28%	6.60%
S&P Midcap 400 Index	Wgt.	Sector	QTR	YTD	1 yr.
	23%	Industrials	12.05%	21.62%	38.94%
	10%	Information Technology	8.71%	24.61%	33.34%
	4%	Energy	6.86%	-2.18%	14.02%
	4%	Consumer Staples	4.89%	8.86%	19.13%
	9%	Health Care	4.70%	5.15%	5.05%
	15%	Consumer Discretionary	3.79%	12.09%	24.34%
	7%	Real Estate	2.10%	3.10%	-3.38%
	14%	Financials	0.94%	-6.67%	2.81%
	7%	Materials	-1.04%	6.05%	21.27%
S&P Smallcap 600 Index	Wgt.	Sector	QTR	YTD	1 yr.
	14%	Information Technology	11.87%	23.17%	27.22%
	18%	Industrials	9.36%	17.83%	29.12%
	14%	Consumer Discretionary	3.35%	16.51%	23.79%
	5%	Energy	3.02%	-5.70%	11.18%
	6%	Materials	2.44%	11.63%	19.38%
	11%	Health Care	1.73%	1.28%	-2.35%
	8%	Real Estate	0.00%	-3.61%	-10.17%
	5%	Consumer Staples	-0.55%	7.89%	9.73%
	3%	Communication Services	-2.49%	8.33%	-6.17%
	Wgt.	Sector	QTR	YTD	1 yr.
	16%	Financials	-3.44%	-14.55%	-10.76%
	2%	Utilities	-3.82%	-4.64%	-1.68%

Source: Morningstar

### Index Performance Data

Index	QTR	YTD	1 yr.	Annualized		
				3 yrs.	5 yrs.	10 yrs.
S&P 500	8.74%	16.89%	19.59%	14.60%	12.31%	12.86%
Russell 1000 Value	4.07%	5.12%	11.54%	14.30%	8.11%	9.22%
Russell 1000 Growth	12.81%	29.02%	27.11%	13.73%	15.14%	15.74%
Russell Mid Cap	4.76%	9.01%	14.92%	12.50%	8.46%	10.32%
Russell Mid Cap Value	3.86%	5.23%	10.50%	15.04%	6.84%	9.03%
Russell Mid Cap Growth	6.23%	15.94%	23.13%	7.63%	9.71%	11.53%
Russell 2000	5.21%	8.09%	12.31%	10.82%	4.21%	8.26%
Russell 2000 Value	3.18%	2.50%	6.01%	15.43%	3.54%	7.29%
Russell 2000 Growth	7.05%	13.55%	18.53%	6.10%	4.22%	8.83%
Russell 3000	8.39%	16.17%	18.95%	13.89%	11.39%	12.34%
DJ US Select REIT	2.92%	5.77%	-0.69%	9.17%	3.28%	5.75%

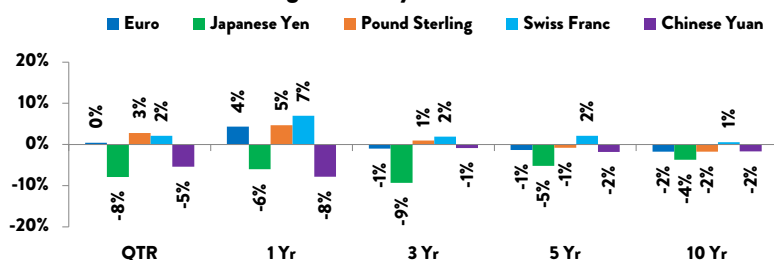


## 2Q2023 International Market Data

### Index Performance Data (net)

Index (US\$)	QTR	YTD	1 yr.	3 yrs.	5 yrs.	10 yrs.
MSCI ACWI ex-US	2.44%	9.47%	12.72%	7.22%	3.52%	4.75%
MSCI EAFE	2.95%	11.67%	18.77%	8.93%	4.39%	5.41%
Europe	2.74%	13.59%	21.81%	10.68%	5.19%	5.70%
United Kingdom	2.19%	8.43%	13.19%	12.57%	2.83%	3.88%
Germany	2.80%	17.89%	28.37%	5.21%	1.77%	4.07%
France	3.23%	18.32%	31.74%	14.87%	6.97%	7.60%
Pacific	3.50%	8.38%	13.69%	5.97%	3.00%	4.95%
Japan	6.42%	13.00%	18.14%	5.70%	3.13%	5.23%
Hong Kong	-5.05%	-7.32%	-9.03%	-0.17%	-1.29%	4.11%
Australia	0.27%	3.07%	11.19%	10.52%	4.95%	4.95%
Canada	3.69%	8.16%	6.95%	12.81%	6.36%	5.22%
MSCI EM	0.90%	4.89%	1.75%	2.32%	0.93%	2.95%
MSCI EM Latin America	14.04%	18.52%	29.84%	16.45%	4.79%	1.13%
MSCI EM Asia	-0.77%	4.00%	-0.90%	1.19%	1.20%	4.67%
MSCI EM Eur/Mid East	5.77%	4.47%	3.02%	-1.12%	-1.78%	-2.41%
MSCI ACWI Value ex-US	2.95%	8.26%	12.19%	10.42%	2.65%	3.70%
MSCI ACWI Growth ex-US	1.94%	10.70%	13.26%	3.96%	4.06%	5.61%
MSCI ACWI Sm Cap ex-US	2.05%	6.84%	10.93%	8.15%	2.62%	5.75%

### Foreign Currency v. US\$ Returns

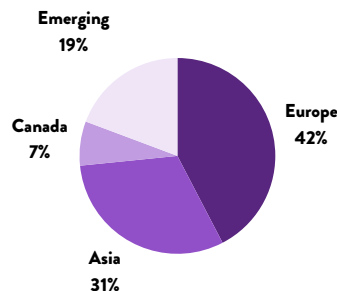


Exchange Rates	QTR	1Q23	4Q22	3Q22	2Q22	1Q22
Japanese Yen	144.47	132.75	131.81	144.71	135.69	121.44
Euro	0.92	0.92	0.93	1.02	0.96	0.90
British Pound	0.79	0.81	0.83	0.90	0.82	0.76
Swiss Franc	0.89	0.91	0.92	0.98	0.96	0.92
Chinese Yuan	7.25	6.87	6.90	7.11	6.70	6.34

Source: Federal Reserve Bank of St. Louis

### Regional Exposure

MSCI ACWI ex-USA



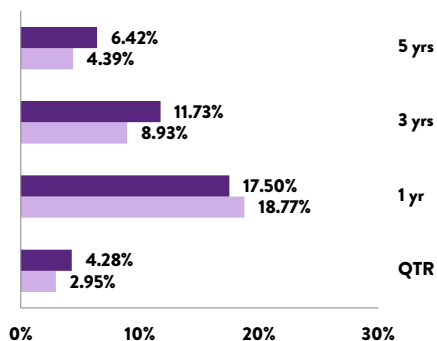
### Top 10 Countries (MSCI AC World ex-USA)

Japan	15%
UK	9%
China	8%
France	8%
Canada	8%
Switzerland	6%
Germany	5%
Australia	5%
Taiwan	4%
India	4%

Source: Morningstar

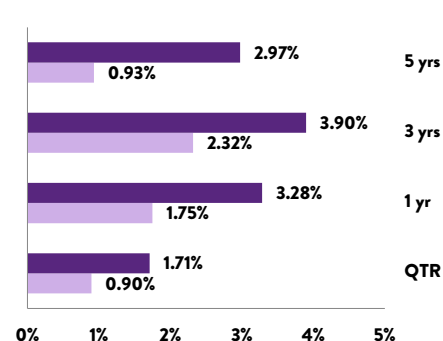
### MSCI EAFE Index Return

Local US\$



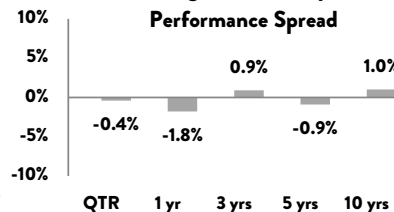
### MSCI Emerging Index Return

Local US\$



### MSCI ACWI Ex US Large v. Small Cap Performance Spread

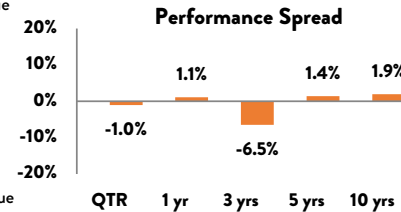
Small Beating Large  
Large Beating Small



Performance Source: Morningstar

### MSCI ACWI Ex US Value v. Growth Performance Spread

Growth Beating Value  
Value Beating Growth



## Historical Market Returns

Ranked by Performance

2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	YTD	2Q23
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 16.89%	Large Cap 8.74%
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%	Global Balanced 9.58%	Small Cap 5.21%
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%	Intl 9.47%	Mid Cap 4.76%
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 9.01%	Global Balanced 3.63%
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%	Small Cap 8.09%	Intl 2.44%
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 5.38%	High Yield 1.75%
High Yield -26.16%	Global Balanced 20.49%	Large Cap 15.06%	Cash 0.06%	Global Balanced 11.06%	High Yield 7.44%	Global Balanced 3.17%	Mid Cap -2.43%	Core Real Estate 7.76%	High Yield 7.50%	Large Cap -4.38%	High Yield 14.32%	Intl 10.65%	Intl 7.82%	Intl -16.00%	Emerging Markets 4.89%	Cash 1.29%
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%	Cash 2.46%	Emerging Markets 0.90%
Commod. -35.65%	TIPS 11.41%	Global Balanced 9.40%	Mid Cap -1.55%	TIPS 6.98%	US Bonds -2.02%	Global Bonds 0.59%	Small Cap -4.41%	TIPS 4.68%	Core Real Estate 6.66%	Mid Cap -9.06%	TIPS 8.43%	US Bonds 7.51%	High Yield 5.28%	Global Balanced -16.40%	US Bonds 2.09%	US Bonds -0.84%
Large Cap -37.00%	Global Bonds 6.93%	US Bonds 6.54%	Small Cap -4.18%	Global Bonds 4.32%	Global Bonds -2.60%	Cash 0.04%	High Yield -4.46%	Intl 4.50%	US Bonds 3.54%	Small Cap -11.01%	Commod. 7.69%	High Yield 7.11%	Cash 0.05%	Mid Cap -17.32%	TIPS 1.87%	TIPS -1.42%
Mid Cap -41.46%	US Bonds 5.93%	TIPS 6.31%	Commod. -13.32%	US Bonds 4.21%	Emerging Markets -2.60%	Emerging Markets -2.18%	Intl -5.66%	US Bonds 2.65%	TIPS 3.01%	Commod. -11.25%	Global Bonds 6.84%	Cash 0.37%	US Bonds -1.54%	Large Cap -18.11%	Global Bonds 1.43%	Global Bonds -1.53%
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 -6.12%	Commod. -2.56%
Emerging Markets -53.33%	Core Real Estate -30.40%	Cash 0.15%	Emerging Markets -18.42%	Commod. -1.06%	Commod. -9.52%	Commod. -17.00%	Commod. -24.60%	Cash 0.25%	Cash 0.71%	Emerging Markets -14.58%	Cash 2.30%	Commod. -3.12%	Global Bonds -4.71%	Small Cap -20.44%	Commod. -7.79%	Core Real Estate -2.84%

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

# STATE OF NEVADA

Combined 457(b) DC Plans

# PLAN ASSET ALLOCATION

Second Quarter 2023

Fixed Income	Ticker	Assets	%
Voya Fixed Account	-	\$335,086,688	32.8%
Vanguard Total Bond Market Index I	VBPIX	\$35,099,556	3.4%
Sterling Capital Total Return Bond R6	STRDX	\$1,842,256	0.2%
<b>Total</b>		<b>\$372,028,500</b>	<b>36.4%</b>

Large Cap	Ticker	Assets	%
MFS Value R4	MEIUX	\$21,142,639	2.1%
Vanguard Institutional Index Instl Plus	VIIIIX	\$145,965,625	14.3%
JPMorgan Large Cap Growth R6	JLGMX	\$68,531,697	6.7%
<b>Total</b>		<b>\$235,639,961</b>	<b>23.1%</b>

Mid Cap	Ticker	Assets	%
Vanguard Mid-Cap Value Index Adm	VMVAX	\$7,830,074	0.8%
Vanguard Extended Market Index Instl Plus	VEMPX	\$97,778,572	9.6%
Vanguard Mid-Cap Growth Index Adm	VMGMX	\$21,361,933	2.1%
<b>Total</b>		<b>\$126,970,578</b>	<b>12.4%</b>

International	Ticker	Assets	%
Vanguard Instl Total Intl Stock Mkt Index Trust	-	\$43,622,923	4.3%
American Funds EuroPacific Growth R6	RERGX	\$6,833,782	0.7%
<b>Total</b>		<b>\$50,456,704</b>	<b>4.9%</b>

Asset Allocation	Ticker	Assets	%
Vanguard Target Retirement Income Trust II	-	\$41,223,057	4.0%
Vanguard Target Retirement 2020 Trust II	-	\$12,040,406	1.2%
Vanguard Target Retirement 2025 Trust II	-	\$43,884,797	4.3%
Vanguard Target Retirement 2030 Trust II	-	\$15,848,061	1.6%
Vanguard Target Retirement 2035 Trust II	-	\$53,974,658	5.3%
Vanguard Target Retirement 2040 Trust II	-	\$9,252,614	0.9%
Vanguard Target Retirement 2045 Trust II	-	\$28,752,731	2.8%
Vanguard Target Retirement 2050 Trust II	-	\$6,338,018	0.6%
Vanguard Target Retirement 2055 Trust II	-	\$8,347,873	0.8%
Vanguard Target Retirement 2060 Trust II	-	\$2,691,491	0.3%
Vanguard Target Retirement 2065 Trust II	-	\$1,215,109	0.1%
Vanguard Target Retirement 2070 Trust II	-	\$259,857	0.0%
<b>Total</b>		<b>\$223,828,672</b>	<b>21.9%</b>

Miscellaneous	Ticker	Assets	%
Self-Directed Brokerage Account	-	\$9,244,872	0.9%
Participant Loans	-	\$3,459,668	0.3%
<b>Total</b>		<b>\$12,704,540</b>	<b>1.2%</b>

**TOTAL PLAN ASSETS** **\$1,021,628,955**

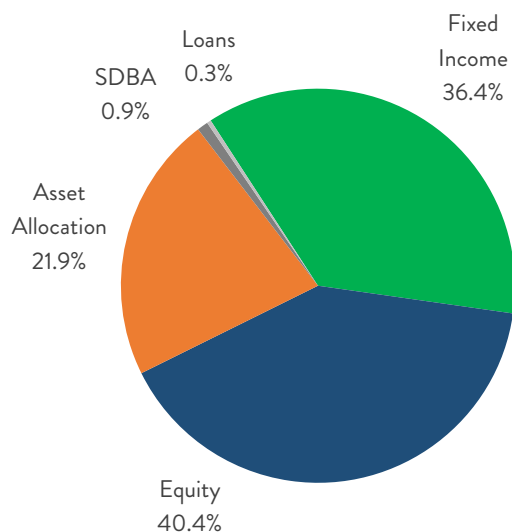
Administrative Account Balance (6/30/23) \$315,858

# STATE OF NEVADA

Combined 457(b) DC Plans

# PLAN ASSET ALLOCATION

Second Quarter 2023



## HISTORICAL PLAN ALLOCATION

Asset Class	2Q23	2022	2021	2020	2019	2018	2017	2016
Fixed Income	36.4%	39.7%	34.0%	36.7%	38.1%	43.8%	41.5%	N/A
Large Cap	23.1%	20.9%	24.4%	22.4%	21.8%	18.8%	20.4%	N/A
Mid Cap	12.4%	12.2%	14.5%	14.9%	14.4%	13.4%	14.2%	N/A
International	4.9%	4.8%	4.7%	4.3%	4.2%	4.0%	4.4%	N/A
Asset Allocation	21.9%	21.3%	21.3%	20.7%	20.7%	19.2%	18.7%	N/A
SDBA	0.9%	0.8%	0.9%	0.6%	0.4%	0.3%	0.3%	N/A
Loans	0.3%	0.4%	0.3%	0.3%	0.4%	0.5%	0.4%	N/A

## EQUITY STYLE\*

■ Core ■ Growth ■ Value

2 Q 23	69.6%	23.4%	7.0%
2022	70.5%	21.1%	8.4%
2021	66.6%	27.2%	6.2%
2020	65.9%	28.9%	5.2%
2019	69.4%	25.3%	5.4%
2018	65.5%	23.6%	10.9%
2017	65.0%	22.6%	12.4%

## BY EQUITY REGION\*

■ US ■ Non-US

2 Q 23	87.8%	12.2%
2022	87.4%	12.6%
2021	89.2%	10.8%
2020	89.7%	10.3%
2019	89.6%	10.4%
2018	89.3%	10.7%
2017	88.6%	11.4%

## ACTIVE V PASSIVE\*\*

■ Active ■ Passive

2 Q 23	55.2%	44.8%
2022	57.4%	42.6%
2021	54.6%	45.4%
2020	65.8%	34.2%
2019	72.8%	27.2%
2018	77.9%	22.1%
2017	78.0%	22.0%

\*Excludes Fixed Income, Asset Allocation, Brokerage, and Loan assets

\*\*Excludes Asset Allocation, Brokerage, and Loan assets

# STATE OF NEVADA

Combined 457(b) DC Plans

# PLAN ASSET ALLOCATION

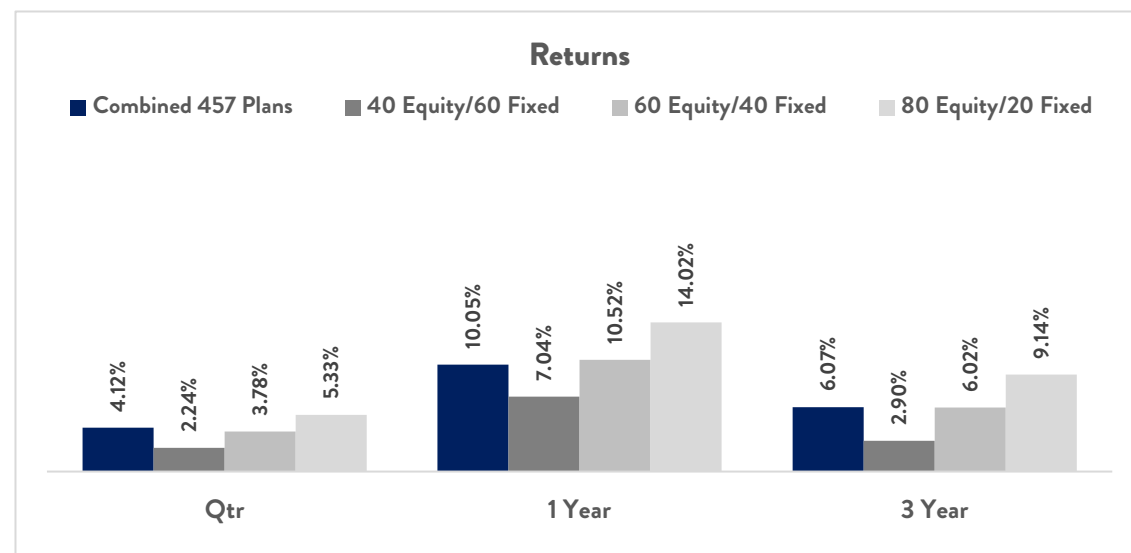
Second Quarter 2023

## PLAN LEVEL CASH FLOWS

	Beginning Value	Cash Flow (+)	Cash Flow (-)	Transfer	Market Gain/Loss	Ending Value
<b>Fixed Income</b>	\$375,084,476	\$3,774,994	(\$9,708,679)	\$721,219	\$2,156,491	\$372,028,500
<b>Large Cap</b>	\$215,337,337	\$2,593,812	(\$4,731,068)	\$1,067,298	\$21,372,581	\$235,639,961
<b>Mid Cap</b>	\$122,660,053	\$1,518,273	(\$2,116,426)	(\$2,425,602)	\$7,334,280	\$126,970,578
<b>International</b>	\$48,284,637	\$791,831	(\$926,514)	\$1,053,674	\$1,253,077	\$50,456,704
<b>Asset Allocation</b>	\$214,086,003	\$6,602,585	(\$3,589,010)	(\$748,831)	\$7,477,925	\$223,828,672
<b>SDBA</b>	\$8,033,419	\$0	\$0	\$420,791	\$790,662	\$9,244,872
<b>Total</b>	\$983,485,925	\$15,281,496	(\$21,071,697)	\$88,548	\$40,385,016	\$1,018,169,287

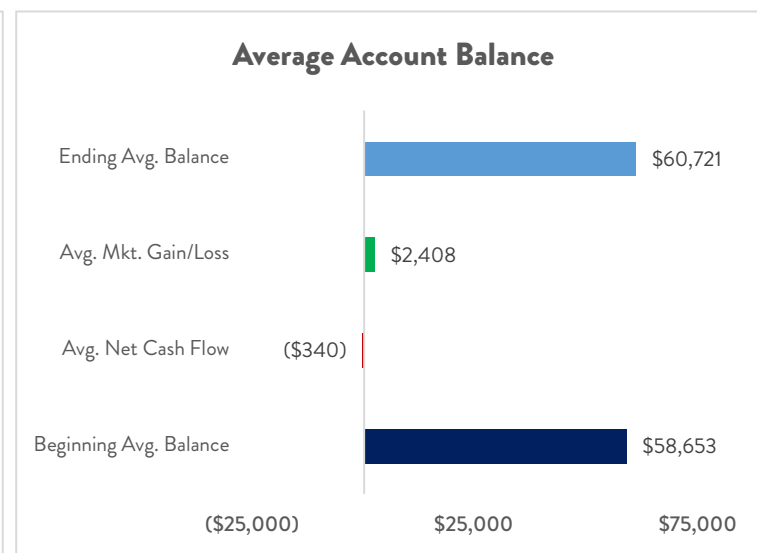
## HISTORICAL PLAN CASH FLOWS

	Beginning Value	Net Cash Flow	Market Gain/Loss	Ending Value
<b>2Q23</b>	\$983,485,925	(\$5,701,654)	\$40,385,016	\$1,018,169,287
<b>YTD</b>	\$944,760,930	(\$9,745,044)	\$83,153,401	\$1,018,169,287
<b>2022</b>	\$1,103,984,931	(\$9,111,229)	(\$150,112,772)	\$944,760,930
<b>2021</b>	\$1,012,211,305	(\$19,402,347)	\$111,175,973	\$1,103,984,931
<b>2020</b>	\$890,766,732	\$942,462	\$120,502,111	\$1,012,211,305
<b>2019</b>	\$771,229,524	(\$7,494,189)	\$127,031,396	\$890,766,732



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

Aggregate Bond (rebalanced quarterly)



# STATE EMPLOYEES PLAN

## 457(b) Deferred Compensation Plan

# PLAN ASSET ALLOCATION

Second Quarter 2023

Fixed Income	Ticker	Assets	%
Voya Fixed Account	-	\$236,292,320	35.1%
Vanguard Total Bond Market Index I	VBPIX	\$22,063,618	3.3%
Sterling Capital Total Return Bond R6	STRDX	\$874,881	0.1%
<b>Total</b>		<b>\$259,230,819</b>	<b>38.5%</b>

Large Cap	Ticker	Assets	%
MFS Value R4	MEIUX	\$13,466,944	2.0%
Vanguard Institutional Index Instl Plus	VIIIIX	\$93,540,560	13.9%
JPMorgan Large Cap Growth R6	JLGMX	\$43,435,408	6.4%
<b>Total</b>		<b>\$150,442,912</b>	<b>22.3%</b>

Mid Cap	Ticker	Assets	%
Vanguard Mid-Cap Value Index Adm	VMVAX	\$4,333,335	0.6%
Vanguard Extended Market Index Instl Plus	VEMPX	\$63,156,847	9.4%
Vanguard Mid-Cap Growth Index Adm	VMGMX	\$13,915,350	2.1%
<b>Total</b>		<b>\$81,405,532</b>	<b>12.1%</b>

International	Ticker	Assets	%
Vanguard Instl Total Intl Stock Mkt Index Trust	-	\$25,981,406	3.9%
American Funds EuroPacific Growth R6	RERGX	\$4,164,977	0.6%
<b>Total</b>		<b>\$30,146,383</b>	<b>4.5%</b>

Asset Allocation	Ticker	Assets	%
Vanguard Target Retirement Income Trust II	-	\$31,748,653	4.7%
Vanguard Target Retirement 2020 Trust II	-	\$6,862,900	1.0%
Vanguard Target Retirement 2025 Trust II	-	\$29,137,022	4.3%
Vanguard Target Retirement 2030 Trust II	-	\$8,316,755	1.2%
Vanguard Target Retirement 2035 Trust II	-	\$37,478,176	5.6%
Vanguard Target Retirement 2040 Trust II	-	\$4,940,756	0.7%
Vanguard Target Retirement 2045 Trust II	-	\$15,895,165	2.4%
Vanguard Target Retirement 2050 Trust II	-	\$2,870,413	0.4%
Vanguard Target Retirement 2055 Trust II	-	\$4,353,114	0.6%
Vanguard Target Retirement 2060 Trust II	-	\$1,139,499	0.2%
Vanguard Target Retirement 2065 Trust II	-	\$572,983	0.1%
Vanguard Target Retirement 2070 Trust II	-	\$257,350	0.0%
<b>Total</b>		<b>\$143,572,786</b>	<b>21.3%</b>

Miscellaneous	Ticker	Assets	%
Self-Directed Brokerage Account	-	\$5,416,039	0.8%
Participant Loans	-	\$3,455,865	0.5%
<b>Total</b>		<b>\$8,871,904</b>	<b>1.3%</b>

## TOTAL PLAN ASSETS

**\$673,670,336**

Administrative Account Balance (6/30/23)

\$315,858

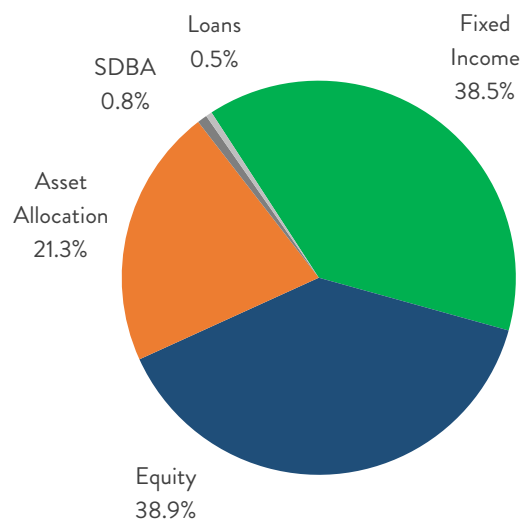


# STATE EMPLOYEES PLAN

457(b) Deferred Compensation Plan

# PLAN ASSET ALLOCATION

Second Quarter 2023



## HISTORICAL PLAN ALLOCATION

Asset Class	2Q23	2022	2021	2020	2019	2018	2017	2016
<b>Fixed Income</b>	38.5%	41.7%	35.4%	38.0%	40.1%	44.9%	42.8%	N/A
<b>Large Cap</b>	22.3%	20.0%	23.7%	21.5%	20.6%	18.6%	19.1%	N/A
<b>Mid Cap</b>	12.1%	11.8%	14.2%	14.5%	13.8%	12.6%	13.6%	N/A
<b>International</b>	4.5%	4.3%	4.2%	3.8%	3.5%	3.4%	4.0%	N/A
<b>Asset Allocation</b>	21.3%	20.9%	21.3%	21.2%	21.1%	19.4%	19.6%	N/A
<b>SDBA</b>	0.8%	0.7%	0.7%	0.5%	0.3%	0.3%	0.3%	N/A
<b>Loans</b>	0.5%	0.6%	0.5%	0.5%	0.6%	0.7%	0.6%	N/A

## EQUITY STYLE\*

■ Core ■ Growth ■ Value

2 Q 23	69.7%	23.5%	6.8%
2022	70.6%	21.0%	8.3%
2021	66.9%	27.0%	6.1%
2020	66.0%	28.7%	5.2%
2019	69.0%	25.6%	5.4%
2018	65.1%	24.1%	10.8%
2017	64.8%	23.1%	12.2%

## BY EQUITY REGION\*

■ US ■ Non-US

2 Q 23	88.5%	11.5%
2022	88.2%	11.8%
2021	90.0%	10.0%
2020	90.5%	9.5%
2019	90.7%	9.3%
2018	90.1%	9.9%
2017	89.2%	10.8%

## ACTIVE V PASSIVE\*\*

■ Active ■ Passive

2 Q 23	57.2%	42.8%
2022	59.5%	40.5%
2021	56.1%	43.9%
2020	68.6%	31.4%
2019	75.3%	24.7%
2018	80.1%	19.9%
2017	80.2%	19.8%

\*Excludes Fixed Income, Asset Allocation, Brokerage, and Loan assets

\*\*Excludes Asset Allocation, Brokerage, and Loan assets

# STATE EMPLOYEES PLAN

457(b) Deferred Compensation Plan

# PLAN ASSET ALLOCATION

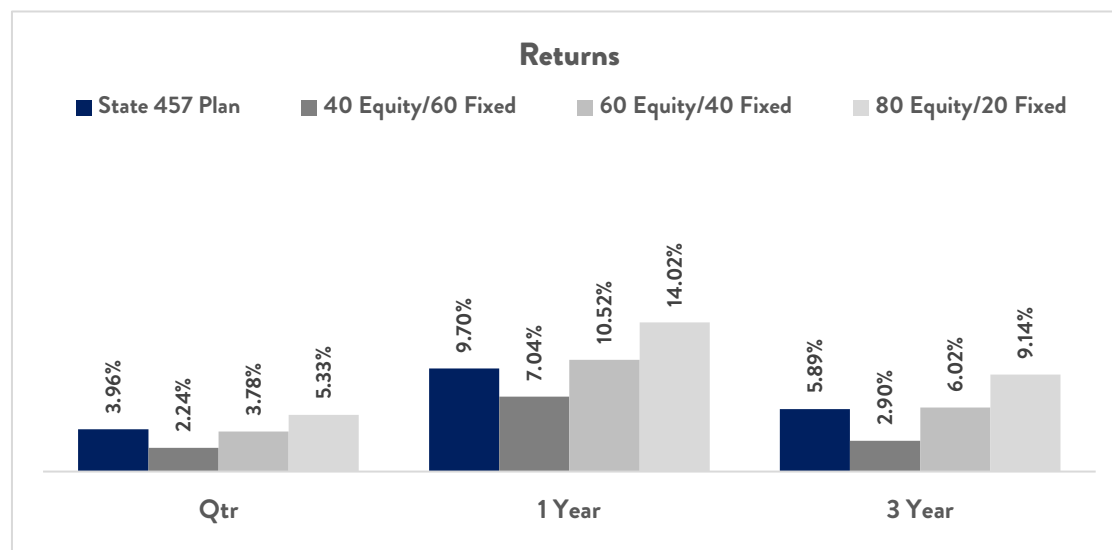
Second Quarter 2023

## PLAN LEVEL CASH FLOWS

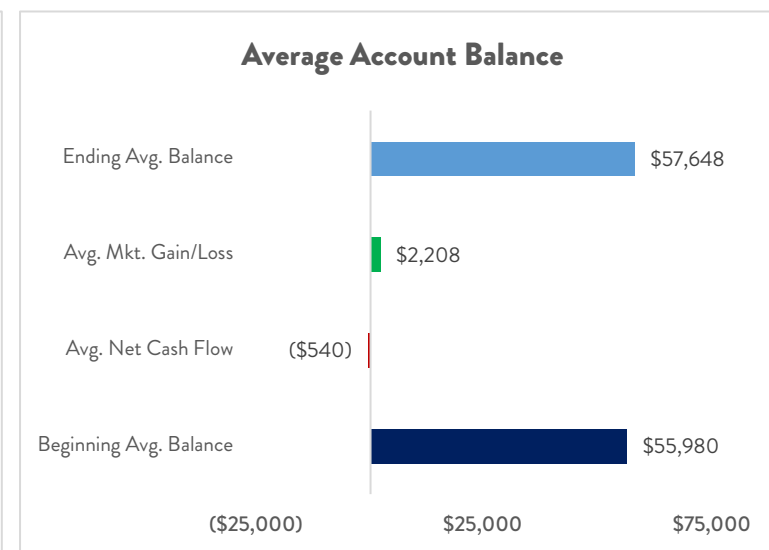
	Beginning Value	Cash Flow (+)	Cash Flow (-)	Transfer	Market Gain/Loss	Ending Value
<b>Fixed Income</b>	\$262,331,105	\$2,361,917	(\$6,827,771)	(\$185,194)	\$1,550,763	\$259,230,819
<b>Large Cap</b>	\$137,270,313	\$1,520,160	(\$3,442,931)	\$1,509,400	\$13,585,969	\$150,442,912
<b>Mid Cap</b>	\$78,970,916	\$826,356	(\$1,549,017)	(\$1,563,943)	\$4,721,219	\$81,405,532
<b>International</b>	\$28,775,111	\$472,753	(\$713,665)	\$862,648	\$749,535	\$30,146,383
<b>Asset Allocation</b>	\$138,902,660	\$3,713,705	(\$2,726,529)	(\$944,608)	\$4,627,559	\$143,572,786
<b>SDBA</b>	\$4,569,904	\$0	\$0	\$409,948	\$436,187	\$5,416,039
<b>Total</b>	\$650,820,009	\$8,894,892	(\$15,259,914)	\$88,251	\$25,671,232	\$670,214,470

## HISTORICAL PLAN CASH FLOWS

	Beginning Value	Net Cash Flow	Market Gain/Loss	Ending Value
<b>2Q23</b>	\$650,820,009	(\$6,276,771)	\$25,671,232	\$670,214,470
<b>YTD</b>	\$628,030,428	(\$10,755,632)	\$52,939,675	\$670,214,470
<b>2022</b>	\$736,232,396	(\$11,933,591)	(\$96,268,377)	\$628,030,428
<b>2021</b>	\$680,605,231	(\$16,866,120)	\$72,493,284	\$736,232,396
<b>2020</b>	\$608,234,330	(\$6,442,157)	\$78,813,059	\$680,605,231
<b>2019</b>	\$537,863,111	(\$14,358,576)	\$84,729,795	\$608,234,330



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



## POLITICAL SUBDIVISIONS

### 457(b) Deferred Compensation Plan

## PLAN ASSET ALLOCATION

Second Quarter 2023

Fixed Income	Ticker	Assets	%
Voya Fixed Account	-	\$83,717,618	32.7%
Vanguard Total Bond Market Index I	VBPIX	\$8,898,116	3.5%
Sterling Capital Total Return Bond R6	STRDX	\$504,781	0.2%
<b>Total</b>		<b>\$93,120,515</b>	<b>36.4%</b>

Large Cap	Ticker	Assets	%
MFS Value R4	MEIUX	\$6,064,332	2.4%
Vanguard Institutional Index Instl Plus	VIIIIX	\$36,243,246	14.1%
JPMorgan Large Cap Growth R6	JLGMX	\$19,440,051	7.6%
<b>Total</b>		<b>\$61,747,629</b>	<b>24.1%</b>

Mid Cap	Ticker	Assets	%
Vanguard Mid-Cap Value Index Adm	VMVAX	\$2,163,086	0.8%
Vanguard Extended Market Index Instl Plus	VEMPX	\$25,775,251	10.1%
Vanguard Mid-Cap Growth Index Adm	VMGMX	\$4,614,848	1.8%
<b>Total</b>		<b>\$32,553,184</b>	<b>12.7%</b>

International	Ticker	Assets	%
Vanguard Instl Total Intl Stock Mkt Index Trust	-	\$12,859,673	5.0%
American Funds EuroPacific Growth R6	RERGX	\$1,412,001	0.6%
<b>Total</b>		<b>\$14,271,673</b>	<b>5.6%</b>

Asset Allocation	Ticker	Assets	%
Vanguard Target Retirement Income Trust II	-	\$4,601,705	1.8%
Vanguard Target Retirement 2020 Trust II	-	\$2,488,363	1.0%
Vanguard Target Retirement 2025 Trust II	-	\$8,520,876	3.3%
Vanguard Target Retirement 2030 Trust II	-	\$4,052,383	1.6%
Vanguard Target Retirement 2035 Trust II	-	\$11,200,136	4.4%
Vanguard Target Retirement 2040 Trust II	-	\$2,624,959	1.0%
Vanguard Target Retirement 2045 Trust II	-	\$9,975,652	3.9%
Vanguard Target Retirement 2050 Trust II	-	\$2,600,752	1.0%
Vanguard Target Retirement 2055 Trust II	-	\$3,257,366	1.3%
Vanguard Target Retirement 2060 Trust II	-	\$1,464,960	0.6%
Vanguard Target Retirement 2065 Trust II	-	\$366,864	0.1%
Vanguard Target Retirement 2070 Trust II	-	\$2,379	0.0%
<b>Total</b>		<b>\$51,156,396</b>	<b>20.0%</b>

Miscellaneous	Ticker	Assets	%
Self-Directed Brokerage Account	-	\$3,287,943	1.3%
Participant Loans	-	\$3,803	0.0%
<b>Total</b>		<b>\$3,291,746</b>	<b>1.3%</b>

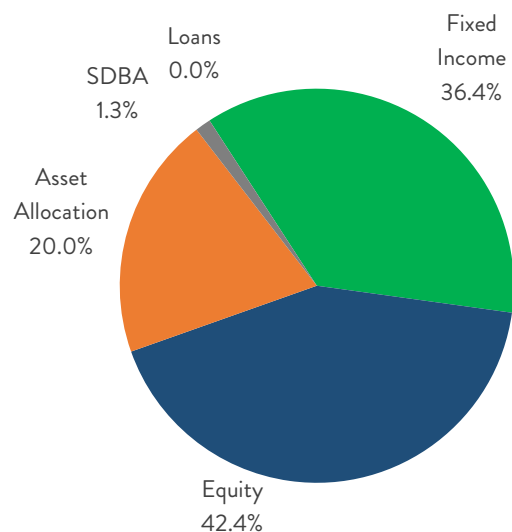
**TOTAL PLAN ASSETS** **\$256,141,143**

## POLITICAL SUBDIVISIONS

### 457(b) Deferred Compensation Plan

## PLAN ASSET ALLOCATION

Second Quarter 2023

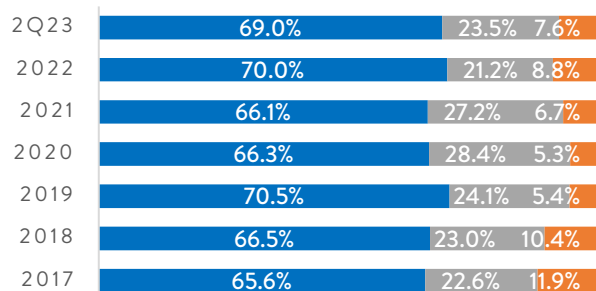


### HISTORICAL PLAN ALLOCATION

Asset Class	2Q23	2022	2021	2020	2019	2018	2017	2016
<b>Fixed Income</b>	36.4%	39.6%	34.5%	37.9%	37.5%	46.2%	42.5%	N/A
<b>Large Cap</b>	24.1%	22.3%	25.5%	24.5%	24.4%	17.5%	22.8%	N/A
<b>Mid Cap</b>	12.7%	12.6%	15.1%	15.2%	15.3%	15.1%	15.0%	N/A
<b>International</b>	5.6%	5.5%	5.5%	5.3%	5.5%	5.2%	5.1%	N/A
<b>Asset Allocation</b>	20.0%	18.9%	18.0%	16.2%	16.6%	15.6%	14.0%	N/A
<b>SDBA</b>	1.3%	1.1%	1.5%	0.9%	0.7%	0.5%	0.6%	N/A
<b>Loans</b>	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	N/A

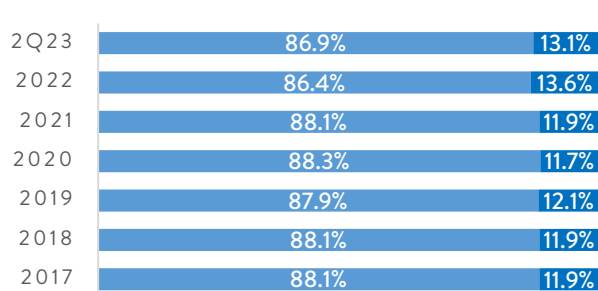
### EQUITY STYLE\*

■ Core ■ Growth ■ Value



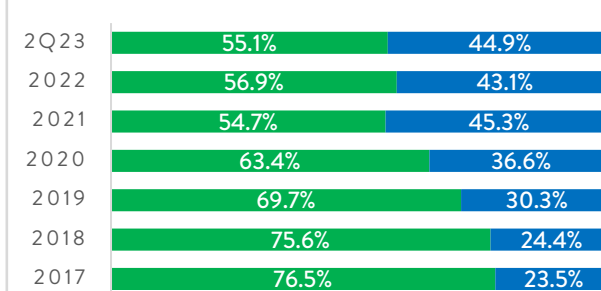
### BY EQUITY REGION\*

■ US ■ Non-US



### ACTIVE V PASSIVE\*\*

■ Active ■ Passive



\*Excludes Fixed Income, Asset Allocation, Brokerage, and Loan assets

\*\*Excludes Asset Allocation, Brokerage, and Loan assets

## POLITICAL SUBDIVISIONS

### 457(b) Deferred Compensation Plan

## PLAN ASSET ALLOCATION

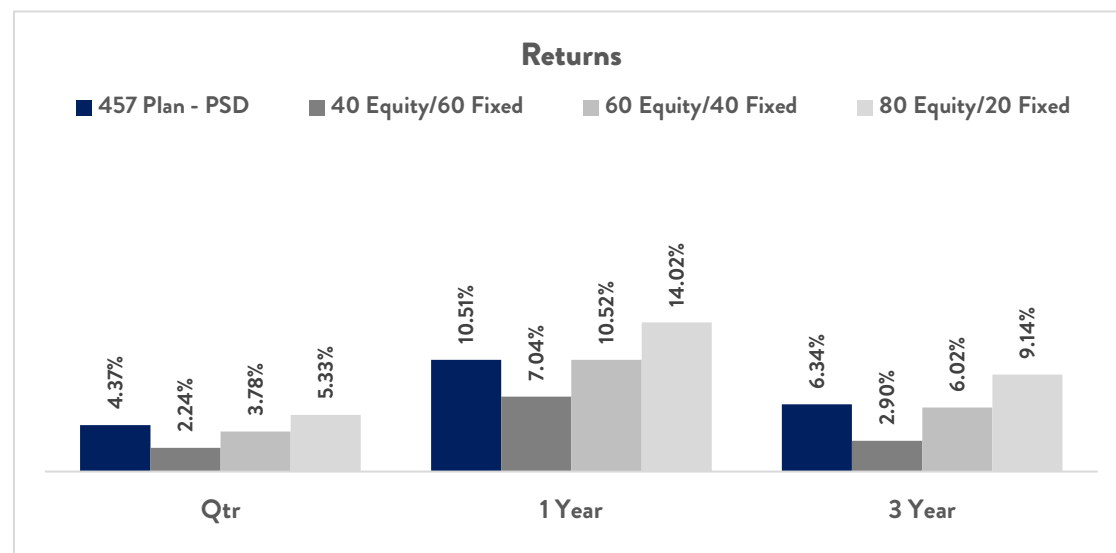
Second Quarter 2023

### PLAN LEVEL CASH FLOWS

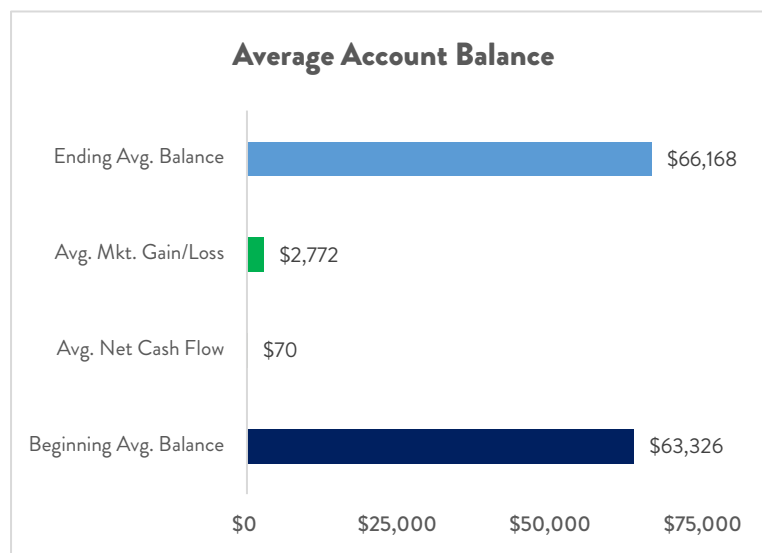
	Beginning Value	Cash Flow (+)	Cash Flow (-)	Transfer	Market Gain/Loss	Ending Value
<b>Fixed Income</b>	\$92,918,805	\$1,208,870	(\$2,334,188)	\$794,467	\$532,561	\$93,120,515
<b>Large Cap</b>	\$56,733,147	\$751,857	(\$946,068)	(\$487,213)	\$5,695,906	\$61,747,629
<b>Mid Cap</b>	\$31,135,759	\$545,173	(\$324,462)	(\$687,922)	\$1,884,637	\$32,553,184
<b>International</b>	\$13,748,714	\$240,199	(\$139,751)	\$66,828	\$355,683	\$14,271,673
<b>Asset Allocation</b>	\$47,676,735	\$2,031,650	(\$762,937)	\$302,997	\$1,907,951	\$51,156,396
<b>SDBA</b>	\$2,923,245	\$0	\$0	\$10,843	\$353,855	\$3,287,943
<b>Total</b>	\$245,136,404	\$4,777,749	(\$4,507,406)	\$0	\$10,730,592	\$256,137,340

### HISTORICAL PLAN CASH FLOWS

	Beginning Value	Net Cash Flow	Market Gain/Loss	Ending Value
<b>2Q23</b>	\$245,136,404	\$270,344	\$10,730,592	\$256,137,340
<b>YTD</b>	\$233,192,231	\$1,187,280	\$21,757,829	\$256,137,340
<b>2022</b>	\$268,237,618	\$2,772,040	(\$37,817,427)	\$233,192,231
<b>2021</b>	\$244,053,779	(\$3,563,244)	\$27,747,083	\$268,237,618
<b>2020</b>	\$211,520,904	\$2,964,561	\$29,568,315	\$244,053,779
<b>2019</b>	\$174,082,438	\$7,146,048	\$30,292,417	\$211,520,904



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



# NEVADA SYSTEM OF HIGHER EDUCATION

## 457(b) Deferred Compensation Plan

# PLAN ASSET ALLOCATION

Second Quarter 2023

Fixed Income	Ticker	Assets	%
Voya Fixed Account	-	\$15,076,750	16.4%
Vanguard Total Bond Market Index I	VBPIX	\$4,137,822	4.5%
Sterling Capital Total Return Bond R6	STRDX	\$462,594	0.5%
<b>Total</b>		<b>\$19,677,166</b>	<b>21.4%</b>

Large Cap	Ticker	Assets	%
MFS Value R4	MEIUX	\$1,611,362	1.8%
Vanguard Institutional Index Instl Plus	VIIIIX	\$16,181,818	17.6%
JPMorgan Large Cap Growth R6	JLGMX	\$5,656,239	6.2%
<b>Total</b>		<b>\$23,449,419</b>	<b>25.5%</b>

Mid Cap	Ticker	Assets	%
Vanguard Mid-Cap Value Index Adm	VMVAX	\$1,333,653	1.5%
Vanguard Extended Market Index Instl Plus	VEMPX	\$8,846,474	9.6%
Vanguard Mid-Cap Growth Index Adm	VMGMX	\$2,831,735	3.1%
<b>Total</b>		<b>\$13,011,863</b>	<b>14.2%</b>

International	Ticker	Assets	%
Vanguard Instl Total Intl Stock Mkt Index Trust	-	\$4,781,844	5.2%
American Funds EuroPacific Growth R6	RERGX	\$1,256,804	1.4%
<b>Total</b>		<b>\$6,038,648</b>	<b>6.6%</b>

Asset Allocation	Ticker	Assets	%
Vanguard Target Retirement Income Trust II	-	\$4,872,699	5.3%
Vanguard Target Retirement 2020 Trust II	-	\$2,689,144	2.9%
Vanguard Target Retirement 2025 Trust II	-	\$6,226,900	6.8%
Vanguard Target Retirement 2030 Trust II	-	\$3,478,922	3.8%
Vanguard Target Retirement 2035 Trust II	-	\$5,296,347	5.8%
Vanguard Target Retirement 2040 Trust II	-	\$1,686,898	1.8%
Vanguard Target Retirement 2045 Trust II	-	\$2,881,914	3.1%
Vanguard Target Retirement 2050 Trust II	-	\$866,853	0.9%
Vanguard Target Retirement 2055 Trust II	-	\$737,393	0.8%
Vanguard Target Retirement 2060 Trust II	-	\$87,032	0.1%
Vanguard Target Retirement 2065 Trust II	-	\$275,262	0.3%
Vanguard Target Retirement 2070 Trust II	-	\$127	0.0%
<b>Total</b>		<b>\$29,099,490</b>	<b>31.7%</b>

Miscellaneous	Ticker	Assets	%
Self-Directed Brokerage Account	-	\$540,890	0.6%
<b>Total</b>		<b>\$540,890</b>	<b>0.6%</b>

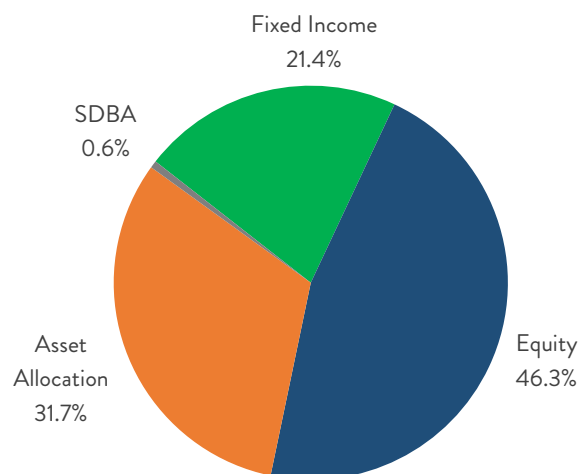
**TOTAL PLAN ASSETS** **\$91,817,477**

# NEVADA SYSTEM OF HIGHER EDUCATION

## 457(b) Deferred Compensation Plan

# PLAN ASSET ALLOCATION

Second Quarter 2023



### HISTORICAL PLAN ALLOCATION

Asset Class	2Q23	2022	2021	2020	2019	2018	2017	2016
<b>Fixed Income</b>	21.4%	24.6%	22.3%	22.9%	22.4%	27.3%	26.9%	N/A
<b>Large Cap</b>	25.5%	23.7%	26.1%	24.4%	24.4%	24.1%	24.7%	N/A
<b>Mid Cap</b>	14.2%	14.1%	15.6%	17.3%	17.1%	15.7%	16.8%	N/A
<b>International</b>	6.6%	6.3%	6.1%	5.8%	5.9%	5.8%	6.8%	N/A
<b>Asset Allocation</b>	31.7%	30.7%	29.4%	29.1%	29.9%	26.8%	24.7%	N/A
<b>SDBA</b>	0.6%	0.6%	0.6%	0.5%	0.3%	0.3%	0.1%	N/A

### EQUITY STYLE\*

■ Core ■ Growth ■ Value

2 Q 23	70.1%	22.9%	6.9%
2022	70.6%	21.5%	7.9%
2021	65.9%	28.8%	5.3%
2020	63.5%	31.5%	5.0%
2019	69.0%	26.0%	5.0%
2018	64.9%	21.7%	13.5%
2017	65.7%	19.3%	15.0%

### BY EQUITY REGION\*

■ US ■ Non-US

2 Q 23	85.8%	14.2%
2022	85.6%	14.4%
2021	87.3%	12.7%
2020	87.7%	12.3%
2019	87.6%	12.4%
2018	87.3%	12.7%
2017	85.9%	14.1%

### ACTIVE V PASSIVE\*\*

■ Active ■ Passive

2 Q 23	38.7%	61.3%
2022	41.3%	58.7%
2021	41.8%	58.2%
2020	50.4%	49.6%
2019	58.6%	41.4%
2018	63.6%	36.4%
2017	61.2%	38.8%

\*Excludes Fixed Income, Asset Allocation, and Brokerage assets

\*\*Excludes Asset Allocation and Brokerage assets

# NEVADA SYSTEM OF HIGHER EDUCATION

## 457(b) Deferred Compensation Plan

# PLAN ASSET ALLOCATION

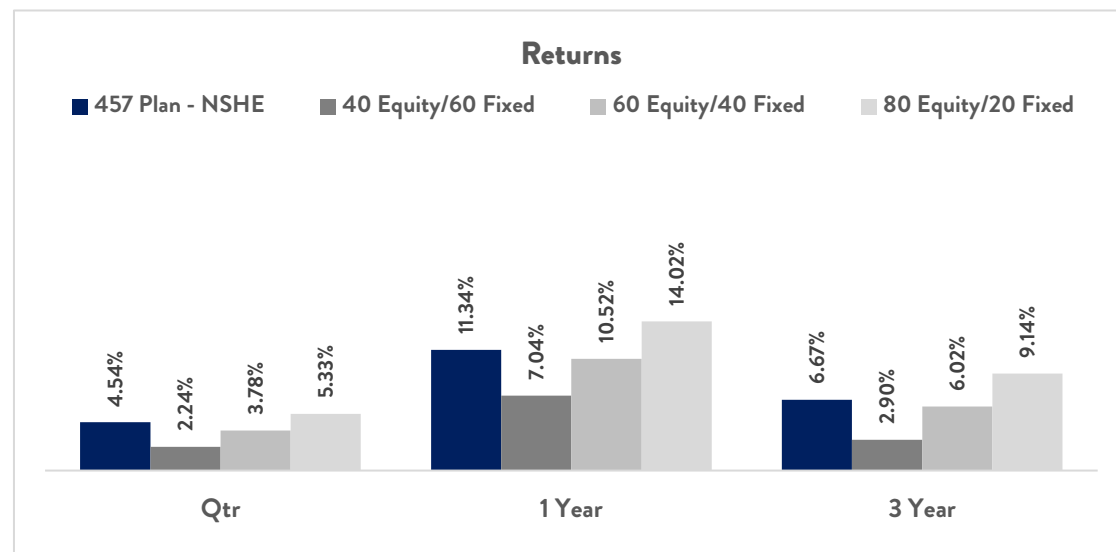
Second Quarter 2023

### PLAN LEVEL CASH FLOWS

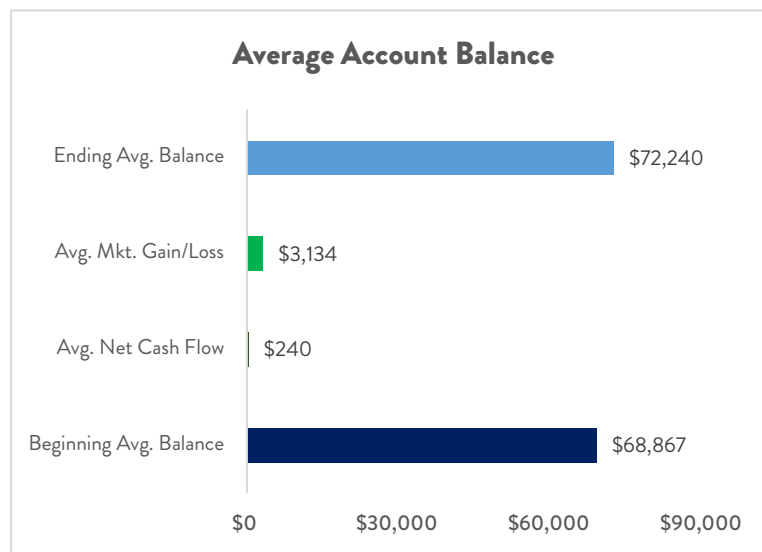
	Beginning Value	Cash Flow (+)	Cash Flow (-)	Transfer	Market Gain/Loss	Ending Value
<b>Fixed Income</b>	\$19,834,566	\$204,207	(\$546,720)	\$111,946	\$73,167	\$19,677,166
<b>Large Cap</b>	\$21,333,877	\$321,795	(\$342,069)	\$45,111	\$2,090,706	\$23,449,419
<b>Mid Cap</b>	\$12,553,378	\$146,744	(\$242,947)	(\$173,737)	\$728,425	\$13,011,863
<b>International</b>	\$5,760,812	\$78,879	(\$73,098)	\$124,197	\$147,859	\$6,038,648
<b>Asset Allocation</b>	\$27,506,609	\$857,229	(\$99,544)	(\$107,219)	\$942,415	\$29,099,490
<b>SDBA</b>	\$540,270	\$0	\$0	\$0	\$620	\$540,890
<b>Total</b>	\$87,529,511	\$1,608,854	(\$1,304,377)	\$297	\$3,983,192	\$91,817,477

### HISTORICAL PLAN CASH FLOWS

	Beginning Value	Net Cash Flow	Market Gain/Loss	Ending Value
<b>2Q23</b>	\$87,529,511	\$304,774	\$3,983,192	\$91,817,477
<b>YTD</b>	\$83,538,271	(\$176,691)	\$8,455,897	\$91,817,477
<b>2022</b>	\$99,514,917	\$50,322	(\$16,026,968)	\$83,538,271
<b>2021</b>	\$87,552,294	\$1,027,017	\$10,935,606	\$99,514,917
<b>2020</b>	\$71,011,498	\$4,420,058	\$12,120,738	\$87,552,294
<b>2019</b>	\$59,283,975	(\$281,661)	\$12,009,184	\$71,011,498



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



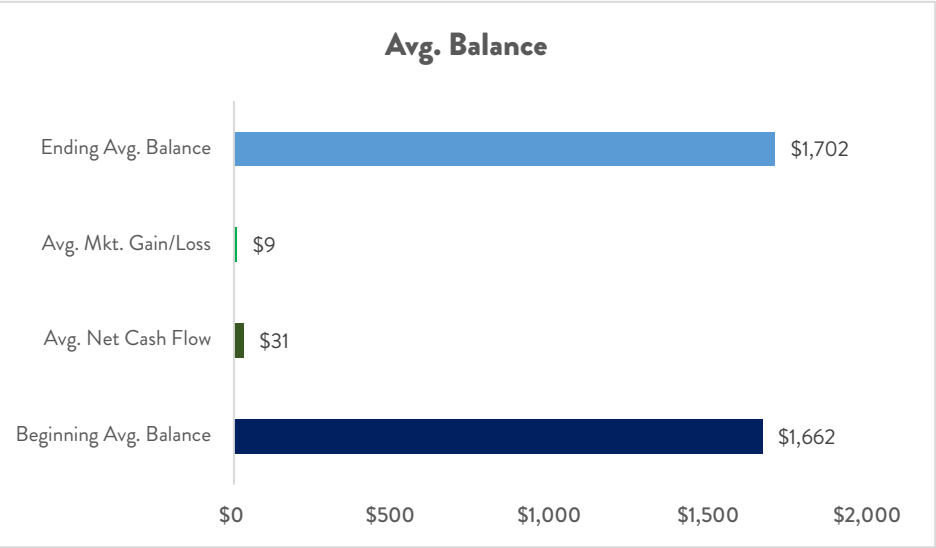
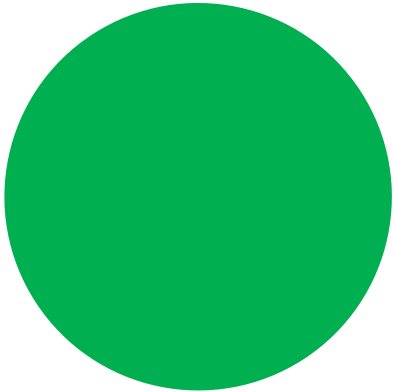


Fixed Income	Ticker	Assets	%
Voya Fixed Account - FICA	-	\$60,893,388	100.0%
Total		\$60,893,388	100.0%

HISTORICAL PLAN CASH FLOWS

	Beginning Value	Net Cash Flow	Market Gain/Loss	Ending Value
2Q23	\$59,447,230	\$1,110,294	\$335,864	\$60,893,388
YTD	\$58,595,787	\$1,633,387	\$664,214	\$60,893,388
2022	\$53,114,954	\$4,247,755	\$1,233,078	\$58,595,787
2021	\$48,389,052	\$3,600,343	\$1,125,559	\$53,114,954
2020	\$45,103,420	\$2,240,312	\$1,045,320	\$48,389,052
2019	\$40,981,957	\$3,480,620	\$640,843	\$45,103,420

**TOTAL PLAN ASSETS** **\$60,893,388**  
Administrative Account Balance (6/30/23) \$23,224



# Section 3

# STATE OF NEVADA

Combined Retirement Plans

# INVESTMENT POLICY STATEMENT COMPLIANCE REPORT

Second Quarter 2023

	Investment Policy Status				
	Performance Factors	Qualitative Factors	On-Watch Information	Notes	Added to Plan
Key: <span style="color: green;">●</span> Pass / <span style="color: orange;">●</span> Caution / <span style="color: red;">●</span> Fail					
Voya Fixed Account	<span style="color: green;">●</span>	<span style="color: green;">●</span>	-		4Q2004
Voya Fixed Account - FICA	<span style="color: green;">●</span>	<span style="color: green;">●</span>	-		4Q2004
Vanguard Total Bond Market Index I	<span style="color: green;">●</span>	<span style="color: green;">●</span>	-		1Q2010
Sterling Capital Total Return Bond R6	<span style="color: green;">●</span>	<span style="color: green;">●</span>	-		3Q2021
MFS Value R4	<span style="color: green;">●</span>	<span style="color: green;">●</span>	-		3Q2016
Vanguard Institutional Index Instl Plus	<span style="color: green;">●</span>	<span style="color: green;">●</span>	-		3Q2021
JPMorgan Large Cap Growth R6	<span style="color: green;">●</span>	<span style="color: green;">●</span>	-		2Q2023
Vanguard Mid-Cap Value Index Adm	<span style="color: green;">●</span>	<span style="color: green;">●</span>	-		2Q2017
Vanguard Extended Market Index Instl Plus	<span style="color: green;">●</span>	<span style="color: green;">●</span>	-		3Q2021
Vanguard Mid-Cap Growth Index Adm	<span style="color: green;">●</span>	<span style="color: green;">●</span>	-		2Q2022
Vanguard Instl Total Intl Stock Mkt Index Trust	<span style="color: green;">●</span>	<span style="color: green;">●</span>	-		4Q2022
American Funds EuroPacific Growth R6	<span style="color: green;">●</span>	<span style="color: green;">●</span>	-		1Q2019
Vanguard Target Retirement Income Trust II	<span style="color: green;">●</span>	<span style="color: green;">●</span>	-		4Q2022
Vanguard Target Retirement 2020 Trust II	<span style="color: green;">●</span>	<span style="color: green;">●</span>	-		4Q2022
Vanguard Target Retirement 2025 Trust II	<span style="color: green;">●</span>	<span style="color: green;">●</span>	-		4Q2022
Vanguard Target Retirement 2030 Trust II	<span style="color: green;">●</span>	<span style="color: green;">●</span>	-		4Q2022
Vanguard Target Retirement 2035 Trust II	<span style="color: green;">●</span>	<span style="color: green;">●</span>	-		4Q2022
Vanguard Target Retirement 2040 Trust II	<span style="color: green;">●</span>	<span style="color: green;">●</span>	-		4Q2022
Vanguard Target Retirement 2045 Trust II	<span style="color: green;">●</span>	<span style="color: green;">●</span>	-		4Q2022
Vanguard Target Retirement 2050 Trust II	<span style="color: green;">●</span>	<span style="color: green;">●</span>	-		4Q2022
Vanguard Target Retirement 2055 Trust II	<span style="color: green;">●</span>	<span style="color: green;">●</span>	-		4Q2022
Vanguard Target Retirement 2060 Trust II	<span style="color: green;">●</span>	<span style="color: green;">●</span>	-		4Q2022
Vanguard Target Retirement 2065 Trust II	<span style="color: green;">●</span>	<span style="color: green;">●</span>	-		4Q2022
Vanguard Target Retirement 2070 Trust II	<span style="color: green;">●</span>	<span style="color: green;">●</span>	-		4Q2022

# STATE OF NEVADA

## Combined Retirement Plans

	QTR	YTD	1Yr	Annualized				2022	2021	2020	2019	2018
				3Yr	5Yr	10Yr	15Yr					
<b>Voya Fixed Account</b>	<b>0.74</b>	<b>1.49</b>	<b>3.00</b>	<b>3.05</b>	<b>2.94</b>	<b>-</b>	<b>-</b>	<b>3.00</b>	<b>3.10</b>	<b>3.10</b>	<b>2.70</b>	<b>2.54</b>
5 Yr Constant Maturity US Treasury Yield	0.91	1.86	3.68	1.95	1.92	1.82	1.76	3.00	0.85	0.54	1.96	2.75
+/- Index	(0.17)	(0.37)	(0.68)	1.10	1.02	-	-	0.00	2.25	2.56	0.74	(0.21)
US Stable Value	9	8	4	2	1	-	N/A	1	2	1	4	5
<b>Voya Fixed Account - FICA</b>	<b>0.56</b>	<b>1.12</b>	<b>2.25</b>	<b>2.25</b>	<b>2.02</b>	<b>-</b>	<b>-</b>	<b>2.25</b>	<b>2.25</b>	<b>2.25</b>	<b>1.50</b>	<b>1.50</b>
5 Yr Constant Maturity US Treasury Yield	0.91	1.86	3.68	1.95	1.92	1.82	1.76	3.00	0.85	0.54	1.96	2.75
+/- Index	(0.35)	(0.74)	(1.43)	0.30	0.10	-	-	(0.75)	1.40	1.71	(0.46)	(1.25)
US Stable Value	57	48	28	8	26	-	N/A	8	3	10	97	83
<b>Vanguard Total Bond Market Index I</b>	<b>-0.90</b>	<b>2.24</b>	<b>-0.89</b>	<b>-4.01</b>	<b>0.78</b>	<b>1.49</b>	<b>2.71</b>	<b>-13.15</b>	<b>-1.65</b>	<b>7.74</b>	<b>8.73</b>	<b>-0.01</b>
Bloomberg US Aggregate Bond Index	-0.84	2.09	-0.94	-3.96	0.77	1.52	2.73	-13.01	-1.54	7.51	8.72	0.01
+/- Index	(0.06)	0.15	0.05	(0.05)	0.01	(0.03)	(0.02)	(0.14)	(0.11)	0.23	0.01	(0.02)
US Fund Intermediate Core Bond	54	44	41	62	38	41	N/A	34	55	54	34	27
<b>Sterling Capital Total Return Bond R6</b>	<b>-0.53</b>	<b>2.47</b>	<b>-0.52</b>	<b>-3.14</b>	<b>1.29</b>	<b>2.07</b>	<b>3.47</b>	<b>-13.15</b>	<b>-1.12</b>	<b>9.35</b>	<b>9.37</b>	<b>-0.27</b>
Bloomberg US Aggregate Bond Index	-0.84	2.09	-0.94	-3.96	0.77	1.52	2.73	-13.01	-1.54	7.51	8.72	0.01
+/- Index	0.31	0.38	0.42	0.82	0.52	0.55	0.74	(0.14)	0.42	1.84	0.65	(0.28)
US Fund Intermediate Core Bond	11	26	20	16	11	6	N/A	34	28	15	18	42
<b>MFS Value R4</b>	<b>3.60</b>	<b>2.08</b>	<b>10.64</b>	<b>12.83</b>	<b>8.77</b>	<b>9.71</b>	<b>8.69</b>	<b>-5.90</b>	<b>25.42</b>	<b>3.91</b>	<b>30.08</b>	<b>-9.87</b>
Russell 1000 Value Index	4.07	5.12	11.54	14.30	8.11	9.22	8.36	-7.54	25.16	2.80	26.54	-8.27
+/- Index	(0.47)	(3.04)	(0.90)	(1.47)	0.66	0.49	0.33	1.64	0.26	1.11	3.54	(1.60)
US Fund Large Value	52	75	51	73	33	27	N/A	53	59	37	7	68

# STATE OF NEVADA

## Combined Retirement Plans

	QTR	YTD	1Yr	Annualized				2022	2021	2020	2019	2018
				3Yr	5Yr	10Yr	15Yr					
<b>Vanguard Institutional Index Instl Plus</b>	<b>8.74</b>	<b>16.88</b>	<b>19.57</b>	<b>14.58</b>	<b>12.29</b>	<b>12.85</b>	<b>10.89</b>	<b>-18.13</b>	<b>28.69</b>	<b>18.41</b>	<b>31.48</b>	<b>-4.41</b>
S&P 500 Index	8.74	16.89	19.59	14.60	12.31	12.86	10.88	-18.11	28.71	18.40	31.49	-4.38
+/- Index	0.00	(0.01)	(0.02)	(0.02)	(0.02)	(0.01)	0.01	(0.02)	(0.02)	0.01	0.00	(0.02)
US Fund Large Blend	22	20	26	23	14	9	N/A	49	21	32	22	22
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	15Yr	2022	2021	2020	2019	2018
<b>JPMorgan Large Cap Growth R6</b>	<b>13.04</b>	<b>23.42</b>	<b>25.97</b>	<b>12.48</b>	<b>16.27</b>	<b>17.00</b>	<b>13.34</b>	<b>-25.21</b>	<b>18.79</b>	<b>56.42</b>	<b>39.39</b>	<b>0.57</b>
Russell 1000 Growth Index	12.81	29.02	27.11	13.73	15.14	15.74	12.92	-29.14	27.60	38.49	36.39	-1.51
+/- Index	0.23	(5.60)	(1.14)	(1.25)	1.13	1.26	0.42	3.93	(8.81)	17.93	3.00	2.08
US Fund Large Growth	30	63	31	20	2	2	N/A	22	68	10	4	26
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	15Yr	2022	2021	2020	2019	2018
<b>Vanguard Mid-Cap Value Index Adm</b>	<b>3.83</b>	<b>3.45</b>	<b>9.54</b>	<b>15.60</b>	<b>7.12</b>	<b>9.63</b>	<b>9.67</b>	<b>-7.90</b>	<b>28.76</b>	<b>2.54</b>	<b>27.99</b>	<b>-12.42</b>
Vanguard US Mid Cap Value Index	3.84	3.46	9.57	15.64	7.14	9.67	9.72	-7.84	28.83	2.50	28.05	-12.42
+/- Index	(0.01)	(0.01)	(0.03)	(0.04)	(0.02)	(0.04)	(0.05)	(0.06)	(0.07)	0.04	(0.06)	0.00
US Fund Mid-Cap Value	63	77	75	61	44	17	N/A	45	47	52	42	36
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	15Yr	2022	2021	2020	2019	2018
<b>Vanguard Extended Market Index Instl Plus</b>	<b>6.46</b>	<b>12.69</b>	<b>15.23</b>	<b>9.29</b>	<b>6.16</b>	<b>9.36</b>	<b>9.20</b>	<b>-26.45</b>	<b>12.48</b>	<b>32.24</b>	<b>28.07</b>	<b>-9.35</b>
Vanguard Extended Market Index	6.40	12.57	15.00	9.16	6.02	9.23	9.09	-26.54	12.35	32.17	27.95	-9.57
+/- Index	0.06	0.12	0.23	0.13	0.14	0.13	0.11	0.09	0.13	0.07	0.12	0.22
US Fund Mid-Cap Blend	15	15	40	88	76	48	N/A	98	95	2	43	29
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	15Yr	2022	2021	2020	2019	2018
<b>Vanguard Mid-Cap Growth Index Adm</b>	<b>5.69</b>	<b>14.93</b>	<b>18.35</b>	<b>8.27</b>	<b>9.66</b>	<b>11.00</b>	<b>9.24</b>	<b>-28.84</b>	<b>20.48</b>	<b>34.48</b>	<b>33.86</b>	<b>-5.60</b>
Vanguard US Mid Cap Growth Index	5.71	14.97	18.40	8.31	9.70	11.06	9.21	-28.83	20.51	34.56	33.93	-5.57
+/- Index	(0.02)	(0.04)	(0.05)	(0.04)	(0.04)	(0.06)	0.03	(0.01)	(0.03)	(0.08)	(0.07)	(0.04)
US Fund Mid-Cap Growth	52	48	52	32	34	43	N/A	55	15	54	49	56

# STATE OF NEVADA

## Combined Retirement Plans

	QTR	YTD	1Yr	Annualized				2022	2021	2020	2019	2018
				3Yr	5Yr	10Yr	15Yr					
<b>Vanguard Instl Total Intl Stock Mkt Index Trust</b>	<b>2.65</b>	<b>9.54</b>	<b>12.48</b>	<b>7.63</b>	<b>3.83</b>	<b>-</b>	<b>-</b>	<b>-15.92</b>	<b>8.73</b>	<b>11.48</b>	<b>21.68</b>	<b>-14.35</b>
Vanguard Total International Stock Index	2.53	9.12	12.51	7.61	3.66	5.09	3.07	-16.10	8.84	11.24	21.81	-14.62
+/- Index	0.12	0.42	(0.03)	0.02	0.17	-	-	0.18	(0.11)	0.24	(0.13)	0.27
US Fund Foreign Large Blend	59	75	83	57	53	100	N/A	50	63	38	58	38
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	15Yr	2022	2021	2020	2019	2018
<b>American Funds EuroPacific Growth R6</b>	<b>2.16</b>	<b>12.25</b>	<b>15.80</b>	<b>5.47</b>	<b>4.29</b>	<b>6.30</b>	<b>4.64</b>	<b>-22.72</b>	<b>2.84</b>	<b>25.27</b>	<b>27.40</b>	<b>-14.91</b>
MSCI ACWI Ex-USA (Net) Index	2.44	9.47	12.72	7.22	3.52	4.75	2.87	-16.00	7.82	10.65	21.51	-14.20
+/- Index	(0.28)	2.78	3.08	(1.75)	0.77	1.55	1.77	(6.72)	(4.98)	14.61	5.89	(0.71)
US Fund Foreign Large Blend	80	30	54	90	37	10	N/A	96	95	2	10	47
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	15Yr	2022	2021	2020	2019	2018
<b>Vanguard Target Retirement Income Trust II</b>	<b>1.36</b>	<b>5.69</b>	<b>4.54</b>	<b>1.74</b>	<b>3.49</b>	<b>4.17</b>	<b>4.57</b>	<b>-12.73</b>	<b>5.25</b>	<b>10.08</b>	<b>13.28</b>	<b>-2.00</b>
Vanguard Retirement Income Index	1.44	5.63	4.79	1.92	3.72	4.35	4.68	-12.44	5.43	10.70	13.40	-1.98
+/- Index	(0.08)	0.06	(0.25)	(0.18)	(0.23)	(0.18)	(0.11)	(0.29)	(0.18)	(0.63)	(0.12)	(0.03)
US Fund Target-Date Retirement	58	42	54	48	29	25	N/A	49	64	29	44	18
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	15Yr	2022	2021	2020	2019	2018
<b>Vanguard Target Retirement 2020 Trust II</b>	<b>2.12</b>	<b>7.01</b>	<b>6.57</b>	<b>3.87</b>	<b>4.66</b>	<b>6.09</b>	<b>5.88</b>	<b>-14.14</b>	<b>8.24</b>	<b>12.10</b>	<b>17.69</b>	<b>-4.19</b>
Vanguard Retirement 2020 Index	2.20	6.97	6.91	4.12	4.96	6.31	6.04	-13.77	8.43	12.86	17.87	-4.14
+/- Index	(0.08)	0.04	(0.34)	(0.25)	(0.30)	(0.22)	(0.16)	(0.37)	(0.19)	(0.76)	(0.18)	(0.05)
US Fund Target-Date 2020	37	31	53	55	29	16	N/A	40	60	38	32	45
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	15Yr	2022	2021	2020	2019	2018
<b>Vanguard Target Retirement 2025 Trust II</b>	<b>2.96</b>	<b>8.45</b>	<b>8.56</b>	<b>5.05</b>	<b>5.35</b>	<b>6.76</b>	<b>6.30</b>	<b>-15.44</b>	<b>9.90</b>	<b>13.39</b>	<b>19.75</b>	<b>-5.07</b>
Vanguard Retirement 2025 Index	3.04	8.41	8.96	5.33	5.66	7.00	6.48	-15.02	10.10	14.19	19.93	-5.01
+/- Index	(0.08)	0.04	(0.40)	(0.28)	(0.31)	(0.24)	(0.18)	(0.42)	(0.20)	(0.79)	(0.18)	(0.07)
US Fund Target-Date 2025	12	10	14	26	15	12	N/A	48	45	29	17	43

# STATE OF NEVADA

## Combined Retirement Plans

	QTR	YTD	1Yr	Annualized				2022	2021	2020	2019	2018
				3Yr	5Yr	10Yr	15Yr					
<b>Vanguard Target Retirement 2030 Trust II</b>	<b>3.62</b>	<b>9.47</b>	<b>10.03</b>	<b>6.13</b>	<b>5.88</b>	<b>7.33</b>	<b>6.63</b>	<b>-16.16</b>	<b>11.46</b>	<b>14.19</b>	<b>21.15</b>	<b>-5.79</b>
Vanguard Retirement 2030 Index	3.64	9.43	10.48	6.43	6.19	7.56	6.82	-15.71	11.65	14.96	21.33	-5.74
+/- Index	(0.02)	0.04	(0.45)	(0.30)	(0.31)	(0.23)	(0.19)	(0.45)	(0.19)	(0.78)	(0.18)	(0.05)
US Fund Target-Date 2030	10	7	16	34	20	18	N/A	43	53	33	35	37
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	15Yr	2022	2021	2020	2019	2018
<b>Vanguard Target Retirement 2035 Trust II</b>	<b>4.10</b>	<b>10.28</b>	<b>11.34</b>	<b>7.30</b>	<b>6.44</b>	<b>7.90</b>	<b>7.05</b>	<b>-16.52</b>	<b>13.07</b>	<b>14.92</b>	<b>22.57</b>	<b>-6.54</b>
Vanguard Retirement 2035 Index	4.13	10.24	11.77	7.59	6.74	8.14	7.22	-16.22	13.24	15.67	22.76	-6.48
+/- Index	(0.03)	0.04	(0.43)	(0.29)	(0.30)	(0.24)	(0.17)	(0.30)	(0.17)	(0.75)	(0.19)	(0.06)
US Fund Target-Date 2035	33	28	43	56	29	23	N/A	35	74	37	45	29
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	15Yr	2022	2021	2020	2019	2018
<b>Vanguard Target Retirement 2040 Trust II</b>	<b>4.63</b>	<b>11.12</b>	<b>12.66</b>	<b>8.43</b>	<b>6.97</b>	<b>8.41</b>	<b>7.44</b>	<b>-16.94</b>	<b>14.68</b>	<b>15.57</b>	<b>23.97</b>	<b>-7.30</b>
Vanguard Retirement 2040 Index	4.62	11.06	13.08	8.75	7.28	8.67	7.61	-16.51	14.85	16.31	24.19	-7.22
+/- Index	0.01	0.06	(0.42)	(0.32)	(0.31)	(0.26)	(0.17)	(0.43)	(0.17)	(0.73)	(0.22)	(0.08)
US Fund Target-Date 2040	52	42	55	62	28	24	N/A	33	78	39	44	32
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	15Yr	2022	2021	2020	2019	2018
<b>Vanguard Target Retirement 2045 Trust II</b>	<b>5.12</b>	<b>11.94</b>	<b>13.96</b>	<b>9.58</b>	<b>7.51</b>	<b>8.77</b>	<b>7.67</b>	<b>-17.33</b>	<b>16.33</b>	<b>16.27</b>	<b>25.07</b>	<b>-7.86</b>
Vanguard Retirement 2045 Index	5.11	11.88	14.37	9.90	7.82	9.02	7.85	-16.84	16.45	17.03	25.36	-7.77
+/- Index	0.01	0.06	(0.41)	(0.32)	(0.31)	(0.25)	(0.18)	(0.49)	(0.12)	(0.76)	(0.29)	(0.10)
US Fund Target-Date 2045	52	41	51	42	22	17	N/A	30	61	35	36	39
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	15Yr	2022	2021	2020	2019	2018
<b>Vanguard Target Retirement 2050 Trust II</b>	<b>5.43</b>	<b>12.42</b>	<b>14.67</b>	<b>9.81</b>	<b>7.66</b>	<b>8.83</b>	<b>7.71</b>	<b>-17.45</b>	<b>16.60</b>	<b>16.42</b>	<b>25.05</b>	<b>-7.83</b>
Vanguard Retirement 2050 Index	5.40	12.34	15.03	10.13	7.96	9.09	7.89	-17.07	16.77	17.18	25.36	-7.77
+/- Index	0.03	0.08	(0.36)	(0.32)	(0.30)	(0.26)	(0.18)	(0.38)	(0.17)	(0.76)	(0.31)	(0.06)
US Fund Target-Date 2050	40	35	44	41	15	18	N/A	28	62	35	42	32

# STATE OF NEVADA

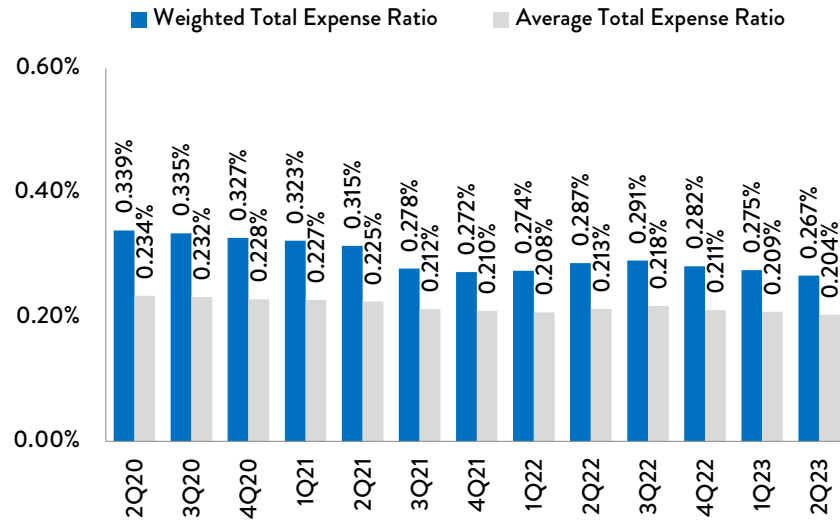
## Combined Retirement Plans

	QTR	YTD	1Yr	Annualized				2022	2021	2020	2019	2018
				3Yr	5Yr	10Yr	15Yr					
<b>Vanguard Target Retirement 2055 Trust II</b>	<b>5.40</b>	<b>12.41</b>	<b>14.67</b>	<b>9.81</b>	<b>7.65</b>	<b>8.82</b>	<b>-</b>	<b>-17.44</b>	<b>16.59</b>	<b>16.41</b>	<b>25.07</b>	<b>-7.85</b>
Vanguard Retirement 2055 Index	5.40	12.34	15.03	10.13	7.96	9.09	-	-17.07	16.77	17.18	25.36	-7.77
+/- Index	0.00	0.07	(0.36)	(0.32)	(0.31)	(0.27)	-	(0.37)	(0.18)	(0.76)	(0.29)	(0.09)
US Fund Target-Date 2055	48	44	50	48	18	21	N/A	25	68	38	43	34
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	15Yr	2022	2021	2020	2019	2018
<b>Vanguard Target Retirement 2060 Trust II</b>	<b>5.40</b>	<b>12.42</b>	<b>14.71</b>	<b>9.83</b>	<b>7.68</b>	<b>8.83</b>	<b>-</b>	<b>-17.41</b>	<b>16.56</b>	<b>16.50</b>	<b>25.09</b>	<b>-7.85</b>
Vanguard Retirement 2060 Index	5.40	12.34	15.03	10.13	7.96	9.09	-	-17.07	16.77	17.18	25.36	-7.77
+/- Index	0.00	0.08	(0.32)	(0.30)	(0.28)	(0.26)	-	(0.34)	(0.21)	(0.68)	(0.27)	(0.09)
US Fund Target-Date 2060	49	46	49	52	18	13	N/A	24	73	38	48	30
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	15Yr	2022	2021	2020	2019	2018
<b>Vanguard Target Retirement 2065 Trust II</b>	<b>5.38</b>	<b>12.41</b>	<b>14.69</b>	<b>9.81</b>	<b>7.68</b>	<b>-</b>	<b>-</b>	<b>-17.40</b>	<b>16.54</b>	<b>16.45</b>	<b>25.11</b>	<b>-7.70</b>
Vanguard Retirement 2065 Index	5.40	12.34	15.03	10.13	7.96	-	-	-17.07	16.77	17.18	25.36	-7.77
+/- Index	(0.02)	0.07	(0.34)	(0.32)	(0.28)	-	-	(0.33)	(0.23)	(0.73)	(0.25)	0.07
US Fund Target-Date 2065+	52	50	55	52	30	-	N/A	18	64	51	59	-
	QTR	YTD	1Yr	3Yr	5Yr	10Yr	15Yr	2022	2021	2020	2019	2018
<b>Vanguard Target Retirement 2070 Trust II</b>	<b>5.44</b>	<b>12.39</b>	<b>14.72</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Vanguard Retirement 2070 Index	5.40	12.34	15.03	-	-	-	-	-	-	-	-	-
+/- Index	0.04	0.05	(0.31)	-	-	-	-	-	-	-	-	-
US Fund Target-Date 2065+	49	50	53	-	-	-	N/A	-	-	-	-	-

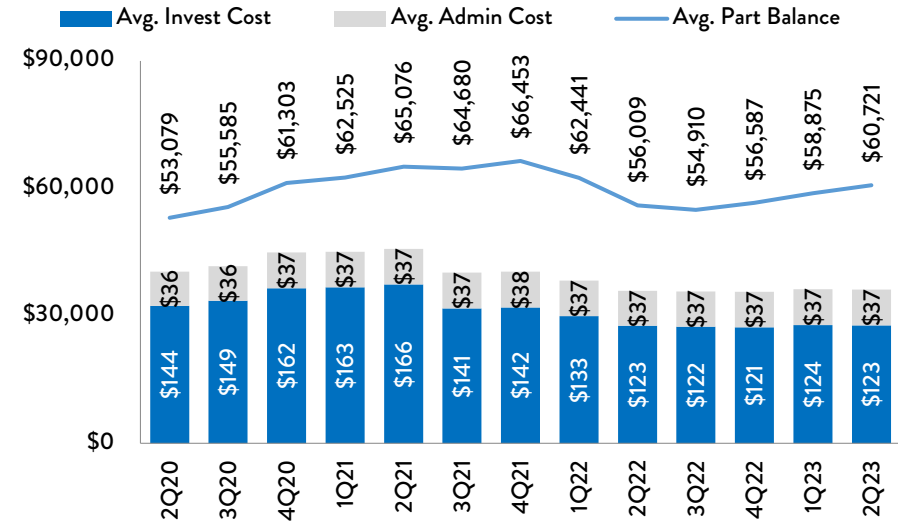
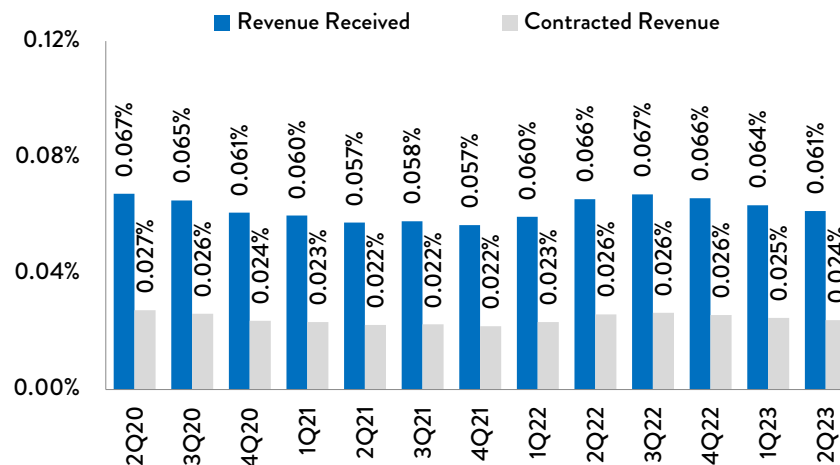
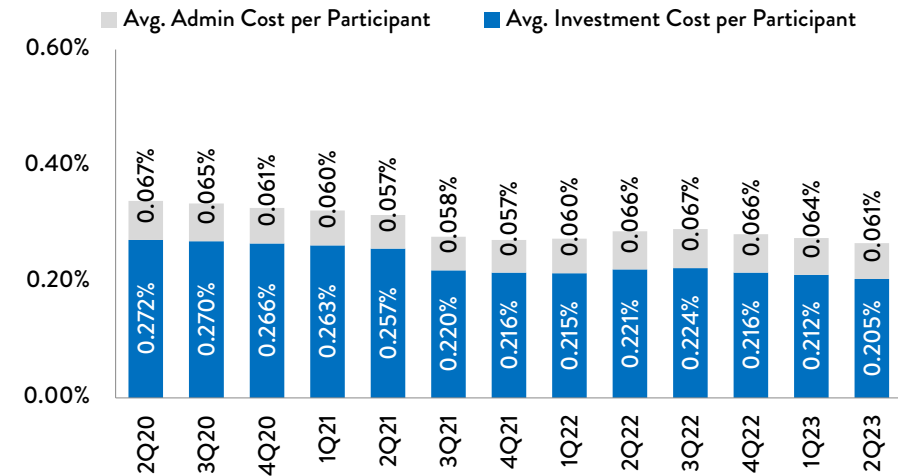


# Section 4

Annualized Plan Cost (%)



Average Participant Balance and Cost (\$)

Annualized Contracted Revenue v. Revenue Received  
(as a % of total assets)Annualized Total Cost Summary  
(as a % of total assets)

\*Administration costs are only charged to accounts with balances over \$1,000. For reporting purposes the total amounts charged are displayed relative to all participant accounts with a balance.

**STATE OF NEVADA**  
Combined 457(b) DC Plans

**PLAN FEE ANALYSIS**  
Second Quarter 2023

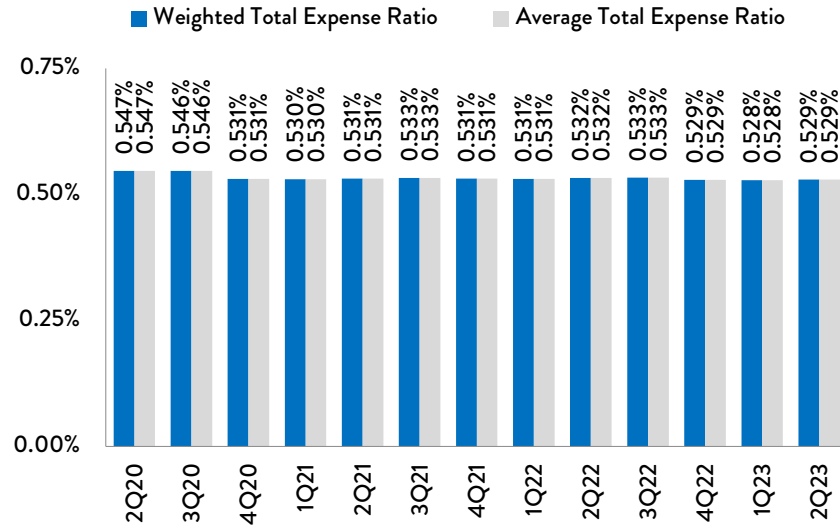
*Annualized*

Fund	Ticker	Quarter End Balance	Net Expense Ratio	Admin Fee	Est. Total Invest. Cost	Est. Total Admin. Cost
Voya Fixed Account	-	\$335,086,688	0.400%	0.06%	\$1,340,347	\$206,017
Vanguard Total Bond Market Index I	VBPIX	\$35,099,556	0.035%	0.06%	\$12,285	\$21,580
Sterling Capital Total Return Bond R6	STRDX	\$1,842,256	0.350%	0.06%	\$6,448	\$1,133
MFS Value R4*	MEIJX	\$21,142,639	0.400%	0.06%	\$84,571	\$12,999
Vanguard Institutional Index Instl Plus	VIIIX	\$145,965,625	0.020%	0.06%	\$29,193	\$89,742
JPMorgan Large Cap Growth R6	JLGMX	\$68,531,697	0.440%	0.06%	\$301,539	\$42,134
Vanguard Mid-Cap Value Index Adm	VMVAX	\$7,830,074	0.070%	0.06%	\$5,481	\$4,814
Vanguard Extended Market Index Instl Plus	VEMPX	\$97,778,572	0.040%	0.06%	\$39,111	\$60,116
Vanguard Mid-Cap Growth Index Adm	VMGMX	\$21,361,933	0.070%	0.06%	\$14,953	\$13,134
Vanguard Instl Total Intl Stock Mkt Index Trust	-	\$43,622,923	0.080%	0.06%	\$34,898	\$26,820
American Funds EuroPacific Growth R6	RERGX	\$6,833,782	0.470%	0.06%	\$32,119	\$4,202
Vanguard Target Retirement Income Trust II	-	\$41,223,057	0.075%	0.06%	\$30,917	\$25,345
Vanguard Target Retirement 2020 Trust II	-	\$12,040,406	0.075%	0.06%	\$9,030	\$7,403
Vanguard Target Retirement 2025 Trust II	-	\$43,884,797	0.075%	0.06%	\$32,914	\$26,981
Vanguard Target Retirement 2030 Trust II	-	\$15,848,061	0.075%	0.06%	\$11,886	\$9,744
Vanguard Target Retirement 2035 Trust II	-	\$53,974,658	0.075%	0.06%	\$40,481	\$33,185
Vanguard Target Retirement 2040 Trust II	-	\$9,252,614	0.075%	0.06%	\$6,939	\$5,689
Vanguard Target Retirement 2045 Trust II	-	\$28,752,731	0.075%	0.06%	\$21,565	\$17,678
Vanguard Target Retirement 2050 Trust II	-	\$6,338,018	0.075%	0.06%	\$4,754	\$3,897
Vanguard Target Retirement 2055 Trust II	-	\$8,347,873	0.075%	0.06%	\$6,261	\$5,132
Vanguard Target Retirement 2060 Trust II	-	\$2,691,491	0.075%	0.06%	\$2,019	\$1,655
Vanguard Target Retirement 2065 Trust II	-	\$1,215,109	0.075%	0.06%	\$911	\$747
Vanguard Target Retirement 2070 Trust II	-	\$259,857	0.075%	0.06%	\$195	\$160
Self-Directed Brokerage Account	-	\$9,244,872	-	0.06%	-	\$5,684
TOTAL		\$1,018,169,287			\$2,068,817	\$625,988

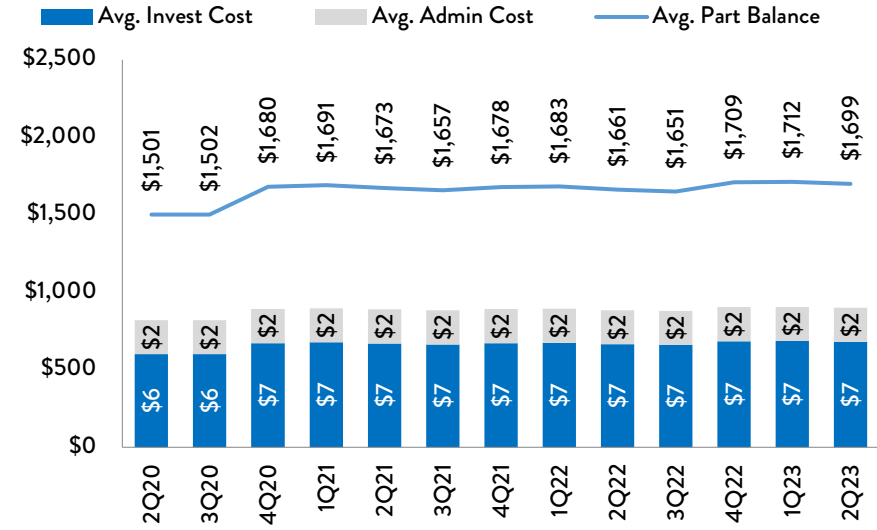
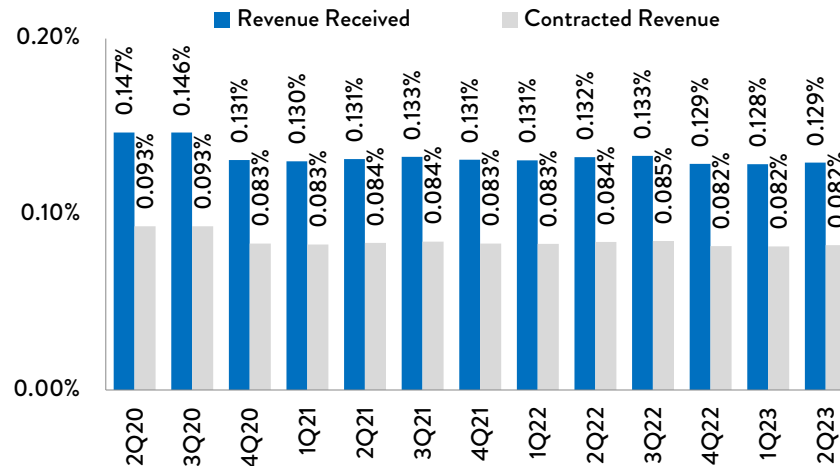
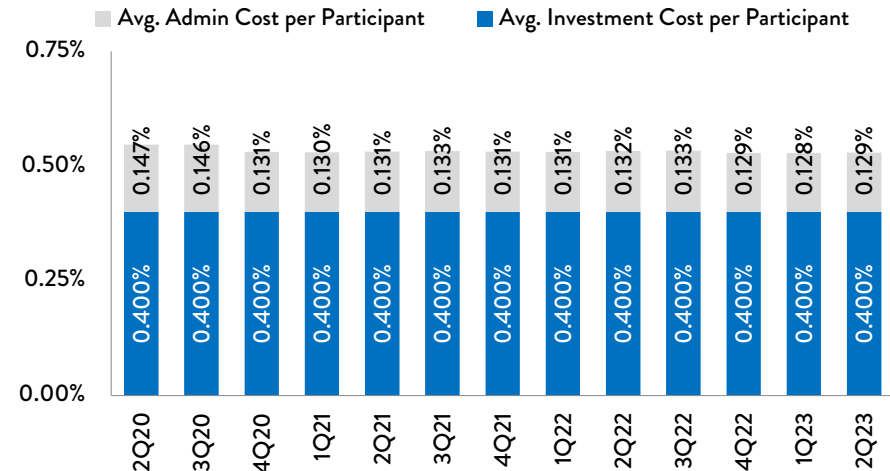
Plan Administration Cost	Quarter	Annualized
Plan Generated Revenue (\$41.00 per ppt with >\$1,000 bal) (est):	\$156,497	\$625,988
Contracted Revenue (\$14.50 per participant) (est):	\$60,777	\$243,107
Net Excess/(Deficit) (est):	\$95,720	\$382,881

\*Revenue derived from funds credited to participant accounts in which they are held. For fee reporting purposes, the credit has been used to offset the reported fund expense ratio.  
An expense ratio of 0.40% was assumed for the Voya Fixed Account.

Annualized Plan Cost (%)



Average Participant Balance and Cost (\$)

Annualized Contracted Revenue v. Revenue Received  
(as a % of total assets)Annualized Total Cost Summary  
(as a % of total assets)

**STATE OF NEVADA**  
FICA Alternative OBRA Plan

**PLAN FEE ANALYSIS**  
Second Quarter 2023

*Annualized*

Fund	Ticker	Quarter End Balance	Net Expense Ratio	Admin Fee	Est. Total Invest. Cost	Est. Total Admin. Cost
Voya Fixed Account - FICA	-	\$60,893,388	0.40%	0.13%	\$243,574	\$78,830
TOTAL		\$60,893,388			\$243,574	\$78,830

Plan Administration Cost	Quarter	Annualized
Plan Generated Revenue (\$2.20 per participant) (est):	\$19,708	\$78,830
Contracted Revenue (\$1.40 per participant) (est):	\$12,541	\$50,165
Net Excess/(Deficit) (est):	\$7,166	\$28,666

An expense ratio of 0.40% was assumed for the Voya Fixed Account.

# Section 5

American Funds  
Europacific Growth R6  
(USD)

Performance 07-31-2023					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2021	-0.43	6.97	-2.35	-1.13	2.84
2022	-12.24	-14.65	-9.33	13.78	-22.72
2023	9.87	2.16	—	—	15.53
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	13.49	4.53	4.45	6.16	8.03
Std 06-30-2023	15.80	—	4.29	6.30	7.86
Total Return	13.49	4.53	4.45	6.16	8.03
+/- Std Index	0.07	-2.56	0.60	1.45	—
+/- Cat Index	2.79	1.78	0.11	0.62	—
% Rank Cat	22	39	52	36	
No. in Cat	449	410	354	242	

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 800-421-4225 or visit [www.americanfunds.com](http://www.americanfunds.com).

Fees and Expenses

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

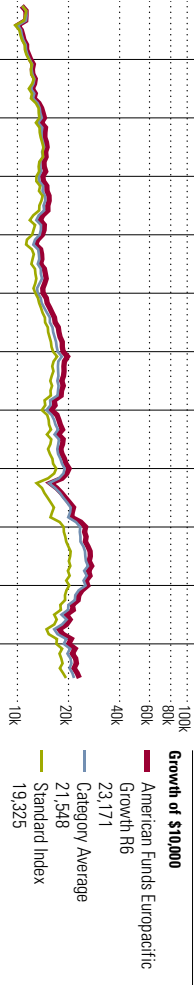
Fund Expenses	
Management Fees %	0.42
1201 Expense %	NA
Net Expense Ratio %	0.47
Gross Expense Ratio %	0.47
Risk and Return Profile	

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

Standard Deviation	18.86	19.18	15.47	10.47
Mean	4.53	4.45	6.16	—
Sharpe Ratio	0.24	0.23	0.39	—

MFT Statistics	Standard Index	Best Fit Index
	Morningstar Gbl xUS Growth TME	NR USD
Alpha	-2.58	1.63
Beta	1.07	1.09
R-Squared	93.87	95.37
12-Month Yield		1.64%
Potential Cap Gains Exp		28.78%

Morningstar Analyst-Driven %	Morningstar Rating™	Standard Index	Category Index	Morningstar Cat
Medalist Rating™ Gold	100.00 Data Coverage % 410 US Fund	MSCI ACWI Ex USA NR	MSCI ACWI Ex USA Growth NR USD	US Fund Foreign Large Growth
07-17-2023	100.00 Foreign Large Growth			



Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	07-23
NAV/Price	41.18	49.03	47.09	45.32	45.04	56.14	44.99	55.55	69.30	64.73	49.03	56.43
Total Return %	19.64	20.58	-2.29	-0.48	1.01	31.17	-14.91	27.40	25.27	2.84	-22.72	15.53
+/- Standard Index	2.81	5.29	1.57	5.18	-3.48	3.98	-0.71	5.89	14.61	-4.99	-6.72	1.60
Investment Style	Equity/Stocks %	90	92	86	89	93	92	92	97	95	94	95
% Rank Cat	22	39	52	36	52	36	52	36	52	36	52	36
No. in Cat	449	410	354	242	237	237	237	237	237	237	237	237

Portfolio Analysis 06-30-2023

Asset Allocation %	Net %	Long %	Short %	Share Chg since 03-2023	Share Amount	Holdings : 377 Total Stocks - 0 Total Fixed-Income, 34% Turnover Ratio	Net Assets %
Cash	4.06	4.13	0.07	—	37.7 mil	AIA Group Ltd	2.35
US Stocks	2.47	2.47	0.00	—	33 mil	Novo Nordisk A/S Class B	3.88
Non-US Stocks	93.05	93.05	0.00	—	5 mil	LVMH Moët Hennessy Louis Vuitton SE	3.24
Bonds	0.00	0.00	0.00	—	5 mil	ASML Holding NV	2.81
Other/Not Csfld	0.42	0.42	0.00	—	110 mil	Reliance Industries Ltd	2.48
Total	100.00	100.07	0.07	—	176 mil	Taiwan Semiconductor Manufacturing	2.37

Equity Style	Portfolio Statistics	Port Avg Index	Rel Index	Rel Cat
Value Blend Growth	P/E Ratio TTM	19.1	1.43	0.86
	P/C Ratio TTM	12.7	1.41	0.82
	P/B Ratio TTM	2.9	1.74	0.88
	Geo Avg Mkt Cap	60813	1.40	1.07

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

Credit Quality Breakdown —

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

Regional Exposure	Stocks %	Rel Std Index
Americas	13.9	1.30
Greater Europe	49.6	1.08
Greater Asia	36.5	0.84

Sector Weightings	Stocks %	Rel Std Index
Cyclical	35.6	0.86
Basic Materials	8.7	1.12
Consumer Cyclical	14.2	1.24
Financial Services	12.2	0.60
Real Estate	0.5	0.24
Sensitive	42.8	1.15
Communication Services	3.8	0.67
Energy	8.2	1.48
Industrials	14.8	1.10
Technology	16.0	1.27
Defensive	21.7	1.02
Consumer Defensive	6.9	0.81
Healthcare	13.8	1.42
Utilities	1.0	0.32

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**American Funds  
Europacific Growth R6  
(USD)**

American Funds Europacific Growth R6 (USD)					
Morningstar Medalist Rating™		Analyst-Driven %		Morningstar Rating™	
★★★★★ Gold		100.00		★★★★★	
07-17-2023		Data Coverage %		410 US Fund	
		100.00		Foreign Large Growth	
Operations					
Family:	American Funds	Ticker:	RENGX	Purchase Constraints:	
Manager:	Multiple	ISIN:	US2987066218	Incept:	
Tenure:	22.2 Years	Minimum Initial Purchase:	\$250	Type:	
Objective:	Foreign Stock	Min Auto Investment Plan:	\$250	Total Assets:	
Base Currency:	USD	Minimum IFA Purchase:	\$25	\$137,273.21 mil	



**JPMorgan Large Cap Growth R6 (USD)**

Performance 07-31-2023											
Quarterly Returns		1st Qtr		2nd Qtr		3rd Qtr		4th Qtr		Total %	
2021	0.40	8.76	0.51	8.23	18.75	2022	-10.21	-18.40	-1.47	3.59	-25.21
2023	9.19	13.04	—	—	—	27.79					
Trailing Returns											
Load-adj Mthly	1 Yr	3 Yr	5 Yr	10 Yr	Incept						
Std 06-30-2023	18.17	10.27	16.81	16.70	16.03						
Total Return	25.97	—	16.27	17.00	15.82						
	18.17	10.27	16.81	16.70	16.03						
+/- Std Index	5.16	-3.44	4.61	4.04	—						
+/- Cat Index	0.86	-1.92	1.57	1.17	—						
% Rank Cat	23	39	4	4	—						
No. in Cat	1214	1116	1031	796	—						
7-day Yield											
30-day SEC Yield											
Subsidized					Unsubsidized						
—					—						
—					—						

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

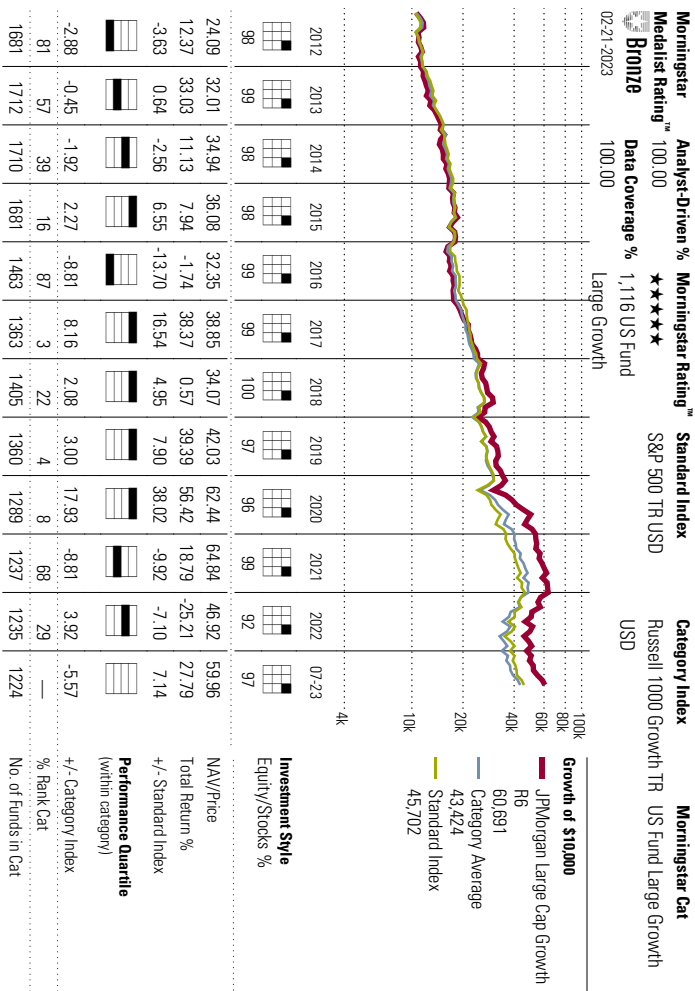
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*Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-480-4111 or visit [www.jpmorganfunds.com](http://www.jpmorganfunds.com).*

Fees and Expenses	
Sales Charges	N/A
Front-End Load %	N/A
Deferred Load %	N/A
Fund Expenses	
Management Fees %	0.45%
12b1 Expense %	N/A
Net Expense Ratio %	0.44%
Gross Expense Ratio %	0.51%
Risk and Return Profile	

Morningstar Rating™	3 Yr	5 Yr	10 Yr
Morningstar Risk	3★	5★	5★
Morningstar Return	-Avg Avg	+Avg High	+Avg High
Standard Deviation	3 Yr	5 Yr	10 Yr
Mean	19.74	21.43	17.33
Sharpe Ratio	10.27	16.81	16.70
	0.51	0.75	0.92
MPT Statistics	Standard Index	Best Fit Index	
Alpha	-3.05		7th USFT
Beta	1.02		
R-Squared	87.45		
12-Month Yield			
Potential Cap Gains Exp			

<b>Operations</b>	
Family:	JPMorgan
Manager:	Multiple
Tenure:	19.0 Years
Objective:	Growth

















Portfolio Analysis 06-30-2023			Top Holdings 05-31-2023			Net Assets %
Asset Allocation % 05-31-2023	Net %	Long %	Short %	Share Cng since 05-2023	Share Amount	Holdings: 70 Total Stocks, 5 Total Fixed-Income, 50% Turnover Ratio
Cash	4.50	4.50	0.00			
US Stocks	92.54	92.54	0.00		20 mil	Microsoft Corp
Non-US Stocks	2.96	2.96	0.00		34 mil	Apple Inc
Bonds	0.00	0.00	0.00		8 mil	NVIDIA Corp
Other/Not Cstd	0.00	0.00	0.00		22 mil	Alphabet Inc Class C
Total	100.00	100.00	0.00	⊕		

Equity Style	Portfolio Statistics						
	Value			Bread		Growth	
	Large	Mid	Small	P/E Ratio TTM	Port Index	Rel Index	Ne Index
				32.6	1.40	1.05	1.08
				P/C Ratio TTM	22.9	1.40	1.06
				P/B Ratio TTM	9.3	2.27	1.22
			Geo Avg Mkt Cap	352152	1.53	0.92	\$mil

	Low	Med	Ext
Avg Eff Maturity	High		
Avg Eff Duration	Med		
Avg Wtd Coupon			
Avg Wtd Price	Low		

Credit Quality Breakdown —		Bond %
AAA		—
AA		—
A		—
BBB		—
BB		—
B		—
Below B		—
NR		—
<b>Regional Exposure</b>	Stocks %	Rel Std Index
Americas	99.2	1.00
Greater Europe	0.8	1.57
Greater Asia	0.0	0.00

Sector	Weightings	Stocks %	Real Std Index
 <b>Cyclical</b>		<b>20.8</b>	<b>0.75</b>
 Basic Materials	1.1	0.49	1.52
 Consumer Cyclical	16.3	1.57	0.28
 Financial Services	3.4	0.00	0.00
 Real Estate	0.0		
 <b>Sensitive</b>		<b>65.3</b>	<b>1.30</b>
 Communication Services	12.2	1.40	0.27
 Energy	1.1	0.41	1.69
 Industrials	3.4		
 Technology	48.5		
 <b>Defensive</b>		<b>13.9</b>	<b>0.62</b>
 Consumer Defensive	1.6	0.24	0.94
 Healthcare	12.3	0.00	
 Utilities	0.0		

Purchase Constraints:	A
Incept:	11-30-2010
Type:	MF
Total Assets:	\$63,027.93 mil

MFS Value R4 (USD)

Performance 07-31-2023						
Quarterly Returns		1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2021		8.66	5.63	0.65	8.57	25.42
2022		-3.64	-9.91	-4.58	13.58	-5.90
2023		-1.46	3.60	—	—	4.74
Trailing Returns		1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly		6.69	12.33	8.26	9.38	8.44
Std 06-30-2023		10.64	—	8.77	9.71	8.33
Total Return		6.69	12.33	8.26	9.38	8.44
+/- Std Index		-6.32	-1.39	-3.94	-3.28	—
+/- Cat Index		-1.59	-1.81	0.25	0.36	—
% Rank Cat		71	79	46	35	—
No. in Cat		1221	1137	1084	813	—
7-day Yield		Subsidized		Unsubsidized		
30-day SEC Yield 06-30-23		—		1.76 <sup>1</sup>		
1 Contractual waiver, Expires 12-31-2023				1.75		

**Performance Disclosure**  
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Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-225-2806 or visit <http://www.mfs.com>.

Fees and Expenses

Sales Charges	
Front-End Load %	NA
Deferred Load %	NA
Fund Expenses	
Management Fees %	0.43
12b1 Expense %	NA
Net Expense Ratio %	0.55
Gross Expense Ratio %	0.56
Risk and Return Profile	

3 Yr 5 Yr 10 Yr  
1,137 funds 1,084 funds 813 funds

Morningstar Rating™	2★	3★	4★
Morningstar Risk	-Avg	-Avg	-Avg
Morningstar Return	-Avg	Avg	Avg

Standard Deviation	16.44	17.93	14.48
Mean	12.33	8.26	9.38
Shape Ratio	0.68	0.44	0.62
MFT Statistics	Standard Index	Best Fit Index	Morningstar US LM
Alpha	0.53	-2.00	0.53
Beta	0.84	0.95	0.84
R-Squared	84.29	97.19	84.29
12-Month Yield	1.70%		
Potential Cap Gains Exp	45.93%		

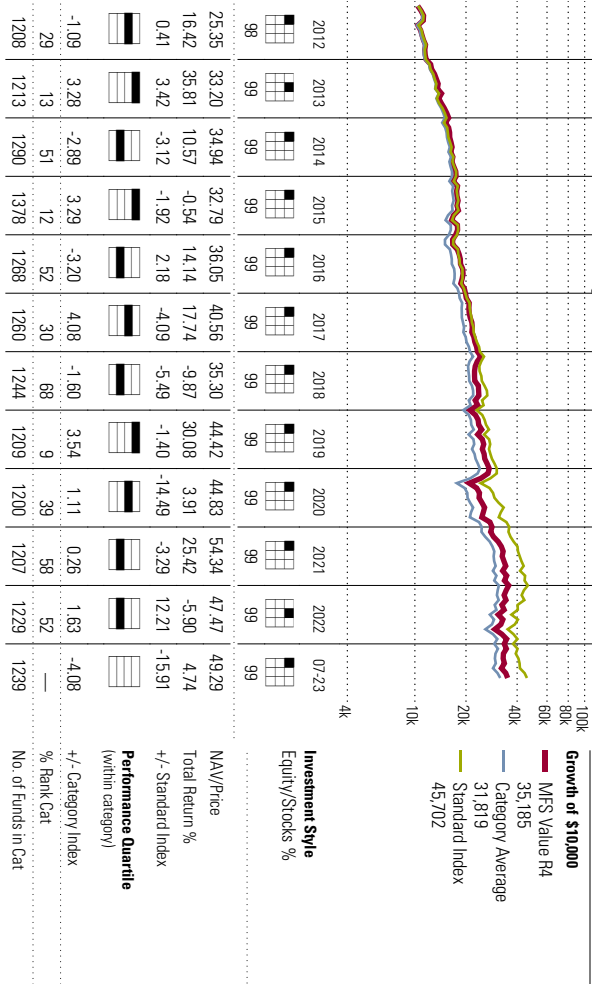
Operations

Family:	MFS
Manager:	Multiple
Tenure:	17.3 Years
Objective:	Growth

Base Currency:	USD
Ticker:	MEUX
ISIN:	US55273H6356
Minimum Initial Purchase:	\$0

Purchase Constraints:	A
Incept:	04-01-2005
Type:	MF
Total Assets:	\$58,483.30 mil

Morningstar Medalist Rating™	Analyst-Driven %	Morningstar Rating™	Standard Index	Category Index	Morningstar Cat
★★★★★ Gold	100.00	★★★★★	Russell 1000 Value TR	US Fund Large Value	
Data Coverage %	1,137 US Fund				
08-02-2023	100.00	Large Value			



Portfolio Analysis 06-30-2023					
Asset Allocation %			Share Chg		
Cash	0.50	0.50	0.00	since 05-2023	Amount
US Stocks	91.59	91.59	0.00	12% Turnover Ratio	74 Total Stocks, 0 Total Fixed-Income.
Non-US Stocks	7.91	7.91	0.00	16 mil	JPMorgan Chase & Co
Bonds	0.00	0.00	0.00	10 mil	Johnson & Johnson
Other/Not Cstfd	0.00	0.00	0.00	5 mil	Aon PLC Class A
Total	100.00	100.00	0.00	6 mil	The Cigna Group
				8 mil	Marsh & McLennan Companies Inc
Equity Style			Portfolio Statistics		
Value	Brand	Growth	P/E Ratio TTM	Port Avg Index	Rel Cat
Large	Mid	Ext	P/C Ratio TTM	18.2	0.78
Mid	Mid	Small	P/B Ratio TTM	13.3	0.81
Small	Mid	Small	Geo Avg Mkt Cap	2.8	0.69
				97292	0.42
					0.81

Fixed-Income Style			Credit Quality Breakdown		
Int	Med	Ext	Avg Eff Maturity	Avg Eff Duration	Avg Wtd Coupon
High	Mid	Low	Avg Wtd Coupon		

Sector Weightings			Stocks %		
Cyclical	34.5	1.25	Basic Materials	3.8	1.66
Consumer Cyclical	3.7	0.34	Financial Services	25.0	2.06
Real Estate	2.1	0.85	Communication Services	3.6	0.41
Energy	4.9	1.13	Industrials	16.2	1.95
Technology	8.6	0.30	Defensive	32.2	1.45
Consumer Defensive	7.5	1.14	Healthcare	17.3	1.32
Utilities	7.4	2.91			

Release date 07-31-2023 | Note: Portions of the analysis are based on pre-inception returns. Please read disclosure for more information.

Sterling Capital Total  
Return Bond R6 (USD)

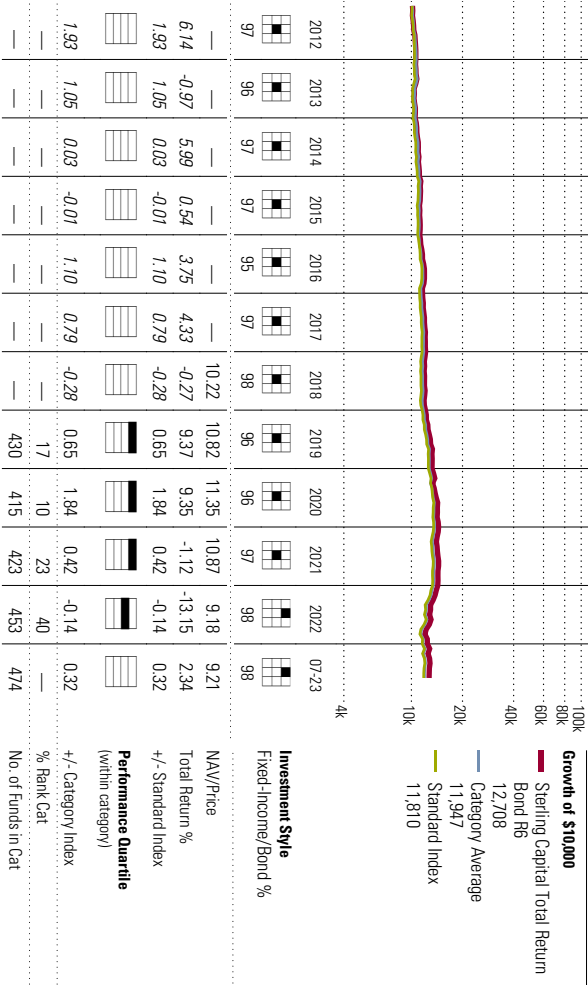
Performance 07-31-2023						
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %	
2021	-3.00	2.16	0.04	-0.26	-1.12	
2022	-6.15	-4.69	-4.42	1.57	-13.15	
2023	3.01	-0.53	—	—	2.34	
Trailing Returns	1Yr	3Yr	5Yr	10Yr	Incept	
Load-adj Mthly	-2.60	-3.79	1.26	—	1.06	
Std 06-30-2023	-0.52	—	1.29	—	1.10	
Total Return	-2.60	-3.79	1.26	2.02	1.06	
+/- Std Index	0.77	0.67	0.52	0.52	—	
+/- Cat Index	0.77	0.67	0.52	0.52	—	
% Rank Cat	23	20	12	6		
No. in Cat	469	418	381	278		
7-day Yield 08-02-23	Subsidized		Unsubsidized			
	0.41 <sup>1</sup>		—			
30-day SEC Yield 06-30-23	4.03 <sup>1</sup>		3.98			
Contractual waiver, Expires 01-31-2024						

**Performance Disclosure**  
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Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-228-1872 or visit [www.sterlingcapitalfunds.com](http://www.sterlingcapitalfunds.com).

Fees and Expenses				
Sales Charges				
Front-End Load %	NA			
Deferred Load %	NA			
Fund Expenses				
Management Fees %	0.25			
12bt Expense %	0.00			
Net Expense Ratio %	0.35			
Gross Expense Ratio %	0.48			
Risk and Return Profile				
Morningstar Rating™	3 Yr 418 funds 4★	5 Yr 381 funds 4★	10 Yr 278 funds 5★	
Morningstar Risk	-Avg			
Morningstar Return	+Avg			
	3 Yr	5 Yr	10 Yr	
Standard Deviation	5.68	5.46	4.23	
Mean	-3.79	1.26	2.02	
Sharpe Ratio	-0.97	-0.06	0.23	
MPT Statistics				
	Standard Index	Best Fit Index		
Alpha	0.19	Bloomberg US		
Beta	0.92	Universal TR USD		
R-Squared	97.12	97.57		
12-Month Yield	3.29%			
Potential Cap Gains Exp	-19.17%			



Portfolio Analysis 06-30-2023									
Asset Allocation %				Share Chg since 05-2023		Net Assets %			
Cash	1.26	1.87	0.61	Amount	Holdings : 0 Total Stocks, 281 Total Fixed-Income, 48% Turnover Ratio				
US Stocks	0.00	0.00	0.00	68 mil	United States Treasury Notes 4.125%	6.55%			
Non-US Stocks	0.00	0.00	0.00	53 mil	United States Treasury Bonds 2.5%	3.88%			
Bonds	98.48	98.48	0.00	52 mil	United States Treasury Bonds 1.375%	2.86%			
Other/Not Cstfd	0.26	0.26	0.00	20 mil	Federated Hermes Treasury 0bl IS	1.87%			
Total	100.00	100.61	0.61	21 mil	United States Treasury Notes 2.625%	1.86%			
Equity Style				Portfolio Statistics					
Value	Blend	Growth		21 mil	ONEWMAN FINANCIAL ISSUANCE TRUST 1	1.70%			
			Large	15 mil	Fmma Pass-Thru I	1.33%			
				16 mil	HERTZ VEHICLE FINANCING III LLC 1.	1.29%			
			Mid	13 mil	ONEMAN DIRECT AUTO RECEIVABLES TR	1.20%			
			Small	12 mil	Federal Home Loan Mortgage Corpora	1.10%			
				12 mil	Fmma Pass-Thru 3.5%	1.04%			
Fixed-Income Style				10 mil	Federal Home Loan Mortgage Corpora	0.97%			
Ltd	Med	Ext		12 mil	Federal National Mortgage Associat	0.94%			
			High	11 mil	Fmma Pass-Thru 3%	0.93%			
			Med	10 mil	Fmma Pass-Thru I	0.93%			
			Low						
Sector Weightings				Stocks %		Rel Std Index			

Please date 07-31 -2023 | Note: Portions of the analysis are based on pre-inception returns. Please read disclosure for more information.

Sterling Capital Total Return Bond R6 (USD)		Morningstar Analyst-Driven %	Morningstar Rating™	Standard Index	Category Index	Morningstar Cat
		Medalist Rating™	10.00	★★★★	Bloomberg US Agg	US Fund Intermediate
		Neutral	Data Coverage %	418 US Fund	Bond TR USD	Core Bond
		06-30-2023	100.00	Intermediate Core Bond		

Operations		Ticker:	STRDX	Incept	02-01 -2018
Family:	Sterling Capital Funds	ISIN:	US859180D242	Type:	MF
Manager:	Multiple	Minimum Initial Purchase:	\$10 mil	Total Assets:	\$1,049,24 mil
Tenure:	15.6 Years	Min Auto Investment Plan:	\$10 mil		
Objective:	Growth and Income	Purchase Constraints:	A		
Base Currency:	USD				

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Vanguard Institutional Index Instl PI (USD)

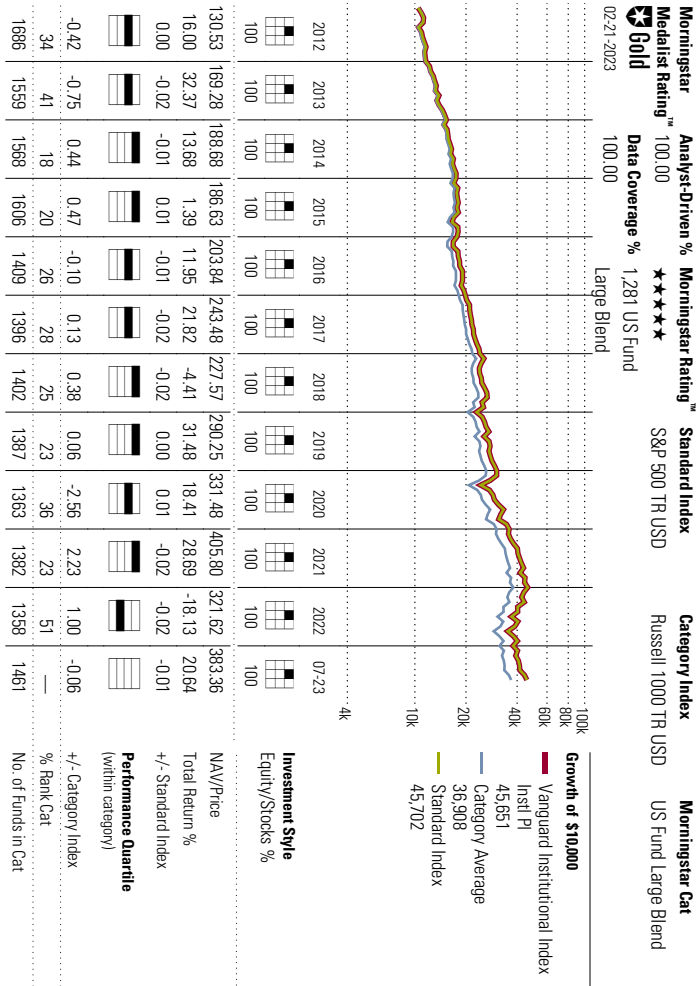
Performance 07-31-2023					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2021	6.18	8.54	0.57	11.02	28.69
2022	-4.61	-16.11	-4.89	7.55	-18.13
2023	7.49	8.74	—	—	20.64
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	12.99	13.70	12.18	12.65	8.42
Std 06-30-2023	19.57	—	12.29	12.85	8.31
Total Return	12.99	13.70	12.18	12.65	8.42
+/- Std Index	-0.02	-0.02	-0.01	-0.01	—
+/- Cat Index	0.05	0.48	0.26	0.21	—
% Rank Cat	30	30	17	9	—
No. in Cat	1427	1281	1179	873	—
7-day Yield	Subsidized		Unsubsidized		
30-day SEC Yield 08-01-23	1.50		1.50		

**Performance Disclosure**  
The Overall Morningstar Rating is based on risk-adjusted returns, derived from a weighted average of the three-, five-, and 10-year (if applicable) Morningstar metrics.  
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Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 888-809-8102 or visit www.vanguard.com.  
**Fees and Expenses**

Sales Charges			
Front-End Load %	NA		
Deferred Load %	NA		
Fund Expenses			
Management Fees %	0.02		
12b1 Expense %	NA		
Net Expense Ratio %	0.02		
Gross Expense Ratio %	0.02		
Risk and Return Profile			
Morningstar Rating™	3 Yr	5 Yr	10 Yr
	1,281 funds	1,179 funds	873 funds
	4★	4★	5★
	Avg	Avg	Avg
Morningstar Risk	Avg		
Morningstar Return	+Avg		
Standard Deviation	3 Yr	5 Yr	10 Yr
	18.04	18.78	14.89
	13.70	12.18	12.65
	0.71	0.62	0.80
Sharpe Ratio	0.80		
MPT Statistics		Best Fit Index	
	Standard Index	S&P 500 TR USD	
Alpha	-0.02	-0.02	
Beta	1.00	1.00	
R-Squared	100.00	100.00	
12-Month Yield	1.51%		
Potential Cap Gains Exp	59.50%		

Operations

Family: Vanguard  
Manager: Multiple  
Tenure: 22.7 Years  
Objective: Growth and Income



Portfolio Analysis 06-30-2023			
Asset Allocation %			
Cash	Net %	Long %	Short %
US Stocks	0.20	0.20	0.00
Non-US Stocks	99.26	99.26	0.00
Bonds	0.54	0.54	0.00
Other/Not Csfld	0.00	0.00	0.00
Total	100.00	100.00	0.00

Equity Style			
Value	Brand	Growth	
Large	Mid	Ext	
High	Mid	Ext	
Avg Eff Maturity	Avg Eff Duration		
Avg Eff Duration	Avg Wid Coupon		
Avg Wid Coupon	Avg Wid Price		

Credit Quality Breakdown —		
AAA		Bond %
AA		—
A		—
BBB		—
BB		—
B		—
Below B		—
NR		—
Regional Exposure		
Americas	Stocks %	Rel Std Index
Greater Europe	99.5	1.00
Greater Asia	0.5	0.99
	0.0	1.00

Sector Weightings			
1. Cyclical	Stocks %	Rel Std Index	
Basic Materials	27.5	1.00	
Consumer Cyclical	2.3	1.00	
Financial Services	10.8	1.01	
Real Estate	11.9	0.98	
	2.5	1.01	
2. Sensitive	Stocks %	Rel Std Index	
Communication Services	49.8	0.99	
Energy	8.4	0.97	
Industrials	4.1	0.96	
Technology	8.4	1.00	
	28.9	1.01	
3. Defensive	Stocks %	Rel Std Index	
Consumer Defensive	22.7	1.02	
Healthcare	6.6	1.01	
Utilities	13.5	1.02	
	2.6	1.01	

Purchase Constraints: —  
Incept: 07-07-1997  
Type: MF  
Total Assets: \$254,069.64 mil



# Vanguard Institutional Total International Stock Market Index Trust

International stock fund

Fund facts

Risk level					Total net assets		Inception date	Fund number
Low ← → High					\$23.214 MM		06/24/16	
1	2	3	4	5				2069

Investment objective

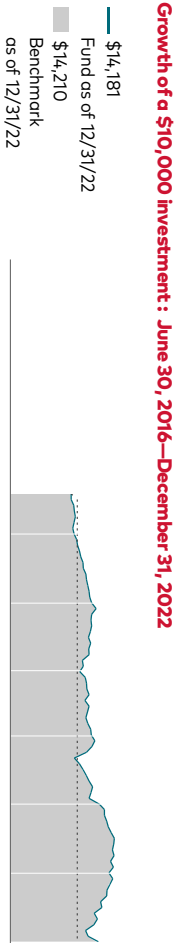
Vanguard Institutional Total International Stock Market Index Trust seeks to track the performance of a benchmark index that measures the investment return of stocks issued by companies located in developed and emerging markets, excluding the United States.

Investment strategy

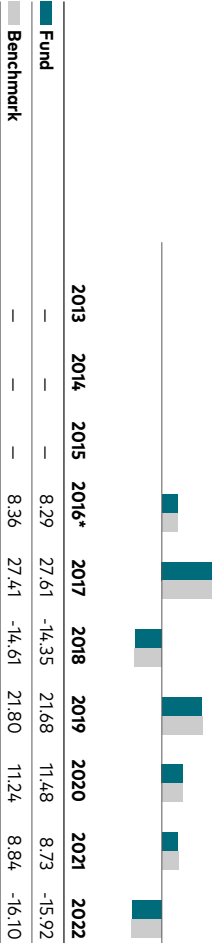
The trust portfolio employs an indexing investment approach designed to track the performance of the FTSE Global All Cap ex US Index, a free-float-adjusted market-capitalization-weighted index designed to measure equity market performance of companies located in developed and emerging markets, excluding the United States. The index includes more than 5,300 stocks of companies located in 46 countries. The trust invests substantially all of its assets in the common stocks included in its target index.

Benchmark

FTSE Global All Cap ex US Index



Annual returns

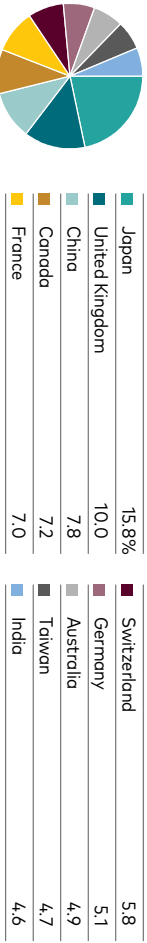


Total returns

Periods ended June 30, 2023						
Quarter	Year to date	One year	Three years	Five years	Since inception	
Fund	2.65%	9.54%	12.47%	7.63%	3.83%	7.00%
Benchmark	2.53%	9.12%	12.51%	7.61%	3.66%	—

The performance data shown represent past performance, which is not a guarantee of future results. Investment returns and principal value will fluctuate, so investors' shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than the performance data cited. For performance data current to the most recent month-end, visit our website at [vanguard.com/performance](https://vanguard.com/performance). The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index. Figures for periods of less than one year are cumulative returns. All other figures represent average annual returns. Performance figures include the reinvestment of all dividends and any capital gains distributions. All returns are net of expenses.

Market allocation—stocks



\* Partial return since fund started, June 24, 2016.  
FTSE Global All Cap ex US Index: Consists of large-, mid-, and small-cap stocks globally, excluding the U.S. The index is derived from the FTSE Global Equity Index Series (GEIS), which covers approximately 98% of the world's investable market capitalization. Index returns are adjusted for withholding taxes.

# Vanguard Institutional Total International Stock Market Index Trust

International stock fund

Ten largest holdings\*

1	Taiwan Semiconductor Manufacturing Co. Ltd.
2	Nestle SA
3	Samsung Electronics Co. Ltd.
4	ASML Holding NV
5	Tencent Holdings Ltd.
6	Novo Nordisk A/S
7	LVMH Moët Hennessy Louis Vuitton SE
8	Roche Holding AG
9	AstraZeneca plc
10	Shell plc
Top 10 as % of total net assets	
9.7%	

\* The holdings listed exclude any temporary cash investments and equity index products.

Sector Diversification



Financials	19.0%	Basic Materials	7.3
Industrials	15.4	Energy	5.5
Consumer Discretionary	13.9	Telecommunications	4.0
Technology	11.9	Utilities	3.4
Health Care	9.1	Real Estate	3.0
Consumer Staples	7.4	Other	0.1

Sector categories are based on the Industry Classification Benchmark system ("ICB"), except for the "Other" category (if applicable), which includes securities that have not been provided an ICB classification as of the effective reporting period.

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Plain talk about risk

An investment in the trust portfolio could lose money over short or even long periods. You should expect the trust portfolio's share price and total return to fluctuate within a wide range, like the fluctuations of the overall stock market. The trust portfolio's performance could be hurt by:

**Stock market risk:** The chance that stock prices overall will decline. Stock markets tend to move in cycles, with periods of rising stock prices and periods of falling stock prices. The fund's investments in foreign stocks can be riskier than U.S. stock investments. Foreign stocks tend to be more volatile and less liquid than U.S. stocks. The prices of foreign stocks and the prices of U.S. stocks may move in opposite directions. In addition, the fund's target index may, at times, become focused in stocks of a particular market sector, which would subject the fund to proportionately higher exposure to the risks of that sector.

**Country/regional risk:** The chance that world events—such as political upheaval, financial troubles, or natural disasters—will adversely affect the value of securities issued by companies in foreign countries or regions. Because the fund may invest a large portion of its assets in securities of companies located in any one country or region, its performance may be hurt disproportionately by the poor performance of its investments in that area. Country/regional risk is especially high in emerging markets.

**Currency risk:** The chance that the value of a foreign investment, measured in U.S. dollars, will decrease because of unfavorable changes in currency exchange rates.

**Investment style risk:** The chance that returns from small- and mid-capitalization stocks, to the extent that the fund invests in them, will trail returns from the overall stock market. Historically, these stocks have been more volatile in price than the large-cap stocks that dominate the overall market, and they often perform quite differently.

**Emerging markets risk:** The chance the stocks of companies located in emerging markets will be substantially more volatile, and substantially less liquid, than the stocks of companies located in more developed foreign markets.

Note on frequent trading restrictions

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

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

**For more information about Vanguard funds or to obtain a prospectus, see below for which situation is right for you.**

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Visit [vanguard.com](https://www.vanguard.com) to obtain a prospectus or, if available, a summary prospectus. Investment objectives, risks, charges, expenses, and other important information about a fund are contained in the prospectus; read and consider it carefully before investing.



Vanguard Mid-Cap Growth Index Admiral (USD)

Performance 07-31-2023					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2021	1.25	10.25	0.16	7.76	20.48
2022	-12.32	-21.19	-2.58	5.69	-28.84
2023	8.74	5.69	—	—	18.76
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	9.36	6.88	9.97	10.74	12.41
Std 06-30-2023	18.35	—	9.66	11.00	12.19
Total Return	9.36	6.88	9.97	10.74	12.41
+/- Std Index	-3.65	-6.94	-2.23	-1.92	—
+/- Cat Index	-3.67	0.93	0.07	-0.45	—
% Rank Cat	50	44	28	41	
No. in Cat	562	522	490	383	
7-day Yield	Subsidized		Unsubsidized		
30-day SEC Yield 08-02-23	0.80		0.80		

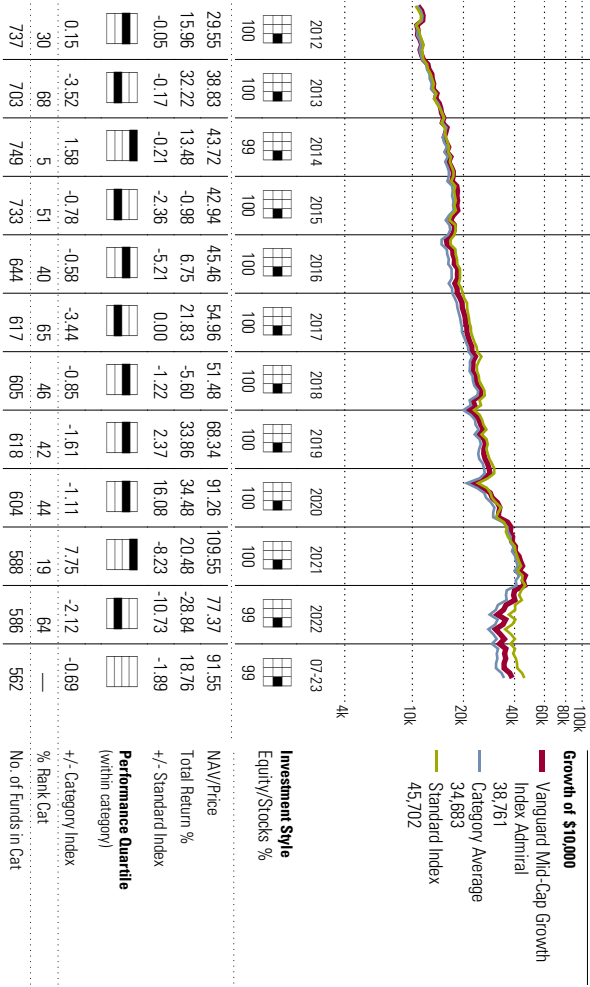
**Performance Disclosure**  
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Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 800-662-7447 or visit www.vanguard.com. Fees and Expenses

Sales Charges			
Front-End Load %	NA		
Deferred Load %	NA		
Fund Expenses			
Management Fees %	0.06		
1201 Expense %	NA		
Net Expense Ratio %	0.07		
Gross Expense Ratio %	0.07		
Risk and Return Profile			
Morningstar Rating™	3 Yr	5 Yr	10 Yr
	522 funds	490 funds	383 funds
	3★	4★	3★
	Avg	Avg	Avg
Morningstar Risk	Avg		
Morningstar Return	+Avg		
Standard Deviation	3 Yr	5 Yr	10 Yr
	21.08	22.12	17.32
	6.88	9.97	10.74
	Avg	Avg	Avg
Mean	6.88		
Sharpe Ratio	0.34	0.46	0.61
MPT Statistics		Standard Index	Best Fit Index
Alpha	Morningstar US Mid		Morningstar US Mid
	Brd Gr TR USD		Brd Gr TR USD
	-6.62		-0.96
	1.08		1.04
Beta	NR		
R-Squared	84.71	98.96	
12-Month Yield	0.70%		
Potential Cap Gains Exp	-5.15%		

Operations	
Family:	Vanguard
Manager:	Multiple
Tenure:	10.5 Years
Objective:	Growth

Morningstar Medalist Rating™	Analyst-Driven %	Morningstar Rating™
★★★★ Gold	100.00	★★★★
01-23-2023	Data Coverage % 522 US Fund Mid-Cap Growth	



Portfolio Analysis 06-30-2023									
Asset Allocation %					Net %				
Cash	0.57	0.57	0.00	0.00	0.57	0.57	0.00	0.00	0.00
US Stocks	98.24	98.24	0.00	0.00	98.24	98.24	0.00	0.00	0.00
Non-US Stocks	1.19	1.19	0.00	0.00	1.19	1.19	0.00	0.00	0.00
Bonds	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other/Not Cstfd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	100.00	100.00	100.00	0.00	100.00	100.00	0.00	0.00	0.00
Equity Style					Portfolio Statistics				
Value	Brand	Growth	Port Avg	Rel Index	Port Avg	Rel Index	Rel Cat	Share Clng	Share Holdings
Large	Mid	Small	P/E Ratio TTM	25.3	1.09	0.96	0.00	Amount	161 Total Stocks, 0 Total Fixed-Income.
			P/C Ratio TTM	18.1	1.11	0.94	0.00	22 % Turnover Ratio	
			P/B Ratio TTM	5.1	1.23	1.08	0.00		
			Geo Avg Mkt Cap	27131	0.12	1.43	0.00		

Fixed-Income Style					Credit Quality Breakdown				
High	Med	Ext	Avg Eff Maturity	—	AAA	—	Bond %		
			Avg Eff Duration	—	AA	—	—		
			Avg Wtd Coupon	—	A	—	—		
			Avg Wtd Price	—	BBB	—	—		
				—	BB	—	—		
				—	B	—	—		
				—	Below B	—	—		
				—	NR	—	—		
Regional Exposure					Stocks %	Rel Std Index	1.01		
Americas	100.0	0.0	0.00	0.00	Greater Europe	0.0	0.00		
Greater Europe	0.0	0.0	0.00	0.00	Greater Asia	0.0	0.00		
Greater Asia	0.0	0.0	0.00	0.00					

Sector Weightings					Stocks %	Rel Std Index
1. Cyclical	25.3	3.4	1.49	0.91		
Basic Materials	9.8	0.92	0.45	2.69		
Consumer Cyclical	5.4	0.45	0.45	2.69		
Financial Services	6.7	0.45	0.45	2.69		
Real Estate	6.7	0.45	0.45	2.69		
1. Sensitive	57.5	5.1	0.58	1.15		
Communication Services	5.1	0.58	0.58	1.15		
Energy	6.0	1.40	1.40	1.15		
Industrials	16.6	2.00	2.00	1.15		
Technology	29.8	1.04	1.04	1.15		
1. Defensive	17.2	1.8	0.28	0.77		
Consumer Defensive	1.8	0.28	0.28	0.77		
Healthcare	15.4	1.17	1.17	0.77		
Utilities	0.0	0.00	0.00	0.77		

Purchase Constraints:	
Incept:	09-27-2011
Type:	M/F
Total Assets:	\$11,105.63 mil

Category Index	Morningstar Cat
Russell Mid Cap Growth	US Fund Mid-Cap Growth
TR USD	

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**Fees and Expenses**

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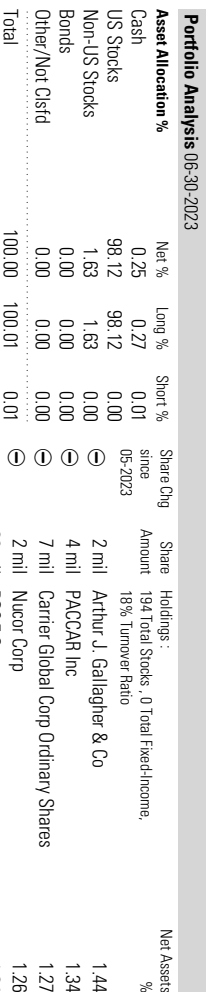
Front-End Load %	NA
Deferred Load %	NA

Net Expense Ratio %	0.07
Gross Expense Ratio %	0.07

Morningstar Rating™	3Yr 380 funds	5Yr 362 funds	10Yr 271 funds
Morningstar Risk	2★	3★	4★
Morningstar Return	-Avg	Avg	+Avg

MPT Statistics	Standard Index	Best Fit Index
Alpha	2.29	-0.91
Beta	0.92	0.98
R-Squared	77.33	99.29

<b>Operations</b>	Vanguard
Family:	Multiple
Manager:	17.0 Years
Tenure:	Growth
Objective:	



	Ltd	Maid	Ext	
Avg Eff Maturity				—
Avg Eff Duration				—
Avg Wtd Coupon				—
Avg Wtd Price				—

Order number	Order date
AAA	—
AA	—
A	—
BBB	—

Americas	98.4	0.99
Greater Europe	1.3	2.46
Greater Asia	0.4	11.65

[illegible]

MORNINGSTAR®



# Vanguard Target Retirement 2020 Trust II

Balanced fund (stocks and bonds)

Fund facts

Risk level					Total net assets	Expense ratio as of 03/31/21	Inception date	Fund number
Low	2	3	4	High				
1	2	3	4	5	\$6.814 MM	0.075%	02/29/08	14,74

Investment objective

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

Investment strategy

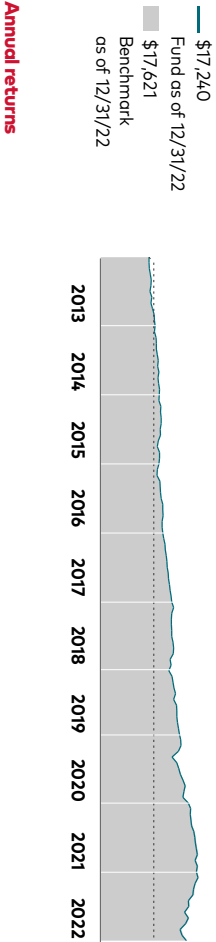
The trust invests in other Vanguard mutual funds and trusts according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2020 (the target year). The trust's asset allocation will become more conservative over time, meaning that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

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

Benchmark

Target Retirement 2020 Composite Ix

Growth of a \$10,000 investment : January 31, 2013—December 31, 2022



Annual returns

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Fund	15.86	7.20	-0.59	7.02	14.19	-4.19	17.69	12.10	8.24	-14.14
Benchmark	16.21	7.37	-0.40	7.17	14.22	-4.13	17.87	12.85	8.43	-13.77

Total returns

	Quarter	Year to date	One year	Three years	Five years	Ten years
Fund	2.12%	7.01%	6.57%	3.87%	4.66%	6.09%
Benchmark	2.20%	6.98%	6.91%	4.12%	4.96%	6.31%

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

# Vanguard Target Retirement 2020 Trust II

Balanced fund (stocks and bonds)



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**Plain talk about risk**

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

**Note on frequent trading restrictions**

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# Vanguard Target Retirement 2025 Trust II

Balanced fund (stocks and bonds)

Fund facts

Risk level					Total net assets	Expense ratio as of 03/31/21	Inception date	Fund number
Low	←		→	High				
1	2	3	4	5	\$14,602 MM	0.075%	02/29/08	14,75

Investment objective

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

Investment strategy

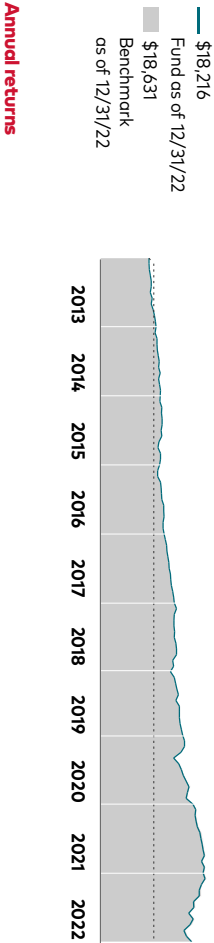
The trust invests in other Vanguard mutual funds and trusts according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2025 (the target year). The trust's asset allocation will become more conservative over time, meaning that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

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

Benchmark

Target Retirement 2025 Composite Ix

Growth of a \$10,000 investment : January 31, 2013—December 31, 2022



Annual returns

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Fund	18.23	7.22	-0.72	7.51	16.04	-5.07	19.75	13.39	9.90	-15.44
Benchmark	18.52	7.45	-0.58	7.67	16.08	-5.01	19.92	14.19	10.09	-15.02

Total returns

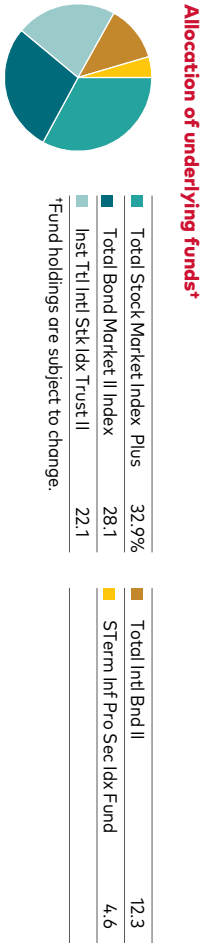
	Quarter	Year to date	One year	Three years	Five years	Ten years
Fund	2.96%	8.45%	8.56%	5.05%	5.35%	6.76%
Benchmark	3.04%	8.41%	8.97%	5.32%	5.66%	7.00%

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Target Retirement 2025 Composite Ix: Derived by applying the fund's target asset allocation to the results of the following benchmarks: for international stocks of developed markets, the MSCI EAFE Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for emerging-market stocks, the Select Emerging Markets Index through August 23, 2006, the MSCI Emerging Markets Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for U.S. bonds, the Bloomberg U.S. Aggregate Bond Index through December 31, 2009, and the Bloomberg U.S. Aggregate Float Adjusted Index thereafter, as well as the Bloomberg U.S. Treasury Inflation-Protected Securities (TIPS) 0-5 Year Index; for international bonds, the Bloomberg Global Aggregate ex-USD Float Adjusted RIC Copied Index Hedged beginning June 3, 2013; and for U.S. stocks, the Dow Jones U.S. Total Stock Market Index (formerly known as the Dow Jones Wilshire 5000 Index) through April 22, 2005, the MSCI US Broad Market Index through June 2, 2013, and the CRSP US Total Market Index thereafter. International stock benchmark returns are adjusted for withholding taxes.

# Vanguard Target Retirement 2025 Trust II

Balanced fund (stocks and bonds)



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**Plain talk about risk**

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# Vanguard Target Retirement 2030 Trust II

Balanced fund (stocks and bonds)

Fund facts

Risk level					Total net assets		Expense ratio as of 03/31/21	Inception date	Fund number
Low ← → High									
1	2	3	4	5	\$18,250 MM		0.075%	02/29/08	14,76

Investment objective

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

Investment strategy

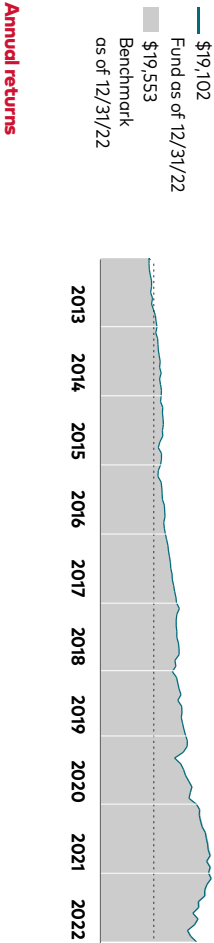
The trust invests in other Vanguard mutual funds and trusts according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2030 (the target year). The trust's asset allocation will become more conservative over time, meaning that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

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

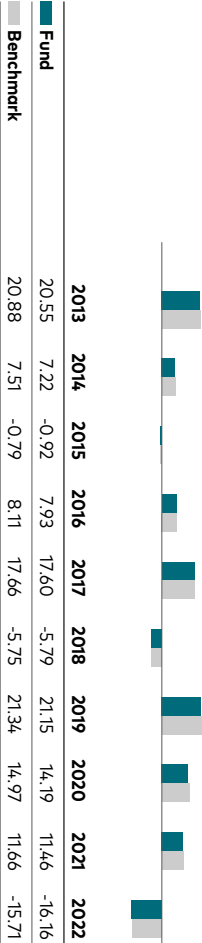
Benchmark

Target Retirement 2030 Composite Ix

Growth of a \$10,000 investment : January 31, 2013—December 31, 2022



Annual returns



Total returns

Periods ended June 30, 2023

	Quarter	Year to date	One year	Three years	Five years	Ten years
Fund	3.62%	9.47%	10.03%	6.13%	5.88%	7.33%
Benchmark	3.64%	9.43%	10.48%	6.43%	6.20%	7.57%

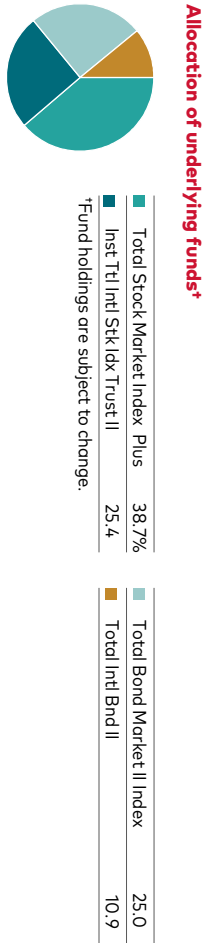
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Figures for periods of less than one year are cumulative returns. All other figures represent average annual returns. Performance figures include the reinvestment of all dividends and any capital gains distributions. All returns are net of expenses.

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

# Vanguard Target Retirement 2030 Trust II

Balanced fund (stocks and bonds)



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**Plain talk about risk**

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

**Note on frequent trading restrictions**

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# Vanguard Target Retirement 2035 Trust II

Balanced fund (stocks and bonds)

Fund facts

Risk level					Total net assets		Expense ratio as of 03/31/21	Inception date	Fund number
Low ← → High					\$17,372 MM		0.075%	02/29/08	14,77
1	2	3	4	5					

Investment objective

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

Investment strategy

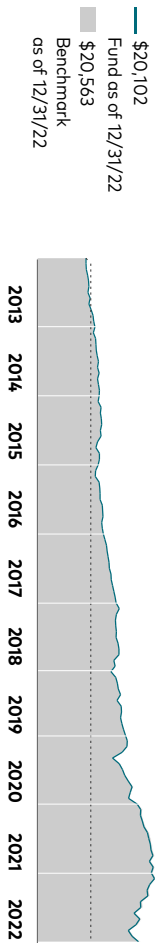
The trust invests in other Vanguard mutual funds and trusts according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2035 (the target year). The trust's asset allocation will become more conservative over time, meaning that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

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

Benchmark

Target Retirement 2035 Composite Ix

Growth of a \$10,000 investment : January 31, 2013—December 31, 2022



Annual returns



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Fund	22.93	7.22	-1.12	8.37	19.18	-6.54	22.57	14.92	13.07	-16.52
Benchmark	23.27	7.57	-1.02	8.55	19.25	-6.48	22.76	15.67	13.24	-16.10

Total returns

Periods ended June 30, 2023

	Quarter	Year to date	One year	Three years	Five years	Ten years
Fund	4.10%	10.28%	11.34%	7.30%	6.44%	7.90%
Benchmark	4.13%	10.24%	11.77%	7.59%	6.74%	8.14%

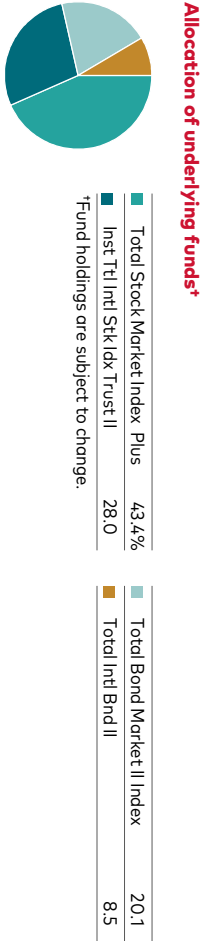
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Target Retirement 2035 Composite Ix: Derived by applying the fund's target asset allocation to the results of the following benchmarks: for international stocks of developed markets, the MSCI EAFE Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for emerging-market stocks, the Select Emerging Markets Index through August 23, 2006, the MSCI Emerging Markets Index through December 15, 2010, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for U.S. bonds, the Bloomberg U.S. Aggregate Bond Index through December 31, 2009, and the Bloomberg U.S. Aggregate Float Adjusted Index thereafter; for international bonds, the Bloomberg Global Aggregate ex-USD Float Adjusted RIC Capped Index Hedged beginning June 3, 2013, and for U.S. stocks, the Dow Jones U.S. Total Stock Market Index (formerly known as the Dow Jones Wilshire 5000 Index) through April 22, 2005, the MSCI US Broad Market Index through June 2, 2013, and the CRSP US Total Market Index thereafter. International stock benchmark returns are adjusted for withholding taxes.

# Vanguard Target Retirement 2035 Trust II

Balanced fund (stocks and bonds)



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**Plain talk about risk**

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

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# Vanguard Target Retirement 2040 Trust II

Balanced fund (stocks and bonds)

Fund facts

Risk level					Total net assets		Expense ratio as of 03/31/21	Inception date	Fund number
Low ← → High					\$16,215 MM		0.075%	02/29/08	14,78
1	2	3	4	5					

Investment objective

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

Investment strategy

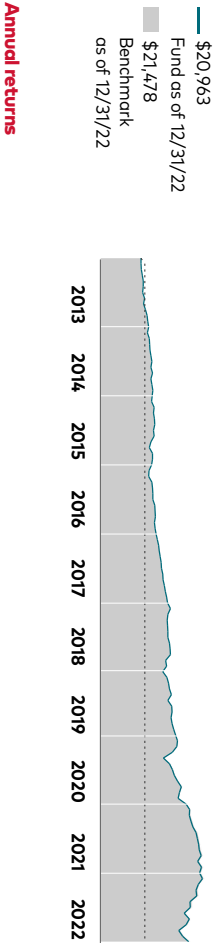
The trust invests in other Vanguard mutual funds and trusts according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2040 (the target year). The trust's asset allocation will become more conservative over time, meaning that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

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

Benchmark

Target Retirement 2040 Composite Ix

Growth of a \$10,000 investment : January 31, 2013—December 31, 2022



Annual returns

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Fund	24.42	7.26	-1.47	8.79	20.81	-7.30	23.97	15.57	14.68	-16.94
Benchmark	24.79	7.61	-1.25	8.98	20.86	-7.23	24.19	16.31	14.84	-16.51

Total returns

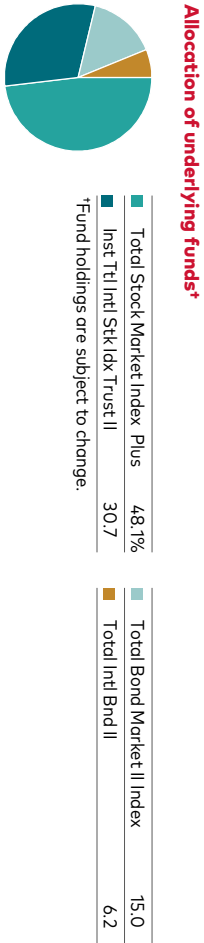
	Quarter	Year to date	One year	Three years	Five years	Ten years
Fund	4.63%	11.12%	12.66%	8.43%	6.97%	8.41%
Benchmark	4.62%	11.06%	13.07%	8.74%	7.28%	8.67%

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

# Vanguard Target Retirement 2040 Trust II

Balanced fund (stocks and bonds)



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**Plain talk about risk**

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

**Note on frequent trading restrictions**

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# Vanguard Target Retirement 2045 Trust II

Balanced fund (stocks and bonds)

Fund facts

Risk level					Total net assets		Expense ratio as of 03/31/21	Inception date	Fund number
Low ← → High									
1	2	3	4	5	\$14,699 MM		0.075%	02/29/08	14,79

Investment objective

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

Investment strategy

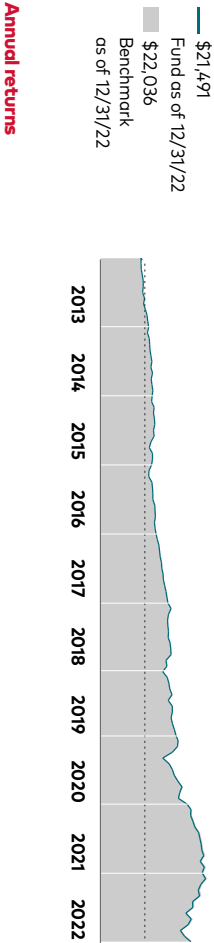
The trust invests in other Vanguard mutual funds and trusts according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2045 (the target year). The trust's asset allocation will become more conservative over time, meaning that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

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

Benchmark

Target Retirement 2045 Composite Ix

Growth of a \$10,000 investment : January 31, 2013—December 31, 2022



Annual returns

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Fund	24.43	7.22	-1.48	8.91	21.51	-7.86	25.07	16.27	16.33	-17.33
Benchmark	24.79	7.61	-1.25	9.13	21.55	-7.77	25.37	17.02	16.45	-16.93

Total returns

	Quarter	Year to date	One year	Three years	Five years	Ten years
Fund	5.12%	11.94%	13.96%	9.58%	7.51%	8.77%
Benchmark	5.11%	11.88%	14.37%	9.90%	7.82%	9.02%

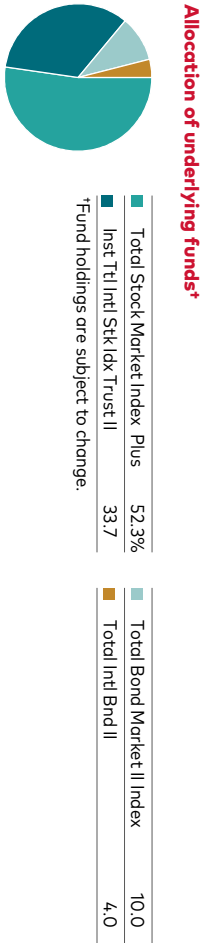
The performance data shown represent past performance, which is not a guarantee of future results. Investment returns and principal value will fluctuate, so investors' shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than the performance data cited. For performance data current to the most recent month-end, visit our website at [vanguard.com/performance](https://vanguard.com/performance). The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index. Figures for periods of less than one year are cumulative returns. All other figures represent average annual returns. Performance figures include the reinvestment of all dividends and any capital gains distributions. All returns are net of expenses.

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



# Vanguard Target Retirement 2045 Trust II

Balanced fund (stocks and bonds)



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# Vanguard Target Retirement 2050 Trust II

Balanced fund (stocks and bonds)

Fund facts

Risk level					Total net assets		Expense ratio as of 03/31/21	Inception date	Fund number
Low ← → High									
1	2	3	4	5	\$13,257 MM		0.075%	02/29/08	1480

Investment objective

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

Investment strategy

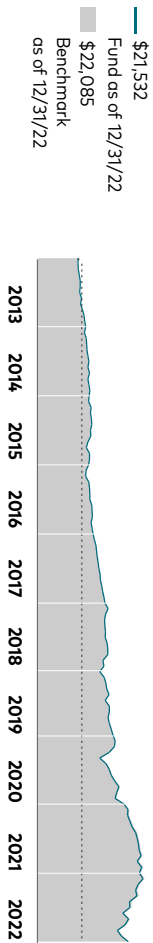
The trust invests in other Vanguard mutual funds and trusts according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2050 (the target year). The trust's asset allocation will become more conservative over time, meaning that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

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

Benchmark

Target Retirement 2050 Composite Ix

Growth of a \$10,000 investment : January 31, 2013—December 31, 2022



Annual returns



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Fund	24.47	7.23	-1.54	8.95	21.48	-7.83	25.05	16.42	16.60	-17.45
Benchmark	24.79	7.61	-1.25	9.13	21.55	-7.77	25.37	17.17	16.75	-17.07

Total returns

Periods ended June 30, 2023

	Quarter	Year to date	One year	Three years	Five years	Ten years
Fund	5.43%	12.42%	14.67%	9.81%	7.66%	8.83%
Benchmark	5.40%	12.34%	15.05%	10.13%	7.96%	9.09%

The performance data shown represent past performance, which is not a guarantee of future results. Investment returns and principal value will fluctuate, so investors' shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than the performance data cited.

For performance data current to the most recent month-end, visit our website at [vanguard.com/performance](https://vanguard.com/performance).

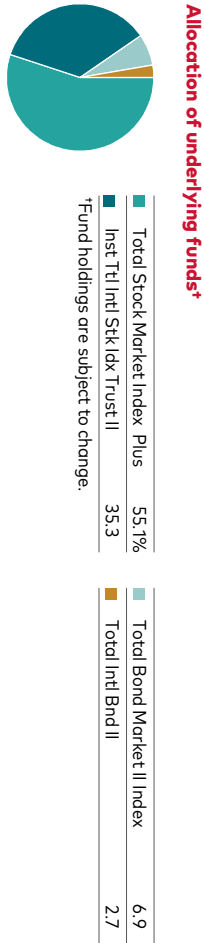
The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index.

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

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

# Vanguard Target Retirement 2050 Trust II

Balanced fund (stocks and bonds)



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Plain talk about risk

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# Vanguard Target Retirement 2055 Trust II

Balanced fund (stocks and bonds)

Fund facts

Risk level					Total net assets		Expense ratio as of 03/31/21	Inception date	Fund number
Low ← → High					\$8.618 MM		0.075%	08/31/10	1489
1	2	3	4	5					

Investment objective

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

Investment strategy

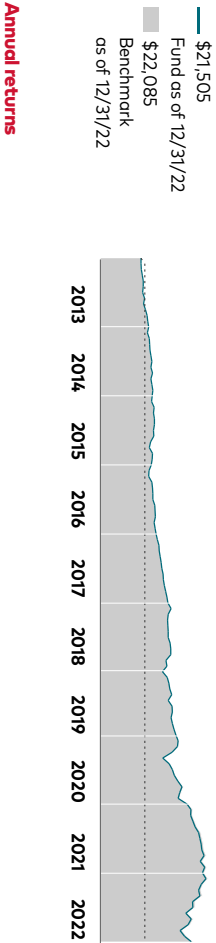
The trust invests in other Vanguard mutual funds and trusts according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2055 (the target year). The trust's asset allocation will become more conservative over time, meaning that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

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

Benchmark

Target Retirement 2055 Composite Ix

Growth of a \$10,000 investment : January 31, 2013—December 31, 2022



Annual returns

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Fund	24.34	7.26	-1.66	8.97	21.49	-7.85	25.07	16.41	16.59	-17.44
Benchmark	24.79	7.61	-1.25	9.13	21.55	-7.77	25.37	17.17	16.75	-17.07

Total returns

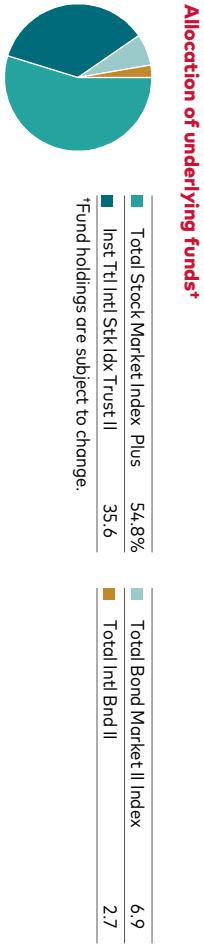
	Quarter	Year to date	One year	Three years	Five years	Ten years
Fund	5.40%	12.41%	14.67%	9.81%	7.65%	8.82%
Benchmark	5.40%	12.34%	15.05%	10.13%	7.96%	9.09%

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

# Vanguard Target Retirement 2055 Trust II

Balanced fund (stocks and bonds)



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# Vanguard Target Retirement 2060 Trust II

Balanced fund (stocks and bonds)

Fund facts

Risk level					Total net assets	Expense ratio as of 03/31/21	Inception date	Fund number
1	2	3	4	5				
Low ← → High								
					\$4,506 MM	0.075%	03/01/12	1693

Investment objective

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

Investment strategy

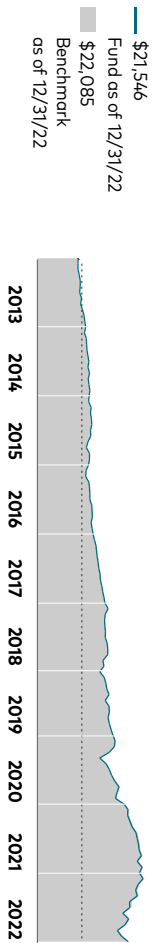
The trust invests in other Vanguard mutual funds and trusts according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2060 (the target year). The trust's asset allocation will become more conservative over time, meaning that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

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

Benchmark

Target Retirement 2060 Composite Ix

Growth of a \$10,000 investment : January 31, 2013—December 31, 2022



Annual returns

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Fund	24.32	7.22	-1.60	8.95	21.51	-7.85	25.09	16.50	16.56	-17.41
Benchmark	24.79	7.61	-1.25	9.13	21.55	-7.77	25.37	17.17	16.75	-17.07

Total returns

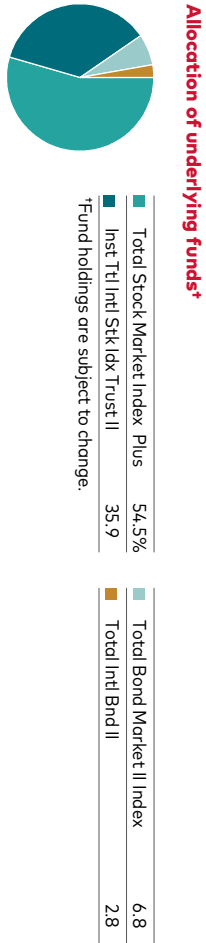
	Quarter	Year to date	One year	Three years	Five years	Ten years
Fund	5.40%	12.42%	14.71%	9.83%	7.68%	8.83%
Benchmark	5.40%	12.34%	15.05%	10.13%	7.96%	9.09%

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Target Retirement 2060 Composite Ix: Derived by applying the fund's target asset allocation to the results of the following benchmarks: for international stocks of developed markets, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for emerging-market stocks, the MSCI ACWI ex USA IMI Index through June 2, 2013, and the FTSE Global All Cap ex US Index thereafter; for U.S. bonds, the Bloomberg U.S. Aggregate Float Adjusted Index; for international bonds, the Bloomberg Global Aggregate ex-USD Float Adjusted RIC Capped Index Hedged beginning June 3, 2013; and for U.S. stocks, the MSCI US Broad Market Index through June 2, 2013, and the CRSP US Total Market Index thereafter. International stock benchmark returns are adjusted for withholding taxes.

# Vanguard Target Retirement 2060 Trust II

Balanced fund (stocks and bonds)



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# Vanguard Target Retirement 2065 Trust II

Balanced fund (stocks and bonds)

Fund facts

Risk level					Total net assets	Expense ratio as of 03/31/21	Inception date	Fund number
1	2	3	4	5				
Low ← → High					\$1,147 MM	0.075%	07/17/17	1794

Investment objective

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

Investment strategy

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

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

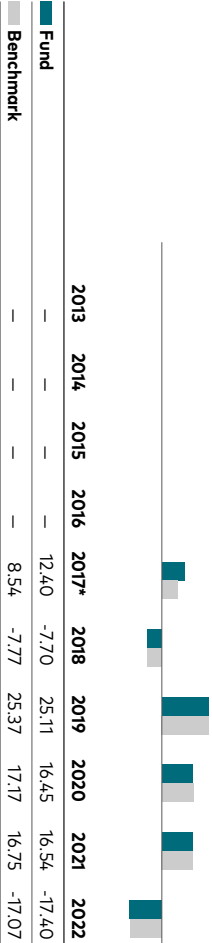
Benchmark

Target Retirement 2065 Composite Ix

Growth of a \$10,000 investment : July 31, 2017 –December 31, 2022



Annual returns



Total returns

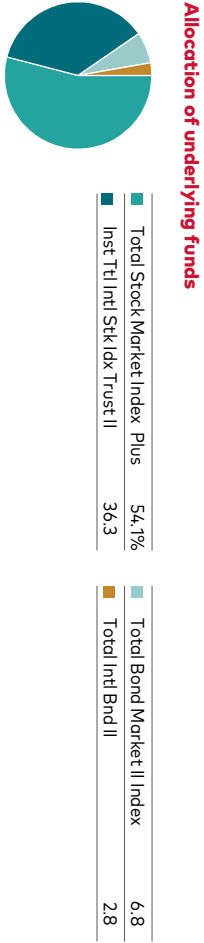
Fund	Quarter	Year to date	One year	Three years	Five years	Since inception
	5.38%	12.41%	14.69%	9.81%	7.68%	8.61%
Benchmark	5.40%	12.34%	15.05%	10.13%	7.96%	—

The performance data shown represent past performance, which is not a guarantee of future results. Investment returns and principal value will fluctuate, so investors' shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than the performance data cited. For performance data current to the most recent month-end, visit our website at [vanguard.com/performance](https://vanguard.com/performance). The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index. Figures for periods of less than one year are cumulative returns. All other figures represent average annual returns. Performance figures include the reinvestment of all dividends and any capital gains distributions. All returns are net of expenses.

\* Partial return since fund started, July 17, 2017.  
Target Retirement 2065 Composite Ix: Derived by applying the fund's target asset allocation to the results of the following benchmarks: the FTSE Global All Cap ex US Index for international stocks, the Bloomberg U.S. Aggregate Float Adjusted Index for U.S. bonds, the Bloomberg Global Aggregate ex-USD Float Adjusted RIC Capped Index Hedged for international bonds, and the CRSP US Total Market Index for U.S. stocks. International stock benchmark returns are adjusted for withholding taxes.

# Vanguard Target Retirement 2065 Trust II

Balanced fund (stocks and bonds)



**Connect with Vanguard** • [vanguard.com](https://vanguard.com)  
**Plain talk about risk**

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

**Note on frequent trading restrictions**

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

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

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

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

If you receive your retirement plan statement from Vanguard or log on to Vanguard's website to view your plan, visit [vanguard.com](https://vanguard.com) or call 800-523-1188.

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





# Vanguard Target Retirement 2070 Trust II

Balanced fund (stocks and bonds)

Fund facts

Risk level					Total net assets	Expense ratio as of 04/07/22	Inception date	Fund number
1	2	3	4	5				
Low ← → High								
					\$51 MM	0.075%	04/07/22	V006

Investment objective

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

Investment strategy

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

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

Benchmark

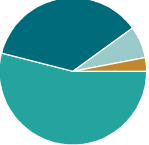
Target Retirement 2070 Composite Index

Total returns

Fund	Periods ended June 30, 2023			
	Quarter	Year to date	One year	Since inception
Fund	5.44%	12.39%	14.72%	-0.20%
Benchmark	5.40%	12.34%	15.05%	—

The performance data shown represent past performance, which is not a guarantee of future results. Investment returns and principal value will fluctuate, so investors' shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than the performance data cited. For performance data current to the most recent month-end, visit our website at [vanguard.com/performance](https://vanguard.com/performance). The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index. Figures for periods of less than one year are cumulative returns. All other figures represent average annual returns. Performance figures include the reinvestment of all dividends and any capital gains distributions. All returns are net of expenses.

Allocation of underlying funds



Total Stock Market Index Plus	54.0%	Total Bond Market II Index	7.0
Inst Ttl Intl Stk Idx Trust II	36.0	Total Intl Bond II	3.0

Target Retirement 2070 Composite Index: Derived by applying the fund's target asset allocation to the results of the following benchmarks: the FTSE Global All Cap ex US Index for international stocks, the Bloomberg U.S. Aggregate Float Adjusted Index for U.S. bonds, the Bloomberg Global Aggregate ex-USD Float Adjusted RIC Capped Index Hedged for international bonds, and the CRSP US Total Market Index for U.S. stocks. International stock benchmark returns are adjusted for withholding taxes.

# Vanguard Target Retirement 2070 Trust II

Balanced fund (stocks and bonds)

**Connect with Vanguard** • [vanguard.com](https://vanguard.com)  
**Plain talk about risk**

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

**Note on frequent trading restrictions**

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

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**For more information about Vanguard funds or to obtain a prospectus, see below for which situation is right for you.**

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**Visit [vanguard.com](https://vanguard.com) to obtain a prospectus or, if available, a summary prospectus. Investment objectives, risks, charges, expenses, and other important information about a fund are contained in the prospectus; read and consider it carefully before investing.**





# Vanguard Target Retirement Income Trust II

Balanced fund (stocks and bonds)

Fund facts

Risk level					Total net assets	Expense ratio as of 03/31/21	Inception date	Fund number
Low ← → High					\$4,513 MM	0.075%	02/29/08	1471
1	2	3	4	5				

Investment objective

Vanguard Target Retirement Income Trust II seeks to provide current income and some capital appreciation.

Investment strategy

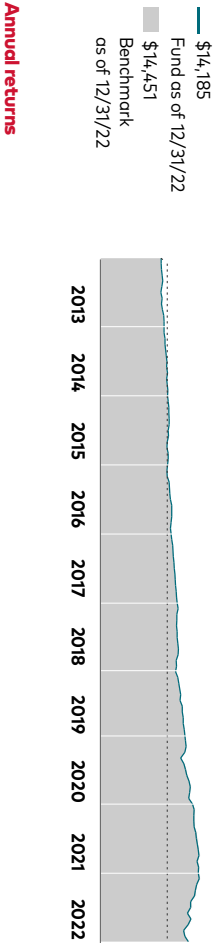
The trust invests in other Vanguard mutual funds and trusts according to an asset allocation strategy designed for investors currently in retirement. The underlying holdings are: Vanguard Total Stock Market Index Fund, Vanguard Total Bond Market II Index Fund, Vanguard Institutional Total International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

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

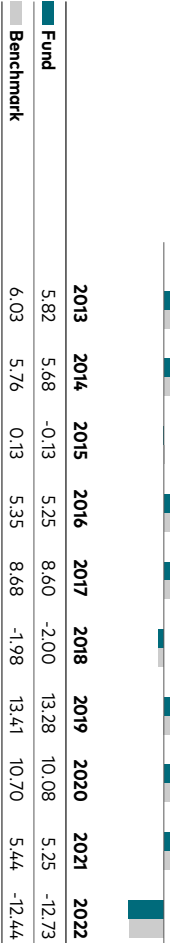
Benchmark

Target Retirement Income Compos. Ix

Growth of a \$10,000 investment : January 31, 2013—December 31, 2022



Annual returns



Total returns

Periods ended June 30, 2023						
	Quarter	Year to date	One year	Three years	Five years	Ten years
Fund	1.36%	5.69%	4.54%	1.74%	3.49%	4.17%
Benchmark	1.44%	5.63%	4.80%	1.93%	3.72%	4.35%

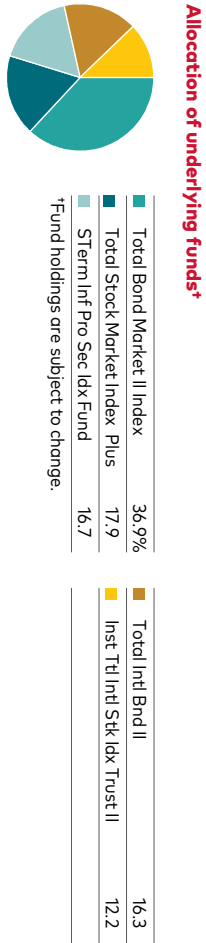
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Figures for periods of less than one year are cumulative returns. All other figures represent average annual returns. Performance figures include the reinvestment of all dividends and any capital gains distributions. All returns are net of expenses.

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

# Vanguard Target Retirement Income Trust II

Balanced fund (stocks and bonds)



**Connect with Vanguard** • [vanguard.com](https://vanguard.com)

**Plain talk about risk**

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Vanguard Total Bond Market Index I (USD)

Performance 07-31-2023					
Quarterly Returns	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total %
2021	-3.61	2.00	0.11	-0.08	-1.65
2022	-5.98	-4.71	-4.65	1.67	-13.15
2023	3.16	-0.90	—	—	2.19
Trailing Returns	1 Yr	3 Yr	5 Yr	10 Yr	Incept
Load-adj Mthly	-3.18	-4.52	0.77	1.47	4.22
Std 06-30-2023	-0.89	—	0.78	1.49	4.23
Total Return	-3.18	-4.52	0.77	1.47	4.22
+/- Std Index	0.19	-0.05	0.02	-0.03	—
+/- Cat Index	0.19	-0.05	0.02	-0.03	—
% Rank Cat	43	56	35	36	
No. in Cat	469	418	381	278	

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.

Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please call 888-809-8102 or visit www.vanguard.com.

Fees and Expenses

Sales Charges

Front-End Load %  
Deferred Load %

Fund Expenses

Management Fees %

12b1 Expense %

Net Expense Ratio %

Gross Expense Ratio %

Risk and Return Profile

	3 Yr	5 Yr	10 Yr
Morningstar Rating™	418 funds 3★	381 funds 4★	278 funds 3★
Morningstar Risk	Avg	Avg	Avg
Morningstar Return	Avg	Avg	Avg

	3 Yr	5 Yr	10 Yr
Standard Deviation	6.12	5.53	4.38
Mean	-4.52	0.77	1.47
Sharpe Ratio	-1.02	-0.15	0.10

MPI Statistics

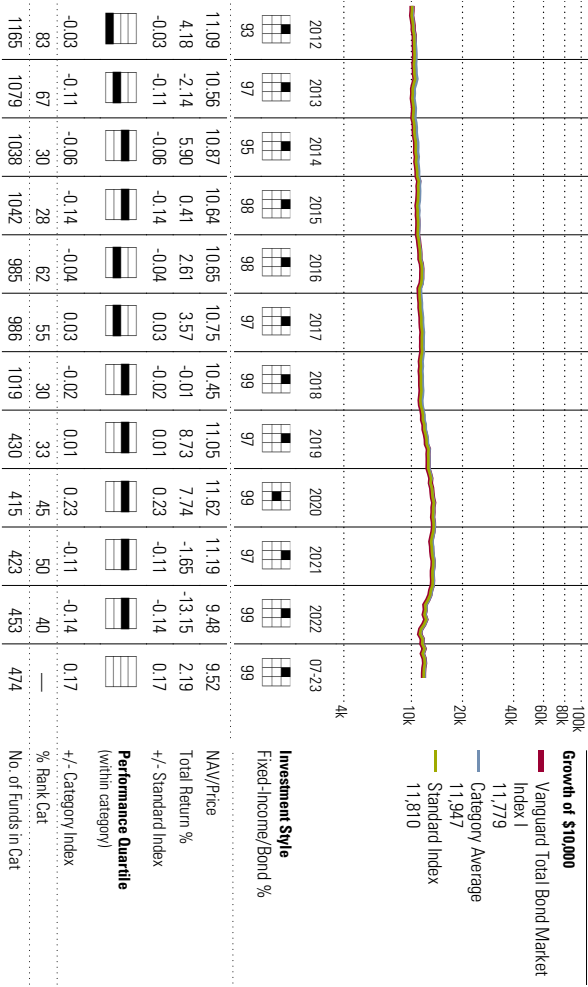
	Standard Index	Best Fit Index
Alpha	-0.03	-0.03
Beta	1.00	1.00
R-Squared	99.72	99.72

12-Month Yield  
Potential Cap Gains Exp

Operations

Family: Vanguard  
Manager: Joshua Barrickman  
Tenure: 10.5 Years  
Objective: Income

Morningstar Medalist Rating™ ★★★★★ Gold	Analyst-Driven % 100.00 Data Coverage % 100.00	Morningstar Rating™ ★★★★ 418 US Fund Intermediate Core Bond	Standard Index Bloomberg US Agg Bond TR USD	Category Index Bloomberg US Agg Bond TR USD	Morningstar Cat US Fund Intermediate Core Bond
06-27-2023					



Portfolio Analysis 06-30-2023

Asset Allocation %	Net %	Long %	Short %	Share Chg since 05-2023	Share Amount	Holdings: 0 Total Stocks, 14,737 Total Fixed Income, 40% Turnover Ratio	Net Assets %
Cash	0.61	0.62	0.01				
US Stocks	0.00	0.00	0.00				
Non-US Stocks	0.00	0.00	0.00				
Bonds	99.38	99.56	0.18				
Other/Not Cstfd	0.01	0.01	0.00				
Total	100.00	100.19	0.19				

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

Fixed Income Style	Int	Med	Ext	Avg Eff Maturity	8.90
				Avg Eff Duration	6.56
				Avg Wtd Coupon	3.00
				Avg Wtd Price	90.98

Credit Quality Breakdown 03-31-2023

	AAA	Bond %
AAA	71.15	
AA	2.90	
A	11.99	
BBB	13.96	
BB	0.00	
B	0.00	
Below B	0.00	
NR	0.00	

Regional Exposure

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

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

Purchase Constraints:  
Incept: 09-18-1995  
Type: MF  
Total Assets: \$94,268.78 mil

# Voya Fixed Account – 457/401 II - State of Nevada

The Voya Fixed Account – 457/401 II is available through a group annuity or other type of contract issued by Voya Retirement Insurance and Annuity Company ("VRIAC" or the "Company"). The Voya Fixed Account – 457/401 II is an obligation of VRIAC's general account which supports all of the Company's insurance and annuity commitments. All guarantees are based on the financial strength and claims-paying ability of VRIAC, which is solely responsible for all obligations under its contracts.

## Asset Class: **Stability of Principal**

### **Important Information**

This information should be read in conjunction with your contract prospectus, contract prospectus summary or disclosure booklet, as applicable. Please read them carefully before investing.

### **Voya Retirement Insurance and Annuity Company**

One Orange Way  
Windsor, CT 06095-4774  
[www.voyaretirementplans.com](http://www.voyaretirementplans.com)

### **Objective**

Stability of principal is the primary objective of this investment option. The Voya Fixed Account – 457/401 II guarantees minimum rates of interest and may credit interest that exceeds the guaranteed minimum rates. Daily credited interest becomes part of principal and the investment increases through compound interest. All amounts invested by your plan in the Voya Fixed Account – 457/401 II receive the same credited rate. This is known as a portfolio method of interest rate crediting.

### **Key Features**

The Voya Fixed Account – 457/401 II is intended to be a long-term investment for participants seeking stability of principal. The assets supporting it are invested by VRIAC with this goal in mind. Therefore, VRIAC may impose restrictions on transfers and withdrawals involving the Voya Fixed Account – 457/401 II if Competing Investment Options (as defined below) are offered, or if you have a choice between multiple service providers. These restrictions help VRIAC to provide stable credited interest rates which historically have not varied significantly from month to month despite the general market's volatility in new money interest rates.

**Restrictions on Transfers from the Voya Fixed Account – 457/401 II**  
Transfers from the Voya Fixed Account – 457/401 II will be subject to the equity wash restrictions shown below.

### **Equity Wash Restrictions on Transfers**

Transfers between investment options are allowed at any time, subject to the following provisions:

- (a) Direct transfers from the Voya Fixed Account – 457/401 II cannot be made to a Competing Investment Option;
  - (b) A transfer from the Voya Fixed Account – 457/401 II to other investment options under the contract cannot be made if a transfer to a Competing Investment Option has taken place within 90 days;
  - (c) A transfer from the Voya Fixed Account – 457/401 II to other investment options under the contract cannot be made if a non-benefit withdrawal from a non-Competing Investment Option has taken place within 90 days; and
  - (d) A transfer from a non-Competing Investment Option to a Competing Investment Option cannot be made if a transfer from the Voya Fixed Account – 457/401 II has taken place within 90 days.
- Competing Investment Option**  
As used throughout this document, a Competing Investment Option is defined as any investment option that:
- (a) Provides a direct or indirect investment performance guarantee;
  - (b) Is, or may be, invested primarily in assets other than common or preferred stock;
  - (c) Is, or may be, invested primarily in financial vehicles (such as mutual funds, trusts or insurance company contracts) which are invested in assets other than common or preferred stock;
  - (d) Is available through an account with a brokerage firm designated by the Company and made available by the Contract Holder (as defined in the contract) as an additional investment under the plan;
  - (e) Is a self-directed brokerage arrangement;
  - (f) Is any fund with similar characteristics to the above as reasonably determined by the Company; or

- (g) Is any fund with a targeted duration of less than three years (e.g. money market funds).

For more information regarding Competing Investment Options in your plan, please contact the Customer Contact Center at (800) 584-6001.

### **Requests for Full Withdrawals**

Withdrawals from the Voya Fixed Account – 457/401 II are allowed to pay benefits to participants at any time. However, if the plan, as the Contract Holder, requests a full withdrawal of all participant accounts held in the Voya Fixed Account – 457/401 II, VRIAC will pay amounts in the Voya Fixed Account – 457/401 II in one of the following two ways, as elected by the plan:

- (a) In equal annual principal payments, with interest, over a period not to exceed 60 months; or
- (b) At the completion of each 5-year period measured from the plan effective date (the "applicable anniversary date"), as a lump sum. Request for this option must be made in writing by the plan and received by us in our home office at least 12 months prior to the applicable anniversary date. Payout of all amounts held within the Voya Fixed Account – 457/401 II would then occur no later than the next applicable anniversary date. Full withdrawal requests at any other time would be subject to the provisions of option (a) above.

### **Interest Rate Structure**

The Voya Fixed Account – 457/401 II guarantees principal and a guaranteed minimum interest rate ("GMIR") for the life of the contract, as well as featuring two declared interest rates: a current rate, determined at least monthly, and a guaranteed minimum floor rate declared for a defined period – currently one calendar year. The guaranteed minimum floor rate may change after a defined period, but it will never be lower than the GMIR that applies for the life of the contract. The current rate, the guaranteed minimum floor rate and the GMIR are expressed as annual effective yields. Taking the effect of compounding into account, the interest credited to your account daily yields the then current credited rate.

VRIAC's determination of credited interest rates reflects a number of

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factors, which may include mortality and expense risks, interest rate guarantees, the investment income earned on invested assets and the amortization of any capital gains and/or losses realized on the sale of invested assets. Under this option, VRIAC assumes the risk of investment gain or loss by guaranteeing the principal amount you allocate to this option and promising a minimum interest rate during the accumulation period and also throughout the annuity payout period, if applicable.

Currently, the guaranteed minimum floor rate equals the GMIR. The current rate to be credited under a contract may be higher than the GMIR/guaranteed minimum floor rate and may be changed at any time, except that VRIAC will not apply a decrease to the current rate following a rate change initiated solely by us prior to the last day of the three-month period measured from the first day of the month in which such change was effective. The current rate for a plan's initial investment in the Voya Fixed Account – 457/401 II may be in effect for less than a full three-month period.

#### **Credited Interest Rate**

The Voya Fixed Account – 457/401 II will earn interest at a rate no less than 3.10% through December 31, 2021, and 3.00% through December 31, 2024.

The Voya Fixed Account – 457/401 II's GMIR for the life of the contract is 1.00%.

Any insurance products, annuities and funding agreements that you may have purchased are issued by Voya Retirement Insurance and Annuity Company ("VRIAC"). VRIAC is solely responsible for meeting its obligations. Plan administrative services provided by VRIAC or Voya Institutional Plan Services, LLC ("VIPS"). Neither VRIAC nor VIPS engage in the sale or solicitation of securities. If custodial or trust agreements are part of this arrangement, they may be provided by Voya Institutional Trust Company. All companies are members of the Voya® family of companies. Securities distributed by Voya Financial Partners, LLC (member SIPC) or other broker-dealers with which it has a selling agreement. All products or services may not be available in all states.

Standardized and Tax Adjusted Returns Disclosure Statement

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end please visit <http://advisor.morningstar.com/familyinfo.asp>.

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

If adjusted for taxation, the performance quoted would be significantly reduced. For variable annuities, additional expenses will be taken into account, including M&E risk charges, fund-level expenses such as management fees and operating fees, contract-level administration fees, and charges such as surrender, contract, and sales charges. The maximum redemption fee is the maximum amount a fund may charge if redeemed in a specific time period after the fund's purchase.

After-tax returns are calculated using the highest individual federal marginal income tax rates, and do not reflect the impact of state and local taxes. Actual after-tax returns depend on the investor's tax situation and may differ from those shown. The after-tax returns shown are not relevant to investors who hold their fund shares through tax-deferred arrangements such as 401(k) plans or an IRA. After-tax returns exclude the effects of either the alternative minimum tax or phase-out of certain tax credits. Any taxes due are as of the time the distributions are made, and the taxable amount and tax character of each distribution are as specified by the fund on the dividend declaration date. Due to foreign tax credits or realized capital losses, after-tax returns may be greater than before-tax returns. After-tax returns for exchange-traded funds are based on net asset value.

Money Market Fund Disclosures

If money market fund(s) are included in the Standardized Returns table below, each money market fund's name will be followed by a superscripted letter that links it to the applicable disclosure below:

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

You could lose money by investing in the fund. Because the share price of the fund will fluctuate, when you sell your shares they may be worth more or less than what you originally paid for them. The fund may impose a fee upon sale of your shares or may temporarily suspend your ability to sell shares if the fund's liquidity falls below required minimums because of market conditions or other factors. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

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

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

You could lose money by investing in the fund. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. The fund may impose a fee upon sale of your shares or may temporarily suspend your ability to sell shares if the fund's liquidity falls below required minimums because of market conditions or other factors. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

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

You could lose money by investing in the fund. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

Annualized returns 06-30-2023													
Standardized Returns (%)	7-day Yield		1Yr	5Yr	10Yr	Since Inception	Inception Date		Max Front Load %	Max Back Load %	Net Exp Ratio %	Gross Exp Ratio %	Max Redemption %
	Subsidized as of date	Unsubsidized as of date											
American Funds Europacific Growth R6	—	—	15.80	4.29	6.30	7.86	05-01-2009		NA	NA	0.47	0.47	NA
JPMorgan Large Cap Growth R6	—	—	25.97	16.27	17.00	15.82	11-30-2010		NA	NA	0.44 <sup>1</sup>	0.51	NA
MFS Value R4	—	—	10.64	8.77	9.71	8.33	04-01-2005		NA	NA	0.55 <sup>2</sup>	0.56	NA
Sterling Capital Total Return Bond R6	—	—	-0.52	1.29	—	1.10	02-01-2018		NA	NA	0.35 <sup>3</sup>	0.48	NA
Vanguard Extended Market Index InstlPlus	—	—	15.23	6.16	9.36	9.61	01-14-2011		NA	NA	0.04	0.04	NA
Vanguard Institutional Index Instl Pl	—	—	19.57	12.29	12.85	8.31	07-07-1997		NA	NA	0.02	0.02	NA
Vanguard Mid-Cap Growth Index Admiral	—	—	18.35	9.66	11.00	12.19	09-27-2011		NA	NA	0.07	0.07	NA

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Annualized returns 06-30-2023													
Standardized Returns (%)		7-day Yield Subsidized as of date	7-day Yield Unsubsidized as of date	1Yr	5Yr	10Yr	Since Inception	Inception Date	Max Front Load %	Max Back Load %	Net Exp Ratio %	Gross Exp Ratio %	Max Redemption %
Vanguard Mid-Cap Value Index Admiral		—	—	9.54	7.12	9.63	11.81	09-27-2011	NA	NA	0.07	0.07	NA
Vanguard Total Bond Market Index I		—	—	-0.89	0.78	1.49	4.23	09-18-1995	NA	NA	0.04	0.04	NA
Bloomberg US Agg Bond TR USD			-0.94	0.77	1.52	—	01-03-1980						
Bloomberg US Universal TR USD			-0.04	0.98	1.80	—	12-31-1998						
Morningstar Gbl xUS Growth TME NR USD			12.74	—	—	—	11-24-2021						
Morningstar US Core Bd TR USD			-1.05	—	—	—	05-01-2019						
Morningstar US LM Brd Val TR USD			13.10	—	—	—	12-21-2020						
Morningstar US Mid Brd Grt TR USD			18.49	—	—	—	12-21-2020						
Morningstar US Mid Brd Val TR USD			10.11	—	—	—	12-21-2020						
Morningstar US Sm1 Brd Grt Ext TR USD			18.31	—	—	—	12-21-2020						
MSCI ACWI Ex USA Growth NR USD			13.26	4.06	5.61	—	01-01-2001						
MSCI ACWI Ex USA NR USD			12.72	3.52	4.75	—	01-01-2001						
MSCI EAFE NR USD			18.77	4.39	5.41	—	03-31-1986						
Russell 1000 Growth TR USD			27.11	15.14	15.74	—	01-01-1987						
Russell 1000 TR USD			19.36	11.92	12.64	—	12-31-1978						
Russell 1000 Value TR USD			11.54	8.11	9.22	—	01-01-1987						
Russell Mid Cap Growth TR USD			23.13	9.71	11.53	—	02-01-1995						
Russell Mid Cap TR USD			14.92	8.46	10.32	—	12-31-1978						
Russell Mid Cap Value TR USD			10.50	6.84	9.03	—	12-31-1985						
S&P 500 TR USD			19.59	12.31	12.86	—	01-30-1970						
USTREAS T-Bill Auction Ave 3 Mon			4.36	1.68	1.07	—	02-28-1941						
1. Contractual waiver, Expires 10-31-2023													
2. Contractual waiver, Expires 12-31-2023													
3. Contractual waiver, Expires 01-31-2024													
Return after Tax (%)		On Distribution							On Distribution and Sales of Shares				
	1Yr	5Yr	10Yr	Since Inception	Inception Date	1Yr	5Yr	10Yr	Since Inception				
American Funds Europacific Growth R6	15.23	3.31	5.33	7.00	05-01-2009	9.59	3.25	4.87	6.32				
JPMorgan Large Cap Growth R6	25.00	13.71	14.92	14.15	11-30-2010	15.87	12.54	13.76	13.09				
MFS Value R4	8.39	7.38	8.19	7.06	04-01-2005	7.23	6.46	7.31	6.44				
Sterling Capital Total Return Bond R6	-1.81	-0.06	—	-0.24	02-01-2018	-0.31	0.47	—	0.32				
Vanguard Extended Market Index InstlPlus	14.77	5.77	8.88	9.18	01-14-2011	9.23	4.73	7.50	7.66				
Vanguard Institutional Index Instl Pl	18.67	11.35	12.02	7.71	07-07-1997	12.06	9.66	10.50	7.01				
Vanguard Mid-Cap Growth Index Admiral	18.11	9.46	10.75	11.95	09-27-2011	10.98	7.61	9.04	10.23				
Vanguard Mid-Cap Value Index Admiral	8.85	6.49	8.96	11.14	09-27-2011	6.01	5.46	7.70	9.72				
Vanguard Total Bond Market Index I	-2.02	-0.24	0.41	2.56	09-18-1995	-0.53	0.20	0.69	2.61				

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# Mutual Fund Detail Report

## Disclosure Statement

The Mutual Fund Detail Report is supplemental sales literature, and therefore must be preceded or accompanied by the mutual fund's current prospectus or an equivalent statement. Please read this information carefully. In all cases, this disclosure statement should accompany the Mutual Fund Detail Report. Morningstar is not itself a FINRA-member firm.

All data presented is based on the most recent information available to Morningstar as of the release date and may or may not be an accurate reflection of current data for securities included in the fund's portfolio. There is no assurance that the data will remain the same.

Unless otherwise specified, the definition of "funds" used throughout this Disclosure Statement includes closed-end funds, exchange-traded funds, grantor trusts, index mutual funds, open-ended mutual funds, and unit investment trusts. It does not include exchange-traded notes or exchange-traded commodities.

Prior to 2016, Morningstar's methodology evaluated open-end mutual funds and exchange-traded funds as separate groups. Each group contained a subset of the current investments included in our current comparative analysis. In this report, historical data presented on a calendar-year basis and trailing periods ending at the most-recent month-end reflect the updated methodology.

Risk measures (such as alpha, beta, r-squared, standard deviation, mean, or Sharpe ratio) are calculated for securities or portfolios that have at least a three-year history.

Most Morningstar rankings do not include any adjustment for one-time sales charges, or loads. Morningstar does publish load-adjusted returns, and ranks such returns within a Morningstar Category in certain reports. The total returns for ETFs and fund share classes without one-time loads are equal to Morningstar's calculation of load-adjusted returns. Share classes that are subject to one-time loads relating to advice or sales commissions have their returns adjusted as part of the load-adjusted return calculation to reflect those loads.

### Comparison of Fund Types

Funds, including closed-end funds, exchange-traded funds (ETFs), money market funds, open-end funds, and unit investment trusts (UITs), have many similarities, but also many important differences. In general, publicly-offered funds are investment companies registered with the Securities and Exchange Commission under the Investment Company Act of 1940, as amended. Funds pool money from their investors and manage it according to an investment strategy or objective, which can vary greatly from fund to fund. Funds have the ability to offer diversification and professional management, but also involve risk, including the loss of principal.

A closed-end fund is an investment company, which typically makes one public offering of a fixed number of shares. Thereafter, shares are traded on a secondary market. As a result, the secondary market price may be higher or lower than the closed-end fund's net asset value (NAV). If these shares trade at a price above their NAV, they are said to be trading at a premium. Conversely, if they are trading at a price below their NAV, they are said to be trading at a discount. A closed-end mutual fund's expense ratio is an annual fee charged to a shareholder. It includes operating expenses and management fees, but does not take into account any brokerage costs. Closed-end funds may also have 12b-1 fees. Income distributions and capital gains of the closed-end fund are subject

to income tax, if held in a taxable account.

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

Holding company depository receipts (HOLDRs) are similar to ETFs, but they focus on narrow industry groups. HOLDRs initially own 20 stocks, which are unmanaged, and can become more concentrated due to mergers, or the disparate performance of their holdings. HOLDRs can only be bought in 100-share increments. Investors may exchange shares of a HOLDR for its underlying stocks at any time.

A money-market fund is an investment company that invests in commercial paper, banker's acceptances, repurchase agreements, government securities, certificates of deposit and other highly liquid securities, and pays money market rates of interest. Money markets are not FDIC-insured, may lose money, and are not guaranteed by a bank or other financial institution.

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

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

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asset value minus a deferred sales charge, and sold to other investors. UITs have set termination dates, at which point the underlying securities are sold and the sales proceeds are paid to the investor. Typically, a UIT investment is rolled over into successive trusts as part of a long-term strategy. A rollover fee may be charged for the exercise of rollover purchases. There are tax consequences associated with rolling over an investment from one trust to the next.

## Performance

The performance data given represents past performance and should not be considered indicative of future results. Principal value and investment return will fluctuate, so that an investor's shares, when sold, may be worth more or less than the original investment. Fund portfolio statistics change over time. Funds are not FDIC-insured, may lose value, and are not guaranteed by a bank or other financial institution.

Morningstar calculates after-tax returns using the highest applicable federal marginal income tax rate plus the investment income tax and Medicare surcharge. As of 2018, this rate is 37% plus 3.8% investment income plus 0.9% Medicare surcharge, or 41.7%. This rate changes periodically in accordance with changes in federal law.

## Pre-Inception Returns

The analysis in this report may be based, in part, on adjusted historical returns for periods prior to the inception of the share class of the fund shown in this report ("Report Share Class"). If pre-inception returns are shown, a performance stream consisting of the Report Share Class and older share classes) is created. Morningstar adjusts pre-inception returns downward to reflect higher expenses in the Report Share Class, we do not hypothetically adjust returns upwards for lower expenses. For more information regarding calculation of pre-inception returns please see the Morningstar Extended Performance Methodology.

**When pre-inception data is presented in the report, the header at the top of the report will indicate this. In addition, the pre-inception data included in the report will appear in italics.**

While the inclusion of pre-inception data provides valuable insight into the probable long-term behavior of newer share classes of a fund, investors should be aware that an adjusted historical return can only provide an approximation of that behavior. For example, the fee structures of a retail share class will vary from that of an institutional share class, as retail shares tend to have higher operating expenses and sales charges. These adjusted historical returns are not actual returns. The underlying investments in the share classes used to calculate the pre-performance string will likely vary from the underlying investments held in the fund after inception. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the fund itself.

## Quantitatively-Driven Content

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

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

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

## 12b1 Expense %

A 12b-1 fee is a fee used to pay for a mutual fund's distribution costs. It is often used as a commission to brokers for selling the fund. The amount of the fee is taken from a fund's returns.

## Alpha

Alpha is a measure of the difference between a security or portfolio's actual returns and its expected performance, given its level of risk (as measured by beta.) Alpha is often seen as a measure of the value added or subtracted by a portfolio manager.

## Analyst-Driven %

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

## Asset Allocation

Asset Allocation reflects asset class weightings of the portfolio. The "Other" category includes security types that are not neatly classified in the other asset classes, such as convertible bonds and preferred stocks, or cannot be classified by Morningstar as a result of missing data. Morningstar may display asset allocation data in several ways, including tables or pie charts. In addition, Morningstar may compare the asset class breakdown of the fund against its three-year average, category average, and/or index proxy.

Asset allocations shown in tables may include a breakdown among the long, short, and net (long positions net of short) positions. These statistics summarize what the fund's managers are buying and how they are positioning the fund's portfolio. When short positions are captured in these portfolio statistics, investors get a more robust description of the fund's exposure and risk. Long positions involve buying the security outright and selling it later, with the hope the security's price rises over time. Short positions are taken with the hope of benefiting from anticipated price declines. The investor borrows the security from another investor, sells it and receives cash, and then is obligated to buy it back at some point in the future. If the price falls after the short sale, the investor will have sold high and can buy low to close the short position and lock in a profit. However, if the price of the security increases after the short sale, the investor will experience a loss buying it at a higher price than the sale price.

Most fund portfolios hold fairly conventional securities, such as long positions in equities and bonds. Morningstar may generate a colored pie chart for these portfolios. Other portfolios use other investment strategies or securities, such as short positions or derivatives, in an attempt to reduce transaction costs, enhance returns, or reduce risk. Some of these securities and strategies behave like conventional securities, while other have unique return and risk characteristics. Portfolios that incorporate investment strategies resulting in short positions or portfolio with relatively exotic derivative positions often report data to Morningstar that does not meet the parameters of the calculation underlying a pie chart's generation. Because of the nature of how these securities are reported to Morningstar, we may not always get complete portfolio information to report asset allocation. Morningstar, at its discretion, may determine if unidentified characteristics of fund holdings are material. Asset allocation and other breakdowns may be rescaled accordingly so that percentages total to 100 percent. (Morningstar used discretion to determine if

unidentified characteristics of fund holdings are material, pie charts and other breakdowns may rescale identified characteristics to 100% for more intuitive presentation.)

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

#### **Average Effective Duration**

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

#### **Average Effective Maturity**

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

#### **Average Weighted Coupon**

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

#### **Average Weighted Price**

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

#### **Best Fit Index**

Alpha, beta, and R-squared statistics are presented for a broad market index and a "best fit" index. The Best Fit Index identified in this report was determined by Morningstar by calculating R-squared for the fund against approximately 100 indexes tracked by Morningstar. The index representing the highest R-squared is identified as the best fit index. The best fit index may not be the fund's benchmark, nor does it necessarily contain the types of securities that may be held by the fund or portfolio.

#### **Beta**

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

#### **Credit Quality Breakdown**

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

#### **Data Coverage %**

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

#### **Deferred Load %**

The back-end sales charge or deferred load is imposed when an investor redeems shares of a fund. The percentage of the load charged generally declines the longer the fund's shares are held by the investor. This charge,

coupled with 12b-1 fees, commonly serves as an alternative to a traditional front-end load.

#### **Expense Ratio %**

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

#### **Front-end Load %**

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

#### **Geometric Average Market Capitalization**

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

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

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

The index in the Growth of 10,000 graph is an unmanaged portfolio of specified securities and cannot be invested in directly. The index does not reflect any initial or ongoing expenses. A fund's portfolio may differ significantly from the securities in the index. The index is chosen by Morningstar.

#### **Management Fees %**

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

#### **Maximum Redemption Fee %**

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

#### **Mean**

Mean is the annualized geometric return for the period shown.

#### **Morningstar Medalist Rating™**

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

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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.

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### Morningstar Category

Morningstar Category is assigned by placing funds into peer groups based on their underlying holdings. The underlying securities in each portfolio are the primary factor in our analysis as the investment objective and investment strategy stated in a fund's prospectus may not be sufficiently detailed for our proprietary classification methodology. Funds are placed in a category based on their portfolio statistics and compositions over the past three years. Analysis of performance and other indicative facts are also considered. If the fund is new and has no portfolio history, Morningstar estimates where it will fall before giving it a permanent category assignment. Categories may be changed based on recent changes to the portfolio.

### Morningstar Rank

Morningstar Rank is the total return percentile rank within each Morningstar Category. The highest (or most favorable) percentile rank is zero and the lowest (or least favorable) percentile rank is 100. Historical percentile ranks are based on a snapshot of a fund at the time of calculation.

### Morningstar Rating™

The Morningstar Rating™ for funds, or "star rating", is calculated for funds and separate accounts with at least a three-year history. Exchange-traded funds and open-ended mutual funds are considered a single population for comparative purposes. It is calculated based on a Morningstar Risk-Adjusted Return measure that accounts for variation in a managed product's monthly excess performance, placing more emphasis on downward variations and rewarding consistent performance. The Morningstar Rating does not include any adjustment for sales loads. The top 10% of products in each product category receive 5 stars, the next 22.5% receive 4 stars, the next 35% receive 3 stars, the next 22.5%

receive 2 stars, and the bottom 10% receive 1 star. The Overall Morningstar Rating for a managed product is derived from a weighted average of the performance figures associated with its three-, five-, and 10-year (if applicable) Morningstar Rating metrics. For more information about the Morningstar Rating for funds, including its methodology, please go to [global.morningstar.com/managerdisclosures](http://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/oc/oc-learn-nrsro.html>. Additionally, Morningstar will use credit ratings from CRA's which have been recognized by foreign regulatory institutions that are deemed the equivalent of the NRSRO designation.

To determine the rating applicable to a holding and the subsequent holding weighted value of a portfolio two methods may be employed. First is a common methodology approach where if a case exists such that two rating organizations/ agencies have rated a holding, the lower rating of the two should

be applied; if three or more CRA's have rated a holding, the median rating should be applied, and in cases where there are more than two ratings and a median rating cannot be determined, the lower of the two middle ratings should be applied. Alternatively, if there is more than one rating available an average can be calculated from all and applied. Please Note: Morningstar, Inc. is not an NRSRO nor does it issue a credit rating on the fund. Credit ratings for any security held in a portfolio may change over time.

Morningstar uses the credit rating information to calculate a weighted-average credit quality value for the portfolio. This value is based only upon those holdings which are considered to be classified as "fixed\_income", such as government, corporate, or securitized issues. Other types of holdings such as equities and many, though not all, types of derivatives are excluded. The weighted-average credit quality value is represented by a rating symbol which corresponds to the long-term rating symbol schemas employed by most CRA's. Note that this value is not explicitly published but instead serves as an input in Style Box calculation. This symbol is then used to map to a Style Box credit quality category of "low," "medium," or "high". Funds with a "low" credit quality category are those whose weighted-average credit quality is determined to be equivalent to the commonly used High Yield classification, meaning a rating below "BBB", portfolios assigned to the "high" credit category have either a "AAA" or "AA+" average credit quality value, while "medium" are those with an average rating of "AA" inclusive to "BBB-". It is expected and intended that the majority of portfolios will be assigned a credit category of "medium".

For assignment to an interest-rate sensitivity category Morningstar uses the average effective duration of the portfolio. From this value there are three distinct methodologies employed to determine assignment to category.

Portfolios which are assigned to Morningstar municipal-bond categories employ static breakpoints between categories. These breakpoints are "Limited" equal to 4.5 years or less; (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 TTM

The Price/Cash Flow Ratio (or P/C Ratio) for a fund is the weighted average of the P/C Ratio of the stocks in its portfolio. The P/C Ratio of a stock represents the amount an investor is willing to pay for a dollar generated from a company's operations. It shows the ability of a company to generate cash and acts as a gauge of liquidity and solvency.

## P/E Ratio TTM

The Price/Earnings Ratio (or P/E Ratio) for a fund is the weighted average of the P/E Ratios of the stocks in its portfolio. The P/E Ratio of a stock is the stock's current price divided by the company's trailing 12-month earnings per share. A high P/E Ratio usually indicates the market will pay more to obtain the company's earnings because it believes in the company's abilities to increase their earnings. A low P/E Ratio indicates the market has less confidence that the company's earnings will increase, however value investors may believe such stocks have an overlooked or undervalued potential for appreciation.

## Percentile Rank in Category

Percentile Rank is a standardized way of ranking items within a peer group, in this case, funds within the same Morningstar Category. The observation with the largest numerical value is ranked zero, the observation with the smallest numerical value is ranked 100. The remaining observations are placed equal distance from one another on the rating scale. Note that lower percentile ranks are generally more favorable for returns (high returns), while higher percentile ranks are generally more favorable for risk measures (low risk).

## Performance Quartile

Performance Quartile reflects a fund's Morningstar Rank.

## Potential Capital Gains Exposure

Potential Capital Gains Exposure is an estimate of the percent of a fund's assets that represent gains. It measures how much the fund's assets have appreciated, and it can be an indicator of possible future capital gains distributions. A positive potential capital gains exposure value means that the fund's holdings have generally increased in value while a negative value means that the fund has reported losses on its book.

## Quarterly Returns

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

## R-Squared

R-squared is the percentage of a security or portfolio's return movements that are explained by movements in its benchmark index, showing the degree of correlation between the security or portfolio and the benchmark. This figure is helpful in assessing how likely it is that beta and alpha are statistically significant. A value of 1 indicates perfect correlation between the security or portfolio and its benchmark. The lower the R-squared value, the lower the correlation.

## Regional Exposure

The regional exposure is a display of the portfolio's assets invested in the regions shown on the report.

## Sector Weightings

Super Sectors represent Morningstar's broadest classification of equity sectors by assigning the 11 equity sectors into three classifications. The Cyclical Super Sector includes industries significantly impacted by economic shifts, and the 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.

Sector Strategies: Portfolios that invest exclusively in one sector or industry involve additional risks. The lack of industry diversification subjects the investor to increased industry-specific risks.

Non-Diversified Strategies: Portfolios that invest a significant percentage of assets in a single issuer involve additional risks, including share price fluctuations, because of the increased concentration of investments.

Small Cap Equities: Portfolios that invest in stocks of small companies involve additional risks. Smaller companies typically have a higher risk of failure, and are not as well established as larger blue-chip companies. Historically, smaller-company stocks have experienced a greater degree of market volatility than the overall market average.

Mid Cap Equities: Portfolios that invest in companies with market capitalization below \$10 billion involve additional risks. The securities of these companies may be more volatile and less liquid than the securities of larger companies.

High-Yield Bonds: Portfolios that invest in lower-rated debt securities (commonly referred to as junk bonds) involve additional risks because of the lower credit quality of the securities in the portfolio. The investor should be aware of the possible higher level of volatility, and increased risk of default.

Tax-Free Municipal Bonds: The investor should note that the income from tax-free municipal bond funds may be subject to state and local taxation and the Alternative Minimum Tax.

Bonds: Bonds are subject to interest rate risk. As the prevailing level of bond interest rates rise, the value of bonds already held in a portfolio declines. Portfolios that hold bonds are subject to declines and increases in value due to general changes in interest rates.

Hedge Funds: The investor should note that hedge fund investing involves specialized risks that are dependent upon the type of strategies undertaken by the manager. This can include distressed or event-driven strategies, long/short strategies, using arbitrage (exploiting price inefficiencies), international

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

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

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

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

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

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

**Liquidity Risk:** Closed-end fund, ETF, and HOLDR trading may be halted due to market conditions, impacting an investor's ability to sell a fund.

**Market Price Risk:** The market price of ETFs, HOLDRs, and closed-end funds traded on the secondary market is subject to the forces of supply and demand and thus independent of the NAV. This can result in the market price trading at a premium or discount to the NAV, which will affect an investor's value.

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

**Target-Date Funds:** Target-date funds typically invest in other mutual funds and are designed for investors who are planning to retire during the target date year. The fund's target date is the approximate date when investors expect to begin withdrawing their money. A target-date fund's investment objective/strategy typically becomes more conservative over time, primarily by reducing its allocation to equity mutual funds and increasing its allocations in fixed-income

mutual funds. An investor's principal value in a target-date fund is not guaranteed at any time, including at the fund's target date.

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

## Benchmark Disclosure

### Bloomberg US Agg Bond TR USD

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

### Bloomberg US Universal TR USD

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

### Morningstar Gbl xUS Growth TME NR USD

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

### 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 Val TR USD

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

### Morningstar US Mid Brd Grt TR USD

The index measures the performance of US mid-cap growth stocks. It targets stocks representing the faster growing half of the mid-cap market. This index does not incorporate Environmental, Social, or Governance (ESG) criteria.

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### **Morningstar US Mid Brd Val TR USD**

The index measures the performance of US mid-cap value stocks. It targets stocks representing the cheaper half of the U.S. mid-cap market. This index does not incorporate Environmental, Social, or Governance (ESG) criteria.

### **Morningstar US SmI 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.

### **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 EAFE NR USD**

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

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

### **Russell 1000 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.

### **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 Mid Cap Growth TR USD**

Tracks the companies within the Russell Midcap Index with higher price-to-book

ratios and higher forecasted growth values. The constituents displayed for this index are from the following proxy: iShares Russell Mid-Cap Growth ETF.

### **Russell Mid Cap TR USD**

Measures the performance of the 800 smallest companies in the Russell 1000 Index, which represent approximately 25% of the total market capitalization of the Russell 1000 Index. The constituents displayed for this index are from the following proxy: iShares Russell Mid-Cap ETF.

### **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.



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Fund data provided by Morningstar.

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**Peer Group Ranking Methodology.** A percentile rank denotes the value of a product in which a certain percent of observations falls within a peer group. The range of percentile rankings is between 1 and 100, where 1 represents a high statistical value and 100 represents a low statistical value. The 30th percentile, for example, is the value in which 30% of the highest observations may be found, the 65th percentile is the value in which 65% of the highest observations may be found, and so on.

Percentile rankings are calculated based on a normalized distribution ranging from 1 to 100 for all products in each peer group, where a ranking of 1 denotes a high statistical value and a ranking of 100 denotes a low statistical value. It is important to note that the same ranking methodology applies to all statistics, implying that a ranking of 1 will always mean highest value across all statistics.

For example, consider a risk/return assessment using standard deviation as a measure of risk. A percentile ranking equal to 1 for return denotes highest return, whereas a percentile ranking of 1 for standard deviation denotes highest risk among peers.

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