

Retirement income planning with confidence

RETIREMENT REDEFINED

Today's retirees are living longer, more active lives while enjoying the opportunity to travel, explore new activities and complete the items on their "bucket lists." Very simply, your expectations for retirement are changing, and that has big implications for how you should manage your savings. Your expectations for retirement are changing, and that has big implications for how you should manage your savings.

Accumulating a retirement nest egg is only part of the equation. You also need to optimize those savings so they can provide reliable income throughout your life, regardless of how long you live. The challenge is that many of the critical factors in creating a retirement income plan are unpredictable. For example, you have no control over the ups and downs of the markets, the direction of future interest rates, or the possibility that your retirement may be longer or more expensive than expected. Yet each of these variables can have a significant impact on how much you'll be able to safely withdraw from your portfolio once you retire.

A DIFFERENT APPROACH TO RETIREMENT PLANNING

The Northwestern Mutual Retirement Strategy is a unique retirement income strategy that uses an offensive and defensive approach to help you meet your specific goals and future needs. It's designed to provide a complete retirement plan that shows you how to optimize your assets while protecting against life events that can impact your long-term financial security.

Having both offensive and defensive strategies in place not only moves you forward on the path to financial security, it gives you confidence that you can manage and preserve your assets to help them last throughout retirement.

“

It's important to create a comprehensive retirement income strategy that enables you to manage the uncertainties of retirement, knowing you'll have the income you need for as long as you need it.

MEETING RETIREMENT GOALS

Northwestern Mutual works with you to develop a comprehensive plan that can be the basis for meeting these and other long-term goals by addressing the six most important risks you'll face in retirement.

Managing the risks that can impact financial security in retirement

Creating a sound retirement strategy requires addressing some of the unique challenges you may face in the future. These include:

1 Longevity

It's no secret that people today are enjoying healthier, more active retirements than prior generations. But what does a longer life mean for your retirement savings? Living longer is good news, but it also means your money will need to last longer than you may realize.

As Figure 1 illustrates, there is a 50 percent likelihood that a 65-year-old man will live beyond age 86 and that a 65-year-old woman will live beyond age 88. If they are married, there is a 50 percent probability that one of them will live beyond age 92.

For this reason, it's important to plan for longevity — in other words, the possibility that you'll need retirement income well into your 90s and maybe even longer. The Northwestern Mutual Retirement

Allocation Strategy is designed specifically to help ensure your savings last throughout retirement, regardless of how long you live. Rather than building a plan based on a fixed life expectancy, we study the various longevity scenarios so that your income plan succeeds with a high level of confidence no matter how long you live.¹

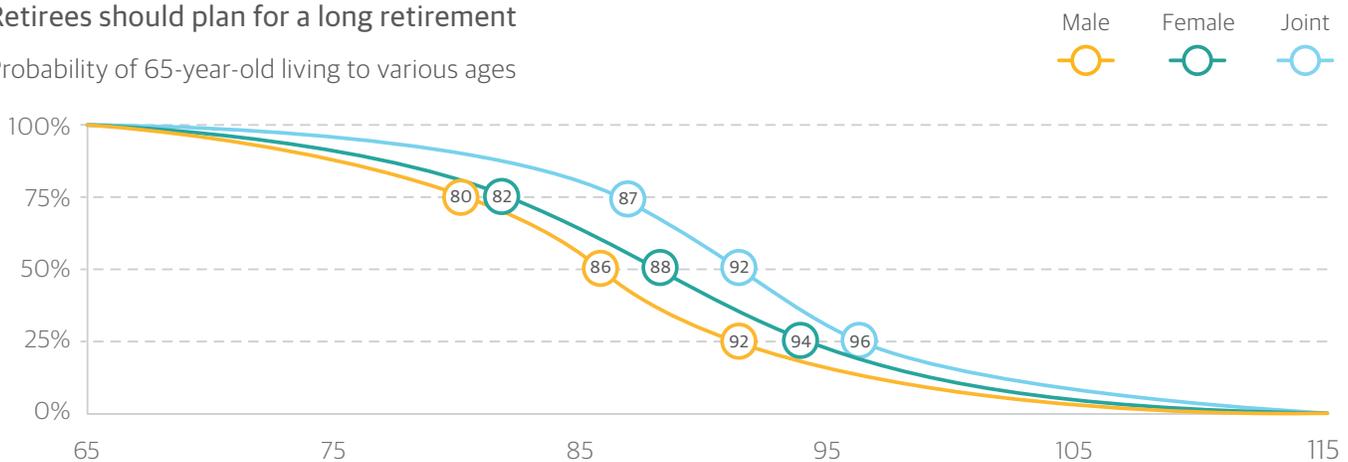
2 Market volatility

Investment markets can go up and down. Yet poor market performance, especially early in retirement, can significantly impact how long your savings will last. To help you weather the impact of market ups and downs, our Retirement Strategy models the effects of various market conditions in order to provide retirement income solutions that succeed with a high level of confidence in a variety of market conditions.

Figure 1.

Retirees should plan for a long retirement

Probability of 65-year-old living to various ages



Source: 2012 Individual Annuity Mortality Tables, Society of Actuaries, 2016 Morningstar.

¹ The strategy is based on a Monte Carlo simulation, which is a problem-solving technique used to test the probability of outcomes by running repeated hypothetical simulations randomizing not only economic events such as inflation, investment returns or losses, but also the risks of living longer than expected. It is important to note that while Monte Carlo simulations can test the probability of outcomes, they are hypothetical, do not reflect actual investment results and are not a guarantee of future results.

3 Inflation and taxes

Both taxes and inflation can take a bite out of your retirement savings – inflation by reducing your purchasing power, and taxes by reducing your income and leaving you with less money to spend. Your retirement plan should include tax-efficient options that can help protect your assets from the rising cost of everyday goods and services and from increasing taxes.

When creating a retirement income plan, the Northwestern Mutual Retirement Allocation Strategy uses Monte Carlo simulation² to model the effects of inflation. By examining economic scenarios with varying inflation rates, we provide solutions that are designed to provide an amount of income that grows with inflation over time. This enables you to retire knowing that your savings will be able to maintain a

constant amount of purchasing power throughout retirement.³ We also tested the effect of taxes on different plans to optimize after-tax income.⁴

Impact of inflation on your retirement income

Years	3%	4%	5%
0	\$100,000	\$100,000	\$100,000
5	\$86,000	\$82,000	\$78,000
15	\$64,000	\$56,000	\$48,000
25	\$48,000	\$38,000	\$30,000
30	\$41,000	\$31,000	\$23,000

Over long time horizons, such as a 30-year retirement, inflation can significantly erode purchasing power. This table shows how inflation erodes the purchasing power of \$100,000 over time using different inflation rates. For example, after 15 years at a 4% annual inflation rate, the purchasing power of \$100,000 is reduced to \$56,000.

4 Health care costs

Health care costs are rising dramatically. Planning is critical to meeting future medical costs, including those expenses not covered by Medicare, and to minimizing the impact an unexpected health care need may have on your savings. While you can't control how quickly health care costs will rise in the future, you can make a plan to cover future health-related expenses, which are likely to increase as you age.

Our Retirement Allocation Strategy takes into account research done by Ernst & Young regarding the use of health care services by retirees compared to the general population, and the fact that health care costs grow at a faster rate than costs for other services.⁵

Estimated annual health and drug costs at age 65 (per individual/per year)

Health Indicator	Cost Estimate*
Excellent Health	\$4,450
Good Health	\$7,850
Poor Health	\$15,910

Health spending is projected to grow at an average of **5-6%** per year through 2025.**

These estimates include the following: plan benefits (coverage), cost of premiums, copayments, deductibles and coinsurance.

High Income Beneficiaries will pay more for their Part B and D premiums.

*Medicare.gov, 2019

**National Health Expenditure (NHE) Projections 2016-2025 Centers for Medicare and Medicaid Services, cms.gov

² Monte Carlo is a problem-solving technique used to test the probability of outcomes by running repeated hypothetical simulations randomizing not only economic events such as inflation, investment returns or losses, but also the risks of living longer than expected. It's important to note that while Monte Carlo simulations can test the probability of outcomes, they are hypothetical, do not reflect actual investment results and are not guarantees of future results.

³ Inflation was modeled as a factor of the one-year T-bill, in which rates moved in a time series model (where results correlated year to year) with a mean reversion target. A health care inflation factor was added. In the 500 trials, the inflation rate could be as high as 20% in a given year.

⁴ In determining after-tax income, we used 2014 tax law.

⁵ Using the Consumer Expenditure reports put together by the Bureau of Labor Statistics for the years 2000-2004, E&Y constructed a retiree "basket of goods" and compared this to the basket used by the CPI for Urban consumers (CPI-U). The largest difference between the retiree basket of goods and the CPI-U basket was that much more weight was given to the medical component of the basket for retirees. The average rate of inflation for medical goods was roughly 4.35% over this period compared with an average CPI-U of roughly 2.55%.

5 Long-term care needs

Life can be unpredictable. A chronic illness, disabling condition or cognitive impairment that requires long-term care could quickly deplete your retirement savings, especially since many long-term care services are not covered by private health insurance or Medicare. Planning ahead can help ensure that you have the resources to cover an unexpected event or long-term illness and help protect your financial future.

A survey of pre-retirees and retirees aged 55 to 75 found that health care and long-term care expenses together account for between 12 and 15 percent of retirement expenses, depending on the household income.⁶ As shown in Figure 2, if long-term care costs increased 5 percent each year, an eight-hour-a-day home health aide who was paid \$71,198 per year in 2018 would command \$374,028 in 2053.

To protect against the cost of long-term care, it's crucial to understand your long-term care options and have a plan for getting the services you need that won't

Figure 2.

Current vs. projected annual cost of LTC (2018–2053)⁷



jeopardize your family's financial security. To develop our Retirement Strategy, we examined the risks of long-term care events occurring during retirement and the costs of paying for those events. We studied solutions with and without funding for long-term care, with insurance or other assets, to determine which solutions delivered the most income at a high confidence level.

6 Leaving a legacy

Retirement income planning is all about finding a healthy balance between having enough money to live comfortably in retirement and leaving a financial legacy to loved ones or charity. The Northwestern Mutual Retirement Strategy is designed to help you achieve this goal without sacrificing your ability to live comfortably in retirement. We studied the legacy goals of a large sample of individuals and considered how those goals could be met while optimizing income in the most efficient manner.⁸

“By addressing these key retirement challenges, the Northwestern Mutual Retirement Strategy can help you create a solid financial future now and throughout your retirement years.”

⁶ “Retirement Income Trade-offs, Implications for Product Development,” LIMRA, 2009.

⁷ Illustrates a hypothetical situation. Costs will vary by state. Northwestern Long Term Care Cost of Care Survey, conducted nationwide, November 2018. Long Term Care Group, Inc. Future cost based on 5% annual increase. These future costs are not guaranteed.

⁸ Retirement Allocation Strategies were developed for individuals and couples with no legacy goal at death, a goal to leave 25% of the value of retirement assets at death, 50% of the value of retirement assets at death and 100% of the value of retirement assets at death.

A SOUND RETIREMENT STRATEGY

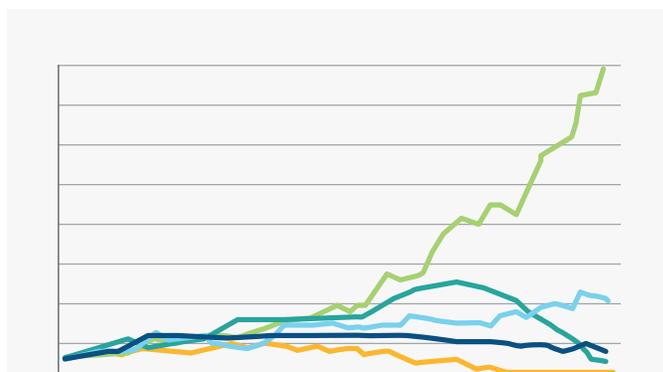
Conventional retirement planning, which is built on fixed assumptions for inflation and investment return rates, does not take into account the way the future may unfold. In today's environment, a more realistic and confident approach to retirement planning is needed — one that can help you manage the risks of retirement. That's why we developed and tested solutions that provide lifetime retirement income and meet your legacy goal with a 90 percent confidence level.⁹

Using Monte Carlo simulation to improve a plan's ability to meet your goals

The Northwestern Mutual Retirement Allocation Strategy planning tool uses a sophisticated modeling process called Monte Carlo simulation. This planning tool benchmarks the likelihood that your retirement plan will meet your goals under a variety of hypothetical market and economic scenarios, such as how a plan will fare in times of high inflation or declining markets. The Retirement Allocation Strategy tool analyzes uncertainties of planning for retirement to help you gain greater confidence in knowing what you need to do, both today and in the future, to achieve a certain level of financial security.

Financial planners today commonly use Monte Carlo simulation to determine the maximum amount of retirement income that your nest egg can support with a certain probability of success. However, most focus on risks such as market volatility and inflation for a retirement income plan.¹⁰

The Retirement Allocation Strategy planning tool takes a different approach. We secured Ernst & Young (E&Y) to assist in developing the tool. Using E&Y's Monte Carlo tool, Retirement Analytics™, we looked beyond traditional models of success to also test a wider range of possible outcomes, including the possibility that your retirement may be longer or more expensive than you



Monte Carlo simulation

- ✓ Uses a repeatable, scalable process to analyze your plan against thousands of market scenarios.
- ✓ Meeting retirement income and legacy goals may require a more conservative investment approach.

expected. It's important to note that while Monte Carlo simulations can test the probability of outcomes, they are hypothetical, do not reflect actual investment results and are not guarantees of future results.

IMPORTANT: The projections or other information generated by the Retirement Allocation Strategy planning tool regarding the likelihood of various outcomes are hypothetical in nature, do not reflect actual investment or life results and are not guarantees of future results. Results may vary with each use and over time. Other investments not considered may have characteristics that are similar to or superior to those being analyzed.

⁹ The planning tool analyzes Retirement Allocation Strategies with the Retirement Analytics Monte Carlo tool running 500 trials. A plan with a 90% confidence level means that in 90% of the trials (450), the plan met both goals of providing a specified amount of income over the lifetime of a hypothetical retiree and of meeting that retiree's assumed legacy objective. A 75% confidence level option is also available.

¹⁰ E.g., David M. Blanchett and Brian C. Blanchett, "Data Dependence and Sustainable Real Withdrawal Rates." *Journal of Financial Planning* 21, 9 (September 2008): 70-85; William Bengen, *Conserving Client Portfolios During Retirement*. Denver: FPA Press. (2006); Ameriks, John, Robert Veres, and Mark J. Warshawsky, "Making Retirement Income Last a Lifetime." *Journal of Financial Planning* 14, 12 (December 2001): 60-76.

How we developed the Retirement Allocation Strategy

In developing the Retirement Allocation Strategy planning tool, we reviewed published research and tested case studies¹¹ to determine whether certain products might improve the probability of a financial plan reaching a client's financial goals. The following list shows the products we selected for analyzing:

- ✓ Investments
- ✓ Fixed and variable income annuities
- ✓ Fixed and variable deferred annuities
- ✓ Long-term care insurance
- ✓ Life insurance

Thousands of hypothetical financial plans

TESTING

option 1

option 2

option 3

option 4

For each type of product, we designed a hypothetical, industry-neutral product, taking into account the products offered by Northwestern Mutual and other companies in the industry. Using these hypothetical products, Ernst & Young built a complete set of hypothetical financial plans that represented almost every conceivable combination of investments and available products that an individual could use. Thousands of hypothetical financial plans were constructed and tested to determine the maximum amount of income a plan could provide a retiree for a given probability of success. Of the thousands of plans tested, we identified the plans that were most suitable to providing income in retirement.¹²

USING OUR APPROACH TO PLAN FOR A FINANCIALLY SECURE RETIREMENT

The research that developed the Retirement Allocation Strategy tool made some noteworthy findings.

Long-term care funding improves a plan's chances for success

Long-term care funding, from other assets or insurance, is a way for you to prepare for the cost of care that an illness, physical or cognitive impairment, or the lasting impact of an accident can require.

Considering your options early in life, while in good health, can help you protect against the unexpected need for care now and in the future. By including funding for long-term care in your retirement strategy, you may be able to reduce the need to deplete income and retirement savings, maintain control of your care decisions, reduce reliance on others, and help ensure your ability to pay for services when you need them.



Almost 70% of people turning 64 will need long-term care at some point in their lives.

Source: LongTermCare.gov/the-basics (2015)

¹¹ E.g., Roger G. Ibbotson, Moshe A. Milevesky, Peng Chen, Kevin X. Zhu, *Lifetime Financial Advice: Human Capital, Asset Allocation, and Insurance*, Chapter 4, at 50-52, Research Foundation of CFA Institute (2007) (research on utility of fixed and variable income plans).

¹² In the trials where the plans did not meet a 90% or 75% confidence level, it does not necessarily mean one would completely run out of funds. It could mean slightly less income must be lived on than hoped for or that children or a charity will not be left as much money as desired.

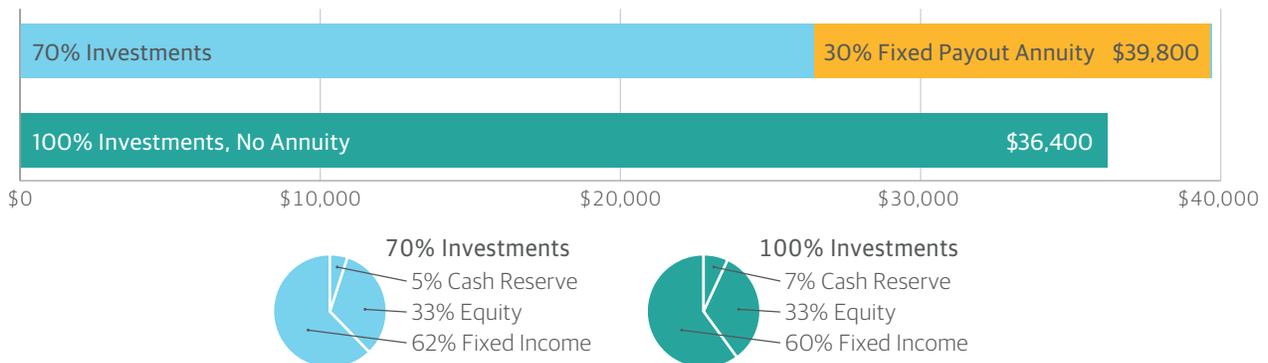
Adding fixed annuities may provide a higher guaranteed level of income

Fixed payout annuities provide a base of income for as long as an individual lives. Because there is no market risk associated with fixed annuities, you can reduce your reliance on investment performance for income. Down markets will have a lower impact on a portfolio with annuities, as less is being withdrawn from your investments. Lower withdrawals from investments allow for continued growth and tax deferral.

The Retirement Allocation Strategy tool analyzes the risks associated with inflation, market fluctuations and longevity. In analyzing these risks, adding fixed annuities may provide for a higher level of guaranteed income with a 90% probability of success. The planning tool analyzes Retirement Allocation Strategies with the Retirement Analytics Monte Carlo tool running 500 trials. A plan with a 90% probability of success means that in 90% of the trials (450), the plan met both goals of providing a specified amount of income over the lifetime of a hypothetical retiree and of meeting that retiree's assumed legacy objective. A 75% level of success is also available. "Income" refers to real, inflation-adjusted, before-tax income that the plan can support with 90% probability of success.

Figure 3.

Using annuities and investments – income generated from \$1,000,000



IMPORTANT: The graph in Figure 3 contains hypothetical projections and other information generated by the Retirement Allocation Strategy tool regarding the likelihood of various outcomes. Hypothetical results shown do not reflect actual investment performance and are not guarantees of future results. Results may vary with each use and over time. The graph is based on output from Northwestern Mutual's Retirement Allocation Strategy tool and illustrates a hypothetical scenario where a male and female couple, both age 65, retire with \$1,000,000 in retirement assets.

The annual lifetime income the couple could withdraw from their assets with a 90% confidence level is shown utilizing two different strategies: one where assets are split 70% investments and 30% fixed annuities; and the other where assets are 100% investments.

We analyzed a limited universe of investments (mutual funds) and products (annuities, variable annuities, life insurance, long-term care insurance) to generate

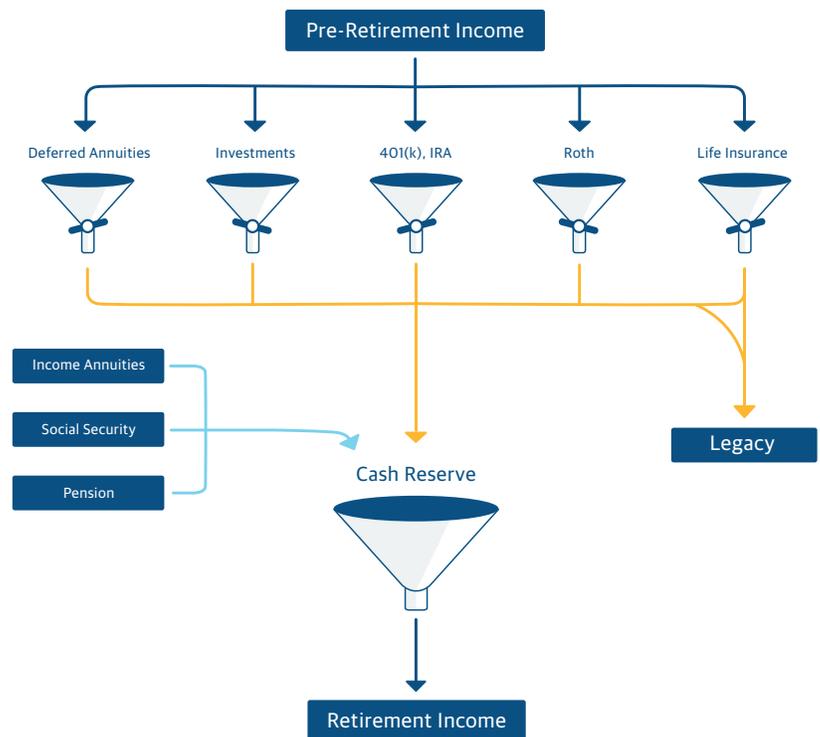
options. We selected only products that could be sold by Northwestern Mutual representatives. Other investments and products that we did not consider may have characteristics similar or superior to those we selected. We tested hypothetical financial plans with different investment and product combinations. We used the results of those tests to identify the best-performing financial plan for providing income with a 90% confidence level. The options shown here represent some but not all options available from the Retirement Allocation Strategy tool. Investments were assumed to be in mutual funds. Mutual funds had annual assumed expenses of 0.94% for Equity assets, .56% for Fixed Income and .34% for Cash Reserve assets. Expenses are averages for the seven Affinity Fund partner fund families available and sold by Northwestern Mutual Investment Services, LLC (NMIS). For more information about the fund families and the NMIS Affinity Fund Partners Program, visit NorthwesternMutual.com. See page 9 of this brochure for more information regarding the assumptions made in the simulation that generated these results.

Using a cash reserve helps provide sustainable income

The Retirement Allocation Strategy planning tool recommends that clients use a cash reserve account to fund their day-to-day retirement expenses.¹³ A cash reserve is an account with cash or cash alternatives, funded by your retirement savings, which can be used to meet your living expenses each month. Its purpose is to provide you with the income that you need to meet your current living expenses while helping you avoid selling investments in a down market. The account should contain roughly two years of living expenses that are funded by investments or variable income sources.

As you save for retirement, you may use some or all of the following vehicles to accumulate wealth: deferred annuities, investments, 401(k), IRA, Roth IRA and life insurance. Once you transition into retirement, your retirement savings can funnel into your cash reserve – from liquidating investments when prices are higher, income-producing annuities, dividends and interest generated by investments; or from other income sources such as cash value life insurance, Social Security or a pension.

By establishing a cash reserve, you won't be as likely to have to sell your investments or withdraw from your other income sources at inopportune times, giving you a greater sense of security. Plus, you can be better positioned to more efficiently make withdrawals for your retirement income needs and have better control over income taxes.



SUMMARY

Achieving financial security in retirement requires a comprehensive approach – one that enables you to:

- ✓ Provide predictable and steady income for life.
- ✓ Preserve and manage your wealth to include leaving a legacy.
- ✓ Mitigate the key challenges that can affect your retirement years.

¹³ For example, Harold Evensky, a nationally recognized thought leader in financial planning, uses a cash reserve with his clients and has published research demonstrating the utility of such an approach. Harold Evensky, "Withdrawal Strategies, A Cash Flow Solution," Chapter 11 of Harold Evensky and Deena Katz, eds., *Retirement Income Redesigned: Master Plans for Distribution: An Adviser's Guide for Funding Boomers' Best Years* (2006).

INFORMATION ABOUT THE "USING ANNUITIES AND INVESTMENTS — INCOME GENERATED FROM \$1,000,000" GRAPH ON PAGE 7

The amounts displayed are the maximum amount of real, inflation-adjusted, before-tax income that a hypothetical 65-year-old male and female couple could spend in their lifetime if they retired at age 65 with a 90% confidence level, using Monte Carlo simulation. Monte Carlo simulation is a problem-solving technique used to test the probability of outcomes by running repeated hypothetical scenarios randomizing the occurrence of different events. For our hypothetical couple, we randomized in 500 trials the following variables: market volatility, inflation, and the probability of death or longevity. A 90% confidence level means success in 450 out of 500 trials. If both members of the couple die while having been able to sustain the amount of income tested, then the trial is a success. If the couple does not have sufficient assets to sustain the amount of income tested during the trial for both of their simulated lifetimes, the trial is a failure.

The following was assumed: 1) For market volatility and inflation, equities would have an expected return of 8.6% and a standard deviation of 20.0%; 2) fixed income would have an expected return of 2.93% and a standard deviation of 2.75%; 3) the beginning interest rate for cash was .02% randomized at that rate each year, with the rate in one year related to the previous year's rate with a tendency to move toward a historical average rate of 4.50%.

Expected return is based on the appreciation/depreciation of a hypothetical portfolio expressed as a percentage per year. Values are based on combination of capital market return assumptions for certain asset classes and assume the same asset mix is held throughout the entire period. These hypothetical estimates are not meant to forecast the performance of a particular fund or security and do not guarantee future results.

Standard deviation is a statistical measure of the degree to which an individual value in a probability distribution tends to vary from the mean of the distribution. Higher standard deviation numbers indicate higher volatility and greater risk. Standard deviation assumes a normal bell curve-shaped distribution of outcomes. Experience has shown that not all returns or losses fall within the pattern predicted by a normal distribution. Standard deviation does not capture the risk of large short-term declines in value, such as the market losses that occurred in 2008-2009.

We assumed that the returns of stocks and bonds did not perfectly correlate and that this lack of correlation reduced the overall volatility of the portfolio over time.

We assumed an average base inflation rate of 2.35%. We randomized the base inflation rate each year, assuming that inflation would move up and down in similar patterns to how it has fluctuated in the past. After a base inflation rate was calculated, a medical inflation factor of .32% was added for retirees at or below age 75 and of .44% for retirees age 76 and above. This means that if a trial began with a hypothetical retiree being age 65, inflation would be adjusted by .32% upward until, if the retiree was still living at age 76, an upward adjustment of .44% would be made for the rest of the retiree's lifetime.

Mortality events were simulated using the probabilities from the 2012 Individual Annuity Mortality Basic with mortality improvements based upon Mortality Improvement Scale G2.

Asset Class Risks: Equities — Although stocks have historically outperformed bonds, they also have historically been more volatile. You should carefully consider your ability to invest during volatile periods in the market. Fixed Income — High-yield bonds present greater credit risk than bonds of higher quality. Bond prices correlate inversely with interest rates, and this effect is usually more pronounced for longer-term bonds, making their prices more volatile.

Limitations: Your assets may not be adequately diversified, which could affect the validity of the simulation process described above when applied to your actual circumstances. The simulation does not distinguish between different holdings within an asset class but assumes that any holdings within an asset class are representative of the asset class as a whole. The inflation rate forecast considers consumer prices in the U.S. economy generally as well as an adjustment for medical expenses. To the extent that your future spending differs from the basket of goods and services used in this general inflation forecast, your actual experience with inflation may vary. The simulation assumes that you purchased investment or insurance products that have the expenses, pricing and features described. If you purchase products that have materially different pricing or features from those described, then you cannot use the confidence level projections made in this graph.

Northwestern Mutual is the marketing name for The Northwestern Mutual Life Insurance Company (NM), Milwaukee, WI (life and disability insurance, annuities) and its subsidiaries. Northwestern Long Term Care Insurance Company (NLTC), Milwaukee, WI. (long-term care insurance) subsidiary of NM. **Northwestern Mutual Investment Services, LLC** (NMIS) (securities and investment advisory programs), subsidiary of NM, broker-dealer, registered investment adviser, member FINRA and SIPC.