Financial Analysis

PREPARED FOR:
Bill and Sue Retire
July 23, 2020

PREPARED BY:
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CFP

ATLANTIC
FINANCIAL PLANNING

Things look good in all scenarios under the assumptions described below. This is due to the high level of pension and Social Security. For example, when Bill is 71 and receives a full year of SS, these payment sources cover 96% of all spending and taxes. In 2050 these payments cover 71% of the same. Part of the decline is due to the assumption that the pensions receive no COLA. It's also attributed to the assumption that health care costs inflate at 5.6% annually.

However, one of the largest risks to a 37 year retirement plan is unforeseeable spending shocks. Therefore, it's best to play it very safe. Selecting pensions with survivor benefits is one way to increase safety. Below, I show that a survivor benefit on Bill's pension is required. However, Sue could forego choosing a survivor benefit. Though, keep in mind that the annual reduction for a 2/3rd's survivor benefit on her pension is only 4% ($1075) of her full 2024 pension amount. The value today of that reduction over Sue's 34 year retirement is $24,000 (discounting at 2.5% annual inflation). The value today of the survivor benefit over Bill's 27 year retirement (2024 through 2051) is $390,000. Even though Bill may not need this should Sue die, that amount would ultimately go to the children at the second death in the form of a greater ending plan balance.

1. Demographic: you both live to 95
2. Economic
    a. The baseline plan has you holding a 60/40 stock bond portfolio with an expected return and standard deviation of 5.3% and 9% respectively. Your current cash of $241,000 is kept as cash in the software and is spent first. That account is depleted in 2025.
    b. Bill retires April 2020 and Sue in Sep 2024.
    c. General inflation is 2.5%. Health care/insurance inflation is set at 5.6% (more on this below).
    d. In 2026 the Trump tax cuts revert back to 2017 law as is currently legislated.
3. Spending. Some items to note:
    a. Discretionary spending is set at $88,000 declining by $5000 as each kid turns 24. 2025 is the first year with discretionary spending at $78,000. After the first death it declines to $60,000. There is an assumption that 2 people can live as cheaply as 1.6 due to the economies of shared living.[1] Thus, $48,750=78,000/1.6. However, $60,000 may be a safer number to use as there may be unknowable spending shock(s) at some point over the 37 year (Sue at 95) planning horizon.
    b. You spend $8000/yr on home renovations through 2023.
    c. $30,000 is spent on a car every five years with the first purchase in 2023.
    d. You spend $10,000 annually on a summer rental through 2035.
    e. Health insurance will be $278/month starting in November 2026. A recent study on retiree health care expenses reported that $5200 is spent annually for Medicare, Medicare supplement plan and out of pocket cost. That is $1800 per person more than your expected cost. All scenarios assume you realize this higher cost. Health insurance/care inflation is set to the same 5.6% stated in that report.

[1] Boston U economist Larry Kotlikoff uses this assumption in his Economic Security Planner software. It seems a reasonable starting point.

f. You continue to pay $6300 in Vermont property taxes until Bill turns 85. Note: the standard deduction is greater than your itemized deductions so this expenditure is tax neutral until the Trump tax cuts end.

4. The baseline plan has Bill and Sue claiming Social Security at retirement and age 62 respectively. Other scenarios will test later dates.
5. Pensions:
   a. The baseline plan assumes Bill takes the 66 2/3rd survivor benefit of $50,855 as shown on the statement. Again, this is based on the assumptions that 2 can live as cheaply as 1.6. Thus, 62.5%=1/1.6. To be safe, no cola is assumed. Since the financial crisis, 17 states including MD have reduced, suspended, or eliminated cost-of-living-adjustments (COLAs) for public employee pensions.[2]
   b. The baseline plan assumes Sue takes a pension equal to 96% of the statement amount of $2240. This pension would have a 66 2/3rd survivor benefit. Since we do not yet know your actual reduction, I'm using the reduction from a commercial annuity. Your own reduction should be very similar.
6. Sue makes no retirement plan contributions other than to the required pension. Withdrawals from savings would otherwise be needed.

Scenarios

1. **The baseline plan** is fairly strong having never run out of money in 920 of the 1000 simulated capital market runs. Home equity is not included.

The probability of plan success is determined by simulating capital market returns using a normal distribution and the parameters given in the assumptions. The plan is then run 1000 times with randomized returns for each year.

Note on the table below that an 88% probability of success (920 of the 1000 simulations never ran out of money) would leave you with $764,000 in savings (excluding home equity) in today's spending power at the 50th percentile at plan end at the second death. The 50th percentile describes the ending value of the run in which 500 had higher values and 500 had lower. You'd have $86,000 remaining at the 10th percentile. The 10th percentile describes the ending value of the run in which 900 had higher values and 100 had lower.

Keep the following in mind: each simulation of the same scenario is independent of others. It's possible that the probability of success of a single scenario which is run multiple times can vary by several percentage points. Thus, scenario's that differ only a few percentage points are essentially the same.

2. **Bill delays his SS claim until age 70**. Sue claims at 62. This increases the probability of success.
   Benefits are considered "actuarially fair" for a single person with average life expectancy of early 80's. Someone with a life expectancy of well short of early 80's will get more in lifetime

[2] https://www.marketwatch.com/story/states-cut-colas-for-public-pensions-1400695047

benefits by claiming at 62. Someone with life expectancy well beyond early 80's will get more if they delay until age 70.

Benefits are actuarially generous for a married couple since the larger of the two monthly benefit amounts continues until the second spouse dies.

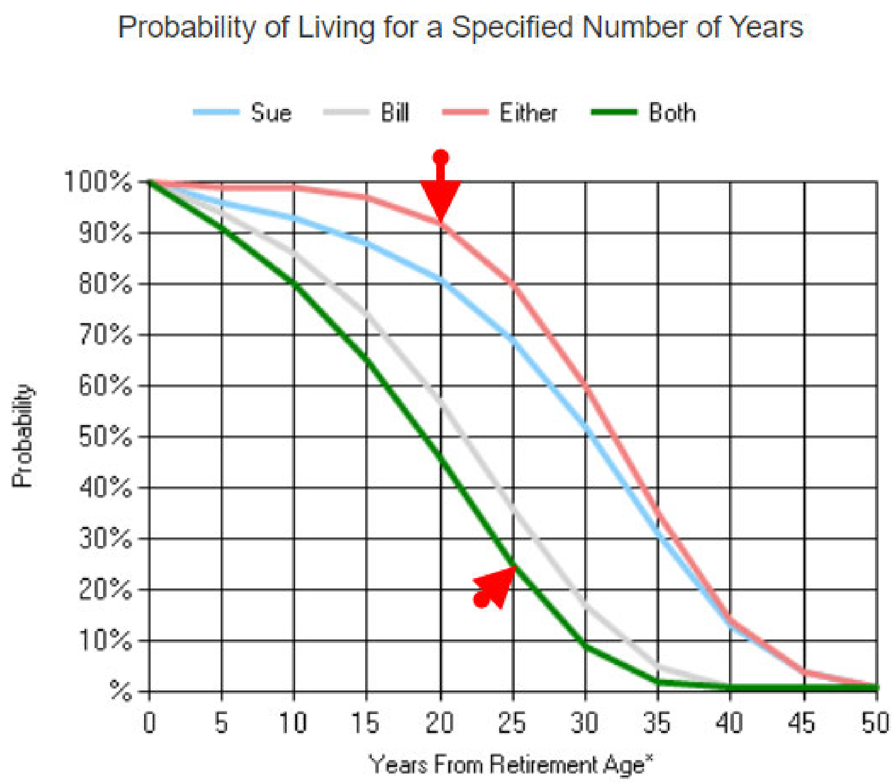
This leaves us with the following logic:

- With married clients, we need to think in terms of benefit longevity instead of individual longevity.

- The higher earner should delay to 70 if either spouse is expected to live well beyond the point in time that that higher earner would be in their early 80's.

- The lower earner should delay to 70 only if it's expected that both spouses will live well beyond that the point in time that the lower earner would be in their early 80's. For example, Sue would be 80 if Bill died at age 86. At that time her SS benefit would be replaced by Bill's. She would not yet be at the early vs. late SS claim breakeven age of early 80's. Thus, an age 62 claim would maximize her own cumulative benefits.

The chart below shows the probability of living X many years from now. Note that there's a 90% chance that either of you will be alive in 20 years and a 75% chance of either living 26 years. This implies that the Bill should delay his claim to age 70. However, the probability of both being alive in 25 years (Sue's early 80's) is only 22%. This implies that Sue should claim early.



3. **Sue retiring in July 2023** vs September 2024 has little impact.
4. **In 2021 you move to VT** with these assumptions:
    a. You pay VT taxes.
    b. Sue gets no pension and she takes her $72,228 pension contribution as an IRA roll over.
    c. You sell the $700,000 house and buy a $600,000 house. Future property tax is $6000.
    d. The $8,000 annual home renovation expense stops at the end of 2020.
    e. You have $50,000 in self-employment income to age 62 (through Aug '24).

    The probability of plan success is reduced by ten percentage points.

5. In this scenario **Bill uses $250,000 (2.5 years) of long term care (LTC) at the end of life**. There's no home downside. This doesn't have much impact. Sequence risk has the biggest impact early in retirement. The impact of an LTC event is much greater if it occurs early in retirement.
6. **Sue as survivor** with Bill selecting the 66% survivor benefit. Changes:
    a. 2.5 years of LTC care at $100,000/yr is incurred from July 2021 through Dec 2023 when Bill is assumed to die.
    b. Sue continues to work until Sep 2024

c. As mentioned above, discretionary spending declines from $78,000 to $60,000 once children funding stops.
d. $10,000 vacation stops.
e. At age 62, Sue claims a reduced SS survivor benefit of $2402= 3003 x 0.8, where $3003 is Bill's full retirement age SS benefit and 80% is the reduction for a claim before Sue's full retirement age. At age 70 she switches to her own retirement benefit of $3240= $2613 x 1.24, where $2613 is her full retirement age benefit and 124% reflects three years of delayed retirement credits.
f. She claims her pension without the 4% reduction for survivor benefit.

This scenario is successful without the home downsize. The reality is that a downsize would likely occur. However, I wanted to be conservative with this scenario. You might downsize to a $500,000 condo but incur association fees and special assessments that total $200,000 over your lifetime.

7. Same as scenario 4 but the pension now has the 50% survivor benefit. The probability of success at 88% is close to the minimally acceptable 85%. The plan would fail with zero survivor benefit.
8. **Bill as survivor** with Sue incurring a 2.5 year long term care event now followed by an assumed death in December 2023. No home downsize is assumed. Changes:
    a. Discretionary spending declines to $60,000 once your second child reaches 24.
    b. $10,000 vacation stops.
    c. Sue's $72,228 pension contribution is transferred to Bill pretax and goes into his IRA.
    d. Bill claims a SS survivor benefit from Jan 2024 through Nov 2026 equal to Sue's full retirement age benefit amount. At 70 he claims his own SS.
    e. The summer vacation expense and the VT property tax stops.
    f. Bill still claims the pension with the survivor benefit since this event is assumed to occur shortly after he claims the pension.

							Ending value of savings in today's dollars	
			Pension				Percentiles	
Scenario		SS claim Sue/Bill	Bill	Sue		Probability of success	50th	10th
1	Baseline	62/63	$50,855 (66%)	$25,804 (66%)		92%	$764,000	$86,000
2	Late SS	62/**70**	$50,855 (66%)	$25,804 (66%)		96%	$672,000	$198,000
3	Sue retires July 2023	62/**70**	$50,855 (66%)	**$22,176 (66%)**		98%	$937,000	$296,000
4	Move to VT in 2021	62/70	$50,855 (66%)	**None**		88%	$547,000	$0
5	Bill uses $250,000 LTC at end	62/**70**	$50,855 (66%)	$25,804 (66%)		96%	$773,000	$191,000
6	Sue survivor	**70/NA**	$50,855 (66%)	**$26,880**		79%	$421,000	$0
7	Sue survivor	**70/NA**	**$52,461 (50%)**	**$26,880**		88%	$699,000	$0
8	Bill survivor	NA/70	$50,855 (66%)	None		95%	$450,000	$50,000

Table of Contents

Net Worth Statement

Proposed Plan

This report displays a comprehensive list of your assets and liabilities as of **Feb 2, 2020**. Use this report to better understand your net worth situation. **Note:** Term life insurance policies and annuitized annuities do not appear on this report as they have no cash value.

Assets	Bill	Sue	Joint	Total
Non-Qualified Assets				
Cash account			$241,176	$241,176
Amer funds			$33,015	$33,015
Total	**$0**	**$0**	**$274,191**	**$274,191**
Qualified Assets				
IRA	$288,187			$288,187
IRA		$473,885		$473,885
HSA		$19,891		$19,891
Total	**$288,187**	**$493,776**	**$0**	**$781,963**
Lifestyle Assets				
Property tax (House)			$700,000	$700,000
Total	**$0**	**$0**	**$700,000**	**$700,000**
Liabilities	**Bill**	**Sue**	**Joint**	**Total**
Total	**$0**	**$0**	**$0**	**$0**
Total Net Worth	**$288,187**	**$493,776**	**$974,191**	**$1,756,154**

Important: The calculations or other information generated by NaviPlan® version 20.2 regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results. These calculations are shown for illustrative purposes only because they utilize return data that may not include fees or operating expenses, and are not available for investment. If included, fees and other operating expenses would materially reduce these calculations. NaviPlan® provides general analysis and planning with non-specific recommendation language that does not qualify as investment advice. Specific investment recommendations found on this deliverable are solely created by the advisor and may materially change the advisor-client fiduciary relationship, and thus should be reviewed between the interested parties.

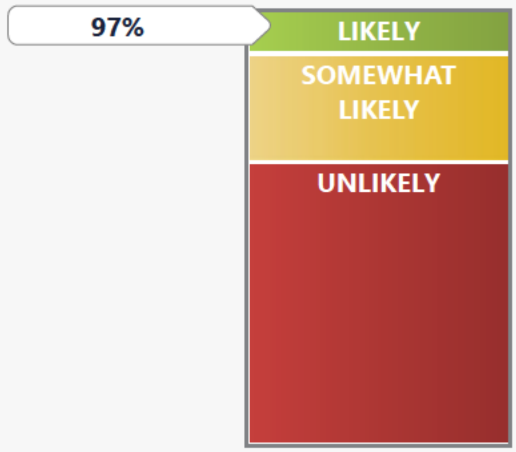
Probability of Success - Retirement

Later SS

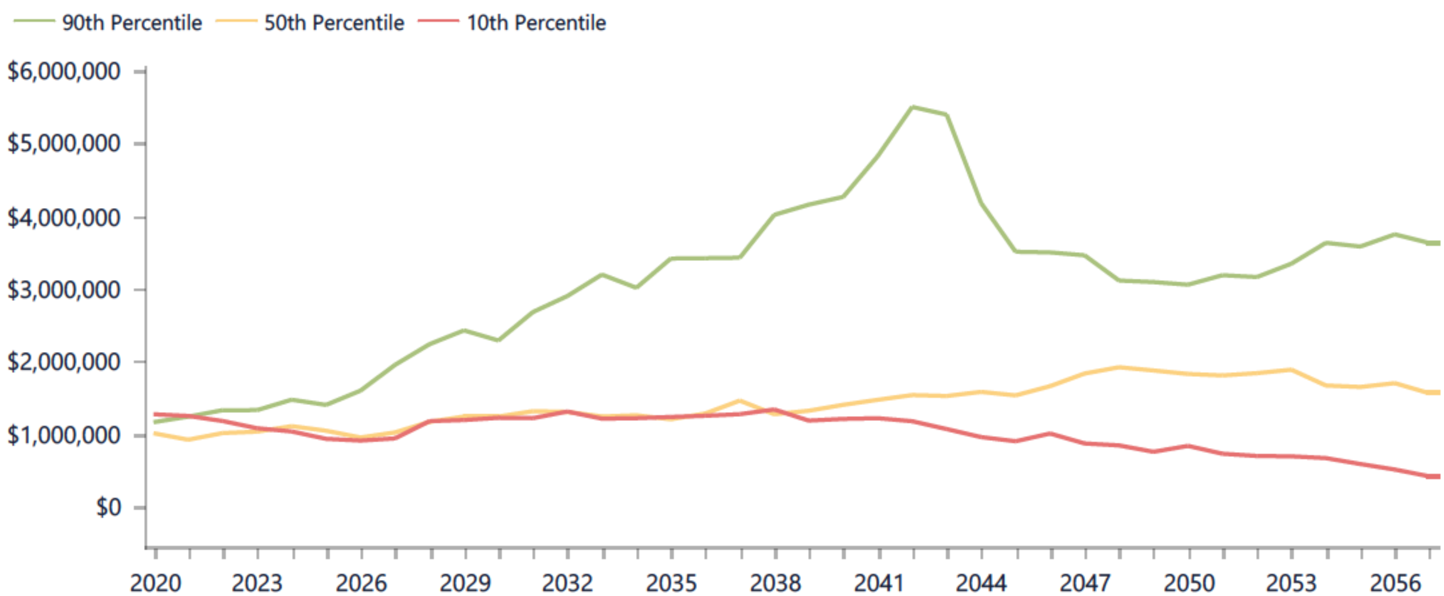
The following report displays the results of Monte Carlo simulations run for your retirement goal. The results are derived from **500** simulations and the specified retirement goal.

The chart to the right represents the overall likelihood of success for the retirement goal. The graph below projects the likelihood of achieving a given investment portfolio value over time for the selected scenario.

PROBABILITY OF SUCCESS: RETIREMENT



Value of Investments funding Retirement



Success Rate	90th Percentile	50th Percentile	10th Percentile
97%	$3,629,462	$1,562,990	$420,922

AN INTRODUCTION

Hope for the Best, Prepare for the Worst

What are Monte Carlo Analyses?

Monte Carlo is, in fact, a city in Monaco known for its gambling. However, Monte Carlo is also a statistical simulation method that was named after the well-known gambling center. It has been used in many applications, but is particularly useful with a financial analysis due to its ability to demonstrate possibilities.

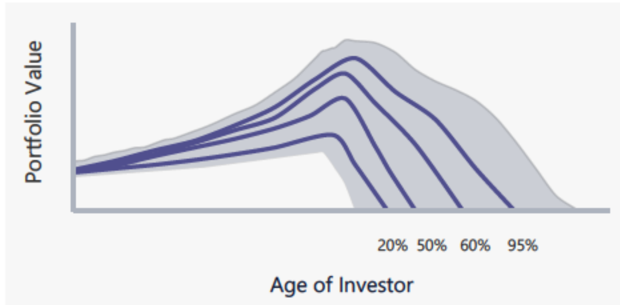
Why Should I Care About Monte Carlo?

If you are preparing for retirement, you should care a lot about Monte Carlo. There is tremendous uncertainty in the world and that affects your financial situation; as a result, you need a method to demonstrate how that uncertainty can affect your savings and potential ability to spend.

Analyzing Your Results

There are a number of ways to look at the results of a Monte Carlo simulation. The first is to look at the overall probability of success. This probability represents the most likely simulation case and is a good guide if you would like a general idea of the likelihood of reaching your goals in the future. A second way to look at your results is to look at a time series chart that details how your assets perform over time. By analyzing Monte Carlo in this way, you are able to see how variability in asset performance leads to the final result of success or failure of your goals. Ultimately, the underlying uncertainty in your financial situation can lead to very different outcomes.

The only thing that you can do is to prepare as best as you can for every situation.



Monte Carlo simulations randomize returns for each year that a portfolio is invested in the market. In many cases, retirees' annual withdrawals eventually deplete their savings. The lines in the accompanying graphic represent the value for an example retirement portfolio using many simulations. Accompanying those lines is a value that represents the proportion of portfolios that were depleted at an earlier age. The gray area represents all possible simulation outcomes in this general example. Simulations such as these are useful because they demonstrate that uncontrollable factors (such as investment returns) can significantly impact when a retirement portfolio may be depleted. Preparing for worst case scenarios can help you succeed in any environment.

Itemized Retirement Spending

Later SS

The following table shows the projected expenses in your retirement years. By identifying and managing these expenses, you can increase your chances of reaching your retirement goals.

Expense	Member	Start Date	End Date	Annual Amount	Index Rate	Fixed?
Retirement Expenses						
[redacted] pension	Sue	1/1/2020	8/31/2024	$6,912	0.00%	Yes
Medicare	Bill	10/1/2021	12/31/2051	$1,740	2.50%	Yes
Medicare	Sue	8/1/2027	12/31/2057	$1,740	2.50%	Yes
Health ins 2	Joint	10/1/2021	9/30/2026	$6,168	5.60%	Yes
Car	Bill	1/1/2023	12/31/2043	$30,000	2.50%	Yes
AA Cty tax 2	Joint	1/1/2023	12/31/2057	$2,800	2.50%	Yes
Discretionary 2	Joint	1/1/2023	12/31/2024	$83,000	2.50%	Yes
Discretionary 3	Joint	1/1/2025	12/31/2057	$78,000	2.50%	Yes
Car	Sue	1/1/2025	12/31/2049	$30,000	2.50%	Yes
Medical Expenses	Bill	10/1/2026	12/31/2051	$3,472	5.60%	Yes
Medical Expenses	Sue	10/1/2026	12/31/2057	$3,472	5.60%	Yes
Health ins 1	Joint	3/1/2020	9/30/2021	$4,536	5.60%	Yes
Dental vision	Joint	3/1/2020	12/31/2057	$1,140	2.50%	Yes
Home renovations	Joint	1/1/2021	12/31/2023	$8,000	2.50%	Yes
Kids auto ins	Joint	1/1/2021	12/31/2025	$1,000	2.50%	Yes
Auto home umb	Joint	1/1/2021	12/31/2057	$6,450	2.50%	Yes
Discretionary 1	Joint	1/1/2021	12/31/2022	$88,000	2.50%	Yes
Summer rental	Joint	1/1/2021	12/31/2035	$10,000	2.50%	Yes
AA Cty tax 1	Joint	1/1/2021	12/31/2022	$2,100	2.50%	Yes
ME property tax	Joint	1/1/2021	12/31/2040	$6,300	2.50%	Yes

Retirement Asset Accumulation & Depletion

Later SS

This report displays a yearly summary of changes to the value of retirement assets for the selected scenario. Additionally, all other (non-retirement) assets are shown in the EOY Other Assets column in order to show the potential for additional ability to cover spending needs.

Note: The initial asset values in this report represent their projected value at the end of the year of the analysis.

Year	Age	SOY Assets	Growth & Reinvestments	Contributions[1]	Withdrawals[2]	Withdrawal Rate	EOY Assets	EOY Other Assets
2020	*64/58	$1,056,154	$42,978	$2,398	$0	0.0%	$1,101,530	$712,833
2021	65/59	$1,101,530	$49,035	$0	$20,913	1.9%	$1,129,652	$727,090
2022	66/60	$1,129,652	$51,022	$0	$25,417	2.2%	$1,155,256	$741,632
2023	67/61	$1,155,256	$53,031	$0	$55,653	4.8%	$1,152,635	$756,464
2024	68/62*	$1,152,635	$54,541	$0	$27,293	2.4%	$1,179,883	$771,594
2025	69/63	$1,179,883	$56,745	$0	$78,645	6.7%	$1,157,983	$787,026
2026	70/64	$1,157,983	$58,091	$0	$46,952	4.1%	$1,169,122	$802,766
2027	71/65	$1,169,122	$59,832	$4,455	$11,030	0.6%	$1,222,379	$818,821
2028	72/66	$1,222,379	$61,908	$11,614	$26,164	1.2%	$1,269,736	$835,198
2029	73/67	$1,269,736	$63,926	$1,355	$17,781	1.3%	$1,317,236	$851,902
2030	74/68	$1,317,236	$66,317	$117	$18,662	1.4%	$1,365,007	$868,940
2031	75/69	$1,365,007	$68,765	$0	$20,738	1.5%	$1,413,034	$886,319
2032	76/70	$1,413,034	$71,269	$0	$23,057	1.6%	$1,461,247	$904,045
2033	77/71	$1,461,247	$73,828	$0	$67,142	4.6%	$1,467,933	$922,126
2034	78/72	$1,467,933	$74,587	$20,995	$60,472	2.7%	$1,503,044	$940,568
2035	79/73	$1,503,044	$75,575	$0	$86,439	5.8%	$1,492,180	$959,380
2036	80/74	$1,492,180	$75,722	$35,285	$66,320	2.1%	$1,536,867	$978,567
2037	81/75	$1,536,867	$76,688	$35,453	$69,430	2.2%	$1,579,578	$998,139
2038	82/76	$1,579,578	$77,518	$35,639	$72,668	2.3%	$1,620,067	$1,018,102
2039	83/77	$1,620,067	$78,204	$35,686	$75,808	2.5%	$1,658,149	$1,038,464
2040	84/78	$1,658,149	$78,728	$35,788	$79,298	2.6%	$1,693,367	$1,059,233
2041	85/79	$1,693,367	$79,084	$42,979	$82,448	2.3%	$1,732,982	$1,080,417

** = year of retirement*

Year	Age	SOY Assets	Growth & Reinvestments	Contributions[1]	Withdrawals[2]	Withdrawal Rate	EOY Assets	EOY Other Assets
2042	86/80	$1,732,982	$79,385	$42,788	$85,675	2.5%	$1,769,480	$1,102,026
2043	87/81	$1,769,480	$79,498	$0	$99,411	5.6%	$1,749,566	$1,124,066
2044	88/82	$1,749,566	$78,537	$42,306	$92,333	2.9%	$1,778,076	$1,146,548
2045	89/83	$1,778,076	$78,215	$0	$108,274	6.1%	$1,748,018	$1,169,479
2046	90/84	$1,748,018	$76,774	$41,725	$98,903	3.3%	$1,767,614	$1,192,868
2047	91/85	$1,767,614	$75,998	$42,102	$101,610	3.4%	$1,784,104	$1,216,726
2048	92/86	$1,784,104	$75,016	$41,191	$104,257	3.5%	$1,796,054	$1,241,060
2049	93/87	$1,796,054	$73,800	$40,119	$106,820	3.7%	$1,803,153	$1,265,881
2050	94/88	$1,803,153	$72,352	$38,590	$108,877	3.9%	$1,805,218	$1,291,199
2051	95/89	$1,805,218	$70,668	$36,847	$110,785	4.1%	$1,801,948	$1,317,023
2052	-/90	$1,801,948	$68,844	$26,602	$101,673	4.2%	$1,795,722	$1,343,363
2053	-/91	$1,795,722	$67,132	$24,995	$103,323	4.4%	$1,784,526	$1,370,231
2054	-/92	$1,784,526	$65,173	$23,370	$104,776	4.6%	$1,768,292	$1,397,635
2055	-/93	$1,768,292	$62,993	$21,461	$105,996	4.8%	$1,746,751	$1,425,588
2056	-/94	$1,746,751	$60,623	$18,469	$105,762	5.0%	$1,720,080	$1,454,100
2057	-/95	$1,720,080	$58,310	$14,919	$168,616	8.9%	$1,624,694	$1,483,182

** = year of retirement*

[1]Includes all additional funds added to assets funding the retirement goal. [2]Includes all assets removed from the assets funding the retirement goal.

Disclaimer

Important: Please read this section carefully. It contains an explanation of some of the limitations of this report.

Important: *The calculations or other information generated by NaviPlan regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results.*

Below is an outline of several specific limitations of the calculations of financial models in general and of NaviPlan specifically.

The Calculations Contained in This Report Depend in Part, on Personal Data That You Provide

The assumptions used in this analysis are based on information provided and reviewed by you. These assumptions must be reconsidered on a frequent basis to ensure the results are adjusted accordingly. The smallest of changes in assumptions can have a dramatic impact on the outcome of this analysis. Any inaccurate representation by you of any facts or assumptions used in this analysis invalidates the results.

This Report is Not a Comprehensive Financial Report and Does Not Include, Among Other Things, a Review of Your Insurance Policies

We have made no attempt to review your property and liability insurance policies (auto and homeowners, for example). We strongly recommend that in conjunction with this analysis, you consult with your property and liability agent to review your current coverage to ensure it continues to be appropriate. In doing so, you may wish to review the dollar amount of your coverage, the deductibles, the liability coverage (including an umbrella policy), and the premium amounts.

NaviPlan Does Not Constitute Legal, Accounting, or Tax Advice

This analysis does not constitute advice in the areas of legal, accounting or tax. It is your responsibility to consult with the appropriate professionals in those areas either independently or in conjunction with this planning process.

Circular 230: Any income tax, estate tax or gift tax advice contained within this document was not intended or written to be used for, and cannot be used for, the purpose of avoiding penalties that may be imposed.

Discussion of the Limits of Financial Modeling

Inherent Limitations in Financial Model Results

Investment outcomes in the real world are the result of a near infinite set of variables, few of which can be accurately anticipated. Any financial model, such as NaviPlan, can only consider a small subset of the factors that may affect investment outcomes and the ability to accurately anticipate those few factors is limited. For these reasons, investors should understand that the calculations made in this analysis are hypothetical, do not reflect actual investment results, and are not guarantees of future results.

Results May Vary With Each Use and Over Time

The results presented in this analysis are not predictions of actual results. Actual results may vary to a material degree due to external factors beyond the scope and control of this analysis. Historical data is used to produce future assumptions used in the analysis, such as rates of return. Utilizing historical data has limitations as past performance is not a guarantee or predictor of future performance.

Outline of the Limitations of NaviPlan and Financial Modeling

Your Future Resources and Needs May Be Different From the Estimates That You Provide

This analysis is intended to help you in making decisions on your financial future based, in part, on information that you have provided and reviewed.

The calculations contained in the report utilize the information that you have provided and reviewed including, but not limited to, your age, tolerance for investment risk, income, assets, liabilities, anticipated expenses, and likely retirement age. Some of this information may change in unanticipated ways in the future and those changes may make NaviPlan less useful.

*NaviPlan Considers Investment in Only a Few Broad Investment Categories**

Where applicable, NaviPlan utilizes this information to estimate your future needs and financial resources and to identify an allocation of your current and future resources, given your tolerance for investment risk, to a few broad investment categories: large-cap equity, mid-cap equity, small-cap equity, international equity, emerging equity, bonds, and cash.

In general and where applicable, NaviPlan favors the investment categories that have higher historical and expected returns. The extent of the recommended allocation to these favored investment categories is limited by the investor's disclosed tolerance for risk. In general, higher returns are associated with higher risk.

These broad investment categories are not specific securities, funds, or investment products and NaviPlan is not an offer or solicitation to purchase any securities or investment products. The assumed rates of return of these broad categories are based on the returns of indices. These indices do not include fees or operating expenses and are not available for investment. These indices are unmanaged and the returns are shown for illustrative purposes only.

It is important to note that the broad categories that are used are not comprehensive and other investments that are not considered may have characteristics that are similar or superior to the categories that are used in NaviPlan.

Refer to the Asset Allocation section of this report for details on return rate assumptions used throughout this analysis.

* Investment categories may not apply to Forecaster Assessments.

*NaviPlan Calculates Investment Returns Far Into the Future Using Morningstar Data**

For all asset class forecasts, Morningstar uses the building block approach to generate expected return estimates. The building block approach uses current market statistics as its foundation and adds historical performance relationships to build expected return forecasts. This approach separates the expected return of each asset class into three components: the real risk-free rate, expected inflation, and risk premia. The real risk-free rate is the return that can be earned without incurring any default or inflation risk. Expected inflation is the additional reward demanded to compensate investors for future price increases, and risk premia measures the additional reward demanded for accepting uncertainty associated with investing in a given asset class. Any calculation of future returns of any asset category, including any calculation using historical returns as a guide, has severe limitations. Changes in market conditions or economic conditions can cause investment returns in the future to be very different from returns in the past. Returns realized in the future can, in fact, be much lower, or even negative, for all or some of these asset categories and, if so, the calculations in NaviPlan will be less useful.

Any assets, including the broad asset categories considered in NaviPlan, that offer potential profits also entail the possibility of losses.

Furthermore, it is significant that the historical data for these investment categories does not reflect investment fees or expenses that an investor would pay when investing in securities or investment products. The fees and expenses would significantly reduce net investment returns and a calculation taking account of fees and expenses would result in lower expected asset values in the future.

Refer to the Asset Allocation section of this report for details on return rate assumptions used throughout this analysis.

* Investment categories may not apply to Forecaster Assessments.

NaviPlan Calculations Include Limited Accounting for Taxes

The federal and state income tax laws are extremely complex and subject to continuous change. NaviPlan has limited capability to model any individual's tax liability, and future tax laws may be significantly different from current tax laws. Any changes in tax law may affect returns for any given investment and make the calculations produced by NaviPlan less useful. The calculations contain limited support for the tax impact on transfers of money or redemptions of funds.

NaviPlan Calculations Do Not Include Fees and Expenses

The calculations utilize return data that do not include fees or operating expenses. If included, fees and other operating expenses would materially reduce these calculations. Recommendations included in the calculations to redeem funds from certain investments or transfer money to others do not account for fees and charges that may be incurred.

NaviPlan Calculations May Include Variable Products

Variable life insurance policies or deferred variable annuities are inherently risky and may be included in the calculations. The return rate assumptions used throughout this analysis do not relate to the underlying product illustrated. These returns should not be used as a proxy for actual performance as they may exaggerate the performance potential of the underlying investment accounts (subaccounts). Any calculations incorporating variable products are hypothetical and intended to show how the performance of the underlying subaccounts could affect the value and death benefit of the variable products; these calculations are not intended to predict or project investment results.

The rates of return have not been adjusted to include mortality and expense fees attributable to variable annuities. These fees, and their effects on asset growth, are accounted for as a monthly expense of the annuity contract and can be observed in applicable net worth reports.

If a variable annuity included in this analysis contains a guaranteed minimum withdrawal rider, it is important to understand that if the contract value is greater than the guaranteed minimum withdrawal benefit once withdrawals begin, as an investor you will have paid for the rider and not actually used it.

Income taxes during the annuitization phase are accounted for in the calculations. See the section titled NaviPlan Calculations Include Limited Accounting for Taxes in this Disclaimer for further information on the tax methodology used.

Review of Advisor-Client Fiduciary Relationship or Information about Fiduciary Standards

NaviPlan's role in Financial Planning

NaviPlan provides general analysis and planning with non-specific recommendation language that does not qualify as investment advice and therefore does not create a fiduciary relationship. Specific investment recommendations found on this deliverable are solely created by the advisor and may materially change the advisor-client fiduciary relationship, and thus should be reviewed between the interested parties.