

# Vanguard Institutional Target Retirement Income Fund Institutional Shares VITRX

Overall Morningstar Rtg™ Morningstar Analyst Rtg™

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 Morningstar Analyst Rating is a subjective evaluation performed by mutual fund analysts of Morningstar, Inc. and based on five pillars: Process, Performance, People, Parent, and Price.

<b>NAV</b> \$22.16	<b>1-Day Total Return</b> 0.32%	<b>TTM Yield</b> 2.61%	<b>Load</b> None	<b>Total Assets</b> \$ 6.1 bil	<b>Expenses</b> 0.09%	<b>Fee Level</b> Low	<b>Turnover</b> 13%	<b>Status</b> Open	<b>Min. Inv.</b> \$ 100.0 mil
USD   NAV as of 27 Jun 2019   1-Day Return as of 27 Jun 2019		<b>30-Day SEC Yield</b> 2.46%	<b>Category</b> Target-Date Retirement	<b>Investment Style</b> Large Blend	<b>Credit Quality/Interest Rate Sensitivity</b> High/Moderate				

## Growth of 10K VITRX



## Performance VITRX

	YTD	1 Yr	3 Yr *	5 Yr *	10 Yr *	Since Inception
Growth of 10,000	10,577	10,373	11,486	—	—	—
Fund	5.77	3.73	4.73			4.08
+/- Morningstar Mod Tgt Risk TR USD	-1.69	1.22	-2.37			-1.24
+/- Category	-0.20	0.56	0.26			0.54
% Rank in Cat	—	27	35	—	—	—
# of Funds in Cat	197	185	161	129	93	—

\* Annualized returns.

Data as of 05/31/2019. Currency is displayed in USD.

## Standardized Returns VITRX

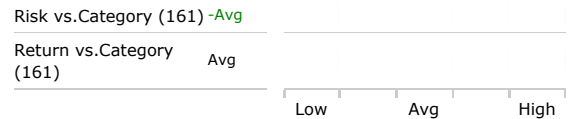
Max Front Load %	Max Back Load %	Prospectus Net Expense Ratio %	Prospectus Gross Expense Ratio % (as of 06/26/2019)	30-day SEC Yield (as of 06/26/2019)	30-day Yield Unsubsidized (as of 06/26/2019)
		0.09	0.09	2.46	2.46
Standardized Return % (as of 03/31/2019)			After Tax Returns % (as of 03/31/2019)		
			On Distribution	On Dist. & Sales of Shrs	
1 Yr Annualized		4.03	2.96		2.51
5 Yr Annualized					
10 Yr Annualized					

The performance 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 the performance data quoted herein. For performance data current to the most recent month-end, please call 800-662-7447 or visit [www.vanguard.com](http://www.vanguard.com).

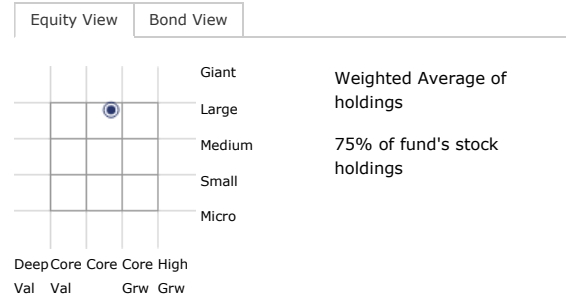
Standardized Returns assume reinvestment of dividends and capital gains. They depict performance without adjusting for the effects of taxation, but are adjusted to reflect sales charges and ongoing fund expenses.

If adjusted for taxation, the performance quoted would be significantly reduced.

## Overall Morningstar Risk Measures VITRX



## Style Map VITRX



## Asset Allocation VITRX

Type	% Net	% Short	% Long
Cash	2.02	0.00	2.02
US Stocks	17.21	0.00	17.21
Non US Stocks	11.26	0.00	11.26
Bonds	69.13	0.02	69.15
Other	0.38	0.00	0.38

Note: Contains derivatives or short positions

As of 05/31/2019

## Management VITRX

	Start Date
William A. Coleman	06/26/2015
Walter Nejman	06/26/2015

	Standardized Return % (as of 03/31/2019)	After Tax Returns % (as of 03/31/2019)	
		On Distribution	On Dist. & Sales of Shrs
Since Inception (06/26/2015)	4.21	3.37	2.98

*The performance 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 the performance data quoted herein. For performance data current to the most recent month-end, please call 800-662-7447 or visit [www.vanguard.com](http://www.vanguard.com).*

*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.*

### Top Holdings VITRX

Equity	Bond	Weight %	Last Price	Day Chg %	52-Week Range
<b>% Assets in Top 5 Holdings 0</b>					
Increase	Decrease	New to Portfolio			
Portfolio Date :05/31/2019, Price data delayed 15 ~ 30 minutes					

### Top Sectors VITRX

Equity	Bond	Fund	3 Yr High	3 Yr Low	Cat Avg	Fund	Cat Avg
Technology		18.70	18.70	16.99	18.50		18.50
Financial Services		17.68	18.42	17.68	17.21		17.21
Consumer Cyclical		12.11	12.11	11.50	11.86		11.86
Industrials		11.38	11.69	11.28	10.85		10.85
Healthcare		11.18	12.49	11.18	11.57		11.57

Portfolio Date: 05/31/2019

### Dividend and Capital Gains Distributions VITRX

Distribution Date	Distribution NAV	Long-Term Capital Gain	Short-Term Capital Gain	Return of Capital	Dividend Income	Distribution Total
03/27/2019	21.52	0.0000	0.0000	0.0000	0.0834	0.0834
12/28/2018	20.44	0.0061	0.0166	0.0000	0.2287	0.2514
09/21/2018	21.48	0.0000	0.0000	0.0000	0.1250	0.1250
06/15/2018	21.38	0.0000	0.0000	0.0000	0.1267	0.1267
03/15/2018	21.45	0.0000	0.0000	0.0000	0.0680	0.0680

Currency: USD

## OEF Data Definitions

## Quote

**52-Wk Range**

The highest and lowest NAV a security reached during the last 52 weeks.

**Analyst Pick/Pan**

This proprietary Morningstar data point indicates whether a fund is designated as a favorite (Fund Analyst Pick) or a least-favorite (Fund Analyst Pan) chosen by Morningstar's in-house staff of analysts.

Only a handful of funds in each investment category are designated Analyst Picks, and this is an excellent way to quickly look for quality funds. Conversely, looking at Analyst Pans is a good way to avoid funds that may be poor or inappropriate investment options.

**Average Effective Duration**

Average effective duration provides a measure of a fund's interest-rate sensitivity.

The longer a fund's duration, the more sensitive the fund is to shifts in interest rates.

The relationship among funds with different durations is straightforward: A fund with duration of 10 years is expected to be twice as volatile as a fund with a five-year duration.

Duration also gives an indication of how a fund's net asset value (NAV) will change as interest rates change. A fund with a five-year duration would be expected to lose 5% of its NAV if interest rates rose by 1 percentage point, or gain 5% if interest rates fell by 1 percentage point. Morningstar surveys fund companies for this information.

**Average Effective Maturity**

Average effective maturity is a weighted average of all the maturities of the bonds in a portfolio, computed by weighting each bond's effective maturity by the market value of the security. Average effective maturity takes into consideration all mortgage prepayments, puts, and adjustable coupons. (Because Morningstar uses fund company calculations for this figure and because different companies use varying interest-rate assumptions in determining call likelihood and timing, we ask that companies not adjust for call provisions.)

Longer-maturity funds are generally considered more interest-rate sensitive than their shorter counterparts.

**Asset Allocation**

The process of dividing investments among different kinds of asset categories, such as stocks, bonds, real estate and cash, to optimize the risk/reward tradeoff based on an individual's or institution's specific situation and goals. A key concept in financial planning and money management.

**Day Change - Percentage**

The daily percentage change in the NAV of the fund.

**Day Change - Value**

The daily value change in the NAV of the fund.

**Distribution - Ex Date**

The date on which an investor who purchases a share is not entitled to an upcoming, declared dividend. The investor selling the share receives this dividend.

**Distribution - Income**

The amount of the distribution attributed by the fund to net investment income, such as interest and dividends.

**Distribution - S/T Cap Gain**

The amount of the distribution attributed by the fund to realized short-term capital gains.

**Distribution - L/T Cap Gain**

The amount of the distribution attributed by the fund to realized long-term capital gains.

**Distribution - Total**

This is the total value of distributions calculated by summing Income, Total Capital Gain and Return Capital Gain distributions.

**Expenses**

The expense ratio is the annual fee that all funds or ETFs 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 initial 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.

If the fund's assets are small, its expense ratio can be quite high because the fund must meet its expenses from a restricted asset base. Conversely, as the net assets of the fund grow, the expense percentage should ideally diminish as expenses are spread across the wider base. Funds may also opt to waive all or a portion of the expenses that make up their overall expense ratio.

**Expense Ratio: Annual Report**

Often referred to as the Audited Expense Ratio. Morningstar pulls the net annual expense ratio from the fund's audited annual report. Annual-report expense ratios reflect the actual fees charged during a particular fiscal year. The annual report expense ratio for a fund of funds is the wrap or sponsor fee only.

The expense ratio 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 initial 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. If the fund's assets are small, its expense ratio can be quite high because the fund must meet its expenses from a restricted asset base. Conversely, as the net assets of the fund grow, the expense percentage should ideally diminish as expenses are spread across the wider base. Funds may also opt to waive all or a portion of the expenses that make up their overall expense ratio.

**Expense Ratio: Prospectus**

The net prospectus expense ratio is pulled from the fund's prospectus and shows expenses the fund company anticipates will actually be borne by the fund's shareholders in the upcoming fiscal year less any expense waivers, offsets or reimbursements. In summary, the net prospectus expense ratio is forward looking and the net annual report expense ratio is backward looking.

The expense ratio 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 initial 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. If the fund's assets are small, its expense ratio can be quite high because the fund must meet its expenses from a restricted asset base. Conversely, as the net assets of the fund grow, the expense percentage should ideally diminish as expenses are spread across the wider base. Funds may also opt to waive all or a portion of the expenses that make up their overall expense ratio.

**Extended Performance**

Extended performance is an estimate based on the performance of the fund's oldest share class, adjusted for fees.

**Fee Level**

This is a proprietary Morningstar data point.

Morningstar evaluates a mutual fund share class's expense ratio relative to other funds that invest in a similar asset class and have similar distribution characteristics. Within each Comparison Group, a fund share class' expense ratio is ranked against peers using five quintiles.

The Fee Level rating is objective, based entirely on a mathematical evaluation of a share class's expense ratio relative to similar funds. It is a useful tool for putting a fund's fees into context, but alone is not a sufficient basis for investment decisions.

**Growth of \$10,000**

A chart showing the growth of a \$10,000 investment in terms of market prices. The red line represents the growth of a \$10,000 investment based on the fund's market price. The orange line represents the fund's Morningstar Category (see definition below). The green line represents the S&P 500. The starting date for each line is set to the earliest month from which Morningstar has continuous monthly return data, or to the leftmost point on the chart.

All three lines are plotted on a logarithmic scale, so that identical percentage changes in the value of an investment have the same vertical distance on the graph. For example, the vertical distance between \$10,000 and \$20,000 is the same as the distance between \$100,000 and \$200,000 because both represent a 100% increase in investment value. This provides a more accurate representation of a fund's performance than would a simple arithmetic graph. All the graphs are scaled so that the full length of vertical axis represents a tenfold increase in investment value. For funds whose returns have exhibited greater than a tenfold increase over the period shown in the graph, the vertical axis has been compressed accordingly.

**Investment Style**

This is a proprietary Morningstar data point. The Morningstar Style Box is a nine-square grid that provides a graphical representation of the "investment style" of stocks and mutual funds. For stocks and stock funds, it classifies securities according to market capitalization (the vertical axis) and growth and value factors (the horizontal axis). Fixed income funds are classified according to credit quality (the vertical axis) and sensitivity to changes in interest rates (the horizontal axis).

By providing an easy-to-understand visual representation of stock and fund characteristics, the Morningstar Style Box allows for informed comparisons and portfolio construction based on actual holdings, as opposed to assumptions based on a fund's name or how it is marketed. The Style Box also forms the basis for Morningstar's style-based fund categories and market indexes.

**How It Works**

The vertical axis of the Style Box defines three size categories, or capitalization bands—small, mid-size, and large. The horizontal axis defines three style categories. Two of these categories, "value" and "growth," are common to both stocks and funds. However, for stocks, the central column of the style box represents the core style (those stocks for which neither value or growth characteristics dominate); for funds, it represents the blend style (a mixture of growth and value stocks or mostly core stocks).

Style Box assignments begin at the individual stock level. Morningstar determines the investment style of each individual stock in its database. Stocks are evaluated against other stocks in the same geographic area (United States, Latin America, Canada, Europe, Japan, Asia ex-Japan, Australia/New Zealand). The style attributes of individual stocks are then used to determine the style classification of stock mutual funds.

**The Horizontal Axis**

- The scores for a stock's value and growth characteristics determine its horizontal placement:
- Value Score Components and Weights
- Forward looking measures 50.0%
- Price/Prospective Earnings
- Historical based measures 50.0%
- Price/book 12.5% Price/sales 12.5% Price/cash flow 12.5% Dividend yield 12.5%
- Growth Score Components and Weights
- Forward looking measures 50.0%
- Long-term projected earnings growth
- Historical-based measures 50.0%
- Historical earnings growth 12.5% Sales growth 12.5% Cash flow growth 12.5% Book value growth 12.5%

Growth and value characteristics for each individual stock are compared to those of other stocks within the same capitalization band and are scored from zero to 100 for both value and growth. To determine the overall style score, the value score is subtracted from the growth score.

The resulting number can range from 100 (for low-yield, extremely growth-oriented stocks) to -100 (high-yield, low-growth stocks). A stock is classified as growth if the net score equals or exceeds the "growth threshold" (normally about 25 for large-cap stocks). It is deemed value if its score equals or falls below the "value threshold" (normally about -15 for large-cap stocks). And if the score lies between the two thresholds, the stock is classified as "core."

The thresholds between value, core, and growth stocks vary to some degree over time, as the distribution of stock styles changes in the market. However, on average, the three stock styles each account for approximately one third of the total free float in each size category.

**The Vertical Axis**

Rather than a fixed number of "large cap" or "small cap" stocks, Morningstar uses a flexible system that isn't adversely affected by overall movements in the market. Large-cap stocks are defined as the group that accounts for the top 70% of the capitalization of each geographic area; mid-cap stocks represent the next 20%; and small-cap stocks represent the balance.

**Moving from Individual Stocks to Funds**

A stock fund is an aggregation of individual stocks and its style is determined by the style assignments of the stocks it owns. By plotting all of a fund's stocks on the stock style grid, the range of stock styles included in the fund immediately becomes apparent. An asset-weighted average of the underlying stocks' style and size scores determines a fund's placement in the Style Box.

Style box assignments for stocks are updated each month. Assignments for funds are recalculated whenever Morningstar receives updated portfolio holdings for the fund.

**Using the Style Box**

In general, a growth-oriented fund will hold the stocks of companies that the portfolio manager believes will increase earnings faster than the rest of the market. A value-oriented fund contains mostly stocks the manager thinks are currently undervalued in price and will eventually see their worth recognized by the market. A blend fund might be a mix of growth stocks and value stocks, or it may contain stocks that exhibit both characteristics.

Understanding how different types of stocks behave is crucial for building a diversified, style-controlled portfolio of stocks or mutual funds. The Morningstar Style Box helps investors construct portfolios based on the characteristics—the style factors—of all the stocks and funds that portfolio includes.

**The Fixed-Income Style Box**

For fixed-income funds, the vertical axis shows the credit quality of the long bonds owned and the horizontal axis shows interest rate sensitivity as measured by a bond's effective duration.

Morningstar seeks credit rating information from fund companies on a periodic basis (e.g., quarterly). In compiling credit rating information, Morningstar instructs fund companies to only use ratings that have been assigned by a Nationally Recognized Statistical Rating Organization (NRSRO): Moody's, Standard & Poor's, Fitch, and Egan-Jones. If two NRSROs have rated a security, fund companies are to report the lowest rating; if three or more NRSROs have rated the same security differently, fund companies are to report the rating that is in the middle. For example, if NRSRO X rates a security AA-, NRSRO Y rates the same security an A and NRSRO Z rates it a BBB+, the fund company should use the credit rating of 'A' in its reporting to Morningstar. PLEASE NOTE: Morningstar, Inc. is not itself an NRSRO nor does it issue a credit rating on the fund. An NRSRO rating on a fixed-income security can change from time-to-time.

For credit quality, Morningstar combines the credit rating information provided by the fund companies with an average default rate calculation to come up with a weighted-average credit quality. The weighted-average credit quality is currently a letter that roughly corresponds to the scale used by a leading NRSRO. Bond funds are assigned a style box placement of "low", "medium", "high" based on their average credit quality. Funds with a low credit quality are those whose weighted-average credit quality is determined to be less than "BBB-"; medium are those less than "AA-", but greater or equal to "BBB-"; and high are those with a weighted-average credit quality of "AA-" or higher. When classifying a bond portfolio, Morningstar first maps the NRSRO credit ratings of the underlying holdings to their respective default rates (as determined by Morningstar's analysis of actual historical default rates). Morningstar then averages these default rates to determine the average default rate for the entire bond fund. Finally, Morningstar maps this average default rate to its corresponding credit rating along a convex curve.

For interest-rate sensitivity, Morningstar obtains from fund companies the average effective duration. Generally, Morningstar classifies a fixed-income fund's interest-rate sensitivity based on the effective duration of the Morningstar Core Bond Index (MCBI), which is currently three years. The classification of Limited will be assigned to those funds whose average effective duration is between 25% to 75% of MCBI's average effective duration; funds whose average effective duration is between 75% to 125% of the MCBI will be classified as Moderate; and those that are at 125% or greater of the average effective duration of the MCBI will be classified as Extensive.

For municipal bond funds, Morningstar also obtains from fund companies the average effective duration. In these cases static breakpoints are utilized. These breakpoints are as follows: (i) Limited: 4.5 years or less; (ii) Moderate: more than 4.5 years but less than 7 years; and (iii) Extensive: more than 7 years. In addition, for non-US taxable and non-US domiciled fixed income funds static duration breakpoints are used: (i) Limited: less than or equal to 3.5 years; (ii) Moderate: greater than 3.5 and less than equal to 6 years; (iii) Extensive: greater than 6 years.

#### Load

Load denotes either a fund's maximum initial or deferred sales charge.

For initial, or front-end loads, this figure is expressed as a percentage of the initial investment and is incurred upon purchase of fund shares.

For deferred sales charges (also known as back-end loads or contingent deferred sales charges), the amount charged is based on the lesser of the initial or final value of the shares sold. If the fund does not have a load and remains open to investors, "None" appears. We list "12b-1 only" in this space if the fund has no sales fees, but does have a 12b-1 fee. If the fund no longer offers shares to new investors, "Closed" is listed here. A percentage followed by a W indicates that, at the time of publication, the fund is waiving its load for the general public.

#### Morningstar Rating

Morningstar rates mutual funds from one to five stars based on how well they've performed (after adjusting for risk and accounting for all sales charges) in comparison to similar funds. Within each Morningstar Category, the top 10% of funds receive five stars, the next 22.5% four stars, the middle 35% three stars, the next 22.5% two stars, and the bottom 10% receive one star. Funds are rated for up to three time periods--three-, five-, and 10 years--and these ratings are combined to produce an overall rating. Funds with less than three years of history are not rated. Ratings are objective, based entirely on a mathematical evaluation of past performance. They're a useful tool for identifying funds worthy of further research, but shouldn't be considered buy or sell recommendations.

#### Morningstar Fee Level for Funds

This is a proprietary Morningstar data point.

Morningstar evaluates a mutual fund share class's expense ratio relative to other funds that invest in a similar asset class and have similar distribution characteristics. Within each Comparison Group, a fund share class' expense ratio is ranked against peers using five quintiles.

The Fee Level rating is objective, based entirely on a mathematical evaluation of a share class's expense ratio relative to similar funds. It is a useful tool for putting a fund's fees into context, but alone is not a sufficient basis for investment decisions.

#### Minimum Investments

##### Initial Investment

The minimum purchase indicates the smallest investment amount a fund will accept to establish a new account.

##### Additional Investment

This indicates the smallest permissible additional purchase a fund will accept in an existing account.

##### Initial IRA Investment

The smallest investment amount accepted for establishing an individual retirement account. If none appears, the fund does not have a plan. If the minimum is zero, then \$0 will appear.

##### Additional IRA Investment

This indicates the smallest permissible additional purchase a fund will accept in an existing IRA account. If the minimum is zero, then \$0 will appear.

##### Initial Auto-Invest Program Investment

This indicates the smallest amount with which one may enter a fund's automatic-investment plan - an arrangement where the fund takes money on a monthly, quarterly, semiannual, or annual basis from the shareholder's checking account. Often, the normal minimum initial purchase requirements are waived in lieu of this systematic investment plan. The systematic investment amount is the minimum amount required for subsequent regular investments in an automatic investment plan. Studies indicate that regular automatic investment, also known as dollar-cost averaging, is perhaps the most successful investment plan for long-term investors.

##### Additional Auto-Invest Program Investment

This indicates the smallest permissible additional investment a fund will accept in an existing automatic-investment plan account.

**Morningstar Category**

This is a proprietary Morningstar data point.

While the investment objective stated in a fund's prospectus may or may not reflect how the fund actually invests, the Morningstar category is assigned based on the underlying securities in each portfolio.

Morningstar categories help investors and investment professionals make meaningful comparisons between funds. The categories make it easier to build well-diversified portfolios, assess potential risk, and identify top-performing funds. We place funds in a given category based on their portfolio statistics and compositions over the past three years.

If the fund is new and has no portfolio history, we estimate where it will fall before giving it a more permanent category assignment. When necessary, we may change a category assignment based on recent changes to the portfolio.

**Stock Funds****Domestic-Stock Funds**

Funds with at least 70% of assets in domestic stocks are categorized based on the style and size of the stocks they typically own. The style and size divisions reflect those used in the Morningstar investment style box: value, blend, or growth style and small, medium, or large median market capitalization. (See Morningstar Style Box for more details on style methodology.)

Based on their investment style over the past three years, domestic-stock funds are placed in one of the nine categories: large growth, large blend, large value, medium growth, medium blend, medium value, small growth, small blend, small value. Domestic-equity funds that specialize in a particular sector of the market are placed in a specialty category: communications, financials, health care, natural resources, real estate, technology, utilities, and miscellaneous.

Also see "Conservative Allocation" and "Moderate Allocation" in the "Balanced Funds" section below.

**International-Stock Funds**

Stock funds that have invested 40% or more of their equity holdings in foreign stocks (on average over the past three years) are placed in an international-stock category.

**Foreign Large Value:** These funds seek capital appreciation by investing in large international stocks that are value-oriented. Large-cap foreign stocks have market capitalizations greater than \$5 billion. Value is defined based on low price/book and price/cash-flow ratios, relative to the MSCI EAFE Index. These funds typically will have less than 20% of assets invested in U.S. stocks.

**Foreign Large Blend:** These funds seek capital appreciation by investing in a variety of large international stocks. Large-cap foreign stocks have market capitalizations greater than \$5 billion. The blend style is assigned to funds where neither growth nor value characteristics predominate. These funds typically will have less than 20% of assets invested in U.S. stocks.

**Foreign Large Growth:** These funds seek capital appreciation by investing in large international stocks that are growth-oriented. Large-cap foreign stocks have market capitalizations greater than \$5 billion. Growth is defined based on high price/book and price/cash-flow ratios, relative to the MSCI EAFE Index. These funds typically will have less than 20% of assets invested in U.S. stocks.

**Foreign Small/Mid Value:** These funds seek capital appreciation by investing in small- and mid-sized international stocks that are value-oriented. Small- and mid-cap stocks have market capitalizations less than \$5 billion. Value is defined based on low price/book and price/cash-flow ratios, relative to the MSCI EAFE Index. These funds typically will have less than 20% of assets invested in U.S. stocks.

**Foreign Small/Mid Growth:** These funds seek capital appreciation by investing in small- and mid-sized international stocks that are growth-oriented. Small- and mid-cap stocks have market capitalizations less than \$5 billion. Growth is defined based on high price/book and price/cash-flow ratios, relative to the MSCI EAFE Index. These funds typically will have less than 20% of assets invested in U.S. stocks.

**World Stock:** an international fund having more than 20% of stocks invested in the United States.

**Diversified Emerging Markets:** at least 50% of stocks invested in emerging markets.

**Diversified Pacific Asia:** at least 65% of stocks invested in Pacific countries, with at least an additional 10% of stocks invested in Japan.

**Asia/Pacific ex-Japan:** at least 75% of stocks invested in Pacific countries, with less than 10% of stocks invested in Japan.

**Europe:** at least 75% of stocks invested in Europe.

**Japan:** at least 75% of stocks invested in Japan.

**Latin America:** at least 75% of stocks invested in Latin America.

**Global Real Estate:** Global real estate portfolios invest primarily in non-U.S. real estate securities but may also invest in U.S. real estate securities. Securities that these portfolios purchase include: debt and equity securities, convertible securities, and securities issued by real estate investment trusts (REITs) and REIT-like entities. Portfolios in this category also invest in real-estate operating companies.

Also see "World Allocation" in the "Balanced Funds" section below.

**Bond Funds**

Funds with 80% or more of their assets invested in bonds are classified as bond funds. Bond funds are divided into two main groups: taxable bond and municipal bond. (Note: For all bond funds, maturity figures are used only when duration figures are unavailable.)

**Taxable-Bond Funds**

**Long-Term Government:** A fund with at least 90% of its bond portfolio invested in government issues with a duration of greater than or equal to six years or an average effective maturity of greater than 10 years.

**Intermediate-Term Government:** A fund with at least 90% of its bond portfolio invested in government issues with a duration of greater than or equal to 3.5 years and less than six years or an average effective maturity of greater than or equal to four years and less than 10 years.

**Short-Term Government:** A fund with at least 90% of its bond portfolio invested in government issues with a duration of greater than or equal to one year and less than 3.5 years, or average effective maturity of greater than or equal to one year and less than four years.

**Long-Term Bond:** A fund that focuses on corporate and other investment-grade issues with an average duration of more than six years, or an average effective maturity of more than 10 years.

**Intermediate-Term Bond:** A fund that focuses on corporate, government, foreign or other issues with an average duration of greater than or equal to 3.5 years but less than or equal to six years, or an average effective maturity of more than four years but less than 10 years.

**Short-Term Bond:** A fund that focuses on corporate and other investment-grade issues with an average duration of more than one year but less than 3.5 years, or an average effective maturity of more than one year but less than four years.

**Ultrashort Bond:** Used for funds with an average duration or an average effective maturity of less than one year. This category includes general- and government-bond funds, and excludes any international, convertible, multisector, and high-yield bond funds.

**High-Yield Bond:** A fund with at least 65% of assets in bonds rated below BBB.

**World Bond:** A fund that invests at least 40% of bonds in foreign markets.

**Emerging-Markets Bond:** at least 65% assets in emerging-markets bonds.

**Multisector Bond:** Used for funds that seek income by diversifying their assets among several fixed-income sectors, usually U.S. government obligations, foreign bonds, and high-yield domestic debt securities.

**Inflation-Protected Bond:** Inflation-protected bond portfolios invest primarily in debt securities that adjust their principal values in line with the rate of inflation. These bonds can be issued by any organization, but the U.S. Treasury is currently the largest issuer for these types of securities.

**Bank Loan:** funds that invest primarily in floating-rate bank loans instead of bonds. In exchange for their credit risk, they offer high interest payments that typically float above a common short-term benchmark.

**Municipal Bond Funds**

**Manager Bond Funds**

**Municipal National Long-Term:** A national fund with an average duration of more than seven years, or average maturity of more than 12 years.

**Municipal National Intermediate-Term:** A national fund with an average duration of more than 4.5 years but less than seven years, or average maturity of more than five years but less than 12 years.

**Municipal National Short:** A fund that focuses on municipal debt/bonds with an average duration of less than 4.5 years, or an average maturity of less than five years.

**State-specific munis:** A municipal bond fund that primarily invest in one specific state. These funds must have at least 80 percent of assets invested in municipal bonds from that state. Each state-specific muni category includes long, intermediate, and short duration bond funds. State-specific funds that do not fall into one of the below categories will occupy either the Muni Single State Long-Term or Muni Single State Intermediate/Short category.

- Muni California Intermediate/Short
- Muni California Long-Term
- Muni Massachusetts
- Muni Minnesota
- Muni New Jersey
- Muni New York Intermediate/Short
- Muni New York Long-Term
- Muni Ohio
- Muni Pennsylvania

**High Yield Muni:** A fund that invest at least 50 percent of assets in high-income municipal securities that are not rated or that are rated by a major rating agency at the level of BBB (considered speculative in the municipal industry) or below.

**Balanced Funds Funds** in these categories offer investors a mix of stocks and bonds to provide capital appreciation, income, diversification, or specific allocations based on planned retirement dates. This group also includes funds that invest in convertibles, which act a bit like stocks and a bit like bonds.

**Convertibles:** Convertible bond portfolios are designed to offer some of the capital-appreciation potential of stock portfolios while also supplying some of the safety and yield of bond portfolios. To do so, they focus on convertible bonds and convertible preferred stocks. Convertible bonds allow investors to convert the bonds into shares of stock, usually at a preset price. These securities thus act a bit like stocks and a bit like bonds.

**Conservative Allocation:** Conservative-allocation portfolios seek to provide both capital appreciation and income by investing in three major areas: stocks, bonds, and cash. These portfolios tend to hold smaller positions in stocks than moderate-allocation portfolios. These portfolios typically have 20% to 50% of assets in equities and 50% to 80% of assets in fixed income and cash.

**Moderate Allocation:** Moderate-allocation portfolios seek to provide both capital appreciation and income by investing in three major areas: stocks, bonds, and cash. These portfolios tend to hold larger positions in stocks than conservative-allocation portfolios. These portfolios typically have 50% to 70% of assets in equities and the remainder in fixed income and cash.

**World Allocation:** World-allocation portfolios seek to provide both capital appreciation and income by investing in three major areas: stocks, bonds, and cash. While these portfolios do explore the whole world, most of them focus on the U.S., Canada, Japan, and the larger markets in Europe. It is rare for such portfolios to invest more than 10% of their assets in emerging markets. These portfolios typically have at least 10% of assets in bonds, less than 70% of assets in stocks, and at least 40% of assets in non-U.S. stocks or bonds.

**Target-Date Portfolios:** Target-date portfolios provide a diversified exposure to stocks, bonds, and cash for those investors who have a specific date in for retirement or another goal. These portfolios aim to provide investors with an optimal level of return and risk, based solely on the target date. Over time, management adjusts the allocation among asset classes to more conservative mixes as the target date approaches. Morningstar divides target-date funds into the following categories:

- Target-Date 2000-2010
- Target-Date 2011-2015
- Target-Date 2016-2020
- Target-Date 2021-2025
- Target-Date 2026-2030
- Target-Date 2031-2035
- Target-Date 2036-2040
- Target-Date 2041-2045
- Target-Date 2050+
- Retirement Income

**Alternative**

Alternative funds may take short positions or invest in currencies, derivatives, or other instruments. Funds in this group may attempt to move in the opposite direction of the market or may have performance that is not correlated with the broader markets.

**Bear Market:** Bear-market portfolios invest in short positions and derivatives in order to profit from stocks that drop in price. Because these portfolios often have extensive holdings in shorts or puts, their returns generally move in the opposite direction of the benchmark index.

**Currency:** Currency portfolios invest in U.S. and foreign currencies through the use of short-term money market instruments; derivative instruments including (and not limited to) forward currency contracts, index swaps, and options; and cash deposits.

**Long-Short:** Long-short portfolios hold sizable stakes in both long and short positions. Some funds that fall into this category are market neutral--dividing their exposure equally between long and short positions in an attempt to earn a modest return that is not tied to the market's fortunes. Other portfolios that are not market neutral will shift their exposure to long and short positions depending upon their macro outlook or the opportunities they uncover through bottom-up research.

**Specialty-Precious Metals:** Specialty-precious metals portfolios focus on mining stocks, though some do own small amounts of gold bullion. Most portfolios concentrate on gold-mining stocks, but some have significant exposure to silver-, platinum-, and base-metal-mining stocks as well. Precious-metals companies are typically based in North America, Australia, or South Africa.

**Morningstar Return Rating**

An annualized measure of a fund's load-adjusted excess return relative to the return of the 90-day Treasury Bill over a three-, five-, or ten-year period. This is a component of the Morningstar Risk-Adjusted Return. This is derived directly from Morningstar Return. In each Morningstar Category, the top 10% of investments earn a High rating, the next 22.5% Above Average, the middle 35% Average, the next 22.5% Below Average, and the bottom 10% Low. Investments with less than three years of performance history are not rated.

**Morningstar Risk Rating**

This is a proprietary Morningstar data point. An assessment of the variations in a fund's monthly returns, with an emphasis on downside variations, in comparison to similar funds. In each Morningstar Category, the 10% of funds with the lowest measured risk are described as Low Risk, the next 22.5% Below Average, the middle 35% Average, the next 22.5% Above Average, and the top 10% 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 fund. Funds with less than three years of performance history are not rated.

**Manager Name**

The name of the individual or individuals who are employed by the advisor or subadvisor who are directly responsible for managing the fund's portfolio, as taken directly from the fund's prospectus. Other terms that may appear in this column include the following:

**Multiple Managers**

This term appears when more than two people are involved in the fund management, and they manage independently. Where this term is used, quite often the fund has divided net assets in set amounts among the individual managers. In most cases, multiple managers are employed at different subadvisors or investment firms.

**Management Team**

This is used when there are more than two people involved in fund management, and they manage together, or when the fund strongly promotes its team-managed aspect.

**Et al**

When this term appears after a manager name, it indicates that while other people are involved in fund management, the person listed acts as the leader or is recognized by the fund as being the principal player.

**NAV**

A fund's net asset value (NAV) represents its per-share price. NAV is calculated by dividing a fund's total net assets by its number of shares outstanding. Shares in regular open-end mutual funds are bought and sold at NAV, but shares in ETFs (with the exception of creation units) are bought and sold at the market price, which can differ from NAV.

**Role in Portfolio**

Role in Portfolio assists with portfolio allocation, funds can be designated core, supporting player, or specialty.

Core funds should be the bulk of an investor's portfolio, while supporting players contribute to a portfolio but are secondary to the core. Specialty offerings tend to be speculative and should typically only be a small portion of investors' portfolios.

**Stewardship Grade**

Morningstar's Stewardship Grade for funds goes beyond the usual analysis of strategy, risk, and return. The Stewardship Grade allows investors and advisors to assess funds based on factors that we believe influence the following:

- The manner in which funds are run

- The degree to which the management company's and fund board's interests are aligned with fund shareholders
- The degree to which shareholders can expect their interests to be protected from potentially conflicting interests of the management company

We assign each fund a letter grade from A (best) to F (worst). Funds are graded on an absolute basis. There is no "curve."

Morningstar analysts' evaluation of five factors determine the grade for each fund:

- Regulatory Issues
- Board Quality
- Manager Incentives
- Fees
- Corporate Culture

Morningstar's Stewardship Grade for funds is entirely different from the Morningstar Rating for funds, commonly known as the Star Rating. There is no relationship between the two.

#### 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 investment style (value, blend, or growth).

For fixed-income funds, the vertical axis shows the credit quality of the long bonds owned and the horizontal axis shows interest rate sensitivity as measured by a bond's effective duration.

Morningstar seeks credit rating information from fund companies on a periodic basis (e.g., quarterly). In compiling credit rating information Morningstar accepts credit ratings reported by fund companies that have been issued by all Nationally Recognized Statistical Rating Organizations (NRSROs). For a list of all NRSROs, please visit <http://www.sec.gov/divisions/marketreg/ratingagency.htm>. Additionally, Morningstar accepts foreign credit ratings from widely recognized or registered rating agencies. If two rating organizations/agencies have rated a security, fund companies are to report the lower rating; if three or more organizations/agencies have rated a security, fund companies are to report the median rating, and in cases where there are more than two organization/agency ratings and a median rating does not exist, fund companies are to use the lower of the two middle ratings. PLEASE NOTE: Morningstar, Inc. is not itself an NRSRO nor does it issue a credit rating on the fund. An NRSRO or rating agency ratings can change from time-to-time.

For credit quality, Morningstar combines the credit rating information provided by the fund companies with an average default rate calculation to come up with a weighted-average credit quality. The weighted-average credit quality is currently a letter that roughly corresponds to the scale used by a leading NRSRO. Bond funds are assigned a style box placement of "low", "medium", or "high" based on their average credit quality. Funds with a low credit quality are those whose weighted-average credit quality is determined to be less than "BBB-"; medium are those less than "AA-", but greater or equal to "BBB-"; and high are those with a weighted-average credit quality of "AA-" or higher. When classifying a bond portfolio, Morningstar first maps the NRSRO credit ratings of the underlying holdings to their respective default rates (as determined by Morningstar's analysis of actual historical default rates). Morningstar then averages these default rates to determine the average default rate for the entire bond fund. Finally, Morningstar maps this average default rate to its corresponding credit rating along a convex curve.

For interest-rate sensitivity, Morningstar obtains from fund companies the average effective duration. Generally, Morningstar classifies a fixed-income fund's interest-rate sensitivity based on the effective duration of the Morningstar Core Bond Index (MCBI), which is currently three years. The classification of Limited will be assigned to those funds whose average effective duration is between 25% to 75% of MCBI's average effective duration; funds whose average effective duration is between 75% to 125% of the MCBI will be classified as Moderate; and those that are at 125% or greater of the average effective duration of the MCBI will be classified as Extensive. For municipal bond funds, Morningstar also obtains from fund companies the average effective duration. In these cases static breakpoints are utilized. These breakpoints are as follows: (i) Limited: 4.5 years or less; (ii) Moderate: more than 4.5 years but less than 7 years; and (iii) Extensive: more than 7 years. In addition, for non-US taxable and non-US domiciled fixed income funds static duration breakpoints are used: (i) Limited: less than or equal to 3.5 years; (ii) Moderate: greater than 3.5 and less than equal to 6 years; (iii) Extensive: greater than 6 years.

#### Turnover

This is how often a fund manager sells all the stocks in the mutual fund in a given year.

If a fund has a 100% Turnover Rate, that means the fund manager, in theory, has sold every single stock position once. In other words, he or she has turned over 100% of the stock positions.

In practice, however, this is not entirely accurate. The manager might have held 50% of all positions for the past five years and turned over the other 50% twice throughout the year. This is a 100% Turnover Rate by calculation.

#### Yield

This is the annual dividend per share divided by the current stock price and displayed as a percentage.

#### TTM Yield

Yield is a measure of the fund's income distributions, as a percentage of the fund price. Trailing twelve months yield is calculated by summing the income distributions over the trailing 12 months and dividing that by the sum of the last month's ending NAV plus any capital gains distributed over the 12-month period.

© Copyright 2019 Morningstar, Inc. All rights reserved.

#### Disclosure Statement

The Morningstar Report may only be used when preceded or accompanied by the fund's current prospectus and this disclosure statement. Please read the prospectus carefully. In all cases, this disclosure statement should accompany the Morningstar Report. Morningstar is not itself a FINRA-member firm. Portfolio information is based on the most recent information available to Morningstar.

Comparing Funds Comparison of funds with different objectives or categories may produce differences that are not meaningful, or even misleading. If this report contains funds from two different Morningstar categories, this will be prominently disclosed at the bottom of the report. Note that there are times when it may be appropriate to compare funds from different categories; for example, when you are interested in changing the fundamental strategy undertaken by a fund you hold currently. However, note that return behavior of funds from different categories may be expected to exhibit different risk and return characteristics, without regard to manager quality. Morningstar star ratings are assessed against other funds in that category, so a fund with a particular star rating within one category may not be directly comparable with a fund's star rating from another category. Likewise, Morningstar Risk and Morningstar Return measures are calibrated in relation to the category to which they are assigned. Rankings of the funds within their respective categories may not be directly comparable. The funds may have different primary benchmarks as a result of being from two distinct categories, and direct comparisons of two different funds' performance against two different benchmarks may not be meaningful.

#### Performance

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 quoted herein. Total return reflects performance without adjusting for sales charges or the effects of taxation, but is adjusted to reflect all actual ongoing fund expenses and assumes reinvestment of dividends and capital gains. If adjusted, sales charges would reduce the performance quoted. Due to market volatility, the fund's return may vary greatly over short periods of time.

#### Standardized and Tax-Adjusted Returns

Standardized Return assumes 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.

#### Morningstar Analyst Rating

The Morningstar Analyst Rating is not a credit or risk rating. It is a subjective evaluation performed by the mutual fund analysts of Morningstar, Inc. Morningstar evaluates funds based on five key pillars, which are process, performance, people, parent, and price. Morningstar's analysts use this five pillar evaluation to identify funds they believe are more likely to outperform over the long term on a risk-adjusted basis. Analysts consider quantitative and qualitative factors in their research, and the weighting of each pillar may vary. The Analyst Rating ultimately reflects the analyst's overall assessment and is overseen by Morningstar's Analyst Rating Committee. The approach serves not as a formula but as a framework to ensure consistency across Morningstar's global coverage universe.

The Analyst Rating scale ranges from Gold to Negative, with Gold being the highest rating and Negative being the lowest rating. A fund with a "Gold" rating distinguishes itself across the five pillars and has garnered the analysts' highest level of conviction. A fund with a "Silver" rating has notable advantages across several, but perhaps not all, of the five pillars-strengths that give the analysts a high level of conviction. A "Bronze"-rated fund has advantages that outweigh the disadvantages across the five pillars, with sufficient level of analyst conviction to warrant a positive rating. A fund with a "Neutral" rating isn't seriously flawed across the five pillars, nor does it distinguish itself very positively. A "Negative" rated fund is flawed in at least one if not more pillars and is considered an inferior offering to its peers. Analyst Ratings are reevaluated at least every 14 months.

For more detailed information about Morningstar's Analyst Rating, including its methodology, please go to

<http://corporate.morningstar.com/us/documents/MethodologyDocuments/AnalystRatingforFundsMethodology.pdf>.

The Morningstar Analyst Rating should not be used as the sole basis in evaluating a mutual fund. Morningstar Analyst Ratings are based on Morningstar's current expectations about future events; therefore, in no way does Morningstar represent ratings as a guarantee nor should they be viewed by an investor as such. Morningstar Analyst Ratings involve unknown risks and uncertainties which may cause Morningstar's expectations not to occur or to differ significantly from what we expected. Morningstar % Rank within Morningstar Category does not account for a fund's sales charge (if applicable). Rankings will not be provided for periods less than one year.

#### Growth of \$10,000

This graph compares the growth of an investment of 10,000 (in the base currency of the fund) with that of an index and 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 assume reinvestment of dividends and capital gains. If adjusted, sales charges would reduce the performance quoted. The index is an unmanaged portfolio of specified securities and cannot be invested in directly. The index and the category average do 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.

Morningstar Rating, Risk and Return

The Morningstar Rating is calculated for funds with at least a three-year history. It is calculated based on a Morningstar Risk-Adjusted Return measure that accounts for variation in a fund's monthly performance, placing more emphasis on downward variations and rewarding consistent performance. The top 10% of funds in each 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 mutual fund is derived from a weighted average of the performance figures associated with its three-, five- and 10-year (if applicable) Morningstar Rating metrics.

Morningstar Return rates a mutual fund's performance relative to other funds in its Morningstar Category. It is an assessment of a fund's excess return over a risk-free rate (the return of the 90-day Treasury Bill), after adjusting for all applicable loads and sales charges, in comparison with the mutual funds in its Morningstar Category. In each Morningstar Category, the top 10% of funds receive a High Morningstar Return (HMR), the next 22.5% receive a Very High Morningstar Return (VHMR), the next 35% receive a High Morningstar Return (HMR), and the bottom 22.5% receive a Low Morningstar Return (LMR).



10% or funds earn a high Morningstar return (HIGH), the next 22.5% above average (+AVG), the middle 35% average (AVG), the next 22.5% below average (-AVG), 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 mutual fund. Funds with less than three years of performance history are not rated.

Morningstar Risk evaluates a mutual fund's downside volatility relative to that of other funds in its Morningstar Category. It is an assessment of the variations in a fund's monthly returns, with an emphasis on downside variations, in comparison with the mutual funds in its Morningstar Category. In each Morningstar Category, the 10% of funds 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 mutual fund. Funds with less than three years of performance history are not rated.

If pre-inception returns are included in this analysis, the risk and return profile data calculated on the basis of these returns will appear in italics.

#### Risk Measures

Mean represents the annualized geometric return for the period shown.

Standard deviation is a statistical measure of the range of a fund's performance. When a fund has a high standard deviation, its range of performance has been very wide, indicating that there is a greater potential for volatility. The Sharpe ratio uses standard deviation and excess return to determine reward per unit of risk. Alpha measures the difference between a fund'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. Beta is a measure of a fund's sensitivity to market movements. A portfolio with a beta greater than 1 is more volatile than the market, and a portfolio with a beta less than 1 is less volatile than the market.

R-squared reflects the percentage of a fund's movements that is explained by movements in its benchmark index, showing the degree of correlation between the fund and the benchmark. This figure is also helpful in assessing how likely it is that alpha and beta are statistically significant.

Risk measures calculated using pre-inception data, if included in the analysis, will be presented in italics.

#### Asset Allocation

The weighting of the portfolio in various asset classes, including "Other" is shown in the table. "Other" includes security types that are not neatly classified in the other asset classes, such as convertible bonds and preferred stocks.

In the table, allocation to the asset classes is shown for long positions only. These statistics summarize what the managers are buying and how they are positioning the portfolio.

Most managed product portfolios hold fairly conventional securities, such as long positions in stocks and bonds. Other portfolios use other investment strategies or securities, such as short positions or derivatives, to reduce transaction costs, enhance returns, or reduce risk. Please note that the exposure to short positions is not included in the allocation breakdown and it is derived based on rescaling the portfolio's long positions to draw the asset allocation pie chart.

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

#### 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 investment style (value, blend, or growth).

For fixed-income funds, the vertical axis shows the credit quality of the long bonds owned and the horizontal axis shows interest rate sensitivity as measured by a bond's effective duration. Morningstar seeks credit rating information from fund companies on a periodic basis (e.g., quarterly). In compiling credit rating information Morningstar accepts credit ratings reported by fund companies that have been issued by all Nationally Recognized Statistical Rating Organizations (NRSROs). For a list of all NRSROs, please visit

<http://www.sec.gov/divisions/marketreg/ratingagency.htm>. Additionally, Morningstar accepts foreign credit ratings from widely recognized or registered rating agencies. If two rating organizations/agencies have rated a security, fund companies are to report the lower rating; if three or more organizations/agencies have rated a security, fund companies are to report the median rating, and in cases where there are more than two organization/agency ratings and a median rating does not exist, fund companies are to use the lower of the two middle ratings. PLEASE NOTE: Morningstar, Inc. is not itself an NRSRO nor does it issue a credit rating on the fund. An NRSRO or rating agency ratings can change from time-to-time.

For credit quality, Morningstar combines the credit rating information provided by the fund companies with an average default rate calculation to come up with a weighted-average credit quality. The weighted-average credit quality is currently a letter that roughly corresponds to the scale used by a leading NRSRO. Bond funds are assigned a style box placement of "low", "medium", or "high" based on their average credit quality. Funds with a low credit quality are those whose weighted-average credit quality is determined to be less than "BBB-"; medium are those less than "AA-", but greater or equal to "BBB-"; and high are those with a weighted-average credit quality of "AA-" or higher. When classifying a bond portfolio, Morningstar first maps the NRSRO credit ratings of the underlying holdings to their respective default rates (as determined by Morningstar's analysis of actual historical default rates). Morningstar then averages these default rates to determine the average default rate for the entire bond fund. Finally, Morningstar maps this average default rate to its corresponding credit rating along a convex curve.

For interest-rate sensitivity, Morningstar obtains from fund companies the average effective duration. Generally, Morningstar classifies a fixed-income fund's interest-rate sensitivity based on the effective duration of the Morningstar Core Bond Index (MCBI), which is currently three years. The classification of Limited will be assigned to those funds whose average effective duration is between 25% to 75% of MCBI's average effective duration; funds whose average effective duration is between 75% to 125% of the MCBI will be classified as Moderate; and those that are at 125% or greater of the average effective duration of the MCBI will be classified as Extensive.

For municipal bond funds, Morningstar also obtains from fund companies the average effective duration. In these cases static durations are utilized. These breakpoints are as follows: (i) Limited: 4.5 years or less; (ii) Moderate: more than 4.5 years but less than 7 years; and (iii) Extensive: more than 7 years. In addition, for non-US taxable and non-US domiciled fixed income funds static duration breakpoints are used: (i) Limited: less than or equal to 3.5 years; (ii) Moderate: greater than 3.5 and less than equal to 6 years; (iii) Extensive: greater than 6 years.

#### Equity Portfolio Statistics

The referenced data elements below are a weighted average of the long equity holdings in the portfolio.

The geometric average market capitalization of a fund's equity portfolio offers a measure of the size of the companies in which the mutual fund invests.

Price/projected earnings for a stock is the ratio of the company's most recent month-end share price to the company's estimated earnings per share (EPS) for the current fiscal year. If a third-party estimate for the current year EPS is not available, Morningstar will calculate an internal estimate based on the most recently reported EPS and average historical earnings growth rates. Price/projected earnings is one of the five value factors used to calculate the Morningstar Style Box. For portfolios, this data point is calculated by taking an asset-weighted average of the earnings yields (E/P) of all the stocks in the portfolio and then taking the reciprocal of the result.

Price/book for a stock is the ratio of the company's most recent month-end share price to the company's estimated book value per share (BPS) for the current fiscal year. Book value is the total assets of a company, less total liabilities. Morningstar calculates internal estimates for the current year BPS based on the most recently reported BPS and average historical book value growth rates. Price/book (projected) is one of the five value factors used to calculate the Morningstar Style Box. For portfolios, this data point is calculated by taking an asset-weighted average of the book value yields (B/P) of all the stocks in the portfolio and then taking the reciprocal of the result.

Price/sales (projected) for a stock is the ratio of the company's most recent month-end share price to the company's estimated sales per share (SPS) for the current fiscal year. Morningstar calculates internal estimates for the current year SPS based on the most recently reported SPS and average historical sales growth rates. Price/sales (projected) is one of the five value factors used to calculate the Morningstar Style Box. For portfolios, this data point is calculated by taking an asset-weighted average of the sales yields (S/P) of all the stocks in the portfolio and then taking the reciprocal of the result.

Price/cash flow (projected) for a stock is the ratio of the company's most recent month-end share price to the company's estimated cash flow per share (CPS) for the current fiscal year.

Cash flow measures the ability of a business to generate cash and it acts as a gauge of liquidity and solvency. Morningstar calculates internal estimates for the current year CPS based on the most recently reported CPS and average historical cash flow growth rates. Price/cash flow (projected) is one of the five value factors used to calculate the Morningstar Style Box. For portfolios, this data point is calculated by taking an asset-weighted average of the cash flow yields (C/P) of all the stocks in the portfolio and then taking the reciprocal of the result.

Dividend yield (projected) for a stock is the percentage of its stock price that a company is projected to pay out as dividends. It is calculated by dividing estimated annual dividends per share (DPS) for the current fiscal year by the company's most recent month-end stock price. Morningstar calculates internal estimates for the current year DPS based on the most recently reported DPS and average historical dividend growth rates. This is one of the five value factors used to calculate the Morningstar Style Box. For portfolios, this data point is calculated by taking an asset-weighted average of the dividend yields of all the stocks in the portfolio.

The long-term projected earnings growth rate for a stock is the average of the available third-party analysts' estimates for three- to five-year EPS growth. Long-term projected earnings growth is one of the five growth factors used to calculate the Morningstar Style Box. For portfolios, this data point is the share-weighted average of the projected earnings growth estimates for all the stocks in the portfolio. (The share-weighted average is more accurate than an asset-weighted average for this type of calculation.)

The historical earnings growth rate for a stock is a measure of how the stock's earnings per share (EPS) has grown over the last five years. Morningstar uses EPS from continuing operations to calculate this growth rate. Historical earnings growth is one of the five growth factors used to calculate the Morningstar Style Box. For portfolios, this data point is the share-weighted collective earnings growth for all stocks in the current portfolio. (The share-weighted average is more accurate than an asset-weighted average for this type of calculation.)

The book value growth rate for a stock is a measure of how the stock's book value per share (BVPS) has grown over the last five years. Book value growth is one of the five growth factors used to calculate the Morningstar Style Box. For portfolios, this data point is the share-weighted collective book value growth for all stocks in the current portfolio. (The share-weighted average is more accurate than an asset-weighted average for this type of calculation.)

The sales growth rate for a stock is a measure of how the stock's sales per share (SPS) has grown over the last five years. Sales growth is one of the five growth factors used to calculate the Morningstar Style Box. For portfolios, this data point is the share-weighted collective sales growth for all stocks in the current portfolio. (The share-weighted average is more accurate than an asset-weighted average for this type of calculation.)

The cash flow growth rate for a stock is a measure of how the stock's cash flow per share (CFPS) has grown over the last three to five years. Cash flow growth is one of the five growth factors used to calculate the Morningstar Style Box. For portfolios, this data point is the share-weighted collective cash flow growth for all stocks in the current portfolio. (The share-weighted average is more accurate than an asset-weighted average for this type of calculation.)

#### Fixed-Income Portfolio Statistics

The referenced data elements below are a weighted average of the long fixed income holdings in the portfolio. Credit quality breakdowns are shown for corporate-bond holdings and depict the quality of bonds in the underlying portfolio. The report shows the percentage of fixed-income securities that fall within each credit quality rating as assigned by an NRSRO. Bonds not rated by an NRSRO are included in the not rated (NR) category. Duration is a time measure of a bond's interest rate sensitivity. Average effective duration is a weighted average of the duration of the underlying fixed income securities within the portfolio. Average effective maturity is a weighted average of all the maturities of the bonds in a portfolio, computed by weighting each maturity date by the market value of the security. Average weighted coupon is generated from the fund's portfolio by weighting the coupon of each bond by its relative size in the portfolio. Coupons are fixed percentages paid out on a fixed-income security on an annual basis. Average weighted price is generated from the fund's portfolio by weighting the price of each bond by its relative size in the portfolio. This number reveals if the fund favors bonds selling at prices above or below face value (premium or discount securities, respectively). A higher number indicates a bias toward premiums. This statistic is expressed as a percentage of par (face) value. Turnover Ratio is a decent proxy for how frequently a manager trades his or her portfolio. The inverse of a fund's turnover ratio is the average holding period for a security in the fund. As turnover increases, a fund's brokerage costs typically rise as well.

Potential capital gains exposure is the percentage of a mutual fund's total assets that represents capital appreciation.

#### Fees and Expenses

Prospectus Gross Expense Ratio reflects the annual percentage of a fund's assets paid out in expenses. Expenses include management, 12B-1, transfer agent and all other asset-based fees associated with the fund's daily operations and distribution, with the exception of brokerage commissions. It does not reflect expenses that have been reimbursed by the investment advisor, reductions from brokerage service arrangements or other expense offset arrangements. Prospectus Net Expense Ratio reflects actual expenses paid by the fund as well as any voluntary waivers, reductions from brokerage service arrangements and any other expense offset arrangements.

#### Expense Projections

Found in the fund's prospectus, these figures show how much an investor would expect to pay in expenses-sales charges (loads) and fees-over the next three, five, and 10 years, assuming a \$10,000 investment that grows by 5% per year with redemption at the end of each time period. Expense projections are commonly based on the past year's incurred fees or an estimate

of the current fiscal year's fees, should a portion of the overall fee structure change as of the printing of the fund's most current prospectus. Newer funds are only required to print expense projections for one- and three-year time periods since longer-term projections may not be possible.

**Investment Risks**

**International/Emerging Market Equities:** Investing in international securities involve 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 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 decline. Portfolios that hold bonds are subject to declines and increases in value due to general changes in interest rates.

**HOLDRs:** The investor should note that these are narrow industry-focused products that, if the industry is hit by hard times, will lack diversification and possible loss of investment would be likely. These securities can trade at a discount to market price, ownership is of a fractional share interest, the underlying investments may not be representative of the particular industry, the HOLDR might be delisted from the AMEX if the number of underlying companies drops below nine, and the investor may experience trading halts.

**Hedge Funds:** The investor should note that hedge fund investing involves specialized risks that are dependent upon the type of strategies undertaken by the manager. This can include distressed or event-driven strategies, long/short strategies, using arbitrage (exploiting price inefficiencies), international investing, and use of leverage, options and/or derivatives. Although the goal of hedge fund managers may be to reduce volatility and produce positive absolute return under a variety of market conditions, hedge funds may involve a high degree of risk and are suitable only for investors of substantial financial means who could bear the entire loss of their investment.

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

**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 ETF's 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 of when investors expect to begin withdrawing their money. 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 anytime, including at the fund's target date.

**Top 25 Holdings**

The Top 25 Holdings displays the largest 25 holdings underlying the portfolio based on percentage of portfolio weight. The holdings can be viewed using the Summary View, Bond View, or Equity View. Each view will display various data points pertaining to each of the Top 25 Holdings. A dash will be presented if the data point is not applicable to a particular holding.