

Important 403(b) information Yale University Tax-Deferred 403(b) Savings Plan

Investment of Plan Contributions

The Yale University Tax-Deferred 403(b) Savings Plan (the "Plan") allows participants and beneficiaries to direct the investment of their Plan Contributions, i.e., Employee Contributions. If you do not select your investment options, your Plan Contributions will be automatically invested in the Yale Target-Date Plus Service. This notice is intended to comply with the Employee Retirement Income Security Act (ERISA) regulations to provide information about how your Plan Contributions and account balance will be invested if you have not made an investment election.

Yale Target-Date Plus Service

In 2019, Yale designated the new Yale Target-Date Plus Service (the "Service") to be the Plan's "Qualified Default Investment Alternative" (QDIA), as described in Section 404(c)(5) of the Employee Retirement Income Security Act (ERISA). Specific information, including a description of the Service's investment objectives, risk and return characteristics, and fees and expenses, is included with this notice. If you did not provide investment instructions by March 4, 2019, or afterward, your existing account balances that were invested in the Plan's mutual funds prior to that date, as well as your future contributions, were automatically invested in an appropriate model portfolio selected for you by the Service. Your account balances and contributions will continue to be invested in the QDIA unless you select other investment options.

The model portfolio selected for you by the Service is based on a predetermined projected retirement age and a moderate investment style, and also takes into account or considers any account balances you may have invested in any of the legacy TIAA and/or CREF annuity contracts. The Service uses these three parameters to create a model portfolio that invests your account and future contributions in age-appropriate investments while maintaining diversified, risk-managed exposure across a wide range of asset classes. In addition, each model provides an option for lifetime income at retirement. The investments selected for a model portfolio are various combinations of the investment options on the Plan's investment fund lineup. The investment mix selected is designed to emphasize growth in the early years. As you get closer to or pass your projected retirement age, the mix is automatically adjusted to become more conservative. Each model portfolio is designated by a specific year (for example, Target-Date Plus 2040) and is appropriate for participants whose projected retirement age falls in the specified year or within two years of the specified year. For example, a Target-Date Plus 2040 model portfolio is for a participant who will attain the projected retirement age during the five-year interval between 2038 and 2042.

Each model portfolio includes a growth component and a guaranteed component. The potential for growth is provided through mutual funds. The guaranteed component is provided by the fixed annuity, in which principal and earnings continue to grow—guaranteed—even in the most volatile financial markets. As your projected retirement age approaches, the gradual increase in guaranteed investments, up to and during the target retirement period, addresses the need for increased stability of principal over a shorter savings horizon. After your projected retirement age, the model portfolio provides an option for guaranteed monthly income payments for life.

continued

You have the right to personalize your Target-Date Plus model portfolio or opt out of the Yale Target-Date Plus Service and select your own investments among one or more of the investment options offered under the Plan's investment lineup. You can personalize your model portfolio by changing your projected retirement age or investing style, or by adjusting "considered" legacy annuity assets. In such cases, the Service will offer a model portfolio that may differ from the QDIA model portfolio previously described. If you choose the personalized model portfolio (whether or not it differs from the QDIA model portfolio), then your personalized model is no longer considered a QDIA.

If you have not provided investment instructions, your account and future contributions will continue to be invested in a model portfolio selected for you by the Yale Target-Date Plus Service. The Yale Target-Date Plus Service rebalances each model portfolio on a quarterly basis by buying and selling assets within your model portfolio to help keep you invested in line with your target investment allocation. The Yale Target-Date Plus Service will also rebalance your portfolio if any of the underlying investments are more than 3% from their best fit allocation. In addition, on an annual basis the Yale Target-Date Plus Service ages each model one year along the intended glidepath, which can lead to a slightly more conservative asset allocation. You may also choose to invest part of your account in a self-directed brokerage account. Note: Yale neither selects nor monitors the investments available through a brokerage account and some fees will apply.

How to Change the Way Your Plan Contributions are Invested

If your Plan Contributions are automatically invested in the Yale Target-Date Plus Service, you may at any time change the investment of your future or past Plan Contributions. You may choose to invest part or all of your Plan account in other investment options offered under the Plan, or through the self-directed brokerage account. If you take no action, your Plan Contributions will continue to be invested in the Yale Target-Date Plus Service.

To review your investments (including your QDIA model portfolio), make investment changes, or learn more about the Plan's investment options, log in to your account at TIAA.org/Yale or call TIAA at the number below. Each of the model portfolios contains a combination of some of the Plan's core investment options. For specific information on each core investment option offered under the Plan, including a description of the investment objectives, risk and return characteristics, and fees and expenses, log in to your account or call TIAA at the number below.

To log in to your TIAA account or register for secure online access, visit **TIAA.org/Yale** and select *Register or Log in*. If you have questions about your account or need assistance with setting up a user ID and password, call TIAA at 855-250-5424, weekdays, 8 a.m. to 10 p.m. (ET).

Roth 403(b) After-Tax Contributions

You may want to consider changing some or all of your pre-tax contributions to Roth 403(b) after-tax contributions. Roth 403(b) after-tax contributions do not lower your current taxable income; however, if you satisfy certain program and tax law requirements, the Roth money you withdraw at retirement, including earnings, won't be taxable.

Vesting of Plan Contributions

You are immediately vested in your Employee Contributions and any investment returns thereon. To be fully vested means that your contributions and any investment returns will always belong to you, and you will not lose them even if your employment with the University ends.

You may withdraw funds or roll them over to another employer or IRA after you retire or terminate your employment with Yale. Withdrawals before age 59½ typically are subject to a 10% excise tax. You may also withdraw your Employee Contributions and earnings after age 59½, even if you are still employed at Yale.

Changing the Amount You Contribute

You can change your contribution rate or choose between pre-tax and Roth (after-tax) contributions, at any time by logging in to your account at TIAA.org/Yale. There are federal limits that apply to the maximum amount you can contribute to the Plan. These IRS plan limits can be found on your TIAA personal account page at TIAA.org/Yale.

continued

If you contribute in any calendar/tax year to a retirement plan through another employer, it is your responsibility to monitor your total contributions to all plans to ensure that you do not contribute over the IRS maximum allowed each year. You can enter the amount you have contributed to another employer by logging in to your account at TIAA.org/Yale or by contacting TIAA at 855-250-5424.

Beneficiary Designations

It is important for you to designate one or more beneficiaries for your account. You can make your beneficiary designation online through your personal account page at TIAA.org/Yale. If you are married and have a non-spouse beneficiary, please see below. Although no action is required, now may be a good time for you to review your beneficiary designations to ensure that they are up-to-date. Visit TIAA.org/Yale to log in and confirm or change your beneficiary designations.

Please note: If you are married and submitted a spousal waiver form(s) to designate a non-spouse beneficiary prior to November 15, 2018, your spousal waiver could not be transferred to the new contracts [Retirement Choice (RC) and Retirement Choice Plus (RCP)]. If applicable, please contact TIAA at 855-250-5424 to obtain and complete a new spousal waiver form(s) to ensure that your beneficiary designations are up-to-date and in accordance with your wishes.

Where to Get More Information

For more information about the Plan, you can contact TIAA at 855-250-5424 or Yale Employee Services at employee.services@yale.edu or 877-352-5552. You can obtain a copy of the Yale University Tax-Deferred 403(b) Savings Summary Plan Description and more information about the Plan and investment options at TIAA.org/Yale.

¹ Legacy annuity contracts

If you currently have balances in any of the legacy annuity options below, you may continue to transfer among the 10 legacy annuity options, but no new contributions may be added.

TIAA and/or CREF annuity investment options remain in your current contracts until you choose to transfer them. However, they will be taken into account, or considered, under the Yale Target-Date Plus Service. Considering annuities in your account can help provide a more complete picture of your overall allocation and fine-tune the automatic management of your Target-Date Plus model portfolio, although the decision to continue to consider them is up to you.

Investment option	Ticker symbol
TIAA Traditional RA/GRA/SRA/GSRA/GA (guaranteed annuity)	N/A
CREF Core Bond Account R3 (variable annuity)	QCBMIX
CREF Equity Index Account R3 (variable annuity)	QCEQIX
CREF Global Equities Account R3 (variable annuity)	QCGLIX
CREF Growth Account R3 (variable annuity)	QCGRIX
CREF Inflation-Linked Bond Account R3 (variable annuity)	QCILIX
CREF Money Market Account R3 (variable annuity)	QCMMIX
CREF Social Choice Account R3 (variable annuity)	QCSCIX
CREF Stock Account R3 (variable annuity)	QCSTIX
TIAA Real Estate Account (variable annuity)	QREARX

You can continue to transfer balances among these annuity investment options, but no new contributions, rollovers, or transfers may be made to your legacy annuity contracts.

You may choose to transfer amounts from some or all of your annuity account balances to the Yale Target-Date Plus Service or to the investment strategy you select in your new account(s). Please keep in mind that transferring out of an existing annuity contract is a permanent decision. Specifically, when TIAA Traditional balances are transferred out of an existing contract, you risk giving up the potential for a favorable crediting rate on older contributions. For more details, see the contract comparison chart at TIAA.org/contractcomparison.

Visit **TIAA.org/Yale** or call **855-250-5424** for additional information.

Plan and Investment Notice

YALE UNIVERSITY RETIREMENT SAVINGS PROGRAM

Your participation in your employer's retirement plan is the first step to ensuring adequate retirement income. The purpose of this Plan and Investment Notice is to help you make informed decisions when managing your retirement account. It contains important information regarding your plan's services, investments and expenses. While no action is required at this time, please review the notice and file it with your other retirement plan documents for future reference.

Section I: Summary of Plan Services and Costs

This section provides important information to assist you in making decisions related to your participation in your employer's plan. It outlines the services available under this plan, explains your right to select the investments for your account, and any fees and plan restrictions that may apply.

Please note this disclosure package covers the following Plans

- Yale University Retirement Account Plan (ID 102373)
- Yale University Tax-Deferred 403(b) Savings Plan (ID 102374)
- Yale University Matching Retirement Plan (ID 102375)

Section II: Investment Options Comparative Chart

This section is designed to make it easier for you to compare investments that align with your retirement goals. It provides detailed information about your plan's investment options, including long-term performance and expenses.

Summary of Plan Services and Costs

TIAA has been selected to provide retirement services and investment options to employees in the plan. There are costs associated with these services and investments, some of which may be paid by you. In addition to explaining how to direct your investments, this section details the administrative and individual expenses associated with your plan.

HOW TIAA RECORDKEEPS YOUR PLANS

TIAA provides recordkeeping services for your employer's plans which are:

YALE UNIVERSITY RETIREMENT SAVINGS PROGRAM

- Yale University Retirement Account Plan (ID 102373)
- Yale University Tax-Deferred 403(b) Savings Plan (ID 102374)
- Yale University Matching Retirement Plan (ID 102375)

If you currently have a TIAA account, your quarterly statement lists the plan(s) that you have. If you do not have an account, please contact your employer to determine which plans apply to you.

RIGHT TO DIRECT INVESTMENTS

You may specify how your future contributions to the retirement plan are invested or make changes to existing investments in your plan as described in the Summary Plan Document. These changes can be made:

- 1. Online by visiting TIAA.org/Yale
- 2. By phone at **855-250-5424**, weekdays 8 a.m. to 10 p.m. (ET)

Please note: If you currently have balances in any of the legacy annuity options, you may continue to transfer among the 10 legacy annuity options, but no new contributions may be added. Also, CREF Global Equities Account R3, CREF Social Choice Account R3, TIAA Real Estate Account and TIAA Traditional can be found in both the new fund lineup and also the legacy annuity lineup.

RESTRICTIONS

Changes to existing investments usually take place at the close of the business day if a change is requested prior to 4:00 p.m. (ET). Refer to Section II: Investment Options Comparative Chart for investment-specific restrictions.

ADDITIONAL RIGHTS AND PRIVILEGES

Certain investments that you may hold may give you the opportunity to vote on proposals. If and when such opportunities arise, you will receive a notice with instructions on how to take advantage of what is being offered.

INVESTMENT OPTIONS

A variety of investment options are available in the plan. Please refer to Section II: Investment Options Comparative Chart for a current list of investment options available to you. Additional information, as well as up-to-date investment performance, is available online at www.TIAA.org/planinvestmentoptions. After entering your plan ID, 102373, 102374 or 102375 you will be directed to plan and investment information.

YALE TARGET-DATE PLUS SERVICE

The Yale Target-Date Plus Service can help you simplify your decisions by investing your contributions in a pre-determined mix of plan's investment options and/or other investment vehicles. The Plan has appointed Aon Hewitt Investment Consulting, Inc. as an investment manager to determine the asset allocations and glide paths for the Yale Target-Date Plus Service. Below is a summary of the RetirePlus Pro Models that are available in your plan's investment line-up.

Yale Target-Date Plus Service	0.02% annual fee (assessed at the rate of 0.0045% quarterly) to participate in the
	service.

For more information on your Plan's RetirePlus Pro model service please refer to the TIAA RetirePlus Pro - Model Service Participant Disclosure Document or enter in www.TIAA.org/customportfoliosprogram. Please contact TIAA at 855-250-5424 for details.

SELF-DIRECTED BROKERAGE

A TIAA Brokerage Service provides access to mutual funds that have not been selected for your plan and are not monitored. This service permits you to use a wide variety of mutual funds but you are expected to prudently select and monitor any investments that you make through the brokerage service. This means that you agree that you have the skill and experience or use an independent expert to advise you. Generally, there are fees associated with investment transactions (purchasing or selling), as well as minimum transaction amount requirements. Before purchasing or selling an investment you should understand any applicable fees, including fees that will be associated with your transaction such as commissions or other charges for purchasing and selling the investment. To request a transaction, and to learn more about the brokerage service including fees call 800-927-3059 or visit TIAA.org/SDA CAA.

COST OF PLAN SERVICES

There are three categories of services provided to your plan:

1. GENERAL ADMINISTRATIVE SERVICES

General administrative services include recordkeeping, legal, accounting, consulting, investment advisory and other plan administration services. Some of the expenses for general administrative services are fixed and other expenses such as legal or accounting may vary from year to year. These costs are allocated to each participant in a uniform way.

Plan servicing fee:

Effective April 1, 2020, a quarterly Plan Servicing Fee of \$10.50 will be assessed against your Yale 403(b) Retirement Savings Plans if you maintain a Retirement Choice Plus (RCP) or Retirement Choice (RC) contract. If you have balances in more than one Yale 403(b) plan, you will be assessed only one plan servicing fee per quarter. The fee is deducted proportionally from each investment in your account and is identified as a "TIAA Plan Servicing Fee" on your quarterly statements.

Some investment providers pay a portion of an investment's expense ratio to the plan's recordkeeper, to help offset the cost of plan administration. This practice is generally called "revenue sharing." If you have investments that revenue share, you will receive a credit in the amount of the investment's revenue share based on your average daily balance. This will be identified as a Plan Servicing Credit on your quarterly statements.

If you do not maintain a RCP or a RC contract, and therefore no Plan Servicing Fee was assessed, your Plan Servicing Credit will be reduced by the amount of the Fee in order to cover plan administrative expenses. Please refer to Section II: Investment Options Comparative Chart of the Plan and Investment Notice for investment credit details.

2. SPECIFIC INVESTMENT SERVICES

Each investment offered within the plan charges a fee for managing the investment and for associated services. This is referred to as the expense ratio and is paid by all participants in that investment in proportion to the amount of their investment. The specific expense ratio for each investment option is listed in Section II: Investment Options Comparative Chart.

3. PERSONALIZED SERVICES

Personalized services provide access to a number of plan features and investments that you pay for, only if you use them. The personalized services used most often are:

Retirement plan loans	\$75 per loan initiated for general purpose, \$12 for a residential loan.						
Collateralized loans	The cost to you based upon the difference between what you earn on collateral and what you pay in interest.						
Brokerage	Certain charges may apply. Please review the Customer Account Agreement provided in the Self-Directed Brokerage section of this document. Your plan may limit the eligible investments within the self-directed brokerage account. T						
Qualified Domestic Relations Orders (QDRO)	No charge						
Sales Charges, Purchase, Withdrawal And Redemption Fees For Certain Investments	Certain charges may apply. See Section II: Investment Options Comparative Chart or the prospectus for applicable charges.						
Advisor Fee	Please refer to your advisor's fee schedule						

Investment Options Comparative Chart

Your plan offers a variety of professionally managed investments. One of the benefits of the plan is that you get to decide how your contributions are invested. When making investment decisions, you should keep in mind how long you have until retirement, your tolerance for risk, how this retirement plan fits into your overall financial picture, and the impact of fees. The information on the following pages will help you compare the investment options and make more informed decisions about your retirement plan.

Part A – Performance and Fee Information

Part A consists of performance and fee information for your plan's investment options. It shows you how well the investments have performed in the past as well as any fees and expenses you will pay if you invest in a particular option.

For more information on the impact of fees and expenses associated with your plan, refer to Section I: Summary of Plan Services and Costs or visit the DOL's website at www.dol. gov/sites/default/files/ebsa/about-ebsa/our-activities/resource-center/publications/a-look-at-401k-plan-fees.pdf. Fees are only one of many factors to consider when making an investment decision.

Part B- Annuity Income Information

Part B contains information about the annuity options available within your employer's retirement plan.

Part A. Performance and Fee Information

The following chart lists your plan's investment options whose value may change based on market fluctuations. When evaluating performance of your variable investment options, you should consider comparing the returns of each investment to an appropriate benchmark, which is included in the chart. A benchmark is a generally accepted unmanaged group of securities whose performance is used as a standard point of reference to measure and compare investment gains or losses for variable return investments. Keep in mind that you may not invest in the benchmark indexes which are shown for comparative purposes only. For investments that use a blend of stocks and bonds to limit risk, such as Target Date or Multi-Asset funds, a difference from the benchmark may be due to a difference in the proportion of stocks to bonds in the fund when compared to the benchmark. Benchmark information for fixed-return investments is not provided in this chart. Past performance does not indicate how an investment will perform in the future.

For the most up-to-date information about your investment options, prospectuses for available TIAA investments and other helpful resources, visit www.TIAA. org/planinvestmentoptions. After entering your plan ID, 102373, 102374 or 102375, you will be directed to plan and investment information.

Visit **www.tiaa.org** for information and resources to help you make informed decisions. To request additional plan information or a paper copy of information available online, free of charge, contact TIAA at 855-250-5424 or write to us at TIAA, P.O. Box 1259, Charlotte, NC, 28201.

Table 1 – Variable Return Investment Performance as of September 30, 2022

			-		ge Annual Total rns/Benchmark 10 Yr. or Total Annual Operating Expenses (%/Per \$1000)		-		
Investment Name / Benchmark	Morningstar Category	Ticker Symbol	Inception Date	1 Yr.	5 Yr.	Since fund Inception if less than 10 years	Gross	Net	Shareholder Fees & Restrictions
Equities									
Mutual Fund									
Vanguard Emerging Markets Stock Index Fund Institutional Plus	Diversified Emerging Mkts	VEMRX	12/15/2010	-24.27%	-0.65%	1.48%	0.08% \$0.80	0.08% \$0.80	Round Trip: You cannot exchange into the fund within 30 calendar days of exchanging out of the fund.
MSCI EM NR USD				-28.11%	-1.81%	1.05%			
Vanguard Developed Markets Index Fund Institutional Plus	Foreign Large Blend	VDIPX	04/01/2014	-25.50%	-0.61%	1.36%	0.04% \$0.40	0.04% \$0.40	Round Trip: You cannot exchange into the fund within 30 calendar days of exchanging out of the fund.
MSCI ACWI Ex USA NR USD				-25.17%	-0.81%	1.04%			
Vanguard Total Stock Market Index Fund Institutional Plus	Large Blend	VSMPX	04/28/2015	-18.00%	8.57%	8.82%	0.02% \$0.20	0.02% \$0.20	Round Trip: You cannot exchange into the fund within 30 calendar days of exchanging out of the fund.
CRSP US Total Market TR USD				-17.98%	8.56%	8.82%			
Vanguard REIT Index Fund Institutional	Real Estate	VGSNX	12/02/2003	-18.70%	3.11%	6.26%	0.10% \$1.00	0.10% \$1.00	Round Trip: You cannot exchange into the fund within 30 calendar days of exchanging out of the fund.
S&P United States REIT TR USD				-16.36%	2.90%	6.10%			
Variable Annuity									
CREF Global Equities Account R3	Global Large- Stock Blend	QCGLIX	04/24/2015	-21.93%	4.49%	7.67%	0.22% \$2.20	0.22% \$2.20	An annual plan servicing credit of up to 0.10% may be credited on a quarterly basis. For more information refer to Section I: General Administrative Services.
MSCI ACWI NR USD				-20.66%	4.44%	7.28%			Round Trip: If a round trip is made within 60 calendar days, exchanges into the same account will be restricted for 90 calendar days.

INVESTMENT OPTIONS COMPARATIVE CHART SECTION II Total Annual Operating Average Annual Total Expenses (%/Per \$1000) Returns/Benchmark 10 Yr. or Morningstar Ticker Inception Since fund Category Symbol Date Inception if less Investment Name / Benchmark 1 Yr. 5 Yr. than 10 years Gross Net Shareholder Fees & Restrictions **Fixed Income Mutual Fund** Inflation-Protected VIPIX 12/12/2003 -11.55% 1.87% 0.92% 0.07% 0.07% Round Trip: You cannot exchange into the fund Vanguard Inflation-Bond within 30 calendar days of exchanging out of the **Protected Securities Fund** \$0.70 \$0.70 fund. Institutional

0.98%

0.86%

0.04%

0.77%

\$7.70

0.77%

\$7.70

\$0.40

0.04%

fund.

\$0.40

Round Trip: You cannot exchange into the fund

within 30 calendar days of exchanging out of the

An annual plan servicing credit of up to 0.24% may

Transfers out: Limit 1 per quarter. Limitations may

apply to any transaction resulting in a balance >

be credited on a quarterly basis. For more

information refer to Section I: General

Administrative Services.

\$150,000.

-11.57%

-14.65%

Bloomberg US Treasury US TIPS TR USD

TIAA Real Estate Account N/A

S&P 500 TR USD

Vanguard Total Bond

Market Index Fund

Institutional

Intermediate-

Term Bond

VBTIX

09/18/1995

QREARX 10/02/1995

1.95%

-0.24%

montational									
Bloomberg US Aggregate Float Adjusted TR USD				-14.61%	-0.23%	0.91%			
Money Market									
Mutual Fund									
Vanguard Federal Money	Money Market-	VMFXX	07/13/1981	0.67%	1.06%	0.62%	0.11%	0.11%	
Market Fund Investor	Taxable						\$1.10	\$1.10	
7-day current annualized yie 2.77% as of 09/30/2022 7-day effective annualized yield 2.77% as of 09/30/2022									
				0.630/	4 420/	0.660/			
FTSE Treasury Bill 3 Month USD				0.63%	1.13%	0.66%			
Multi-Asset									
Variable Annuity									
CREF Social Choice	Allocation50% to	QCSCIX	04/24/2015	-17.70%	3.76%	6.03%	0.19%	0.19%	An annual plan servicing credit of up to 0.10% may
Account R3	70% Equity						\$1.90	\$1.90	be credited on a quarterly basis. For more information refer to Section I: General Administrative Services.
Morningstar Moderate Target Risk TR USD				-18.20%	2.95%	5.17%			Round Trip: If a round trip is made within 60 calendar days, exchanges into the same account will be restricted for 90 calendar days.
Real Estate									
Variable Annuity									

Table 1 shows fee and expense information for the investment options listed including the Total Annual Operating Expenses expressed as a percentage and a dollar amount based upon a \$1,000 accumulation both as net and gross of expenses. Total Annual Operating Expenses is a measure of what it costs to operate an investment, expressed as a percentage of its assets, as a dollar amount or in basis points. These are costs the investor pays through a reduction in the investment's rate of return.

8.01%

11.70%

7.97%

9.24%

18.78%

-15.47%

Table 2 – Fixed Return Investments

The following chart lists the plan's investment options that have a fixed or stated rate of return.

credited through 228/2023. This rate is subject to change in subsequent months. Up-to-date return information is available on your plan-specific website noted above or at 855-520-5424. Traditional guarantees your principal and a minimum annual interest rate. The current guarante minimum interest rate for permiums remitted in 2022 is 1,00%, and is effective through 2031. Tacount also offers the opportunity for additional amounts in excess of the minimum interest rate for additional amounts remain in effect for the twe-wemonth period that begins each Mar accumulating annuities and January 1 for payout annuities. Additional amounts are not guarant the future years. All guarantees are subject to TIAA's claims paying ability. TIAA Traditional is c primarily to help meet your long-term retirement income needs; it is not a short-term savings we Therefore, some contracts require that benefits are paid in installments over time and/or may in surrender charges on certain withdrawals. TIAA has rewarded participants who save in contract benefits are paid in installments over time instead of in an immediate lump-sum by crediting his interest rates, typically 0.50% to 0.75% higher. Higher rates will lead to higher account balance more retirement (choice) for you. For Retirement Choice (RC) contracts, and subject to the term employer's plan, lump-sum withdrawals are available from the TIAA Traditional account only with days after termination of employment and are subject to a 2.5% surrender charge. All other and transfers from the account must be paid in 84 monthly installments (? years) if the Contract elects or remove TIAA Traditional, the contract sentire TIAA Traditional accountation will be period traditional accountact sentire traditional accountacts enter that The Traditional accountacts enter that The Traditional accountacts enter that The Traditional accountacts enter the part of the traditional accountacts enter the part of the traditional accountacts enter the part of the part of the traditional accountact enter th				
An annual plan servicing credit of up to 0.15% may be credited on a quarterly basis. For more information refer to Section 1. General Administrative Services. The current rate shown applies to premiums remitted during the month of October 2022 and wit credited through 2/28/2023. This rate is subject to change in subsequent months. Up-0-dates refeture information is available on your plan-specific website noted above or at 856-250-5424. Traditional offers the opportunity for additional amounts in excess of the minimum interest rate for premiums remitted in 2022 is 1.00%, and is effective through 2031. T account additional amounts in excess of the minimum interest rate for premiums remitted in 2022 is 1.00%, and is effective through 2031. T account additional amounts in excess of the minimum interest rate declared, additional amounts in excess of the minimum interest rate declared, additional amounts in excess of the minimum interest rate declared, additional amounts in excess of the minimum interest rate declared, additional amounts in excess of the minimum interest rate that the excess of the minimum interest rate declared, additional amounts in excess of the minimum interest rate declared, additional amounts in excess of the minimum interest rate in the properties of the properties of the properties of the properties of the minimum interest rate. Which we have a control additional amounts in excess of the minimum interest rate. Which we have a control and the minimum interest rate. Which we have a control and the subject of the properties of the prop	Name/Type/Option	Return	Term	Additional Information
An annual plan servicing credit of up to 0.15% may be credited on a quarterly basis. For more information refer to Section I: General Administrative Services. The current rate shown applies to premiums remitted during the month of October 2022 and will credited through 2/28/2023. This rate is subject to change in subsequent months. Up-to-date ra return information is available on your plan-specific website noted above or at 855-250-5424.TI. Traditional guarantees your principal and a minimum annual interest rate. The current guarante minimum interest rate is 1.00% for premiums remitted in March 2022 through February 2023, at effective through February 2023. The account also offers the opportunity for additional amounts excess of the minimum interest rate. When declared, additional amounts remain in effect for the month period that begins each March 1 for accumulating annuities and January 1 for payout an Additional amounts are not guaranteed for the future years. All guarantees are subject to TIAA's paying ability. For Retirement Choice Plus (RCP) contracts, and subject to the terms of your emplan, lump-sum withdrawals and transfers are available from the TIAA Traditional account without surrender charges. For certain RCP contracts, any transfer from TIAA Traditional to a competing fund for a period of 90 days. After 90 days, transfers rade to a competing fund, including transferring back to TIAA Traditional. (TIAA Contract form	TIAA Traditional-Retirement Choice	6.00%		An annual plan servicing credit of up to 0.15% may be credited on a quarterly basis. For more information refer to Section I: General Administrative Services. The current rate shown applies to premiums remitted during the month of October 2022 and will be credited through 2/28/2023. This rate is subject to change in subsequent months. Up-to-date rate of return information is available on your plan-specific website noted above or at 855-250-5424. TIAA Traditional guarantees your principal and a minimum annual interest rate. The current guaranteed minimum interest rate for premiums remitted in 2022 is 1.00%, and is effective through 2031. The account also offers the opportunity for additional amounts in excess of the minimum interest rate. When declared, additional amounts remain in effect for the twelve-month period that begins each March 1 for accumulating annuities and January 1 for payout annuities. Additional amounts are not guaranteed for the future years. All guarantees are subject to TIAA's claims paying ability. TIAA Traditional is designed primarily to help meet your long-term retirement income needs; it is not a short-term savings vehicle. Therefore, some contracts require that benefits are paid in installments over time and/or may impose surrender charges on certain withdrawals. TIAA has rewarded participants who save in contracts where benefits are paid in installments over time instead of in an immediate lump-sum by crediting higher interest rates, typically 0.50% to 0.75% higher. Higher rates will lead to higher account balances and more retirement income for you. For Retirement Choice (RC) contracts, and subject to the terms of your employer's plan, lump-sum withdrawals are available from the TIAA Traditional account only within 120 days after termination of employment and are subject to a 2.5% surrender charge. All other withdrawals and transfers from the account must be paid in 84 monthly installments (7 years). If the Contract holder elects to remove TIAA Traditional, the contract's entire TIA
income options may be available including income for life and IRS required minimum distributio payments. The Contract holder (typically your employer as the sponsor of your plan) has the rig remove TIAA Traditional as a plan option. If elected, the contract's entire TIAA Traditional accur				An annual plan servicing credit of up to 0.15% may be credited on a quarterly basis. For more information refer to Section I: General Administrative Services. The current rate shown applies to premiums remitted during the month of October 2022 and will be credited through 2/28/2023. This rate is subject to change in subsequent months. Up-to-date rate of return information is available on your plan-specific website noted above or at 855-250-5424.TIAA Traditional guarantees your principal and a minimum annual interest rate. The current guaranteed minimum interest rate is 1.00% for premiums remitted in March 2022 through February 2023, and is effective through February 2023. The account also offers the opportunity for additional amounts in excess of the minimum interest rate. When declared, additional amounts remain in effect for the twelve-month period that begins each March 1 for accumulating annuities and January 1 for payout annuities. Additional amounts are not guaranteed for the future years. All guarantees are subject to TIAA's claims paying ability. For Retirement Choice Plus (RCP) contracts, and subject to the terms of your employer's plan, lump-sum withdrawals and transfers are available from the TIAA Traditional account without any surrender charges. For certain RCP contracts, any transfer from TIAA Traditional to a competing fund must first be directed to a non-competing fund for a period of 90 days. After 90 days, transfers may be made to a competing fund, including transferring back to TIAA Traditional. (TIAA Contract form IGRSP-02-ACC/TIAA Certificate form IGRSP-CERT3-ACC). After termination of employment additional income options may be available including income for life and IRS required minimum distribution payments. The Contract holder (typically your employer as the sponsor of your plan) has the right to remove TIAA Traditional as a plan option. If elected, the contract's entire TIAA Traditional accumulation will be paid out in 60 monthly installments, without any surrender charge and will be

Table 3 – Legacy Annuity Accounts - Variable Return Investment Performance as of September 30, 2022

					ge Annua rns/Benc	hmark		al Operating %/Per \$1000)		
Investment Name / Benchmark	Morningstar Category	Ticker Symbol		1 Yr.	5 Yr.	10 Yr. or Since fund Inception if less than 10 years	Gross	Net	Shareholder Fees & Restrictions	
Equities										
CREF Stock Account R3	Allocation85%+ Equity	QCSTIX	04/24/2015	-21.37%	4.78%	8.30%	0.23% \$2.30	0.23% \$2.30	An annual plan servicing credit of up to 0.10% may be credited on a quarterly basis. For more information refer to Section I: General Administrative Services.	
Morningstar Aggressive Target Risk TR USD				-20.11%	4.26%	7.52%			Round Trip: If a round trip is made within 60 calendar days, exchanges into the same account will be restricted for 90 calendar days.	
CREF Equity Index Account R3	Large Blend	QCEQIX	04/24/2015	-17.69%	8.44%	11.13%	0.16% \$1.60	0.16% \$1.60	An annual plan servicing credit of up to 0.10% may be credited on a quarterly basis. For more information refer to Section I: General Administrative Services.	
Russell 3000 TR USD				-17.63%	8.62%	11.39%			Round Trip: If a round trip is made within 60 calendar days, exchanges into the same account will be restricted for 90 calendar days.	
CREF Growth Account R3	Large Growth	QCGRIX	04/24/2015	-30.26%	8.91%	12.05%	0.21% \$2.10	0.21% \$2.10	An annual plan servicing credit of up to 0.10% may be credited on a quarterly basis. For more information refer to Section I: General Administrative Services.	
Russell 1000 Growth TR USD				-22.59%	12.17%	13.70%			Round Trip: If a round trip is made within 60 calendar days, exchanges into the same account will be restricted for 90 calendar days.	
Fixed Income										
CREF Inflation-Linked Bond Account R3	Inflation-Protected Bond	QCILIX	04/24/2015	-6.46%	2.27%	0.94%	0.17% \$1.70	0.17% \$1.70	An annual plan servicing credit of up to 0.10% may be credited on a quarterly basis. For more information refer to Section I: General Administrative Services.	
Bloomberg US Treasury Inflation Notes 1-10 Yr TR USD				-7.44%	2.27%	1.17%			Round Trip: If a round trip is made within 60 calendar days, exchanges into the same account will be restricted for 90 calendar days.	
CREF Core Bond Account R3	Intermediate- Term Bond	QCBMIX	04/24/2015	-14.86%	-0.11%	1.07%	0.22% \$2.20	0.22% \$2.20	An annual plan servicing credit of up to 0.10% may be credited on a quarterly basis. For more information refer to Section I: General Administrative Services.	
Bloomberg US Aggregate Bond TR USD				-14.60%	-0.27%	0.89%			Round Trip: If a round trip is made within 60 calendar days, exchanges into the same account will be restricted for 90 calendar days.	

Investment Name / Benchmark	Morningstar Category	Ticker Symbol	Inception Date	•	ge Annu ns/Bend 5 Yr.			al Operating %/Per \$1000) Net	Shareholder Fees & Restrictions
Money Market									
CREF Money Market Account R3 7-day current annualized yie 1.74% as of 09/27/2022 7-day effective annualized yield 1.75% as of 09/27/2022	Money Market- Taxable	QCMMIX	04/24/2015	0.42%	0.89%	0.49%	0.18% \$1.80	0.18% \$1.80	An annual plan servicing credit of up to 0.10% may be credited on a quarterly basis. For more information refer to Section I: General Administrative Services.
iMoneyNet Money Fund Averages - All Government				0.53%	0.84%	0.46%			

Table 4 - Legacy Annuity Accounts - Fixed Return Investments

The following chart lists the plan's investment options that have a fixed or stated rate of return.

Name/Type/Option	Dotum	Torm	Additional Information
Guaranteed Annuity	Return	Term	Additional Information
TIAA Traditional-Group Retirement Annuity	5.75%	Through 02/28/2023	Available in Plan(s): 102373 and 102375 An annual plan servicing credit of up to 0.15% may be credited on a quarterly basis. For more information refer to Section I: General Administrative Services. The current rate shown applies to premiums remitted during the month of October 2022 and will be credited through 2/28/2023. This rate is subject to change in subsequent months. Up-to-date rate of return information is available on your plan-specific website noted above or at 855-250-5424.TIAA Traditional guarantees your principal and a minimum annual interest rate. The guaranteed minimum interest rate is 3.00%, and is effective while the funds remain in the contract. The account also offers the opportunity for additional amounts in excess of the guaranteed minimum interest rate. When declared, additional amounts remain in effect for the twelve-month period that begins each March 1 for accumulating annuities and January 1 for payout annuities. Additional amounts are not guaranteed for the future years. All guarantees are subject to TilAA's claims paying ability. TiAA Traditional is designed primarily to help meet your long-term retirement income needs; it is not a short-term savings vehicle. Therefore, some contracts require that benefits are paid in installments over time and/or may impose surrender charges on certain withdrawals. TiAA has rewarded participants who save in contracts where benefits are paid in installments over time instead of in an immediate lump-sum by crediting higher interest rates, typically 0.50% to 0.75% higher. Higher rates will lead to higher account balances and more retirement income for you. For Group Retirement Annuity (GRA) contracts, and subject to the terms of your employer's plan, lump-sum withdrawals are available from the TiAA Traditional account only within 120 days after termination of employment and are subject to a 2.5% surrender charge. All other withdrawals and transfers from the account must be paid in ten annual installments. After termination of employments and IRS requ
TIAA Traditional-Retirement Annuity	5.75%	Through 02/28/2023	Available in Plan(s): 102373 and 102374 An annual plan servicing credit of up to 0.15% may be credited on a quarterly basis. For more information refer to Section I: General Administrative Services. The current rate shown applies to premiums remitted during the month of October 2022 and will be credited through 2/28/2023. This rate is subject to change in subsequent months. Up-to-date rate of return information is available on your plan-specific website noted above or at 855-250-5424. TIAA Traditional guarantees your principal and a minimum annual interest rate. The guaranteed minimum interest rate is 3.00%, and is effective while the funds remain in the contract. The account also offers the opportunity for additional amounts in excess of the guaranteed minimum interest rate. When declared, additional amounts remain in effect for the twelve-month period that begins each March 1 for accumulating annuities and January 1 for payout annuities. Additional amounts are not guaranteed for the future years. All guarantees are subject to TIAA's claims paying ability. TIAA Traditional is designed primarily to help meet your long-term retirement income needs; it is not a short-term savings vehicle. Therefore, some contracts require that benefits are paid in installments over time and/or may impose surrender charges on certain withdrawals. TIAA has rewarded participants who save in contracts where benefits are paid in installments over time instead of in an immediate lump-sum by crediting higher interest rates, typically 0.50% to 0.75% higher. Higher rates will lead to higher account balances and more retirement income for you. For Retirement Annuity (RA) contracts, lump-sum withdrawals are not available from the TIAA Traditional account. Subject to the terms of your plan, all withdrawals and transfers from the account must be paid in ten annual installments. After termination of employment additional income options may be available including income for life, interest-only payments, and IRS required minimum distribution p

Name/Type/Option	Return	Term	Additional Information
Guaranteed Annuity			
TIAA Traditional-Group Supplemental Retirement Annuity	5.00%	Through 02/28/2023	Available in Plan(s): 102374 and 102375 An annual plan servicing credit of up to 0.15% may be credited on a quarterly basis. For more information refer to Section I: General Administrative Services. The current rate shown applies to premiums remitted during the month of October 2022 and will be credited through 2/28/2023. This rate is subject to change in subsequent months. Up-to-date rate of return information is available on your plan-specific website noted above or at 855-250-5424.TIAA Traditional guarantees your principal and a minimum annual interest rate. The guaranteed minimum interest rate is 3.00%, and is effective while the funds remain in the contract. The account also offers the opportunity for additional amounts in excess of the guaranteed minimum interest rate. When declared, additional amounts remain in effect for the twelve-month period that begins each March 1 for accumulating annuities and January 1 for payout annuities. Additional amounts are not guaranteed for the future years. All guarantees are subject to TIAA's claims paying ability. For Group Supplemental Retirement Annuity (GSRA) contracts, and subject to the terms of your employer's plan, lump-sum withdrawals and transfers are available from the TIAA Traditional account without any restrictions or charges. After termination of employment additional income options may be available including income for life, income for a fixed period of time, and IRS required minimum distribution payments.
TIAA Traditional-Supplemental Retirement Annuity	5.00	Through 02/28/2023	Available in Plan(s): 102374 An annual plan servicing credit of up to 0.15% may be credited on a quarterly basis. For more information refer to Section I: General Administrative Services. The current rate shown applies to premiums remitted during the month of October 2022 and will be credited through 2/28/2023. This rate is subject to change in subsequent months. Up-to-date rate of return information is available on your plan-specific website noted above or at 855-842-2733.TIAA Traditional guarantees your principal and a minimum annual interest rate. The guaranteed minimum interest rate is 3.00%, and is effective while the funds remain in the contract. The account also offers the opportunity for additional amounts in excess of the guaranteed minimum interest rate. When declared, additional amounts remain in effect for the twelve-month period that begins each March 1 for accumulating annuities and January 1 for payout annuities. Additional amounts are not guaranteed for the future years. All guarantees are subject to TIAA's claims paying ability. For Supplemental Retirement Annuity (SRA) contracts, and subject to the terms of your employer's plan, lump-sum withdrawals and transfers are available from the TIAA Traditional account without any restrictions or charges. After termination of employment additional income options may be available including income for life, income for a fixed period of time, and IRS required minimum distribution payments.

Part B. Annuity Information

The information below focuses on the annuity options under the plan. Annuities are insurance contracts that allow you to receive a guaranteed stream of payments at regular intervals, usually beginning when you retire and lasting for your entire life. Annuities are issued by insurance companies. Guarantees of an insurance company are subject to its long-term financial strength and claims-paying ability.

TIAA Traditional Annuity Lifetime Income Option OBJECTIVES / GOALS

To provide a guaranteed stable stream of income for your life and, if you choose, the life of an annuity partner. A TIAA Traditional Annuity provides income stability by providing a minimum guaranteed interest rate as well as the potential for additional interest. TIAA Traditional can be part of a diversified retirement portfolio that may include stocks (equities), bonds (fixed income), real estate, and money market investments. Electing a life annuity is just one of many payout options available under the TIAA Traditional Annuity.

PRICING FACTORS

The amount of your lifetime income is dependent upon many factors including:

- The type of annuity selected (single life, joint life, with or without guaranteed minimum periods), and your selection of either the standard or graded benefit method.
- The amount of accumulations converted to a life annuity.
- Your age and, if applicable, the age of your annuity partner.
- The projected returns of the TIAA Traditional Annuity.

Under no circumstances will you receive less than the guaranteed amount of income required under the annuity contracts. To learn more about investments that offer lifetime annuity income, please access the web link provided in the Performance and Fee Information section.

RESTRICTIONS / FEES

- You may not begin a one-life annuity after you attain age 90, nor may you begin a
 two-life annuity after you or your annuity partner attains age 90.
- Subject to contract terms, if your accumulation is less than \$5,000 on your annuity starting date, TIAA may choose instead to pay your accumulations to you in a single sum.
- If your TIAA annuity payment would be less than \$100, TIAA has the right to change the payment frequency which would result in a payment of \$100 or more.
- Once you have elected a lifetime annuity, your election is irrevocable.

TIAA Real Estate and CREF Variable Annuity Lifetime Income Options

OBJECTIVES / GOALS

To provide a variable stream of income for your life and, if you choose, the life of an annuity partner. This lifetime annuity provides a variable income that you cannot outlive. A variable annuity can be part of a diversified retirement portfolio that may include guaranteed, stocks (equities), bonds (fixed income), real estate, and money market investments. Electing a life annuity is just one of many payout options available.

PRICING FACTORS

The amount of your lifetime income is dependent upon many factors including:

- The type of annuity selected (single life, joint life, with or without guaranteed minimum periods).
- The amount of accumulations converted to a life annuity.
- Your age and, if applicable, the age of your annuity partner.
- The investment performance of the variable annuity account your annuity is based upon.

Variable annuity accounts don't guarantee a minimum income. Income fluctuates based on market performance and is directly tied to the accounts' investment returns. A 4% annual investment return is assumed. Generally, if the actual return in a given year is greater than 4% the amount of annuity income will increase; if it is less than 4%, the income will decrease. To learn more about investments that offer lifetime annuity income, please access the web link provided in the Performance and Fee Information section.

RESTRICTIONS / FEES

- You may not begin a one-life annuity after you attain age 90, nor may you begin a two-life annuity after you or your annuity partner attains age 90.
- Subject to contract terms, if your accumulation is less than \$5,000 on your annuity starting date, TIAA may choose instead to pay your accumulations to you in a single sum.
- If your annuity payment would be less than \$100, TIAA has the right to change the payment frequency which would result in a payment of \$100 or more.
- Once you have elected a lifetime annuity, your election is irrevocable.
- Upon annuitization of CREF accumulations, the expenses associated with CREF will be the same as the R3 Class regardless of the CREF Class prior to annuitization.
 The R3 Class has the lowest expense of all the CREF Classes.

Please visit www.TIAA.org/public/support/help/glossary/index.html for a glossary of investment terms relevant to the investment options under this plan.

Fees and expenses are only one of many factors to consider when you decide to invest in an option. You may also want to think about whether an investment in a particular option, along with your other investments, will help you achieve your financial goals. The cumulative effect of fees and expenses can substantially reduce the growth of your retirement savings. Visit the Department of Labor's website for an example showing the long-term effect of fees and expenses at www.dol.gov/sites/default/files/ebsa/about-ebsa/our-activities/resource-center/publications/a-look-at-401k-plan-fees.pdf.

TIAA important additional information:

The returns quoted represent past performance, which is no guarantee of future results. Returns and the principal value of your investment will fluctuate. Current performance may be higher or lower than that shown, and you may have a gain or a loss when you redeem your investments. Expense ratios shown are based on the most recent information available, but may not reflect all updates. Please consult the most recent prospectus or offering document for more detailed information.

Variable return investments (mutual funds and/or variable annuities) are offered through your plan sponsor's retirement plan. Funds are offered at that day's net asset value (NAV), and the performance is displayed accordingly. Performance at NAV does not reflect sales charges, which are waived through your retirement plan. If included, the sales charges would have reduced the performance as quoted.

If a variable return investment option includes performance for periods beyond its inception date that performance is based on the performance of an older share class of the investment option. Such performance has not been restated to reflect expense differences between the two classes. If expense differences had been reflected, performance for these periods would be lower or higher than stated.

Expense ratios shown are based on the most recent information available, but may not reflect all updates and may differ slightly from the prospectus due to rounding. Please consult the most recent prospectus or offering document for more detailed information.

TIAA provides information on restrictions on record kept investment options, as well as performance and product information for all proprietary investment options. TIAA assumes no responsibility for damages or losses arising from the use of such information, and has not independently verified the accuracy or completeness of such information.

Data Provided by Morningstar, Inc. © 2022Morningstar, Inc. All Rights Reserved. The information contained herein: (1) is proprietary to Morningstar and/or its content providers; (2) may not be copied or distributed; and (3) is not warranted to be accurate, complete or timely. Neither Morning star nor its content providers are responsible for any damages or losses arising from any use of this information. Neither TIAA nor its affiliates has independently verified the accuracy or completeness of this information.

The Morningstar Category classifies an investment option based on its investment style as measured by underlying portfolio holdings (portfolio statistics and compositions over the past three years). If the investment option is new and has no portfolio, Morningstar estimates where it will fall before assigning a more permanent category. When necessary, Morningstar may change a category assignment based on current information.

There are inherent risks in investing in variable return investments including loss of principal. Please read the prospectus and carefully consider the investment objectives, risks, charges and expenses before investing.

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The Yale Target-Date Plus Model Series

Target Date AS 0F 09/30/2022

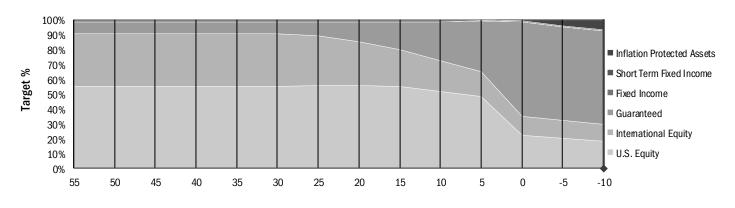
Glidepath Strategy

Target-date models employ glidepaths, which are the planned progression of asset allocation changes (e.g., mix of equity and fixed-income investments) along specific points in time. A model's glidepath generally shows how its asset allocation shifts from a more aggressive to a more conservative investment approach as the model moves toward and beyond its target date.

For more information please contact:

For more information please contact: **800-842-2888**Weekdays, *8 a.m.* to **10** *p.m.* (ET), or visit **TIAA.org**

Investment Glidepath 1



Years to Years Past
Target Date Target Date

What are Target-Date Models?

Target-date models (also commonly referred to as "lifecycle models," "retirement models" and "age-based models") are investment allocation strategies managed based on the specific retirement year (target date) included in its name and assumes an estimated retirement age of approximately 65. In addition to age or retirement date, investors should consider factors such as their risk tolerance, personal circumstance and complete financial situation before choosing to invest in accordance with a target-date model. These models are generally designed for investors who expect to invest in a model until they retire (the target date), and then begin making gradual systematic withdrawals afterward. There is no guarantee that an investment in accordance with a model will provide adequate retirement income, and investors can lose money at any stage of investment, even near or after the target date.

Birth Year	2003-2100	1998-2002	1993-1997	1988-1992	1983-1987	1978-1982	1973-1977	1968-1972	1963-1967	1958-1962	1953-1957	1948-1952	1943-1947	1900-1942
Target	Target-Date													
Model	Plus 2075	Plus 2070	Plus 2065	Plus 2060	Plus 2055	Plus 2050	Plus 2045	Plus 2040	Plus 2035	Plus 2030	Plus 2025	Plus 2020	Plus 2015	Plus Income



¹ Glidepath data is presented based on the allocations of the models in this series.

The Yale Target-Date Plus Model Series

Target Date AS 0F 09/30/2022

Investment Objective and Strategy

The Target-Date Plus model portfolios are comprised of selected investments in the Yale retirement savings program and are designed for investors who plan to retire within two years of the target year. The model portfolios are designed to emphasize growth in the early years and transition to lower risk and capital preservation as they approach and pass the target year. The Yale Target-Date Plus Service combines the best features of target-date investing and managed accounts. It also considers legacy annuity assets that some participants may hold in the plan. Participants can personalize their portfolio by changing their expected retirement age, investing style or adjusting considered legacy annuity assets. Each portfolio includes the TIAA Traditional guaranteed annuity, which provides a secure investment return as well as an option to choose guaranteed monthly income payments for life. Target-Date Plus model portfolios are designed for investors who want their investment allocation to adjust automatically as an investor approaches their target retirement year.

Performance

The returns quoted represent past performance, which is no guarantee of future results. Returns and the principal value of your investment will fluctuate and you may experience gain or loss. The performance shown is of the underlying funds and that of a hypothetical account invested in accordance with the Model during the relevant time periods and reflects the weighted average return of the underlying investments. Actual and current performance may be higher or lower. For current performance information, including performance to the most recent month-end, call 800-842-2888. Performance may reflect waivers or reimbursements of certain expenses at both the model and underlying investment level. Absent these waivers or reimbursement arrangements, performance may be lower. Performance shown is cumulative for periods under one year.

	Target-Date Plus 2075 ⁵	Target-Date Plus 2070	Target-Date Plus 2065	Target-Date Plus 2060	Target-Date Plus 2055	Target-Date Plus 2050	Target-Date Plus 2045
Birth Year	2003-2100	1998-2002	1993-1997	1988-1992	1983-1987	1978-1982	1973-1977
Inception Date	10/31/2021	08/31/2018	08/31/2018	08/31/2018	08/31/2018	08/31/2018	08/31/2018
Total Returns							
3-Month	-6.88%	-6.91%	-6.91%	-6.91%	-6.91%	-6.92%	-6.76%
YTD	-22.92%	-23.00%	-23.00%	-23.00%	-23.00%	-22.93%	-22.43%
Average Annual Total Returns							
1 Year	-	-19.44%	-19.44%	-19.44%	-19.44%	-19.39%	-19.15%
3-Year	-	3.10%	3.10%	3.10%	3.10%	3.08%	2.61%
5-Year	-	-	-	-	-	-	-
10-Year	-	-	-	-	-	-	-
Since Inception	-22.16%	2.76%	2.76%	2.76%	2.76%	2.75%	2.40%
Expenses							
Total Operating Expense Ratio (including fees)*	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%
Fees and Expenses Related to the Model Services				'	'		'
Record Keeping Fees**	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Program Sponsor Fee***	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Plan Advisor Fees†	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%
Other Expenses‡	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Expense Example††	\$0.63	\$0.63	\$0.63	\$0.63	\$0.63	\$0.63	\$0.63

The Yale Target-Date Plus Model Series

Target Date AS 0F 09/30/2022

	Target-Date Plus 2040	Target-Date Plus 2035	Target-Date Plus 2030	Target-Date Plus 2025	Target-Date Plus 2020	Target-Date Plus 2015	Target-Date Plus Income
Birth Year	1968-1972	1963-1967	1958-1962	1953-1957	1948-1952	1943-1947	1900-1942
Inception Date	08/31/2018	08/31/2018	08/31/2018	08/31/2018	08/31/2018	08/31/2018	08/31/2018
Total Returns							
3-Month	-6.29%	-5.69%	-4.98%	-4.20%	-2.22%	-2.13%	-2.02%
YTD	-21.24%	-19.54%	-17.68%	-15.47%	-8.27%	-7.78%	-7.41%
Average Annual Total Returns							
1 Year	-17.92%	-16.39%	-14.54%	-12.82%	-5.94%	-5.49%	-5.28%
3-Year	2.50%	2.28%	2.26%	1.86%	3.06%	2.97%	2.77%
5-Year	-	-	-	-	-	-	-
10-Year	-	-	-	-	-	-	-
Since Inception	2.36%	2.28%	2.39%	2.22%	3.14%	3.05%	2.90%
Expenses							
Total Operating Expense Ratio (including fees)*	0.06%	0.06%	0.05%	0.05%	0.04%	0.04%	0.04%
Fees and Expenses Related to the Model Services							
Record Keeping Fees**	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Program Sponsor Fee***	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Plan Advisor Fees†	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%
Other Expenses‡	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Expense Example††	\$0.63	\$0.63	\$0.53	\$0.53	\$0.42	\$0.42	\$0.42

^{*}The Total Operating Expense Ratio of a plan participant's model-based account is based on the total expense ratio (including fees) of each underlying investment blended in accordance with the Target Allocations for the Model, plus the amount of Program-related fees and other expenses allocated to each model-based account by the Plan Fiduciary. For information concerning each underlying investment's fees and expenses, see its most current prospectus or similar offering document.

^{**} TIAA and the Plan Fiduciary have agreed to an Employer Plan Pricing Model in connection with the agreement for TIAA to provide recordkeeping services separate from the model-based account services, and there is currently no additional fee for the model-based account service. Fees paid to TIAA for recordkeeping services are allocated to the plan participants in the Employer Plan based on their pro rata percentage of the assets in the Employer Plan, unless the Plan Fiduciary, in its sole discretion, determines to pay such fees directly.

^{***} TIAA and its affiliates are not currently charging any separate or additional fee for the services provided by TIAA as the Program Sponsor, although TIAA may charge a fee for services provided in its capacity as Program Sponsor in the future.

[†] Fees charged to the Employer Plan by the Plan Advisor in connection with the Model will be allocated to the model-based accounts invested based on the Model, unless the Plan Fiduciary, in its sole discretion, determines to pay such advisory fees directly.

[†] Other expenses include expenses related to any auditor or other service provider engaged by the Plan Fiduciary in connection with the Model Service, extraordinary expenses incurred by the Program Sponsor in administering the Program, and such other expenses as the Plan Fiduciary, in its sole discretion, determines to allocate to the Plan Participants. Such expenses are allocated to the model-based accounts invested based on the Model, unless the Plan Fiduciary, in its sole discretion, determines to pay such advisory fees directly.

^{††} This is an example to help you compare the cost of investing in underlying investments based on the Model with the cost of investing in other investment options. The example assumes that you invest \$1,000 in underlying investments based on the Model for a one year period and then redeem all your investments in the underlying investments at the end of the one year period. The example also assumes that your investment has a 5% return during the year and that the expenses of each underlying investment, before expense reimbursements, remain the same. However, your actual costs may be higher or lower.

⁵ Total returns and since inception returns are cumulative.

The Yale Target-Date Plus Model Series

Target Date AS 0F 09/30/2022

Important Information

The TIAA RetirePlus Pro® Models are asset allocation recommendations developed in one of three ways, depending on your plan structure: i) by your plan sponsor, ii) by your plan sponsor in consultation with consultants and other investment advisors designated by the plan sponsor, or iii) exclusively by consultants and other investment advisors selected by your 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 (for example, taking into account factors such as participant age and risk capacity as determined by a risk tolerance questionnaire).

This material is for informational, educational or non-fiduciary sales opportunities and/or activities only and does not constitute investment advice (e.g., fiduciary advice under ERISA or otherwise), a securities recommendation under all securities laws, or an insurance product recommendation under state insurance laws or regulations to invest through a model or to purchase any security or advice about investing or managing retirement savings. It does not take into account any specific objectives or circumstances of any particular customer, or suggest any specific course of action.

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. Please read the program description and the prospectuses or other offering documents for the underlying investments carefully before investing.

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).

Established Restrictions: Each Plan Participant may, but need not, propose restrictions for his or her Model-Based Account, which will further customize such Plan Participant's own portfolio of Underlying Investments. The Plan Fiduciary is responsible for considering any restrictions proposed by a Plan Participant, and for determining (together with Plan Advisor(s)) whether the proposed restriction is "reasonable" in each case.

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 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.

TIAA RetirePlus Pro® is administered by Teachers Insurance and Annuity Association of America ("TIAA") as plan recordkeeper. TIAA-CREF Individual & Institutional Services LLC, Member FINRA, 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.

TIAA RetirePlus Pro® is a registered trademark of Teachers Insurance and Annuity Association of America-College Retirement Equities Fund, 730 Third Avenue, New York, NY 10017.

Data Provider Disclosure

Investment Objective and Strategy and Model Fees and Expenses information provided by YALE UNIVERSITY. Neither TIAA nor its affiliates has independently verified the accuracy or completeness of this information.

Data for products managed by TIAA or its affiliates provided by TIAA. Data for products not managed by TIAA or its affiliates provided by Morningstar, Inc. ©2022 Morningstar, Inc. All Rights Reserved. The information contained herein: (1) is proprietary to Morningstar and/or its content providers; (2) may not be copied or distributed; and (3) is not warranted to be accurate, complete or timely. Neither Morningstar nor its content providers are responsible for any damages or losses arising from any use of this information. Neither TIAA nor its affiliates has independently verified the accuracy or completeness of this information.

The Yale Target-Date Plus Model Series

Target Date AS 0F 09/30/2022

A Note About Model Risks

Assets allocated to underlying investments based on the Model will be invested in underlying affiliated or unaffiliated mutual funds and annuities that are permissible investments under the plan. In general, the value of model-based accounts will fluctuate based on the share or unit prices of the underlying investments in which they invest. Assets in model-based accounts are subject to various types of risks, which may include but are not limited to:

Underlying Investment Risk, the assets invested based on a Model will be invested directly in underlying mutual funds and annuities that are permissible investments under the plan and are subject to asset allocation risk. Additionally, the assets are proportionally subject to the risks of those investment instruments' portfolio securities. Such risks may, among other things, include asset allocation risk, market risk, company risk, foreign investment risks, interest rate risk, credit risk, illiquid security risk, prepayment risk and extension risk as described more fully below.

Active Management Risk, the risk that a fund may underperform because of the allocation decisions or individual security selections of its portfolio manager; Asset Allocation Risk, the risk that the selection of investments and the allocation among them will result in the fund's underperformance versus similar funds or will cause an investor to lose money; Call Risk, the risk that, during periods of declining interest rates, an issuer of a bond may "call" (i.e., redeem) a bond prior to maturity, and the associated risk that bondholders will be reinvesting the proceeds at a lower interest rate; Company Risk, the risk that the financial condition of a company may deteriorate, causing a decline in the value of the securities it issues; Credit Risk, the risk that an issuer of bonds may default; Current Income Risk, the risk that the income a fund receives may unexpectedly fall as a result of a decline in interest rates; **Emerging Markets Risk**, the risk that securities issued in developing markets, where there is greater potential for political, currency and economic volatility, may be less liquid than those issued in more developed countries and foreign investors in these markets may be subject to special restrictions which could have an adverse impact on performance; Extension Risk, the risk that a security's duration will lengthen, due to a decrease in prepayments caused by rising interest rates; Foreign Investment Risk, the risk that securities of foreign issuers may lose value because of erratic market conditions, economic and political instability or fluctuations in currency exchange rates, which may be magnified in emerging markets; **Growth Investing** Risk, the risk that, due to their relatively high valuations which are generally a function of expected earnings growth, growth stocks will be more volatile than value stocks and such earnings growth may not occur or be sustained; Income Volatility Risk, the risk that the income from a portfolio of securities may decline in certain interest rate environments; Index Risk, the risk that a fund's performance may not match that of its benchmark index; Interest Rate Risk, the risk that interest payments of debt securities may become less competitive during periods of rising interest rates and declining bond prices; Large-Cap Risk, the risk that large companies may grow more slowly than the overall market; Liquidity Risk, the risk that illiquid securities may be difficult to sell at their fair market value; Market Risk, the risk that the price of securities may fall in response to economic conditions; Mid-Cap Risk, the risk that stocks of mid-capitalization companies may have greater price volatility, lower trading volume and less liquidity than the stocks of larger, more established companies; Prepayment Risk, the risk associated with the early unscheduled return of principal on fixed-income investments, such as mortgage-backed securities; Risks of inflationindexed bonds, the risks that interest payments on inflation-indexed bonds may decline because of a change in inflation (or deflation) expectations; Small-Cap Risk, the risk that the securities of small companies may be more volatile than those of larger ones, and they are also often less liquid than those of larger companies because there is a limited market for small-cap securities; Style Risk, the risk that a fund's investing style may lose favor in the marketolace. **Technology Risk.** the risk that the various systems and technologies that the Model Service relies on for its operation and oversight may be subject to certain defects, failures or interruptions, including, but not limited to, those caused by malware, viruses and power failures. For a detailed discussion of risk, please consult the individual models' fact sheets.

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The Yale Target-Date Plus Model Series

Models' Underlying Investment Performance and Expenses

AS OF 09/30/2022

Underlying Investments' Performance

The performance data quoted represents past performance, and is no guarantee of future results. Your returns and the principal value of your investment will fluctuate so that your mutual fund shares and annuity account account accountlation units, and shares or units of the investment vehicles in your model-based accounts, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the performance quoted. For performance current to the most recent month-end, call 800-842-2252 or visit TIAA.org/planinvestmentoptions and enter your plan ID. Performance may reflect waivers or reimbursements of certain expenses. Absent these waivers or reimbursement arrangements, performance results would have been lower. Since Inception performance shown is cumulative for periods less than one year.

			Total I	Returns		Average Annu	ual Total Returi	ns		al Operating 6/per \$1000)			
Variable Return Investments	Morningstar Category	Inception Date	3 Month	YTD	1 Year	3 Year	5 Year	10 Year/ Since Incept	Gross	Net	Fee Waiver Expiration	Fees/Restrictions	
Vanguard REIT Index Fund Institutional Class (VGSNX) ¹	Real Estate	12/2/03	-11.01%	-29.25%	-18.70%	-1.59%	3.11%	6.26%	0.10%/ \$1.00	0.10%/ \$1.00	-	No	
Benchmark: S&P United States REIT TR USD	-		-9.96%	-28.15%	-16.36%	-1.94%	2.90%	-	-	=		-	
Vanguard Total Stock Market Index Fund Institutional Plus Class (VSMPX) ¹	Large Blend	4/28/15	-4.45%	-24.88%	-18.00%	7.61%	8.57%	8.82%	0.02%/ \$0.20	0.02%/ \$0.20	=	No	
Benchmark: CRSP US Total Market TR USD	-		-4.44%	-24.86%	-17.98%	7.60%	8.56%	-	-	-		-	
Vanguard Inflation-Protected Securities Fund Institutional Class (VIPIX) ¹	Inflation-Protected Bond	12/12/03	-5.34%	-13.47%	-11.55%	0.70%	1.87%	0.92%	0.07%/ \$0.70	0.07%/ \$0.70	-	No	
Benchmark: Bloomberg US Treasury US TIPS TR USD	-		-5.14%	-13.61%	-11.57%	0.79%	1.95%	-	-	-		-	
Vanguard Developed Markets Index Fund Institutional Plus Class (VDIPX) ¹	Foreign Large Blend	4/1/14	-10.43%	-27.67%	-25.50%	-1.23%	-0.61%	1.36%	0.04%/ \$0.40	0.04%/ \$0.40	-	No	
Benchmark: MSCI ACWI Ex USA NR USD	-		-9.91%	-26.50%	-25.17%	-1.52%	-0.81%	-	-	-		-	
Vanguard Emerging Markets Stock Index Fund Institutional Plus Class (VEMRX) ¹	Diversified Emerging Mkts	12/15/10	-10.72%	-23.97%	-24.27%	-0.50%	-0.65%	1.48%	0.08%/ \$0.80	0.08%/ \$0.80	-	No	
Benchmark: MSCI EM NR USD	-	·	-11.57%	-27.16%	-28.11%	-2.07%	-1.81%	=	-	=	·	=	

Investment products, insurance and annuity products and investments based on Models: 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.

The Yale Target-Date Plus Model Series

Underlying Investments Information AS OF 09/30/2022

		Total I	Returns		Avera					
Fixed Return Investments	Inception Date	3 Month	YTD	1 Year	3 Year	5 Year	10 Year	Since Inception	Rate	Guaranteed Minimum Rate
TIAA Traditional Retirement Choice Plus Annuity (RCP) Class (RCP) 2,3	6/1/06	0.89%	2.50%	3.19%	3.12%	3.20%	3.37%	3.58%	5.25%	1.00%

The current rate shown applies to premiums remitted during the month of October 2022 and will be credited through 2/28/2023. This rate is subject to change in subsequent months. Up-to-date rate of return information is available on your plan-specific website noted above or at 800-842-2733.

TIAA Traditional guarantees your principal and a minimum annual interest rate. The current guaranteed minimum interest rate is 1.00% for premiums remitted in March 2022 through February 2023, and is effective through February 2023. The account also offers the opportunity for additional amounts in excess of the minimum interest rate. When declared, additional amounts remain in effect for the twelve-month period that begins each March 1 for accumulating annuities and January 1 for payout annuities. Additional amounts are not guaranteed for the future years. All guarantees are subject to TIAA's claims paying ability.

For Retirement Choice Plus (RCP) contracts, and subject to the terms of your employer's plan, lump-sum withdrawals and transfers are available from the TIAA Traditional account without any surrender charges. For certain RCP contracts, any transfer from TIAA Traditional to a competing fund must first be directed to a non-competing fund for a period of 90 days. After 90 days, transfers may be made to a competing fund, including transferring back to TIAA Traditional. (TIAA Contract form IGRSP-02-ACC/TIAA Certificate form IGRSP-CERT3-ACC). After termination of employment additional income options may be available including income for life and IRS required minimum distribution payments.

The Contractholder (typically your employer as the sponsor of your plan) has the right to remove TIAA Traditional as a plan option. If elected, the contract's entire TIAA Traditional accumulation will be paid out in 60 monthly installments, without any surrender charge and will be reinvested at the direction of your plan sponsor. Please refer to your contract certificate for additional details.

The Yale Target-Date Plus Model Series

Underlying Investments Information AS OF 09/30/2022

Underlying Investments Important Information

- 1 Accumulations in funds not managed by TIAA may be subject to administrative charges. These charges are subject to change. Please review current documents related to your plan.
- ² Interest on accumulations credited to TIAA Traditional in the accumulating stage includes a guaranteed amount (1.00% for current RCP contracts through February 28, 2023 for current premiums in RCP), plus additional amounts that may be declared on a year-by-year basis and are not guaranteed for future years. For information about current rates on additional amounts, visit our website at **TIAA.org**. Guarantees under TIAA Traditional are backed by TIAA's claims-paying ability.
- 3 Retirement Choice Plus (RCP) TIAA Contract form Series IGRSP-01-84-ACC and IGRSP-02-ACC / TIAA Certificate Series IGRSP-CERT2-84-ACC and IGRSP-CERT3-ACC.

Underlying Investments Fees and Expenses

Some Plans may allocate plan costs to participants to offset the cost of recordkeeping and other plan services. When the Plan allocates these costs at the investment-level there may be a plan services fee or credit displayed in the "Shareholder fees & restrictions" column. If the costs are allocated at the plan-level (regardless of investment) it is not displayed here. Fee and expense information for the variable return investment options include the Total Annual Operating Expenses expressed as a percentage and a dollar amount based upon a \$1,000 accumulation both as net (after) and gross (before) of expenses. Total Annual Operating Expenses is a measure of what it costs to operate an investment, expressed as a percentage of its assets, as a dollar amount or in basis points. These are costs the investor pays through a reduction in the investment's rate of return. Expense information shown is based on the most recent information available, but may not reflect all updates and may differ slightly from the prospectus due to rounding. Please consult the most recent prospectus or offering document for more detailed information.

For more information on the impact of fees and expenses associated with your plan, please visit TIAA.org/fees. Fees are only one of many factors to consider when making an investment decision.

Models' Underlying Investments	Target-Date Plus 2075	Target-Date Plus 2070	Target-Date Plus 2065	Target-Date Plus 2060	Target-Date Plus 2055	Target-Date Plus 2050	Target-Date Plus 2045	Target-Date Plus 2040	Target-Date Plus 2035	Target-Date Plus 2030	Target-Date Plus 2025	Target-Date Plus 2020	Target-Date Plus 2015	Target-Date Plus Income
TIAA Traditional	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	9.0%	13.0%	19.0%	26.0%	34.0%	63.0%	63.0%	63.0%
Vanguard Developed Markets Index Fund	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	24.0%	21.0%	18.0%	15.0%	12.0%	10.0%	9.0%	8.0%
Vanguard Emerging Markets Stock Index Fund	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	10.0%	9.0%	7.0%	6.0%	5.0%	3.0%	3.0%	3.0%
Vanguard Inflation-Protected Securities Fund												1.0%	4.0%	7.0%
Vanguard REIT Index Fund	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	10.0%	11.0%	12.0%	12.0%	12.0%	8.0%	7.0%	6.0%
Vanguard Total Stock Market Index Fund	47.0%	47.0%	47.0%	47.0%	47.0%	47.0%	47.0%	46.0%	44.0%	41.0%	37.0%	15.0%	14.0%	13.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

The Yale Target-Date Plus Model Series

Underlying Investments Information AS OF 09/30/2022

About the Underlying Investments Benchmark

A benchmark provides an investor with a point of reference to evaluate an investment's performance. One common type of benchmark used to compare investment performance is called an index. Indexes are unmanaged portfolios of securities designed to track the performance of a particular segment of the market. For example, a large-cap stock fund or account will usually be compared to an index that tracks a portfolio of large-cap stocks. Conversely, a bond fund or account is typically compared to an index that tracks a portfolio of bonds that is comparable to the fund or account's portfolio in terms of credit quality, maturity and liquidity. Each mutual fund or account shown in the chart includes performance information for an index that the advisor determined provides a fair comparison of the fund or account's investment performance. Indexes are for comparison purposes only. You cannot invest directly in any index. Index returns do not reflect a deduction for fees or expenses.

Underlying Funds' Data Provider Disclosure

Unless otherwise noted, data on nonproprietary investment products, including performance, Morningstar Category and expenses, is provided by Morningstar, Inc. All other data provided by Teachers Insurance and Annuity Association of America - College Retirement Equities Fund. Benchmark performance shown across proprietary and nonproprietary funds/accounts is provided by TIAA with the exception of Since Inception periods calculated using a nonproprietary fund's inception date. TIAA reserves the rights to all proprietary data herein, and is not responsible for any damages or losses arising from any use of this information.

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The Morningstar Category classifies a fund based on its investment style as measured by underlying portfolio holdings (portfolio statistics and compositions over the past three years). If the fund is new and has no portfolio, Morningstar estimates where it will fall before assigning a more permanent category. When necessary, Morningstar may change a category assignment based on current information.

Quarterly Investment Update



YALE UNIVERSITY TAX-DEFERRED 403(B) SAVINGS PLAN

Investment Performance as of 9/30/2022

The performance data quoted represents past performance, and is no guarantee of future results. Your returns and the principal value of your investment will fluctuate so that your mutual fund shares and annuity account accumulation units, and shares or units of the investment vehicles in your model-based accounts, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the performance quoted. For performance current to the most recent month-end, call 800-842-2252 or visit TIAA.org/planinvestmentoptions and enter your plan ID. Performance may reflect waivers or reimbursements of certain expenses. Absent these waivers or reimbursement arrangements, performance results would have been lower. Since Inception performance shown is cumulative for periods less than one year.

			Total R	eturns	Avera	age Annual						
Equities - Variable Annuity	Morningstar Category	Inception Date	3 Month	YTD	1 Year	3 Year	5 Year	10 Year/ Since Inception	Gross	Net	Fee Waiver Expiration	Shareholder Fees & Restrictions*
CREF Equity Index Account (R3) (QCEQIX) ^{1,2,3,4}	Large Blend	04/24/15 04/29/94	-4.49%	-24.65%	-17.69%	7.54%	8.44%	11.13%	0.16% \$1.60	0.16% \$1.60	-	Round Trip: If a round trip is made within 60 calendar days, exchanges into the
Benchmark: Russell 3000 TR USD		1 1 1 1 1 1	-4.46%	-24.62%	-17.63%	7.70%	8.62%	11.39%				same account will be restricted for 90 calendar days.
CREF Global Equities Account (R3) (QCGLIX) ^{1,2,3,4}	Global Large- Stock Blend	04/24/15 05/01/92	-7.00%	-26.39%	-21.93%	4.71%	4.49%	7.67%	0.22% \$2.20	0.22% \$2.20	-	Round Trip: If a round trip is made within 60 calendar days, exchanges into the
Benchmark: MSCI ACWI NR USD			-6.82%	-25.63%	-20.66%	3.75%	4.44%	7.28%				same account will be restricted for 90 calendar days.

Investment products, insurance and annuity products and investments based on Models: 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.

Total Annual Operating
Expenses (%/Per \$1000)

Total Returns	Average Annual Total Returns	
iolai keluiiis	Average Annual Total Returns	

Equities - Variable Annuity	Morningstar Category	Inception Date	3 Month	YTD	1 Year	3 Year		10 Year/ Since Inception	Gross	Net	Fee Waiver Expiration	Shareholder Fees & Restrictions*	
CREF Growth Account (R3) (QCGRIX) ^{1,2,3,4,5}	Large Growth	04/24/15 04/29/94	-5.31%	-34.74%	-30.26%	6.40%	8.91%	12.05%	0.21% \$2.10	0.21% \$2.10	-	Round Trip: If a round trip is made within 60 calendar days, exchanges into the	
Benchmark: Russell 1000 Growth TR USD			-3.60%	-30.66%	-22.59%	10.67%	12.17%	13.70%				same account will be restricted for 90 calendar days.	
CREF Stock Account (R3) (QCSTIX) ^{1,2,3,4}	Allocation–85% + Equity	04/24/15 07/31/52	-6.55%	-25.98%	-21.37%	4.16%	4.78%	8.30%	0.23% \$2.30	0.23% \$2.30	-	Round Trip: If a round trip is made within 60 calendar days, exchanges into the	
Benchmark: Momingstar Aggressive Target Risk TR USD			-6.33%	-24.15%	-20.11%	2.90%	4.26%	7.52%				same account will be restricted for 90 calendar days.	
Benchmark: CREF Stock Account Composite Index			-6.30%	-25.39%	-20.48%	4.81%	5.66%	8.87%				- dajo.	

			Total R	eturns	Average Annual Total Returns				Total Annual Op Expenses (%/Per	U		
Equities - Mutual Fund	Morningstar Category	Inception Date	3 Month	YTD	1 Year	3 Year	5 Year	10 Year/ Since Inception	Gross	Net	Fee Waiver Expiration	Shareholder Fees & Restrictions*
Vanguard Developed Markets Index Fund Institutional Plus Shares (VDIPX) ^{6,7,8}	Foreign Large Blend	04/01/14	-10.43%	-27.67%	-25.50%	-1.23%	-0.61%	1.36%	0.04% \$0.40	0.04% \$0.40	-	Round Trip: You cannot exchange into the fund within
Benchmark: MSCI ACWI Ex USA NR USD			-9.91%	-26.50%	-25.17%	-1.52%	-0.81%	1.04%				30 calendar days of exchanging out of the fund.
Vanguard Emerging Markets Stock Index Fund Institutional Plus Shares (VEMRX) ^{6,8,9}	Diversified Emerging Mkts	12/15/10	-10.72%	-23.97%	-24.27%	-0.50%	-0.65%	1.48%	0.08% \$0.80	0.08% \$0.80	-	Round Trip: You cannot exchange into the fund within
Benchmark: MSCI EM NR USD			-11.57%	-27.16%	-28.11%	-2.07%	-1.81%	1.05%				30 calendar days of exchanging out of the fund.
Vanguard Real Estate Index Fund Institutional Shares (VGSNX) ^{6,8,10}	Real Estate	12/02/03	-11.01%	-29.25%	-18.70%	-1.59%	3.11%	6.26%	0.10% \$1.00	0.10% \$1.00	-	Round Trip: You cannot exchange into the fund within
Benchmark: S&P United States REIT TR USD			-9.96%	-28.15%	-16.36%	-1.94%	2.90%	6.10%				30 calendar days of exchanging out of the fund.
Vanguard Total Stock Market Index Fund Institutional Plus Shares (VSMPX) ⁶	Large Blend	04/28/15	-4.45%	-24.88%	-18.00%	7.61%	8.57%	8.82%	0.02% \$0.20	0.02% \$0.20	-	Round Trip: You cannot exchange into the fund within
Benchmark: CRSP US Total Market TR USD			-4.44%	-24.86%	-17.98%	7.60%	8.56%	8.82%				30 calendar days of exchanging out of the fund.

Average	Annual	Total	Returns
Atvolugo	/ IIIII aai	lotai	Ittetuiiio

	Morningstar							10 Year/ Since			Fee Waiver	Shareholder Fees &
Real Estate - Variable Annuity	Category	Inception Date	3 Month	YTD	1 Year	3 Year	5 Year	Inception	Gross	Net	Expiration	Restrictions*
TIAA Real Estate Account (QREARX) ^{3,11,12}	Miscellaneous Sector	10/02/95	1.16%	12.11%	18.78%	9.86%	7.97%	8.01%	0.77% \$7.70	0.77% \$7.70		Transfers out: Limit 1 per quarter. Limitations may apply to any transaction resulting in a balance > \$150,000.

Total Returns

Total Annual
Operating Expenses
(%/Per \$1000)

			Total R	eturns	Average Annual Total Returns				(%/Per \$	1000)		
Fixed Income - Variable Annuity	Morningstar Category	Inception Date	3 Month	YTD	1 Year	3 Year		10 Year/ Since Inception	Gross	Net	Fee Waiver Expiration	Shareholder Fees & Restrictions*
CREF Core Bond Account (R3) (QCBMIX) ^{1,2,3,4,13}	Intermediate Core Bond	04/24/15 03/01/90		-14.67%	-14.86%	-3.06%	-0.11%	1.07%	0.22% \$2.20	0.22% \$2.20	-	Round Trip: If a round trip is made within 60 calendar days, exchanges into the same
Benchmark: Bloomberg US Aggregate Bond TR USD			-4.75%	-14.61%	-14.60%	-3.26%	-0.27%	0.89%				account will be restricted for 90 calendar days. Pln Svcs Credit: 0.1%/quarterly
CREF Inflation-Linked Bond Account (R3) (QCILIX) ^{1,2,3,4}	Inflation- Protected Bond	04/24/15 05/01/97	-3.41%	-7.73%	-6.46%	1.88%	2.27%	0.94%	0.17% \$1.70	0.17% \$1.70	-	Round Trip: If a round trip is made within 60 calendar days,
Benchmark: Bloomberg US Treasury Inflation Notes 1-10 Yr TR USD			-3.94%	-8.84%	-7.44%	1.79%	2.27%	1.17%		1		exchanges into the same account will be restricted for 90 calendar days.

Total Annual Operating Expenses
Total Returns Average Annual Total Returns (%/Per \$1000)

Fixed Income - Mutual Fund	Morningstar Category	Inception Date	3 Month	YTD	1 Year	3 Year		10 Year/ Since Inception	Gross	Net	Fee Waiver Expiration	Shareholder Fees & Restrictions*
Vanguard Inflation-Protected Securities Fund Institutional Shares (VIPIX) ⁶	Inflation- Protected Bond	12/12/03		-13.47%		0.70%	1.87%	0.92%	0.07% \$0.70	0.07%	•	Round Trip: You cannot exchange into the fund within
Benchmark: Bloomberg US Treasury US TIPS TR USD		1 1 1 1 1	-5.14%	-13.61%	-11.57%	0.79%	1.95%	0.98%				30 calendar days of exchanging out of the fund.
Vanguard Total Bond Market Index Fund Institutional Shares (VBTIX) ⁶	Intermediate Core Bond	09/18/95	-4.65%	-14.58%	-14.65%	-3.26%	-0.24%	0.86%	0.04% \$0.40	0.04% \$0.40	-	Round Trip: You cannot exchange into the fund within
Benchmark: Bloomberg US Aggregate Float Adjusted TR USD		1	-4.68%	-14.65%	-14.61%	-3.22%	-0.23%	0.91%				30 calendar days of exchanging out of the fund.

Total Annual

Total Returns Average Annual Total Returns (%,

Multi Asset - Variable Annuity	Morningstar Category	Inception Date	3 Month	YTD	1 Year	3 Year		10 Year/ Since Inception	Gross	Net	Fee Waiver Expiration	Shareholder Fees & Restrictions*
CREF Social Choice Account (R3) (QCSCIX) ^{1,2,3,4}	Allocation–50% to 70% Equity	04/24/15 03/01/90		-21.34%	-17.70%	1.88%	3.76%	6.03%	0.19% \$1.90	0.19% \$1.90		Round Trip: If a round trip is made within 60 calendar days,
Benchmark: Morningstar Moderate Target Risk TR USD		1 1 1 1 1	-5.92%	-20.91%	-18.20%	1.14%	2.95%	5.17%				exchanges into the same account will be restricted for 90 calendar days.
Benchmark: CREF Social Choice Account Composite Index			-5.37%	-20.89%	-17.35%	2.02%	3.73%	6.06%				

Operating Expenses (%/Per \$1000) **Total Returns** Average Annual Total Returns 10 Year/ 7-Day Since Fee Waiver Shareholder Fees & Inception Date Yield** Expiration Restrictions* 3 Month YTD 1 Year 3 Year 5 Year Inception Net Gross 04/24/15 1.74% 0.34% 0.42% 0.42% 0.40% 0.89% 0.49% 0.18% 0.18% 04/01/88 \$1.80 \$1.80 0.42% 0.52% 0.53% 0.38% 0.84% 0.46%

You could lose money by investing in the CREF Money Market Account. Because the accumulation unit value of the Account will fluctuate, the value of your investment may increase or decrease. An investment in the Account is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The Account's sponsor has no legal obligation to provide support to the Account, and you should not expect that the sponsor will provide financial support to the Account at any time.

Money Market - Variable Annuity

CREF Money Market Account (R3) (QCMMIX)^{1,2,3,4,14,15}

Benchmark: iMoneyNet Money Fund

Averages-All Government

Morningstar

Category

Money Market-

Taxable

Total Annual
Operating Expenses
Total Returns
Average Annual Total Returns
(%/Per \$1000)

				lotal Re	eturns	Average Annual Total Returns			(%/Per \$	1000)				
Money Market - Mutual Fund	Morningstar Category	Inception Date	7-Day Yield**	3 Month	YTD	1 Year	3 Year		10 Year/ Since Inception	Gross	Net	Fee Waiver Expiration	Shareholder Fees & Restrictions*	
Vanguard Federal Money Market Fund Investor Shares (VMFXX) ^{6,16}	Money Market- Taxable	07/13/81	2.77%	0.50%	0.67%	0.67%	0.52%	1.06%	0.62%	0.11% \$1.10	0.11% \$1.10	-	-	
Benchmark: FTSE Treasury Bill 3 Month USD				0.45%	0.62%	0.63%	0.57%	1.13%	0.66%					

^{**}The current yield more closely reflects the earnings of this investment choice.

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

**The current yield more closely reflects the earnings of this investment choice.

		Total Retu	ırns	Av	erage Annual T	otal Returns			Current	Rates
Guaranteed - Fixed Annuity	Inception Date	3 Month	YTD	1 Year	3 Year	5 Year	10 Year	Since Inception	Rate	Guaranteed Minimum Rate
TIAA Traditional Annuity - Group Retirement Annuity 17,18,19	-	1.01%	2.88%	3.72%	3.64%	3.71%	3.86%	-	5.75%	3.00%

Additional Information:

The current rate shown applies to premiums remitted during the month of October 2022 and will be credited through 2/28/2023. This rate is subject to change in subsequent months. Up-to-date rate of return information is available on your plan-specific website noted above or at 800-842-2733.TIAA Traditional guarantees your principal and a minimum annual interest rate. The guaranteed minimum interest rate is 3.00%, and is effective while the funds remain in the contract. The account also offers the opportunity for additional amounts in excess of the guaranteed minimum interest rate. When declared, additional amounts remain in effect for the twelve-month period that begins each March 1 for accumulating annuities and January 1 for payout annuities. Additional amounts are not guaranteed for the future years. All guarantees are subject to TIAA's claims paying ability.TIAA Traditional is designed primarily to help meet your long-term retirement income needs; it is not a short-term savings vehicle. Therefore, some contracts require that benefits are paid in installments over time and/or may impose surrender charges on certain withdrawals. TIAA has rewarded participants who save in contracts where benefits are paid in installments over time instead of in an immediate lump-sum by crediting higher interest rates, typically 0.50% to 0.75% higher. Higher rates will lead to higher account balances and more retirement income for you.For Group Retirement Annuity (GRA) contracts, and subject to the terms of your employer's plan, lump-sum withdrawals are available from the TIAA Traditional account only within 120 days after termination of employment and are subject to a 2.5% surrender charge. All other withdrawals and transfers from the account must be paid in ten annual installments. After termination of employment additional income options may be available including income for life, income for a fixed period, interest-only payments and IRS required minimum distributions.

		Total Retu	ırns	Av	erage Annual To	otal Returns			Current Rates	
Guaranteed - Fixed Annuity	Inception Date	3 Month	YTD	1 Year	3 Year	5 Year	10 Year	Since Inception	Rate	Guaranteed Minimum Rate
TIAA Traditional Annuity - Group Supplemental Retirement Annuity 17,18,19	-	0.83%	2.41%	3.18%	3.11%	3.12%	3.22%	-	5.00%	3.00%

Additional Information:

The current rate shown applies to premiums remitted during the month of October 2022 and will be credited through 2/28/2023. This rate is subject to change in subsequent months. Up-to-date rate of return information is available on your plan-specific website noted above or at 800-842-2733. TIAA Traditional guarantees your principal and a minimum annual interest rate. The guaranteed minimum interest rate is 3.00%, and is effective while the funds remain in the contract. The account also offers the opportunity for additional amounts in excess of the guaranteed minimum interest rate. When declared, additional amounts remain in effect for the twelve-month period that begins each March 1 for accumulating annuities and January 1 for payout annuities. Additional amounts are not guaranteed for the future years. All guarantees are subject to TIAA's claims paying ability. For Group Supplemental Retirement Annuity (GSRA) contracts, and subject to the terms of your employer's plan, lump-sum withdrawals and transfers are available from the TIAA Traditional account without any restrictions or charges. After termination of employment additional income options may be available including income for life, income for a fixed period of time, and IRS required minimum distribution payments.

		Total Retu	ırns	Av	erage Annual T	otal Returns			Current	Rates
Guaranteed - Fixed Annuity	Inception Date	3 Month	YTD	1 Year	3 Year	5 Year	10 Year	Since Inception	Rate	Guaranteed Minimum Rate
TIAA Traditional Annuity - Retirement Annuity 17,18,19	-	1.01%	2.88%	3.72%	3.64%	3.71%	3.86%	-	5.75%	3.00%

Additional Information:

The current rate shown applies to premiums remitted during the month of October 2022 and will be credited through 2/28/2023. This rate is subject to change in subsequent months. Up-to-date rate of return information is available on your plan-specific website noted above or at 800-842-2733. TIAA Traditional guarantees your principal and a minimum annual interest rate. The guaranteed minimum interest rate is 3.00%, and is effective while the funds remain in the contract. The account also offers the opportunity for additional amounts in excess of the guaranteed minimum interest rate. When declared, additional amounts remain in effect for the twelve-month period that begins each March 1 for accumulating annuities and January 1 for payout annuities. Additional amounts are not guaranteed for the future years. All guarantees are subject to TIAA's claims paying ability.TIAA Traditional is designed primarily to help meet your long-term retirement income needs; it is not a short-term savings vehicle. Therefore, some contracts require that benefits are paid in installments over time and/or may impose surrender charges on certain withdrawals. TIAA has rewarded participants who save in contracts where benefits are paid in installments over time instead of in an immediate lump-sum by crediting higher interest rates, typically 0.50% to 0.75% higher. Higher rates will lead to higher account balances and more retirement income for you. For Retirement Annuity (RA) contracts, lump-sum withdrawals are not available from the TIAA Traditional account. Subject to the terms of your plan, all withdrawals and transfers from the account must be paid in ten annual installments. After termination of employment additional income options may be available including income for life, interest-only payments, and IRS required minimum distribution payments.

		Total Retu	urns	Av	verage Annual T	otal Returns			Current	Rates
Guaranteed - Fixed Annuity	Inception Date	3 Month	YTD	1 Year	3 Year	5 Year	10 Year	Since Inception	Rate	Guaranteed Minimum Rate
TIAA Traditional Annuity - Retirement Choice Plus 17,18,19	06/01/06	0.89%	2.50%	3.19%	3.12%	3.20%	3.37%	3.58%	5.25%	1.00%

Additional Information:

The current rate shown applies to premiums remitted during the month of October 2022 and will be credited through 2/28/2023. This rate is subject to change in subsequent months. Up-to-date rate of return information is available on your plan-specific website noted above or at 800-842-2733.TIAA Traditional guarantees your principal and a minimum annual interest rate. The current guaranteed minimum interest rate is 1.00% for premiums remitted in March 2022 through February 2023, and is effective through February 2023. The account also offers the opportunity for additional amounts in excess of the minimum interest rate. When declared, additional amounts remain in effect for the twelve-month period that begins each March 1 for accumulating annuities and January 1 for payout annuities. Additional amounts are not guaranteed for the future years. All guarantees are subject to TIAA's claims paying ability.For Retirement Choice Plus (RCP) contracts, and subject to the terms of your employer's plan, lump-sum withdrawals and transfers are available from the TIAA Traditional account without any surrender charges. For certain RCP contracts, any transfer from TIAA Traditional to a competing fund must first be directed to a non-competing fund for a period of 90 days. After 90 days, transfers may be made to a competing fund, including transferring back to TIAA Traditional. (TIAA Contract form IGRSP-02-ACC/TIAA Certificate form IGRSP-02-ACC/TIAA Certificate and IRS required minimum distribution payments. The Contractholder (typically your employer as the sponsor of your plan) has the right to remove TIAA Traditional as a plan option. If elected, the contract's entire TIAA Traditional details.

		Total Retu	ırns	Av	erage Annual To	otal Returns			Current	Rates
Guaranteed - Fixed Annuity	Inception Date	3 Month	YTD	1 Year	3 Year	5 Year	10 Year	Since Inception	Rate	Guaranteed Minimum Rate
TIAA Traditional Annuity - Supplemental Retirement Annuity 17,18,19	-	0.83%	2.41%	3.18%	3.11%	3.12%	3.22%	-	5.00%	3.00%

Additional Information:

The current rate shown applies to premiums remitted during the month of October 2022 and will be credited through 2/28/2023. This rate is subject to change in subsequent months. Up-to-date rate of return information is available on your plan-specific website noted above or at 800-842-2733.TIAA Traditional guarantees your principal and a minimum annual interest rate. The guaranteed minimum interest rate is 3.00%, and is effective while the funds remain in the contract. The account also offers the opportunity for additional amounts in excess of the guaranteed minimum interest rate. When declared, additional amounts remain in effect for the twelve-month period that begins each March 1 for accumulating annuities and January 1 for payout annuities. Additional amounts are not guaranteed for the future years. All guarantees are subject to TIAA's claims paying ability.For Supplemental Retirement Annuity (SRA) contracts, and subject to the terms of your employer's plan, lump-sum withdrawals and transfers are available from the TIAA Traditional account without any restrictions or charges. After termination of employment additional income options may be available including income for life, income for a fixed period of time, and IRS required minimum distribution payments.

Total Returns Average

			rotai K	etuiris	Avei	age Ailliuai	iotai Returns	(%/Per \$	1000)		
	Morningstar						10 Year/ Since			Fee Waiver	Shareholder Fees &
Multi Asset - Non-Registered	Category	Inception Date	3 Month	YTD	1 Year	3 Year	5 Year Inception	Gross	Net	Expiration	Restrictions*
Target-Date Plus 2015 ^{20,21,22}	-	08/31/18	-2.13%	-7.78%		2.97%	- 3.05%	0.04% \$0.40	0.04% \$0.40	-	-
Benchmark: Bloomberg US Aggregate Bond TR USD			-4.75%	-14.61%	-14.60%	-3.26%					
Benchmark: Morningstar Lifetime Allocation Moderate 2015 TR USD			-5.62%	-20.15%	-17.52%	0.31%					
Target-Date Plus 2015 Aggressive ^{20,21,22}	-	08/31/18					- 3.18%	0.05% \$0.50	0.05% \$0.50	-	-
Benchmark: Bloomberg US Aggregate Bond TR USD			-4.75%	-14.61%	-14.60%	-3.26%					
Benchmark: Morningstar Lifetime Allocation Aggressive 2015 TR USD					-18.15%						
Target-Date Plus 2015 Conservative 20,21,22	-	08/31/18					- 2.93%	0.04% \$0.40	0.04% \$0.40	-	-
Benchmark: Bloomberg US Aggregate Bond TR USD			-4.75%	-14.61%	-14.60%						
Benchmark: Morningstar Lifetime Allocation Conservative 2015 TR USD			-5.53%	-18.78%	-16.70%	-0.63%					
Target-Date Plus 2020 ^{20,21,22}	-	08/31/18				3.06%	- 3.14%	0.04% \$0.40	0.04% \$0.40	-	-
Benchmark: Bloomberg US Aggregate Bond TR USD			-4.75%	-14.61%	-14.60%						
Benchmark: Morningstar Lifetime Allocation Moderate 2020 TR USD					-18.89%	0.18%					
Target-Date Plus 2020 Aggressive ^{20,21,22}	-	08/31/18			-10.29%	3.13%	- 3.20%	0.05% \$0.50	0.05% \$0.50	-	-
Benchmark: Bloomberg US Aggregate Bond TR USD					-14.60%						
Benchmark: Morningstar Lifetime Allocation Aggressive 2020 TR USD		:		:	-19.28%						
Target-Date Plus 2020 Conservative 20,21,22	-	08/31/18				3.08%	- 3.11%	0.03% \$0.30	0.03% \$0.30	-	-
Benchmark: Bloomberg US Aggregate Bond TR				:	-14.60%						
Benchmark: Morningstar Lifetime Allocation Conservative 2020 TR USD			-6.00%	-20.63%	-18.34%	-0.89%					

Total Returns

			Total IV	eturns	AVCI	age Ailliaai	Total Retuins	(70/ PEI ֆ	1000)		
	Morningstar		. N		4	0.11	10 Year/ Since				Shareholder Fees &
Multi Asset - Non-Registered	Category	Inception Date	3 Month	YTD	1 Year	3 Year	5 Year Inception	Gross	Net	Expiration	Restrictions*
Target-Date Plus 2025 ^{20,21,22}	-	08/31/18	-4.20%	-15.47%	-12.82%	1.86%	- 2.22%	0.05% \$0.50	0.05% \$0.50	-	-
Benchmark: Bloomberg US Aggregate Bond TR USD			-4.75%	-14.61%	-14.60%						
Benchmark: Morningstar Lifetime Allocation Moderate 2025 TR USD			-6.28%	-22.91%	-19.88%	0.27%					
Target-Date Plus 2025 Aggressive ^{20,21,22}	-	08/31/18					- 2.24%	0.06% \$0.60	0.06% \$0.60	-	-
Benchmark: Bloomberg US Aggregate Bond TR USD			-4.75%	-14.61%	-14.60%	-3.26%					
Benchmark: Morningstar Lifetime Allocation Aggressive 2025 TR USD					-20.05%						
Target-Date Plus 2025 Conservative 20,21,22	-	08/31/18					- 2.31%	0.04% \$0.40	0.04% \$0.40	-	-
Benchmark: Bloomberg US Aggregate Bond TR USD			-4.75%	-14.61%	-14.60%						
Benchmark: Morningstar Lifetime Allocation Conservative 2025 TR USD			-6.34%	-22.04%	-19.56%	-0.96%					
Target-Date Plus 2030 ^{20,21,22}	-	08/31/18	-4.98%	-17.68%			- 2.39%	0.05% \$0.50	0.05% \$0.50	-	-
Benchmark: Bloomberg US Aggregate Bond TR USD					-14.60%						
Benchmark: Morningstar Lifetime Allocation Moderate 2030 TR USD			-6.42%	-23.79%	-20.52%	0.64%					
Target-Date Plus 2030 Aggressive ^{20,21,22}	-	08/31/18					- 2.26%	0.06% \$0.60	0.06% \$0.60	-	-
Benchmark: Bloomberg US Aggregate Bond TR USD			-4.75%	-14.61%	-14.60%						
Benchmark: Morningstar Lifetime Allocation Aggressive 2030 TR USD			-6.27%	-24.31%	-20.48%	1.86%					
Target-Date Plus 2030 Conservative 20,21,22	-	08/31/18				2.09%	- 2.39%	0.05% \$0.50	0.05% \$0.50	-	-
Benchmark: Bloomberg US Aggregate Bond TR					-14.60%				1		
Benchmark: Morningstar Lifetime Allocation Conservative 2030 TR USD			-6.54%	-23.06%	-20.40%	-0.82%			1		

Total Returns

			rotai K	etums	Avei	age Alliluai	iotai Returns	(%/Per \$	1000)		
Multi Assat Nan Pagistavad	Morningstar	Incontion Data	2 Manth	VTD	1 Voor	2 Voor	10 Year/ Since	Cross	No+		Shareholder Fees &
Multi Asset - Non-Registered	Category	Inception Date			1 Year		5 Year Inception	:	Net	Exhitation	Restrictions*
Target-Date Plus 2035 ^{20,21,22}	-	08/31/18	-5.69%	-19.54%		2.28%	- 2.28%	0.06% \$0.60	0.06% \$0.60	-	-
Benchmark: Bloomberg US Aggregate Bond TR USD			-4.75%	-14.61%	-14.60%	-3.26%		1 1 1 1 1 1			
Benchmark: Morningstar Lifetime Allocation Moderate 2035 TR USD			-6.42%	-24.27%	-20.74%	1.22%					
Target-Date Plus 2035 Aggressive ^{20,21,22}	-	08/31/18					- 2.23%	0.06% \$0.60	0.06% \$0.60	-	-
Benchmark: Bloomberg US Aggregate Bond TR USD			-4.75%	-14.61%	-14.60%	-3.26%					
Benchmark: Morningstar Lifetime Allocation Aggressive 2035 TR USD					-20.62%			1	1		
Target-Date Plus 2035 Conservative 20,21,22	-	08/31/18					- 2.36%	0.05% \$0.50	0.05% \$0.50	-	-
Benchmark: Bloomberg US Aggregate Bond TR USD			-4.75%	-14.61%	-14.60%	-3.26%		1 1 1 1 1 1			
Benchmark: Morningstar Lifetime Allocation Conservative 2035 TR USD			-6.57%	-23.60%	-20.75%						
Target-Date Plus 2040 ^{20,21,22}	-	08/31/18					- 2.36%	0.06% \$0.60	0.06% \$0.60	-	-
Benchmark: Bloomberg US Aggregate Bond TR USD			-4.75%	-14.61%	-14.60%			1			
Benchmark: Morningstar Lifetime Allocation Moderate 2040 TR USD					-20.78%	1.78%		1			
Target-Date Plus 2040 Aggressive ^{20,21,22}	-	08/31/18			-19.73%	2.62%	- 2.32%	0.06% \$0.60	0.06% \$0.60	-	-
Benchmark: Bloomberg US Aggregate Bond TR USD			-4.75%	-14.61%	-14.60%	-3.26%		1 1 1 1 1 1			
Benchmark: Morningstar Lifetime Allocation Aggressive 2040 TR USD					-20.67%	2.53%		1			
Target-Date Plus 2040 Conservative 20,21,22	-	08/31/18					- 2.33%	0.06% \$0.60	0.06% \$0.60	-	-
Benchmark: Bloomberg US Aggregate Bond TR USD				:	-14.60%			1			
Benchmark: Morningstar Lifetime Allocation Conservative 2040 TR USD			-6.51%	-23.93%	-20.83%	0.37%		1	1		

Total Returns

			TOTAL IX	eturns	AVCI	age Ailliaai	Total Retuins	(%/FEI \$	1000)		
Multi Assat Nan Dadistand	Morningstar	Incontinu Dat	2 M	VED	1 //	2.1/	10 Year/ Since	0	NI - 4		Shareholder Fees &
Multi Asset - Non-Registered	Category	Inception Date		YTD		3 Year	5 Year Inception	Gross	Net	Expiration	Restrictions*
Target-Date Plus 2045 ^{20,21,22}	-	08/31/18	-6.76%	-22.43%	-19.15%	2.61%	- 2.40%	0.06% \$0.60	0.06% \$0.60	-	-
Benchmark: Bloomberg US Aggregate Bond TR USD			-4.75%	-14.61%	-14.60%						
Benchmark: Morningstar Lifetime Allocation Moderate 2045 TR USD			-6.39%	-24.71%	-20.83%	2.10%					
Target-Date Plus 2045 Aggressive 20,21,22	-	08/31/18					- 2.56%	0.06% \$0.60	0.06% \$0.60	-	-
Benchmark: Bloomberg US Aggregate Bond TR USD			-4.75%	-14.61%	-14.60%						
Benchmark: Morningstar Lifetime Allocation Aggressive 2045 TR USD			-6.33%	-24.86%	-20.74%	2.57%			1		
Target-Date Plus 2045 Conservative 20,21,22	-	08/31/18					- 2.31%	0.06% \$0.60	0.06% \$0.60	-	-
Benchmark: Bloomberg US Aggregate Bond TR USD					-14.60%	-3.26%					
Benchmark: Morningstar Lifetime Allocation Conservative 2045 TR USD			-6.48%	-24.24%	-20.89%	1.04%					
Target-Date Plus 2050 ^{20,21,22}	-	08/31/18	-6.92%	-22.93%			- 2.75%	0.06% \$0.60	0.06% \$0.60	-	-
Benchmark: Bloomberg US Aggregate Bond TR USD					-14.60%						
Benchmark: Morningstar Lifetime Allocation Moderate 2050 TR USD					-20.91%	2.17%					
Target-Date Plus 2050 Aggressive ^{20,21,22}	-	08/31/18					- 2.59%	0.06% \$0.60	0.06% \$0.60	-	-
Benchmark: Bloomberg US Aggregate Bond TR USD			-4.75%	-14.61%	-14.60%						
Benchmark: Morningstar Lifetime Allocation Aggressive 2050 TR USD			-6.40%	-24.89%	-20.84%	2.49%					
Target-Date Plus 2050 Conservative 20,21,22	-	08/31/18			-18.55%		- 2.62%	0.06% \$0.60	0.06% \$0.60	-	-
Benchmark: Bloomberg US Aggregate Bond TR USD					-14.60%						
Benchmark: Morningstar Lifetime Allocation Conservative 2050 TR USD			-6.49%	-24.46%	-20.97%	1.43%			1		

Total Returns

	iotal retuins Average Allinual Iotal retuins		Total Retains	(%/ Fel \$1000)							
M III A A N D C	Morningstar		0.14	VED	4.1/	2.7	10 Year/ Since	0	NI -		Shareholder Fees &
Multi Asset - Non-Registered	Category	Inception Date	3 Month	YTD	1 Year	3 Year	5 Year Inception	Gross	Net	Expiration	Restrictions*
Target-Date Plus 2055 ^{20,21,22}	-	08/31/18	-6.91%	-23.00%	-19.44%	3.10%	- 2.76%	0.06% \$0.60	0.06% \$0.60	-	-
Benchmark: Bloomberg US Aggregate Bond TR USD			-4.75%	-14.61%	-14.60%						
Benchmark: Morningstar Lifetime Allocation Moderate 2055 TR USD			-6.51%	-24.88%	-21.04%	2.12%					
Target-Date Plus 2055 Aggressive 20,21,22	-	08/31/18					- 2.88%	0.06% \$0.60	0.06% \$0.60	-	-
Benchmark: Bloomberg US Aggregate Bond TR USD			-4.75%	-14.61%	-14.60%	-3.26%					
Benchmark: Morningstar Lifetime Allocation Aggressive 2055 TR USD					-20.96%						
Target-Date Plus 2055 Conservative 20,21,22	-	08/31/18					- 2.62%	0.06% \$0.60	0.06% \$0.60	-	-
Benchmark: Bloomberg US Aggregate Bond TR USD			-4.75%	-14.61%	-14.60%	-3.26%					
Benchmark: Morningstar Lifetime Allocation Conservative 2055 TR USD			-6.57%	-24.70%	-21.16%	1.57%					
Target-Date Plus 2060 ^{20,21,22}	-	08/31/18	-6.91%	-23.00%			- 2.76%	0.06% \$0.60	0.06% \$0.60	-	-
Benchmark: Bloomberg US Aggregate Bond TR USD					-14.60%						
Benchmark: Morningstar Lifetime Allocation Moderate 2060 TR USD			-6.59%	-24.97%	-21.18%	2.03%					
Target-Date Plus 2060 Aggressive ^{20,21,22}	-	08/31/18					- 2.88%	0.06% \$0.60	0.06% \$0.60	-	-
Benchmark: Bloomberg US Aggregate Bond TR USD			-4.75%	-14.61%	-14.60%	-3.26%					
Benchmark: Morningstar Lifetime Allocation Aggressive 2060 TR USD			-6.55%	-24.98%	-21.07%	2.31%					
Target-Date Plus 2060 Conservative 20,21,22	-	08/31/18			-18.55%		- 2.62%	0.06% \$0.60	0.06% \$0.60	-	-
Benchmark: Bloomberg US Aggregate Bond TR USD					-14.60%						
Benchmark: Morningstar Lifetime Allocation Conservative 2060 TR USD			-6.67%	-24.90%	-21.38%	1.51%					

Total Returns

	Total Returns Average Annual Total Returns		(%/Per \$	1000)							
Multi Accet Non Podietovod	Morningstar	Inconting Data	2 Manth	VID	1 Vaa-	2 Voor	10 Year/ Since	Cross	Not		Shareholder Fees &
Multi Asset - Non-Registered	Category	Inception Date			1 Year		5 Year Inception		Net	Expiration	Restrictions*
Target-Date Plus 2065 ^{20,21,22}	-	08/31/18	-6.91%	-23.00%		3.10%	- 2.76%	0.06% \$0.60	0.06% \$0.60	-	-
Benchmark: Bloomberg US Aggregate Bond TR USD			-4.75%	-14.61%	-14.60%	-3.26%					
Benchmark: Morningstar Lifetime Allocation Moderate 2060 TR USD			-6.59%	-24.97%	-21.18%	2.03%					
Target-Date Plus 2065 Aggressive ^{20,21,22}	-	08/31/18					- 2.88%	0.06% \$0.60	0.06% \$0.60	-	-
Benchmark: Bloomberg US Aggregate Bond TR USD			-4.75%	-14.61%	-14.60%	-3.26%					
Benchmark: Morningstar Lifetime Allocation Aggressive 2060 TR USD					-21.07%						
Target-Date Plus 2065 Conservative 20,21,22	-	08/31/18					- 2.62%	0.06% \$0.60	0.06% \$0.60	-	-
Benchmark: Bloomberg US Aggregate Bond TR USD			-4.75%	-14.61%	-14.60%						
Benchmark: Morningstar Lifetime Allocation Conservative 2060 TR USD			-6.67%	-24.90%	-21.38%	1.51%					
Target-Date Plus 2070 ^{20,21,22}	-	08/31/18					- 2.76%	0.06% \$0.60	0.06% \$0.60	-	-
Benchmark: Bloomberg US Aggregate Bond TR USD			-4.75%	-14.61%	-14.60%						
Benchmark: Morningstar Lifetime Allocation Moderate 2060 TR USD					-21.18%	2.03%					
Target-Date Plus 2070 Aggressive ^{20,21,22}	-	08/31/18		-23.86%			- 2.88%	0.06% \$0.60	0.06% \$0.60	-	-
Benchmark: Bloomberg US Aggregate Bond TR USD			-4.75%		-14.60%	-3.26%					
Benchmark: Morningstar Lifetime Allocation Aggressive 2060 TR USD				i	-21.07%	2.31%					
Target-Date Plus 2070 Conservative 20,21,22	-	08/31/18					- 2.62%	0.06% \$0.60	0.06% \$0.60	-	-
Benchmark: Bloomberg US Aggregate Bond TR USD				:	-14.60%						
Benchmark: Morningstar Lifetime Allocation Conservative 2060 TR USD			-6.67%	-24.90%	-21.38%	1.51%					

Total Annual
Operating Expense

						Operating Expenses (%/Per \$1000)						
Multi Asset - Non-Registered	Morningstar Category	Inception Date	3 Month	YTD	1 Year	3 Year		10 Year/ Since Inception	Gross	Net		Shareholder Fees & Restrictions*
Target-Date Plus 2075 ^{20,21,22}	-	10/31/21	-6.88%	-22.92%	-	-	-	-22.16%	0.06% \$0.60	0.06% \$0.60	-	-
Benchmark: Bloomberg US Aggregate Bond TR USD			-4.75%	-14.61%	_	-	-	-				
Benchmark: Morningstar Lifetime Allocation Moderate 2060 TR USD			-6.59%	-24.97%	-	-	-	-				
Target-Date Plus 2075 Aggressive ^{20,21,22}	-	10/31/21				-	-	-23.03%	0.06% \$0.60	0.06% \$0.60	-	-
Benchmark: Bloomberg US Aggregate Bond TR USD			-4.75%	-14.61%	-	-	-	-				
Benchmark: Morningstar Lifetime Allocation Aggressive 2060 TR USD				-24.98%	:	-	-	-		 		
Target-Date Plus 2075 Conservative 20,21,22	-	10/31/21			-	-	-	-20.98%	0.06% \$0.60	0.06% \$0.60	-	-
Benchmark: Bloomberg US Aggregate Bond TR USD			-4.75%	-14.61%	-	-	-	-				
Benchmark: Morningstar Lifetime Allocation Conservative 2060 TR USD				-24.90%	-	-	-	-				
Target-Date Plus Income ^{20,21,22}	-	08/31/18				2.77%	-	2.90%	0.04% \$0.40	0.04% \$0.40	-	-
Benchmark: Bloomberg US Aggregate Bond TR			-4.75%	-14.61%	-14.60%		-	-				
Benchmark: Morningstar Lifetime Allocation Moderate Income TR USD					-14.27%	0.85%	-	-				
Target-Date Plus Income Aggressive 20,21,22	-	08/31/18	-3.59%	-12.30%		2.58%		2.89%	0.05% \$0.50	0.05% \$0.50	-	-
Benchmark: Bloomberg US Aggregate Bond TR USD					-14.60%		-	-				
Benchmark: Morningstar Lifetime Allocation Aggressive Income TR USD					;	1.49%	-	-				
Target-Date Plus Income Conservative 20,21,22	-	08/31/18				2.90%	-	2.92%	0.03% \$0.30	0.03% \$0.30	-	-
Benchmark: Bloomberg US Aggregate Bond TR USD					-14.60%	-3.26%	-	-				
Benchmark: Morningstar Lifetime Allocation Conservative Income TR USD			-4.50%	-14.56%	-12.93%	0.17%	-	-				

The model's underlying investments' performance can be found under the appropriate asset class. Please refer to the RetirePlus Pro Model Portfolio Target Allocations section of this document for information on the model's current target allocations and other important information about your investment through the RetirePlus Pro Model program.

RetirePlus Pro Model Portfolio Target Allocations

Underlying Investment	Target-Date Plus 2015 Conservative	Target-Date Plus 2020 Conservative	0	Target-Date Plus 2030 Conservative	O .
Retirement Choice Plus	76.0%	76.0%	48.0%	37.0%	27.0%
Vanguard Developed Markets Index Fund Institutional Plus Shares	6.0%	6.0%	10.0%	13.0%	16.0%
Vanguard Emerging Markets Stock Index Fund Institutional Plus Shares	2.0%	2.0%	4.0%	5.0%	7.0%
Vanguard Inflation-Protected Securities Fund Institutional Shares	2.0%	1.0%			
Vanguard Real Estate Index Fund Institutional Shares	5.0%	5.0%	9.0%	10.0%	11.0%
Vanguard Total Stock Market Index Fund Institutional Plus Shares	9.0%	10.0%	29.0%	35.0%	39.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Underlying Investment	Target-Date Plus 2040 Conservative	Target-Date Plus 2045 Conservative	o o	•	Target-Date Plus 2060 Conservative
Retirement Choice Plus	19.0%	13.0%	11.0%	11.0%	11.0%
Vanguard Developed Markets Index Fund Institutional Plus Shares	20.0%	23.0%	24.0%	24.0%	24.0%
Vanguard Emerging Markets Stock Index Fund Institutional Plus Shares	8.0%	10.0%	10.0%	10.0%	10.0%
Vanguard Inflation-Protected Securities Fund Institutional Shares					
Vanguard Real Estate Index Fund Institutional Shares	10.0%	9.0%	9.0%	9.0%	9.0%
Vanguard Total Stock Market Index Fund Institutional Plus Shares	43.0%	45.0%	46.0%	46.0%	46.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

	Target-Date Plus 2065	Target-Date Plus 2070	Target-Date Plus 2075	Target-Date Plus Income
Underlying Investment	Conservative	Conservative	Conservative	Conservative
Retirement Choice Plus	11.0%	11.0%	11.0%	76.0%
Vanguard Developed Markets Index Fund Institutional Plus Shares	24.0%	24.0%	24.0%	6.0%
Vanguard Emerging Markets Stock Index Fund Institutional Plus Shares	10.0%	10.0%	10.0%	2.0%
Vanguard Inflation-Protected Securities Fund Institutional Shares				3.0%
Vanguard Real Estate Index Fund Institutional Shares	9.0%	9.0%	9.0%	4.0%
Vanguard Total Stock Market Index Fund Institutional Plus Shares	46.0%	46.0%	46.0%	9.0%
Total	100.0%	100.0%	100.0%	100.0%

Underlying Investment	Target-Date Plus 2015	Target-Date Plus 2020	Target-Date Plus 2025	Target-Date Plus 2030	Target-Date Plus 2035
Retirement Choice Plus	63.0%	63.0%	34.0%	26.0%	19.0%
Vanguard Developed Markets Index Fund Institutional Plus Shares	9.0%	10.0%	12.0%	15.0%	18.0%
Vanguard Emerging Markets Stock Index Fund Institutional Plus Shares	3.0%	3.0%	5.0%	6.0%	7.0%
Vanguard Inflation-Protected Securities Fund Institutional Shares	4.0%	1.0%			
Vanguard Real Estate Index Fund Institutional Shares	7.0%	8.0%	12.0%	12.0%	12.0%
Vanguard Total Stock Market Index Fund Institutional Plus Shares	14.0%	15.0%	37.0%	41.0%	44.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Underlying Investment	Target-Date Plus 2040	Target-Date Plus 2045	Target-Date Plus 2050	Target-Date Plus 2055	Target-Date Plus 2060
Retirement Choice Plus	13.0%	9.0%	8.0%	8.0%	8.0%
Vanguard Developed Markets Index Fund Institutional Plus Shares	21.0%	24.0%	25.0%	25.0%	25.0%
Vanguard Emerging Markets Stock Index Fund Institutional Plus Shares	9.0%	10.0%	11.0%	11.0%	11.0%
Vanguard Inflation-Protected Securities Fund Institutional Shares					
Vanguard Real Estate Index Fund Institutional Shares	11.0%	10.0%	9.0%	9.0%	9.0%
Vanguard Total Stock Market Index Fund Institutional Plus Shares	46.0%	47.0%	47.0%	47.0%	47.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Underlying Investment	Target-Date Plus 2065	Target-Date Plus 2070	Target-Date Plus 2075	Target-Date Plus Income
Retirement Choice Plus	8.0%	8.0%	8.0%	63.0%
Vanguard Developed Markets Index Fund Institutional Plus Shares	25.0%	25.0%	25.0%	8.0%
Vanguard Emerging Markets Stock Index Fund Institutional Plus Shares	11.0%	11.0%	11.0%	3.0%
Vanguard Inflation-Protected Securities Fund Institutional Shares				7.0%
Vanguard Real Estate Index Fund Institutional Shares	9.0%	9.0%	9.0%	6.0%
Vanguard Total Stock Market Index Fund Institutional Plus Shares	47.0%	47.0%	47.0%	13.0%
Total	100.0%	100.0%	100.0%	100.0%

Underlying Investment	Target-Date Plus 2015 Aggressive	O .	Target-Date Plus 2025 Aggressive	Target-Date Plus 2030 Aggressive	Target-Date Plus 2035 Aggressive
Retirement Choice Plus	44.0%	44.0%	21.0%	15.0%	10.0%
Vanguard Developed Markets Index Fund Institutional Plus Shares	13.0%	14.0%	14.0%	17.0%	20.0%
Vanguard Emerging Markets Stock Index Fund Institutional Plus Shares	4.0%	5.0%	6.0%	7.0%	8.0%
Vanguard Inflation-Protected Securities Fund Institutional Shares	9.0%	3.0%			
Vanguard Real Estate Index Fund Institutional Shares	10.0%	12.0%	15.0%	14.0%	13.0%
Vanguard Total Stock Market Index Fund Institutional Plus Shares	20.0%	22.0%	44.0%	47.0%	49.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Underlying Investment	Target-Date Plus 2040 Aggressive	Target-Date Plus 2045 Aggressive	0	Target-Date Plus 2055 Aggressive	Target-Date Plus 2060 Aggressive
Retirement Choice Plus	7.0%	5.0%	5.0%	5.0%	5.0%
Vanguard Developed Markets Index Fund Institutional Plus Shares	22.0%	25.0%	26.0%	26.0%	26.0%
Vanguard Emerging Markets Stock Index Fund Institutional Plus Shares	10.0%	11.0%	11.0%	11.0%	11.0%
Vanguard Inflation-Protected Securities Fund Institutional Shares					
Vanguard Real Estate Index Fund Institutional Shares	12.0%	10.0%	9.0%	9.0%	9.0%
Vanguard Total Stock Market Index Fund Institutional Plus Shares	49.0%	49.0%	49.0%	49.0%	49.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Underlying Investment	Target-Date Plus 2065 Aggressive	Target-Date Plus 2070 Aggressive	Target-Date Plus 2075 Aggressive	Target-Date Plus Income Aggressive
Retirement Choice Plus	5.0%	5.0%	5.0%	44.0%
Vanguard Developed Markets Index Fund Institutional Plus Shares	26.0%	26.0%	26.0%	12.0%
Vanguard Emerging Markets Stock Index Fund Institutional Plus Shares	11.0%	11.0%	11.0%	4.0%
Vanguard Inflation-Protected Securities Fund Institutional Shares				12.0%
Vanguard Real Estate Index Fund Institutional Shares	9.0%	9.0%	9.0%	10.0%
Vanguard Total Stock Market Index Fund Institutional Plus Shares	49.0%	49.0%	49.0%	18.0%
Total	100.0%	100.0%	100.0%	100.0%

IMPORTANT INFORMATION ABOUT RETIREPLUS PRO MODELS

The TIAA RetirePlus Pro® Models are asset allocation recommendations developed in one of three ways, depending on your plan structure: i) by your plan sponsor, ii) by your plan sponsor in consultation with consultants and other investment advisors designated by the plan sponsor, or iii) exclusively by consultants and other investment advisors selected by your 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 (for example, taking into account factors such as participant age and risk capacity as determined by a risk tolerance questionnaire).

This material is for informational, educational or non-fiduciary sales opportunities and/or activities only and does not constitute investment advice (e.g., fiduciary advice under ERISA or otherwise), a securities recommendation under all securities laws, or an insurance product recommendation under state insurance laws or regulations to invest through a model or to purchase any security or advice about investing or managing retirement savings. It does not take into account any specific objectives or circumstances of any particular customer, or suggest any specific course of action.

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. Please read the program description and the prospectuses or other offering documents for the underlying investments carefully before investing.

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).

Established Restrictions: Each Plan Participant may, but need not, propose restrictions for his or her Model-Based Account, which will further customize such Plan Participant's own portfolio of Underlying Investments. The Plan Fiduciary is responsible for considering any restrictions proposed by a Plan Participant, and for determining (together with Plan Advisor(s)) whether the proposed restriction is "reasonable" in each case.

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 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.

TIAA RetirePlus Pro is administered by Teachers Insurance and Annuity Association of America ("TIAA") as plan recordkeeper. TIAA-CREF Individual & Institutional Services LLC, Member FINRA, 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.

TIAA RetirePlus Pro® is a registered trademark of Teachers Insurance and Annuity Association of America-College Retirement Equities Fund, 730 Third Avenue, New York, NY 10017.

A Note About Risk

Equity risk refers to the risk of loss due to the market price of shares falling. Equity funds and variable annuity accounts generally carry a higher degree of risk than fixed income funds and accounts. Fixed income funds and variable annuity accounts are not guaranteed and are subject to interest rate, inflation and credit risks.

Variable annuity accounts that invest in real estate securities are subject to various risks, including fluctuation in property values, higher expenses or lower income than expected, and potential environmental problems and liability.

Guaranteed investments offer a guaranteed rate of return but such guarantees are subject to the claims-paying ability of the issuing insurance company.

More detailed information on risks applicable to a particular investment option can be found in the prospectus or other product literature.

Fees and Expenses

*Some Plans may allocate plan costs to participants to offset the cost of recordkeeping and other plan services. When the Plan allocates these costs at the investment-level there may be a plan services fee or credit displayed in the "Shareholder fees & restrictions" column. If the costs are allocated at the plan-level (regardless of investment) it is not displayed on the Quarterly Investment Update. Fee and expense information for the variable return investment options include the Total Annual Operating Expenses expressed as a percentage and a dollar amount based upon a \$1,000 accumulation both as net (after) and gross (before) of expenses. Total Annual Operating Expenses is a measure of what it costs to operate an investment, expressed as a percentage of its assets, as a dollar amount or in basis points. These are costs the investor pays through a reduction in the investment's rate of return. Expense information shown is based on the most recent information available, but may not reflect all updates and may differ slightly from the prospectus due to rounding. Please consult the most recent prospectus or offering document for more detailed information.

For more information on the impact of fees and expenses associated with your plan, please visit TIAA.org/fees. Fees are only one of many factors to consider when making an investment decision.

About the Benchmark

A benchmark provides an investor with a point of reference to evaluate an investment's performance. One common type of benchmark used to compare investment performance is called an index. Indexes are unmanaged portfolios of securities designed to track the performance of a particular segment of the market. For example, a large cap stock fund or account will usually be compared to an index that tracks a portfolio of large-cap stocks. Conversely, a bond fund or account is typically compared to an index that tracks a portfolio of bonds that is comparable to the fund or account's portfolio in terms of credit quality, maturity and liquidity. Each mutual fund or account shown in the table includes performance information for an index that the advisor determined provides a fair comparison of the fund or account's investment performance. Indexes are for comparison purposes only. You cannot invest directly in any index. Index returns do not reflect a deduction for fees or expenses.

Data Providers

Unless otherwise noted, data on nonproprietary investment products, including performance, Morningstar Category and expenses, is provided by Morningstar, Inc. All other data provided by Teachers Insurance and Annuity Association of America - College Retirement Equities Fund. Benchmark performance shown across proprietary and nonproprietary funds/accounts is provided by TIAA with the exception of Since Inception periods calculated using a nonproprietary fund's inception date. TIAA reserves the rights to all proprietary data herein, and is not responsible for any damages or losses arising from any use of this information.

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The Morningstar Category classifies a fund based on its investment style as measured by underlying portfolio holdings (portfolio statistics and compositions over the past three years). If the fund is new

and has no portfolio, Morningstar estimates where it will fall before assigning a more permanent category. When necessary, Morningstar may change a category assignment based on current information.

Important Information

- 1 When more than one inception date is shown, the performance displayed for periods prior to the investment's inception date is hypothetical. The second inception date is that of the fund/account to which such performance is based. Please refer to the investment's performance disclosure for more details
- 2 Total annual expense deductions, which include investment advisory, administrative, and distribution (12b-1) expenses, and mortality and expense risk charges, are estimated each year based on projected expense and asset levels. Differences between actual expenses and the estimate are adjusted quarterly and are reflected in current investment results. Historically, adjustments have been small.
- 3 The Account's total annual expense deduction appears in the Account's prospectus, and may be different than that shown herein due to rounding. Please refer to the prospectus for further details.
- 4 The performance shown for Class R3 that is prior to its inception date is based on the performance of the Account's Class R1. The performance for these periods has not been restated to reflect the lower expenses of Class R3. If these lower expenses had been reflected, the performance of Class R3 for these periods would have been higher.
- 5 Due to their relatively high valuations which are generally a function of expected earnings growth, growth stocks will be more volatile than value stocks and such earnings growth may not occur or be sustained.
- 6 Accumulations in funds not managed by TIAA may be subject to administrative charges. These charges are subject to change. Please review current documents related to your plan.
- 7 Securities of foreign issuers may lose value because of erratic market conditions, economic and political instability or fluctuations in currency exchange rates, which may be magnified in emerging markets.
- 8 The index shown is for comparative purposes only, and may not match other websites or publications.
- 9 Securities issued in developing markets, where there is greater potential for political, currency and economic volatility, may be less liquid than those issued in more developed countries and foreign investors in these markets may be subject to special restrictions which could have an adverse impact on performance.
- 10 Funds that focus their investments in real estate are subject to the risks associated with real estate ownership, including fluctuations in property values, higher expenses or lower income than expected, and potential environmental problems and liability.
- 11 Funds that focus their investments in a specific sector (such as health care or technology) are more vulnerable to developments that affect those industries or sectors than more broadly diversified funds.
- 12 The total annual expense deduction, which includes investment management, administration, and distribution expenses, mortality and expense risk charges, and the liquidity guarantee, is estimated each year based on projected expense and asset levels. Differences between actual expenses and the estimate are adjusted quarterly and are reflected in current investment results. Historically, adjustments have been small.
- 13 Prior to April 29, 2022 the CREF Core Bond Account was known as the CREF Bond Market Account.

- 14 You could lose money by investing in the CREF Money Market Account (the "Account"). Because the accumulation unit value of the Account will fluctuate, the value of your investment may increase or decrease. An investment in the Account is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The Account's sponsor has no legal obligation to provide support to the Account, and you should not expect that the sponsor will provide financial support to the Account at any time, Between July 16, 2009 and March 7, 2017, TIAA withheld ("waived") a portion of the Rule 12b-1 distribution and/or administrative expenses for each class of the Account when a class's yield was less than zero. Without this waiver, the total returns of the Account would have been lower. For a period of three years after the date an amount was waived, it was eligible for recoupment by TIAA, under certain conditions. All eligible expenses for this waiver were recouped by July 2018 for Class R3, September 2018 for Class R2 and June 2019 for Class R1. Beginning in 2020, TIAA agreed to a new waiver of a portion of the Rule 12b-1 distribution and/or administrative expenses for each class of the Account when a class's yield is less than zero. This waiver of expenses expired as of December 31, 2021. Without this waiver, the total returns of each class of the Account would have been lower, and could be negative. TIAA may, for a period of three years after the date an amount was waived, recover from the Account a portion of the amounts waived at such time as the class's daily yield would be positive absent the effect of the waiver and, in such event, the amount of recovery on any day will be approximately 25% of the class's yield (net of all other expenses) on that day.
- 15 iMoneyNet reports yields as of the last Tuesday of the month. Yields for the iMoneyNet Money Fund Report Averages-All Taxable and the annuity account(s) that track this industry average are calculated based on this date.
- 16 Closed to new investors.
- 17 The TIAA Traditional Annuity guarantees principal and a specified interest rate (based on TIAA's claims paying ability). It also offers the potential for greater growth through additional amounts, which may be declared on a year-by-year basis by the TIAA Board of Trustees. These additional amounts, when declared, remain in effect for the "declaration year" which begins each March 1. Additional amounts are not guaranteed. For more up to date information please visit your employer's microsite or TIAA.org. TIAA Traditional is a guaranteed insurance contract and not an investment for federal securities law purposes.
- 18 Accumulations are credited with interest based on when contributions and transfers are received, and your performance will reflect your pattern of contributions. The returns shown in the table reasonably represent what an individual making level monthly premiums would have historically earned over the time periods. Returns for different time periods are calculated in two steps: monthly performance returns are calculated from an accumulation created by a series of level monthly premiums over the prior 10 years (or the inception date of the product if later), and those monthly returns are linked together to determine historical performance for each of the return periods shown.
- 19 The Current Rates, Minimum Guaranteed Rates and Fees (if applicable) shown for guaranteed annuities are the rates in effect as of the first day of the month following quarter end. Depending upon the contract, these may apply to new money only or to both new money and existing accumulations. See your annuity contract or certificate for details.
- 20 As Target Retirement Date Models are actively managed, their asset allocations are subject to change and may vary from those indicated. They invest in many underlying funds and are exposed to the risks of different areas of the market. Please note that, as with all Model Portfolios, the principal value of a Target Retirement Date Model is not guaranteed. The higher a Model's allocation to stocks, the greater the risk. After the target date has been reached, some of these Models may be merged into a Model with a more stable asset allocation. Please consult the fact sheet or offering document for more complete information.
- 21 Model Fees and Expenses and Target Allocations information provided by the Plan Sponsor. Neither TIAA nor its affiliates has independently verified the accuracy or completeness of this information.

22 Model performance shown is based on the performance of the underlying investments that were present in the Model's lineup as of the end of the most recent calendar quarter. If a Model's lineup has changed since then, no adjustments have been made to the Model's performance shown here to reflect the revised lineup, and the investments (and their performance) removed from the lineup no longer appear in the fund performance table. However, all the investments (and their performance) in the Model's lineup as of the end of the most recent calendar quarter may continue to be viewed on the fact sheet available on your employer's microsite.



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Mutual funds are offered through your plan sponsor's retirement plan, which is recordkept by TIAA. Funds are offered at that day's net asset value (NAV), and the performance is displayed accordingly. Performance at NAV does not reflect sales charges, which are waived through your retirement plan. If included, the sales charges would have reduced the performance as quoted.

Before making your investment choices and completing your enrollment form, you should consider the investment objectives, risks, charges and expenses carefully. Please call 877-518-9161 for paper copies of the product and fund prospectuses and disclosure documents that contain this and other information. Please read the prospectuses and disclosure documents carefully before investing.

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