

Retirement Calculators

AAll Houston Chapter
March 26, 2021

Ben Klein

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Retirement - Just how much do you need?



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CrystalBall

online

Ask the Crystal Ball

Take a few seconds to think about your question. It must be formulated in such a way that the answer can be **yes or no**.



crystalballonline.com

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It Doesn't Require Magic

- Retirement calculators create a plan – a financial forecast
 - Based on assumptions, current fact and future projection.
 - Rely on the accuracy and precision of their input
 - Subject to the error and uncertainty of the assumptions, predictions, ... and the tool used to create it.

Some tools are better than others,
and some are worse.

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“The goal of forecasting is not to predict the future, but to tell you what you need to know to take meaningful action in the present.”

Paul Saffo

Six Rules for Accurate Effective Forecasting

Harvard Business Review,

July-August 2007, 122-131

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Accumulation / Decumulation

invest verb (1)

 Save Word

in-vest | \ in-'vest \

invested; investing; invests

Definition of invest (Entry 1 of 2)

transitive verb

1 : to commit (money) in order to earn a financial return

2 : to make use of for **future benefits** or advantages
// *invested* her time wisely

3 : to involve or engage especially emotionally
// *were deeply invested* in their children's lives

intransitive verb

: to make an **investment**

decumulation noun

 Save Word

de-cumulation | \ 'dē+ \

Definition of decumulation

: disposal of something accumulated

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Goals

- Enough money to live comfortably in retirement
- Travel
- Toys
- Gifts
 - Family
 - Charity
 - Legacy



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How Retirement Calculators Work

- Account for the net accumulation of your assets
 - Income
 - Expenses
 - Gains / Losses
 - Interest / Dividend
 - Taxes
- Predict and project a future value per year
- Caution – Some show future value in current dollars

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How Retirement Calculators Work (2)

- Combine expected available assets and returns per year and subtract expected expenses, RMD's and taxes to determine sufficiency
- Few account for Order of Withdrawal – Large effect on taxes and residual estate
 - How to withdraw
 - How much
 - In what order
 - Taxable – Regular Investment Accounts
 - Tax Deferred – Retirement Accounts
 - Tax Exempt – Roth

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Default Order of Withdrawal

- General Rule of Thumb Withdrawal Order
 - Taxable
 - Tax Deferred
 - Tax Exempt
- RMD's - Higher Withdrawals from Tax Deferred Later in Retirement
 - Lower Taxes Early in Retirement
 - Higher Taxes Later in Retirement
 - Higher Total Taxes – Lower Residual Estate*

* May depend on your Tax Bracket and amount in your Tax Deferred accounts

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Modified Order of Withdrawal

- Tax Modified Order of Withdrawal
 - Tax Deferred - To the Limit of Your Tax Bracket
 - Taxable
 - Tax Exempt
- RMD's – Will be Lower Later in Retirement
 - Higher Taxes Early in Retirement
 - Lower Taxes Later in Retirement
 - Lower Total Taxes – Higher Residual Estate*

* May depend on your Tax Bracket and amount in your Tax Deferred accounts

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Input Data

Knowns (Controlled)

- Current Age
- Spouse's Age
- Current Income
- Current Savings
- Current Investments
- Current Expenses
- Current Debt
- Current Investment Returns

Unknowns (Uncontrolled)

- Retirement Age
- Spouse's Retirement Age
- Length of Retirement
- Future Marital Status
- Future Health
- Future Expenses
- Future Income
- Future Debt
- Future Investment Returns
- Inflation

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Unknowns Can Lead to Error

- Retirement Age
- Life Expectancy
- Expenses
- Portfolio Allocation and Size
- Inflation
- Investment Return

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Complexity

- Income and Expenses change every year
- Value of money changes over time
- No financial outcome or decision stands alone
 - Income affects taxes
 - Taxes affect spending
 - Social Security benefits and retirement accounts affect Taxes
 - Withdrawals affect assets
- All of this happens among the milestones and changes that life brings.

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Rules for Retirement Calculator Use

- Never Assume Complete Accuracy
- Iterative – Long Term Process
- Small Errors Compound into Big Errors
- Test Multiple and Varied Scenarios
- Use Results as a Guide
- Look for Corroboration

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Types of Retirement Calculators

- Free
- Purchased
- Consumer / Professional
- Online
- PC / Mac Applications
- Spreadsheet (Excel) based

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Key Attributes

- Detail and Fidelity – Type and Amount of Input Data Required
 - Low
 - Medium
 - High
- Modeling – Future Investment Returns
 - Simple - Projected Return Rates
 - Historic Return Rates
 - Monte Carlo

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Detail and Fidelity

- Low
 - Dozen input fields or less using summarized investment accounts
 - Simple fixed or average future rate of return
 - Requires just a few minutes
- Medium
 - Additional data input fields
 - Multiple investment accounts and assets
 - Allows one-time financial events or irregular income or expenses
 - Requires 10 – 15 minutes
- High
 - More data input fields and options
 - Social Security and Tax calculations
 - Allows for comparison of multiple scenarios
 - Potentially several hours to collect, input and analyze results

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Modeling Investment Returns

- Average Returns
 - Simplest
 - Does not reflect the impact of volatility
 - Overly simplistic
- Historical Returns
 - Uses actual market data on the performance of asset classes
 - What would have happened in the past
 - Will the market really repeat itself as it had in the past
 - What historical starting point do you base your model on?
- Monte Carlo
 - Average return accounting for standard deviation
 - Requires expertise in choosing necessary mathematical parameters
 - Artificial randomness may not mimic the real world accurately

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Calculator.net

<https://www.calculator.net/retirement-calculator.html>

Web
Low Fidelity
History – Average
\$0

Your Age Now	63
Your Planned Retirement Age	65
Your Life Expectancy	95 estimate yours , 79 in U.S. on average
Expected Social Security Income	\$ 2100 /Month estimate your number at SSA.gov
Other Income After Retirement	\$ 0 /Month pension, rental property income...
Average Investment Return	5%
Inflation Rate (Annual)	3%
Your Current Income	\$ 75000 /Year
Income Needed After Retirement	125% 70-80% to maintain life style

Calculate 

You will need \$1,643,652 at Age 65 to Retire

Savings Needed at 65: \$1,643,652
Equivalent Purchase Power Now: \$1,549,300
Lifestyle after Retirement: Much better than your current life style

Monthly Income at Age 65

Total:	\$8,288
From Savings:	\$6,060
From Social Security:	\$2,228
From Other Income:	\$0

Monthly Income at Age 95

Total:	\$20,118
From Savings:	\$14,710
From Social Security:	\$5,408
From Other Income:	\$0

Breakdown of Monthly Income at Age 65



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moneychimp

http://www.moneychimp.com/articles/randomness/retirement_odds.htm

Web
Low Fidelity
History – Historical
\$0

Starting Principal at Retirement: \$ 2,000,000
Time in Retirement: 30 years
Desired Annual Withdrawal: \$ 100,000
 Adjust for Inflation
Principal you'd like to have left to leave to your heirs: \$ 0
Portfolio: 60 % stocks / 40 % cash
Use market data from 1871 through 2020
"Stocks" lose 0.23 % in annual expenses
"Cash" earns 1 % above inflation
Calculate Reset

Results

S&P 500 returns (dividends included): [Robert Shiller](#) and [Yahoo Finance](#)

121 possible 30-year periods
80% success rate

24 failures:

1902-1930 (28 years)
1905-1933 (28 years)
1906-1930 (24 years)
1907-1933 (26 years)
1909-1937 (28 years)
1910-1939 (29 years)
1911-1938 (27 years)
1912-1939 (27 years)
1929-1954 (25 years)
1937-1964 (27 years)
1959-1988 (29 years)
1960-1987 (27 years)
1962-1986 (24 years)
1963-1991 (28 years)
1964-1988 (24 years)
1965-1986 (21 years)
1966-1986 (20 years)
1967-1991 (24 years)
1968-1988 (20 years)
1969-1988 (19 years)
1970-1994 (24 years)
1971-1997 (26 years)
1972-1996 (24 years)
1973-1994 (21 years)

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msn | money

<https://www.msn.com/en-us/money/tools/retirementplanner>

Web
Low Fidelity
History – Average
\$0

Retirement Planner

Current Annual Income
120,000

Age
Current: 30 Retirement: 65

Life Expectancy
85

Current Savings
10,000

Desired Annual Income After Retirement
100,000

Annual Investment Return (%)
Pre-retirement: 5 Post-retirement: 5

Calculate

To retire at the age of 65 with an annual income of \$100,000, each year you need to save, 10.989%, which equates to **\$13,187**

[MORE DETAILS](#)

1.40M
1.05M
700,000
350,000
0

140M
105M
700,000
350,000
0

54 38 42 46 50 54 58 62 66 70 74 78 82 86

Age

■ Retirement Income ■ Savings

Chart Schedule

To retire at the age of 65 with an annual income of \$100,000, each year you need to save, 10.989%, which equates to

\$13,187

[MORE DETAILS](#)

Age	Cumulative Savings	Interest	Retirement Income	Ending Balance
30	10,000	0	-	10,000
31	23,187	500	-	23,687
32	36,374	1,184	-	38,059
33	49,561	1,903	-	53,149
80	507,569	25,378	100,000	432,948
81	432,948	21,647	100,000	354,595
82	354,595	17,730	100,000	272,325
83	272,325	13,616	100,000	185,941
84	185,941	9,297	100,000	95,238
85	95,238	4,762	100,000	0

Chart Schedule

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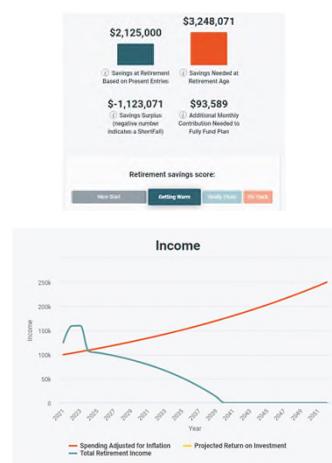
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Financial Mentor

<https://financialmentor.com/calculator/best-retirement-calculator>

Web
Medium Fidelity
History – Average
\$0

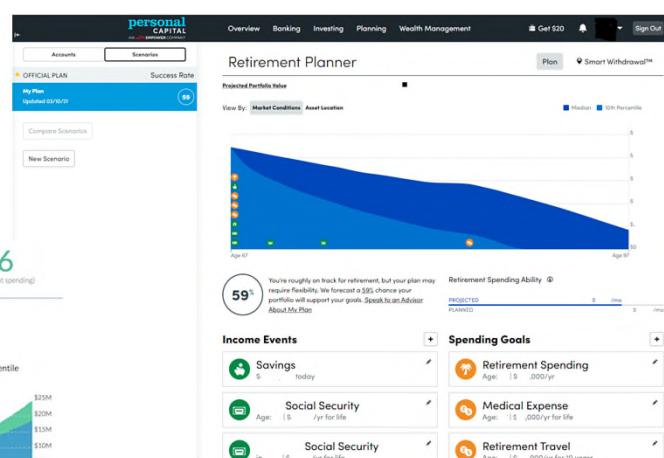
Personal Information		
① Enter age at end of current year:	67	Yrs
② Enter age you plan to retire:	65	Yrs
③ Enter life expectancy:	90	Yrs
① Conventional Retirement Planning		
① Current total savings:	\$ 2000000	
② Desired annual retirement income:	\$ 100000	
③ Desired estate at death:	\$ 0	
④ Monthly savings contributions		
⑤ Amount:	0	Annual %: (%)
S 0	Yrs	To 0 Yrs
Remove or add another contribution.		
④ Average Annual Investment Return		
⑤ From now (67) to age 67, apply this ROI:	7.5	%
⑥ From 67 to end of life (90), apply this ROI:	5	%
⑦ Estimated tax rate during retirement:	32 %	
⑧ Estimated average annual inflation rate:	3 %	



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Personal Capital

<https://www.personalcapital.com/>



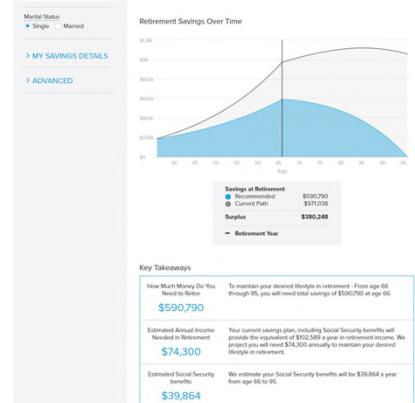
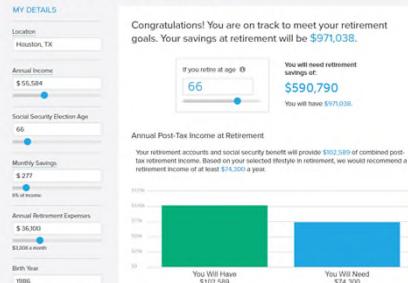
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smartasset

<https://smartasset.com/retirement/retirement-calculator>

Web
Low Fidelity
History - Average
\$0

Retirement Calculator



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Fidelity Investments

Now, let's talk about money.

How much income do you earn? /yr

How would you like to estimate your retirement expenses?

<input checked="" type="radio"/> Lifestyle	<input type="radio"/> Estimated Dollars	<input type="radio"/> Detailed Expenses
--	---	---

Which of the following best describes your spending in retirement?

Below Average

Average **On Target**

Above Average

1% below average

The inflation rate is projected to inflation rate of 2.2%, with the exception of health care over 10 years. The inflation rate for health care is based on a schedule of rates that starts at 3% and gradually declines until it matches the general inflation rate.

About You

- Personal Information | Click to load
- Time Horizon | Click to load
- Retirement Expenses | Click to load
- Taxes | Click to load

Assets & Savings

- Accounts & Contributions | Accounts Assigned: 1 | Total Assigned Value:
- Asset Mix | Click to load

Income Sources

- Salary & Other Income | Click to load
- Social Security | Click to load



About You

- Personal Information | Click to load
- Time Horizon | Click to load

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T Rowe Price

<https://www.troweprice.com/usis/advice/tools/retirement-income-calculator>

Web
Medium Fidelity
History – Monte Carlo
\$0

Personal Information

Tell us a little about yourself! All fields are required.

Adam	Eve
First Name	
Gender	Male
Date of Birth	07/1957
Employment Status	Retired
Marital Status	Married
State of Residence	Texas

Additional Social Security Information

In Adam currently receiving benefits? Yes

What year did Adam retire? 2020

Adam's Employment Income in 2020? \$ 1

What year did Eve retire? 2020

Eve's Employment Income in 2021? \$ 1

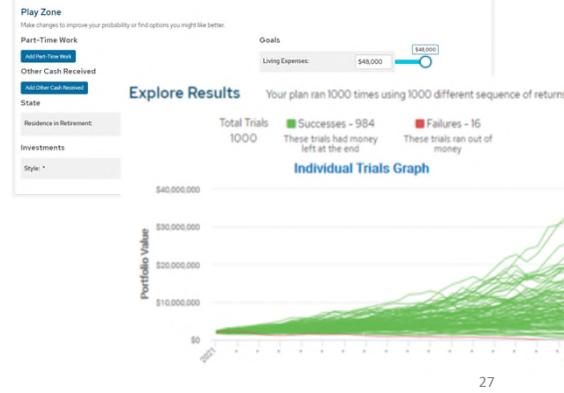
Your Retirement Savings

Total Amount Saved for Retirement Today: \$ 1,000,000

Percent in Qualified Retirement Accounts (e.g. 401(k), 403(b), IRA): 50 %

How do you plan to invest your retirement assets? Moderate

Will you receive other cash in the future to fund retirement? No



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Vanguard

<https://retirementplans.vanguard.com/VGApp/pe/pubeducation/calculators/RetirementNestEggCalc.jsf>

Web
Low Fidelity
History – Monte Carlo
\$0

Retirement Nest Egg Calculator

How long will your retirement nest egg last? How much could your investments grow? Answer a few questions to see a long-term projection. Then try making a few changes to view the impact on your results.

Your Retirement Plan

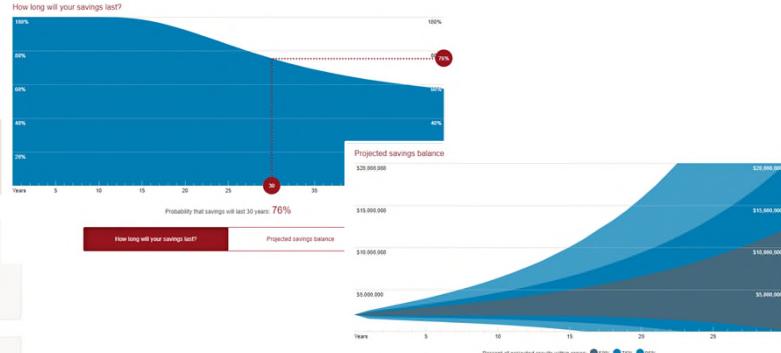
How many years should your savings last? 30 years

What is your savings balance today? \$2,000,000

How much do you spend each year? \$80,000 (4.0% of savings)

How are your savings allocated?

60% Stocks
25% Bonds
15% Cash



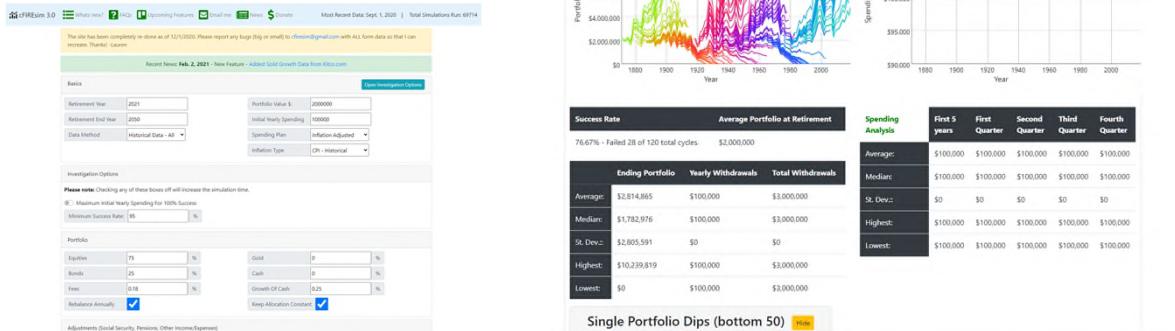
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cFIREsim

<https://www.cfiresim.com/>

Crowdsourced FIRE Simulator
Web
Medium Fidelity
History – Historical
\$0



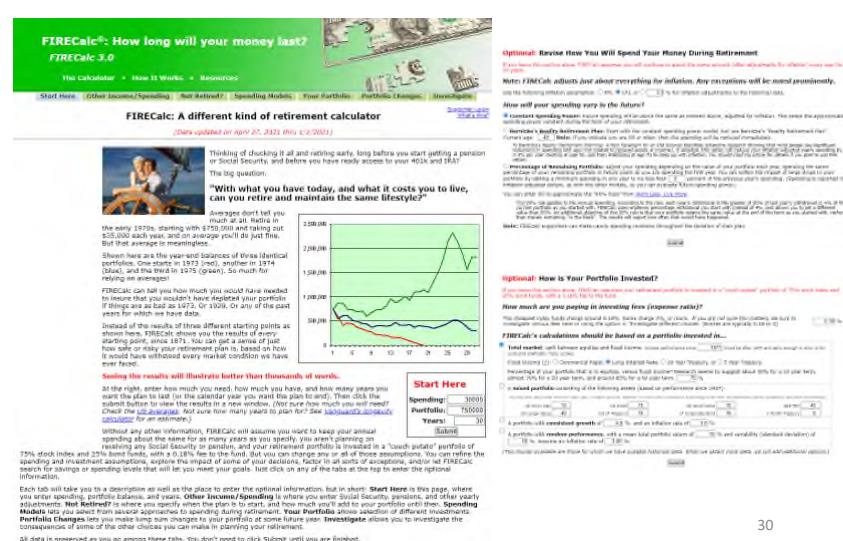
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FIREcalc

<https://www.firecalc.com/>

Web
Medium Fidelity
History – Average, Historical, Monte Carlo
etc.



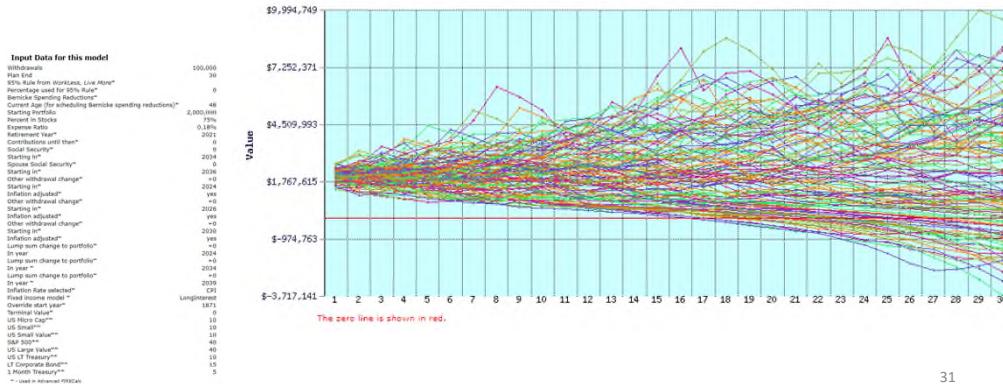
30

30

FIREcalc

<https://www.firecalc.com/>

Year-by-Year Portfolio Balances



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i-ORP

<https://i-orp.com/Plans/index.html>

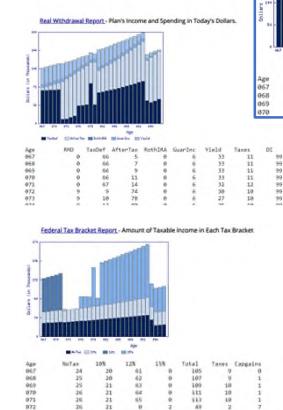
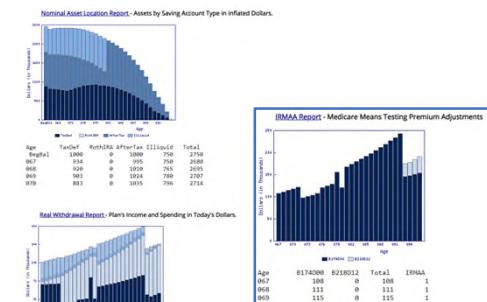
<https://i-orp.com/Plans/extended.html>

The Essential ORP Narrative

1. Essential ORP asks for the financial facts of your retirement and computes your optimal savings withdrawal plan.

Amounts are in thousands of dollars
(example: For \$10,000, enter 10)

Retiree	Spouse
Current Age(s): Retirement Age (Default Age 65):	61 62
Tax-deferred Savings (RA, 401k, etc.):	€500 €500
Tax-deferred Maximum Annual Contribution:	€
Both RA Savings	€
Both RA Maximum Annual Contribution	€
Regular Savings and Brokerage Accounts, Maximum Annual Contribution of All Types	€1000
Social Security Benefits	€2.5
Age to Begin Benefits	61
Pension and Other Income, Induced to Inflation	€2.5
Pension and Other Income, not Induced to Inflation	€
Retiree Beginning Age (Default: Retirement Age):	61 62
Illiquid Assets	Home Other
Value of Home or Business	€750
Original Cost, for Tax Purposes:	€650
Optimize Your Plan	Optimize



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i-ORP Extended

<https://i-orp.com/Plans/extended.html>

1 Enter all dollar amounts as thousands of dollars (For example: Enter 10 for \$10,000)

2 Click on a field's link for help

Current Ages)

Retiree Spouse

Retirement Accounts

Tax-deferred Account Initial Balance
Tax-deferred Account After tax Balance
Tax-deferred Account Maximum Annual Contribution

Both IRA Initial Balance
Both IRA Maximum Annual Contribution
Both IRA Minimum Balance

After-tax Account Initial Balance
After-tax Assets Cost Basis

Maximum Annual Contribution of All Types

Plan Surplus in current dollars (No Surplus)

Illiquid Assets

Asset Value
Current - Original Cpt. for Tax Purposes.
Mortgage or Loan - Balance due at sale
Age to Sell - Convert illiquid asset to liquid asset

Reverse Mortgage

Age to Start Reverse Mortgage Distribution
Lifetime Sum Plan Annual Payments
Lifetime Sum Distribution

Guaranteed Retirement Income

Social Security Benefit Current Benefits or PIA
Age to Begin Benefits (FRA)
Disability Insurance (check if it applies)
Social Security will continue full benefits?

Pension and Other Income, Indexed to Inflation
Pension and Other Income, not Indexed to Inflation
Retirement Timing - Lump Sum Distribution
Pension Beginning Age (Retirement Age)
Pension Survivor's Benefit

Earned Income - Part time and Otherwise
Earned Income Ending Age

Annuity Annual Distribution
Annuity Funding from the IRA
Age to Begin Annuity (Immediate Annuity)

Timeline Dividend
Timeline Funding from the IRA

Affordable Care Act

ACA - Taxable Income Limit
PTC - Premium Tax Credit

The Plan of Retirement

Retirement Spending Option Constant Spending Variable Spending

Essential Spending and Extraordinary Events

Age	Non-recurring Events	Essential Spending	One-time Income	Identification (Optional)
60				
61				
62				
63				
64				
65				
66				
67				
68				
69				
70				
71				
72				
73				
74				
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93				
94				
95				
96				
97				
98				
99				
100				

Retirement Plan

Retirement Age (65)
Estimated Incomes (42)
Early Withdrawals (Pay 10% Penalty)
IRA to Roth IRA Conversions

Retiree Spouse

No Partial Roth Conversions

Goal Path (Investment)

Tax-deferred Roth Taxable

1985 Allocation at Retirement (100%)
1986 Allocation at Retirement (0%)
1985 Allocation at Plan End (100%)
1986 Allocation at Plan End (0%)
Market Value Rate of Return (%)
Stock Dividend rate (12%)
Fixed Income Yield (3%)

Inflation

Inflation Rate (2% 4%)

Income Spending

Taxes

After-tax Account Capital Gains Tax Rate (15%)
Current Marginal Personal Income Tax Rate (24%)
Retirement State Income Tax Deductions & Exemptions
Retirement State Income Tax Rate
Social Security Exemption From State Income Taxes
Pension Income Exemption From State Income Taxes

i-PLAN Retirement Income Management Simulation

Year to Begin Historical Simulation
Management Fee

Run Once Monte Carlo

What's Monte Carlo

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Retiree Portfolio Model

<https://www.bogleheads.org/forum/viewtopic.php?p=1405885#p1405885>

http://www.bogleheads.org/wiki/Retiree_Portfolio_Model

<https://www.dropbox.com/s/s4i85jch4nc4dge/Retiree%20Portfolio%20Model%20v21.1.xlsx?dl=0>

Excel
High Fidelity
History – Average
\$0

Retiree Portfolio Model

From Bogleheads

The **Retiree Portfolio Model** is a downloadable Excel spreadsheet created by a retiree for retirees. It models the most common financial aspects of a retiree and their spouse's lives, including pensions, Social Security benefits, living expenses, IRA Required Minimum Distributions, purchase of an annuity, sale of a house, and many other items including Federal and state income taxes. All of this data is used to create a model of their accounts over a period of 1 to 40 years.

A feature of this model allows the user to compare their normal portfolio results with one that includes alternative choices, such as doing Roth IRA conversions, choosing alternative Social Security starting ages and benefits, or buying a Single Premium Immediate Annuity. The model was developed by forum member BigFoot48.

Contents [Hide]
1. Downloading and support
2. Methodology
3. Screenshots
4. See also
5. External links



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Pralana Gold

<https://pralanaretirementcalculator.com/>

http://www.bogleheads.org/wiki/Retiree_Portfolio_Model

<https://www.dropbox.com/s/s4i85jch4nc4dge/Retiree%20Portfolio%20Model%20v21.1.xlsx?dl=0>

Excel
High Fidelity
History – Average
\$99

Assumptions	
Inflation (%)	6.0%
Home State	AK
Average Real Rate of Return (%)	2.0%
Amount of Current Savings	
Your Tax-Deferred Accounts	500,000
Spouse's Tax-Deferred Accounts	
Annual Income Amount	70,000
Annual Percentage Increase	4.0%
Long-Term Investment Assets	20,000
Regular Cash Accounts	10,000
Company Contributions to 401(k) (\$)	
Contributions to a Roth IRA (\$)	
Contributions to a Defined Benefit Plan (\$)	
Post-Retirement Employment Income (in today's \$)	
Annual Income	
Number of Years You Plan to Work	
Pension Benefits (in future \$)	
Annual Amount	
Maximum Cost of Living (COLA) Adjustments	
Social Security Benefits (in today's \$)	
Annual Benefit Amount at FRA	12,000
Age at which you plan to start benefits	70

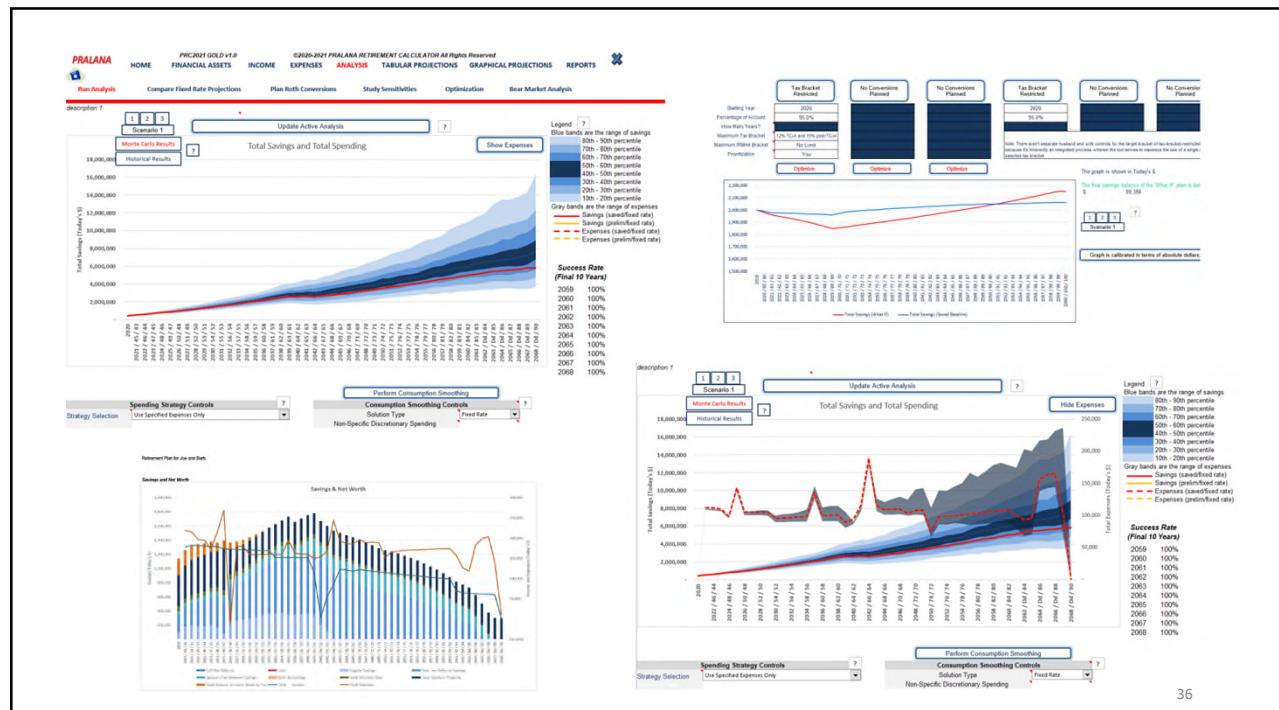
Expenses	
Recurring Annual Expenses (in today's \$)	
Period 1 Expenses	\$4,000
Period 2 Expenses	Year
Period 3 Expenses	Year
One-Time Expenses (in today's \$)	
Expense1	Year
Expense2	Year
Expense3	Year

Populate PRC from These Simple Inputs
Go to Home Page

HEALTHCARE	
Over Healthcare Table	
Period 1. You've both seen full time, nothing has changed, and you probably have group...	SL My scenario 1
Insurance Premiums	2,000
Out-of-pocket expenses	600
Period 2. Only one of you works full time, nothing has changed, and you probably have...	SL My scenario 2
Insurance Premiums	2,000
Out-of-pocket expenses	600
Period 3. Neither of you works full time, nothing has changed, and you probably don't...	SL My scenario 3
Insurance Premiums	2,000
Out-of-pocket expenses	600
Period 4. Only one of you is eligible for Medicare	SL My scenario 4
Insurance Premiums Beyond...	6,000
Out-of-pocket expenses	3,000
Period 5. Both of you are eligible for Medicare	SL My scenario 5
Insurance Premiums Beyond...	7,200
Out-of-pocket expenses	3,000
Auto Calculate Medicare	
Period 1. You're not yet eligible for Medicare	Year My scenario 1
Period 2. You're not yet eligible for Medicare	Year My scenario 2
Period 3. You're not yet eligible for Medicare	Year My scenario 3
ACA Insurance	
In Period 1?	+
In Period 2?	+
In Period 3?	+
In Period 4?	+
HCA-Other Plan Premiums	
Period 1. Reduction after death of first...	40%
Period 2. Reduction after death of first...	40%
Period 3. Reduction after death of first...	40%
Healthcare Expenses	
Period 1. Reduction after death of first...	40%
Period 2. Reduction after death of first...	40%
Period 3. Reduction after death of first...	40%
Long Term Care LTC	
Initial Cost	100
Start Age	60
Duration of Periods	20

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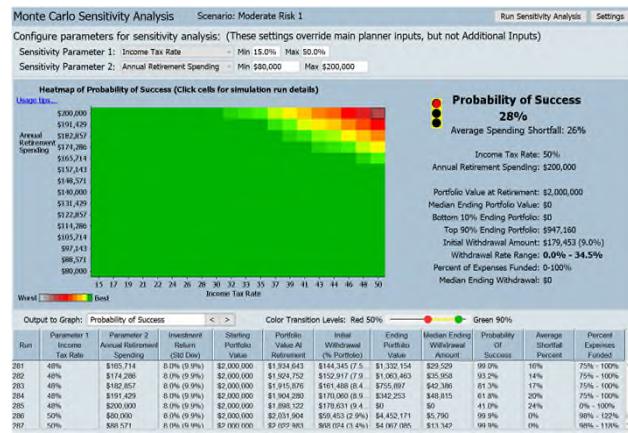
Flexible Retirement Planner

<https://www.flexiblereirementplanner.com/wp/planner-launch-page/>

Java Application
High Fidelity
Model – Average and Monte Carlo
\$0 - \$20

Summary View Detailed View
Enter retirement plan information below.

Current Age: 47	Taxable Portfolio Value: 1000000	Investing Style: Moderate Risk	Additional Inputs	Settings
Retirement Age: 65	Tax Free Portfolio Value: 1000000	Debt: 0		
Life Expectancy: 95	Tax Free Portfolio Value: 1000000	Debt: 0		
Inflation: Average: 3.0%	Retirement Start Age: 66	Return: Average: 4.5% / 14%		
Inflation: Std Dev: 1.0%	Retirement Spending: 20000	Return: Std Dev: 3.5%		
Investment Tax Rate: 15%	Tax Free Annual Savings: 0			
Income Tax Rate: 21%	Annual Retirement Income: 0			
	Tax Free Annual Savings: 0			
	Annual Retirement Spending: 20000			
	Spending Policy: Flexible			



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Flexible Retirement Planner



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OnTrajectory

<https://www.ontrajectory.com/>

<https://www.ontrajectory.com/guides/guide112.html>

<https://www.choosefi.com/ontrajectory-review/>

<https://www.budgetsaresexy.com/ontrajectory-review-love-child-excel-cfresim-calculator/>

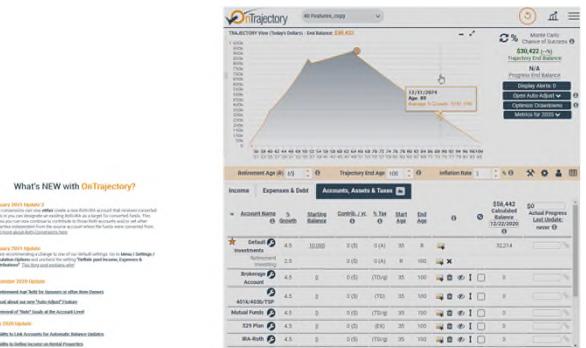
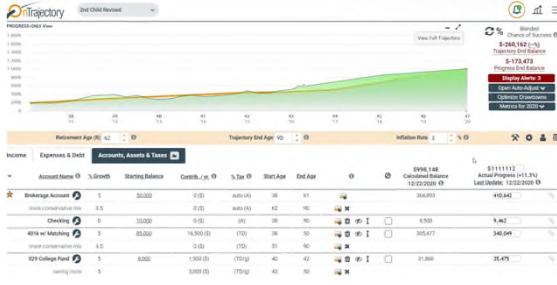
<https://www.getrichslowly.org/ontrajectory-retirement-calculator/>

Online

High Fidelity

History – Historical, MonteCarlo

\$5 / month - \$50 / year



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MaxiFi Planner

<https://maxifiplanner.com/>

Web

High Fidelity

History – Average, Monte Carlo

\$99 - \$139

Goodbye to Guesswork

Conventional financial planning software and “free” online tools use the Replacement Rate method based on outdated, generic “Rules of Thumb.” This simplistic method “guesstimates” targets for spending and saving.

These “targets” are the basis for your whole financial plan. If they are wrong —too high or too low—the mistakes compound over time and you’re in trouble.

<https://financialanalystinsider.com/maxifi-planner-review/>
<https://thewealthcircle.com/maxifi-reviews/>

<https://www.bogleheads.org/forum/viewtopic.php?t=223851>

<http://www.theretirementcafe.com/2019/05/going-it-alone-with-retirement-planning.html>

<https://www.advisorperspectives.com/articles/2019/04/22/the-major-technology-breakthrough-to-guide-portfolio-choice>

<https://support.maxifi.com/support/solutions/articles/35000157621-how-does-maxifi-differ-from-my-current-financial-planning-tool>

The Economics Approach In Action

It's virtually impossible to find your household's highest sustainable spending level. Income and expenses change every year and no financial decision stands alone: income affects taxes, taxes affect spending, Social Security benefits and retirement account withdrawals affect income, which affects taxes, and on and on.

MaxiFi software makes it possible. It can correctly calculate the highest spending level your household's income and assets can support and provide a plan to sustain and protect it for life.

MaxiFi software uses iterative dynamic programming methods developed by our founder and President Laurence Kotlikoff. These methods are similar to those used in bioinformatics and aerospace engineering—actual rocket science. It's why MaxiFi software is the only software powerful and accurate enough to put the Economics Approach into action.

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MaxiFi Planner

Base Plan: Lifetime Balance Sheet

Lifetime Income

Labor Earnings
Social Security Benefits
Pensions and Annuities
Real Estate Income
Dividend Income
Regular Assets

TOTAL

\$3,399,802
\$1,987,228
\$0
\$0
\$0
\$0
TOTAL

Lifetime Spending

Housing Expenses
Special Expenses
Federal and State Taxes
Medicare Part B Premiums
Healthcare Expenses
Discretionary Spending

TOTAL

\$591,175
\$17,615
\$0
\$0
\$265,158
\$1,537,000
TOTAL

Your Lifetime Discretionary Spending, shown in orange, is the amount MaxiFi Planner calculates you will have left over in your budget after you cover all fixed spending, including taxes. This is the money you can freely spend on food, travel, clothes, entertainment, etc.

MaxiFi Planner

Jack Sarah

Maximize Household Social Security benefit?

Optimize retirement account withdrawal?

Optimize order of Roth/Non-Roth withdrawal?

Contribute more to retirement account?

Limit annual spending?

Maximize household Social Security benefit?

Optimize retirement account withdrawal?

Optimize order of Roth/Non-Roth withdrawal?

Contribute more to retirement account?

Limit annual spending?

MAXIFI Your Family Profile + Downizing Home Reports

Social Security

Retirement Accounts

Sarah

Current Future Earnings

Pensions

Annuities

Social Security

Retirement Accounts

Household

Housing

Real Estate

Special Receipts

Special Expenses

Regular Assets

Housing (Downzizing Home Profile)

Enter information about the family's primary residence and, optionally, vacation home. In addition to the financial information provided here, we use the location of the primary residence to calculate state income taxes.

Add Vacation Home

Base Profile - Included

Your Base Profile housing will be included as part of this profile. You can modify the data for this profile – for example, change mortgage terms or add a home change – to see how it compares to your Base.

Primary Residence

Modified from Base Profile

Base Plan: Annual Income and Spending

Base Plan Download Disclaimer

Spending Overview

Chart View Table View

2024 Discretionary Spending: \$16,421 Medicare Part B Premiums: \$1,622 Retirement Contributions: \$10,278 Taxes: \$1,247

Legend: Total Income, Fixed Spending, Discretionary Spending, Taxes, Medicare Part B Premiums, Retirement Contributions, Housing Expenses, Special Expenses

Base Plan: Annual Saving and Withdrawals

Base Plan Download Disclaimer

Spending Overview

Chart View Table View

Legend: Regular Asset Saving, Regular Asset Withdrawals

MAXIFI Your Family Profile + Downizing Home Reports

Overview Compare Base Plan Downizing Home Download Disclaimer

Net Worth

Year at a Glance

Income Overview

Jack's Non-Accum. Income

Sarah's Non-Accum. Income

Sarah's Retirement Accounts

Sarah's Retirement Benefits

Sarah's Social Security

Spending Overview

Taxes

Housing

Real Estate

Lifetime Discretionary Spending

\$83,891,704

\$8,681,741

\$7,795,431

\$1,747,641

Congratulations! Base Plan rates provide the maximum lifetime Discretionary Spending.

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New Retirement

New Retirement

<https://www.newretirement.com/retirement/planner-signup/>

Web
High Fidelity
History – Average, Monte Carlo
\$0, \$96, \$396, \$99

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The screenshot displays a financial planning dashboard with several sections:

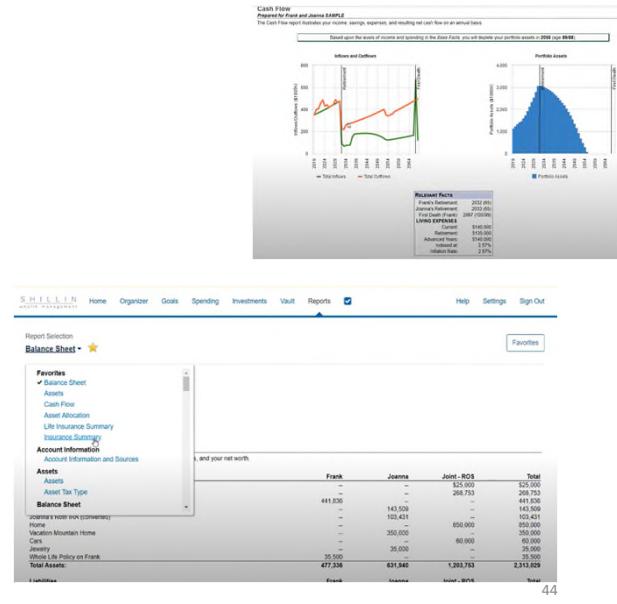
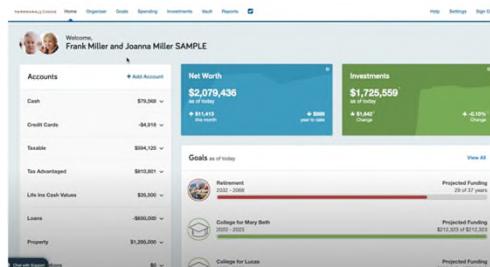
- Plan Analysis > Cash Flow Forecast:** A line chart showing projected income and expenses from 2021 to 2031. Income (blue line) starts at \$103,320 and rises to \$103,320. Expenses (orange line) start at \$88,000 and rise to \$103,320. A legend indicates "2003 (Yield 9%, Spouse 9%)".
- Plan Analysis > Net Worth:** A bar chart showing projected net worth by year, including savings, home equity, and other assets. Total net worth grows from \$344,687 in 2021 to \$1,000,000 by 2031. A legend indicates "2003 (Yield 9%, Spouse 9%)".
- Plan Inspector > Income & Expenses:** A section with a sub-chart titled "Estimated Income, Drawdowns, and Debt".
- Estimated Expenses:** A bar chart showing projected monthly expenses across various categories.
- Estimated Taxes:** A bar chart showing projected monthly taxes.
- Gross Taxable Income by Source:** A bar chart showing projected monthly taxable income from various sources.
- Surplus-Gap:** A bar chart showing projected monthly surplus or gap.

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eMoney Advisor

Fidelity Wealth Technologies
Web
High Fidelity

<https://planvisionmn.com/>
\$ 189



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eMoney Advisor

45

IncomeStrategy

<https://incomestrategy.com/>

Web
High Fidelity
History – ?
\$20/mo \$50/mo

Professional Version:
IncomeSolver
\$1,900/yr

Social Security Solutions
SSAnalyzer

- Income Management
 - Asset Allocation
 - Asset Location
 - Rebalancing
 - Tax Minimalization
- Social Security Optimization
- Medicare
- Health Spending
- Variable Spending
- Withdrawal Strategy
 - Sequencing
 - Coordination
 - Roth Conversions

IncomeStrategy

Withdrawal Sequence

Withdrawal sequence is about how you should “tap” your retirement savings. It is identifying the proper order, appropriate account, specific holding and the right amount to liquidate from the assets you hold in your 401k, Traditional IRA, Roth, Annuity, CD's etc.... There may be significant advantages to tapping more than one account at a time.

How do people get it wrong?

Unfortunately, some people will draw from whichever account, whenever they want and ignore the implications – we call it the “Willy Nilly” strategy. Others may rely on a financial advisor who defaults to “conventional wisdom” which suggests you should tap and fully liquidate in this order: 1. Taxable 2. Tax Deferred 3. Tax Exempt. Sadly, this will expose the retiree to significant and unnecessary tax exposure. You can do better.

Custom Scenarios					
Strategy Name	Longevity	Total Value	Last Viewed	Last Modified	Status
Conventional Wisdom with Roth Conversions	34.00	\$11,020,862	12/19/2016	12/06/2016	Analyze Edit
Roth Conversion w/ Tax Bracket 15%	34.00	\$11,020,862	12/19/2016	12/19/2016	Analyze Edit
Opposite Conventional Wisdom	34.00	\$16,771,242	12/19/2016	11/11/2016	Analyze Edit
Alternative 2 SS at FRA	34.00	\$16,584,685	12/19/2016	12/07/2016	Analyze Edit
Alternative 2 SS at ...	34.00	\$16,305,115	12/19/2016	11/11/2016	Analyze Edit
Conventional Wisdom - Roth conversion w/ Early SS	34.00	\$16,271,406	12/19/2016	12/19/2016	Analyze Edit
Multiple Accounts - Tax Bracket 10%	34.00	\$10,174,011	12/19/2016	12/19/2016	Analyze Edit
Conventional Wisdom	34.00	\$10,099,338	12/19/2016	11/11/2016	Analyze Edit

[Recalculate](#) [Create](#)

System Scenarios					
Strategy Name	Longevity	Total Value	Last Viewed	Last Modified	Status
Top System Strategy	34.00	\$11,020,862	12/19/2016	12/06/2016	Analyze
Alternative 1	34.00	\$11,019,998		12/19/2016	Analyze

[Analyze](#) [Compare](#)

INCOME SOLVER

Roth Conversion w/ Tax Bracket 25 - Early SS [Manage Strategies](#) [Save or Print](#)

* Analyze [Compare](#)

Risk

29%
24.62% 48.22% 27.16%
Total Assets Assets & Income Assets & Expenses

Guide Path

20,000,000
18,000,000
16,000,000
14,000,000
12,000,000
10,000,000
8,000,000
6,000,000
4,000,000
2,000,000
0
2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040
Roth Conversion w/ Tax Bracket 25 - Tax Exempt
Roth Conversion w/ Tax Bracket 25

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Resources

- The Best Retirement Calculators
- Online Retirement Calculators - What each does well, and where they fall short
- 8 Ways Online Retirement Planning Is Superior to That Printed Report Stashed Somewhere in Your Desk
- Is Financial Planning Software Incapable Of Formulating an Actual Financial PLAN? - Michael Kitces
- Bogleheads® retirement planning start-up kit
- The Best Retirement Calculator
- Going it Alone with Retirement Planning Software
- The Major Technology Breakthrough to Guide Portfolio Choice
- 5 Reasons Retirement Calculators Can't Be Trusted
- The 10 Best Retirement Calculators

- <https://www.caniretireyet.com/the-best-retirement-calculators/>
- <https://www.thebalance.com/retirement-calculator-reviews-4061796>
- <http://www.aaii.com/computerized-investing/article/8-ways-online-retirement-planning-is-superior-to-that-printed-report-stashed-somewhere-in-your-desk>
- <https://www.kitces.com/blog/is-financial-planning-software-incapable-of-formulating-an-actual-financial-plan/>
- https://www.bogleheads.org/wiki/Bogleheads%C2%AE_retirement_planning_start-up_kit
- <https://www.theretirementmanifesto.com/best-retirement-calculator/>
- <http://www.theretirementcafe.com/2019/05/going-it-alone-with-retirement-planning.html>
- <https://www.advisorperspectives.com/articles/2019/04/22/the-major-technology-breakthrough-to-guide-portfolio-choice>
- <https://financialmentor.com/retirement-planning/how-much-money-do-i-need-to-retire/retirement-calculators-2/17130https://financialmentor.com/retirement-planning/how-much-money-do-i-need-to-retire/retirement-calculators-2/17130>
- <https://www.newretirement.com/retirement/best-retirement-calculators/>

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More Resources

- Infinite Retirement Calculator
- WealthTrace
- Motley Fool Retirement Planning
- The Best Retirement Calculator Review – I Review 26 In One Day
- Retirement Withdrawal Strategies
- Tax-savvy withdrawals in retirement
- <https://eis271828.blogspot.com/2010/08/infinite-retirement-calculator.html>
- <https://www.mywealthtrace.com/>
- <https://www.calxml.com/calculators/retirement-planning?skn=606>
- <https://chiefmomofficer.org/2018/07/02/i-slogged-through-26-different-retirement-calculators-will-what-i-learned-sprise-you-calculatormountain/>
- <https://retiswire.com/retirement-withdrawal-strategies/>
- <https://www.fidelity.com/viewpoints/retirement/tax-savvy-withdrawals>

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