# Vanguard Instl Trgt Retire 2015 Instl

RETIREREADY
TENNESSEE'S RETIREMENT PROGRAM

## Volatility Meter*

*The Investment volatility, when shown, is a function of the investment option's **Morningstar 3-year Risk Rating.** The Asset Category volatility is based on the average standard deviation of investment options in this asset category.*

Investment

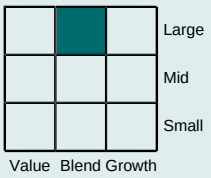
| Low | Moderate | High |
|---|---|---|

Asset Category

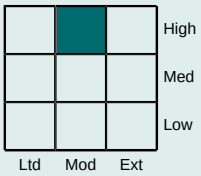
***For illustrative purposes only.**
*The Asset Category volatility measure will always be displayed. If the Investment volatility measure is not displayed, the investment may have fewer than three years of history or the data may not be available.*

## Morningstar Style[3]

**Stock**
Style / Capitalization
Large Blend




**Fixed Income**
Credit Quality / Interest Rate Sensitivity
Moderate Sensitivity High Quality




## Fund Issuer

Vanguard

## Investment Adviser

Vanguard Group Inc

## Portfolio Managers

Nejman / Coleman

## Asset Category

Target-Date 2015

## Investment Objective & Strategy

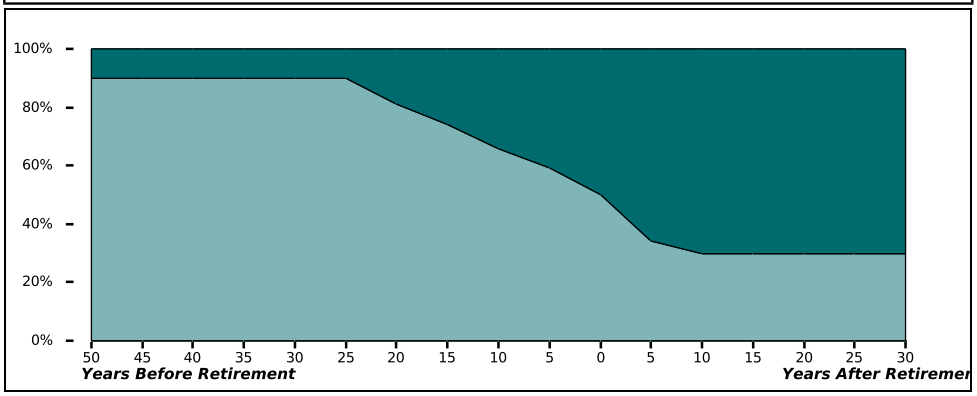
The investment seeks to provide capital appreciation and current income consistent with its current asset allocation. The fund invests in other Vanguard mutual funds according to an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2015 (the target year). The fund'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.

## Risk Profile

This investment option may be most appropriate for someone willing to take some risk to achieve higher potential returns but also seeking income as a secondary objective. The investor may be in or approaching retirement or may prefer to take less risk than other investors. Investors choosing this option want to invest in a mixture of diverse investments suiting their needs but may not have the time, desire, or knowledge to select and manage their own portfolios. The date in a target date fund's name represents an approximate date when an investor is expected to retire (which is assumed to be at age 65) and/or begins withdrawing money. The principal value of the funds is not guaranteed at any time, including the target date. Asset allocation and balanced investment options and models are subject to the risks of the underlying funds, which can be a mix of stocks/stock funds and bonds/bond funds. For more information, please refer to the fund prospectus and/or disclosure document.

## Enhanced Portfolio Diversification: Glide Path[4]

| Category | Allocation At Target Date |
|---|---|
| Fixed Income | 50.00% |
| Equities | 50.00% |




## Geographic Diversification

| | % of Assets |
|---|---|
| United States | 67.74 |
| Japan | 5.80 |
| United Kingdom | 3.04 |
| France | 2.76 |
| Germany | 2.62 |
| Canada | 2.22 |
| China | 1.64 |
| Italy | 1.41 |
| Switzerland | 1.27 |
| Australia | 1.11 |

## Bond Sector Diversification

| | % of Assets |
|---|---|
| Government | 56.06 |
| Corporate | 17.47 |
| AgencyMtgBacked | 11.92 |
| Cash & Equivalents | 6.37 |
| Government/Agency | 5.26 |
| CoveredBond | 1.06 |
| Collateralized Mortgage Oblig | 0.64 |
| Convertible | 0.55 |
| Municipal | 0.36 |
| Asset Backed | 0.30 |
| Preferred | 0.01 |

Asset Allocation

Period Ending: 06/30/2020

| Net Expense Ratio | Gross Expense Ratio | Total Net Assets (MM) | Inception Date | Data Effective Date | Ticker |
|---|---|---|---|---|---|
| .09% | .09% | $8,811.410 | 06/26/2015 | 06/30/2020 | VITVX ◆ |

**Carefully consider the investment option's objectives, risks, fees and expenses. Contact us for a prospectus, summary prospectus and disclosure document, as available, containing this information. Read them carefully before investing.**
The gross and net expense ratio, if shown, reflect the most current data available at the time of production, which may differ from the data effective date. The net expense ratio shown, if lower than the gross expense, reflects fee waivers or reimbursements that may expire as stated in the fund's prospectus.

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Investment ▼

| Low | Moderate | High |
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▲ Asset Category

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## Morningstar Style[3]

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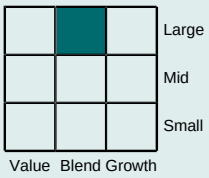
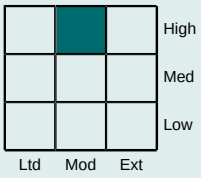



**Fixed Income**
Credit Quality / Interest Rate Sensitivity
Moderate Sensitivity High Quality

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## Asset Category

Target-Date 2015

## Equity Sector Diversification

| | % of Assets |
|---|---|
| Technology | 17.68 |
| Financial Svc | 14.78 |
| Healthcare | 13.67 |
| Consumer Cyclical | 10.84 |
| Industrials | 10.51 |
| Communication Svc | 9.22 |
| Consumer Defensive | 8.08 |
| Basic Materials | 4.58 |
| Real Estate | 3.72 |
| Energy | 3.62 |
| Utilities | 3.28 |

## Largest Holdings

| | % of Assets |
|---|---|
| Vanguard Total Bond Market II Idx Inv | 34.52 |
| Vanguard Total Stock Market Idx I | 20.46 |
| Vanguard Total Intl Bd Idx Admiral(TM) | 14.84 |
| Vanguard Shrt-Term Infl-Prot Sec Idx Adm | 14.29 |
| Vanguard Total Intl Stock Index Inv | 14.25 |
| ***Percent of Total Net Assets*** | ***98.38%*** |
| ***Number of Holdings*** | ***6*** |
| ***Portfolio Turnover (%)*** | ***16.00%*** |

## Risk Statistics (3 Year)^

| | |
|---|---|
| Alpha | 1.26 |
| Beta | 0.65 |
| R-Squared | 97.39 |
| Sharpe Ratio | 0.63 |
| Standard Deviation | 6.73 |

^Risk Statistics are measured using the BBgBarc US Agg Bond TR USD benchmark, where applicable. The rating, risk, and return values are relative to each fund's asset category.

## Bond Characteristics

| | |
|---|---|
| Average Effective Duration | 5.87 yrs |
| Effective Maturity | 7.31 yrs |

## Maturity Allocation

| | % of Assets |
|---|---|
| 91 - 182 Days | 0.07 |
| 183 - 364 Days | 4.10 |
| 1 - 3 Years | 24.16 |
| 3 - 5 Years | 22.87 |
| 5 - 7 Years | 9.10 |
| 7 - 10 Years | 8.41 |
| 10 - 15 Years | 4.49 |
| 15 - 20 Years | 4.21 |
| 20 - 30 Years | 20.90 |
| Over 30 Years | 1.69 |

**For more information about this investment option please go to www.vanguard.com.**

Asset Allocation

Period Ending: 06/30/2020

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# Glossary & Investment Option Disclosures

| | |
|---|---|
| ***3-Year Risk Rating*** | An annualized measure of a fund's downside volatility over a three-year period. Morningstar Risk Rating is derived directly from Morningstar Risk, which is 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 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. |
| ***Alpha*** | Alpha is a measure of the difference between a portfolio's actual returns and its expected performance, given its level of risk as measured by beta. A positive Alpha figure indicates the portfolio has performed better than its beta would predict. In contrast, a negative Alpha indicates the portfolio has underperformed, given the expectations established by beta. |
| ***Beta*** | Beta is a measure of a portfolio's sensitivity to market movements. The beta of the market is 1.00 by definition. Morningstar calculates beta by comparing a portfolio's excess return over T-bills to the benchmark's excess return over T-bills, so a beta of 1.10 shows that the portfolio has performed 10% better than its benchmark in up markets and 10% worse in down markets, assuming all other factors remain constant. Conversely, a beta of 0.85 indicates that the portfolio's excess return is expected to perform 15% worse than the benchmark's excess return during up markets and 15% better during down markets. |
| ***Effective Duration*** | Effective duration for all long fixed income positions in a portfolio. Morningstar asks fund companies to calculate and send average effective duration (also known as "option adjusted duration") for each of their fixed income or allocation funds. We ask for effective duration because the measure gives better estimation of how the price of bonds with embedded options, which are common in many mutual funds, will change as a result of changes in interest rates. Effective duration takes into account expected mortgage prepayment or the likelihood that embedded options will be exercised if a fund holds futures, other derivative securities, or other funds as assets, the aggregate effective duration should include the weighted impact of those exposures. Standard practice for calculating this data point requires determination of a security's option-adjusted spread, including the use of option models or Monte Carlo simulation, as well as interest-rate scenario testing Morningstar requests that the fund only report data in this field that has been specifically labeled effective or option-adjusted duration, or that fund is certain has been calculated in the fashion described. |
| ***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. Longer-maturity funds are generally considered more interest-rate sensitive than their shorter counterparts. We list Average Effective Maturity for Taxable Fixed-Income and Hybrid funds and Average Nominal Maturity for Municipal Bond Funds. |
| ***Equity Style Box*** | The Morningstar U.S. Equity Style Box™ is a grid that provides a graphical representation of the investment style of stocks and portfolios. It classifies securities according to market capitalization (the vertical axis) and 10 growth and value factors (the horizontal axis) and allows us to provide analysis on a 3-by-3 Style Box - as well as providing the traditional style box assignment, which is the basis for the Morningstar Category. Two of the style categories, value and growth, are common to both stocks and portfolios. However, for stocks, the central column of the style box represents the core style (those stocks for which neither value nor growth characteristics dominate); for portfolios, it represents the blend style (a mixture of growth and value stocks or mostly core stocks). Furthermore, the core style for stocks is wider than the blend style for portfolios. 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. |
| ***Fixed Income Style Box*** | The model for the fixed income style box is based on the two pillars of fixed-income performance: interest-rate sensitivity and credit quality. The three interest sensitivity groups are limited, moderate and extensive and the three credit quality groups are high, medium and low. These groupings display a portfolio's effective duration and third party credit ratings to provide an overall representation of the fund's risk orientation given the sensitivity to interest rate and credit rating of bonds in the portfolio. On a monthly basis Morningstar calculates duration breakpoints based around the 3 year effective duration of the Morningstar Core Bond Index (MCBI). By using the MCBI as the duration benchmark, Morningstar is letting the effective duration bands to fluctuate in lock-steps with the market which will minimize market-driven style box changes. Municipal bond funds with duration of 4.5 years or less qualify as low; more than 4.5 years but less than 7 years, medium; and more than 7 years, high. For hybrid funds, both equity and fixed-income style boxes appear. |
| ***Portfolio Turnover*** | Portfolio turnover is a measure of the portfolio manager's trading activity which is computed by taking the lesser of purchases or sales (excluding all securities with maturities of less than one year) and dividing by average monthly net assets. A turnover ratio of 100% or more does not necessarily suggest that all securities in the portfolio have been traded. In practical terms, the resulting percentage loosely represents the percentage of the portfolio's holdings that have changed over the past year. |
| **$R^2$ R-squared** | $R^2$, also known as the Coefficient of Determination, reflects the percentage of a portfolio's movement that can be explained by the movement of its primary benchmark over the past three years. An R-squared of 100 indicates that all movement of a fund can be explained by the movement of the index. |
| ***Sharpe Ratio*** | A risk-adjusted measure developed by Nobel Laureate William Sharpe. It is calculated by using standard deviation and excess return to determine reward per unit of risk. The higher the Sharpe Ratio, the better the fund's historical risk-adjusted performance. The Sharpe ratio is calculated for the past 36-month period by dividing a fund's annualized excess returns by the standard deviation of a fund's annualized excess returns. Since this ratio uses standard deviation as its risk measure, it is most appropriately applied when analyzing a fund that is an investor's sole holding. The Sharpe Ratio can be used to compare two funds directly on how much risk a fund had to bear to earn excess return over the risk-free rate. |
| ***Standard Deviation*** | Standard deviation is a statistical measurement of dispersion about an average, which, for a mutual fund, depicts how widely the returns varied over the past three years. Investors use the standard deviation of historical performance to try to predict the range of returns that are most likely for a given fund. When a fund has a high standard deviation, the predicted range of performance is wide, implying greater volatility. Standard deviation is most appropriate for measuring risk if it is for a fund that is an investor's only holding. The figure can not be combined for more than one fund because the standard deviation for a portfolio of multiple funds is a function of not only the individual standard deviations, but also of the degree of correlation among the funds' returns. If a fund's returns follow a normal distribution, then approximately 68 percent of the time they will fall within one standard deviation of the mean return for the fund, and 95 percent of the time within two standard deviations. Morningstar computes standard deviation using the trailing monthly total returns for the appropriate time period. All of the monthly standard deviations are then annualized. |

All Glossary terms are sourced from Morningstar, Inc., except "Fixed" and/or "Stable Value" when shown.

Funds may impose redemption fees and/or transfer restrictions if assets are held for less than the published holding period.

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Holdings and composition of holdings are subject to change.

◆The ticker symbol displayed may refer to the underlying mutual fund available as an investment option through a variable annuity and held in a separate account of Great-West Life & Annuity Insurance Company, Corporate Headquarters: Greenwood village, CO, or in New York, Great-West Life & Annuity Insurance Company of New York, Home Office: New York, NY. Fees and expenses for investment options offered through a separate account may be higher than those associated with the underlying fund. Please refer to the annuity contract and/or other disclosure documents for detailed information.

A benchmark index, if shown, is not actively managed, does not have a defined investment objective, and does not incur fees or expenses. Therefore, performance of a fund will generally be less than its benchmark index. You cannot invest directly in a benchmark index.

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The Inception Date listed is the date the fund began operations. The Data Effective Date is the date for which the most current data is available. The Period Ending Date is the date for which the fund fact sheet is produced.

# Glossary & Investment Option Disclosures

U.S. Treasury securities, where listed, are neither issued nor guaranteed by the U.S. government.

Asset allocation funds may be subject to operating expenses for the fund and for each underlying fund.

Investing involves risk, including possible loss of principal.

[3] The Morningstar Style Box™ reveals a fund's investment strategy. For equity funds the vertical axis shows the market capitalization of the stocks owned and the horizontal axis shows investment style (value, blend or growth). A darkened square in the style box indicates the weighted average style of the portfolio.

For fixed-income funds, the vertical axis shows the credit quality of the 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). 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 stylebox 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 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.

Interest-rate sensitivity for non-U.S. domiciled funds (excluding funds in convertible categories) may be measured with modified duration when effective duration is not available.

[4] A glide path is how the fund expects to allocate to those underlying investments over time, essentially "gliding" from more aggressive investments to more conservative ones In general, the underlying investments are made up of stocks (or stock funds), bonds (or bond funds), and cash alternatives.

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