

TIAA TRADITIONAL ANNUITY: ADDING SAFETY AND STABILITY TO RETIREMENT PORTFOLIOS

AUGUST 2008

OVERVIEW

Launched with the founding of TIAA in 1918, the TIAA Traditional Annuity is the pioneering retirement offering on which the company built its asset and participant base. Since 1918, a variety of new retirement products have been introduced in the marketplace, many by TIAA-CREF. Yet the TIAA Traditional Annuity remains a centerpiece of participants' retirement portfolios, providing an attractive combination of account features and an excellent complement to TIAA-CREF's equity, fixed-income, money market and real estate investment offerings. Today, more participant dollars are allocated to the TIAA Traditional Annuity than to any other TIAA-CREF product.¹

The TIAA Traditional Annuity is a guaranteed fixed annuity offered to participants in employer-sponsored retirement plans and Individual Retirement Accounts (IRAs) through a contract with TIAA, an insurance company. Participants who choose to allocate a portion of their retirement savings to the TIAA Traditional Annuity make contributions that purchase a specific amount of lifetime income based on the contractual rate schedule in effect at the time the premium is paid.

The participant's principal, plus a specified rate of interest, are guaranteed by TIAA's claims-paying ability. TIAA Traditional also provides an opportunity for participants to receive additional amounts, which the TIAA Board of Trustees may declare on a year-by-year basis. These additional amounts, when declared, remain in effect for the 12-month "declaration year" that begins each March 1 for accumulating annuities and January 1 for lifetime payout annuities; they are not guaranteed for future years.

¹ Assets held in the TIAA Traditional Annuity across all retirement plans and accounts totaled \$174.6 billion as of June 30, 2008.



To increase understanding of how the TIAA Traditional Annuity works and what makes it uniquely attractive as part of a diversified retirement strategy, this paper:

- Describes the features of the TIAA Traditional Annuity
- Examines the investments held in TIAA's General Account, which are the source of the earnings, financial strength and stability that back the TIAA Traditional Annuity
- Explains the value of allocating a portion of one's retirement assets to the TIAA Traditional Annuity

The TIAA Traditional Annuity is offered through a variety of contracts, including Retirement Annuities (RAs), Group Retirement Annuities (GRAs), Supplemental Retirement Annuities (SRAs), Group Supplemental Retirement Annuities (GSRAs), Retirement Choice (RC) and Retirement Choice PLUS (RCP) annuities, IRAs and Keoghs. The type of contract through which a participant owns TIAA Traditional determines the applicability of certain account features, such as the guaranteed minimum interest rate, additional amounts paid, the degree of liquidity of the participant's account and the options for receiving income upon retirement. This paper focuses primarily on RA contracts, although other types of contracts are referenced where appropriate.

KEY FEATURES OF TIAA TRADITIONAL ANNUITY RETURNS

There are four characteristics of return that are key to this account.

Guaranteed principal and minimum interest rate

The TIAA Traditional Annuity guarantees principal and pays a guaranteed minimum interest rate during the accumulation phase—generally 3%, but between 1% and 3% for some contracts. (Because TIAA's contractual rates guarantee lifetime benefits that will not be paid out until many years in the future, these rates are based on conservative assumptions that are intended to make the annuities fully self-supporting.) These guarantees of principal and minimum interest rates assure that each participant's accumulation is protected from loss and will always increase in value.

Opportunity to receive additional amounts

As described earlier, additional amounts above the guaranteed minimum interest rate may be declared at the discretion of the TIAA Board of Trustees on a year-by-year basis. Such additional amounts have been declared every year since 1948. When declared, additional amounts remain in effect for the "declaration year" that begins each March 1 and are not guaranteed for future years. Together, the guaranteed minimum and additional amounts make up the "crediting rate" in the accumulation phase of the account. Crediting rates applied to the TIAA Traditional Annuity have generally been among the highest in the industry.

Exhibit 1 shows the crediting rate for RA and GRA contracts for the years 1980 through 2007. Over that period, the crediting rate averaged 8.16% and ranged from a high of 10.8% in 1985 to a low of 5.12% in 2006. The declining rate in more recent years is reflective of general interest-rate trends. Due to the minimum guarantee, there have been no years in which the crediting rate fell below 3%.

Because the yields available on bonds and other fixed-income investments tend to change over time, TIAA groups the premium dollars it receives over defined time periods into *vintages*—typically composed of one or more contiguous calendar months—for the purpose of determining the crediting rate for the applicable declaration year during the accumulation phase. The crediting rate for each vintage is determined, in part, by the net investment earnings rate of the TIAA assets supporting that vintage, minus a charge for administrative expenses and an amount set aside for contingency reserves, which are discussed on pages 3-4. The net investment earnings rate associated with each vintage reflects both the yields at which premiums are invested and the rates at which subsequent cash flows are reinvested. This approach enables TIAA to distribute excess earnings to participants on a more equitable basis, so that each generation will ultimately receive benefit payments that reflect, in part, the prevailing interest-rate environment at the time the crediting rates were applied.

Guaranteed minimum interest rate and potential for additional amounts during the payout phase

The third notable feature related to the TIAA Traditional Annuity Account's returns is that each participant dollar applied to the account purchases a guaranteed amount

of lifetime annuity income, paid to participants when they annuitize. Under most TIAA Traditional Annuity contracts, the minimum guaranteed interest rate during the payout phase is 2.5%. As in the accumulation phase, this guaranteed minimum rate may be supplemented by additional amounts declared by the TIAA Board of Trustees on a year-by-year basis.

These additional amounts reflect earnings in excess of the guaranteed minimum rate, as well as a payout of unneeded contingency reserves. As an insurance company, TIAA is required to maintain contingency reserves to ensure that it will be able to fulfill its contractual obligations to policyholders, even in the face of unexpected adverse circumstances. However, to the extent that these reserves prove to be unneeded, they are gradually distributed to participants in the form of additional annuity income during the payout phase. (It is important to note that if TIAA were a typical stock insurance company, unneeded reserves

could be used for the benefit of its stockholders rather than its participants.)

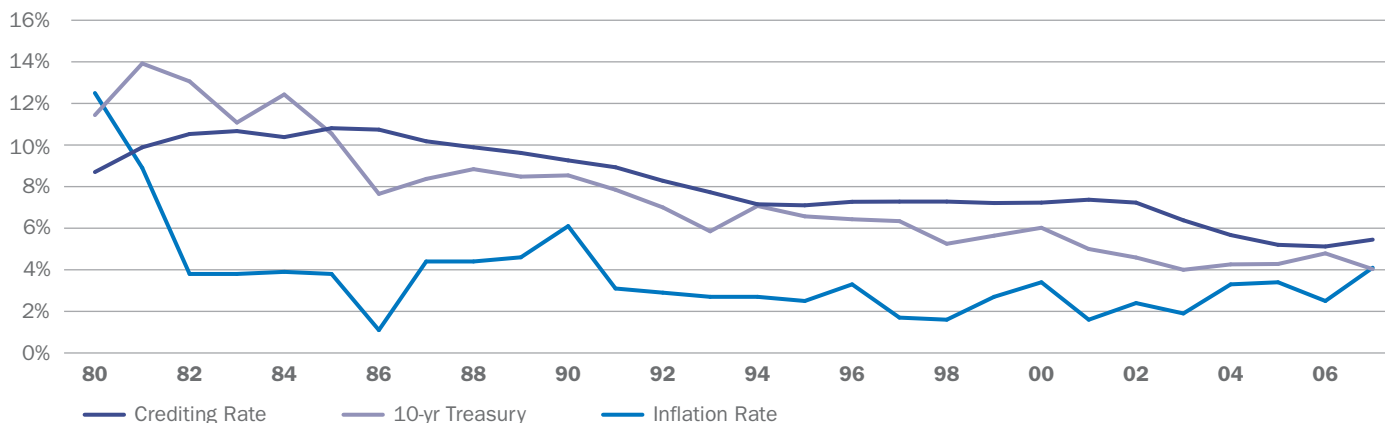
A calculation by TIAA actuaries shows that a hypothetical 65-year-old participant who annuitized in 1995 after 30 years of participating in the TIAA Traditional Annuity through an RA contract would have received annuity payments in 2008 that were 17.6% larger than the initial payment as a result of the gradual return of unneeded contingency reserves. Details and assumptions of this hypothetical example are shown in Exhibit 2.

Long time horizon to enable competitive returns

The fourth important characteristic related to the TIAA Traditional Annuity’s return is the account’s long time horizon. Under RA contracts, participants may only make withdrawals in the form of a life annuity or in 10 installments, with the first installment paid immediately so that the “10-year” withdrawal period actually occurs over a period

EXHIBIT 1: TRENDS IN KEY RATES SPANNING THREE DECADES

TIAA TRADITIONAL CREDITING RATE, 10-YEAR U.S. TREASURY YIELD AND INFLATION, 1980–2007



TIAA Traditional Annuity crediting rate represents the average rate applied to all accumulations in force under RA and GRA contracts each year. 10-year U.S. Treasury rate represents annual averages of daily yields. Inflation rate represents annual changes in the Consumer Price Index. Sources: TIAA; Bloomberg; Bureau of Labor Statistics.

The graph above is not intended to compare the TIAA Traditional Annuity to 10-year U.S. Treasury securities. Rather, the graph merely shows the TIAA Traditional Annuity’s crediting rate alongside general long-term interest rates (for which the 10-year U.S. Treasury yield is a common barometer) during the time period shown. There are many inherent differences between the purchase of an annuity contract and an investment in a U.S. Treasury security; the interest rate paid is just one factor that should be considered when evaluating these products. It is also important to note that past performance cannot guarantee future results, and that there is no assurance that additional amounts above the TIAA Traditional Annuity’s guaranteed minimum rate will be declared in the future. Furthermore, U.S. Treasury securities are guaranteed by the full faith and credit of the United States government, whereas the TIAA Traditional Annuity’s guaranteed rate is subject to the claims-paying ability of Teachers Insurance and Annuity Association.

of nine years and one day.² This restricted liquidity provides TIAA with the flexibility to invest its General Account assets, which back up the Traditional Annuity, in a wider range of investments than would be possible with liabilities having a shorter time horizon. This flexibility, combined with deep investment expertise and the economies of scale offered by a large asset base, has helped generate steady returns for the TIAA General Account portfolio—contributing to the portfolio’s growth and to the financial strength and stability that back the TIAA Traditional Annuity’s guaranteed returns.

FINANCIAL STRENGTH AND LIQUIDITY RESTRICTIONS PROVIDE SAFETY, STABILITY

The safety and stability of the TIAA Traditional Annuity is made possible, first and foremost, by TIAA’s financial strength—its ability to pay its claims and deliver on the guarantees it makes to its participants. TIAA has

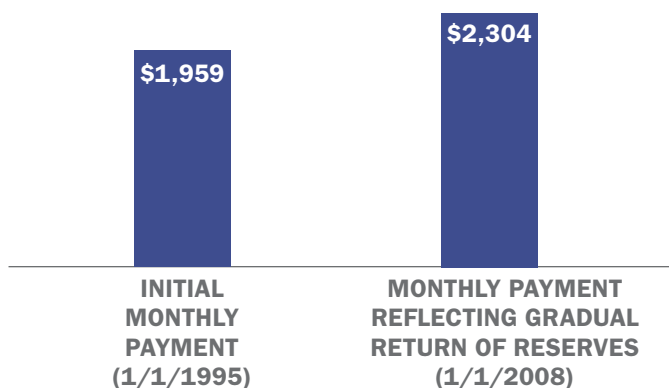
consistently been awarded the highest possible ratings by the four major independent rating agencies.³ These agencies monitor multiple aspects of life insurance company business, including the quality of the investment portfolio, the soundness and competitiveness of the overall business, and the structure and risks associated with individual products. In addition, each agency monitors capital adequacy using its own capital model or standards.

TIAA’s highest possible ratings do not mean that its General Account investments are restricted to securities that carry equally high ratings. Rather, the quality of the investment portfolio is evaluated in relation to the other characteristics of TIAA’s business and against TIAA’s capital reserves. In effect, the rating process aims to ensure that investment and other risks are balanced by the capital TIAA has available to absorb investment volatility or losses and its ongoing ability to maintain capital at appropriate levels.

EXHIBIT 2: HOW THE RETURN OF TIAA RESERVES CAN INCREASE ANNUITY PAYMENTS HYPOTHETICAL EXAMPLE

A hypothetical 65-year-old participant who annuitized in 1995 after 30 years of participating in the TIAA Traditional Annuity would have had a final accumulation of \$259,303, resulting in an initial monthly payment of \$1,959 on January 1, 1995.

By January 1, 2008, this payment would have increased to \$2,304 because of the gradual return of unneeded contingency reserves.



Assumptions: Participant held the TIAA Traditional Annuity through an RA contract and remitted monthly premiums of \$100 beginning in 1965, with such premiums increasing at 5% per year thereafter; the resulting accumulation was annuitized in 1995; monthly payments were based on a single life annuity with 10 years guaranteed.

This example is hypothetical and based on past performance, which is not guaranteed. Individual participant results may differ.

² Liquidity restrictions vary by type of contract. Under a Retirement Choice contract, for example, the withdrawal period is seven years (84 monthly installments). Other contracts—including IRAs, SRAs, GSRAs and Retirement Choice PLUS annuities—provide for lump-sum withdrawals and transfers. However, because of the increased liquidity of these contracts, they are credited with lower interest rates.

³ The respective highest possible ratings from these independent analysts are A++, A.M. Best Company (as of 6/07); AAA, Fitch (as of 5/07); Aaa, Moody’s Investors Service (as of 5/07); AAA, Standard & Poor’s (as of 7/07). These ratings are for TIAA as an insurance company and do not apply to variable annuities, mutual funds or any other product or service not fully backed by the claims-paying ability of TIAA or TIAA-CREF Life Insurance Company.

Also supporting the safety and stability of the TIAA Traditional Annuity is the restricted liquidity of the account under RA and certain other contracts. As described earlier, this helps facilitate TIAA's ability to invest a portion of its General Account portfolio in long-term assets that have the potential to contribute to the General Account's growth and to the financial strength and stability that back the TIAA Traditional Annuity's guaranteed returns.

THE TIAA GENERAL ACCOUNT: A SOUND, DIVERSIFIED PORTFOLIO

A detailed analysis of TIAA's General Account investments sheds light on the strength and stability that back the TIAA Traditional Annuity's guarantees. Although participants in the TIAA Traditional Annuity do not invest in the General Account portfolio, the investment performance of that portfolio supports the annuity's minimum guaranteed returns, additional amounts and payout obligations.

As an insurance company, TIAA is governed by New York State insurance regulations that limit the General Account's exposure to higher-risk asset types. In addition, insurance regulations limit the proportion of investments that can be allocated to certain asset classes. Specifically, regulations limit holdings of below-investment-grade bonds to 10% of the portfolio; emerging market debt to 4%; common stock to 20%; and U.S. real estate to 20%.

Regulations also require TIAA to maintain certain minimum amounts of capital. These capital requirements vary by asset class; they are comparatively stiffer for higher-risk asset types than for investment-grade public bonds. Below-investment-grade bonds and emerging market bonds require capital equal to 7%–10% of book value, depending on the individual bond rating; common stock requires capital of almost 30% of market value; and U.S. real estate requires capital of almost 10% of book value. In contrast, capital supporting investment-grade bonds is less than 1% of book value (0% for U.S. Treasuries). In general, regulatory constraints and capital requirements dictate that life insurance company general accounts focus largely on investment-grade fixed-income assets. The challenge is to construct a portfolio that optimizes return within these constraints.

TIAA has three valuable competitive advantages that enable it to meet this challenge:

- First, TIAA is a capital-rich insurance company.
- Second, although TIAA Traditional Annuity participants do not invest in the TIAA General Account portfolio, the characteristics of the annuity help make it possible for the General Account to invest in long-duration and less liquid alternative assets, including higher-yielding alternatives to the “plain vanilla” corporate bonds that have historically dominated life insurance company portfolios.
- Third, the TIAA General Account has invested \$25 billion per year on average since 2000, making it one of the world's largest institutional investors. The size and constancy of these investment flows provide TIAA with the asset base and stability to take advantage of investment opportunities in asset classes that might not be available to investors with smaller or less constant flows. In addition, the breadth and stability of TIAA's asset base have allowed it to nurture in-house expertise and accumulate experience in these asset types. And because of its scale, TIAA can execute transactions more efficiently and cost-effectively, an advantage that smaller investors do not enjoy.

In combination, these three advantages have made it possible to build TIAA's General Account portfolio using the variety of asset types as shown in the pie chart in Exhibit 3.

SPECIALIZED EXPERTISE GUIDES INVESTING OF GENERAL ACCOUNT ASSETS

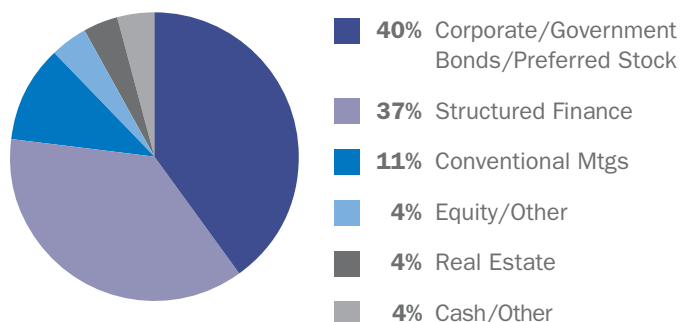
It is important to note that government and investment-grade corporate bonds, which often dominate insurance company portfolios, represented less than half of the TIAA General Account portfolio on June 30, 2008. On that date, 60% of the portfolio was composed of various other asset types, including structured securities, commercial mortgages, real estate and private equity.

Structured securities include residential mortgage-backed, commercial mortgage-backed and asset-backed securities. While residential mortgage-backed and commercial mortgage-backed securities are self-explanatory in terms of their composition, “asset-backed securities” is a more

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EXHIBIT 3: TIAA GENERAL ACCOUNT DIVERSIFICATION

AS OF 6/30/08



CORPORATE/GOVERNMENT BONDS/PREFERRED STOCK

(IN MILLIONS)

Percentage of Total Account	40%
Communication	4,808
Finance	16,415
Government	8,709
Manufacturing	11,267
Oil & Gas	5,718
REIT	2,514
Retail & Wholesale	2,893
Revenue & Special Obligations	2,887
Services	3,478
Transportation	1,579
Utilities	9,292
Mining	1,529
Other	58
	71,147

STRUCTURED FINANCE

(IN MILLIONS)

Percentage of Total Account	37%
Mortgage-Backed Securities	35,425
Asset-Backed Securities	6,929
Commercial Mortgage-Backed Securities	22,538
	64,892

CONVENTIONAL MORTGAGES

(IN MILLIONS)

Percentage of Total Account	11%
Shopping Center	7,288
Office Buildings	6,319
Industrial Buildings	3,268
Apartments	1,316
Mixed Use	1,009
Hotel	542
Other	141
	19,883

EQUITY/OTHER

(IN MILLIONS)

Percentage of Total Account	4%
Private Equity/Limited Partnership Fund Investments	6,963
Convertibles	1
REIT Common Stock	46
Common Stock Other/Misc	615
	7,625

REAL ESTATE BY PROPERTY TYPE

(IN MILLIONS)

Percentage of Total Account	4%
Office Buildings	4,597
Shopping Centers	894
Land/Other	1,097
Mixed Use	236
Industrial	324
Apartments	219
Hotel	74
	7,441

CASH/OTHER

(IN MILLIONS)

Percentage of Total Account	4%
Cash and Short Term	3,637
TIAA-CREF Institutional Mutual Funds & other TIAA-CREF Funds	1,594
Other*	2,024
	7,255

* Includes contract loans, derivatives and other investments

eclectic category. The largest components of asset-backed securities are automobile, credit card and manufactured home loans.

Issuers of structured securities create them by bundling a large number of individual loans of a certain type (auto loans, for example) and then slicing the contractual cash flow they will produce over time into a series of “tranches.” The tranches are ranked by the order of priority in which investors will receive the cash flow and, conversely, the investors’ exposure to cash flow risk. The highest-rated tranches are paid first, while the lowest-rated tranches are the first to absorb losses. In exchange for first-priority status, the yield on the highest-rated tranche is lower than the yield on lower-rated tranches. In some cases, an unrated tranche is created as part of a structured security series. That tranche, sometimes called the “first loss piece,” receives what is left after all the rated tranches have been paid. When losses in the underlying assets are severe enough to wipe out all the value in the first loss piece, the next-highest tranche is in line to absorb losses, and so on.

Commercial mortgages are loans secured by properties such as apartments, industrial space, office buildings, shopping centers, hotels, self-storage warehouses and medical offices. Commercial mortgages are private instruments that historically have offered higher yields than public market instruments. In addition to providing this yield premium, private instruments allow lenders to negotiate the terms of each individual loan in a way that addresses the specific risks of the property and the borrower. Finally, commercial mortgages offer value to investors because they help diversify portfolios. The risk pattern of commercial mortgages is heavily influenced by the real estate cycle in the individual markets represented in the portfolio. Real estate cycles have a strong local component, reflecting the supply and demand for space in specific markets. Historically, real estate cycles have been found to be only modestly correlated with the business cycles that drive corporate bond and stock market performance.

TIAA is a leading originator of commercial mortgages among life insurance companies and has a long history of participation in this asset class, having originated its first commercial mortgage in 1934. Since then, TIAA has

acquired extensive expertise in originating commercial mortgages and has built an extensive infrastructure supporting commercial mortgage origination and portfolio management. This expertise and infrastructure give TIAA a competitive advantage in the marketplace. In addition, the General Account can invest in commercial mortgages that are not especially liquid and that require more capital than asset types such as high-quality corporate bonds.

Real estate (directly owned property) has been a component of the TIAA General Account portfolio since 1947, decades before the dramatic increase of interest in real estate as an “alternative investment.” The portfolio’s holdings as of June 30, 2008, included apartments, warehouses, offices and shopping centers in major U.S. and European localities. Real estate provides the portfolio with cash flow from property rents along with capital gains from property value appreciation. The investment performance of real estate as an asset class has historically been somewhat above that of corporate bonds but with less volatility. Because real estate cycles are only modestly correlated with the business cycle that drives stock and corporate bond performance, real estate is an excellent diversifier of investment portfolios.

In the years since its first real estate investment, TIAA has built extensive real estate expertise covering acquisition and disposition, portfolio management, asset management and research. TIAA’s size and scope provide the specialized expertise required for successful real estate investing.

Private equity includes long-horizon private investment funds that engage in venture capital, buyouts and related types of investments. Private equity funds, along with hedge funds, have been deemed “alternative” investments in recent years because, like real estate, they offer diversification benefits to investors in traditional stocks and bonds.

Private equity funds are highly illiquid because there is essentially no secondary market for them; this means the investments are locked up until the fund reaches its goals and liquidates. In addition, private equity funds charge substantial fees and retain a substantial portion of gains. The illiquidity and high cost of private equity investments require that investors make very careful choices based on diligent research and deep expertise.

Despite these challenges, historically private equity returns have been attractive enough to entice a flood of investor dollars. TIAA has been investing in private equity since 1997 and has built a dedicated team of professionals to select and manage TIAA's private equity holdings, which made up a small portion (about 4%) of the total General Account portfolio on June 30, 2008. Maintaining and nurturing such specialized expertise is a major commitment made possible by TIAA's size and capacity to invest in long-term, relatively illiquid assets.

THE ROLE OF TIAA TRADITIONAL IN A DIVERSIFIED RETIREMENT PORTFOLIO

The key attributes of the TIAA General Account—its financial strength, highly diversified portfolio, long-term investment time horizon and economies of scale—make it possible for the TIAA Traditional Annuity to offer important advantages to its contract holders:

- Guaranteed principal and a guaranteed rate of interest, plus possible additional amounts, which can result in highly competitive crediting rates in the accumulation phase.
- A guaranteed rate, plus the potential for additional amounts paid from excess capital reserves, during the payout phase.

In addition to being a source of safety and stability in its own right, the TIAA Traditional Annuity can help offset the effects of market fluctuations on other assets held in a diversified retirement portfolio. Classified as a “guaranteed” asset, TIAA Traditional Annuity returns historically have had little or no correlation to returns from other types of assets such as stocks and bonds. (Correlation measures the relationship among returns of different asset classes, showing how similarly or differently they tend to perform.) This low or negative correlation can help minimize volatility and improve overall portfolio returns over time, making the TIAA Traditional Annuity a valuable component of a well-diversified retirement portfolio.

TIAA-CREF: FINANCIAL SERVICES FOR THE GREATER GOOD®

Since 1918, we have helped millions of people at America's academic, medical, cultural and research institutions plan for the future. TIAA-CREF is one of the largest financial services organizations in the world, with more than \$420 billion in combined assets under management as of June 30, 2008.

To learn more about the TIAA Traditional Annuity and TIAA-CREF's full menu of products and services, visit tiaa-cref.org.

Retirement Annuity (RA) contract form series 1000.24; Group Retirement Annuity (GRA) contract form series G-1000.4 or G-1000.5; G1000.6 or G1000.7 (not available in all states); Supplemental Retirement Annuity (SRA) contract form series 1200.8; Group Supplemental Retirement Annuity (GSRA) contract form series G1250.1 (GSRA's are not available in all states); IRA Annuity contract form series 1280.2 or 1280.4 (not available in all states); Roth IRA Annuity contract form series 1280.3 or 1280.5 (not available in all states); and Keogh Annuity contract form series G1350 (Keoghs are not available in all states) are issued by TIAA (Teachers Insurance and Annuity Association), 730 Third Avenue, New York, NY.

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