



Calculating your TIAA Traditional Annuity earnings

For RA, GRA, SRA, GSRA, Keogh, ATRA
and IRAs issued prior to 10/11/10



See TIAA Traditional's current rates.

To see your personal TIAA Traditional balances by vintage, the current crediting rates for each vintage and your personal dollar weighted crediting rate, log in to your account at tiaa.org. Look at your balances by asset class then click *View Interest Rates* under the Guaranteed Asset class section.

Current TIAA Traditional crediting rates by contract are available online at tiaa.org/mytraditionaloptions. Simply log in to see the rates for the contract types available within your plan.

Understanding TIAA Traditional interest rates.

The TIAA General Account is the investment engine that fuels TIAA Traditional.¹

The TIAA General Account, whose returns support TIAA Traditional, invests in publicly traded bonds, direct loans to business and industry, mortgages and real estate. Although you do not invest directly in the General Account, it backs TIAA Traditional's guaranteed minimum rates, additional amounts² and retirement paychecks³ for life that you receive.

TIAA Traditional interest rates include a guaranteed minimum plus any additional amounts declared.

Your TIAA Traditional balance is credited with interest that includes a guaranteed minimum interest rate of 3% (for the contracts featured in this brochure) plus any additional amounts. The additional amounts are established on a year-by-year basis and are not guaranteed for future years. When declared, they remain in effect for the "declaration year." The "declaration year" for accumulating annuities begins March 1 and runs through the end of the following February.⁴

TIAA's vintage system is a key feature.

All of your funds are not necessarily credited with the same rate. Instead, TIAA uses a vintage system. Depending upon the prevailing interest rate when contributions, rollovers or transfers are made, different rates are applied. This means when interest rates are high, contributions will most likely benefit from higher rates, but even when interest rates are low, you will be protected by the guaranteed minimum interest rate under your contract.

How long do the rates apply?

TIAA's rates for existing vintages are established for a year at a time—March 1 through the end of the following February for accumulating annuities.⁴

"New money" rate changes.

TIAA can establish and declare new rates for new funds applied at any time, but these declarations are typically made once a month. How often the rate changes depends on a number of factors, including the interest rate environment, and the yields and earnings available on investments in the TIAA General Account, which backs TIAA Traditional's returns. Once declared, the rate remains in effect for these funds until the end of the "declaration year," which begins each March 1 for accumulating annuities.⁴

1. The TIAA General Account is an insurance company account and is not available to investors as an investment. All guarantees are subject to TIAA's claims-paying ability.
2. TIAA may declare additional amounts of interest and income benefits above contractually guaranteed levels. Additional amounts are not guaranteed beyond the period for which they are declared.
3. Retirement paycheck refers to the annuity income received in retirement. Guarantees of fixed monthly payments are only associated with TIAA's fixed annuities.
4. TIAA Traditional Annuity interest and income benefits include guaranteed amounts plus additional amounts as may be established on a year-by-year basis by the TIAA Board of Trustees. The additional amounts, when declared, remain in effect through the "declaration year," which begins each March 1 for accumulating annuities and January 1 for payout annuities. Additional amounts are not guaranteed beyond the period for which they are declared.

Calculating your interest.

The rates TIAA credits for the various vintages are quoted as effective annual rates, with interest compounded daily. This means that your balance—or the portion of your balance in a particular vintage—is credited with the stated rate, assuming interest is earned for one full year.

Here's an example of how to calculate the earnings for a period of less than one year.

Example 1 calculation for money that's all in the same vintage.

Earnings on your balance for a three-month period from April 1 through June 30.

Balance: \$105,000 as of the end of the day on March 31

Vintage: All in the same vintage

Interest rate: 4%.

The basic formula

$$(1 + i)^{n/365} - 1^*$$

i = effective annual interest rate

n = number of days in the period

*If this calculation is done during a leap year, the formula is $(1 + i)^{n/366} - 1$.

Note:

For the purposes of these examples, a six-decimal rounding was used. Actual calculations may round differently.

ALL IN ONE VINTAGE – \$105,000.00 (4%)

Step 1: Calculate the interest rate factor.

Determine the number of days interest will be earned: 91 days

Plug the interest rate and number of days into the formula and solve the equation:

$$(1 + .04)^{91/365} - 1 = (1.04)^{(.249315068)} - 1$$

$$(1.04)^{(.249315068)} - 1 = 1.009826 - 1$$

$$1.009826 - 1 = .009826$$

The interest rate factor = .009826

Step 2: Calculate the amount earned.

Balance at beginning of period x interest factor = amount earned during the period

$$\$105,000 \times .009826 = \$1,031.73$$

Step 3: Determine your new balance.

Balance at beginning of period + amount earned = new balance

$$\$105,000 + \$1,031.73 = \$106,031.73$$



What does “rolled forward” mean?

It means that interest above the guaranteed amount (usually 3%) credited to a balance in a certain vintage is “rolled forward” and treated like a new contribution. Therefore, the additional amounts credited are applied to the newest or “current” vintage rather than the vintage containing the balance on which the additional amounts were earned.

Example 2 calculation for money spread over multiple vintages.

Earnings on your balance for a three-month period from April 1 through June 30.

Balance: \$105,000 as of the end of the day on March 31

Vintage: Spread over three vintages

Interest rates:

- **Vintage 1: \$75,000 at 5%**
- **Vintage 2: \$25,000 at 4%**
- **Vintage 3: \$5,000 at 3.50% (current vintage)**

In this example, you calculate the total earnings separately for each vintage to arrive at the total interest earned for a given period. We offer three vintages for this example, but you may have more or fewer vintages, depending on how long you’ve been contributing to TIAA Traditional.

This calculation is significantly different than Example 1 since TIAA’s additional interest amounts in older vintages are “rolled forward” to the newest or “current” vintage (for the contracts detailed in this brochure). This means that to get an accurate calculation for a period of time, you must do the calculation each day and then add them together. You will use the “end-of-the-day” value for day 1 as the “beginning-of-the-day” value for day 2 and so on.

The basic formula

$$(1 + i)^{n/365} - 1^*$$

i = effective annual interest rate

n = number of days in the period

*If this calculation is done during a leap year, the formula is $(1 + i)^{n/366} - 1$.

VINTAGE 1 – \$75,000.00 (5%)

Step 1: Calculate the total interest for day one.

$$\$75,000.00[(1.05)^{1/365} - 1] = \$10.05$$

Step 2: Calculate the guaranteed amount (3%).

$$\$75,000.00[(1.03)^{1/365} - 1] = \$6.08$$

Step 3: Calculate the additional amounts earned.

$$\$10.05 - \$6.08 = \$3.97$$

Step 4: Calculate the total vintage 1 balance.

Beginning of day	\$75,000.00
Guaranteed interest	+ \$6.08

End-of-day balance for vintage 1 \$75,006.08

VINTAGE 2 – \$25,000.00 (4%)

Step 1: Calculate the total interest for day one.

$$\$25,000.00[(1.04)^{1/365} - 1] = \$2.68$$

Step 2: Calculate the guaranteed amount (3%).

$$\$25,000.00[(1.03)^{1/365} - 1] = \$2.03$$

Step 3: Calculate the additional amounts earned.

$$\$2.68 - \$2.03 = \$0.65$$

Step 4: Calculate the total vintage 2 balance.

Beginning of day	\$25,000.00
Guaranteed interest	+ \$2.03

End-of-day balance for vintage 2 **\$25,002.03**

CURRENT VINTAGE – \$5,000.00 (3.5%)

Step 1: Calculate the total interest for day one.

$$\$5,000.00[(1.035)^{1/365} - 1] = \$0.47$$

Step 2: Calculate the guaranteed amount (3%).

$$\$5,000.00[(1.03)^{1/365} - 1] = \$0.41$$

Step 3: Calculate the additional amounts earned.

$$\$0.47 - \$0.41 = \$0.06$$

Step 4: Calculate the additional amounts rolled forward.

$$\$3.97(\text{vintage 1}) + \$0.65(\text{vintage 2}) = \$4.62$$

Step 5: Calculate the total current vintage balance.

Beginning of day	\$5,000.00
Guaranteed interest	+ \$0.41
Additional amounts (current vintage)	+ \$0.06
Additional amounts (rolled forward)	+ \$4.62

End-of-day balance for this vintage **\$5,005.09**

Note:

This example illustrates calculations for the first day in a period of 91 days from April 1 to June 30. Also, for the purposes of these examples, a six-decimal rounding was used. Actual calculations may round differently.

TOTAL BALANCE AND INTEREST EARNED FOR DAY ONE (APRIL 1)

This total is the end-of-day balance for all vintages on March 31 plus the total interest earned for April 1.

Step 1: Calculate the total for all vintages together.

Vintage 1	\$75,006.08
Vintage 2	\$25,002.03
Current vintage	+ \$5,005.09

New total balance **\$105,013.20**

Step 2: Calculate the interest earned for day one.

(New total balance - Total balance at the beginning of the day)

$\$105,013.20 - \$105,000.00 = \$13.20$

TIAA is committed to helping you.

We believe vintages are the most objective way to credit interest among all participants, whose contributions to TIAA Traditional span various time periods. Vintages help ensure that the money in your TIAA Traditional Annuity is credited in large part with a competitive rate of return that reflects both the prevailing interest-rate environment and the financial experience of the TIAA General Account investments.



If you don't want to do the math...

Just call **800-842-2252**, weekdays from 8 a.m. to 10 p.m. (ET).
Or log in to your account at [tiaa.org](https://www.tiaa.org) to find out the vintages or different rates your current balance is earning. Look at your balances by asset class then click *View Interest Rates* under the Guaranteed Asset class section.

This material is for informational or educational purposes only and is not fiduciary investment advice, or a securities, investment strategy, or insurance product recommendation. This material does not consider an individual's own objectives or circumstances which should be the basis of any investment decision.

Annuity contracts may contain terms for keeping them in force. Your financial consultant can provide you with costs and complete details.

TIAA Traditional is a fixed annuity product issued through these contracts by Teachers Insurance and Annuity Association of America (TIAA), 730 Third Avenue, New York, NY, 10017: Form series including but not limited to: 1000.24; G-1000.4; IGRS-01-84-ACC; IGRSP-01-84-ACC; 6008.8. Not all contracts are available in all states or currently issued.

Transfers and withdrawals from TIAA Traditional are restricted by its underlying agreements that can affect the liquidity of the product.

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

©2024 and prior years, Teachers Insurance and Annuity Association of America-College Retirement Equities Fund, 730 Third Avenue, New York, NY 10017.