Invest in your retirement—and yourself—today, with help from The University of North Carolina Optional Retirement Program and Fidelity.

# INVESTMENT OPTIONS GUIDE



# Investment Options

Here is a list of investment options for The University of North Carolina Optional Retirement Program. For up-to-date performance information and other fund specifics, go to www.netbenefits.com/UNC.

# **Target Date Funds**

Placement of investment options within each risk spectrum is only in relation to the investment options within that specific spectrum. Placement does not reflect risk relative to the investment options shown in the other risk spectrums.

Investment options to the left have potentially more inflation risk and less investment risk

Investment options to the right have potentially less inflation risk and more investment risk

Vanguard Target Retirement Income	Vanguard Target Retirement 2025 Trust	Vanguard Target Retirement 2040 Trust
Trust Plus	Plus	Plus
Vanguard Target Retirement 2015 Trust	Vanguard Target Retirement 2030 Trust	Vanguard Target Retirement 2045 Trust
Plus	Plus	Plus
Vanguard Target Retirement 2020 Trust	Vanguard Target Retirement 2035 Trust	Vanguard Target Retirement 2050 Trust
Plus	Plus	Plus
		Vanguard Target Retirement 2055 Trust Plus
		Vanguard Target Retirement 2060 Trust Plus
		Vanguard Target Retirement 2065 Trust Plus

Target date investments are generally designed for investors expecting to retire around the year indicated in each investment's name. The investments are managed to gradually become more conservative over time. The investment risks of each target date investment change over time as its asset allocation changes. They are subject to the volatility of the financial markets, including equity and fixed income investments in the U.S. and abroad and may be subject to risks associated with investing in high yield, small cap and foreign securities. Principal invested is not guaranteed at any time, including at or after their target dates.

The chart below lists the assigned fund The University of North Carolina Optional Retirement Program believes will best fit your diversification needs should you not select an investment option.

Your Birth Date*	Fund Name	Target Retirement Years
Before 1948	Vanguard Target Retirement Income Trust Plus	Retired before 2013
January 1, 1948 - December 31, 1952	Vanguard Target Retirement 2015 Trust Plus	Target Years 2013 - 2017
January 1, 1953 - December 31, 1957	Vanguard Target Retirement 2020 Trust Plus	Target Years 2018 - 2022
anuary 1, 1958 - December 31, 1962	Vanguard Target Retirement 2025 Trust Plus	Target Years 2023 - 2027
anuary 1, 1963 - December 31, 1967	Vanguard Target Retirement 2030 Trust Plus	Target Years 2028 - 2032
anuary 1, 1968 - December 31, 1972	Vanguard Target Retirement 2035 Trust Plus	Target Years 2033 - 2037
anuary 1, 1973 - December 31, 1977	Vanguard Target Retirement 2040 Trust Plus	Target Years 2038 - 2042
anuary 1, 1978 - December 31, 1982	Vanguard Target Retirement 2045 Trust Plus	Target Years 2043 - 2047
anuary 1, 1983 - December 31, 1987	Vanguard Target Retirement 2050 Trust Plus	Target Years 2048 - 2052
anuary 1, 1988 - December 31, 1992	Vanguard Target Retirement 2055 Trust Plus	Target Years 2053 - 2057
anuary 1, 1993 - December 31, 1997	Vanguard Target Retirement 2060 Trust Plus	Target Years 2058 - 2062
anuary 1, 1998 and later*	Vanguard Target Retirement 2065 Trust Plus	Target Years 2063 and beyond
Dates selected by Plan Sponsor		



# **Core Investment Options**

Investment options to the left have potentially more inflation risk and less investment risk

Investment options to the right have potentially less inflation risk and more investment risk

CONSERVATIVE AGGRESSIVE

#### SHORT-TERM INVESTMENT

Money Market

Government

Fidelity® Government Money Market Fund

This spectrum, with the exception of the Domestic Equity category, is based on Fidelity's analysis of the characteristics of the general investment categories of the investment options and not on the actual security holdings, which can change frequently. Investment options in the Domestic Equity category are based on the options' Morningstar categories as of 09/30/2019. Morningstar categories are based on a fund's style as measured by its underlying portfolio holdings over the past three years and may change at any time. These style calculations do not represent the investment options' objectives and do not predict the investment options' future styles. Investment options are listed in alphabetical order within each investment category. Risk associated with the investment options can vary significantly within each particular investment category, and the relative risk of categories may change under certain economic conditions. For a more complete discussion of risk associated with the mutual fund options, please read the prospectuses before making your investment decision. The spectrum does not represent actual or implied performance.

# **Extended Investment Options**

Investment options to the left have potentially more inflation risk and less investment risk

Investment options to the right have potentially less inflation risk and more investment risk

CONSERVATIVE AGGRESSIVE

SHORT-TERM INVESTMENT	BOND	STOCKS AND BONDS	STOCKS				
Stable Value	Bond	Balanced/ Hybrid		Domestic Equities	5	International/ Global	Specialty
Managed	Diversified	Fidelity®	Large Value	Large Blend	Large Growth	Diversified	Cohen & Steers
Income Portfolio Class 1	JPMorgan Core Bond Fund Class R5	Balanced Fund - Class K	John Hancock Funds Disciplined	Vanguard FTSE Social Index Fund Institutional Shares	Fidelity <sup>®</sup> Contrafund <sup>®</sup> - Class K	American Funds EuroPacific Growth Fund®	Realty Shares Fund Class L
	Metropolitan West Total Return Bond Fund Plan Class		Value Fund Class R5		T. Rowe Price Institutional Large Cap Growth Fund	Class R-4 MFS International Intrinsic Value Fund Class R4	
			Mid Value	Vanguard Institutional			
	Vanguard Short- Term Bond Index Fund Institutional Shares		MFS Mid Cap Value Fund Class R4  Mid Blend  Vanguard Extended Market Index Fund Institutional Plus Shares  Mid Blend  Class R4  Second	Index Fund Institutional Plus			
					MassMutual	T. Rowe Price International	
				Select Mid Cap Growth Fund	Discovery Fund		
	Vanguard Total Bond Market Index Fund Institutional Shares			Extended Market Index Fund Institutional Plus	Class I	Vanguard Total International Stock Index Fund Institutional Shares	
					Small Growth  Carillon Eagle Small Cap Growth Fund Class R5		

This spectrum, with the exception of the Domestic Equity category, is based on Fidelity's analysis of the characteristics of the general investment categories of the investment options and not on the actual security holdings, which can change frequently. Investment options in the Domestic Equity category are based on the options' Morningstar categories as of 09/30/2019. Morningstar categories are based on a fund's style as measured by its underlying portfolio holdings over the past three years and may change at any time. These style calculations do not represent the investment options' objectives and do not predict the investment options' future styles. Investment options are listed in alphabetical order within each investment category. Risk associated with the investment options can vary significantly within each particular investment category, and the relative risk of categories may change under certain economic conditions. For a more complete discussion of risk associated with the mutual fund options, please read the prospectuses before making your investment decision. The spectrum does not represent actual or implied performance.

# ► Fidelity BrokerageLink®

Fidelity BrokerageLink® gives you the opportunity to invest in an expanded range of investment choices to manage your plan. BrokerageLink includes investments beyond those in your plan's standard lineup. You should compare investments and share classes that are available in your plan's lineup with those available through BrokerageLink, and determine the available share class that is appropriate for your situation. The plan fiduciary neither evaluates nor monitors the investments available through BrokerageLink. It is your responsibility to ensure that the investments you select are suitable for your situation, including your goals, time horizon, and risk tolerance. To enroll, and for more information about BrokerageLink, including the Plan's BrokerageLink fact sheet, the brokerage commission schedule, and brochure, go to netbenefits.com and click on "Quick Links," then select "BrokerageLink."

# Investment Options

Before investing in any mutual fund, consider the investment objectives, risks, charges, and expenses. Contact Fidelity for a mutual fund prospectus or, if available, a summary prospectus containing this information. Read it carefully.

# American Funds EuroPacific Growth Fund® Class R-4

VRS Code: 845638

Fund Objective: The investment seeks long-term growth of capital.

**Fund Strategy:** The fund invests primarily in common stocks of issuers in Europe and the Pacific Basin that the investment adviser believes have the potential for growth. Growth stocks are stocks that the investment adviser believes have the potential for above-average capital appreciation. It normally will invest at least 80% of its net assets in securities of issuers in Europe and the Pacific Basin. The fund may invest a portion of its assets in common stocks and other securities of companies in emerging markets.

**Fund Risk:** Foreign securities are subject to interest-rate, currency-exchange-rate, economic, and political risks, all of which may be magnified in emerging markets. Growth stocks can perform differently from the market as a whole and can be more volatile than other types of stocks. Stock markets are volatile and can decline significantly in response to adverse issuer, political, regulatory, market, economic or other developments. Additional risk information for this product may be found in the prospectus or other product materials, if available.

### Fund short term trading fees: None

# Who may want to invest:

- Someone who is seeking to complement a portfolio of domestic investments with international investments, which can behave differently.
- Someone who is willing to accept the higher degree of risk associated with investing overseas.

### Footnotes:

- This description is only intended to provide a brief overview of the mutual fund. Read the fund's prospectus for more detailed information about the fund.
- The analysis on these pages may be based, in part, on adjusted historical returns for periods prior to the class's actual inception of 06/07/2002. These calculated returns reflect the historical performance of the oldest share class of the fund, with an inception date of 04/16/1984, adjusted to reflect the fees and expenses of this share class (when this share class's fees and expenses are higher.) Please refer to a fund's prospectus for information regarding fees and expenses. These adjusted historical returns are not actual returns. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the fund itself.

# Carillon Eagle Small Cap Growth Fund Class R5

VRS Code: 879373

Fund Objective: The investment seeks long-term capital appreciation.

**Fund Strategy:** The fund normally invests at least 80% of its net assets (plus the amount of any borrowings for investment purposes) in the stocks of small-capitalization companies. The fund's portfolio managers consider small-capitalization companies to be those companies that, at the time of initial purchase, have a market capitalization equal to or less than the largest company in the Russell 2000<sup>®</sup> Growth Index during the most recent 12-month period.

**Fund Risk:** The securities of smaller, less well-known companies can be more volatile than those of larger companies. Growth stocks can perform differently from the market as a whole and can be more volatile than other types of stocks. Stock markets are volatile and can decline significantly in response to adverse issuer, political, regulatory, market, economic or other developments. These risks may be magnified in foreign markets. Additional risk information for this product may be found in the prospectus or other product materials, if available.

# Fund short term trading fees: None

# Who may want to invest:

- Someone who is seeking the potential for long-term share-price appreciation.
- Someone who is willing to accept the generally greater price volatility associated both with growth-oriented stocks and with smaller companies.

#### Footnotes:

- This description is only intended to provide a brief overview of the mutual fund. Read the fund's prospectus for more detailed information about the fund.
- The Russell 2000 Growth Index is an unmanaged market capitalization-weighted index of growth-oriented stocks of U.S. domiciled companies that are included in the Russell 2000 Index. Growth-oriented stocks tend to have higher price-to-book ratios and higher forecasted growth values.
- The analysis on these pages may be based, in part, on adjusted historical returns for periods prior to the class's actual inception of 10/02/2006. These calculated returns reflect the historical performance of the oldest share class of the fund, with an inception date of 05/07/1993, adjusted to reflect the fees and expenses of this share class (when this share class's fees and expenses are higher.) Please refer to a fund's prospectus for information regarding fees and expenses. These adjusted historical returns are not actual returns. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the fund itself.

# Cohen & Steers Realty Shares Fund Class L

VRS Code: 893727

Fund Objective: The investment seeks total return through investment in real estate securities.

**Fund Strategy:** Under normal market conditions, the fund invests at least 80% of its total assets in common stocks and other equity securities issued by real estate companies. It may invest up to 20% of its total assets in securities of foreign issuers which meet the same criteria for investment as domestic companies, including investments in such companies in the form of American Depositary Receipts ("ADRs"), Global Depositary Receipts ("GDRs") and European Depositary Receipts ("EDRs"). The fund is non-diversified.

Fund Risk: Real Estate is a cyclical industry that is sensitive to interest rates, economic conditions (both nationally and locally), property tax rates, and other factors. Changes in real estate values or economic downturns can have a significant negative effect on issuers in the real estate industry. Stock markets are volatile and can decline significantly in response to adverse issuer, political, regulatory, market, economic or other developments. These risks may be magnified in foreign markets. Sector funds can be more volatile because of their narrow concentration in a specific industry. In general the bond market is volatile, and fixed income securities carry interest rate risk. (As interest rates rise, bond prices usually fall, and vice versa. This effect is usually more pronounced for longer-term securities.) Fixed income securities also carry inflation risk and credit and default risks for both issuers and counterparties. Unlike individual bonds, most bond funds do not have a maturity date, so avoiding losses caused by price volatility by holding them until maturity is not possible. Additional risk information for this product may be found in the prospectus or other product materials, if available.

# Fund short term trading fees: None

# Who may want to invest:

- Someone who is willing to accept the potentially lower diversification and higher risks associated with investing in a particular industry or sector.
- Someone who is seeking to complement his or her core holdings with investments concentrated in a particular sector or industry.

# Footnotes:

- This description is only intended to provide a brief overview of the mutual fund. Read the fund's prospectus for more detailed information about the fund.
- As of 07/06/2019, Fidelity was notified this fund changed its name from Cohen & Steers Realty Shares Fund. See the fund's
  prospectus for any additional details.

# Fidelity® Balanced Fund - Class K

VRS Code: 002077

Fund Objective: Seeks income and capital growth consistent with reasonable risk.

**Fund Strategy:** Investing approximately 60% of assets in stocks and other equity securities and the remainder in bonds and other debt securities, including lower-quality debt securities, when its outlook is neutral. Investing at least 25% of total assets in fixed-income senior securities (including debt securities and preferred stock.) Engaging in transactions that have a leveraging effect on the fund.



**Fund Risk:** Stock markets, especially foreign markets, are volatile and can decline significantly in response to adverse issuer, political, regulatory, market, or economic developments. Fixed income investments entail interest rate risk (as interest rates rise bond prices usually fall), the risk of issuer default, issuer credit risk and inflation risk. Foreign securities are subject to interest rate, currency exchange rate, economic, and political risks. Lower-quality bonds can be more volatile and have greater risk of default than higher-quality bonds. Leverage can increase market exposure and magnify investment risk.

#### Fund short term trading fees: None

# Who may want to invest:

- Someone who is seeking to invest in a fund that invests in both stocks and bonds.
- Someone who is seeking the potential both for income and for long-term share-price appreciation and who is willing to accept the volatility of the bond and stock markets.

#### Footnotes:

- This description is only intended to provide a brief overview of the mutual fund. Read the fund's prospectus for more detailed information about the fund.
- On May 9, 2008, an initial offering of the retirement (K) class took place. Returns and expenses prior to that date are those of the non-K, non-advisor class. Had K class expenses been reflected in the returns shown, total returns would have been higher.

# Fidelity® Contrafund® - Class K

VRS Code: 002080

Fund Objective: Seeks capital appreciation.

**Fund Strategy:** Investing in securities of companies whose value FMR believes is not fully recognized by the public. Investing in either 'growth' stocks or 'value' stocks or both. Normally investing primarily in common stocks.

**Fund Risk:** The value of the fund's domestic and foreign investments will vary from day to day in response to many factors. Stock values fluctuate in response to the activities of individual companies, and general market and economic conditions. Investments in foreign securities involve greater risk than U.S. investments. You may have a gain or loss when you sell your shares.

#### Fund short term trading fees: None

# Who may want to invest:

- Someone who is seeking the potential for long-term share-price appreciation.
- Someone who is willing to accept the generally greater price volatility associated with growth-oriented stocks.

# Footnotes:

- This description is only intended to provide a brief overview of the mutual fund. Read the fund's prospectus for more detailed information about the fund.
- On May 9, 2008, an initial offering of the retirement (K) class took place. Returns and expenses prior to that date are those of the non-K, non-advisor class. Had K class expenses been reflected in the returns shown, total returns would have been higher.

# Fidelity® Government Money Market Fund

VRS Code: 000458

Fund Objective: Seeks as high a level of current income as is consistent with preservation of capital and liquidity.

**Fund Strategy:** The Adviser normally invests at least 99.5% of the fund's total assets in cash, U.S. Government securities and/or repurchase agreements that are collateralized fully (i.e., collateralized by cash or government securities). Certain issuers of U.S. Government securities are sponsored or chartered by Congress but their securities are neither issued nor guaranteed by the U.S. Treasury. Investing in compliance with industry-standard regulatory requirements for money market funds for the quality, maturity, liquidity and diversification of investments. The Adviser stresses maintaining a stable \$1.00 share price, liquidity, and income. In addition the Adviser normally invests at least 80% of the fund's assets in U.S. Government securities and repurchase agreements for those securities.

**Fund Risk:** You could lose money by investing in the fund. Although the fund seeks to preserve the value of your investment at \$1.00 per share, it cannot guarantee it will do so. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. Fidelity Investments and its affiliates, the fund's sponsor, have no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time. The fund will not impose a fee upon the sale of your shares, nor temporarily suspend your ability to sell shares if the fund's weekly liquid assets fall below 30% of its total assets because of market conditions or other factors. Interest rate increases can cause the price of a money market security to decrease. A decline in the credit quality of an issuer or a provider of credit support or a maturity-shortening structure for a security can cause the price of a money market security to decrease.

# Fund short term trading fees: None

# Who may want to invest:

- Someone who has a low tolerance for investment risk and who wishes to keep the value of his or her investment relatively stable.
- Someone who is seeking to complement his or her bond and stock fund holdings in order to reach a particular asset allocation.

#### Footnotes:

• This description is only intended to provide a brief overview of the mutual fund. Read the fund's prospectus for more detailed information about the fund.

# Goldman Sachs Small Cap Value Fund Institutional Class

VRS Code: 847125

Fund Objective: The investment seeks long-term capital appreciation.

**Fund Strategy:** The fund normally invests at least 80% of its net assets plus any borrowings for investment purposes (measured at the time of purchase) ("net assets") in a diversified portfolio of equity investments in small-cap issuers with public stock market capitalizations within the range of the market capitalization of companies constituting the Russell 2000<sup>®</sup> Value Index at the time of investment. Although it will invest primarily in publicly traded U.S. securities, including real estate investment trusts, it may also invest in foreign securities.

**Fund Risk:** The securities of smaller, less well-known companies can be more volatile than those of larger companies. Value and growth stocks can perform differently from other types of stocks. Growth stocks can be more volatile. Value stocks can continue to be undervalued by the market for long periods of time. Stock markets are volatile and can decline significantly in response to adverse issuer, political, regulatory, market, economic or other developments. These risks may be magnified in foreign markets. Additional risk information for this product may be found in the prospectus or other product materials, if available.

# Fund short term trading fees: None

# Who may want to invest:

- Someone who is seeking the potential for long-term share-price appreciation and, secondarily, dividend income.
- Someone who is seeking both growth- and value-style investments and who is willing to accept the generally greater volatility of investments in smaller companies.

- This description is only intended to provide a brief overview of the mutual fund. Read the fund's prospectus for more detailed information about the fund.
- The Russell 2000<sup>®</sup> Value Index is an unmanaged market capitalization-weighted index of value-oriented stocks of U.S. domiciled companies that are included in the Russell 2000 Index. Value-oriented stocks tend to have lower price-to-book ratios and lower forecasted growth values.
- The analysis on these pages may be based, in part, on adjusted historical returns for periods prior to the class's actual inception of 08/15/1997. These calculated returns reflect the historical performance of the oldest share class of the fund, with an inception date of 10/22/1992, adjusted to reflect the fees and expenses of this share class (when this share class's fees and expenses are higher.) Please refer to a fund's prospectus for information regarding fees and expenses. These adjusted historical returns are not actual returns. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the fund itself.



# John Hancock Funds Disciplined Value Fund Class R5

VRS Code: 878514

**Fund Objective:** The investment seeks to provide long-term growth of capital primarily through investment in equity securities; current income is a secondary objective.

**Fund Strategy:** The fund normally invests at least 80% of its net assets in a diversified portfolio consisting primarily of equity securities, such as common stocks, of issuers with a market capitalization of \$1 billion or greater and identified by the manager as having value characteristics. It may also invest up to 20% of its total assets in foreign currency-denominated securities. The fund may participate as a purchaser in initial public offerings of securities (IPO).

**Fund Risk:** Value stocks can perform differently than other types of stocks and can continue to be undervalued by the market for long periods of time. Stock markets are volatile and can decline significantly in response to adverse issuer, political, regulatory, market, economic or other developments. These risks may be magnified in foreign markets. Additional risk information for this product may be found in the prospectus or other product materials, if available.

# Fund short term trading fees: None

# Who may want to invest:

- Someone who is seeking the potential for long-term share-price appreciation and, secondarily, dividend income.
- Someone who is comfortable with the volatility of large-cap stocks and value-style investments.

#### Footnotes:

- This description is only intended to provide a brief overview of the mutual fund. Read the fund's prospectus for more detailed information about the fund.
- The analysis on these pages may be based, in part, on adjusted historical returns for periods prior to the class's actual inception of 05/22/2009. These calculated returns reflect the historical performance of the oldest share class of the fund, with an inception date of 01/02/1997, adjusted to reflect the fees and expenses of this share class (when this share class's fees and expenses are higher.) Please refer to a fund's prospectus for information regarding fees and expenses. These adjusted historical returns are not actual returns. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the fund itself.

# JPMorgan Core Bond Fund Class R5

VRS Code: 885113

**Fund Objective:** The investment seeks to maximize total return by investing primarily in a diversified portfolio of intermediateand long-term debt securities.

**Fund Strategy:** The fund is designed to maximize total return by investing in a portfolio of investment grade intermediateand long-term debt securities. It will invest at least 80% of its net assets plus the amount of borrowings for investment purposes in bonds. The fund may principally invest in corporate bonds, U.S. treasury obligations and other U.S. government and agency securities, and asset-backed, mortgage-related and mortgage-backed securities. Its average weighted maturity will ordinarily range between 4 and 12 years.

**Fund Risk:** In general the bond market is volatile, and fixed income securities carry interest rate risk. (As interest rates rise, bond prices usually fall, and vice versa. This effect is usually more pronounced for longer-term securities.) Fixed income securities also carry inflation risk and credit and default risks for both issuers and counterparties. Unlike individual bonds, most bond funds do not have a maturity date, so avoiding losses caused by price volatility by holding them until maturity is not possible. Additional risk information for this product may be found in the prospectus or other product materials, if available.

### Fund short term trading fees: None

### Who may want to invest:

- Someone who is seeking potential returns primarily in the form of interest dividends rather than through an increase in share price.
- Someone who is seeking to diversify an equity portfolio with a more conservative investment option.

#### Footnotes:

- This description is only intended to provide a brief overview of the mutual fund. Read the fund's prospectus for more detailed information about the fund.
- Weighted average maturity (WAM) is the weighted average of all the maturities of the securities held in a fund. WAM for money market funds can be used as a measure of sensitivity to interest rate changes. Generally, the longer the maturity, the greater the sensitivity. WAM for money market funds is based on the dollar-weighted average length of time until principal payments must be paid, taking into account any call options exercised by the issuer and any permissible maturity shortening devices, such as demand features and interest rate resets. For bond funds, WAM can be used as a measure of sensitivity to the markets. Generally, the longer the maturity, the greater the sensitivity. The WAM calculation for bond funds excludes interest rate resets and only takes into account issuer call options if it is probable that the issuer of the instrument will take advantage of such options.
- The analysis on these pages may be based, in part, on adjusted historical returns for periods prior to the class's actual inception of 05/15/2006. These calculated returns reflect the historical performance of the oldest share class of the fund, with an inception date of 05/31/1991, adjusted to reflect the fees and expenses of this share class (when this share class's fees and expenses are higher.) Please refer to a fund's prospectus for information regarding fees and expenses. These adjusted historical returns are not actual returns. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the fund itself.

# Managed Income Portfolio Class 1

VRS Code: 000632

**Fund Objective:** The fund seeks to preserve your principal investment while earning a level of interest income that is consistent with principal preservation. The fund seeks to maintain a stable net asset value (NAV) of \$1 per share, but it cannot guarantee that it will be able to do so. The yield of the fund will fluctuate.

**Fund Strategy:** The fund invests in benefit-responsive investment contracts issued by insurance companies and other financial institutions ("Contracts"), fixed income securities, and money market funds. Under the terms of the Contracts, the assets of the fund are invested in fixed income securities (which may include, but are not limited to, U.S. Treasury and agency bonds, corporate bonds, mortgage-backed securities, commercial mortgage-backed securities, asset-backed securities, and collective investment vehicles and shares of investment companies that invest primarily in fixed income securities) and shares of money market funds. The fund may also invest in futures contracts, option contracts, and swap agreements. Fidelity Management Trust Company, as investment manager and trustee of the Fidelity Group Trust for Employee Benefit Plans, has claimed an exemption from registration under the Commodity Exchange Act and is not subject to registration or regulation under the Act. At the time of purchase, all Contracts and securities purchased for the fund must satisfy the credit quality standards specified in the Declaration of Separate Fund

Fund Risk: The Contracts and securities purchased for the fund are backed solely by the financial resources of the issuers of such Contracts and securities. An investment in the fund is not insured or guaranteed by the manager(s), the plan sponsor, the trustee, the FDIC, or any other government agency. The Contracts purchased by the fund permit the fund to account for the fixed income securities at book value (principal plus interest accrued to date). Through the use of book value accounting, there is no immediate recognition of investment gains and losses on the fund's securities. Instead, gains and losses are recognized over time by periodically adjusting the interest rate credited to the fund under the Contracts. However, while the fund seeks to preserve your principal investment, it is possible to lose money by investing in this fund. The Contracts provide for the payment of certain withdrawals and exchanges at book value during the terms of the Contracts. In order to maintain the Contract issuers' promise to pay such withdrawals and exchanges at book value, the Contracts subject the fund and its participants to certain restrictions. For example, withdrawals prompted by certain events (e.g., layoffs, early retirement windows, spin-offs, sale of a division, facility closings, plan terminations, partial plan terminations, changes in laws or regulations) may be paid at the market value of the fund's securities, which may be less than your book value balance.

Certain investment options offered by your plan (e.g., money market funds, short term bond funds, certain asset allocation/lifecycle funds and brokerage window) may be deemed by the Contract issuers to "compete" with this fund. The terms of the Contracts prohibit you from making a direct exchange from this fund to such competing funds. Instead, you must first exchange to a non-competing fund for 90 days. While these requirements may seem restrictive, they are imposed by the Contract issuers as a condition for the issuer's promise to pay certain withdrawals and exchanges at book value.

# Fund short term trading fees: None

# Who may want to invest:

- Someone who seeks a slightly higher yield over the long term than is offered by money market funds, but who is willing to accept slightly more investment risk.
- Someone who is interested in balancing an aggressive portfolio with an investment that seeks to provide stability of price.



#### Footnotes:

- The investment option is a stable value fund. It is managed by Fidelity Management Trust Company. This description is only intended to provide a brief overview of the fund.
- This fund is a commingled pool of the Fidelity Group Trust for Employee Benefit Plans. Only qualified, participant-directed, defined contribution plans may invest in the fund.
- This investment option is not a mutual fund.
- Management Fee includes the costs associated with managing the investments in the pool. The management fee does not include the wrap contract fees, which are paid to third party wrap providers and do not result in any additional compensation to Fidelity. The wrap contract fees are not separately stated but are included in the Expense Ratio and do reduce returns.
- Expense Ratio (Gross) includes management and wrap contract fees. For certain investments, it may also include distribution fees. Please note that the Gross and Net Expense Ratio are the same for this investment.

# MassMutual Select Mid Cap Growth Fund Class I

VRS Code: 823261

Fund Objective: The investment seeks growth of capital over the long-term.

**Fund Strategy:** The fund invests primarily in equity securities of mid-capitalization companies that the fund's subadvisers believe offer the potential for long-term growth. It invests at least 80% of its net assets (plus the amount of any borrowings for investment purposes) in a broadly diversified portfolio of common stocks of mid-cap companies whose earnings the subadvisers expect to grow at a faster rate than the average company.

Fund Risk: Growth stocks can perform differently from the market as a whole and can be more volatile than other types of stocks. The securities of smaller, less well-known companies can be more volatile than those of larger companies. Stock markets are volatile and can decline significantly in response to adverse issuer, political, regulatory, market, economic or other developments. These risks may be magnified in foreign markets. Additional risk information for this product may be found in the prospectus or other product materials, if available.

# Fund short term trading fees: None

# Who may want to invest:

- Someone who is seeking the potential for long-term share-price appreciation.
- Someone who is willing to accept the generally greater price volatility associated both with growth-oriented stocks and with smaller companies.

# Footnotes:

- This description is only intended to provide a brief overview of the mutual fund. Read the fund's prospectus for more detailed information about the fund.
- The analysis on these pages may be based, in part, on adjusted historical returns for periods prior to the class's actual inception of 11/15/2010. These calculated returns reflect the historical performance of the oldest share class of the fund, with an inception date of 05/31/2000, adjusted to reflect the fees and expenses of this share class (when this share class's fees and expenses are higher.) Please refer to a fund's prospectus for information regarding fees and expenses. These adjusted historical returns are not actual returns. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the fund itself.

# Metropolitan West Total Return Bond Fund Plan Class

VRS Code: 889080

**Fund Objective:** The investment seeks to maximize long-term total return.

**Fund Strategy:** The fund pursues its objective by investing, under normal circumstances, at least 80% of its net assets in investment grade fixed income securities or unrated securities that are determined by the Adviser to be of comparable quality. Up to 20% of the fund's net assets may be invested in securities rated below investment grade. The fund also invests at least 80% of its net assets plus borrowings for investment purposes in fixed income securities it regards as bonds.

**Fund Risk:** In general the bond market is volatile, and fixed income securities carry interest rate risk. (As interest rates rise, bond prices usually fall, and vice versa. This effect is usually more pronounced for longer-term securities.) Fixed income securities also carry inflation risk and credit and default risks for both issuers and counterparties. Unlike individual bonds, most bond funds do not have a maturity date, so avoiding losses caused by price volatility by holding them until maturity is not possible. The fund may invest in lower-quality debt securities that involve greater risk of default or price changes due to potential changes in the credit quality of the issuer. Foreign securities are subject to interest-rate, currency-exchange-rate, economic, and political risks, all of which may be magnified in emerging markets. Additional risk information for this product may be found in the prospectus or other product materials, if available.

# Fund short term trading fees: None

#### Who may want to invest:

- Someone who is seeking potential returns primarily in the form of interest dividends rather than through an increase in share price.
- Someone who is seeking to diversify an equity portfolio with a more conservative investment option.

#### Footnotes:

- This description is only intended to provide a brief overview of the mutual fund. Read the fund's prospectus for more detailed information about the fund.
- The analysis on these pages may be based, in part, on adjusted historical returns for periods prior to the class's actual inception of 07/29/2011. These calculated returns reflect the historical performance of the oldest share class of the fund, with an inception date of 03/31/1997, adjusted to reflect the fees and expenses of this share class (when this share class's fees and expenses are higher.) Please refer to a fund's prospectus for information regarding fees and expenses. These adjusted historical returns are not actual returns. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the fund itself.

# MFS International Intrinsic Value Fund Class R4

VRS Code: 877386

Fund Objective: The investment seeks capital appreciation.

**Fund Strategy:** The fund normally invests its assets primarily in foreign equity securities, including emerging market equity securities. Equity securities include common stocks and other securities that represent an ownership interest (or right to acquire an ownership interest) in a company or other issuer. The advisor focuses on investing the fund's assets in the stocks of companies that it believes are undervalued compared to their intrinsic value.

**Fund Risk:** Foreign securities are subject to interest-rate, currency-exchange-rate, economic, and political risks, all of which may be magnified in emerging markets. Growth stocks can perform differently from the market as a whole and can be more volatile than other types of stocks. Stock markets are volatile and can decline significantly in response to adverse issuer, political, regulatory, market, economic or other developments. Additional risk information for this product may be found in the prospectus or other product materials, if available.

# Fund short term trading fees: None

# Who may want to invest:

- Someone who is seeking to complement a portfolio of domestic investments with international investments, which can behave differently.
- Someone who is willing to accept the higher degree of risk associated with investing overseas.

- This description is only intended to provide a brief overview of the mutual fund. Read the fund's prospectus for more detailed information about the fund.
- The analysis on these pages may be based, in part, on adjusted historical returns for periods prior to the class's actual inception of 10/01/2008. These calculated returns reflect the historical performance of the oldest share class of the fund, with an inception date of 10/24/1995, adjusted to reflect the fees and expenses of this share class (when this share class's fees and expenses are higher.) Please refer to a fund's prospectus for information regarding fees and expenses. These adjusted historical returns are not actual returns. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the fund itself.
- As of 06/07/2019, Fidelity was notified this fund changed its name from MFS<sup>®</sup> International Value Fund Class R3. See the fund's prospectus for any additional details.



# MFS Mid Cap Value Fund Class R4

VRS Code: 826438

Fund Objective: The investment seeks capital appreciation.

**Fund Strategy:** The fund normally invests at least 80% of the fund's net assets in issuers with medium market capitalizations. The adviser generally defines medium market capitalization issuers as issuers with market capitalizations similar to those of issuers included in the Russell Midcap<sup>®</sup> Value Index over the last 13 months at the time of purchase. It normally invests the fund's assets primarily in equity securities.

**Fund Risk:** Value stocks can perform differently than other types of stocks and can continue to be undervalued by the market for long periods of time. The securities of smaller, less well-known companies can be more volatile than those of larger companies. Stock markets are volatile and can decline significantly in response to adverse issuer, political, regulatory, market, economic or other developments. These risks may be magnified in foreign markets. Additional risk information for this product may be found in the prospectus or other product materials, if available.

# Fund short term trading fees: None

# Who may want to invest:

- · Someone who is seeking the potential for long-term share-price appreciation and, secondarily, dividend income.
- Someone who is comfortable with value-style investments and the potentially greater volatility of investments in smaller companies.

## Footnotes:

- This description is only intended to provide a brief overview of the mutual fund. Read the fund's prospectus for more detailed information about the fund.
- The Russell Midcap® Value Index is an unmanaged market capitalization-weighted index of medium-capitalization valueoriented stocks of U.S. domiciled companies that are included in the Russell Midcap Index. Value-oriented stocks tend to have lower price-to-book ratios and lower forecasted growth values.
- The analysis on these pages may be based, in part, on adjusted historical returns for periods prior to the class's actual inception of 04/01/2005. These calculated returns reflect the historical performance of the oldest share class of the fund, with an inception date of 08/31/2001, adjusted to reflect the fees and expenses of this share class (when this share class's fees and expenses are higher.) Please refer to a fund's prospectus for information regarding fees and expenses. These adjusted historical returns are not actual returns. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the fund itself.

# T. Rowe Price Institutional Large Cap Growth Fund

VRS Code: 849772

**Fund Objective:** The investment seeks to provide long-term capital appreciation through investments in common stocks of growth companies.

**Fund Strategy:** In taking a growth approach to stock selection, the fund will normally invest at least 80% of its net assets (including any borrowings for investment purposes) in the common stocks of large-cap companies. The advisor defines a large-cap company as one whose market capitalization is larger than the median market capitalization of companies in the Russell 1000<sup>®</sup> Growth Index, a widely used benchmark of the largest U.S. growth stocks. The fund is non-diversified.

**Fund Risk:** Growth stocks can perform differently from the market as a whole and can be more volatile than other types of stocks. Stock markets are volatile and can decline significantly in response to adverse issuer, political, regulatory, market, economic or other developments. These risks may be magnified in foreign markets. Additional risk information for this product may be found in the prospectus or other product materials, if available.

# Fund short term trading fees: None

# Who may want to invest:

- Someone who is seeking the potential for long-term share-price appreciation.
- Someone who is willing to accept the generally greater price volatility associated with growth-oriented stocks.

- This description is only intended to provide a brief overview of the mutual fund. Read the fund's prospectus for more detailed information about the fund.
- The Russell 1000<sup>®</sup> Growth Index is an unmanaged market capitalization-weighted index of growth-oriented stocks of the largest U.S. domiciled companies that are included in the Russell 1000 Index. Growth-oriented stocks tend to have higher price-to-book ratios and higher forecasted growth values.

# T. Rowe Price International Discovery Fund

VRS Code: 899542

**Fund Objective:** The investment seeks long-term growth of capital through investments primarily in the common stocks of rapidly growing, small- to medium-sized companies outside the U.S.

**Fund Strategy:** The managers expect to primarily invest outside the U.S. and to diversify broadly across a variety of industries in developed and emerging market countries throughout the world. Normally, at least 80% of the fund's net assets (including any borrowings for investment purposes) will be invested in non-U.S. stocks.

**Fund Risk:** Foreign securities are subject to interest-rate, currency-exchange-rate, economic, and political risks, all of which may be magnified in emerging markets. Growth stocks can perform differently from the market as a whole and can be more volatile than other types of stocks. The securities of smaller, less well-known companies can be more volatile than those of larger companies. Stock markets are volatile and can decline significantly in response to adverse issuer, political, regulatory, market, economic or other developments. Additional risk information for this product may be found in the prospectus or other product materials, if available.

# Fund short term trading fees: None

# Who may want to invest:

- Someone who is seeking to complement a portfolio of domestic investments with international investments in smaller companies, which can behave differently.
- Someone who is willing to accept the higher degree of risk associated both with investing overseas and with investing in smaller companies.

#### Footnotes:

• This description is only intended to provide a brief overview of the mutual fund. Read the fund's prospectus for more detailed information about the fund.

# Vanguard Extended Market Index Fund Institutional Plus Shares

VRS Code: 877808

Fund Objective: The investment seeks to track a benchmark index that measures the investment return of small- and mid-capitalization stocks.

**Fund Strategy:** The fund employs an indexing investment approach designed to track the performance of S&P Completion Index, a broadly diversified index of stocks of small and mid-size U.S. companies. It invests by sampling the index, meaning that it holds a broadly diversified collection of securities that, in the aggregate, approximates the full index in terms of key characteristics. These characteristics include industry weightings and market capitalization, as well as certain financial measures, such as price/earnings ratio and dividend yield.

**Fund Risk:** Value and growth stocks can perform differently from other types of stocks. Growth stocks can be more volatile. Value stocks can continue to be undervalued by the market for long periods of time. The securities of smaller, less well-known companies can be more volatile than those of larger companies. Stock markets are volatile and can decline significantly in response to adverse issuer, political, regulatory, market, economic or other developments. These risks may be magnified in foreign markets. Additional risk information for this product may be found in the prospectus or other product materials, if available.

# Fund short term trading fees: None

# Who may want to invest:

- Someone who is seeking the potential for long-term share-price appreciation and, secondarily, dividend income.
- Someone who is seeking both growth- and value-style investments and who is willing to accept the generally greater volatility of investments in smaller companies.

- This description is only intended to provide a brief overview of the mutual fund. Read the fund's prospectus for more detailed information about the fund.
- The S&P Completion Index contains all of the U.S. common stocks regularly traded on the New York and American Stock Exchanges and the Nasdaq over-the-counter market, except those stocks included in the S&P 500 Index.
- The analysis on these pages may be based, in part, on adjusted historical returns for periods prior to the class's actual inception of 01/14/2011. These calculated returns reflect the historical performance of the oldest share class of the fund, with an inception date of 12/21/1987, adjusted to reflect the fees and expenses of this share class (when this share class's fees and expenses are higher.) Please refer to a fund's prospectus for information regarding fees and expenses. These adjusted historical returns are not actual returns. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the fund itself.



# Vanguard FTSE Social Index Fund Institutional Shares

VRS Code: 843131

**Fund Objective:** The investment seeks to track the performance of a benchmark index that measures the investment return of large- and mid-capitalization stocks.

**Fund Strategy:** The fund employs an indexing investment approach designed to track the performance of the FTSE4Good US Select Index. The index is composed of the stocks of companies that have been screened for certain social and environmental criteria by the index sponsor, which is independent of Vanguard. The Advisor attempts to replicate the index by investing all, or substantially all, of its assets in the stocks that make up the index.

Fund Risk: Value and growth stocks can perform differently from other types of stocks. Growth stocks can be more volatile. Value stocks can continue to be undervalued by the market for long periods of time. Stock markets are volatile and can decline significantly in response to adverse issuer, political, regulatory, market, economic or other developments. These risks may be magnified in foreign markets. Additional risk information for this product may be found in the prospectus or other product materials, if available.

### Fund short term trading fees: None

# Who may want to invest:

- Someone who is seeking the potential for long-term share-price appreciation and, secondarily, dividend income.
- Someone who is seeking both growth- and value-style investments and who is willing to accept the volatility associated with investing in the stock market.

#### Footnotes:

- This description is only intended to provide a brief overview of the mutual fund. Read the fund's prospectus for more detailed information about the fund.
- Additional Risk Information: The Fund's social responsibility criteria will affect the fund's exposure to certain issuers, industries, sectors, regions and countries and could cause the fund to sell or avoid stocks that subsequently perform well. In addition, undervalued stocks that do not meet the social criteria could outperform those that do.
- The FTSE4Good U.S. Select Index is composed of the stocks of companies that have been screened for certain social and environmental criteria by the index sponsor, which is independent of Vanguard.
- The analysis on these pages may be based, in part, on adjusted historical returns for periods prior to the class's actual inception of 01/14/2003. These calculated returns reflect the historical performance of the oldest share class of the fund, with an inception date of 05/31/2000, adjusted to reflect the fees and expenses of this share class (when this share class's fees and expenses are higher.) Please refer to a fund's prospectus for information regarding fees and expenses. These adjusted historical returns are not actual returns. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the fund itself.

# Vanguard Institutional Index Fund Institutional Plus Shares

VRS Code: 820745

**Fund Objective:** The investment seeks to track the performance of a benchmark index that measures the investment return of large-capitalization stocks.

**Fund Strategy:** The fund employs an indexing investment approach designed to track the performance of the Standard & Poor's 500 Index, a widely recognized benchmark of U.S. stock market performance that is dominated by the stocks of large U.S. companies. The advisor attempts to replicate the target index by investing all, or substantially all, of its assets in the stocks that make up the index, holding each stock in approximately the same proportion as its weighting in the index.

**Fund Risk:** Value and growth stocks can perform differently from other types of stocks. Growth stocks can be more volatile. Value stocks can continue to be undervalued by the market for long periods of time. Stock markets are volatile and can decline significantly in response to adverse issuer, political, regulatory, market, economic or other developments. These risks may be magnified in foreign markets. Additional risk information for this product may be found in the prospectus or other product materials, if available.

# Fund short term trading fees: None

# Who may want to invest:

- Someone who is seeking the potential for long-term share-price appreciation and, secondarily, dividend income.
- Someone who is seeking both growth- and value-style investments and who is willing to accept the volatility associated with investing in the stock market.

#### Footnotes:

- This description is only intended to provide a brief overview of the mutual fund. Read the fund's prospectus for more detailed information about the fund.
- S&P 500 Index is a market capitalization-weighted index of 500 common stocks chosen for market size, liquidity, and industry group representation to represent U.S. equity performance.
- The analysis on these pages may be based, in part, on adjusted historical returns for periods prior to the class's actual inception of 07/07/1997. These calculated returns reflect the historical performance of the oldest share class of the fund, with an inception date of 07/31/1990, adjusted to reflect the fees and expenses of this share class (when this share class's fees and expenses are higher.) Please refer to a fund's prospectus for information regarding fees and expenses. These adjusted historical returns are not actual returns. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the fund itself.

# **Vanguard Short-Term Bond Index Fund Institutional Shares**

VRS Code: 879771

**Fund Objective:** The investment seeks to track the performance of Bloomberg Barclays U.S. 1-5 Year Government/Credit Float Adjusted Index.

**Fund Strategy:** Bloomberg Barclays U.S. 1-5 Year Government/Credit Float Adjusted Index includes all medium and larger issues of U.S. government, investment-grade corporate, and investment-grade international dollar-denominated bonds that have maturities between 1 and 5 years and are publicly issued. All of its investments will be selected through the sampling process, and at least 80% of its assets will be invested in bonds held in the index.

**Fund Risk:** In general the bond market is volatile, and fixed income securities carry interest rate risk. (As interest rates rise, bond prices usually fall, and vice versa. This effect is usually more pronounced for longer-term securities.) Fixed income securities also carry inflation risk and credit and default risks for both issuers and counterparties. Unlike individual bonds, most bond funds do not have a maturity date, so avoiding losses caused by price volatility by holding them until maturity is not possible. Additional risk information for this product may be found in the prospectus or other product materials, if available.

#### Fund short term trading fees: None

# Who may want to invest:

- Someone who is seeking potential returns primarily in the form of interest dividends rather than through an increase in share price.
- Someone who is seeking to diversify an equity portfolio with a more conservative investment option.

# Footnotes:

- This description is only intended to provide a brief overview of the mutual fund. Read the fund's prospectus for more detailed information about the fund.
- The Bloomberg Barclays U.S. 1-5 Year Government/ Credit Float Adjusted Index includes all medium and larger issues of U.S. government, investment-grade corporate, and investment-grade international dollar-denominated bonds that have maturities between 1 and 5 years and are publicly issued.
- The analysis on these pages may be based, in part, on adjusted historical returns for periods prior to the class's actual inception of 09/27/2011. These calculated returns reflect the historical performance of the oldest share class of the fund, with an inception date of 03/01/1994, adjusted to reflect the fees and expenses of this share class (when this share class's fees and expenses are higher.) Please refer to a fund's prospectus for information regarding fees and expenses. These adjusted historical returns are not actual returns. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the fund itself.

# Vanguard Target Retirement 2015 Trust Plus

VRS Code: 886085

Fund Objective: Seeks to provide capital appreciation and current income consistent with its current asset allocation.

**Fund Strategy:** The trust invests in Vanguard mutual funds using 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 trust's asset allocation will become more conservative over time. Within seven years after 2015, the trust's asset allocation should resemble that of the Target Retirement Income Trust Plus. Unit price and return will vary.



# Fund short term trading fees: None

#### Who may want to invest:

- Someone who is seeking an investment option intended for people in or very near retirement and who is willing to accept the volatility of diversified investments in the market.
- Someone who is seeking a diversified mix of stocks, bonds, and short-term investments in one investment option or who does not feel comfortable making asset allocation choices over time.

#### Footnotes:

- The investment option is a collective investment trust. It is managed by Vanguard. This description is only intended to provide a brief overview of the fund.
- This investment option is not a mutual fund.

# Vanguard Target Retirement 2020 Trust Plus

VRS Code: 886086

Fund Objective: Seeks to provide capital appreciation and current income consistent with its current asset allocation.

**Fund Strategy:** The trust invests in Vanguard mutual funds using an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2020 (the target year). The trust's asset allocation will become more conservative over time. Within seven years after 2020, the trust's asset allocation should resemble that of the Target Retirement Income Trust Plus. Unit price and return will vary.

Fund Risk: The target date funds are designed for investors expecting to retire around the year indicated in each fund's name. The funds are managed to gradually become more conservative over time as they approach their target date. The investment risk of each target date fund changes over time as its asset allocation changes. They are subject to the volatility of the financial markets, including that of equity and fixed income investments in the U.S. and abroad, and may be subject to risks associated with investing in high-yield, small-cap, and foreign securities. Principal invested is not guaranteed at any time, including at or after their target dates. Additional risk information for this product may be found in the prospectus or other product materials, if available.

# Fund short term trading fees: None

### Who may want to invest:

- Someone who is seeking an investment option that gradually becomes more conservative over time and who is willing to accept the volatility of the markets.
- Someone who is seeking a diversified mix of stocks, bonds, and short-term investments in one investment option or who does not feel comfortable making asset allocation choices over time.

### Footnotes:

- The investment option is a collective investment trust. It is managed by Vanguard. This description is only intended to provide a brief overview of the fund.
- This investment option is not a mutual fund.

# Vanguard Target Retirement 2025 Trust Plus

VRS Code: 886087

Fund Objective: Seeks to provide capital appreciation and current income consistent with its current asset allocation.

**Fund Strategy:** The trust invests in Vanguard mutual funds using an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2025 (the target year). The trust's asset allocation will become more conservative over time. Within seven years after 2025, the trust's asset allocation should resemble that of the Target Retirement Income Trust Plus. Unit price and return will vary.

# Fund short term trading fees: None

# Who may want to invest:

- Someone who is seeking an investment option that gradually becomes more conservative over time and who is willing to accept the volatility of the markets.
- Someone who is seeking a diversified mix of stocks, bonds, and short-term investments in one investment option or who does not feel comfortable making asset allocation choices over time.

#### Footnotes:

- The investment option is a collective investment trust. It is managed by Vanguard. This description is only intended to provide a brief overview of the fund.
- This investment option is not a mutual fund.

# Vanguard Target Retirement 2030 Trust Plus

VRS Code: 886088

Fund Objective: Seeks to provide capital appreciation and current income consistent with its current asset allocation.

**Fund Strategy:** The trust invests in Vanguard mutual funds using an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2030 (the target year). The trust's asset allocation will become more conservative over time. Within seven years after 2030, the trust's asset allocation should resemble that of the Target Retirement Income Trust Plus. Unit price and return will vary.

Fund Risk: The target date funds are designed for investors expecting to retire around the year indicated in each fund's name. The funds are managed to gradually become more conservative over time as they approach their target date. The investment risk of each target date fund changes over time as its asset allocation changes. They are subject to the volatility of the financial markets, including that of equity and fixed income investments in the U.S. and abroad, and may be subject to risks associated with investing in high-yield, small-cap, and foreign securities. Principal invested is not guaranteed at any time, including at or after their target dates. Additional risk information for this product may be found in the prospectus or other product materials, if available.

### Fund short term trading fees: None

### Who may want to invest:

- Someone who is seeking an investment option that gradually becomes more conservative over time and who is willing to accept the volatility of the markets.
- Someone who is seeking a diversified mix of stocks, bonds, and short-term investments in one investment option or who does not feel comfortable making asset allocation choices over time.

### Footnotes

- The investment option is a collective investment trust. It is managed by Vanguard. This description is only intended to provide a brief overview of the fund.
- This investment option is not a mutual fund.

# Vanguard Target Retirement 2035 Trust Plus

VRS Code: 886089

Fund Objective: Seeks to provide capital appreciation and current income consistent with its current asset allocation.

**Fund Strategy:** The trust invests in Vanguard mutual funds using an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2035 (the target year). The trust's asset allocation will become more conservative over time. Within seven years after 2035, the trust's asset allocation should resemble that of the Target Retirement Income Trust Plus. Unit price and return will vary.



# Fund short term trading fees: None

# Who may want to invest:

- Someone who is seeking an investment option that gradually becomes more conservative over time and who is willing to accept the volatility of the markets.
- Someone who is seeking a diversified mix of stocks, bonds, and short-term investments in one investment option or who does not feel comfortable making asset allocation choices over time.

#### Footnotes:

- The investment option is a collective investment trust. It is managed by Vanguard. This description is only intended to provide a brief overview of the fund.
- This investment option is not a mutual fund.

# Vanguard Target Retirement 2040 Trust Plus

VRS Code: 886090

Fund Objective: Seeks to provide capital appreciation and current income consistent with its current asset allocation.

**Fund Strategy:** The trust invests in Vanguard mutual funds using an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2040 (the target year). The trust's asset allocation will become more conservative over time. Within seven years after 2040, the trust's asset allocation should resemble that of the Target Retirement Income Trust Plus. Unit price and return will vary.

Fund Risk: The target date funds are designed for investors expecting to retire around the year indicated in each fund's name. The funds are managed to gradually become more conservative over time as they approach their target date. The investment risk of each target date fund changes over time as its asset allocation changes. They are subject to the volatility of the financial markets, including that of equity and fixed income investments in the U.S. and abroad, and may be subject to risks associated with investing in high-yield, small-cap, and foreign securities. Principal invested is not guaranteed at any time, including at or after their target dates. Additional risk information for this product may be found in the prospectus or other product materials, if available.

### Fund short term trading fees: None

### Who may want to invest:

- Someone who is seeking an investment option that gradually becomes more conservative over time and who is willing to accept the volatility of the markets.
- Someone who is seeking a diversified mix of stocks, bonds, and short-term investments in one investment option or who does not feel comfortable making asset allocation choices over time.

### Footnotes:

- The investment option is a collective investment trust. It is managed by Vanguard. This description is only intended to provide a brief overview of the fund.
- This investment option is not a mutual fund.

# Vanguard Target Retirement 2045 Trust Plus

VRS Code: 886091

Fund Objective: Seeks to provide capital appreciation and current income consistent with its current asset allocation.

**Fund Strategy:** The trust invests in Vanguard mutual funds using an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2045 (the target year). The trust's asset allocation will become more conservative over time. Within seven years after 2045, the trust's asset allocation should resemble that of the Target Retirement Income Trust Plus. Unit price and return will vary.

# Fund short term trading fees: None

#### Who may want to invest:

- Someone who is seeking an investment option that gradually becomes more conservative over time and who is willing to accept the volatility of the markets.
- Someone who is seeking a diversified mix of stocks, bonds, and short-term investments in one investment option or who does not feel comfortable making asset allocation choices over time.

#### Footnotes:

- The investment option is a collective investment trust. It is managed by Vanguard. This description is only intended to provide a brief overview of the fund.
- This investment option is not a mutual fund.

# Vanguard Target Retirement 2050 Trust Plus

VRS Code: 886092

Fund Objective: Seeks to provide capital appreciation and current income consistent with its current asset allocation.

**Fund Strategy:** The trust invests in Vanguard mutual funds using an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2050 (the target year). The trust's asset allocation will become more conservative over time. Within seven years after 2050, the trust's asset allocation should resemble that of the Target Retirement Income Trust Plus. Unit price and return will vary.

Fund Risk: The target date funds are designed for investors expecting to retire around the year indicated in each fund's name. The funds are managed to gradually become more conservative over time as they approach their target date. The investment risk of each target date fund changes over time as its asset allocation changes. They are subject to the volatility of the financial markets, including that of equity and fixed income investments in the U.S. and abroad, and may be subject to risks associated with investing in high-yield, small-cap, and foreign securities. Principal invested is not guaranteed at any time, including at or after their target dates. Additional risk information for this product may be found in the prospectus or other product materials, if available.

### Fund short term trading fees: None

### Who may want to invest:

- Someone who is seeking an investment option that gradually becomes more conservative over time and who is willing to accept the volatility of the markets.
- Someone who is seeking a diversified mix of stocks, bonds, and short-term investments in one investment option or who does not feel comfortable making asset allocation choices over time.

### Footnotes

- The investment option is a collective investment trust. It is managed by Vanguard. This description is only intended to provide a brief overview of the fund.
- This investment option is not a mutual fund.

# Vanguard Target Retirement 2055 Trust Plus

VRS Code: 886093

Fund Objective: Seeks to provide capital appreciation and current income consistent with its current asset allocation.

**Fund Strategy:** The trust invests in Vanguard mutual funds using an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2055 (the target year). The trust's asset allocation will become more conservative over time. Within seven years after 2055, the trust's asset allocation should resemble that of the Target Retirement Income Trust Plus. Unit price and return will vary.



# Fund short term trading fees: None

#### Who may want to invest:

- Someone who is seeking an investment option that gradually becomes more conservative over time and who is willing to accept the volatility of the markets.
- Someone who is seeking a diversified mix of stocks, bonds, and short-term investments in one investment option or who does not feel comfortable making asset allocation choices over time.

#### Footnotes:

- The investment option is a collective investment trust. It is managed by Vanguard. This description is only intended to provide a brief overview of the fund.
- This investment option is not a mutual fund.

# Vanguard Target Retirement 2060 Trust Plus

VRS Code: 886094

Fund Objective: Seeks to provide capital appreciation and current income consistent with its current asset allocation.

**Fund Strategy:** The trust invests in Vanguard mutual funds using an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2060 (the target year). The trust's asset allocation will become more conservative over time. Within seven years after 2060, the trust's asset allocation should resemble that of the Target Retirement Income Trust Plus. Unit price and return will vary.

Fund Risk: The target date funds are designed for investors expecting to retire around the year indicated in each fund's name. The funds are managed to gradually become more conservative over time as they approach their target date. The investment risk of each target date fund changes over time as its asset allocation changes. They are subject to the volatility of the financial markets, including that of equity and fixed income investments in the U.S. and abroad, and may be subject to risks associated with investing in high-yield, small-cap, and foreign securities. Principal invested is not guaranteed at any time, including at or after their target dates. Additional risk information for this product may be found in the prospectus or other product materials, if available.

### Fund short term trading fees: None

### Who may want to invest:

- Someone who is seeking an investment option that gradually becomes more conservative over time and who is willing to accept the volatility of the markets.
- Someone who is seeking a diversified mix of stocks, bonds, and short-term investments in one investment option or who does not feel comfortable making asset allocation choices over time.

### Footnotes:

- The investment option is a collective investment trust. It is managed by Vanguard. This description is only intended to provide a brief overview of the fund.
- This investment option is not a mutual fund.

# Vanguard Target Retirement 2065 Trust Plus

VRS Code: 886095

Fund Objective: Seeks to provide capital appreciation and current income consistent with its current asset allocation.

**Fund Strategy:** The trust invests in Vanguard mutual funds using an asset allocation strategy designed for investors planning to retire and leave the workforce in or within a few years of 2065 (the target year). The trust's asset allocation will become more conservative over time. Within seven years after 2065, the trust's asset allocation should resemble that of the Target Retirement Income Trust Plus. Unit price and return will vary.

# Fund short term trading fees: None

# Who may want to invest:

- Someone who is seeking an investment option that gradually becomes more conservative over time and who is willing to accept the volatility of the markets.
- Someone who is seeking a diversified mix of stocks, bonds, and short-term investments in one investment option or who does not feel comfortable making asset allocation choices over time.

#### Footnotes:

- The investment option is a collective investment trust. It is managed by Vanguard. This description is only intended to provide a brief overview of the fund.
- This investment option is not a mutual fund.

# Vanguard Target Retirement Income Trust Plus

VRS Code: 886084

Fund Objective: Seeks to provide current income and some capital appreciation.

**Fund Strategy:** The trust invests in Vanguard mutual funds according to an asset allocation strategy designed for investors currently in retirement. Unit price and return will vary.

Fund Risk: The fund is subject to the volatility of the financial markets, including that of equity and fixed income investments. Fixed income investments carry issuer default and credit risk, inflation risk, and interest rate risk. (As interest rates rise, bond prices usually fall, and vice versa. This effect is usually more pronounced for longer-term securities.) Principal invested is not guaranteed at any time, including at or after retirement. Additional risk information for this product may be found in the prospectus or other product materials, if available.

### Fund short term trading fees: None

# Who may want to invest:

- Someone who is seeking an investment option intended for people in retirement and who is willing to accept the volatility of diversified investments in the market.
- Someone who is seeking a diversified mix of stocks, bonds, and short-term investments in one investment option and looking primarily for the potential for income and, secondarily, for share-price appreciation.

# Footnotes:

- The investment option is a collective investment trust. It is managed by Vanguard. This description is only intended to provide a brief overview of the fund.
- This investment option is not a mutual fund.

# Vanguard Total Bond Market Index Fund Institutional Shares

VRS Code: 844511

Fund Objective: The investment seeks the performance of Bloomberg Barclays U.S. Aggregate Float Adjusted Index.

**Fund Strategy:** Bloomberg Barclays U.S. Aggregate Float Adjusted Index represents a wide spectrum of public, investment-grade, taxable, fixed income securities in the United States-including government, corporate, and international dollar-denominated bonds, as well as mortgage-backed and asset-backed securities-all with maturities of more than 1 year. All of its investments will be selected through the sampling process, and at least 80% of its assets will be invested in bonds held in the index.



**Fund Risk:** In general the bond market is volatile, and fixed income securities carry interest rate risk. (As interest rates rise, bond prices usually fall, and vice versa. This effect is usually more pronounced for longer-term securities.) Fixed income securities also carry inflation risk and credit and default risks for both issuers and counterparties. Unlike individual bonds, most bond funds do not have a maturity date, so avoiding losses caused by price volatility by holding them until maturity is not possible. Additional risk information for this product may be found in the prospectus or other product materials, if available.

#### Fund short term trading fees: None

# Who may want to invest:

- Someone who is seeking potential returns primarily in the form of interest dividends rather than through an increase in share price.
- Someone who is seeking to diversify an equity portfolio with a more conservative investment option.

#### Footnotes

- This description is only intended to provide a brief overview of the mutual fund. Read the fund's prospectus for more detailed information about the fund.
- The Bloomberg Barclays U.S. Aggregate Float Adjusted Index measures the total universe of public, investment-grade, taxable, fixed income securities in the United States-including government, corporate, and international dollar-denominated bonds, as well as mortgage-backed and asset-backed securities-all with maturities of more than 1 year.
- The analysis on these pages may be based, in part, on adjusted historical returns for periods prior to the class's actual inception of 09/18/1995. These calculated returns reflect the historical performance of the oldest share class of the fund, with an inception date of 12/11/1986, adjusted to reflect the fees and expenses of this share class (when this share class's fees and expenses are higher.) Please refer to a fund's prospectus for information regarding fees and expenses. These adjusted historical returns are not actual returns. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the fund itself.

# Vanguard Total International Stock Index Fund Institutional Shares

VRS Code: 877800

**Fund Objective:** The investment seeks to track the performance of a benchmark index that measures the investment return of stocks issued by companies located in developed and emerging markets, excluding the United States.

**Fund Strategy:** The fund employs an indexing investment approach designed to track the performance of the FTSE Global All Cap ex US Index, a float-adjusted market-capitalization-weighted index designed to measure equity market performance of companies located in developed and emerging markets, excluding the United States. It invests all, or substantially all, of its assets in the common stocks included in its target index.

**Fund Risk:** Foreign securities are subject to interest-rate, currency-exchange-rate, economic, and political risks, all of which may be magnified in emerging markets. Value and growth stocks can perform differently from other types of stocks. Growth stocks can be more volatile. Value stocks can continue to be undervalued by the market for long periods of time. Stock markets are volatile and can decline significantly in response to adverse issuer, political, regulatory, market, economic or other developments. Additional risk information for this product may be found in the prospectus or other product materials, if available.

# Fund short term trading fees: None

# Who may want to invest:

- Someone who is seeking to complement a portfolio of domestic investments with international investments, which can behave differently.
- Someone who is willing to accept the higher degree of risk associated with investing overseas.

- This description is only intended to provide a brief overview of the mutual fund. Read the fund's prospectus for more detailed information about the fund.
- The FTSE Global All Cap ex US Index is part of a range of indices designed to help US investors benchmark their international investments. The index comprises large, mid and small cap stocks globally excluding the US.
- The analysis on these pages may be based, in part, on adjusted historical returns for periods prior to the class's actual inception of 11/29/2010. These calculated returns reflect the historical performance of the oldest share class of the fund, with an inception date of 04/29/1996, adjusted to reflect the fees and expenses of this share class (when this share class's fees and expenses are higher.) Please refer to a fund's prospectus for information regarding fees and expenses. These adjusted historical returns are not actual returns. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the fund itself.

This information is intended to be educational and is not tailored to the investment needs of any specific investor. This document provides only a summary of the main features of The University of North Carolina Optional Retirement Program and the Plan Document will govern in the event of discrepancies. The Plan is intended to be a participant-directed plan as described in Section 404(c) of ERISA, which means that fiduciaries of the Plan are ordinarily relieved of liability for any losses that are the direct and necessary result of investment instructions given by a participant or beneficiary. © 2010 - 2019 FMR LLC. All rights reserved.





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