

Making **S.M.A.R.T.** Financial Decisions

How Much Do You Need to Retire?

Professor Terrance Odean

My father retired in 1991 after 39 years as a high school teacher. His pension, along with my mother's pension and their social security checks, added up to more than they spent every month. Dad never had to ask himself whether he'd saved enough to retire. He simply needed to work enough years to get his pension. In 1991, most people with pension plans had traditional defined benefit pensions, pensions that paid a monthly income until you died. These days, most workers with pension plans have defined contribution plans, such as 401(k) plans. Workers own the money in their retirement accounts. But they have to figure out for themselves whether it's enough to retire. How much retirement savings you need to retire is going to depend upon how old you are when you retire, how much social security you collect, what additional income you have in retirement, and how much you spend each year.

Let's look at an example of how to calculate retirement saving needs. Jocelyn is 55 and single. Her annual total salary is \$44,000 a year. She plans to retire on her 70th birthday. To estimate how much money she needs to save to retire at 70, Jocelyn first writes down her current annual spending by category. Your own categories may be more or less detailed than hers. Jocelyn goes through her financial records, including her checkbook and her credit card statements for the last year, to figure out how much she spent on what. On the W2 form that her employer sent her at the beginning of the year, she sees that she paid \$3,366 in FICA and Medicare taxes. Her state and federal income taxes were \$4,000. She contributed \$6,000 to her 401(k) retirement savings. She funded her rainy day account years ago and didn't add to it last year. Jocelyn's employer currently pays for her medical and disability insurance. Her out-of-pocket medical expenses last year, including medications, were \$1,000. Rent, \$15,600. Phone and utilities, \$2,400. Groceries, \$3,600. She spent \$1,200 eating out and \$1,000 on entertainment and travel. Auto maintenance cost her \$1,000, auto insurance, \$800, and gas, \$1,000. She spent \$1,200 on clothing and personal items. Jocelyn spent \$600 on gifts and gave \$600 to charity. Her renters insurance and other expenses were \$634.

Jocelyn now goes through her list and asks herself which expenses are likely to change after she retires. She won't pay FICA and Medicare taxes after retiring. That's one big savings. Her state and federal income taxes will be lower. As we'll see, most of Jocelyn's retirement income will be her social security benefits. And at Jocelyn's income level, less than half of her social security will be subject to federal income taxes. After she retires, Jocelyn will no longer contribute to her 401(k) retirement savings account. However, she does plan to set aside \$3,000 a year for unexpected expenses. She will pay \$1,500 a year for her Medicare Part B and D coverage. And her out-of-pocket medical expenses will likely increase as she ages. Jocelyn expects most of her other expenses to stay about the same after she retires. Two exceptions are that she's going to spend less money on gas, since she'll no longer be driving to work, and she plans to spend more on travel. All together, Jocelyn expects to spend about \$37,134 a year after she retires.

Jocelyn looks up her projected social security benefits on the Social Security website. If she starts claiming benefits at age 62, she'll receive \$11,700 in today's dollars each year. If she claims at 67, she'll

get \$17,556 a year. And if she waits until 70 to receive Social Security, she'll receive \$22,320 a year. She'll get nearly twice the annual income if she claims social security at 70 rather than 62. Jocelyn is healthy. And her mother lived into her 90s. Her biggest financial fear is that she might outlive her savings. Waiting until 70 to claim social security is one of the most cost effective ways to provide additional income in old age. And that's what Jocelyn decides to do. Jocelyn will spend \$37,134 a year in retirement and receive \$22,320 in social security benefits. That leaves her with \$14,814 to fund out of her retirement savings. That's in today's dollars. When Jocelyn retires in 15 years, everything will cost more because of inflation. Fortunately, social security benefits are indexed to inflation. So her social security income will rise about as fast as her expenses do. However, in 15 years, she will need more than \$14,814 to make up the difference between her social security and what she plans to spend. How much more? Over the last 25 years, inflation in the United States has been about 2.5% a year. If that trend continued, Jocelyn's \$14,814 in annual expenses will be about \$21,500 in 15 years. You can calculate that by multiplying 14,814 by 1.025 to the 15th power, which equals 21,455. Alternatively, you can use one of many future inflation calculators available online.

Jocelyn decides to be a bit more conservative in her projections. And she assumes that her expenses will go up by 3% a year, not 2.5%. Let's use an online calculator to see how much \$14,814 will grow to in 15 years with 3% inflation. Enter the expected inflation rate of 3% a year for 15 years and a starting amount or a present value of \$14,814. With inflation of 3%, Jocelyn will need about \$23,000 a year in income beyond her social security when she retires in 15 years. So how much savings will Jocelyn need to provide \$23,000 in income when she's 70? In a video on spending in retirement, I suggest that people apply the RMD spending rule. That is, each year spend no more from your retirement savings than the required minimum distribution mandated by the IRS. The rule can also be used to estimate how much savings you need to provide a level of income. To do so, look up the RMD withdrawal factor for the age at which you plan to retire. You can find this on RMD calculators such as the one on investor.gov. Or you can look it up on the IRS website. Multiply the annual income you'll need by the withdrawal factor. And that gives you the amount of savings you'll need to generate that annual income under the RMD rule.

In Jocelyn's case, let's keep things simple and assume that her birthday is in January. Her RMD withdrawal factor the year in which she retires, also the year in which she turns 70 and 1/2, will be 27.4. 27.4 times \$23,000 is \$630,200. So Jocelyn's going to need about \$630,000 in savings plus her social security to support her anticipated expenses when she retires. Put differently, the year she retires, Jocelyn's required minimum distribution will be 3.65% of her retirement savings. And \$23,000 is 3.65% of \$630,200. So that's it. Estimate how much you're going to spend in retirement. Subtract your estimated social security benefits from that, as well as any other income you're going to have in retirement. And that gives you the expenses that you need to fund through your savings. Adjust these expenses for inflation between now and when you retire. And multiply by your RMD withdrawal factor the year that you retire. This will give you an estimate of how much money you're going to need when you retire. Of course, your situation may be more complicated than Jocelyn's. For example, if you own your home and have a fixed rate mortgage, your mortgage expenses won't increase with inflation and will end when you pay off your mortgage. So calculate future mortgage expenses separately from your other expenses. Furthermore, if you own your home this gives you additional savings.

What if you plan to retire before 70? Required minimum distributions start the year you turn 70 and 1/2. If you are thinking of retiring a few years earlier, I suggest using a withdrawal rate of 33. That is,

multiply the annual expenses you're going to need to cover from your retirement savings by 33 to get the amount of savings you'll need. If you are planning to retire many years before you turn 70, you're probably not watching this video. What if there is no way for you to save enough to fund the retirement you'd like? That's a tough problem, but not an uncommon one. To have more income in retirement, wait until 70 to claim social security benefits. Also, consider working a few more years before you retire, looking for part time work after you retire, taking in a roommate, or reducing your spending.

Planning for retirement is much harder today than when my father was teaching at Mahtomedi High School. The change from traditional defined benefit pensions to 401(k) retirement plans has shifted the responsibility and risk of funding retirements from employers to individuals. You have to decide how much to save, how to invest your savings, and how much you need to retire. This video may help you figure out the minimum you'll need to retire. But you will continue to bear the risk that your investments do poorly or that you live longer than expected. So if you possibly can, try to retire with more than the minimum.