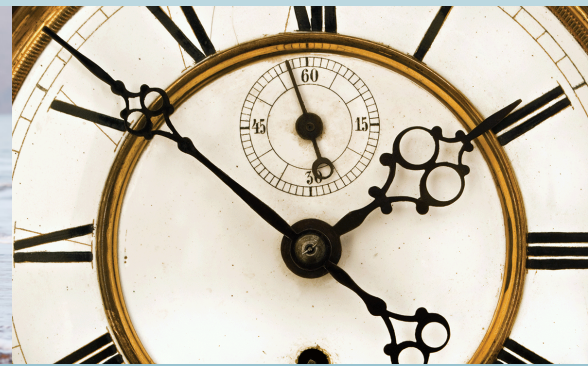


# A Plan for a Secure & Comfortable Retirement



Get it right so you don't run out of money.



Many people focus on saving and growing assets for retirement, but what about investing and withdrawing money after you've stopped working? There are a number of issues you should consider.

1. **How Inflation Affects Your Retirement Needs** - If you plan to live on your retirement account for decades, you need to consider the impact of inflation.
2. **How Long Must Your Portfolio Last?** - Time is another important variable in planning a comfortable and secure retirement.
3. **How Much Can You Withdraw from Your Retirement Account Without Running out of Money?** - Having a sustainable source of income in retirement is a top priority for most retirees.
4. **How to Get it Right** - Bring all the pieces together – time, inflation, withdrawal rates and your chances of success—to enjoy a comfortable and secure retirement.
5. **What to Expect Along the Way** - The past can help you plan for the future, but you should expect changes along the way.
6. **What about Social Security?** - How to factor in additional sources of income in retirement, like Social Security.

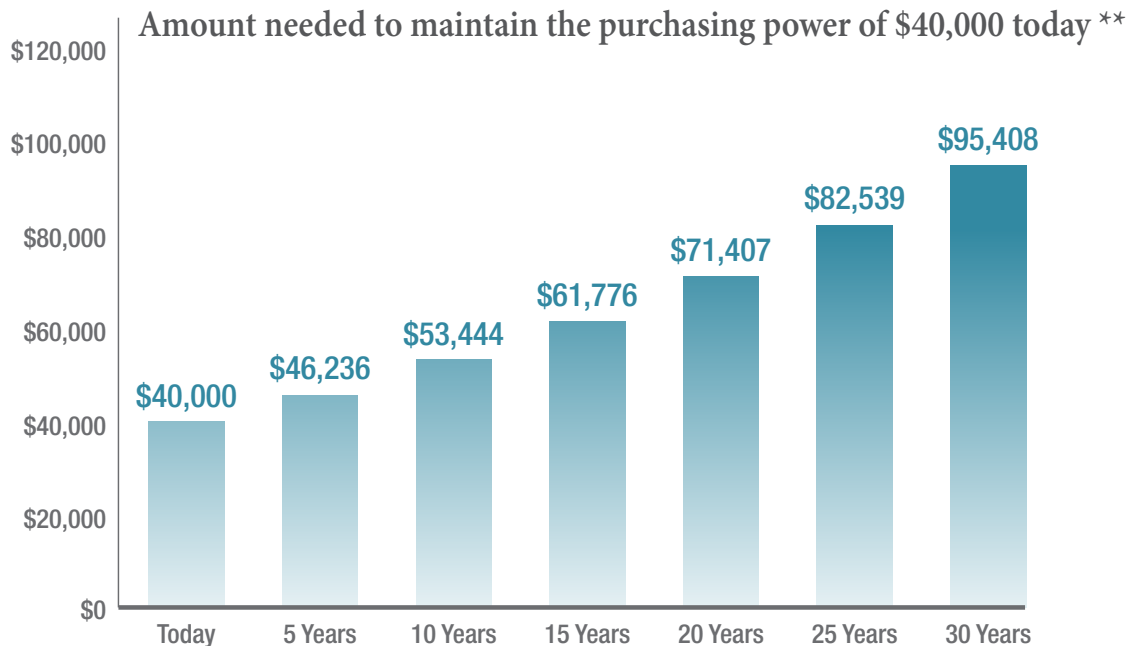
## How Inflation Affects Your Retirement Needs

Let's say you're retiring next month with \$1 million in your retirement account. You figure you'll need \$40,000 each year to cover your living expenses so it seems logical that you could safely keep your retirement money in cash and withdraw \$40,000 a year for 25 years. But when you take inflation into account, that \$40,000 will be worth a fraction of what it is today.

Since 1925, inflation has eroded the purchasing power of the dollar by about an annualized 3%.\*

This means that if you need \$40,000 today to fund your life in retirement, you will need \$53,444 to maintain the same spending level in 10 years, and you would need \$71,407 in 20 years.

*However, if you properly invest that \$1 million retirement account, you could withdraw \$40,000 each year, adjusted for inflation, with an excellent likelihood of not running out of money over 30 years!*



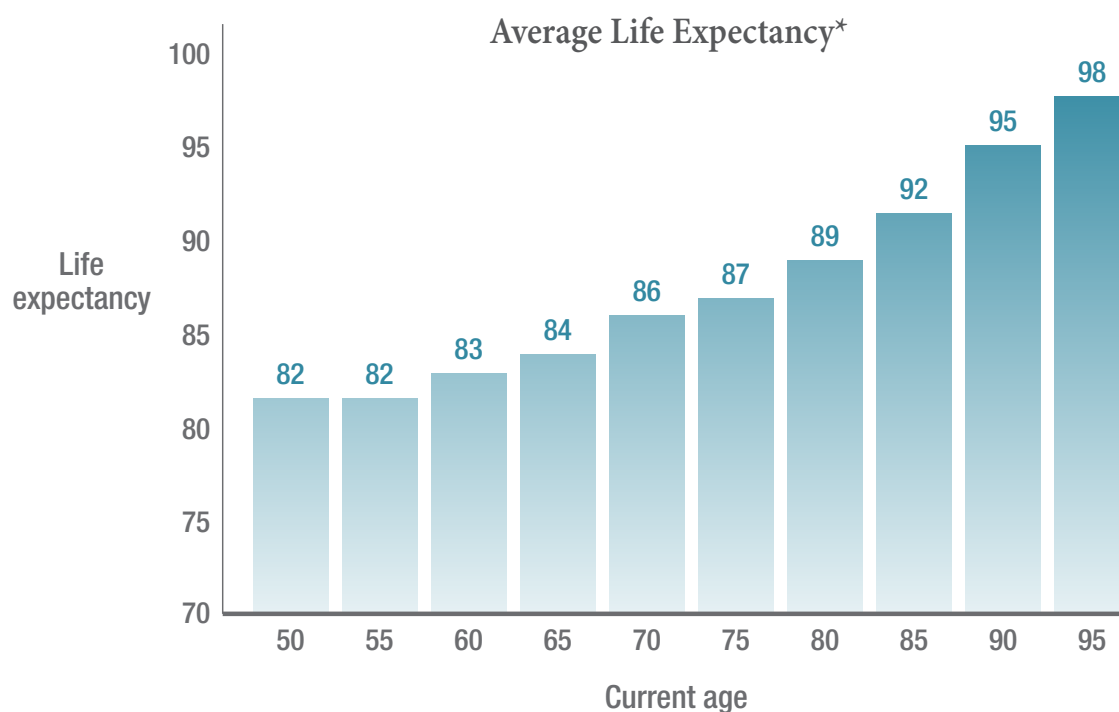
\*Source: Bureau of Labor Statistics Consumer Price Index Calculator from 1925-2015

\*\* Estimate based on 2.94% rate of inflation

## How Long Must Your Portfolio Last?

Another important variable is time. How long must your retirement account last? The table below shows the average life expectancy rounded to the nearest year. We see at age 65 the average life expectancy is 84, which means half of 65 year olds will live beyond age 84 and many will live much longer, possibly to 90, 95 or even 100!

We can't know how long we'll live, but we believe it makes sense to plan to live a long life in retirement. After all, it's better to have more money than we need than less. The purpose of this guide is to help you think about the decisions you have ahead and plan for a secure and comfortable retirement.



\*Source: United States Life Tables, 2011, NVSR Volume 64, Number 11- All races and origins



## How Much Can You Withdraw from Your Retirement Account Without Running out of Money?

How much can you safely withdraw from your retirement accounts and not run out of money? This is perhaps the most important question retirees face.

William Bengen published an early and influential paper on withdrawal rates in 1994, and his work was followed by the Trinity study in 1998. The Trinity study is one of the most well-respected and rigorously tested works on withdrawal rates in retirement. Three professors—Cooley, Hubbard and Walz—at Trinity University in Texas calculated the probability of not running out of money over

rolling 15-30 year periods from 1926 to 1995 using actual historical returns for stocks, bonds, and inflation. The study was updated in 2009 by these same academics and updated again in 2014 by Professor Wade Pfau of The American College of Financial Services.

### **The Trinity Study and the 4% Rule**

These studies confirmed what's known as the 4% Rule: investors who invested their retirement portfolio 50% in stocks and 50% in bonds could withdraw an initial 4%, adjusted annually for inflation, and be confident they not run out of money over 30 years.

## Likelihood of Success

Here's a more detailed look at the success rates for a portfolio that was invested 50% in stocks and 50% in bonds using four different withdrawal rates over four different time periods.

You can see why the 4% rule is so popular: it had a very high likelihood of success whether you were withdrawing from your account for 15 years or 30 years. It was successful 100% of the time over every 30 year period tested. But if you increased that to 5%, taking \$50,000 instead of \$40,000 from a \$1 million portfolio, your success rate dropped dramatically to 68%. And if you withdrew 6%, your chance of success fell to just 43%.

Likelihood of success using various withdrawal rates from a portfolio with 50% bonds and 50% stocks over four time periods

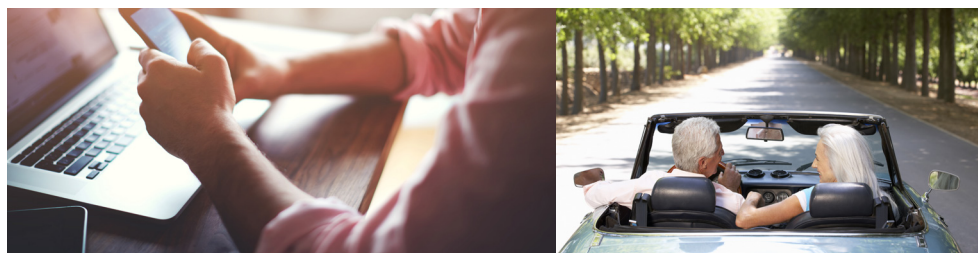
Initial withdrawal rates*	15 Years	20 Years	25 Years	30 Years
4%	100%	100%	100%	100%
5%	100%	99%	85%	68%
6%	100%	79%	58%	43%
7%	84%	61%	22%	22%

<span style="display:inline-block; width:15px; height:15px; background-color:#004a60; border:1px solid #004a60;"></span> 100-90% success rate	<span style="display:inline-block; width:15px; height:15px; background-color:#6b5d3d; border:1px solid #6b5d3d;"></span> 70-79% success rate
<span style="display:inline-block; width:15px; height:15px; background-color:#8090a0; border:1px solid #8090a0;"></span> 80-89% success rate	<span style="display:inline-block; width:15px; height:15px; background-color:#a09060; border:1px solid #a09060;"></span> Less than 70% success rate

An influential paper written in 1998 by professors at Trinity University studied actual stock (S&P 500) and bond (20 year US Government Bond) returns from 1926 through 1995, which were compiled by Ibbotson Associates, to determine sustainable withdrawal rates. (It was updated by Wade D. Pfau, Ph.D., CFA, Professor of Retirement Income, The American College, Director of Retirement Research, McLean Asset Management & inStream Solutions, Founder, Retirement Researcher to include 35 & 40 year retirement horizons and real market data through 2014). The professors looked at five possible asset allocations — from 100% bonds to 100% stocks — to evaluate the impact of inflation adjusted initial withdrawals ranging from 3% to 12%. This created 50 hypothetical portfolios for each retirement horizon used throughout the study. (Five asset allocations times ten withdrawal percentages.) Returns of stocks (S&P 500) and 20-year U.S. government bonds compiled by Ibbotson Associates, covering period from 1926 to 1995 (subsequently updated through 2014). Historical inflation based on Consumer Price Index. 2. Source: Philip L. Cooley, Carl M. Hubbard and Daniel T. Walz, Retirement Savings: Choosing a Withdrawal Rate That Is Sustainable. (AAIL Journal February 1998, Volume XX, No. 2).

\*Withdrawal rates are increased annually by the rate of inflation to maintain purchasing



## Get It Right

The Trinity study offers a useful planning guide for your retirement portfolio, but you must consider all these variables in order to get it right:

- Time (life expectancy)
- Inflation
- Initial withdrawal rate
- Allocation to stocks and bonds
- Acceptable chance of success

If you don't start withdrawing from your retirement until later in life, you can take out more. A 5% withdrawal rate from a portfolio of 50% stocks and 50% bonds was successful 99% of time over 20 years. And over 15 years, you could have withdrawn 6% with a 100% chance of success.

Allocation is just as important as your withdrawal rate and the time you'll be withdrawing from your accounts. The Trinity study also shows that if you eliminate stocks and only invest in bonds, you hurt your chances of success and risk running out of money. If you withdrew 4% from a portfolio entirely invested in bonds, you had just a 41% chance of success over 30 years.

And there's another variable you should consider, and that's your acceptable chance of success. Will you only feel secure if you choose a withdrawal rate and a portfolio allocation that has historically been successful 100% of the time? Or are you comfortable selecting a withdrawal rate and an allocation that has succeeded 85% of the time? How about a lower rate? That's a decision for you to make.





## Expect Changes Along the Way

There's a lot to like about the 4% rule: it's easy to understand, and it's been arrived at independently by various researchers. And having a sustainable income in retirement is a top priority for most retirees.

But the 4% rule has come under scrutiny after the tough market environments in the 2000s. People who retired in the early 2000s faced two bear markets, including the losses of 2008-2009, and people who retire in bear markets run a higher risk of running out of money because they're often withdrawing from their portfolios while their portfolios are losing value. By the time the market eventually recovers, they may have depleted more of their portfolios than they had hoped.

The 4% rule is still a good rule of thumb when planning ahead for retirement, but even the Trinity study acknowledged that retirees may need to adjust their withdrawals in retirement. The study concluded that its retirement calculations should be used solely as a planning guide and that people should expect changes both up and down along the way.

This is true for all retirement planning. Everything in this study is based on history, and we can't know if the future will be like the past. But we know that history gives us a useful framework to start thinking about the important decisions we need to make in retirement.





## What about Social Security?

Up until now, we've focused on how much you'll withdraw from your retirement account, but most people have additional sources of income in retirement, like Social Security.

If you have a \$1 million retirement account, and you plan to withdraw 4% (or \$40,000) a year and adjust these withdrawals for inflation, then you'll have a very high likelihood of success over 30 years based on the Trinity study and Professor Pfau's 2014 research.

Currently, the maximum Social Security payment is about \$30,000 a year, so that brings your total retirement income to \$70,000\*.

<i>Initial portfolio value</i>	<i>\$1 million</i>	<i>\$2 million</i>
<i>Initial withdrawal rate</i>	4%	4%
<i>Initial withdrawal*</i>	\$40,000	\$80,000
<i>Social security/pension*</i>	\$30,000	\$30,000
<i>Initial retirement income</i>	\$70,000	\$110,000

Social Security benefits will vary, but you can get an estimate of your social security benefits at [www.ssa.gov/estimator](http://www.ssa.gov/estimator).

\*Assumes withdrawals are adjusted for inflation over time; social security has been adjusted for inflation since 1975.



## One Client's Experience

Some investors know FundX only as the publishers of NoLoad FundX newsletter, but our core business is money management. Since 1969, we've worked to help clients build wealth, fund their goals, and enjoy a comfortable retirement.

One of our long-term clients hired us back in 1973 to help him save and fund his eventual retirement. At that time, he was working as a physician and managing a successful medical practice, so he had already accumulated some savings for retirement. For the first decades, we invested his portfolio in noload stock funds. Our goal was to grow his portfolio so that he'd have enough to live on when he eventually retired.

As our client grew closer to retirement, we adjusted his allocation to include bond funds as well as stock funds because, while he still needed growth to make sure he didn't run out of money

later in life, he also needed capital preservation.

Twenty years ago, he retired with a more balanced allocation to stocks and bonds. We maintained this commitment to stock funds for growth because most retirees don't need all their money at once. And in addition to current income, our client wanted a comfortable lifestyle that he could count on. Over time, we gradually shifted his allocation to a more conservative allocation of mostly bonds.

At the age of 95, our client was still playing a round of golf each week. And he continued to live on withdrawals from the retirement account we began managing 40 years ago. We continue to be gratified that the plan we initiated four decades ago was effective, and it is our intention that all of our subscribers, clients, and shareholders have a similar long-term experience.

To learn more about our money management services or to talk with a portfolio manager about your retirement plans, **please contact us at 877-748-1114**

\*FundX can't guarantee similar results for all of its clients.