RetireTrack℠

Overview & Methodology
Overview

RetireTrack™ is a sophisticated yet easy-to-use retirement planning tool that helps you analyze and improve your retirement strategy based on your specific goals, your financial situation and the investment options available in your retirement plan.

Developed by Diversified, RetireTrack empowers you with a comprehensive picture of all the income and expenses you can expect in retirement—from inside and outside your retirement plan.

First, RetireTrack lets you choose how much income to target in retirement. Then, thanks to a powerful “Monte Carlo simulation” forecasting engine provided by Ibbotson Associates®, a widely-respected expert in asset allocation, it gives you a personalized Retirement Outlook that shows you if you’re on track to meet your goal. If not, you can experiment with alternative strategies (such as saving more or investing through any of five well-diversified model portfolios) to find the one that suits you best and which may give you a better chance of fully funding your retirement.

Most of your plan and investment data are updated automatically. But you can make changes and check your progress at any time. What’s more, you can add and update investments, income and expenses from outside your plan—including your spouse’s information—to make RetireTrack’s results more precise and comprehensive.

Monte Carlo simulation is an analytical technique involving a large number of hypothetical trial runs, called simulations, which collectively provide insight for decision-making based on the likelihood of various outcomes. The technique assigns random (or pseudo-random) values for uncertain variables, such as interest rates and asset class returns, within each simulation and performs a series of calculations as appropriate to generate a potential outcome for each simulation.
Key Features

- **Adjustable savings rate** for different scenarios.
- **Adjustable investment strategy** for different scenarios, including five sample investment mixes.
- **A focus on strategies you can actually implement**, such as increasing savings and diversifying among the investment options in your plan, rather than purely theoretical strategies, such as a portfolio that produces an assumed rate of return every year.
- **A fully personalized Retirement Outlook** that estimates your future income estimate based on your current and alternative strategies.
- **Monte Carlo simulations incorporate uncertainty** in the level and timing of returns and other economic factors. This allows RetireTrack to analyze a broad range of possible scenarios to estimate how your investments might turn out under a variety of circumstances, including changes in interest rates, inflation and market conditions.
- **Separate forecasts for each distinctive asset class** based on the characteristics of the specific investments in your portfolio.
- **After-tax income estimates** in current dollars make it easier to compare your Retirement Outlook with your current earnings and living standard.
- **Comprehensive household forecasting** lets you include outside retirement accounts and assets (including your spouse’s), as well as other sources of income and expenses, into the projections.
- **Integrates all Diversified plans in which you participate**, giving you a comprehensive view of your savings in one convenient location.
- **Easy online access** through our secure website. RetireTrack is featured in both the Account Overview and Retirement Planning sections.
- A great benefit at **no cost to you!**
Methodology

RetireTrack starts with five required pieces of personal information you need to provide:

- Gender
- State of Residence
- Annual Salary + Bonus
- Desired Retirement Age
- Current Savings Rate (note: this may be automatically populated for some plans)

This information is used to estimate the annual income you may have at retirement. RetireTrack then compares this estimate to your retirement income goal to create your personalized "Retirement Outlook," rendered as a "weather" icon (on a visual scale of "rainy" to "sunny"). This gives you an easily understandable way to judge whether you are on track for a fully funded retirement.

You can improve the accuracy of the estimate by updating your personal information with outside retirement accounts and assets (including your spouse's), as well as other sources of expected income and expenses. You can also change your retirement income goal (from a default of 80% of your projected final working year's salary, adjusted for taxes), to better reflect your specific needs.

RetireTrack's income estimate is calculated by a sophisticated forecasting engine built by Ibbotson Associates®, a widely-respected expert in asset allocation. The engine employs Monte Carlo simulations to examine how your situation may change over time. These simulations rely on Ibbotson's capital markets and other assumptions, as well as detailed information regarding your financial capital (e.g., current balance, asset allocation, and specific fund characteristics for your in-plan assets) and human capital (e.g., future earnings and savings and future income from Social Security and pensions). The end result—the estimated annual income—reflects the lifetime income stream you may have at retirement based on your accumulated wealth, Social Security benefits, pensions and any other pre- and post-retirement cash flows (income, expenses) you have included.

If you are not satisfied with your current Retirement Outlook, RetireTrack makes it easy to analyze the impact of meaningful alternative strategies, such as saving more or investing in any of five well-diversified model portfolios, to find the strategy with which you are most comfortable and which may give you a better chance of a fully-funded retirement. If your alternative strategy improves your Retirement Outlook and you wish to implement the changes, RetireTrack helps you take the appropriate action.

IMPORTANT: The projections generated by the simulation model regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results, and do not guarantee future results.

Please refer to the Appendix for more details on assumptions, limitations and other pertinent information regarding RetireTrack's methodology.
APPENDIX:

RetireTrack IMPORTANT INFORMATION

Please read the following information carefully before using or enrolling in the service described below. Your use of the service will signify your acknowledgement of receipt of the information below.

Information About Probability Illustrations

The probability illustrations included in this report are based on a simulation model that simulates 500 different potential incomes for a specified investment period. Some of these scenarios assume favorable investment market returns, consistent with some of the best periods in history for investors in the last 80 years. Some scenarios assume returns consistent with the worst periods in investing history in the last 80 years. Most scenarios assume returns falling somewhere in-between. See below for information concerning the source of the investment returns used.

The results compare the estimated annual income generated by the simulation model to the annual retirement income goal you have specified. The estimated annual income is based on a 70% likelihood, meaning that in 350 of the 500 simulations generated in the simulation model, the given investment scenario reached the estimated annual income shown. The graphical outlook is based on the shortfall or excess of the model’s estimated annual income compared to your annual income goal.

There is no guarantee that the income goal will be achieved, nor is there any guarantee that the aggregate amount accumulated by the end of the "years to retire" will necessarily ensure a specified annual income every year of retirement. Moreover, the model results may vary with each use and over time.

Limitations and Key Assumptions

The probability illustrations assume retirement at an age which you select. If you do not select a retirement age, the probability illustrations assume a retirement age of 65. The probability illustrations also assume an annual retirement income goal which you select. If you do not set a goal, the probability illustrations assume an annual retirement income goal of 80% of the projected final working salary.

The probability illustrations assume Social Security payments based on the calculation methodology as defined by the Social Security Administration. Current Social Security Law is applied to current salary to arrive at an estimate of this benefit.

The probability illustrations assume annual salary increases of 3%, a consistent deferral contribution percentage, inflation at 3%, and constant asset allocation (rather than periodic rebalancing) for "years to retirement".

The probability illustrations included in this report are generated based on investment analysis models developed by Ibbotson Associates, a leading provider of asset allocation, analytical, and wealth forecasting software.

The investment analysis models assess the probability of various investment scenarios over a period of time, based on historical performance and other information for elected investment asset classes and for various allocations among asset classes. The following is a list of the asset classes considered by the model and the benchmarks that represent the major asset classes:
• Short-Term Bonds: The Barclays Capital 1-3 Year US Government Bond Index — The Barclays Capital 1-3 Year US Government Bond Index consists of short-term government bonds issued by the US Treasury with maturities between one and three years.

• Intermediate/Long-Term Bonds: Barclays Capital Aggregate Bond Index — The Index consists of the Barclays Core Index plus mortgage-backed securities and asset-backed securities indices. All issues in the Index are investment grade or higher, have at least one year to maturity and have an outstanding par value of at least $100 million. Returns are market value-weighted and inclusive of accrued interest.

• High-Yield Bonds: Barclays Capital High Yield Bond Index — An unmanaged index made up of bonds that are non-investment grade, unrated, or rated below Ba1 by Moody's Investors Service with a remaining maturity of at least one year.

• Large-Cap Stocks: Standard & Poor's 500 Index — The S&P 500 Index is a market capitalization-weighted benchmark index made up of 500 blue chip, large cap stocks with market capitalizations of at least $3 billion, which together represent about 75% of the total U.S. equities market.

• Mid-Cap Stocks: Standard & Poor's MidCap 400 Index — The S&P MidCap 400 Index is a market capitalization-weighted benchmark index made up of 400 companies, representing about 7% of U.S. equity markets, with market values between $750 million and $3.3 billion.

• Small-Cap Stocks: Standard & Poor's SmallCap 600 Index — The S&P SmallCap 600 Index is a market capitalization-weighted benchmark index made up of 600 companies, representing 3% of the U.S. equities markets, with market values between $200 million and $1 billion.

• International Stocks: MSCI EAFE Index — The MSCI EAFE Index tracks the performance of stocks of about 1,000 companies in Europe, Australasia, and the Far East (EAFE).

The model does not consider other asset classes such as real estate or commodities. Other investments and/or asset classes not considered for the models may have characteristics similar or superior to those used in the model.

The methodology used by Ibbotson Associates is based on mean-variance analysis, which requires three statistical estimates for each asset class: return (Mean); risk (Standard Deviation) and relationship between the asset classes (Correlation Coefficients). Ibbotson develops assumptions for each of these statistics using a combination of historical data, current market information, and additional analysis. Each of these statistics becomes an input in mean-variance analysis.

To calculate return assumptions utilized in the model, Ibbotson uses current market statistics derived from benchmark indexes as your foundation and adds historical performance relationships. This approach separates the assumed return of each asset class into three components: real risk-free rate, inflation assumptions and risk-free premiums. Ibbotson Associates captures the market's assumption of the real risk-free rate plus inflation by observing the nominal risk-free rate, or a U.S. Government Treasury security. When choosing a risk-free rate, Ibbotson Associates uses treasury yield curve rates with a maturity to match the investment period. The risk premiums are derived from the historical relationship between the returns of the asset class and the risk-free rate. In this way, past data are incorporated into the assumption of the returns utilized in the model. Various premiums are added to the current nominal risk-free rate in order to generate the return utilized in the model for each asset class. Historical returns are calculated over annual periods and may be income or total returns depending on the nature of the benchmark. In general, total returns are used for equities, whereas income returns are used for fixed income. Total return is composed of capital (or price) appreciation and income (interest payments or dividends). For fixed income asset classes, the realization of capital gains and losses is assumed to sum to zero over the time horizon of the investment.

To calculate the risk assumptions utilized in the model, Ibbotson Associates uses historical data, such as historical standard deviations using all available and relevant data (1926 and 1970 for equity and fixed income, respectively). Ibbotson Associates uses the ratio method to extend the standard deviation estimates of the shorter-lived asset class benchmarks so that you incorporate all relevant economic events. The ratio method attempts to extend the standard deviation estimate for certain asset class benchmarks using an asset class benchmark that does not have historical data over the full, relevant time period.
period and an index that has historical data over the full, relevant time period and is economically similar
to the short benchmark, i.e. there is a logical reason to believe that the returns of the two series are highly
related. Ibbotson Associates assumes that the relationship between the short benchmark and long proxy
is representative of what it would have been if both series had existed over the full relevant time period.

To build correlation coefficient assumptions utilized in the models, Ibbotson Associates typically uses
historical returns of the asset class benchmarks. Ibbotson Associates prefers to use equity to equity
 correlation coefficients from 1926 forward, and all correlations to fixed income asset classes from 1970
forward. Correlation coefficients must be extended for series that do not have history for the full relevant
period. A sophisticated statistical process extends asset class benchmarks that do not have complete
data histories, (i.e. since 1926 for equities and 1970 for fixed income) but do have a relatively high
correlation coefficient with another proxy. This estimate is an approximation of what the correlation
coefficient between the two series might have been if both had existed over the longer time period. Most
asset classes with benchmarks that do not cover the full relevant time period (1926-2004 for equity and
1970-2004 for bonds) have your correlation coefficients with other, select asset classes determined by
this process. Ibbotson Associates has determined that there are no appropriate benchmarks with which to
extend International equity asset classes. Therefore when developing correlation coefficient assumptions
for international stocks, Ibbotson Associates uses data since 1970. For emerging markets, Ibbotson
Associates extends the short-lived emerging markets series to 1970 using the International benchmark as
the long proxy.

Ibbotson’s models are subject to a number of limitations, including that:

- Returns associated with market extremes may occur more frequently than assumed in the model.
- Some asset classes have relatively limited histories, and Ibbotson utilized historical data for
  shorter periods of time for these classes than for other asset classes.

IMPORTANT: The projections generated by the simulation model regarding the likelihood of
various investment outcomes are hypothetical in nature, do not reflect actual investment results,
and do not guarantee future results.