

DETAILED METHODOLOGY

Fidelity Planning & Guidance Center
Retirement Analysis

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FIDELITY PLANNING & GUIDANCE CENTER RETIREMENT ANALYSIS

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1. OVERVIEW

The primary objective of the Planning & Guidance Center Retirement Analysis (the "Tool") is to provide you with education about your current savings, estimated future contributions, and the potential impact they may have on your estimated income in retirement. The Tool allows you to explore hypothetical what-if scenarios to potentially improve your retirement planning strategy.

This analysis is provided to you for informational purposes only by either Fidelity Brokerage Services LLC, a registered broker-dealer, or its affiliate, Fidelity Personal and Workplace Advisors LLC, a registered investment adviser, depending on your relationship with Fidelity Investments. Each Tool session is a one-time, nondiscretionary service, which means that it is up to you to implement your planning strategy if, and as, you choose. We suggest that you revisit the Tool periodically and, in particular, when your financial circumstances change. Please consult your tax advisor or investment professional, if applicable.

IMPORTANT: The projections or other information generated by the Tool regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results. Results may vary with each use and over time.

Limitations of Tools

The Tool does not make predictions of future market conditions, or predict or project the performance of actual investments or actual holdings in your selected accounts. Instead, the Tool uses historical returns (based on indexes, not actual holdings in your accounts) to estimate potential income in retirement. Past performance is no guarantee of future results. Also, it is not possible to invest directly in an index. Performance returns for actual investments will generally be reduced by fees and expenses not reflected in the hypothetical illustrations.

All calculations and results are purely hypothetical in nature and will not affect your actual accounts. You are responsible for your own investment and planning decisions, and you may accept, reject, or modify any results obtained through the Tool.

Fidelity may incorporate certain personal or financial information into the Tool which you and/or your workplace savings plan sponsor or a third party, such as another financial institution, have previously provided to Fidelity or its affiliates. You should verify the continued accuracy of any such information.

Keep in mind that the illustrations reflected in the Tool are current as of the date provided, based in part on data obtained from multiple sources, including third-party sources. Any results provided are based on certain quotes and other pricing data that the

Tool obtains from Fidelity and third parties on a periodic basis. Results are also based on the value of your accounts and other income sources. The estimate of potential Social Security income is based, in large part, on your reported compensation. Because these values change over time, your results may change if you use the Tool more than once. If you model changes to your plan but do not implement those changes soon after leaving the Tool, you should recalculate your Retirement Analysis if you decide to put your modeled changes into action. It is important to remember that the asset and income amounts that the Tool calculates are approximate, as is much of the information entered into the Tool. Much of this information is based on what you know today, but also reflects assumptions regarding how the situation may change in the future. These assumptions cover future market returns, inflation, income, asset growth, tax assumptions, and certain assumptions about your personal situation.

The Tool may overstate or understate the impact of taxation on your withdrawals as a result of the Tool's assumptions. For example, the Tool treats non-Roth after-tax balances as subject to ordinary income tax upon withdrawal, thereby overstating taxes and understating available income. Additional details are available below.

Who Should Not Use the Tool

The Tool takes into account certain tax rules that are primarily based on the assumption that a person has only a U.S. tax liability. It also assumes that information about any spousal relationship will continue until the death of that person.

There may be situations where you should consider creating separate plans for each individual. The Tool assumes that you and the "spouse/planning partner" can file a federal tax return as "Married Filing Jointly." It also assumes that you and the "spouse/planning partner" qualify for certain Social Security benefits, transfer-tax marital deductions, and other benefits to which only individuals qualifying as "spouses" under federal tax or other law may be entitled. These assumptions may not be appropriate in the context of planning with "planning partners," and the Tool results may therefore not be appropriate if "planning partner" rather than "spouse" information is entered. The following tax circumstances are some, but not all, of the reasons you may want to consult your tax advisor or a Fidelity Representative before using this tool. The outputs may not be applicable if you:

- Have a significant amount of margin debt
- Have a foreign tax liability
- Are subject to alternative minimum tax (AMT)
- Are in court/legal proceedings (divorce, probate, etc.) where final asset amounts are in question

2. USER PROFILE INFORMATION

The Tool leverages user profile data for display purposes and for inputs into calculations and analysis. The data may originate from recordkeeping systems and/or be manually entered by the user. New users will have certain data input fields (see below) prefilled. All data inputs should be validated for accuracy and completeness.

Time Horizon Data

The Tool defines your retirement time horizon as the years between your retirement age and your planning age. If you are planning with a spouse or planning partner, retirement starts in the earlier retirement year and continues until the later planning year. If one of you is not working, but you don't consider your household retired, you should select the "Neither" option when prompted for retirement status.

- **Retirement Age:** For new Tool users, the Retirement Age field is prefilled with the age the user is eligible for a full Social Security payment (referred to as a person's "Full Retirement Age" by the Social Security Administration).
- **Planning Age:** For new users, the planning age (end of plan age) is prefilled with the user's 25% mortality age. The mortality age is based on the user's date of birth and gender, and represents the age to which you have a 25% chance of living. The source for this estimate is the Society of Actuaries RP-2014 Mortality Table projected with Mortality Improvement Scale MP-2017 as of 2018.

Expenses

The amount which you've selected for your expenses plays an important role in the analysis of the Tool. The Tool's analysis is based primarily on your ability to cover your expense amount throughout your plan's time horizon. Expenses can be entered at the approximate level, or at the expense category level using the budget worksheet. If you enter your expenses at the approximate level, the Tool will assume the amount you enter remains constant throughout your plan, changing only for cost-of-living adjustments based on the Tool's general inflation rate of 2.5%. If you expect your expenses to fluctuate throughout your retirement, you can model the variance using the budget worksheet.

For users greater than five years from retirement, there is the option within the Tool to have retirement expenses estimated.

Default Expense Amount Calculation:

Step 1: Determine an expense amount which replaces 85% of the user's estimated pre-retirement compensation. We take your current income (which includes salary, commission, and bonus, as applicable) and grow it at a rate of 1.5% over inflation from now until retirement. The value at retirement is multiplied by 85% and taxes are subtracted. This value is reverted to today's dollars and divided by 12 to get the monthly value of estimated expenses at retirement.

Step 2: Apply an adjustment factor to the value calculated in Step 1. Adjustment factors are based on household income, and use an assumption that spending patterns in retirement vary by pre-retirement income. For example, households with significantly higher pre-retirement income may not need to replace 85% of their income, and in this case the adjustment factor would reduce their target to a rate below 85%. The Tool provides the ability to reduce or increase this amount based on your expected spending habits in retirement.

Health Care Expense Inflation Assumptions

The Tool makes the following inflation assumptions and does not allow you to change these inflation rates.

- **Health Care Costs:** The default inflation rate of health care costs is a schedule of rates which start at 4.9% for some time and slowly decrease to general inflation, based on Fidelity research.
- **Long-Term-Care Insurance Premiums:** The default inflation rate of long-term-care insurance premiums entered in the Budget Worksheet is 0%. This figure is based on the assumption that your insurance premiums are fixed and level.

Income Sources

Income sources are used within the Tool for the purpose of analyzing your retirement goal. The amounts may be pre-populated from recordkeeping systems or entered manually, and all inputs should be validated. Fidelity is not able to verify the accuracy, timeliness, or completeness of the data reflected for any manually added retirement income sources. Fidelity is not responsible for the accuracy of any values provided by your employer.

Compensation Income

Compensation Income in the Tool is divided between Salary, Bonus, and Commission. Compensation data entered into the Tool is used for estimating retirement income, and for default value for estimates of tax rates and retirement expense. For new users of Workplace plans recordkept at Fidelity, your compensation data may be pre-populated. Once you have used the Tool, your compensation data is saved and will no longer be pre-populated. If your compensation changes, you should update the Tool.

Salary Growth Rate

The Tool defaults to a salary growth rate that equals the Tool's inflation rate plus 1.5%. The salary growth rate is applied to your salary plus any applicable bonus and commissions you enter. This figure is derived from data from the Department of Labor and the U.S. Census Bureau. Please see the "Dollar Values: Future vs. Current" section for additional details on the current inflation rate used in the Tool.

Social Security Benefits

The Social Security retirement benefit estimated by the Tool is based on your date of birth, your most recent earned income amount, and the retirement age you enter (the Old Age and Survivor's Insurance [OASI] program retirement benefits' commencement age may be no earlier than age 62 and no later than age 70). The estimate is not impacted by account balances, contribution rates, or asset mix; market conditions do not affect the calculation of potential Social Security income. The estimate is impacted by salary growth. So if an individual experiences a different salary growth rate than the Tool assumes, the Social Security benefit may be different. Surviving spouses can start taking early Social Security by the age of 60. Surviving spouses who are also disabled can begin taking early Social Security by the age of 50, but only if the recipient qualifies for disability payments. Social Security retirement benefits are adjusted by the application of a Cost of Living Adjustment (COLA) increase defined in a federal legislative enactment. The Tool assumes increasing future Social Security retirement benefits using the Tool's default inflation rate, which is updated from time to time. When the retirement age you enter is the same as your Full Retirement Age, as defined by

the Social Security Administration (SSA), a default benefit amount is retrieved from a table provided annually by Fidelity Actuarial Services. If the defined retirement age you enter is younger than the Full Retirement Age as defined by the SSA, the Full Retirement Benefit is adjusted down to acknowledge an early benefit start date. Benefits can start as early as age 62 for individuals with Full Retirement Ages of 65, 66, or 67. The further a benefit start date is from the Full Retirement Age, the greater the reduction will be; the reduction currently can reach a maximum of approximately 30%.

Notes:

- Early commencement benefit reductions are permanent.
- An SSA reduction table is used to calculate the adjustment. If the retirement age you enter is older than the Full Retirement Age as defined by the SSA, the Full Retirement Benefit is adjusted upward to acknowledge a delayed benefit start date. Benefits can be deferred up to age 70 for individuals with Full Retirement Ages of 65, 66, or 67. The later a benefit start date is from the Full Retirement Age, the greater the premium is; the deferral can result in a premium currently reaching a maximum of approximately 32% of the Full Retirement Benefit. Deferring benefits beyond age 70, however, will not increase the benefit any more.

Notes:

- Deferred commencement benefit premiums are permanent.
- An SSA premium table is used to calculate the adjustment. If you earn income while receiving Social Security benefits and you are under your Full Retirement Age, your benefits may be reduced. After you reach your Full Retirement Age, earned income should not reduce your benefits.

If you have obtained an estimate of benefits directly from the Social Security Administration, you may prefer to enter that amount. If you do not expect to receive Social Security or want to calculate a retirement income plan based on other sources alone, enter \$0 for the amount.

For more information, visit the Social Security Administration website at www.ssa.gov. Please consult your tax advisor if you have any questions regarding the taxability of Social Security income. See also "Tax Calculations and Assumptions" for additional details on material tax assumptions related to Social Security income and how the Tool calculates estimated income taxes on Social Security income.

Work in Retirement/Recurring Income Source

The Tool assumes all such income is taxed at ordinary income tax rates in the year it is earned. This income, after taxes are withheld, is assumed to be invested in a hypothetical taxable account and made available to pay retirement expenses (see "Section 4. Calculations and Results" for information as to how this income is assumed to be invested).

One-Time Event

The One-Time Event income source within the Tool is used to model an amount you are expecting to receive as a lump sum (e.g., inheritance, proceeds from the sale of real estate). The Tool provides the ability to designate whether the amount will be taxed in the year it is received, or if withdrawals will be tax free. There is

also the option to specify an annual growth rate for the entered amount. If a growth rate is entered, the amount will be compounded annually until the specified age, and will not be reduced for inflation. If the growth rate is not entered, the income amount at the specified age will equal the current balance. This income is assumed to be invested in a hypothetical taxable account and made available to pay retirement expenses.

Defined Benefit Pension Plans

Any defined benefit pension plans recordkept by Fidelity or aggregated through a third-party provider are automatically included in the Tool as retirement income, provided you also have a Fidelity 401(k), 403(b), or 457(b) account. The benefit listed initially defaults to the amount you would receive if your plan sponsor continued the plan under current provisions until retirement, you were fully vested, worked at the company offering the benefit until the plan's normal retirement age, and received a salary increase each year of 3%. This may not reflect your actual experience.

For Single Life Annuity and Joint and Survivor pension options, the Tool assumes the benefit will continue for your or your survivor's life. Please consult your tax advisor if you have any questions regarding the taxability of your pension benefit. See "Tax Calculations and Assumptions" for additional details on material tax assumptions related to pension benefits and how the Tool calculates estimated income taxes on pension benefits.

For purposes of estimating the effect of federal, state, and local income taxes, the Tool uses the following assumptions for qualified and nonqualified defined benefit pension plans:

- All pensions recordkept at Fidelity or aggregated through a third-party provider are assumed to be fully taxable upon distribution.
- FICA tax withholding on nonqualified pension plan payments is not reflected. FICA tax is normally withheld on nonqualified pension plan payments, so if you are receiving or might receive nonqualified plan payments, the Tool might overstate net amounts available for your retirement income.
- Any lump-sum values reflected will be treated as having been rolled over from a qualified plan to an IRA for purposes of estimating your retirement income in the Tool, notwithstanding that the lump sum may be a nonqualified pension plan payment. Payments under nonqualified pension plans cannot be rolled over to a tax-deferred account.

Estimates of future pension benefits are not adjusted for the Tool's inflation rate. Any lump-sum values reflected will be treated as an account in the "Asset Allocation" section for purposes of calculating your retirement income in the Tool. Please consult your tax advisor if you have any questions regarding the taxability of your pension benefit.

Income Annuities

Certain income annuities you currently hold that were purchased through Fidelity Insurance Agency, Inc., may be automatically assigned to your retirement goal and hypothetical future income amounts illustrated in your analysis.

Income received from other income annuities you currently hold must be manually entered by you.

It is important to note that when an income annuity you currently hold is assigned to your retirement goal (by you or the Tool), the Tool makes certain assumptions that may not be accurate for your specific annuity contract. This may have a significant impact on the analysis the Tool conducts and the results it displays about your retirement preparedness. For example:

- In illustrating future income payments from an annuity that is currently paying or will pay income entirely on a fixed basis (as opposed to variable), the Tool does not factor in a cost of living adjustment (“COLA”). Instead, the Tool assumes that future payments will equal the last payment received, or if payments have not yet started, the first expected payment. To the extent your annuity has a COLA, this will result in the Tool underestimating the amount of income you may receive.
- In illustrating future income payments from an annuity that is making payments entirely on a variable basis, the Tool takes the last payment made and estimates future payments by comparing (i) the performance of an asset mix similar to the current asset mix of the accounts assigned to your retirement goal or of another asset mix that you select for modeling purposes (see “Calculations and Results—Historical Performance Analysis” below for more details), to (ii) a 3.5% annuity benchmark rate of return. The Tool illustrates annuity income as (i) increasing from one income annuity date to the next if the annualized asset mix return is greater than the assumed 3.5% benchmark rate of return, and (ii) decreasing if the annualized asset mix return is less than the assumed 3.5% benchmark rate of return. The Tool assumes your annuity has a 3.5% benchmark rate of return and a 0.6% annual annuity charge. Your annuity contract’s actual benchmark rate of return and annuity charge may be higher, and, if so, the Tool’s income projections will be overstated. Finally, the asset mix the Tool assumes for modeling purposes (see above) may differ significantly from the asset mix of the fund you have actually chosen within your annuity; in fact, it may not be possible to select a fund within your annuity contract that has an asset mix similar to the asset mix the Tool uses for modeling purposes.
- In illustrating future income payments from an annuity that is making payments on a combination fixed and variable basis, the Tool takes the last payments made and assumes all future payments will be based entirely on a variable basis, using the above methodology. This may result in the Tool significantly understating or overstating your potential future income.
- For all income annuities, the Tool does not factor in any guarantee periods or other death benefits; instead, the Tool assumes no income or assets are payable to beneficiaries other than your spouse at the end of your plan. To the extent your annuity has a guarantee period or other death benefit, this may result in the Tool underestimating the amount of assets left at the end of your plan.

For details on the features and terms of your annuity, please refer to your annuity contract.

Deferred Annuities

Information on certain deferred annuities you currently hold that were purchased through Fidelity Insurance Agency, Inc., may be automatically imported into the Tool. Depending on the specific annuity, it is either defaulted by the Tool as “assigned” or “unassigned” to your retirement goal in your Planning Profile. You have the option of changing the Tool’s default assignment.

It is important to note that when a deferred annuity is assigned to your retirement goal (by you or the Tool), the Tool’s analysis does not take into account the annuity’s:

- Insurance features—for example, guaranteed rates of return, guaranteed living benefits (i.e., guaranteed accumulation benefit or guaranteed withdrawal benefit), and guaranteed death benefits; or
- Fees—for example, mortality and expense risk fees, surrender charges, and market value adjustments.

This may have a significant impact on the analysis the Tool conducts and the results it displays about your retirement preparedness. For example:

- The Tool may illustrate withdrawals from your annuity that would have adverse consequences, such as surrender charges and reductions in a guaranteed withdrawal amount or guaranteed accumulation amount. The Tool will not factor in these consequences nor will the Tool’s output disclose them to you.
- By not taking into account a guaranteed withdrawal benefit of a deferred variable annuity (to the extent applicable), the Tool may show income stopping from the annuity when the contract value is depleted, when in fact it would continue.
- By not taking into account a guaranteed death benefit (to the extent applicable), the Tool may underestimate the amount of assets left at the end of your plan.
- The Tool will not recognize if you have already started taking guaranteed withdrawals, and will not draw down the account balance in its projections in anticipation of future guaranteed withdrawals. If you are currently taking or planning to take annual withdrawals from an annuity (or if you plan to annuitize an annuity), instead of assigning the annuity as an Account to your retirement goal in your Planning Profile, you may want to manually add the income in the Tool under “Additional Income Sources”—if you do so, you should select “Fixed Income Annuity.” Keep in mind that the Tool’s analysis will treat the income as a fixed payment that will not change, and will not take into account the living/death benefit features or surrender charges.
- The Tool will classify fixed deferred annuity assets as bonds, and will not recognize in its analysis your annuity’s guaranteed rate of return or guarantee period (meaning it will classify a fixed deferred annuity’s assets as bonds in perpetuity). This may result in the Tool significantly overestimating or underestimating your potential future contract value.

For details on the features and terms of your annuity, please refer to your annuity contract.

Accounts

Accounts at Fidelity	
<p>Accounts included in the Tool experience:</p> <ul style="list-style-type: none"> • Taxable Accounts • Traditional IRAs* • Roth IRAs* • 401(k) Plans (including Roth sources)* • 403(b) Plans (including Roth sources)* • 457(b) Plans (including Roth sources)* • 401(a) Qualified Plans* • Defined Benefit Pension Plan Payments (Joint and Survivor, Lump Sum and Periodic)* • Nonqualified Deferred Compensation Plans* • Health Savings Accounts • SEP-IRAs* • Keogh Plans* • Certain Income Annuities* • Certain Deferred Annuities* • Full View® Accounts • Manually Added Income Sources • Brokerage Accounts 	<p>Accounts excluded from the Tool experience:</p> <ul style="list-style-type: none"> • 457(f) Plans • Fidelity Advisor IRAs and Other IRAs (such as small business) • SDCB (self-directed cash balance)[†] • 501(c)(9) (Voluntary Employee Beneficiary Association) • 671 Grantor Trusts • RMBAs • 529

*These accounts may be automatically assigned to your retirement goal. If so, in some cases you have the option of unassigning them if you prefer not to include them.

[†]For self-directed cash balance, this is included as an unknown balance in a qualified plan.

Unsettled Transactions, Margin Balances, and Short Positions

NOTICE: Unsettled transactions, margin balances, and short positions affect account balances, holdings data, and analytical information presented. Please consult your account statement and any statements from the respective financial institution for accounts included in the Tool.

Unsettled transactions pending in any of your selected accounts, margin balances, and short positions at the time of your Tool interaction may materially impact the value of that account included in your analysis. For an unsettled equity purchase, the value may be materially overstated (and the investment risk understated due to cash remaining in the account), and for an unsettled equity sale, the value may be materially understated (and the investment risk overstated). Depending on the size and scope of such balances or transactions, you may want to exclude the affected account(s) from your analysis or, if included, consider the reliability of the Tool's results.

Authorized Accounts

Accounts that have been authorized to be associated with your Social Security number will also appear in the Tool. An authorized account is an account for which you have been provided inquiry (or higher) authorization by the account owner. The person who has provided authorization to you is either an individual (not a corporation, trust, or other entity) or an owner, trustee, custodian, fiduciary, or a joint or beneficial owner of a Fidelity mutual fund or brokerage account otherwise accessible through Fidelity. Note: It may not be

appropriate to include an authorized account in your retirement income plan if you have no ownership interest in that account. For security purposes, Fidelity accounts held by a spouse are not automatically included.

Full View® Accounts

A Full View® account (if this service is available to you) is an online account held at another institution from which you have authorized Fidelity to import your account data electronically. The Full View service is provided by Fidelity for your convenience. Fidelity controls which account types offered by the Full View service will be used with the Tool. The supported types may change over time. Fidelity is not responsible for the validity, legality, copyright compliance, or appropriateness of content gathered by the Full View service. Fidelity does not prepare, edit, endorse, or warrant, and makes no representations concerning the accuracy, timeliness, or completeness of information and data collected from third-party sources. Fidelity does not audit, confirm, or verify the information you provide or the information that you permit to be obtained through Full View. You are responsible for checking and updating this information for accuracy, timeliness, and completeness. Balances of accounts aggregated using Full View represent the most recent update and may not be timely or accurate if an update was not successfully completed or the information obtained during the refresh from the institution is otherwise not accurate or current. The "refresh" date may not be the same as the "as of" date, which is available directly through the financial institutions.

Manually Entered/Other Accounts

The Tool will display accounts and other income sources you have manually entered during a previous planning tool interaction, and also allows you to manually add an account or other income source, and, as appropriate, assign the account to your retirement income goal, provide general asset allocation information, assign a balance or market value (as appropriate) to the account or other income source, and include it in your analysis. Note that manually added account balances do not automatically update. You should review these balances with each Tool use to ensure that the most up-to-date values and information are used in your analysis.

Nonqualified Deferred Compensation Plans

If you participate in any nonqualified deferred compensation plans recordkept at Fidelity, the Tool automatically includes any amounts or positions credited to you under the plan. Any contribution elections you have made in your plan are not automatically included for planning purposes. The Tool uses any contribution amounts you enter in the Tool for yourself and/or your employer. If you do not enter contributions, a value of \$0 is used for contributions. No contribution limits are applied. The Tool assumes there are no predefined rules or elections for taking distributions from your nonqualified deferred compensation plans. The tool permits distributions from nonqualified plans at any time, and never forces distributions to occur. There are no required minimum distributions (RMDs) and no penalties for withdrawal before the scheduled distribution date (i.e., before age 59½). All distributions from nonqualified plans are assumed to be fully taxable. The tool assumes investment returns are applied to your balances based on your retirement plan asset mix. No specific plan rules for investment returns (such as fixed return rates) are considered. The tool also assumes FICA taxes are not due at retirement (or at any time of distribution), but are paid on an ongoing basis.

For your nonqualified deferred compensation plans that are recordkept at Fidelity, the actual value of your plan benefit at any point in the future is determined by any plan activity and any investment

increases or losses that may occur. Any defined contribution plan amounts or positions reflect an unsecured promise your employer has made to you to pay notional investment increases sometime in the future. If your employer becomes insolvent, you may not receive any money under these plans. Please refer to your plan materials for more details, including any distribution elections you may have made that may not be reflected in the Tool. (See "Tax Calculations and Assumptions" for additional details on how the Tool calculates estimated income taxes on nonqualified plan account assets.)

Updating Account Data

In the Tool, market values, account balances, and account positions for employer-sponsored workplace savings plans [e.g., 401(k), 403(b), and 457(b) plans] and personal investing accounts you hold at Fidelity will be automatically updated. Non-Fidelity accounts that are aggregated using Full View (if you have this service available to you) will also be automatically updated in accordance with the terms of that service. You are responsible for updating the data for any other accounts or income sources.

Contribution Limit Handler

When considering your retirement plan strategy and, more specifically, when deciding how much to contribute to a retirement account, consider plan rules, IRS limits, your individual situation, and any other future sources of income. Keep in mind that, generally, you can increase or decrease the amount of your contribution according to plan rules and IRS limits. You can request that contributions be stopped at any time. Employer contributions, if applicable, are subject to the plan's vesting schedule. Please see your plan rules for specific details on any nonqualified deferred compensation plans.

Each retirement account type has a set dollar-amount contribution limit, as specified in the charts to the right. You cannot contribute more than an account's contribution limit, as established by the Internal Revenue Code (IRC) and your plan's rules, if applicable. To address this, the Tool uses annual IRC contribution limits to check that all contributions are within the specified limit for that account. Limits used within the Tool may be subject to change by the IRS. Limit changes will be incorporated into the Tool; however, due to timing issues there may be instances when Tool limits and IRS limits differ. The Tool may also apply plan limits or contribution information applicable to your plan, if such information has been supplied by your workplace plan sponsor. Please consult your tax advisor for assistance. Tax-advantaged account assumptions are included below.

Account Contributions

- For workplace savings plans that are recordkept at Fidelity, contribution information may be imported into the Tool, as described in the "Contribution Limit Handler" section, above.
- The Tool applies IRC annual contribution limitations based on the type of account (see below for applicable contribution limits). The Tool considers any IRC limits that may apply to amounts you indicated that your employer will contribute to the plan on your behalf. IRC limits on after-tax employee contributions to employer-sponsored accounts are also considered by the Tool. Employer-sponsored plan rules and limits are not considered by the Tool when not provided by the plan sponsor. Please contact your plan sponsor for details. Contributions are assumed to stop at the indicated retirement age or when no longer permitted, whichever occurs earlier.

Contribution Limits for 401(k), 403(b), 401(a), and 457(b) plans

- If you are age 50 or older, the Tool considers catch-up contributions allowed under the Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA) for applicable accounts. However, the Tool

does not consider the last three years' contributions to 457(b) plan accounts or 15+ years-of-service contributions to 403(b) plan accounts. Employee elective deferral limits, including employee 401(k), 401(a), Roth 457(b), and 403(b) contributions, are as follows (if you are contributing to multiple 401(k), 401(a), and 403(b) plans, the Tool aggregates your contributions and applies a single limit):

Tax Year	If You're under Age 50	If You're Age 50 or Older
2021	\$19,500	\$26,000

- Employer/employee combined contribution limits cannot exceed the lesser of 100% of compensation or \$58,000 in 2021 (effectively \$64,500 when catch-up contributions are considered), indexed for inflation thereafter. For purposes of the nonelective contribution, annual compensation for 401(k) and 403(b) plans is limited to \$290,000 in 2021. This compensation limit also applies to the determination of the accrued benefit in a defined benefit plan.
- Note that if your 401(k) plan includes a retirement medical benefit account (RMBA), the Tool does not distinguish these assets and assumes all assets to be regular plan contributions.
- Note that if your 401(k) plan includes a cash balance plan, the Tool does not distinguish these assets and assumes all assets are subject to investment returns related to the associated asset allocations, with no fixed returns or credited amounts.
- The Tool assumes potential cost-of-living increases to applicable contribution limits after 2021, which will be indexed for inflation in \$500 increments. These contribution limits are inflation adjusted in accordance with specific rules outlined by the Internal Revenue Code, assuming the Tool's default inflation rate.
- Warning: While the Tool allows you to enter your own annual contribution amounts and, where applicable, employer contribution limits (excluding pensions), please remember that the outcome of the Tool is less meaningful if you enter unrealistic contribution amounts. The Tool will not permit modeling of contribution amounts in excess of IRC limits applicable to the selected account or, to the extent provided by your workplace plan sponsor, applicable plan limits.
- All contributions, whether made by you or your employer, to all tax-advantaged accounts are assumed to be immediately owned by you (immediate vesting).

Contribution Limits for Health Savings Accounts (HSA) and IRAs

Traditional and Roth IRA Annual Contribution Limits

Tax Year	If You're under Age 50	If You're Age 50 or Older
2021	\$6,000	\$7,000

HSA (Health Savings Account) Contribution Limits

Tax Year	If You're under Age 55	If You're Age 55 or Older
2021	\$7,200 (family)	\$8,200 (family)
2021	\$3,600 (single)	\$4,600 (single)

For HSAs, contributions are pretax, and permitted until you enroll in Medicare. The Tool assumes potential cost-of-living increases to applicable contribution limits after 2021. For calculation purposes, the Tool uses the family limit as the maximum allowed contribution, which may not be permitted if your HSA account is for single coverage.

3. TAX CALCULATIONS AND ASSUMPTIONS

Taxes can play an important role in how money grows over time. Given the same investments in the same proportions, assets in tax-advantaged accounts have the potential to grow faster than assets in taxable accounts, as the earnings in tax-advantaged accounts are not taxed until withdrawal, and in some cases not at all. However, while distributions from tax-advantaged accounts are often taxed at ordinary income tax rates, earnings on taxable accounts may be taxed at lower rates applicable to long-term capital gains, qualified dividends, and certain other types of income.

The Tool estimates federal, state, and local individual income taxes on, among other things, investment earnings, distributions from tax-free and tax-deferred retirement plans, Social Security, and any earned income or salary. It does not calculate actual tax liabilities or benefits and, therefore, should not be used for tax-planning or tax-reporting purposes. Rather, the tax calculations for any particular year are estimates based on information provided by you, tax

rate data supplied by third parties, and projected inflation adjustments to tax brackets, among other things. Any tax estimates and tax information provided are not, and should not be construed as, legal or tax advice. While reasonable efforts are made to use and maintain the most current rates, income tax brackets, and other tax rules for estimating taxes, there may be a delay between when new actual tax rates, brackets, and other rules become effective and when the Tool is updated to reflect them. For tax reporting, you should rely on the official tax forms mailed to you each year and your tax advisor's calculations for tax-reporting purposes. Consult your tax advisor regarding questions specific to your tax situation.

The Tool makes certain tax assumptions based on the types of incomes, accounts or other information entered. For each year of the projection of your financial plan, the tool estimates your effective tax rate based on projected taxable income. The effective tax rate includes an estimation of your total deductions by using Statistics of Income data provided by the Internal Revenue Service.

The Tool assumes the following classifications:

Taxable Accounts	Tax-Deferred Accounts/Plans & Annuities	Federally Tax-Free Accounts or Events	Other Taxable Income or Events
Brokerage Account	401(k) Plans (including SIMPLE 401(k) Plans and BrokerageLink® accounts within such plans)	529 College Savings Plan Account	Social Security Benefits
Mutual Fund Account	403(b) Plans	Roth IRAs ¹	Work in Retirement/ Recurring Income Source
Checking Account	457(b) Plans ³	Roth Source in a 401(k) Plan ²	One-time Events (taxable)
Savings Account	Profit Sharing Plans	Roth Source in a 403(b) Plan ² Roth Source in a 457(b) Plan ²	
	Traditional IRA	One-time Events (tax-free)	
	Rollover IRA	Health Savings Accounts (HSA)*	
	SEP-IRA		
	SIMPLE IRA		
	401(a) Plans		
	Keogh Plans		
	Money Purchase Plans		
	Defined Benefit Plans		
	Nonqualified Deferred Compensation Plans		
	Qualified Annuity		
	Nonqualified Annuity		
	Manually Added Self-Employed Plan		

* You should check with your state of residence for applicable state tax rules on distributions that do not require tax withholding at the federal level.

¹ A distribution from a Roth IRA is federally tax free and penalty free, provided the five-year aging requirement has been satisfied and one of the following conditions is met: age 59½, disability, qualified first-time home purchase, or death. Nonqualified distribution of earnings will be taxable and may also be subject to penalties. You should check with your state of residence for applicable state tax rules.

² Roth 401(k), Roth 403(b), and Roth 457(b) sources are part of a 401(k), 403(b), or 457(b) account. The Tool assumes the Workplace Savings Plan rules allow for withdrawals by source.

³ 457(b) plans include both governmental and nongovernmental 457(b) plans. 457(f) plans are not supported within the Tool.

Taxable Account Assumptions

For federal, state, and local income tax purposes, the Tool uses the following assumptions for taxable brokerage and mutual fund account assets [excluding self-directed brokerage accounts held within a tax-advantaged plan such as a 401(k)]:

- All realized capital gains are long-term capital gains.
- Realized gains and losses, interest income, dividend income, and other investment income are taxed annually.
- The Tool assumes a 20% turnover of assets each year, pro rata across all asset classes, so that each year, 20% of previously unrealized gains or losses become realized. This assumption will have the most impact on assets the Tool classifies as stocks.
- The Tool may overstate or understate the amount of after-tax proceeds available from sales of securities in taxable accounts because it assumes that the tax basis for each security is the fair market value of the security on the date the Tool is used. The actual adjusted tax basis of the securities in your taxable account often will be different from the fair market value of those securities on any given day. For example, if you have highly appreciated securities in your taxable account, the adjusted tax basis actually will be much lower than the fair market value, and you will be subject to capital gains tax on your net gain. Because the Tool assumes that the adjusted tax basis is equal to fair market value, however, its calculations would show that there was no taxable gain and that 100% of the sale proceeds were available to you. Conversely, if your taxable account holds securities that are currently in a loss position, the Tool will not take into account any tax benefit that may be generated upon a sale of those securities. The Tool does not consider any cost basis on company stock held in employer-sponsored plans.
- The portion of assets classified as stocks by the Tool are assumed to pay an annual dividend of 2% and are treated as qualified dividends.
- Potential applicability of five-year capital gains and foreign tax credit rules is not reflected.
- For checking and savings accounts, the Tool assumes all income is interest income and taxes it annually at ordinary income tax rates.

Tax-Deferred/Tax-Free Account Assumptions

Account Contributions

- For workplace savings plans that are recordkept at Fidelity (excluding nonqualified deferred compensation plans) your plan deferral information will be automatically imported into the Tool, including any employee pretax, Roth, non-Roth after-tax, and catch-up contributions. The Tool applies IRS annual employee elective deferral limits based on the type of account, and these will be included in the Tool's calculations. In some cases the plan sponsor has also provided plan rule information including matching, mandatory, and profit-sharing contributions, as well as plan minimum and maximum contribution limits, and these will be included in the Tool's calculations. Check the "Contribution Details" page of the account to see if your workplace savings plan has this information included.
- For individuals who enter annual tax-advantaged account contributions, the Tool applies IRS annual contribution limitations based on the type of account (see the "Contribution Limit Handler" section). Limits are tested for each account individually as you enter data in the Tool.

Except as provided above, any amount you enter in excess of the applicable IRS limit is not included in the Tool's calculations. The Tool considers any IRS limits that may apply to amounts you

indicated that your employer will contribute to the plan on your behalf (regardless of whether or not your plan is recordkept by Fidelity). IRS limits on after-tax employee contributions to employer-sponsored accounts are also considered by the Tool. Employer-sponsored plan rules and limits are not considered by the Tool when not provided by the plan sponsor; please contact your plan sponsor for details. Contributions are assumed to stop at the indicated retirement age.

- If you are age 50 or older, the Tool supports catch-up contributions. However, the Tool does not consider the last three years' contributions to 457(b) plan accounts or 15+ years-of-service contributions to 403(b) plan accounts.
- Note that if your 401(k) plan includes a retirement medical benefit account (RMBA), the Tool does not distinguish these assets and assumes all assets to be regular plan contributions.
- Note that if your 401(k) plan includes a Cash Balance plan, the Tool does not distinguish these assets and assumes all assets to be regular plan contributions.

Distributions/Withdrawals from Defined Contribution Plans, HSAs, and IRAs

Withdrawals from tax-advantaged retirement accounts are subject to the applicable provisions of the IRC and/or plan rules. Be sure you understand the implications and tax consequences of any withdrawal prior to initiating such transactions. Please consult your tax advisor, if applicable.

Distributions/withdrawals from tax-deferred accounts are assumed to be fully taxable as ordinary income. Note that if information relating to significant tax-deferred accounts to which nondeductible or after-tax contributions have previously been made is entered into the Tool, the tax analysis performed by the Tool may not be as meaningful as it would otherwise be.

The Tool applies early withdrawal penalties from tax-deferred account balances. Distributions taken before age 59½ from traditional IRAs, Roth IRAs, and employer-sponsored savings accounts [e.g., 401(k), 401(a), and 403(b) plans] may be subject to a 10% early withdrawal penalty. Withdrawals from certain employer-sponsored savings accounts are penalty free when the account owner leaves the employer in the year he or she turns age 55 or older. This age 55 exception does not apply to any type of IRA. The Tool assumes no early withdrawal penalty if you plan to separate from service with your current employer after age 55 or older. The Tool assumes no early withdrawal penalty after age 59½ for all other workplace savings plan assets. Note that for Roth sources in a workplace savings plan recordkept at Fidelity, the early withdrawal penalty is applicable to the earnings only on any Roth IRA or any Roth sources. If you indicate you are retiring at age 55 or older and your current employer's plan is a 401(k), 401(a), or 403(b) plan recordkept by Fidelity, the Tool will not assume a 10% penalty on any distributions taken in the year in which you turn 55 or older. For all other plans and accounts, the Tool assumes a 10% penalty unless the distribution is taken after you turn age 59½. Note that there are other applicable special exceptions to the 10% early withdrawal penalty that the Tool does not consider in its calculations. You may want to consult a tax advisor to learn more about withdrawal requirements.

- Distributions of pretax contributions from a tax-advantaged 401(k) or 403(b) workplace savings plan account or from a traditional IRA are generally taxable.
- The Tool assumes that all distributions of Roth assets will not be taxed at the state level. A distribution from a Roth IRA is federally tax free and penalty free, provided the five-year aging require-

ment has been satisfied and one of the following conditions is met: age 59½, disability, qualified first-time home purchase, or death. The Tool assumes that the workplace savings plan rules allow for withdrawal by source. Roth distributions that do not qualify for tax-free treatment may be subject to income taxes and may also be subject to a 10% penalty. The Tool does apply early withdrawal penalties. The Tool assumes the five-year holding period requirements have been met and does not apply taxes.

- For tax-deferred accounts that may hold both pretax and after-tax (deductible and nondeductible) contributions, the Tool assumes the balances in such accounts at the beginning of your planning period consist of all pretax assets. To the extent distributions constitute a return of after-tax or nondeductible contributions, the Tool will understate your after-tax income. For example, an IRA may have an account value of \$100,000, of which \$50,000 constitutes nondeductible (or already taxed) contributions. The Tool will assume that any amount distributed from the retirement account or source (in the case of a workplace savings plan) is taxable as ordinary income.
- The Tool assumes that, unless you are still working, after age 72 you and your spouse will be required to withdraw the IRS required minimum distribution (RMD) annually from your traditional IRA, rollover IRA, SEP-IRA, SIMPLE IRA, Keogh, and employer-sponsored savings plan accounts [e.g., 401(k), 401(a), 403(b), and 457(b) plans]. The Tool does not enforce the greater than 5% ownership rule on starting RMDs. The Tool does not apply any RMD rules to deferred annuities. It is assumed in the Tool that income annuities purchased with pretax money will satisfy the RMD rules for the portion of your assets used to buy the income annuity. For each year beginning in the year you or your spouse reaches age 72, the Tool calculates an estimated RMD amount needed to comply with the IRS requirements (for applicable retirement accounts indicated, or those accounts for which you have entered data).
- For Roth 401(k), 403(b), and 457(b) sources, the Tool assumes those monies are rolled over to a Roth IRA and therefore are not subject to the RMD rules. In most cases, the Tool calculates your RMD under the uniform distribution method relying on the Uniform Lifetime Table, which uses the joint life expectancy of you and a beneficiary deemed to be 10 years younger than you for each year until the end of your planning age.
- One exception to the above RMD calculation method occurs when you indicate that you are married and your spouse is more than 10 years younger than you. The Tool then assumes that your spouse will be your sole beneficiary each year for the entire year and, as a result, it will then estimate your RMD under the spousal exception method, which uses the life expectancy of you and your spouse as reflected in the Joint and Last Survivor Table. If your spouse's planning age ends before your own, the uniform distribution method will then be used until the end of your planning age. The Tool uses the same methodology to calculate RMDs on your spouse's retirement accounts, where applicable.
- For tax-advantaged accounts that are inherited, the Tool estimates required minimum distributions (RMDs) by assuming you are eligible to take such distributions over your own life expectancy and using a distribution factor in the IRS's Single Life Expectancy Table based on your projected age each year. The calculation of RMDs for inherited accounts is highly specific to your individual situation. If you have such an account, you should consider consulting an advisor for more details.

- After RMD amounts are withdrawn from retirement accounts (excluding pension plans), the Tool assumes these savings are redeposited in a hypothetical taxable account and are available to meet retirement goal expenses. You should consult your tax or financial advisor for assistance with your specific circumstances. For plans recordkept at Fidelity, the Tool does not automatically consider any pre-1987 balances.
- The Tool does not consider the possibility of electing Net Unrealized Appreciation (NUA) tax treatment on company stock distributed from a workplace savings plan.
- The Tool assumes that distributions from HSAs are for qualified medical purposes and thus are tax free. Contributions, investment earnings, and distributions are tax free for federal tax purposes if used to pay for qualified medical expenses, and may or may not be subject to state taxation. For additional information, see IRS Publication 969. The administration of an HSA is an individual responsibility; see a tax professional for more information.
- If you choose to manually create an account by selecting the type "Self-Employed Plan," the Tool will treat this account as tax deferred and use the contribution limits of a SEP-IRA.

Taxation of Annuities

- For tax-deferred annuities that may hold both pretax and after-tax (deductible and nondeductible) contributions, the Tool assumes the balances in such accounts at the beginning of the planning period consist of all pretax assets. Annuity distributions will be considered taxable by the Tool and taxed at ordinary income tax rates.
- Some states charge a state tax premium either on the purchase amount of a deferred annuity or on its value at the time it is annuitized (i.e., converted to an income annuity). This tool does not take those premium taxes into account.
- For payments from an income annuity, the Tool assumes a portion of each withdrawal is a return of your after-tax investment in the contract (if any was assumed by the Tool) and a portion is taxable income. Once all your investment in the contract is returned to you, the Tool assumes all payments are taxable income. The breakdown between return of investment contract and income is done using an exclusion formula similar to that required by tax regulations.

Substantially Equal Periodic Payments

The Internal Revenue Code states that the 10% premature distribution tax penalty generally applicable to withdrawals from tax-deferred assets in IRAs and qualified retirement plans before the individual reaches age 59½ will not apply to distributions that are part of a series of substantially equal periodic payments. The Tool does not provide the ability to model substantially equal periodic payments. If you are considering this distribution strategy, you may want to consult an advisor.

Retirement Medical Benefit Account

If your plan offers retirement medical benefit accounts (RMBAs) within the workplace savings plan, the Tool does not distinguish these assets from the other assets in the plan. The Tool's tax assumptions for these accounts are, therefore, the same as for the workplace savings plan of which they are a part. For purposes of the Tool, the limitations on withdrawals of RMBA assets are disregarded and such assets may be applied to any retirement expenses. Please check your plan rules for specific details of limitations on withdrawals of RMBA assets.

Defined Benefit Plan Tax Assumptions

For federal, state, and local income tax purposes, the Tool uses the following assumptions for qualified and nonqualified defined benefit pension plans:

- All pensions recordkept at Fidelity or aggregated through a third-party provider are assumed to be fully taxable upon distribution.
- FICA tax withholding on nonqualified pension plan payments is not reflected. FICA tax must normally be withheld on nonqualified pension plan payments received. If you are receiving or are set to receive payments from a nonqualified plan, the Tool will overstate net amounts available to you to apply toward your retirement expenses.
- Any lump-sum values reflected will be treated as having been rolled over from a qualified plan to an IRA for purposes of calculating your retirement income in this tool notwithstanding that the lump sum may come from a nonqualified pension plan. Payments from nonqualified pension plans cannot usually be rolled over to a tax-deferred account.
- Imposition of required minimum distribution (RMD) rules are not reflected. RMD rules normally apply.
- Other pension payment amounts are based upon information you enter about the annual benefit you expect to receive. You may want to contact your employer for a personalized pension projection. Be sure that the benefits amount reflects the provisions of any Qualified Domestic Relations Order that provides benefits to alternate payees.
- Estimates of future pension benefits are not adjusted for the Tool's inflation rate. However, pension benefit amounts may include a salary growth rate. This growth rate will be provided by you or your company's pension plan (if Fidelity recordkeeps the pension). If applicable, the salary growth rate may be applied to the remaining years of service with an assumed retirement age of 65. Any lump-sum values reflected will be treated as an account in the Assets section for purposes of calculating your retirement income in this tool. This may account for any changes in represented value between lifetime income and investment income shown. Please consult your tax advisor if you have any questions regarding the taxability of your pension benefit.

Federal Income Tax Calculations

Estimated federal income taxes are automatically calculated for you by the Tool based on the information you provide and hypothetical account activity in each simulation. An estimate of taxable income is calculated for a given year and is then taxed based on federal income tax rates and certain other items, such as those listed below, projected to then be in effect at that time. The Tool assumes that the tax rates, tax credits, and other limits set forth below will be in effect to the end of your plan. If this assumption is incorrect, it may result in understated estimated tax liabilities and, therefore, overstated after-tax income available for future expenses.

- Tax rates — Ordinary Income: The Tool assumes ordinary income tax rates of 10%, 12%, 22%, 24%, 32%, 35%, and 37%.
- Tax rates — Long-term Capital Gains: The Tool assumes a long-term capital gains rate of 15%. Depending on your marginal

income tax rate, you may be subject to a different rate.

Consequently, this assumption could affect estimated tax liabilities and thus over- or understate your available after-tax income.

- Tax rates — Qualified Dividend Income: The Tool assumes qualified dividend income is taxed at the applicable long-term capital gains tax rates described above. Fidelity will update following any updates to rates and/or other code changes, although certain updates may not be possible because of technical limitations.

State and Local Income Tax Calculations

You will need to enter your state of residence and local income tax rate information (if applicable). The Tool is updated annually with the tax rates for each state, but local taxes are your responsibility to enter. Once the local income tax rate is entered, local taxes are calculated based on state taxable income. If no local income tax rate is entered, the Tool assumes that there is no local income tax. State tax calculations are intended to provide a reasonable approximation of state taxes for any given year. With the exception of income tax rates and income tax brackets, state taxes are calculated based on assumed identical state tax.

Note that each state has specific rules and special deductions, credits, and additional taxes and adjustments. The Tool does not reflect all such state-specific rules and should therefore not be used for purposes of calculating actual state tax liabilities or benefits.

The Tool assumes that all distributions of Roth and HSA assets will not be taxed at the state level. You should check your state of residence for applicable state tax rules.

Other Tax Assumptions

For federal, state, and local income tax purposes, the Tool uses the following other assumptions:

- Tax brackets, standard deduction amounts, and personal exemption amounts are indexed each year for inflation.
- Potential applicability of alternative minimum tax (AMT) rules is not reflected.
- Potential applicability of the 3.8% Medicare surtax on net investment income is not reflected.
- Potential applicability of transfer (estate, gift, and generation-skipping) tax rules is not reflected.
- Assets at end of plan have not been reduced by applicable federal and/or state transfer or inheritance taxes that may be due at death or upon transfer.
- Assets at end of plan have not been reduced by applicable income taxes that may be due at a later date.
- Future earnings on assets at end of plan are reduced by applicable income taxes.

4. CALCULATIONS AND RESULTS

Financial Planning Engine

The Tool provides a numerical and graphical display of the results generated from the financial planning engine. You have the ability to change inputs and certain assumptions and have the engine recalculate your estimated income in retirement.

The Tool uses a Monte Carlo simulation-based approach to estimate potential growth of your account balances through retirement and then converts those balances into potential monthly withdrawal amounts over the time frame specified, relying on certain market performance assumptions. The analysis is based on historical market data to estimate a range of potential outcomes for various hypothetical retirement income portfolios under different market conditions. Monte Carlo simulations are mathematical methods used to estimate the likelihood of a particular outcome based on market performance historical analysis. The Tool uses information derived from the Monte Carlo approach, in which markets are assumed to change. While over very long periods of time, markets have averages, it is often the case that the market performs both above and below these averages. The Monte Carlo simulations are designed to reflect this historical market volatility.

Historical Performance Analysis

The historical performance analysis is performed in several steps.

First, asset class percentages of an asset mix similar to the current asset mix of your selected account or of another target asset mix that you select for modeling purposes, as appropriate, are identified. Then, using the expected returns for each asset class (i.e., stocks, bonds, and short-term investments, but not those classified as "other" or "unknown") and their historical correlations and volatilities derived from running a minimum of 250 hypothetical financial market return scenarios or simulations, the Tool estimates the performance of that asset mix to create a range of potential returns. The expected returns for the asset classes are based on historical returns. Finally, the Tool graphs results of the analysis based on how that asset mix may have performed in a certain percentage of the simulated market scenarios. These percentages are called "confidence levels." For example, the default confidence level is 90%, which we consider "very conservative" market performance. This means that in 90% of the historical market scenarios run, a target asset mix similar to the current asset mix of your selected account or of another target asset mix that you select for modeling purposes, as appropriate, performed at least as well as the results shown. Conversely, in only 10% of the historical market scenarios run, a target asset mix similar to the current asset mix of your selected account or of another target asset mix that you select, as appropriate, failed to reach the results shown. Fidelity uses this 90% figure so as to err on the side of a more conservative estimation of future market performance. Your results will be available for viewing at the 50%, 75%, and 90% confidence levels.

Average annual returns are hypothetical, and, if achieved annually, would produce the same cumulative total return as if performance had been constant over the entire period. Average annual total returns simply smooth out variation in performance; they are not the same as actual year-by-year results.

Market Conditions	Performance Assumptions Fail	Performance Assumptions Meet or Exceed	Confidence Level
If markets perform significantly lower than historical averages	10 out of 100 times	90 out of 100 times	90% (Significantly Below Average)
If markets perform lower than historical averages	25 out of 100 times	75 out of 100 times	75% (Below Average)
If market averages continue	50 out of 100 times	50 out of 100 times	50% (Average)

Each target asset mix's¹ performance figures are based on the weighted average of annual return figures for certain benchmarks for each asset class represented in the target asset mix. Historical returns and volatility of the stock, bond, and short-term asset classes are based on the historical performance data from 1926 through the most recent year-end data available from Morningstar.* Stocks (domestic and foreign), bonds, and short-term assets are represented by the S&P 500[®],† U.S. intermediate-term government bonds, and 30-day U.S. Treasury bills, respectively. Foreign equities are represented by MSCI EAFE Index (MSCI EAFE)² for the period from 1970 to the last calendar year. Foreign equities prior to 1970 are represented by the S&P 500[®] Index. Stocks, foreign stocks, bonds, and short-term investments are represented by total returns of the US Large Stock Index 1/1926–1/1987, Dow Jones Total Market Index from 2/1987 to present; US Large Stock Index 1/1926–12/1969, MSCI EAFE 1/1970–11/2000, MSCI ACWI Ex USA USD 12/2000 to present; US Intermediate-Term Government Bond Index from 1/1926–12/1975, Bloomberg Barclays Aggregate Bond Index from 1/1976–12/2019; and 30-Day T-Bills from 1/1926 to present.

* Morningstar, Inc., is an independent provider of financial information. Morningstar does not endorse any broker-dealer, financial planner, insurance company, or mutual fund company.

† The S&P 500[®] Index, an unmanaged market capitalization-weighted index of common stocks, is a registered service mark of Standard & Poor's Financial Services LLC.

¹ Refer to the "About Target Asset Mixes" section for information regarding TAMs.

² The MSCI EAFE Index is a stock market index that is designed to measure the equity market performance of developed markets outside of the U.S. and Canada. It is maintained by MSCI Barra.

There is historical risk associated with market declines. Volatility of the stock (domestic and foreign), bond, and short-term asset classes is based on the historical annual data from 1926 through the most recent year-end data available from Morningstar, Inc.

Although past performance does not guarantee future results, it may be useful in comparing alternate investment strategies over the long term. Performance returns for actual investments will generally be reduced by fees and expenses not reflected in these hypothetical illustrations. Indexes are unmanaged, and it is not possible to invest directly in an index.

Limitations of Historical Performance Analysis

Historical performance analysis figures do not represent the actual or hypothetical performance of your actual holdings. They are based on the mix of asset classes which may be similar to those currently in your accounts. This assumes broad diversification within each asset class as represented by certain indexes. It makes no attempt to model one's actual holdings. Thus, results may be quite skewed if someone has a considerable amount of idiosyncratic security-specific risk. In addition, if you hold an investment for which Fidelity does not have asset allocation or underlying holdings information, this investment is classified as "unknown." If you hold an investment for which Fidelity has information, but that cannot be classified as either a stock, bond, or short-term investment, that investment is classified as "other."

Monte Carlo Simulations

Monte Carlo simulations are mathematical methods used to estimate the likelihood of a particular outcome based on market performance historical analysis. The Monte Carlo approach has been around since the early 1900s and is used across many fields, such as physics, chemistry, and biotechnology to solve complex science problems, particularly those that fall into a nonlinear category. Historical performance simulations are conducted to determine the probability that a portfolio may experience a certain minimum level of performance given market volatility.

Monte Carlo simulations are analogous to rolling several pairs of dice. Each Monte Carlo simulation reproduces a random set of results by generating a random return for the scenario. When analyzed together, these results suggest a probability of occurrence. For example, if you repeatedly roll four dice at the same time, the probability of all sixes coming up in the same roll is very low; however, other results may be more probabilistic, such as one six occurring in any given roll. For the purposes of our Monte Carlo simulations, we randomly generate a series of hundreds of returns for a given scenario. Together, these scenarios provide a probability that a certain amount (or greater) of assets/income occurs at that level. These simulations are generated by the financial planning engine and are used by the Tool.

Assumptions in Monte Carlo

Random variables, representing asset class returns, are drawn from a specific statistical distribution. The time increment used in the Monte Carlo simulations is one year. Annual randomly generated returns are required to simulate the mean, standard deviation, distribution, and correlated behavior of the observed historical asset class.

Annual returns assume the reinvestment of interest income and dividends, no transaction costs, no management or servicing fees (except for a variable annuity fee), and the rebalancing of the portfolio every year. The calculation does not include annual returns of individual securities you hold; instead, the analysis is performed on asset classes, not individual securities. All investments within an asset class are treated the same for historical performance purposes subject to the limitations described above. It is not possible to invest directly in an index. All indexes include reinvestment of dividends and interest income.

Asset Allocation of Certain Proceeds and/or Income Assumed Risk and Return

A Monte Carlo simulation of capital market returns takes into account expected returns from each asset class (i.e., stocks, bonds, and short-term investments), their volatility, correlations between them, and other factors, all based on historical statistics. Random

rates of return are generated by sampling values from a probability distribution such as a bell curve (i.e., "lognormal" distribution). Returns from stock asset classes (such as Canadian, U.S., or international equities) are historically higher than returns from lower-risk (such as fixed income) or risk-free investments (such as cash). But higher stock returns also have greater risk associated with a wider range of outcomes—from complete loss of capital to appreciation many times over the initial purchase price. And they also experience greater volatility. Asset classes, when considered within a framework of historical performance conditions, have a clear correlation with each other and are not considered independently. These mathematical relationships can be quantified and fit in the model.

5. ASSET ALLOCATION

For purposes of the historical performance analysis described above, as a starting point for modeling purposes, the Tool identifies a mix that is similar to the current asset mix of your selected account. First, your current asset mix is determined based on the holdings within the account. Each holding is first categorized by asset class (i.e., stocks, bonds, or short-term investments).

If you hold an investment for which Fidelity has information, but that cannot be classified as either a stock, bond, or short-term investment (e.g., derivative securities, options, or warrants), that investment is classified as "other."

Data Used to Classify Assets

Holdings data used to classify mutual funds and other financial assets is provided by Fidelity Investments. Holdings data for publicly available mutual funds is obtained monthly from an independent third-party vendor, Morningstar, Inc. Data is only as current as the holdings information supplied to Morningstar by third parties and may be up to 12 months old. In some cases (e.g., newer funds), the third-party vendor may not have holdings information and therefore such funds are classified as "unknown." In some other cases, the third-party vendor may not recognize all the holdings within a mutual fund. In these cases, the third-party vendor provides analysis only on the recognized portion of the fund. Therefore, the underlying holdings may not be fully classified, as the unrecognized holdings will not be categorized. The unrecognized holdings are then classified as "unknown."

For proprietary mutual funds and other pooled investment options unique to certain retirement plans (e.g., commingled pools or separate accounts), the Tool relies on underlying holdings provided quarterly by Fidelity affiliates, plan sponsors, and external money managers. In the event that current quarterly holdings are not available, the latest available data will be used. Holdings data provided to Fidelity is not based on contemporaneous information, but, rather, on third-party data. No Fidelity Investments company is responsible for the accuracy of data provided by third parties.

IMPORTANT: Assets classified as "unknown" or "other" are "normalized" to reflect your current allocation to stocks, bonds, and short-term categories and then reflected in those asset allocation percentages for purposes of the Tool's analysis. However, these assets may or may not actually perform according to this allocation. Significant weightings classified as "other" or "unknown" or short positions in a selected account(s), as well as margin balances, at the time of the interaction may materially impact the analytical information presented during this interaction and render the interaction unreliable. If your holdings are nondiversified within an asset class (such as a single security such as company stock), because the Tool assumes that diversification within each asset class is consistent with market indexes, the historical performance analysis performed

by the Tool may not be applicable to your holdings and may not appropriately reflect the actual risk/return characteristics associated with your investments.

Short Positions for Workplace Accounts

The Tool may reflect both long and short positions in your workplace savings account for one of two reasons. Either (1) you hold an interest in a fund or funds in your workplace savings account that maintains a short position in an underlying investment, or (2) you maintain a short position in an investment(s) held in your Fidelity BrokerageLink® account. With respect to your mutual fund holdings, please refer to the funds' prospectuses for more information. If you require further assistance, please contact your Fidelity representative.

Positive quantities are "long" and negative quantities are "short." Long positions represent fully paid holdings, whereas short positions reflect holdings that involve borrowing or selling a security or "right," such as a covered call option. For example, if a fund borrows shares and then sells them, the fund's underlying position will be negative or "short" as the fund is obligated to buy back the shares in the future. If you hold an interest in a fund that maintains a short position in an underlying investment, it does not mean that your interest in the fund is "short" or "on margin" or that you owe money.

Short Positions for Other Accounts

The Tool may reflect both long and short positions in your account, whether held individually or as underlying investments in a mutual fund in which you hold an interest. With respect to your mutual fund holdings, please refer to the funds' prospectuses for more information. If you require further assistance, please contact your Fidelity representative.

Positive quantities are "long" and negative quantities are "short." Long positions represent fully paid holdings, whereas short positions reflect holdings that involve borrowing or selling a security or "right," such as a covered call option. For example, if a fund borrows shares and then sells them, the fund's underlying position will be negative or short as the fund is obligated to buy back the shares in the future. If you hold an interest in a fund that maintains a short position in an underlying investment, it does not mean that your interest in the fund is short or "on margin" or that you owe money. Note that trades initiated within a money market fund (such as Fidelity® Cash Reserves) pending settlement at the close of a calendar month may present as a short position or negative allocation and inadvertently impact the analysis set forth above.

Projections in the Tool are based strictly on the net holdings within each asset class, and asset classes are netted out such that no asset class has a negative value when modeled. Please be advised: If an asset class has a net negative value, the normalized asset allocation of the account for modeling purposes may have a materially different level of risk and return than that of your actual account.

Hypothetical Asset Allocation Scenario

For purposes of illustration, a hypothetical asset allocation scenario is presented below.

Stocks 40%
 Bonds 20%
 Short Term 15%
 Other 10%
 Unknown 15%

The Tool combines the percentages of "other" and "unknown" to calculate historical market performance figures. It then takes the percentage of each known classification (stocks, bonds, and short term) and divides it by the total percentage of stocks, bonds, and

short term. This calculation results in a normalized mix percentage adding up to 100%.

Other + Unknown = 25%

Stocks + Bonds + Short Term = 75% [or 100% – total for Other and Unknown (25%)]

Stocks (40%) / 75% = 53%

Bonds (20%) / 75% = 27%

Short Term (15%) / 75% = 20%

The short-term allocation is then calculated as 100% – (stock allocation + bond allocation). No value is permitted to be more than 100% or less than 0%.

This allocation is then deemed your "current asset mix" for that account for purposes of the Tool's historical performance analysis.

The Tool allows you the opportunity to select a different asset mix for modeling purposes, from one of the nine target mixes described below, presented to you from most conservative to most aggressive, in terms of both potential return and risk.

Also, the slider defaults to a target asset mix that most closely aligns with an asset allocation based on your current age and estimated retirement age. This value should be considered merely a starting point for you to model various asset allocations in an account. The default may be a more aggressive target asset mix than your current asset mix for the selected account(s), and you should consider your own personal situation before making any investment decisions.

About Target Asset Mixes

A target asset mix is one of several different asset allocations among stocks (domestic and foreign), bonds, and short-term investments. These target asset mixes are created based on historical risk and return characteristics for stock, bond, and short-term investment asset classes. At Fidelity, they represent nine significantly different allocations that are intended for different investor profiles with different investment objectives, risk tolerance, and time horizon.

The nine different target asset mixes available in the Tool are:

Target Asset Mix	Domestic Stock	Foreign Stock	Bonds	Short-Term
Short-Term	0%	0%	0%	100%
Conservative	14%	6%	50%	30%
Moderate with Income	21%	9%	50%	20%
Moderate	28%	12%	45%	15%
Balanced	35%	15%	40%	10%
Growth with Income	42%	18%	35%	5%
Growth	49%	21%	25%	5%
Aggressive Growth	60%	25%	15%	0%
Most Aggressive	70%	30%	0%	0%

- **Short-Term:** This target asset mix may be appropriate for investors who want to preserve their capital and can accept the lowest returns in exchange for price stability.

- **Conservative:** This target asset mix may be appropriate for investors who want to minimize fluctuations in market value by taking an income-oriented approach with some potential for capital appreciation.
- **Moderate with Income:** This target asset mix may be appropriate for investors who seek income and the potential for capital appreciation, with a slight priority on income, and who can withstand moderate fluctuations in market values.
- **Moderate:** This target asset mix may be appropriate for investors who seek income and the potential for capital appreciation, with a slight priority on capital appreciation, and who can withstand moderate fluctuations in market values.
- **Balanced:** This target asset mix may be appropriate for investors who want the potential for capital appreciation and some growth, and who can withstand moderate fluctuations in market value.
- **Growth with Income:** This target asset mix may be appropriate for investors who seek moderate growth and income and who can withstand moderate fluctuations in market values.
- **Growth:** This target asset mix may be appropriate for investors who have a preference for growth and who can withstand significant fluctuations in market value.
- **Aggressive Growth:** This target asset mix may be appropriate for investors who seek aggressive growth and who can tolerate wide fluctuations in market value, especially over the short term.
- **Most Aggressive:** This target asset mix may be appropriate for investors who seek very aggressive growth and who can tolerate very wide fluctuations in market value, especially over the short term.

Keep in mind that different asset classes tend to offer different balances of risk and reward. Generally, the greater the potential for long-term returns, the greater the risk of volatility, especially over the short term. In order to minimize the risk you assume in seeking high returns, it is critical that your portfolio provides an appropriate mix of investments. A more aggressive portfolio (one with a higher stock allocation) could represent higher risk, especially in the short term, but higher potential long-term returns. Conversely, a less aggressive portfolio (with a lower allocation to stock and higher allocation to bonds or short-term investments) could represent less short-term risk, but potentially lower long-term returns. You should take into consideration any unique circumstances or need for funds that might apply to your situation when deciding on an appropriate investment strategy.

While past performance does not guarantee future results, history has shown that diversifying assets among different asset classes, industries, and countries can generally improve the long-term performance of a portfolio. Diversification relies heavily on the concept of correlation. Correlation is a measurement of how the returns of two investments move together. If two investments are highly correlated and one moves higher, generally the second investment will move higher as well. Conversely, if there is a low correlation between the investments, they would be expected to move in the opposite direction. When you put assets that have low correlations together in a portfolio, you may be able to get more return while taking on the same level of risk, or the same returns with less risk. The less correlated the assets are in your portfolio, the more efficient the trade-off between risk and return. With a portfolio of assets with low correlation, even if a portion of the portfolio is declining, the rest of the portfolio is designed to be growing. Thus, you can potentially offset the impact of poor market performance on the overall portfolio. However, it is important to remember that certain asset types

involve greater risk than others do. For example, foreign investments can involve greater risk than U.S. investments. Diversifying your investments across asset classes, industry sectors, and nations may help minimize your overall exposure to sudden market swings that may cause sudden changes in the price of investments. However, it does not ensure a profit or guarantee against a loss.

Time-Based Option Default Target Asset Mix

The Tool may show a default target asset mix (TAM) based on a measure of your time horizon. Within the context of a time-based option TAM, time horizon is defined as the difference between your current age and expected retirement age (Goal Start). Please note that this time horizon-based default TAM is just a starting point for you to begin the consideration of the appropriate asset allocation.

For a Retirement Investment Goal:

- **Conservative:** If you are already 18 years or more into retirement.
- **Moderate with Income:** If you are 12 to 17 years into retirement.
- **Moderate:** If you are 6 to 11 years into retirement.
- **Balanced:** If you are 0 to 5 years into retirement.
- **Growth with Income:** If you are 1 to 8 years away from your retirement start date.
- **Growth:** If you are 9 to 12 years away from your retirement start date.
- **Aggressive Growth:** If you are 13 years or more away from your retirement start date.

Look-through Analysis

Look-through analysis is the categorization of a portfolio based on the underlying value and type of assets held in each underlying investment (based on data from the third-party sources described above). Rather than simply classifying investments as stocks, bonds, or short-term investments, this approach analyzes the underlying holdings of the investments to discern a more accurate exposure to all asset classes. For the Tool, look-through analysis is applied to all accounts.

6. INCOME STRATEGY

An income strategy is a plan for how your retirement savings could be used to cover estimated retirement expenses. To help analyze potential adjustments to your retirement plan, you may model an allocation of current retirement savings, including additional liquid assets you may identify for your retirement, to hypothetical income-generating product categories. For modeling purposes, allocations are based on a standard liquidation hierarchy (see below) and it is assumed that your identified asset mix or selected target asset mix remains constant. Modeling options, assumptions, and product category selections are not recommendations of either specific securities or an investment strategy involving securities.

Allocations are modeled by reducing the total value of your assigned accounts based on the following standard liquidation hierarchy of sources (exhausting all sources within a given category before moving to the next category):

1. In a tax-free transaction using assets accumulated in tax-deferred annuity accounts;
2. In a tax-free transaction using assets distributed from tax-deferred accounts;
3. Using after-tax proceeds generated by the liquidation of taxable account assets; then
4. Using assets distributed from tax-free accounts.

If less than 100% of an account type's funds are needed, the Tool will proportionally reduce the same percentage from each account within that account type. Please note that tax-deferred annuities held at Fidelity will be considered in this hierarchy, but tax-deferred annuities held elsewhere will not be considered.

The Tool may overstate or understate the amount of after-tax proceeds available. For taxable accounts, it is assumed that the tax basis for the account is the same as the currently identified account value. The actual adjusted tax basis of the securities in your taxable account often will be different from the fair market value of those securities on any given day. For workplace savings plan accounts and non-Roth individual retirement accounts (IRAs), it is assumed that the entire value of these accounts is subject to ordinary income taxation upon distribution.

Product categories may include either immediate fixed income annuities or deferred income annuities. Other categories may be available with similar risk and return characteristics. Hypothetical fixed income annuities are initially modeled with the following features, if applicable that can be adjusted according to your preferences: fixed payments with no cost of living adjustment; 100% survivor benefit (if planning with a partner) beneficiary protection in the form of a Cash Refund upon the death of the last surviving annuitant where beneficiaries are refunded any difference between the investment made into the annuity versus the payments received.

Purchase price is estimated using the best quote available from among guaranteed income annuities distributed by Fidelity Insurance Agency, Inc. Rates may vary daily. Annuities used to generate estimated purchase prices for modeling are issued by third-party insurance companies, which are not affiliated with any Fidelity Investments company. Modeled allocations take into account minimum purchase limits for specific annuity providers. Before investing in any annuity, ensure it is appropriate for your personal financial situation. Guarantees are subject to the claims-paying ability of the issuing insurance company.

Please note that the product categories included in the income strategy modeling options are not generally available in Fidelity recordkept workplace savings plans and, as a result, the Tool effectively assumes that assets allocated from such a plan would be rolled over to an IRA in order to obtain access to such products, if desired and appropriate, and if the plan terms allow for rollovers (assuming the participant is still actively employed).

Please note that when rolling out of your current workplace savings plan, you may lose access to company stock purchase plans, institutionally priced funds, custom funds, and other options. You are encouraged to speak with a tax advisor prior to making any decisions regarding company stock holdings. Be aware that IRAs and annuity accounts do not offer the same protection from creditors available in an employer-sponsored plan. Distribution options are subject to plan rules.

You should make sure you are aware of all the implications of rolling out of your workplace savings plan before making your decision. When reviewing available investment options, be sure to also consider any associated fees to help you in your determination. A number of financial services providers offer IRAs and annuities. You should pick the financial services provider that best suits your personal needs and investment objectives. Your employer does not endorse any provider of personal investment accounts, including IRAs and annuities.

Proposed Strategy

Proposed Strategy is a starting point for creating your personalized income strategy and you must make your own determination whether a specific investment is appropriate for you. The strategies utilize hypothetical fixed income annuities to attempt to cover estimated essential retirement expenses exceeding your estimated income not associated with withdrawals from your portfolio. Depending on when you plan to retire, the Proposed Strategy could include an Immediate Fixed Income Annuity or Deferred Income Annuity. If a Deferred Income Annuity is modeled as part of the solution, payments are assumed to start at the beginning of the year that you and/or your partner retires.

While there are other options to create immediate or deferred income, the Tool only includes Immediate Fixed Income Annuities or Deferred Income Annuities in the Proposed Strategy. Other strategies may be available with similar risk-and-return characteristics. The process of creating and modeling income strategies may be referred to as the Fidelity Income Strategy Evaluator®.

The Tool will display two proposed strategies for your analysis and potential selection for further consideration. For each strategy the Tool starts by estimating the income needed to help cover your estimated essential expenses. The first strategy attempts to cover your lifetime need by determining a midpoint and adjusting averaged needs for inflation. That midpoint is considered a fair representation of your lifetime essential income need. The second strategy attempts to cover the essential income need estimated for the first year of your plan (First Year Need), again after averaging needs across your planning horizon and adjusting for assumed inflation. The Tool will always attempt to solve for the midpoint of any identified short-term (bridge) income need.

Proposed strategies first attempt to cover estimated essential retirement income needs, then any bridge need. If your bridge need is less than four years, the Tool will identify a hypothetical cash reserve for this portion of the proposed strategies.

Depending on the information you provide, the allocation to hypothetical annuities in your proposed strategies may not cover the identified essential income need. The allocation to hypothetical annuities is designed to represent not more than 50% of the liquid net worth you identified (reduced by known values of other annuity products you may own) and not more than 25% of the liquid net worth you identified in the period-certain annuity category. Liquid net worth is defined as the sum of all your assets that can be easily and quickly converted to cash. Proposed strategies do not incorporate estimated required minimum distribution (RMD) amounts from workplace savings plan accounts or IRAs.

Income Mix Modeling

Income mix modeling is a representative-assisted option where you can use a lifetime income modeling slider and income start year option to illustrate the potential impact of converting retirement savings to lifetime income using sample allocations of 10%, 20%, or 30% of the total value of your assets identified for your retirement plan.

Depending on the start date you select, the Tool will model lifetime income using either hypothetical immediate fixed income annuities or deferred income annuities. Allocation percentages, other modeling options, assumptions, and product category selections are not recommendations of either specific securities or an investment strategy involving securities. You must determine whether an income strategy including lifetime income is appropriate for you.

7. RETIREMENT ANALYSIS

The Tool provides different methods for analyzing the potential income, preparedness, and risks of a retirement goal. The analysis uses your planning profile data as inputs into all calculations (see "Section 2. User Profile Information" for a description of profile data). The data may be held at or recordkept by Fidelity, imported from an outside source at your direction, or manually entered by you within this Tool or another Fidelity planning tool. You should review all data for accuracy and completeness. Data can be reviewed either from the Planning Profile, or directly within the Retirement Analysis section. Accounts, future contributions, and expense assumptions are detailed in "Section 2. User Profile Information." Taxes are estimated according to the rules outlined in "Section 3. Tax Calculations and Assumptions." Hypothetical growth of each source of income for retirement goal analysis is calculated using the financial planning engine, as described in "Section 4. Calculations and Results." The asset mix used is based on either your current asset mix as identified through a normalized assessment of the accounts assigned to your retirement plan, or a Target Asset Mix that you selected for modeling purposes. See "Section 5. Asset Allocation" for more details.

Fidelity Retirement Score (FRS)

The Fidelity Retirement Score estimates the percentage of a retirement income goal that a user or household is estimated to replace in significantly below average market conditions (see "Section 4. Calculations and Results" for detailed information on market conditions). The retirement income goal being measured is either a retirement goal set up within the Tool, or an existing retirement goal created using a different Fidelity retirement planning tool. The Fidelity Retirement Score is calculated using key household planning profile information, including retirement time horizon, estimated tax rate(s), estimated retirement expenses,* accounts assigned to retirement, assumed future contributions, sources of income, and either your current or modeled asset allocation. The Fidelity Retirement Score is the amount of monthly income estimated to be available at retirement, divided by the amount of monthly income required to meet a household's retirement goal (see "Basic Income Analysis" for information on how the Tool calculates a household's estimated monthly income). The score displayed within the Tool is recalculated after any change(s) are made to input data. The Fidelity Retirement Score is visually displayed within a dial, which is segmented by Fidelity's assessment of the score.

*If your expenses vary significantly throughout your retirement time horizon, your calculated Fidelity Retirement Score will be a less accurate measurement of your retirement preparedness than if your inflation-adjusted expenses remain reasonably constant.

The Fidelity Retirement Score assessment breakdown is as follows:

Score	Assessment
<65	Needs Attention: Significant adjustments to plan are required to sufficiently cover your estimated retirement expenses in a significantly below average market
65-80	Fair: Modest adjustments to plan are required to sufficiently cover your estimated retirement expenses in a significantly below average market
81-95	Good: On track to cover most of your estimated retirement expenses in a significantly below average market
>95	On Track: On track to cover 95% or more of your estimated expenses, even in a significantly below average market

Projected Asset Analysis

The Tool displays a graphical and tabular view of the estimated assets from accounts included in the retirement goal from the current year until the year in which your plan ends.

Basic Income Analysis

The **Basic Income Analysis** chart is an estimate of the amount of income potentially available in retirement. The view is available for households with greater than five years until retirement. The analysis includes your estimated monthly retirement expenses and a calculation of a potential gap or surplus. To calculate your potential monthly retirement income amount, we look at your sources of income and calculate whether you can meet your expense needs in a significantly below average, below average, and an average market. If you choose to view your results in a significantly below average market, we solve for an income amount that satisfies your expense needs throughout your retirement in at least 90% of the calculated scenarios. If you choose a below average market, the solver calculates an amount that will meet your expenses 75% of the time. And if you choose an average market, the solver calculates an amount that will meet your expenses 50% of the time. If you've approximated your retirement expenses, your goal amount is the total of your essential and discretionary expenses. If you've used the budget worksheet, your goal amount is an estimate of your average monthly expenses in retirement. A leveling process is used to smooth out any expense variability. Because of the leveling process required to show a point-in-time retirement view (see "Section 8. Other Considerations and Additional Rules" for a description of leveling), it is possible for the chart to indicate a gap/surplus and for the actual year-by-year data to indicate otherwise. The point-in-time value represents an average expense need and income potential for the retirement time horizon.

Detailed Income Analysis

The **Detailed Income Analysis** shows how your sources of income change over your retirement time horizon. The chart, which includes an overlay of annual expense needs, demonstrates the estimated income available from the Lifetime Income, Other Income, and Withdrawals from Savings (income available is calculated as outlined in "Section 4. Calculations and Results"). Lifetime Income is income that is expected to continue until your planning age, and includes Social Security, pensions, and annuities. Other Income does not carry the guarantee that is typically associated with Lifetime Income, and includes sources such as work in retirement and rental income.

Withdrawals from Savings represent income that may be generated from your savings. The tabular view of the chart breaks down the sources of income into more detail, and also includes an estimate of the Required Minimum Distributions from all qualified plans. In all views, the Total Expenses amount includes estimated taxes.

If your income is not estimated to meet your expenses until the end of your plan, the chart will indicate the age(s) at which you are estimated to experience a shortfall.

Risk Assessment

While you may face numerous risks in retirement, the Tool helps you identify and monitor your retirement income plan against five key retirement risks. These key risks are identified and assessed throughout the Tool based on the information you provide. Key risks are color coded using the following system: red indicates a significant level of risk, yellow indicates some risk, and green indicates that your risk may be accounted for in your plan.

Each of the key risks and how we assess them is described below.

• **Outliving Your Retirement Assets**

Green—You (or you and your spouse/planning partner) are planning at least to your 25% longevity age (the age at which 25% of healthy individuals of your age and gender will still be living).

Yellow—You (or you and your spouse/planning partner) are planning to an age within seven years of your 25% longevity age.

Red—You (or you and your spouse/planning partner) are planning to an age that is more than seven years younger than your 25% longevity age.

• **Health Care Expenses**

Green—By indicating that you have factored in long-term-care insurance and health care insurance, your plan currently accounts for future medical expenses.

Yellow—You are planning for either health care expenses or long-term care in retirement.

Red—You are not planning for health care expenses or long-term care in retirement.

• **Impact of Inflation**

Green—You are using the default inflation rate assigned by the Tool.

Red—You have changed the default inflation rate. If you change the Tool's suggested inflation rate, it could have other unintended effects on the Tool's results. Increasing the inflation rate may seem as though it imposes additional stress on your budget assumptions. However, it also may affect hypothetical asset projections, as some asset class returns historically have increased during periods of higher inflation.

• **Spending Your Retirement Assets Too Quickly**

Green—The historical performance analysis suggests that you may be able to cover your indicated expenses until your planning age in a significantly below average market.

Yellow—The historical performance analysis suggests that you may be able to cover your indicated expenses within five years of your planning age in a significantly below average market.

Red—The historical performance analysis suggests that you may not be able to cover your indicated expenses for more than five years from your planning age in a significantly below average market.

• **Market Performance**

The Tool provides the capability to model your plan under different market conditions. The assessment uses a significantly below average market as the default for market performance.

Green—You are running the Tool using significantly below average market conditions.

Yellow—You are running the Tool under market conditions less conservative than the default, but more conservative than average market conditions.

Red—You are running the Tool under average market conditions.

8. OTHER CONSIDERATIONS AND ADDITIONAL RULES

Dollar Values: Future vs. Current

Future dollars and current dollars (also known as "today's dollars") are different ways of viewing values over time. Both ways are correct means of presenting values. Future dollar values illustrate how a current expense would grow over time taking into account the effects of projected inflation. For example, if something costs \$1,000 today, in 10 years the future dollar value is \$1,280 (\$1,000 plus 10 years of assumed inflation growth at 2.50%). This method is used to estimate the effects of inflation. Note that the Tool always uses your stated retirement date, or the current year if you are already retired, as the date for which this valuation is made on your expected retirement expenses. If you indicated that you are already retired, the Tool will provide a future dollar amount that is equal to today's value.

Expense Leveling

A process called "leveling" is used to show a point-in-time representation of certain expenses. Expenses entered using the detailed budget worksheet may be made level in order to show your average income need at retirement. This amount may not represent your exact income need in your first year of retirement.

Exception Handling and Additional Rules

An income source that pays out before retirement is considered fully taxable, and the asset allocation of your overall portfolio will be applied to these investments. We assume the money will be invested for retirement, rather than spent before reaching retirement. In the case of a lump-sum pension payout occurring before retirement, the payout will be assumed to be rolled over to an IRA and then withdrawn evenly throughout retirement using a systematic withdrawal plan.

If you anticipate using one or more of your income sources differently during your retirement, such as to cover your expenses for a period of time rather than investing it as the Tool assumes, you may wish to explore other tools to see how your choices might affect your retirement income strategies.

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