Making the most of your retirement

Your income options
This brochure is for people within 10 years of retiring and starting to explore the options for withdrawing funds from their retirement plans. You’ll find details on the variety of income choices offered by Teachers Insurance and Annuity Association of America (TIAA) and College Retirement Equities Fund (CREF), as well as guidance to help you create the right withdrawal and investment strategy for your needs.

Getting ready to retire ............................................................................................................. 1
A variety of retirement income choices .................................................................................. 4
Investment strategies in retirement ......................................................................................... 13
Putting it all together ............................................................................................................. 15
Your experienced retirement professionals ........................................................................... 16
Getting ready to retire

Throughout your working years, your priority has been saving for retirement—so you’ll have enough set aside to provide income that’ll last for the rest of your life.

As retirement approaches, it’s important to consider what you would like your lifestyle to be and what you have set aside to make that a reality. For example, some people plan to relocate, travel, become more involved in cultural and other activities, or take up a hobby.

Once you have your vision for retirement, you should review your finances including retirement accounts and other savings. Then, your priority can shift to creating a retirement income plan that makes sense for you.

To help with your planning, following are answers to four key questions about retirement income:

- How much income do you need?
- When should you start receiving retirement income?
- Where will your income come from in retirement?
- How much should you withdraw and from which assets?

How much income do you need?

Many financial planners estimate that during retirement, you’ll need between 80% and 90% of your preretirement income. Of course, this amount can shift over time.

For example, early in retirement you may work and enjoy the benefits of living in a less expensive house or community. Later in your retirement, more of your income may go toward healthcare and assisted living.

So be sure to plan for adequate coverage for healthcare, long-term care and prescription drug costs, whether through your employer, through Medicare or as a supplement to Medicare.

When should you start receiving retirement income?

There is no one right answer. It depends on a variety of factors including your current employment status, how much income you think you may need and how much you have set aside.

For example, if you find that you have insufficient savings to fund your retirement, you may need to delay retirement for a while or you might consider ways to supplement your retirement income, as well as ways to control expenses and reduce debt.
As you review your personal situation and consider your choices, it’s a good idea to keep the following milestones in mind:

- **Age 59½.** This is when the withdrawals from tax-advantaged retirement plans are no longer subject to the 10% early withdrawal penalty.

- **Age 62.** You can begin receiving Social Security benefits, but at a reduced amount.

- **Age 66.** If you were born between 1934 and 1954, this is when full Social Security benefits are available (regardless of any future earnings).

- **Age 70½.** You must begin withdrawing funds from your retirement plans.
  - **Employer plans:** By April 1, following the year you turn age 70½ or retirement from the sponsoring employer, whichever is later.
  - **IRAs (except Roth IRAs):** By April 1, following the year you turn age 70½.

- **Age 75.** You must begin withdrawing funds exempt from the age 70½ distribution requirement (those funds contributed to a 403(b) plan before January 1, 1987), unless you are still employed and meet certain criteria.

- **Age 90.** You must begin income from after-tax annuities. It’s the latest you can start taking lifetime annuity income from a TIAA retirement account.

### Where will your income come from in retirement?

For many people, retirement income comes from a few sources:

**Social Security.** You can begin taking benefits as early as age 62 and as late as age 70. The earlier you start collecting, the lower your monthly payment will be. For example, at age 62, you’ll receive only about 75% of what you would have received at your full retirement age. For most people, this is age 66. For information, visit the Social Security Administration at [ssa.gov](http://ssa.gov).

---

You can find out how much income you could expect from your retirement plan with illustrations of lifetime income at [TIAA.org](http://TIAA.org).

By estimating your potential income based on your retirement account balances and factoring in your personal situation and preferences, the illustrations can show you if you’ll have enough income to help meet your needs.
In addition, if you’re married or have children, other members of your family may also be eligible for Social Security benefits. And it’s important to take this into account when planning for retirement. Since everyone’s circumstances are different, it’s a good idea to consult with your local Social Security office to discuss your options.

Employer savings plans. Like many of your colleagues who have spent their careers working in the academic, medical, cultural or research fields, your TIAA retirement accounts will probably be your primary source of retirement income.

As shown in the milestones on page two, generally you must be at least age 59½ to withdraw funds without penalty and must begin to withdraw funds by age 70½.

Personal assets. Your personal assets may include other tax-favored investments such as IRAs, Keogh plans or after-tax annuities.

Working in retirement. About 75% of workers age 50 and over expect to have retirement jobs.* Whether by choice or necessity, there’s a good chance you’ll continue to work—at least in some capacity—during your retirement years.

How much should you withdraw and from which assets?
As a rule of thumb, experts suggest withdrawing no more than 4% of your total retirement savings (not including any amounts you convert to lifetime annuity income) in the year you begin receiving income.

This can help you avoid depleting your resources too quickly. Plus, it can leave you with the extra resources that you might need in the future to help your income keep pace with inflation.

Please keep in mind that 4% is a guideline and may not be appropriate for everyone. If you’re not sure if this is right for you or if your situation is complex, you may want to consult with a financial advisor.

To eliminate the concern of outliving your savings, consider a lifetime annuity income option from which you can receive guaranteed and variable income, with income well in excess of the 4% guideline.**

* Source: Sloan Center on Aging and Work at Boston College, 2010.
** Source: TIAA Actuarial. At age 65 a Single Life annuity has a current payment (May 2016) of over 6% of the balance. All guarantees are subject to the issuing company’s claims-paying ability. Income from variable accounts will rise or fall based upon the performance of the underlying investments.
A variety of retirement income choices

An important step in creating a personalized income plan is to understand the distribution options available for your retirement plan account balances.

Since retirement isn’t the same for everyone, we offer a variety of choices. Our broad range of distribution options gives you the flexibility to respond to your changing needs in retirement.

Option #1: Lifetime income through annuities

No one wants to run out of money in retirement. There’s one way to make sure you don’t—a lifetime annuity.

Unlike lump-sum or systematic periodic withdrawals, lifetime annuities provide income you can’t outlive. And, depending on the type of annuity you choose, you can have income continue to loved ones after your death.*

A one-life annuity provides income for as long as you live. A two-life annuity provides lifetime income to you and, upon your death, to your annuity partner for his or her life. The level of income depends on which lifetime annuity option you choose.

- **Full benefit to survivor**
  You receive lifetime income. And upon your death, your annuity partner continues to receive the full amount. One important note—since this option offers the most coverage, your initial income is generally lower than any of the other lifetime annuity options.

- **Half benefit to annuity partner**
  You receive lifetime income. And, upon your death, your annuity partner receives half the amount you would have received had you lived.

* Guarantees are based on the claims-paying ability of the issuing insurance company. Income from the variable accounts will rise or fall based upon the performance of the underlying investments.

Take advantage of our experience and let us help you set up an income plan that’s right for your unique needs. Call us at 800-842-2252.
- **75% benefit to annuity partner**
  You receive lifetime income. And upon your death, your annuity partner receives 75% of the amount you would have received had you lived.

- **Two-thirds benefit to survivor**
  You receive lifetime income. At the death of either you or your annuity partner, whoever survives will continue to receive income for life. However, it’s reduced to two-thirds.

As permitted by applicable law, you can also add a guaranteed period of 10, 15 or 20 years to any lifetime income choice, based on life expectancy. This ensures that if you—and your annuity partner if you choose a two-life annuity—die before the end of the period, income will continue to your beneficiary for the rest of the period. (Of course, if you—or your annuity partner—live beyond the guaranteed period, income will continue for the rest of the survivor’s life. And there will be no income to a beneficiary.)

**Potential advantages:**
- Income you can’t outlive.
- Income may continue to loved ones upon your death.
- Guaranteed minimum level of income available through the TIAA Traditional Annuity.*
- Opportunity to continue participating in the investment experience of the variable annuity accounts.

**Potential drawbacks:**
- You can’t change the annuity option or annuity partner once you begin receiving income. (You can change your beneficiary.)
- Once you use your account balance to set up a life annuity, that balance isn’t available for income under other distribution options. However, you can change the annuity fund. So, for example, if you have a life annuity being paid out of the CREF Stock Account, you can transfer to have income be paid from TIAA.

**Income from a TIAA Traditional Annuity**
There are two ways—called payment methods—to receive income from a TIAA Traditional Annuity. Both guarantee a minimum interest rate; however, they provide different amounts of income.*

**Standard Payment Method**
You receive the “total” interest credited with each payment. This includes the guaranteed portion, plus any additional amounts. Potential benefits of this method include:

- Payments typically start out higher than the Graded Method.
- It’s designed to provide a relatively consistent level of income.

However, you should also note that this method isn’t designed to provide a future hedge against inflation, which could be a potential drawback over the long term.

* All guarantees are subject to TIAA’s claims-paying ability.
Graded Payment Method

Your initial income is based on a 4% interest rate—2.5% is guaranteed and the rest comes from additional amounts. Any interest credited above the 4% rate is reinvested to buy additional future income.

Potential benefits of the Graded Method are:

- Payments go up when the total interest rates exceed 4%. For example, if the total interest credited for a given year is 6%, your income the following year will increase by about 2%. (Because increases depend on market conditions and interest rates, there is no guarantee that income will go up from year to year.)

- It’s designed to help reduce the impact of inflation on your income over time.

When considering the Graded Method, keep in mind a potential drawback: Income usually starts out lower than the Standard Method and can take a number of years to catch up.

Income from a variable annuity

Unlike the TIAA Traditional Annuity, TIAA and CREF variable annuity accounts don’t offer a guaranteed minimum amount of income. Their values fluctuate based on market performance, and your income is directly tied to the account’s investment returns.

When we calculate your income, we take into account the lifetime income option you select, your age and the age of your annuity partner (if you choose a two-life annuity).

We also assume an annual investment return of 4%. This means if your account’s net investment earnings in a given year are 6%, your variable annuity income will go up by about 2%. If the investment earnings are less than 4%, your income will decrease accordingly.

**Important information:**

TIAA’s Graded Method is available only for vintages* with total payout interest rates of 4% or more. So, in today’s interest rate environment, you may not be able to use the Graded Payment Method for some or all of your income. For information on TIAA’s current payout interest rates, go to TIAA.org. If you start out with payments under the Graded Method you can move to the Standard Method once per calendar quarter, but you can’t go from Standard to Graded.

---

* TIAA interest rates are based on a vintage system. This means different rates are established for funds applied at different times. This way of crediting interest takes into account that the level of prevailing interest rates varies over time, so the TIAA General Account’s investments supporting contributions applied at different times may have significantly different results. You cannot invest directly in the General Account.
Income from TIAA Traditional and CREF Stock

To give you an idea of the income TIAA Traditional and the variable annuity accounts can provide from year to year, let’s take a look at income based on actual historical returns.

The charts below show what monthly payment amounts would have been if someone had a retirement account balance of $100,000, and used $50,000 for lifetime annuity income from the TIAA Traditional Annuity under the Standard Method and $50,000 for variable income from the CREF Stock Account.*

The chart on the left shows the income for the 21-year period from 1995 through 2016, and the chart on the right shows income for the 16-year period from 2000 through 2016. As you can see on the charts, TIAA Traditional and CREF Stock can provide very different types of income streams:

- Monthly income from TIAA Traditional was relatively stable, rising slightly when increases in TIAA’s payout interest rate were declared.
- Monthly income from CREF Stock started lower than TIAA Traditional and changed every year, sometimes significantly.

For example, during the 16-year period, monthly income started at $287 in January and at the first revaluation in May 2000, it reached $297 before dropping to a low of $131 in 2009. By 2016, it increased to $294. During the 21-year period, monthly income started out at $294 and reached a high of $755 in 2000. By 2009, it had gone back down to $333 (which was below the TIAA Traditional income amount of $399), was up to $803 in 2015, and back down to $746 in 2016.

These are historical results and are not indicative of what will happen in the future. However, they illustrate that different accounts may provide very different income scenarios over time. It’s important that you keep this in mind as you plan for retirement, and also remember that you don’t have to receive income from just one type of account.

For example, depending on your situation, you may want to consider receiving part of your income from an account that has a guaranteed element—like TIAA Traditional—and the rest from one or more of the variable accounts, whose income can go up or down based on performance. This may be a way for you to find a balance between wanting some income that is more steady and predictable, and wanting some income that offers the potential for growth (although this is not guaranteed). Note: There are other income choices and you don’t need to use your entire account balance for a lifetime annuity. For example, some retirees may take lifetime annuity income from TIAA Traditional and set up a series of systematic cash withdrawals from their variable accounts.

*Assumptions: Person age 65, started income on January 1, 1995 or 2000, based on an account balance of $50,000 in TIAA Traditional and $50,000 in CREF Stock. Income is paid under a single life annuity with a 10-year guarantee. Changes in TIAA Traditional income, if any, occur annually on January 1. Income from the Stock Account is adjusted each year on May 1. The illustration is not intended to predict or project returns.
Income amounts from different lifetime annuity options

TIAA offers a range of one- and two-life annuity options, as described on pages 4 and 5. As the annuity owner, you always receive income for life; however, the amount you receive depends on the income option you choose.

The various one- and two-life options offer different amounts of “coverage,” and, therefore, provide different amounts of income. For example, with the single life annuity, income stops at your death; there is no provision for income for an annuity partner or a beneficiary. Since it offers the least “coverage,” it provides the highest lifetime income to you.

The chart below shows you the effect including an annuity partner or beneficiary may have on your payments. In this hypothetical example, someone age 65 would receive $1,000 under the single life annuity with no guaranteed period. Adding a guaranteed period to the single life annuity would mean lower income—either $978 with a 10-year guaranteed period or $911 with a 20-year guaranteed. Monthly income is about 2.2% or 8.9% less than it would be under a single life annuity with no guaranteed period.

The same is true of the two-life options. The more “coverage” you have, the greater the reduction in income compared to a single life annuity without a guaranteed period. For example, with the full benefit to survivor with a 20-year guaranteed period, you receive lifetime income and even when you or your annuity partner dies, payments continue to the survivor in the amount that would have been had you both lived. Plus, if both you and your annuity partner die within the 20-year guaranteed period, your beneficiary will receive payments for the rest of the period.

While this option offers a lot of income protection, it’s important to keep in mind that there is a tradeoff. As you can see in the chart below, income under this option is about 15.2% less than income under the single life annuity with no guaranteed period. And at monthly payment of $848, it provides the lowest income of all the options.

So what’s the best choice? It depends on your personal situation. As you evaluate the choices, it may be helpful to take into account such factors as your income needs, your health, your marital status, whether you have others that are financially dependent on you, and other sources of income. Once you have a clear view of your situation, you can look for the option or combination of options that offers you a comfortable balance between the level of income you need and the amount of coverage you desire.

<table>
<thead>
<tr>
<th>Annuity option</th>
<th>Hypothetical monthly payment</th>
<th>Payment amount compared to single life annuity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single life annuity (SLA)</td>
<td>$1,000</td>
<td></td>
</tr>
<tr>
<td>SLA with 10-year guaranteed period</td>
<td>$978</td>
<td>-2.2%</td>
</tr>
<tr>
<td>SLA with 20-year guaranteed period</td>
<td>$911</td>
<td>-8.9%</td>
</tr>
<tr>
<td>Full benefit to survivor*</td>
<td>$861</td>
<td>-13.9%</td>
</tr>
<tr>
<td>Full benefit to survivor with 10-year guaranteed period*</td>
<td>$860</td>
<td>-14.0%</td>
</tr>
<tr>
<td>Full benefit to survivor with 20-year guaranteed period*</td>
<td>$848</td>
<td>-15.2%</td>
</tr>
<tr>
<td>75% to annuity partner with 20-year guaranteed period*</td>
<td>$881</td>
<td>-11.9%</td>
</tr>
<tr>
<td>Half-benefit to annuity partner with 20-year guaranteed period*</td>
<td>$918</td>
<td>-8.2%</td>
</tr>
<tr>
<td>2/3 benefit to survivor with 20-year guaranteed period*</td>
<td>$938</td>
<td>-6.2%</td>
</tr>
</tbody>
</table>

Source: TIAA Actuarial. This illustration is hypothetical.

The figures above are based on an annuity owner age 65 and annuity partner age 65*: these amounts can be higher or lower depending on actual ages. For the hypothetical illustration amounts above, we assume that a $176,000 account balance is converted to TIAA Traditional lifetime annuity income. We used a 4.00% interest rate for TIAA Traditional, but your actual rates and income can be higher or lower than those shown above. For CREF, whose income is calculated based on a 4% assumed investment return (AIR) results, would be very similar to the chart above. The illustration is not intended to predict or project returns.
Option #2: Systematic cash withdrawals
If available through your employer’s plan, you can set up a series of withdrawals for any amount (minimum of $100) and receive payments monthly, quarterly, semiannually or annually. You can change the amount and frequency of withdrawals or stop them altogether at any time. If you die while receiving payments, your beneficiary will receive the remaining account balance.

Potential advantages:
- You have the control and flexibility to specify the amount and frequency of your income.
- You can convert your remaining balance to another income choice at any time.

Potential drawbacks:
- You need to carefully manage your withdrawals to ensure that you don’t outlive your savings.
- Your employer’s plan may not offer this option.
- You may have less available for lifetime income.

Any income you receive for a period of less than 10 years is generally subject to 20% withholding, unless you’re rolling it over directly to an eligible retirement plan.

Option #3: Interest-only income
If you’re between ages 55 and 69½, you can receive as income the total interest that would otherwise be credited to your TIAA Traditional Annuity account balance.

With the TIAA Interest-Only Option, you have the benefit of receiving some income without drawing down your principal. Plus, you have the flexibility to switch to another income choice if your needs change later. It’s an ideal way to supplement your income as you move from full-time employment to retirement.

Your income includes a guaranteed interest rate (ranging from 1% to 3% depending on the contract) plus any additional amounts declared above the guaranteed rate. Additional amounts are in effect for a year at a time and aren’t guaranteed for the future. As interest rates change, so does your income.

After the first year, you can switch to another income option, like one of our lifetime annuity choices.

Once you reach age 70½, we generally recommend that you switch to an income option designed to meet the IRS minimum distribution requirements.

Potential advantages:
- You can preserve your principal until taking lifetime income or required minimum distributions.
- You can use interest payments to supplement income during a transition to full retirement or if you’re working part time in retirement.
- You can combine this option with other income choices.

Potential drawbacks:
- You may not receive enough interest income to satisfy your required minimum distribution (once you reach age 70½).
- You must receive interest-only income for at least one year before switching to another income choice.
- You can use this option only for balances in Retirement, Group Retirement and Retirement Choice Annuities.

When may systematic cash withdrawals be right for you?
- You need income but want some time before making an irrevocable decision about your lifetime income.
- You need income for a limited period—for example, while you’re waiting for your Social Security payments to begin.
- You’re continuing to work at least part time and require only a limited amount of income from your retirement accounts.
Option #4: Minimum distributions

Even if you find that you don’t really need your retirement accounts for income, they can’t continue to grow tax deferred indefinitely. According to federal tax rules, you must begin withdrawing funds from your retirement plans as follows:

- **Employer plans:** By April 1, following the year you turn age 70½ or retire from the employer that sponsors the plan, whichever is later.
- **IRAs (except Roth IRAs):** By April 1, following the year you turn age 70½.

To help make it easy for you, TIAA offers a minimum distribution withdrawal option. We automatically calculate and pay you the minimum amount you must receive each year from your balances that are recordkept by TIAA. This way, you don’t have to worry about whether you’ve met the requirements.*

Withdrawals are generally taxed as ordinary income. **Note:** If you made after-tax contributions, these amounts are returned to you tax free.

**Potential advantages:**

- You automatically meet the federal requirements for amounts that are recordkept at TIAA.
- You have the convenience of receiving withdrawals, monthly, quarterly, semiannually or annually.
- You have flexibility to change to another income choice.
- You may be able to withdraw additional funds, as needed, if permitted by your employer’s plan.
- You can reinvest your minimum distributions in TIAA-CREF mutual funds or other non-plan investment options.

Option #5: Transfer Payout Annuity

With this option, you receive your TIAA Traditional account balance—in a Retirement Annuity or Group Retirement Annuity—in 10 annual withdrawals. Retirement Choice annuities offer an 84-month withdrawal option. **Note:** Withdrawals through a Transfer Payout Annuity may not be available from all employer plans.

Each payment includes a return of principal plus earnings, based on the interest rates in effect. So by the end of the period, you will have received the entire balance. And any time while you’re receiving payments, you can stop the Transfer Payout Annuity and convert the value of your remaining balance into lifetime annuity income.

* The State Universities Retirement System of Illinois (SURS) Self-Managed Plan does not offer TIAA’s Minimum Distribution Option. Members should contact SURS for more information. Participants in the Arizona Optional Retirement Plan can also use another option called the Life Expectancy Option. If you participate in the college and university state retirement plan of Arizona and have questions, call us at 800-842-2252 for information on the withdrawal options available to you for minimum distribution purposes.
If you die while receiving income under the TIAA Transfer Payout Annuity or fixed-period annuity, your beneficiaries can either receive the income for the remainder of the payout period or take the present (discounted) value of the remaining payments in a lump sum.

Potential advantages:
- You can receive predictable withdrawals over a set period of time rather than a lump-sum payment.
- You continue to earn guaranteed interest and any additional amounts in the TIAA Traditional Annuity.
- You may elect to transfer the remaining TIAA amounts to other accounts, if your plans change.
- You can convert remaining payments into lifetime annuity income anytime.

Potential drawbacks:
- Payments are only for a limited number of years; this option does not guarantee income for life.

Note: If you have a Group Retirement Annuity, you also may be able to receive income for a set number of years—between 5 and 30—with a fixed-period annuity.*

Option #6: Lump-sum cash withdrawals

If available through your employer’s retirement plan, you can take a portion of your retirement account balance in a single sum.** With whatever is left, you can take income using another option, like a life annuity, fixed-period annuity or minimum distribution payments.

Potential advantages:
- You can fund one-time expenses, like paying off your mortgage or making a large purchase.
- You can take only what you need and use your remaining balance for income under other distribution options.

Potential drawbacks:
- You’ll have less available for lifetime income.
- Withdrawals are subject to 20% tax withholding, unless you’re rolling them over directly to an eligible retirement plan.
- Lump-sum withdrawals may increase your current tax liability and you’ll have less available for retirement income.

---

* If your employer’s plan allows, you can withdraw your full TIAA Traditional account balance from a Group Retirement Annuity or Retirement Choice Annuity within 120 days of separating from service (a 2.5% charge applies).

** Payments from TIAA Traditional account balances in Retirement and Group Retirement Annuity contracts can only be taken in 10 annual installments and payments from TIAA Traditional account balances in a Retirement Choice Annuity can only be made over a period of 84 months.
What’s riskier: investing too aggressively or too conservatively?

There’s really no right answer and it depends partly on your feeling toward risk. As you consider your choices, keep in mind that being too aggressive can expose your investments to loss of principal. However, being too conservative can expose your investments to the corrosive effects of inflation over the long term.
Investment strategies in retirement

Along with deciding which option or options can help you meet your income needs, it's also important to think about how you should invest in retirement. So as you look ahead to retirement and create an income plan, you should also consider factoring in the following investment strategies.

Retirement Investment Strategy #1: Beware of inflation

With retirement lasting for 20, 30 or more years, inflation can be a threat to your retirement income and its purchasing power over time. Even at an inflation rate of only 3%, your money’s purchasing power can be cut in half after 24 years. At 5%, the time frame drops to about 14 years.

And you shouldn’t necessarily assume that you’re protecting your longer-term retirement income by staying in “safe” low-yielding investments. Often, exposing funds to some investment risk—through stocks and real estate, for example—may prove to be an effective strategy for keeping pace with inflation. As you weigh the trade-offs between safety and risk, keep in mind that investing in securities can lead to a possible loss of principal.

Retirement Investment Strategy #2: Continue to diversify

Staying diversified while you’re receiving retirement income is just as important as it is while you’re accumulating assets for retirement. This is especially true if some or most of your income is tied to investment performance, through a variable annuity, for example.

Since different types of investments, or asset classes, will perform differently over time, diversification may help offset the volatility of a single investment. The upward movement of one asset class may help reduce losses from the downward movement of another. And as mentioned above, diversifying your investments may be a way to help protect your longer-term retirement income from the effects of inflation.

As you create an investment strategy, try to find a comfortable balance between the safety of low-yielding, fixed-income investments and the growth potential offered by investments with greater risk, like stocks and real estate. And keep in mind that diversification doesn’t guarantee that you’re safe from all losses.

Meeting with one of our knowledgeable consultants and discussing your plans can help identify the investment track that may be right for you. To schedule an appointment, call us at 800-842-2252.

See the chart on page 14 for average annual returns of different investments over time.
Average annual total returns (1926-2015)*

<table>
<thead>
<tr>
<th>Description</th>
<th>Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflation</td>
<td>2.91%</td>
</tr>
<tr>
<td>U.S. Treasury Bills (Data on unmanaged performance of short-term T-bills, computed on a monthly basis, as compiled from various sources by Ibbotson Associates, Inc.)</td>
<td>3.42%</td>
</tr>
<tr>
<td>Long-term Corporate Bonds (Data on unmanaged performance of high grade long-term U.S. corporate debt, as compiled from various sources by Ibbotson Associates, Inc.)</td>
<td>5.99%</td>
</tr>
<tr>
<td>Real Estate (NCREIF Property Index 1978–2014)*</td>
<td>9.32%</td>
</tr>
<tr>
<td>Common Stock (The S&amp;P 500® Index. This is an unmanaged group of securities representing the U.S. stock market.)</td>
<td>10.02%</td>
</tr>
</tbody>
</table>

Chart illustrates returns from 1/1/1926 to 12/31/2015.
*Real Estate returns are from 12/31/1978 to 12/31/2015 from NCREIF Index.

Source: ©2016 Morningstar Investment Management LLC. All rights reserved. Morningstar Investment Management LLC is a registered investment adviser and subsidiary of Morningstar, Inc. The Morningstar name and logo are registered marks of Morningstar, Inc. These returns are for illustrative purposes only and do not reflect TIAA performance or the returns various kinds of investments may earn in the future. Stocks represent shares of ownership in a corporation; bonds are debt obligations; and real estate is direct property ownership. The value of each will fluctuate with market conditions. Treasury bills (T-bills) and government bonds are insured as to timely payment of principal and interest by the U.S. government, unlike stocks and corporate bonds. T-bills are short-term money market instruments. Past performance does not guarantee future returns. S&P 500, Ibbotson U.S. Long-Term Corporate Bonds, Ibbotson U.S. Long-Term Government Bonds, Ibbotson U.S. 30-Day Treasury Bills, U.S. Consumer Price Index for All Urban Consumers (CPI-U). Please note that the indexes are unmanaged and that it is not possible to invest directly in an index.
Putting it all together

Your years of hard work, planning and saving are about to pay off. Below is a checklist of some important steps to consider as you approach your retirement.

<table>
<thead>
<tr>
<th>Action Step</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create an annual retirement budget</td>
<td>Putting together a realistic, detailed budget before you retire can allow you to better assess if there’s a gap between your income needs and your retirement savings.</td>
</tr>
<tr>
<td>Decide on a realistic retirement date</td>
<td>Choosing your retirement date may be influenced by what you uncover when creating a retirement budget. If needed, continuing to work may give you more time for tax deferral in your savings accounts to work to your advantage, and you may be eligible for greater Social Security benefits.</td>
</tr>
<tr>
<td>Estimate your longevity and evaluate your feeling toward risk</td>
<td>Assessing and understanding your specific circumstances will help you decide how best to turn your retirement savings into income. You can create a personalized income plan based on your income needs, estimated longevity in retirement and how you feel about exposing a portion of your investments to risk.</td>
</tr>
<tr>
<td>Calculate how much you can safely withdraw regularly</td>
<td>Arriving at a figure for your annual withdrawals can help you maintain your account balance. A good rule of thumb is no more than 4% of your retirement assets. Be sure to contact us to receive a personalized illustration for your income scenarios.</td>
</tr>
<tr>
<td>Decide which income sources to draw from first</td>
<td>Considering where your income comes from, and in what order, can help maximize not only your income but also your tax advantages.</td>
</tr>
<tr>
<td>Integrate your planning with any other retirement savings you or your spouse or partner may have</td>
<td>Understanding all retirement plans can enable you to use tax and distribution rules to the maximum advantage for both of you.</td>
</tr>
<tr>
<td>Arrange for personalized consultation to implement and monitor investment plan</td>
<td>Working with our consultants can help you get answers, think through your goals and develop a plan that’s uniquely suited to you. Our consultants will discuss choices to help you pursue your individual goals.</td>
</tr>
</tbody>
</table>
Prior to consolidating assets, you should carefully consider your other options. You may be able to leave money in your current plan, roll over money to an IRA, or cash out all or part of the account value.

You should weigh each option carefully and its advantages and disadvantages, including desired investment options and services, fees and expenses, withdrawal options, required minimum distributions, tax treatment, and your unique financial needs and retirement plan. You should seek the guidance of your financial professional and tax advisor prior to consolidating.

Your experienced retirement professionals

Your long-term objective of a financially secure retirement is important to you—and it’s important to us too.

We want to help you plan for and live well in retirement. That’s why we’re steadfast in our belief that prudent investment selection, disciplined asset and risk management, effective diversification and maintaining low costs may be strategies for success.

While you’re creating a plan for and receiving retirement income, you’ll continue to benefit from your relationship with TIAA with:

**Personalized support**

Our trained consultants will use their knowledge to include retirement income solutions that guarantee you won’t outlive your income—even in challenging economic times.

**Investment philosophy**

TIAA’s long-term investment philosophy and competitive historical returns can help support your retirement income needs.

**Low fees**

We keep operating costs low, charging fees that are generally less than half the industry average, as measured by Morningstar Direct.

**High ratings**

For its stability, claims-paying ability and overall financial strength, Teachers Insurance and Annuity Association of America (TIAA) is a member of one of only three insurance groups in the United States to currently hold the highest rating available to U.S. insurers from three of the four leading insurance company rating agencies: A.M. Best (A++ as of 6/15), Fitch (AAA as of 9/15) and Standard & Poor’s (AA+ as of 7/15), and the second highest possible rating from Moody’s Investors Service (Aa1 as of 8/15).

**Income choices and products**

It’s easy for you to create an income strategy to pursue your current and future income needs with our variety of distribution choices.

Plus the TIAA group of companies offers a wide range of investment products, including IRAs, mutual funds, brokerage accounts and annuities—allowing you to manage your finances and retirement income. So if you have retirement savings at other companies, consider consolidating your retirement plans and rollovers at TIAA. We can also help you with your life insurance needs.

**Keeping your funds in one place:**

- Makes it simpler to monitor and maintain your desired investment mix.
- Can potentially provide investment results more in keeping with your objectives.
The next step

As you transition into retirement, we can help you transform your thoughtful and diligent planning into an income and investment strategy to help meet your retirement needs. Contact us today for more information and personalized support.

We're easy to reach...

By phone: Call us at 800-842-2252 to speak with one of our experienced consultants. Available weekdays, 8 a.m. to 10 p.m. and Saturday, 9 a.m. to 6 p.m. (ET).

Online: Visit us at TIAA.org to explore the many ways that we can serve you. To send us an email, click Contact Us at the top of the home page.

In person: Arrange a one-on-one meeting with a TIAA consultant at the TIAA office nearest you. To find a local office, go to TIAA.org/local.
Guarantees are subject to the issuer’s claims-paying ability.

Past performance does not guarantee future returns.

Applies to mutual fund and variable annuity expense ratios. Morningstar Direct, March 31, 2017. The expense ratio on all mutual fund products and variable annuity accounts managed by TIAA-CREF is generally less than half the mutual fund industry average. Our mutual funds and variable products are subject to various fees and expenses, including but not limited to management, administrative, and distribution fees; our variable annuity products have an additional mortality and expense risk charge.

Per S&P criteria, the downgrade of U.S. long-term government debt limits the highest rating of U.S. insurers to AA+ (the second-highest rating available). There is no guarantee that current ratings will be maintained. Ratings represent a company’s ability to meet policyholders’ obligations and do not apply to variable annuities, mutual funds or any other product or service not fully backed by TIAA’s claims-paying ability.

This material is for informational or educational purposes only and does not constitute a recommendation or investment advice in connection with a distribution, transfer or rollover, a purchase or sale of securities or other investment property, or the management of securities or other investments, including the development of an investment strategy or retention of an investment manager or advisor. This material does not take into account any specific objectives or circumstances of any particular investor, or suggest any specific course of action. Investment decisions should be made in consultation with an investor's personal advisor based on the investor's own objectives and circumstances.

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

TIAA and CREF products may be subject to market and other risk factors. See applicable product literature or visit TIAA.org for details.

Annuity contracts contain exclusions, limitations, reductions of benefits and may contain terms for keeping them in force. A financial consultant can provide you with costs and complete details.

You should consider the investment objectives, risks, charges and expenses carefully before investing. Please call 877-518-9161 or go to TIAA.org/prospectuses for current product and fund prospectuses that contain this and other information. Please read prospectuses carefully before investing.

The tax information contained herein is not intended to be used, and cannot be used by any taxpayer, for the purpose of avoiding tax penalties that may be imposed on the taxpayer. It was written to support the promotion of the products and services addressed herein. Taxpayers should seek advice based on their own particular circumstances from an independent tax advisor.

Under Texas law, the benefits of an annuity purchased under the Optional Retirement Program are available only if a participant attains the age of 70½ or terminates participation in the program. For these purposes, a person terminates participation in the Optional Retirement Program, without losing any accrued benefits, by: (1) death; (2) retirement; or (3) termination of employment in all Texas public institutions of higher education.

TIAA-CREF Individual & Institutional Services, LLC, Teachers Personal Investors Services, Inc., and Nuveen Securities, LLC., Members FINRA and SIPC, distribute securities products. Annuity contracts and certificates are issued by Teachers Insurance and Annuity Association of America (TIAA) and College Retirement Equities Fund (CREF), New York, NY. Each is solely responsible for its own financial condition and contractual obligations.

©2017 Teachers Insurance and Annuity Association of America-College Retirement Equities Fund, 730 Third Avenue, New York, NY 10017