

Office of Retirement and Disability Policy • Office of Research, Evaluation, and Statistics

Research and Statistics Note

No. 2016-03 December 2016

A Comparison of Free Online Tools for Individuals Deciding When to Claim Social Security Benefits

by Patricia P. Martin and Dale Kintzel*

Introduction

When to claim Social Security retirement benefits is one of the most important financial decisions an individual can make. Social Security provides monthly benefits to eligible retired workers and their families. As retirement nears, an individual must decide at which age to start receiving benefits. Benefits may be claimed before, at, or after full retirement age (FRA), which varies depending on year of birth. Benefits claimed before reaching FRA are permanently reduced, but they are collected over a longer period. If claiming is deferred until after FRA, monthly benefit amounts are permanently increased, but they are collected over a shorter period. The earliest possible age to claim retirement benefits is 62. The increase for deferred claiming stops accruing at age 70. Social Security benefits continue as long as a person lives and are inflation-protected through an annual cost-of-living adjustment. An adequate stream of inflation-protected income can guard against poverty in old age.

To help individuals facing this complicated decision, various groups—from the government to financial services firms—have developed free online benefit calculators. The Social Security Administration (SSA) provides a variety of online tools to inform individuals about the claiming decision and the program rules that may affect it. Recently, the Consumer Financial Protection Bureau (CFPB), another government agency, worked with SSA to develop its own online Social Security benefit calculator. Outside of government, academic organizations such as the Center for Retirement Research (CRR) at Boston College and nonprofit organizations such as AARP¹ have developed tools as well. Lastly, as part of their services offering comprehensive retirement advice, for-profit companies such as Financial Engines and Bankrate also provide online Social Security calculators. Such tools share the general goal of helping the public prepare for retirement.

^{*} The authors are with the Office of Retirement Policy, Office of Retirement and Disability Policy, Social Security Administration.

Acknowledgments: Brian Alleva, Tom Hungerford, Natalie Lu, Barbara Smith, and David Timmons provided helpful input and suggestions. Special thanks to Anya Olsen for her extraordinary support.

The findings and conclusions presented in this note are those of the authors and do not necessarily represent the views of the Social Security Administration.

¹ Until 1999, AARP was known as the American Association of Retired Persons.

As with any other online resource, the user must understand the purpose and limitations of each tool before following any advice it provides. Research has found that users of publicly available retirement planning tools may make irrational decisions based on suboptimal advice (Turner 2014). Another study (Dorman and others 2016) examines the effectiveness of 36 such planning tools and identifies more than 20 factors that provide consumers with credible recommendations

Selected Abbreviations

CFPB Consumer Financial Protection Bureau

CRR Center for Retirement Research

EEA earliest eligibility age FRA full retirement age

SSA Social Security Administration

and reliable education about their retirement options but are not used consistently by the tools. The latter study also suggests that the tools' different input variables and default assumptions drive differences in the results and thus in the suggested actions (or lack thereof). The authors conclude that only 30 percent of the online tools succeeded in providing adequate advice while the other 70 percent provided inaccurate, ambiguous, or unclear advice. However, the consensus on these tools is that they are helpful if users understand their limitations (Powell 2010, 2015; Tresidder 2011).

This note provides information on six publicly available online retirement planning tools that focus primarily or exclusively on the Social Security claiming decision. It explains their advantages and limitations, what types of information the tools require of the user (inputs), and what types of information the tools provide (outputs). The note also discusses how the Social Security claiming decision works, the types of information SSA provides to assist individuals with that decision, and why other organizations have developed their own calculators. The six tools are from reputable, well-known organizations. They are available to the public, do not require the user to create an account with the organization, and are free to use. Their inclusion here is for research and comparative purposes only. None of the tools reviewed here duplicate any of those evaluated in the cited previous studies.

The Social Security Claiming Decision

The age at which a worker can claim full Social Security retirement benefits depends on his or her year of birth. For an individual born during the period 1943–1954, the FRA is 66. For each successive birth year from 1955 through 1960, the FRA is 2 months older than the preceding year: 66 and 2 months for 1955, 66 and 4 months for 1956, and so forth. The FRA is 67 for those born in 1960 or later. The earliest eligibility age (EEA) at which an individual can claim retirement benefits is 62. Although individuals may choose to claim benefits at the earliest opportunity for numerous reasons, such as becoming disabled, facing a work limitation, being laid off, or having to care for a disabled spouse or other family member (Helman, Copeland, and VanDerhei 2016), claiming retirement benefits before reaching FRA results in permanently lower monthly benefits. (The monthly benefit amount is actuarially reduced to account for the longer period of time over which benefits will be received.) For example, if a worker with a FRA of 67 claims benefits at the EEA, the monthly benefit will be 30 percent lower than it would be if claimed at FRA. In addition, Social Security provides delayed retirement credits for those who claim benefits after reaching their FRA, up to age 70. For every month the individual delays, benefits increase by two-thirds of 1 percent, amounting to an annual increase of 8 percent. For example, if an individual has a FRA of 67 and delays claiming benefits until age 70, his or her monthly benefit will increase 24 percent. (The monthly benefit amount is actuarially increased to account for the shorter period of time over which benefits will be received.)

Social Security pays benefits to retired workers and in some cases also to spouses and survivors of retired workers. At FRA, a spouse is eligible to receive 50 percent of his or her higher-earning spouse's retired-worker benefit. Spousal benefits can start as early as age 62, but are reduced for each month they are claimed before FRA (the reduction percentage differs slightly from that applied to retired-worker

benefits). Divorced spouses can also receive benefits if the marriage lasted at least 10 years. An individual who claims a spousal benefit effectively also claims the retired-worker benefit to which he or she is eligible based on his or her own earnings record.² Such a dually entitled spouse would receive his or her own retired-worker benefit and, if it would amount to less than 50 percent of the higher-earning spouse's retired-worker benefit, a spousal benefit as well.

Widow(er)s can claim a reduced survivor benefit starting at age 60. The FRA for survivor benefits can differ from that for retired-worker benefits depending on year of birth.³ If claimed at the survivor FRA, the survivor's benefit will be 100 percent of the deceased worker's retirement benefit amount. The maximum survivor benefit is generally limited to the retirement benefit the deceased worker would have received if he or she were still alive. If a survivor beneficiary qualifies for his or her own retired-worker benefit and it exceeds the survivor benefit, he or she can switch to the retired-worker benefit as early as age 62.

Most people claim retired-worker benefits before reaching their FRA, with many claiming as early as possible at age 62 (Chart 1). Of the nondisabled persons who claimed benefits in 2015, 40.2 percent of men and 46.6 percent of women claimed benefits at the EEA, while 27.7 percent of men and 28.8 percent of women claimed at ages 63–65, prior to reaching FRA. Although most people still claim before reaching FRA, increasing proportions have been claiming at later ages in recent years. The 40.2 percent of nondisabled men who claimed benefits at age 62 in 2015 represent a decline from the 55.7 percent who did so in 2005. Over the same span, the percentage of men who claimed at FRA rose from 12.8 percent to 21.1 percent and the percentage who claimed after reaching FRA rose from 4.5 percent to 11.2 percent. Similarly, the percentage of women who claimed benefits at age 62 declined from 59.9 percent in 2005 to 46.6 percent in 2015 while the combined percentage of those claiming at the FRA or later increased from 15.1 percent to 24.8 percent (SSA 2016a).⁴

As previously noted, the age at which an individual claims retired-worker benefits determines the monthly benefit amount and can also affect the benefit for his or her spouse and survivors. SSA maintains a neutral stance on the claiming decision—providing information but not advice and noting that "there's no one 'best age' for everyone and, ultimately, it's your choice" (SSA 2016b). A Social Security claims representative reviews a claimant's information and determines eligibility and claiming options but does not persuade the claimant to make any particular claiming decision. Claims representatives can provide monthly benefit amount estimates for claims filed at the EEA, FRA, age 70, or at any monthly interval within that range, but they are instructed not to examine further options once the claimant has decided (SSA 2015).⁵

² This is called "deemed filing" and it applies to spouses if they claim either a retired-worker or spousal benefit. Changes passed by Congress in 2015 and enacted in 2016 eliminated some claiming options for married couples, including the strategies known as "file and suspend" and filing a "restricted application" for spousal benefits.

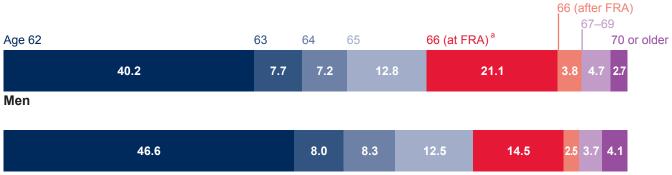
³ For a chart showing the survivor FRAs, see https://www.socialsecurity.gov/planners/survivors/survivorchartred.html.

⁴ These data compare trends across claiming years; from the perspective of successive birth cohorts, the trend in recent years toward claiming at older ages is even more pronounced (see Purcell 2016, Munnell and Chen 2015, and Muldoon and Kopcke 2008).

⁵ SSA's Program Operations Manual System states that "prior to November 2008, [claims representatives] used the breakeven point comparison to inform the claimant about the total benefits and the time it would take to recover the benefits from an earlier to a later [claiming age]. However, [SSA] discontinued this practice because the computation did not consider the changes in life expectancy, mortality rates, and the personal factors that the claimant should evaluate when making benefit decisions" (SSA 2015).

Chart 1.

Percentage distribution of nondisabled retired-worker benefit awards by age of claimant: By sex, 2015



Women

SOURCE: Authors' calculations based on SSA (2016a, Table 6.B5.1).

NOTES: Data are shown by age at entitlement. Entitlement may be retroactive and therefore precede the award date.

Rounded components of percentage distributions do not sum to 100.0.

a. In the first month of age 66.

The agency provides Social Security program information through a variety of online tools and publications to enable users to decide on their own when to claim benefits. For example, 11 online calculators allow users to estimate their monthly benefits under various detailed scenarios; SSA publications and webpages allow users to review program rules; and the Social Security Statement allows individuals to see their estimated benefit amount, personal earnings history, and lifetime Social Security and Medicare taxes paid. Additionally, an individual can open a *my* Social Security account, which allows those who have not yet claimed benefits to view their earnings records and estimated future monthly benefits, and allows those who are already receiving benefits to report address and bank account changes and to obtain tax and benefit forms.

Individuals Want Advice From SSA on When They Should Claim Benefits

Although SSA remains neutral regarding the claiming decision, many individuals would prefer advice on the best age to claim. For example, according to the Understanding America Study, a nationally representative internet panel survey administered by the University of Southern California's Center for Economic and Social Research,⁶ 37 percent of respondents overall and 62 percent of retired respondents had sought information on the best age to claim (Table 1). Similar percentages sought information on retirement ages either for themselves or for a family member. Almost one-fifth of all respondents, and 41 percent of retired respondents, had hoped to find Social Security benefit claiming strategies.

The survey also asked nonretired respondents for their views on the types and adequacy of information available from SSA. Three-quarters of them "strongly" or "somewhat" agreed that they would like to receive more information about their benefits and retirement planning directly from SSA (Chart 2). When asked how they would prefer to receive information from SSA, a majority (61 percent) of nonretirees strongly or somewhat agreed that they are comfortable performing online transactions related to their Social Security benefits (Chart 3).

⁶ The Understanding America Study is jointly financed by the Department of Health and Human Services' National Institute of Aging and SSA.

Table 1.

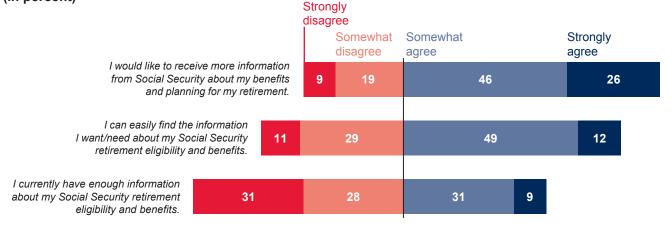
Survey results for the question "In the past, what kind of information about Social Security retirement benefits have you sought?" (in percent)

Information	All respondents	Retired	Nonretired
Own retirement age or that of a family member	39	56	35
When is the best age to claim	37	62	31
How work earnings affect benefits	30	54	25
Taxes on Social Security benefits	25	56	17
The importance of Social Security benefits	19	33	16
Claiming strategies	18	41	13
Effects of pensions on Social Security	15	36	10
Other	3	6	2
None of the above	40	11	47

SOURCE: University of Southern California, Understanding America Study (preliminary results for July 2015–January 2016). NOTE: Data are population-weighted estimates.

Chart 2.

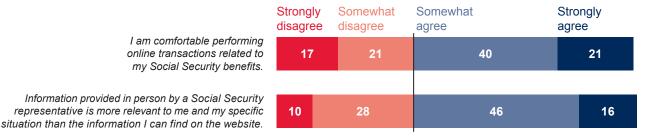
Nonretiree views on availability and adequacy of information on Social Security benefits, 2015 (in percent)



SOURCE: University of Southern California, Understanding America Study (preliminary results for July 2015–January 2016). NOTE: Rounded components of percentage distributions do not necessarily sum to 100.

Chart 3.

Nonretiree views on conducting Social Security transactions using online resources or in-person contact with a representative, 2015 (in percent)



SOURCE: University of Southern California, Understanding America Study (preliminary results for July 2015–January 2016). NOTE: Rounded components of percentage distributions do not necessarily sum to 100.

Regardless of how they interact with SSA, many individuals want to receive more information on their retirement benefits; yet the agency, as noted, maintains a neutral stance on the claiming decision. To provide further guidance, various outside stakeholders have developed their own online Social Security benefit calculators. Survey results showing that a majority of retired respondents wanted information on the best Social Security claiming age before they retired, and that a majority of nonretired respondents are comfortable performing transactions about their benefits online, indicate that online tools addressing the Social Security claiming decision may help individuals plan for their retirement.

Online Benefit Calculators

This section analyzes the six online tools and, to illustrate the differences between them, the next section presents the estimated benefit amounts they produce using identical input criteria. As noted earlier, these tools are provided by government agencies, academic and nonprofit organizations, and private companies. The tools are SSA's *Retirement Estimator*, CFPB's *Planning for Retirement*, CRR at Boston College's *Target Your Retirement*, AARP's *Social Security Benefits Calculator*, Financial Engines' *Social Security Retirement Calculator*, and Bankrate's *Social Security Calculator*.

Government Agencies

SSA, Retirement Estimator

https://www.socialsecurity.gov/retire/estimator.html

Description. The *Retirement Estimator* is one of 11 online calculators available from SSA that address various aspects of retirement planning. It uses an individual's actual earnings history to estimate the future value of his or her Social Security retirement benefits under various claiming-age scenarios. The *Retirement Estimator* had over 8 million unique page visits in 2015 (SSA, Office of Retirement and Disability Policy, Office of Research, Evaluation, and Statistics; e-mail messages, February 11–12, 2016).

User inputs. Name, mother's maiden name, Social Security number, date of birth, place of birth, and previous year's earnings.

Calculator output. Estimated monthly benefit amount at three default claiming ages (62, FRA, and 70). The user can also select alternative work-stop ages or adjust future-income inputs.

Advantages. The *Retirement Estimator* accounts for the person's actual earnings history by incorporating information from the Social Security earnings record in its calculations. Benefit estimates for those who are close to retirement, and thus have fewer years of earnings left, should therefore be very accurate. The *Retirement Estimator* also allows the user to compare results for many different potential work-stop ages. It is straightforward and simple to use.

Limitations. The calculator takes a neutral stance on the question of when to claim benefits and does not distinguish between claiming decisions for single and married individuals. The *Retirement Estimator* is limited to Social Security benefit estimates and does not capture other sources of retirement income. Because the calculations are based on the individual's actual earnings record, the user must enter more personal information, such as Social Security number and mother's maiden name, to access the benefit estimates.

CFPB, Planning for Retirement

http://www.consumerfinance.gov/retirement/before-you-claim/

Description. Planning for Retirement explores retirement options in three steps. The first step presents rough benefit estimates for each claiming age from 62 through 70 based on the SSA calculation formulas. In the second step, the user answers five summary questions covering marital status and expected retirement age, spending habits, income sources, and longevity. The tool provides customized information based on the answers chosen. In the final step, the user selects the age at which he or she plans to claim Social Security retirement benefits. The tool provides summary information on whether the chosen age increases or decreases the benefit amount relative to claiming at FRA. The CFPB launched *Planning for Retirement* in November 2015. It received nearly 220,000 unique visitors in its first 4 months, with the average session lasting about 8 minutes (Hector Ortiz, Older Americans Policy Analyst; e-mail message, March 16, 2016).

User inputs. Date of birth, highest annual work income, and responses to step 2 and step 3 queries.

Calculator output. Rough estimates of benefit amounts appear in an interactive graph that enables the user to select annual claiming ages from 62 through 70 and to see benefit estimates in monthly or annual amounts. Text accompanying the graph provides, for each selected claiming age, the percentage difference from estimated benefits claimed at FRA and the projected value of estimated lifetime benefits received (in today's dollars) by age 85, which is the current average lifespan. The tool also suggests creating a *my* Social Security account, learning more about individual retirement accounts, and opening a Treasury Department myRA savings account.

Advantages. *Planning for Retirement* is simple to use and the benefit calculation requires only two inputs. The five questions in step 2 provide a broader context for the claiming decision and present users with additional situations they should consider. For example, those who are married learn that their claiming decision can affect their wives' or husbands' spousal or survivor benefits.

Limitations. Because the tool requires only date of birth and highest annual work income, it does not provide a highly accurate benefit estimate, particularly for workers with intermittent earnings histories or those in the early stages of their careers. It also assumes the individual's current earnings will continue to increase into the future at a constant rate, which may not be accurate for those with sporadic earnings histories or transitions between full- and part-time employment. Although step 2's five questions provide important factors to consider when making the Social Security claiming decision, the advice provided generally emphasizes delayed claiming for increased monthly benefits, which may not be optimal for all users.

Academic and Nonprofit Organizations

CRR at Boston College, Target Your Retirement

http://crr.bc.edu/special-projects/interactive-tools/target-your-retirement/

Description. Target Your Retirement calculates a target monthly retirement income and estimates the amounts the user will receive from Social Security benefits, retirement savings, and pensions. Users can then adjust three important "levers"—controlling spending, working longer, and either downsizing or getting a reverse mortgage on their house—to assess how each strategy helps them to meet their monthly retirement income target. An audio introduction (which users can skip) discusses the

three levers. This website had almost 5,000 views in 2015 (Amy Grzybowski, Communications Specialist; e-mail message, February 12, 2016).

User inputs. Earnings, date of birth, this year's income, and marital status; retirement savings (current amount accrued as well as own and employer's monthly contributions); pensions (expected monthly amount received at age 65); and home value (current value and monthly mortgage payment, number of years remaining on mortgage, and estimated initial cost and reduction in monthly expenses associated with downsizing). A married user provides the same information (except home value) for his or her spouse. Although the tool provides rough estimates of monthly Social Security benefits, it alternatively allows the user to enter the estimated benefit derived from SSA's *Retirement Estimator* or his or her *my* Social Security account.

Calculator output. An interactive bar graph shows estimated monthly retirement income from Social Security, retirement savings, and pensions. Users may adjust the three levers (controlling spending, working longer [options from ages 62 through 70], and downsizing or taking a reverse mortgage on one's house). The user can also check boxes that gauge the impact of risks such as "market tanks" or "spouse dies." Adjusting the levers and checking the risk boxes alters the estimated retirement income results. Outputs also include "My Action Plan," which summarizes the monthly saving target, a target retirement age, housing options, and the estimated monthly amounts for each source of retirement income.

Advantages. The detailed *Target Your Retirement* tool considers more than just Social Security benefits, giving users a more holistic view of their retirement finances. Because users can account for risks and adjust spending and income inputs, the tool provides more numerous and more realistic retirement scenarios. Users can also customize claiming strategies in relation to their overall financial picture. The website clearly explains its key assumptions and estimates.

Limitations. The calculator relies on estimated average salary inputs rather than permitting a closer accounting of actual and expected earnings. Because the tool provides a more complete picture of retirement, it also requires many more inputs than other calculators do. The "market tanks" scenario is defined as a rate of return of 0.3 percent over a 10-year period (2000–2009 on a 50-50 stock-bond portfolio), which might not meet some observers' definition of "crash" or "tank." Also, the user cannot change the assumed 50-50 stock-bond asset allocation for retirement savings, which may not be accurate for many people.

AARP, Social Security Benefits Calculator

http://www.aarp.org/work/social-security/social-security-benefits-calculator/

Description. In four steps, this calculator shows users their estimated Social Security monthly benefit at each claiming age from 62 through 70, shows them how to maximize their benefits, and summarizes what the numbers mean. The tool is designed to help users figure out how much retirement income they will receive at different Social Security claiming ages but considers broader contexts such as their marital status, whether their expenses will be covered, and what happens to their benefit if they keep working. The *Social Security Benefits Calculator* had almost 1 million visits in 2015 (Jean C. Setzfand, Senior Vice President, Programs; e-mail message, February 11, 2016).

User inputs. Marital status (married, widow[er], never married, divorced); date of birth; work in local, state, or federal government (current or prior that lasted at least 10 years); average annual salary; and estimated monthly Social Security benefit at FRA. If the user does not have an estimated benefit amount from SSA, the tool estimates it for them using SSA's *Quick Calculator* (an alternative

to the *Retirement Estimator*, available at https://www.socialsecurity.gov/OACT/quickcalc/index.html). Married users are prompted to enter the same information for their spouses. Certain selections trigger popup messages about exceptions. For example, users who are divorced and were married for fewer than 10 years are instructed to exclude information on the ex-spouse. Widow(er)s and users who work or worked for the government for at least 10 years are directed to the SSA website for more information ⁷

Calculator output. The tool estimates the Social Security monthly benefit for claiming ages 62 through 70; average monthly retirement expenses by category, and the percentage of total expenses covered by Social Security benefits, by claiming age; monthly benefit paid, withheld, and returned for individuals who continue working after claiming, by claiming age and salary; and six "general rules to help you maximize your benefits."

Advantages. The easy-to-use graphical interface allows the user to enter his or her spouse's information, which is very important for married couples assessing their claiming strategies. Divorced users can enter a former spouse's information for the same purpose. By showing how monthly benefits can help meet expected monthly expenses, the *Social Security Benefits Calculator* provides a more comprehensive view of retirement finances. The graphics highlight how a delay in claiming benefits allows one to cover more of his or her expenses in retirement. Although the tool estimates the user's Social Security benefit based on age and average annual salary, it alternatively allows the user to enter actual SSA benefit estimates directly. It also provides additional information in popup boxes based on the user's marital status and government employment experience.

Limitations. Current salary is assumed to grow at a constant rate; however, the user cannot edit the default inflation and salary-increase assumptions. In addition, the default claiming age is 70. That age produces the highest monthly benefit, which might be unrealistically optimistic for some users, who may not realize they can change the default from the maximum claiming age.

Financial Services Companies

Financial Engines, Social Security Retirement Calculator

https://financialengines.com/education-center/social-security-planner/

Description. This retirement planner guides the user through the following four steps: (1) Who's included (current or former spouse) on your retirement journey? (2) When do you plan to start Social Security? (3) Can you get more from Social Security? (4) Your Social Security Plan. The tool highlights claiming strategies that will maximize the user's lifetime Social Security benefits. The planner had over 80,000 visitors in 2015 (Leticia Miranda, Public Relations; e-mail message, March 8, 2016).

User inputs. In step 1, the user enters name, date of birth, annual salary, gender, life expectancy relative to "average," and marital status (married, single [no previous marriage, divorced, widowed], and unmarried/in a relationship). A married user enters his or her spouse's information as well. Step 2 presents estimated annual Social Security benefit amounts for each claiming age from 62 through 70, with age 65 preselected as the default claiming age. By clicking on "Edit information," the user can select an alternative claiming age and is also able to enter actual benefit estimates (own and spouse's) directly from SSA's *Retirement Estimator* or the user's *my* Social Security account.

⁷ Because such scenarios are less common and might involve special provisions, they are not suitable for a general-use benefit calculator.

Calculator output. In addition to step 2's benefit estimates, step 3 presents a bar chart showing annual benefit amounts for the selected claiming age and the following 14 years, along with expected total lifetime benefits (including survivor benefits, if applicable). The tool enables users to analyze a different strategy that could yield higher benefits, which generally means delaying claiming to age 70. The tool accounts for both claiming-age and spousal-claiming strategies. Step 4 invites users to request a "retirement paycheck" that will provide advice on building a diversified retirement portfolio based on Social Security, 401(k) plans, individual retirement accounts, pensions, and other assets. Users are presented with a printable action plan to maximize Social Security benefits, which includes the month and date on which to start benefits.

Advantages. Users can create and compare custom strategies for one- or two-person households in various marital and survivor statuses. The action plan provides the specific claiming date that would maximize lifetime Social Security benefits for the selected life expectancy assumption. The initial selection and the proposed strategy are shown side by side to highlight the effects of different claiming ages on annual and lifetime benefits.

Limitations. Although most people think of Social Security benefits in terms of monthly amounts, the tool presents benefit amounts in annual and lifetime terms. In addition, it increases future income from work at a constant rate. In step 2, the means of selecting a claiming age other than the default (clicking on the words "Edit information") may be overlooked by some users because those words are not prominently displayed. A user may mistakenly assume that he or she has changed the claiming-age selection and thereby be confused when step 3 shows results for age 65. Because the tool focuses on maximizing lifetime Social Security benefits, it may not provide the best advice for individuals who may need to claim earlier than FRA.

Bankrate, Social Security Calculator

http://www.bankrate.com/calculators/retirement/social-security-benefits-calculator.aspx

Description. This simple single-page tool allows users to estimate their future Social Security benefits based on a few inputs. The number of visitors to Bankrate's *Social Security Calculator* in 2015 was unavailable. Overall, the Bankrate website had more than 15 million visitors each month in 2015 (Kayleen Yates, Vice President, Corporate Communications; e-mail message, April 6, 2016).

User inputs. Current age, age of retirement, annual income, and expected annual average salary increase and inflation rate (in percent). Married users can also check a box that adds a nonworking spouse's benefit (the total is increased to include 50 percent of the retired worker's benefit for the spouse). The inputs can be entered manually or by using slide bars to select the desired values.

Calculator output. A narrative summary of monthly and annual Social Security benefits, projected income in the final year of work, and the benefit amount as a percentage of final income. An accompanying bar chart shows the estimated monthly Social Security benefit for each claiming age from 62 through 70. Definitions are provided for each input. Clicking a "View Report" button displays a popup summarizing all of the results, including a tabular presentation of the bar chart, showing the monthly and annual benefit amounts at each claiming age from 62 through 70.

Advantages. Users can view the information in a variety of ways without leaving the calculator's single page. It is easy to use and navigate and offers a custom printable document with all the outputs. It allows the user to choose and edit future salary and inflation rate assumptions. Unlike the other tools reviewed, Bankrate's calculator provides default entries in the query fields so that a user can view a sample result without having to enter inputs.

Limitations. Although the calculator provides estimated spousal benefits for a nonworking spouse, it does not allow the user to enter information for a working spouse. Some users may not be familiar with the expected inflation rate and expected salary increase inputs, and may not enter realistic or useful values. The input definitions are located relatively far from the input query fields. Benefit estimates may not be highly accurate for some workers, particularly those with intermittent earnings or who are early in their careers. The tool does not specify the FRA for the "current age" input unless the user selects "View Report." Benefit estimates are shown in future (current) dollars, while all other tools show benefits in today's (constant) dollars. Some users might not understand the distinction between current and constant dollars and therefore misinterpret the estimates.

Comparison of Social Security Benefit Estimates Produced by the Online Claiming Tools

Table 2 compares the Social Security benefit estimates from each of the five non-SSA online tools for two hypothetical workers at three potential claiming ages. The first hypothetical worker is a 35-year-old man earning \$100,000 per year and the second is a 55-year-old woman earning \$40,000 per year. We omit SSA's *Retirement Estimator* because it uses an individual's actual earnings record; it therefore cannot work for hypothetical simulations, even though it produces the most accurate benefit estimate of all the tools for an actual worker. Although several of the tools allow users to enter their benefit estimates from the SSA *Retirement Estimator*, this analysis compares benefit estimates produced by entering uniform inputs directly into each tool.

The Social Security benefit estimates are roughly similar, as one might expect, given that they use the same benefit formula. Nevertheless, they do vary from tool to tool. The discrepancies are due to differences in the tools' underlying default assumptions, summarized in the following section.

Underlying Assumptions

SSA's *Retirement Estimator* (not included in Table 2) uses actual earnings records to generate benefit estimates at age 62, FRA, and age 70. Users can customize their estimates by changing their stop-work age and expected future earnings. To use the tool, individuals must have enough Social Security credits to qualify for benefits. They cannot use it if they are currently receiving benefits on their own Social Security record, awaiting a decision about their own Social Security or Medicare benefits, aged 62 or older and receiving benefits on another person's Social Security record, or eligible for a pension based on work not covered by Social Security.⁸ Individuals receiving only Medicare benefits can use the tool to get benefit estimates.

SSA's *Retirement Estimator* calculations are based on average earnings over a working lifetime. The *Estimator* assumes that an individual who worked last year will continue to work and earn about the same amount as was entered for last year (or the estimated annual future earnings amount the user can enter for custom scenarios). Generally, the older the individual and the closer he or she is to retirement, the more accurate the benefit estimates will be, because they are based on a longer work history with fewer uncertainties such as future earnings fluctuations and law changes. SSA cannot provide the individual's actual benefit amount until he or she applies for benefits. That amount may differ from the estimates for various reasons such as fluctuating earnings, an unanticipated decision to continue to work, cost-of-living increases, legislative changes, previous military service, employment not covered by Social Security, deduction of Medicare premiums, and eligibility for benefits based on a current, divorced, or deceased spouse.

⁸ Workers who are not required to pay Social Security payroll taxes—for example, those eligible for state and local government pensions—are not covered by Social Security.

Table 2.

Social Security monthly benefit estimates provided by each of five online benefit calculators for two alternative scenarios, by claiming age (2015 dollars)

Scenario and calculator	62 (EEA)	67 (FRA)	70
Scenario 1: 35-year-old man ^a with \$100,000 salary			
CFPB	1,835	2,606	3,231
CRR at Boston College	1,700	2,400	3,100
AARP	1,737	2,481	3,076
Financial Engines	1,925	2,750	3,408
Bankrate ^b	1,818	2,240	2,542
Scenario 2: 55-year-old woman ^c with \$40,000 salary			
CFPB	959	1,362	1,689
CRR at Boston College	1,000	1,500	1,900
AARP	1,058	1,512	1,874
Financial Engines	1,042	1,492	1,833
Bankrate ^d	926	1,141	1,295

SOURCE: Online calculators based on authors' inputs entered in 2015.

NOTES: All calculators except Bankrate present estimates in 2015 (constant) dollars. For ease of comparison, amounts shown for Bankrate have been adjusted from future (current) dollars to 2015 (constant) dollars assuming 3 percent inflation.

Because SSA's *Retirement Estimator* requires a specific individual's personal information and draws on that individual's actual earnings history, it cannot estimate benefits for a hypothetical individual.

For birthdates in 1960 or later, the FRA is 67.

- a. Birthdate June 15, 1980.
- b. Current-dollar estimates are \$3,921 at age 62; \$5,601 at age 67; and \$6,945 at age 70.
- c. Birthdate June 15, 1960.
- d. Current-dollar estimates are \$1,139 at age 62; \$1,627 at age 67; and \$2,017 at age 70.

CFPB's *Planning for Retirement* tool produces the same estimated benefit at FRA that SSA's *Quick Calculator* does (both calculators assume that the person stops working the year before reaching FRA). The CFPB tool then uses the pre-FRA reduction factors and post-FRA delayed retirement credits described earlier to calculate benefits for the non-FRA claiming ages from 62 through 70. For example, for scenario 1 at claiming age 70, CFPB estimates a monthly benefit of \$3,231 (24 percent higher than the FRA benefit of \$2,606). The CFPB estimates for all non-FRA claiming ages differ slightly from those produced by the *Quick Calculator* because CFPB assumes the user continues to work until reaching FRA and its tool does not change the assumed earnings levels for alternative claiming ages. By contrast, the *Quick Calculator* assumes that the person continues working until the chosen claiming age. This difference in underlying assumptions causes the CFPB tool to estimate higher benefits at pre-FRA claiming ages and lower benefits at post-FRA claiming ages relative to the *Quick Calculator*.

CRR at Boston College's *Target Your Retirement* tool also uses the same formula as SSA's *Quick Calculator*, but in estimating the user's earnings history, it assumes that prior earnings grew at the same rate as national average earnings (as measured by SSA's average wage index). It further assumes that the user's current earnings remain the same (adjusted for inflation) until the selected retirement age. Like SSA's *Quick Calculator*, the CRR tool assumes that the user works until the year Social Security benefits are claimed. The tool caps earnings at the 2009–2011 Social Security taxable maximum of \$106,800. (The 2016 taxable maximum is \$118,500.) Using these assumptions to produce an earnings history for the user, the tool then follows the standard Social Security benefit formula to generate its benefit estimates

AARP's *Social Security Benefits Calculator* estimates the user's earnings history based on the current salary entered. In addition, the tool assumes annual inflation-rate and salary increases of 2.5 percent, although the user can change these two assumptions. Because Social Security benefits are based on an individual's lifetime earnings, the accuracy of AARP's estimate will vary depending on whether the user had lapses in employment, worked less than full time, or had significant earnings fluctuations. This is true for all tools other than the SSA *Retirement Estimator*. AARP benefit estimates are not adjusted for inflation. Calculations are based on 2014 federal tax and Social Security laws (the 2014 taxable maximum was \$117,000).

Financial Engines' *Social Security Retirement Calculator* estimates Social Security benefits and produces claiming strategies for (1) a single person eligible for earned benefits only, (2) a single person eligible for earned benefits and/or benefits based on a previous marriage, (3) unmarried couples eligible for earned benefits only, and (4) a married person and his or her current spouse. Estimated benefits are based on current Social Security laws, rulings, and formulas available from SSA. The benefits are given in today's (constant) dollars, which means that they have been adjusted for inflation. The discount rate that is used to calculate the expected total lifetime benefits is 0 percent. In addition, some estimates may be prorated as partial-year amounts because certain benefit types may not be received in every month of the year.

Bankrate's *Social Security Calculator* assumes that only one spouse works and rounds the user's FRA to the next highest full year. For example, the FRA for a user born in 1957 is 66 and 6 months, but Bankrate's tool assumes the FRA is 67. The Bankrate tool uses the 2015–2016 Social Security taxable maximum of \$118,500 to cap higher earnings. The tool also assumes future annual increases in earnings and inflation of 3 percent, although the user can change these defaults. Of the tools reviewed here, only Bankrate's shows estimated benefits in future dollars, as opposed to today's dollars.

A good retirement planning tool must find the right balance between ease of use and the computational rigor needed to provide useful estimates. All the tools estimate users' Social Security benefits based on the age and earnings they enter, but because of different underlying assumptions and formulas, they produce varying estimates for the same claiming ages. With the exception of CFPB and Bankrate, the tools that account for additional sources of retirement income allow users to enter the benefit estimates provided by SSA. By allowing users to change the default assumptions for inflation and expected salary increases, some tools provide results that might be more realistic. However, users should exercise caution with those results, particularly if they are uncertain about the assumptions they change. Users of online calculators should understand why they may receive different benefit estimates from different tools and should compare them directly with those provided by SSA's *Retirement Estimator* or via their *my* Social Security accounts.

Conclusion

Planning can help ensure a secure and comfortable retirement. Social Security is a crucial part of retirement security, but deciding when to start benefits can be complicated. An individual can choose to start retirement benefits as early as age 62, and benefits increase for each month claiming is delayed until reaching age 70. A person's marital status can also complicate the decision. For example, survivor beneficiaries can choose to start survivor benefits at any age from 60 to their survivor FRA and can make a separate decision about when to start their own retired-worker benefits. For a married individual, the claiming decision can affect the spouse's benefit amount if the spouse ultimately survives the claimant. The Understanding America Study found that Americans want more information from SSA on their retirement benefits and that a majority of retired workers has sought information on the best age to claim benefits. Because SSA maintains a neutral stance on the claiming decision, many other government, academic, nonprofit, and private groups have developed Social Security benefit calculators and tools for

analyzing retirement finances to provide clarity on individuals' retirement decisions. The calculators may be very informative for older workers who have an established earnings record, but less so for younger workers whose future earnings may be unpredictable.

The common feature of all the tools analyzed here is that they estimate Social Security benefits based on the user's date of birth and current earnings. All of them also show how monthly benefits are lower if claimed before FRA and higher if claimed after FRA. The tools enable users to understand how their claiming decision can affect their monthly and lifetime benefit amounts and therefore their well-being in retirement. With some of the tools, additional inputs allow users to see how spousal benefits can affect total household Social Security benefits. In general, the tools that require more user inputs provide more comprehensive retirement information and show how Social Security benefits are one part of potential retirement income, along with savings, pensions, and housing assets.

When using an online planning tool, it is important for individuals to consider the source of information. SSA's *Retirement Estimator* provides very accurate information based on the individual's actual earnings record but does not recommend the best claiming age for individuals or best claiming strategies for couples, nor does it consider other sources of retirement income. Other tools from government, non-profit, and academic organizations educate the public and provide guidance in a neutral manner. Tools provided by for-profit companies also educate their users, but they may also have an interest in selling financial advice or more individualized retirement-planning products. Regardless of the source, users should understand that the benefit estimates produced by each tool are based on differing underlying assumptions, which produce varying results even when the same inputs are entered.

References

- Dorman, Taft, Barry S. Mulholland, Qianwen Bi, and Harold Evensky. 2016. "The Efficacy of Publicly-Available Retirement Planning Tools." https://ssrn.com/abstract=2732927.
- Helman, Ruth, Craig Copeland, and Jack VanDerhei. 2016. "The 2016 Retirement Confidence Survey: Worker Confidence Stable, Retiree Confidence Continues to Increase." Issue Brief No. 422. Washington, DC: Employee Benefit Research Institute. https://www.ebri.org/pdf/briefspdf/EBRI_IB_422.Mar16.RCS.pdf.
- Muldoon, Dan, and Richard W. Kopcke. 2008. "Are People Claiming Social Security Benefits Later?" Issue in Brief No. 8-7. Chestnut Hill, MA: Center for Retirement Research at Boston College. http://crr.bc.edu/wp-content/uploads/2008/05/ib_8-7.pdf.
- Munnell, Alicia H., and Anqi Chen. 2015. "Trends in Social Security Claiming." Issue in Brief No. 15-8. Chestnut Hill, MA: Center for Retirement Research at Boston College. http://crr.bc.edu/wp-content/uploads/2015/05/IB_15-8.pdf.
- Powell, Robert. 2010. "Retirement Calculators Don't Factor in Risk of Outliving Assets." *MarketWatch* (May 21). http://www.marketwatch.com/story/retirement-tools-overlook-major-risk-2010-05-21.
- ——. 2015. "The Pros and Cons of Retirement Calculators." *MarketWatch* (May 1). http://www.marketwatch.com/story/the-pros-and-cons-of-retirement-calculators-2015-05-01.
- Purcell, Patrick J. 2016. "Employment at Older Ages and Social Security Benefit Claiming." *Social Security Bulletin* 76(4): 1–17.
- [SSA] Social Security Administration. 2015. "Program Operations Manual System (POMS) Section GN 00204.039. Explaining the Month of Election (MOEL) Options." https://secure.ssa.gov/apps10/poms.nsf/lnx/0200204039.
- ——. 2016a. *Annual Statistical Supplement to the Social Security Bulletin, 2016* (preliminary data). SSA Publication No. 13-11700. Washington, DC: SSA. https://www.socialsecurity.gov/policy/docs/statcomps/supplement/2016/index.html.
- ——. 2016b. "When to Start Receiving Retirement Benefits." SSA Publication No. 05-10147. https://www.socialsecurity .gov/pubs/EN-05-10147.pdf.
- Tresidder, Todd. 2011. "Can You Trust Retirement Estimators?" Advisor Perspectives (August 16).
- Turner, John A. 2014. "Why Don't People Annuitize? The Role of Advice Provided by Retirement Planning Software." *The Journal of Retirement* 1(4): 129–134.