



Take charge of your retirement portfolio with the University of North Carolina Optional Retirement Program (UNC ORP) investment options

The UNC ORP provides a four-tier investment structure specifically designed to offer a variety of options from leading investment managers to the retirement program participants.

The four tiers are:

- Tier 1: Target-date funds
- Tier 2: UNC risk-based models
- Tier 3: Core investment lineup
- Tier 4: Self-directed brokerage services

For detailed descriptions and performance information, go to TIAA.org/unc.

Tier 1: Target-date funds

Target-date funds are designed for investors who prefer a single diversified investment option. These funds are collective investment trusts and are professionally managed by Vanguard Investment Management to provide a multi-asset investment portfolio within a single fund. The gross expense ratio for these funds is 0.06% as of June 30, 2019. The portfolio is regularly rebalanced and, as you move through your career and as the fund's target date approaches, automatically shifts to become more conservative over time. When using these funds, be sure to select a target-date fund closest to the year you plan to retire. As with all mutual funds, the principal value of a target date fund isn't guaranteed at any time, including at the target-date. Also, please note that the target date represents an approximate date when investors may plan to begin withdrawing from the fund. However, there is no need to withdraw the funds at that target date.

INVESTMENT OPTION AND SHARE CLASS	ASSET CLASS	TICKER SYMBOL
Vanguard Target Retirement Income Trust Plus	Multi-Asset	N/A
Vanguard Target Retirement 2015 Trust Plus	Multi-Asset	N/A
Vanguard Target Retirement 2020 Trust Plus	Multi-Asset	N/A
Vanguard Target Retirement 2025 Trust Plus	Multi-Asset	N/A
Vanguard Target Retirement 2030 Trust Plus	Multi-Asset	N/A
Vanguard Target Retirement 2035 Trust Plus	Multi-Asset	N/A
Vanguard Target Retirement 2040 Trust Plus	Multi-Asset	N/A
Vanguard Target Retirement 2045 Trust Plus	Multi-Asset	N/A
Vanguard Target Retirement 2050 Trust Plus	Multi-Asset	N/A
Vanguard Target Retirement 2055 Trust Plus	Multi-Asset	N/A
Vanguard Target Retirement 2060 Trust Plus	Multi-Asset	N/A
Vanguard Target Retirement 2065 Trust Plus	Multi-Asset	N/A

Target-date funds share the risks associated with the types of securities held by each of the underlying funds in which they invest. In addition to the fees and expenses associated with the funds, there is exposure to the fees and expenses associated with the underlying mutual funds as well.

Tier 2: UNC risk-based models

For investors who wish to choose an investment strategy based upon their personal risk tolerance, UNC offers five risk-based models ranging from lower to higher levels of risk as illustrated below. These models were developed by UNC using investment options from the core investment lineup and offered through the TIAA Custom Portfolio Model service. To see a breakdown of investments within each of the model portfolios visit [TIAA.org/unc](https://www.tiaa.org/unc).



Each model represents a mix of investment options from the core investment lineup (see Tier 3) and is rebalanced semiannually to ensure the overall investment mix remains consistent with its risk profile. Unlike target-date funds, the models do not automatically adjust to become more conservative over time. You should select the model that best meets your objectives, and also revisit your investment decisions periodically and make adjustments if your risk tolerance or other factors change. These risk-based models share the risks associated with the types of securities held by each of the underlying funds in which they invest, including market risk, company risk, foreign investment risks, interest-rate risk, credit risk, illiquid security risk, prepayment risk and extension risk. For a detailed discussion of risk, consult prospectuses of the individual investment options that comprise the model.

Special note for self-directed brokerage account holders: You cannot allocate to a model and a self-directed brokerage account simultaneously. You may not select the model portfolio until your brokerage account holdings are fully liquidated.

Tier 3: Core investment lineup

The core investment lineup represents a diversified array of investment options, including both actively managed and index funds. The core lineup is designed for investors who wish to construct and manage their own investment portfolio to address their specific objectives. The core lineup gives you a great degree of flexibility and the ability to rebalance and manage the portfolio over time and as your situation changes.

ASSET CLASS	NEW INVESTMENT OPTION AND SHARE CLASS	TICKER SYMBOL
Guaranteed	TIAA Traditional Annuity*	Guaranteed Annuity
Money Market	CREF Money Market Account R3 (variable annuity)	QCMMIX
	Vanguard Federal Money Market Fund Investor	VMFXX
Fixed Income	JPMorgan Core Bond Fund R6	JCBUX
	Metropolitan West Total Return Bond Fund	MWTSX
	Vanguard Short-Term Bond Index Fund Institutional	VBITX
	Vanguard Total Bond Market Index Fund Institutional	VBTIX
Multi-Asset	CREF Social Choice Account R3 (variable annuity)	QCSCIX
Real Estate	TIAA Real Estate Account (variable annuity)	QREARX
Equities	American Funds EuroPacific Growth Fund R6	RERGX
	Cohen & Steers Institutional Realty Shares	CSRIX
	CREF Stock Account R3 (variable annuity)	QCSTIX
	Eagle Small Cap Growth Fund R6	HSRUX
	Goldman Sachs Small Cap Value Fund R6	GSSUX
	John Hancock Disciplined Value Fund R6	JDVWX
	MFS International Value Fund R5	MINJX
	MFS Mid Cap Value Fund Class R5	MVCKX
	Mass Mutual Select Mid Cap Growth Equity II I	MEFZX
	T. Rowe Price Institutional Large Cap Growth Fund Institutional	TRLGX
	T. Rowe Price International Discovery Fund I	TIDDX
	Vanguard Extended Market Index Fund Institutional Plus	VEMPX
	Vanguard Institutional Index Fund Institutional Plus	VIIIX
Vanguard Total International Stock Index Fund Institutional	VTSNX	

* The TIAA Traditional Annuity is a guaranteed insurance contract and not an investment for federal securities law purposes. Guarantees are subject to TIAA's claims-paying ability.

Annuity account options are available through annuity contracts issued by TIAA or CREF. These contracts are designed for retirement or other long-term goals and offer a variety of income options, including lifetime income. Payments from the variable annuity accounts are not guaranteed and will rise or fall based on investment performance.

Tier 4: Self-directed brokerage services

For experienced investors seeking maximum flexibility, the UNC ORP offers a self-directed brokerage window that allows you to select from a wide array of mutual funds for using your salary contributions. You may use this feature to add diversification above and beyond the core lineup. **To open your brokerage account and make trades on a brokerage account under the UNC ORP, simply call Brokerage Services at 800-927-3059**, weekdays, 8 a.m. to 7 p.m. (ET). For your 403(b) brokerage option in addition to the Brokerage Services phone line, you also have the option of opening an account and making trades online. The UNC ORP states that only employee contributions are eligible for investment through the brokerage window. In addition, the UNC 403(b) Plan, which only allows employee contributions, are eligible for investment through the brokerage window. The brokerage account option is available to participants who maintain both a legitimate U.S. residential address and a legitimate U.S. mailing address. Please note that investments selected through the brokerage window are not monitored by UNC.

For information regarding fees, commissions and expenses, please visit [TIAA.org/public/offer/products/brokerage](https://www.tiaa.org/public/offer/products/brokerage), click on *Learn About Fees* for a complete list of commissions and fees.



You should consider the investment objectives, principal strategies, principal risks, portfolio turnover rate, performance data, and fee and expense information of each underlying investment carefully before directing an investment based on the model. For a free copy of the program description and the prospectus or other offering documents for each of the underlying investments (containing this and other information), call TIAA at 877-518-9161 or log on to your account at TIAA.org/unc. Please read the program description and the prospectuses or other offering documents for the underlying investments carefully before investing.

The Model is an asset allocation recommendation developed by your Plan Sponsor in consultation with consultants and other investment advisors designated by the Plan Sponsor whereby assets are allocated to underlying mutual funds and annuities that are permissible investments under the plan. Model-based accounts will be managed on the basis of the plan participant's personal financial situation and investment objectives.

Changes in your personal financial situation or investment objective may require a change in the model recommended for your model-based account. Please contact us at **800-842-2888**, visit our website or contact your Plan Sponsor if you need to update your financial situation or investment objective. As a participant in the Program, you may wish to request a reasonable restriction on the management of your model-based account. Please contact your Plan Sponsor to discuss your options for requesting a reasonable restriction or a modification to an existing restriction.

The Plan Fiduciary and the Plan Advisor may determine that an Underlying Investment(s) is appropriate for a Model Portfolio, but not appropriate as a stand-alone investment for a Participant who is not participating in the Program. In such case, Participants who elect to unsubscribe from the Program while holding an Underlying Investment(s) in their Model-Based Account that has been deemed inappropriate as a stand-alone investment option by the Plan Fiduciary and/or the Plan Advisor will be prohibited from allocating future contributions to that investment option(s).

No registration under the Investment Company Act, the Securities Act or state securities laws – The Model is not a mutual fund or other type of security and will not be registered with the Securities and Exchange Commission as an investment company under the Investment Company Act of 1940, as amended, and no units or shares of the Model will be registered under the Securities Act of 1933, as amended, nor will they be registered with any state securities regulator. Accordingly, the Model is not subject to compliance with the requirements of such acts, nor may plan participants investing in underlying investments based on the Model avail themselves of the protections thereunder, except to the extent that one or more underlying investments or interests therein are registered under such acts.

No guarantee – Investments based on the Model are not deposits of, or obligations of, or guaranteed or endorsed by TIAA, the Investment Advisor, The University of North Carolina Retirement Plan or their affiliates, and are not insured by the Federal Deposit Insurance Corporation, or any other agency. An investment based on the Model is not guaranteed, and you may experience losses, including losses near, at, or after the target date. There is no guarantee that investments based on the Model will provide adequate income at and through your retirement. Investors should not allocate their retirement savings based on the Model unless they can readily bear the consequences of such loss.

The TIAA Custom Portfolio Program Model-Based Service (the "Program") has been implemented by your Plan Sponsor to meet the unique retirement requirements of your plan. The Program is administered by Teachers Insurance and Annuity Association of America ("TIAA") as plan recordkeeper. Should you have any questions about the Program offering, please contact your Plan Sponsor directly.

TIAA-CREF Individual & Institutional Services, LLC, Member FINRA and SIPC, distributes securities products. If offered under your plan, TIAA and CREF annuity contracts and certificates are issued by Teachers Insurance and Annuity Association of America (TIAA) and College Retirement Equities Fund (CREF), New York, NY, respectively. Each is solely responsible for its own financial condition and contractual obligations. Transactions in the underlying investments invested in based on the Model on behalf of the plan participants are executed through TIAA-CREF Individual & Institutional Services, LLC, Member FINRA.

Distributions from 403(b) plans before age 59½, severance from employment, death, or disability may be prohibited, limited and/or subject to substantial tax penalties. Different restrictions may apply to other types of plans.

Investment products may be subject to market and other risk factors. See the applicable product literature, or visit TIAA.org/unc for details.

Investment, insurance and annuity products are not FDIC insured, are not bank guaranteed, are not deposits, are not insured by any federal government agency, are not a condition to any banking service or activity, and may lose value.

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