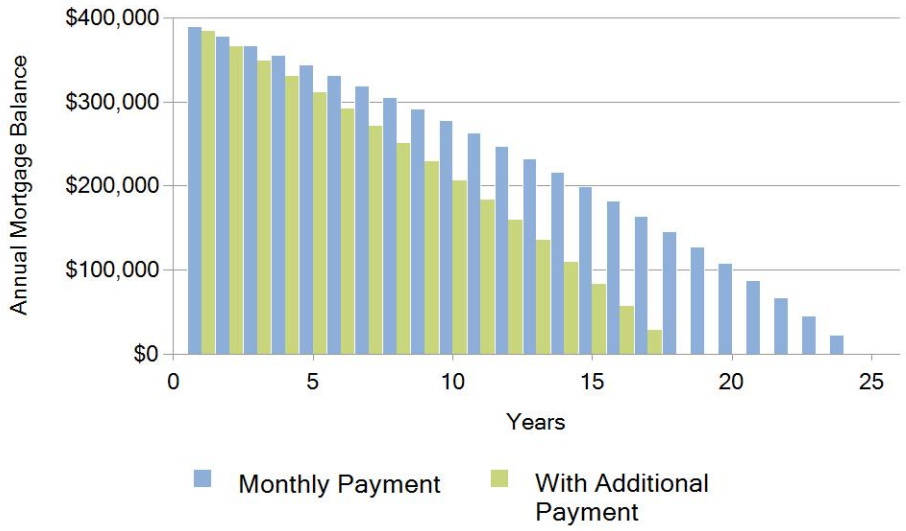
Impact of Making Additional Principal Payments

Assumptions:

Amount of loan: $400,000
Annual interest rate: 3.25%
Number of monthly payments: 300
Additional monthly principal payment amount: $500

	Monthly Payment	Monthly With Additional Payment
Payment Amount	$1,949	$2,449
Total interest paid	$184,779	$128,808
Interest Savings		$55,972
Number of Years to Pay Off Loan	25.00	18.00

Impact of Additional Principal Payment



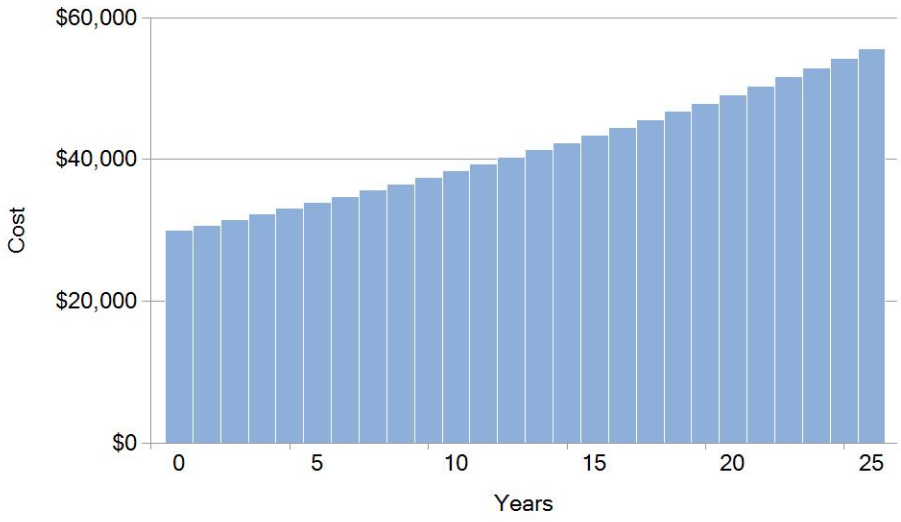
Effect of Inflation

Over the last 54 years, the average annual inflation rate in the U.S. has been 3.76%.[1]

Item Description	Value
Annual inflation rate	2.50%
Number of years from now	25
Current item cost	$30,000
Future item cost	**$55,618**

Example

Assuming an average annual inflation rate of 2.50%, an item which costs $30,000 today will cost $55,618 in 25 year(s).



[1] Source: U.S. Bureau of Labor Statistics, Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W); U.S. City Average. 1967-2021.

Payments To Pay Off A Loan

Item Description	Value
Amount of loan	$27,000
Annual interest rate	3.00%
Frequency of payments	Monthly
Number of Monthly payments	60
Monthly payment amount to pay off loan	**$485**

Example

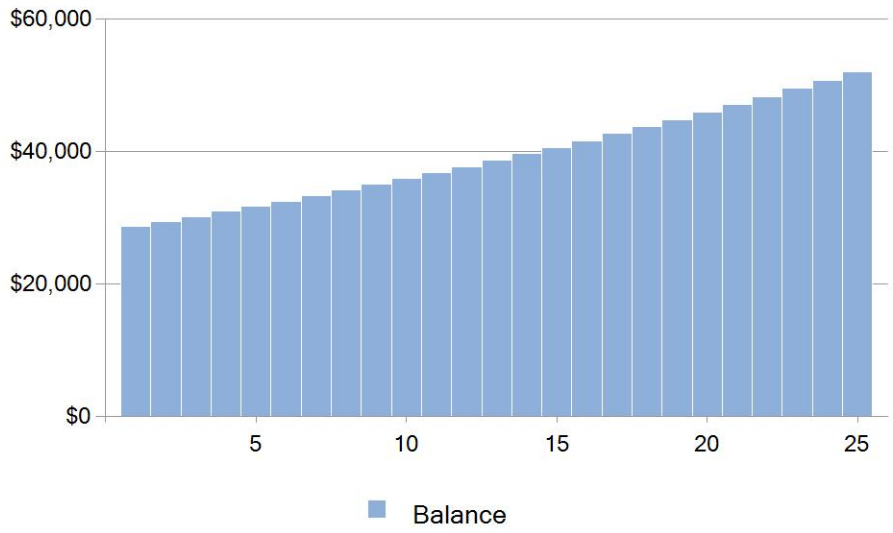
If you borrow $27,000 for 60 months at an annual interest rate of 3.00%, your monthly payment will be $485.

Value over Time

Item Description	Value
Annual rate of return compounded annually	2.50%
Annual savings	$0
Number of years	25
Future amount	$52,000

Initial amount would be $28,048.

Value Over Time



Lifetime Earnings

Item Description	Client 1	Client 2
Current age	40	39
Age at retirement	65	65
Current annual earnings	$80,000	$70,000
Estimated annual increase in earnings	1.00%	1.00%
Projected earnings	**$2,259,456**	**$2,066,794**
Projected total earnings by retirement		**$4,326,250**

Increases in Annual Income

Loan Amortization Schedule

Assumptions:

Amount of loan: $70,000
Frequency of payments/compounding periods: Monthly
Payment start date: 1/2022
Annual interest rate: 1.9%
Number of payments: 60

Results:

Payment: $1,224
Total payments: $73,433
Total interest paid: $3,433

Loan Amortization Schedule

The following table shows year-by-year summary of this loan:

Note: The amount of principal vs. interest paid each year as the loan progresses.

Year	Principal Paid This Year	Interest Paid This Year	Total Paid This Year	Balance Remaining
2022	$13,474	$1,213	$14,687	$56,526
2023	13,732	955	14,687	42,795
2024	13,995	692	14,687	28,800
2025	14,263	423	14,687	14,537
2026	14,537	150	14,687	0

Pay Yourself First

Assumptions:

Beginning balance: $40,000
Beginning monthly savings amount: $500
Years until retirement: 30
Annual rate of return: 8.00%
Expected annual percentage increase in salary: 5.00%
Monthly Income: $5,000

Amount saved by retirement: $1,693,359

Example

If you started with $40,000 and saved 10.00% of your salary for the next 30 years,
while sustaining a 5.00% annual growth in your salary, you would accumulate $1,693,359.

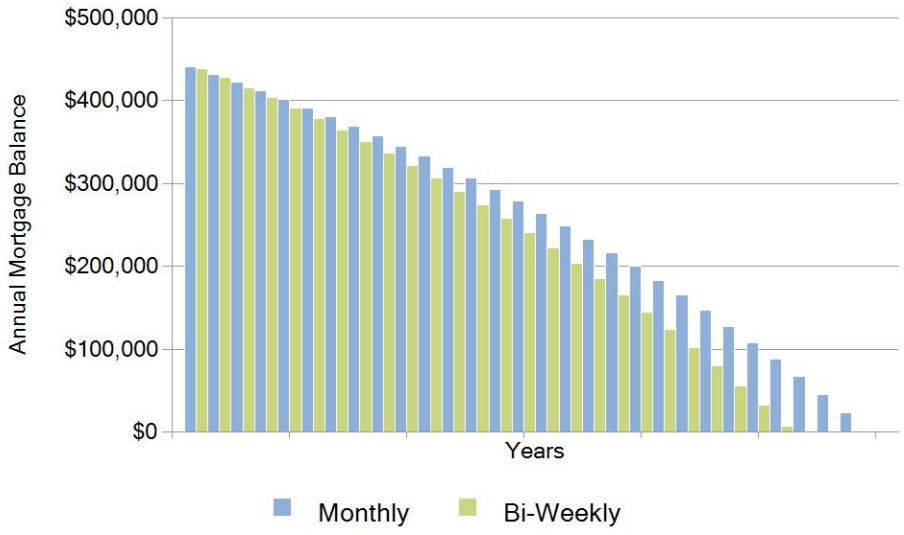
One factor to successfully reaching your financial goal is to save a specific amount every month.

Bi-Weekly Mortgage

Assumptions:

Amount of loan: $450,000
Annual interest rate: 3.25%
Number of monthly payments: 360

	Monthly	Bi-Weekly
Payment Amount	$1,958	$979
Total Interest	$255,034	$219,691
Interest Savings		$35,343
Number of Years to Pay	30.00	26.31



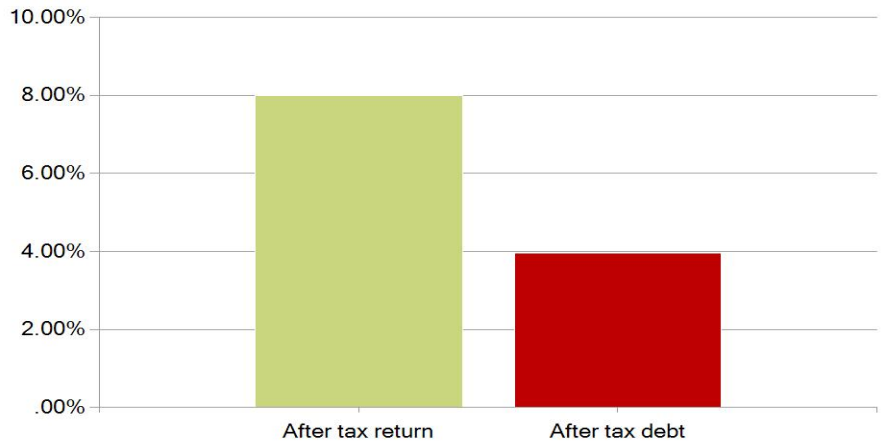
Pay Debt or Invest?

A frequent question that needs to be answered is "Should I work to get my debt paid or should I invest the funds instead. There are several factors that help make this decision, how much can you earn on your investments and how much does the debt cost are the two that can be quantified. The third question needs an emotional response; how do I feel about having debt.

The answer to the quantifiable questions are below:

Assumptions			
Interest rate on debt	5%	Marginal tax rate	21%
Is interest deductible?	Yes	After tax return	8%
Before tax return on investment	8%	After tax debt	3.95%
Is interest taxable	No		

You can earn more on your investment than your debt will cost



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Family Planning

Debt, Income, Mortgage and Education Analysis (DIME)

In the event of Client 1's death

Assumptions:

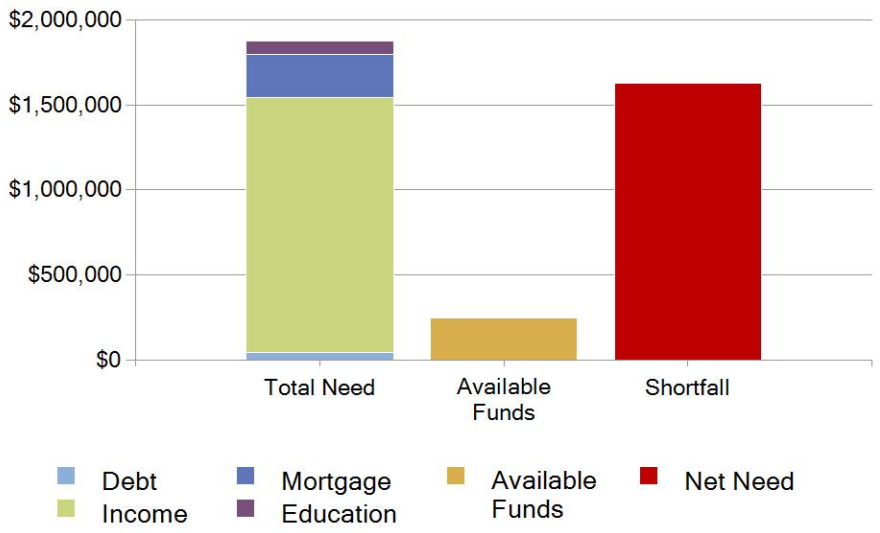
D **Total amount of** Debt**: $45,000**
- **Current Debt: $30,000**
- **Final Expenses: $15,000**

I Current monthly **Income** of $5,000 to be replaced for 25 years: $1,500,000

M **Mortgage** Balance: $250,000

E **Education** costs of $40,000 for 2 children: $80,000

Total available funds: $250,000
- Available Assets: $150,000
- Life Insurance Proceeds: $100,000



Based upon your current needs, you will need an additional $1,625,000 in life insurance to meet all your needs.

529 Plan Savings Calculator

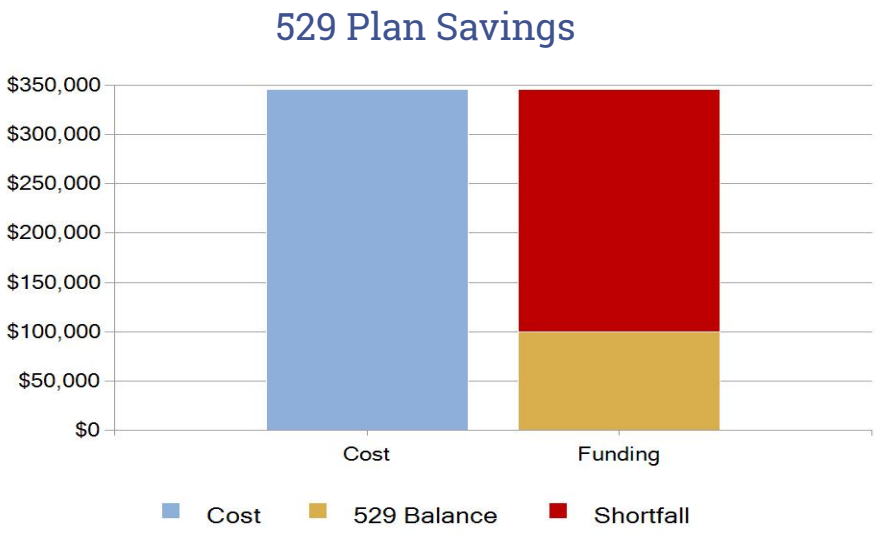
A "529" plan is a tax-favored program operated by a state, or in some cases an eligible private institution, designed to help families prepay future educational costs. While the specific details of these plans will vary, as long as a plan satisfies the requirements of Section 529 of the Internal Revenue Code, 1 federal tax law provides tax benefits for both the contributor and the beneficiary.

Assumptions:

Child Age: 8
Child age at start of school: 18
Number of years in school: 4
Current annual school cost: $40,000
Inflation rate: 8%
Income tax rate: 21%
Current 529 Plan balance: $10,000
Monthly contributions: $500
Rate of return: 6%

Results:

Cost	$345,428
529 Balance[1]	$100,134
Shortfall	$245,294
Comparable after-tax investment	$73,170
Benefit from 529 Plan	$26,964



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[1] Balance is calculated at the beginning of school. School costs are the annual cost inflated until the first year of the school and then multiplied by the number of years in school.

Disability Break-Even

Assumptions:

Monthly Premium: $250
Annual Benefit: $60,000
Benefit Inflating Annually by: 2%

Years Premium Paid	Benefits Paid Will Equal Premiums Paid in:
2 years	2 months
5 years	3 months
10 years	5 months
20 years	9 months

Example

If you paid monthly premiums of $250, for 5 years, your benefits would equal your total outlay in approximately 3 months.

Retirement Saving

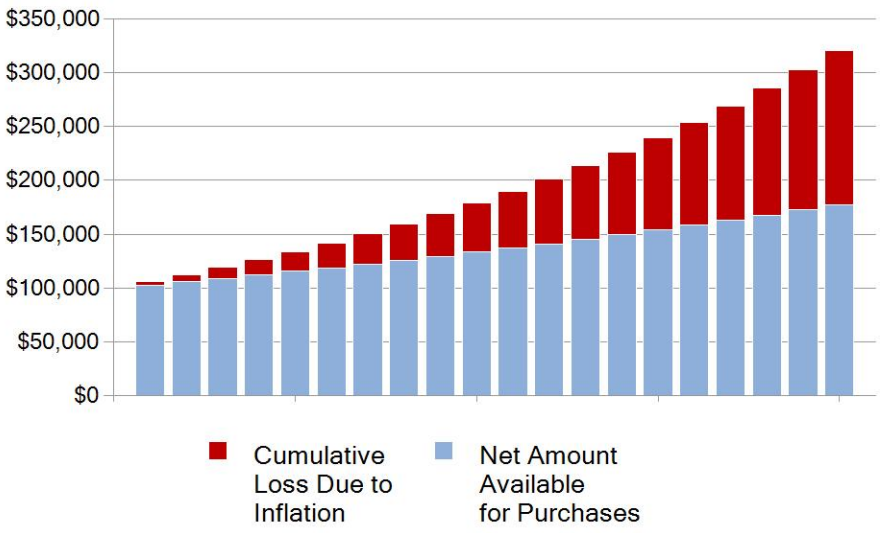
Impact of Inflation on Savings Growth

Assumptions:

Amount: $100,000
Annual rate of return: 6.0%
Annual inflation rate: 3.0%

Even though your investment may be growing,

it may not be growing as fast as you think.



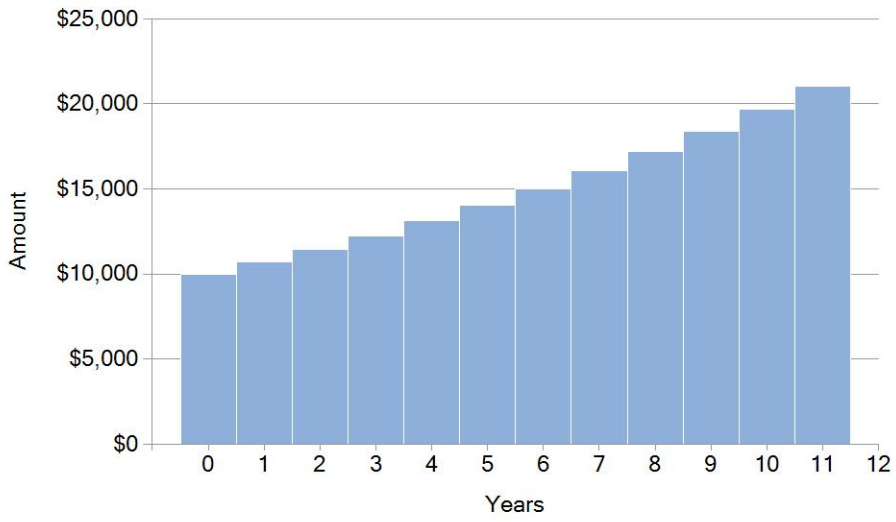
Loss over 20 years due to inflation: $143,142

Rule of 72

The rule of 72 is a mathematical rule that helps in estimating approximately how many years it will take for an amount to double in value at a specified rate of return.

Item Description	Value
Amount	$10,000
Rate of return	7.00%
Your amount will double in approximately 10 years.	

Rule of 72



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Future Value of a Single Sum and Periodic Additions

Item Description	Value
Single sum	$10,000
Frequency of periodic additions	Monthly
Monthly additions	$1,200
Annual rate of return[1]	6.00%
Number of months to make additions	300
Future sum, if additions are made:	
At the end of each month	**$876,242**
At the beginning of each month	**$880,400**

Example

If you place $10,000 into an account earning an annual return of 6.00%, compounded monthly, and deposit $1,200 at the beginning of each month, then in 300 months your account will grow to $880,400

[1] The rates of return used in this illustration are not indicative of any actual investment and will fluctuate in value. An investment will not provide a consistent rate of return; years with lower (or negative) returns than the hypothetical returns shown may substantially affect the scenario presented.

Accumulating One Million Dollars

Or Some Other Amount

How long does it take to accumulate $300,000?

The answer depends on three things:

- How long do you have to save,
- The net rate of return, and
- How often you contribute: One lump sum or monthly contributions.

The table below shows how long it takes to accumulate $300,000 under varying circumstances.[1] The results shown are hypothetical. The actual growth will depend on a number of factors.

Annual Net Rate of Return

	4.00%		6.00%		8.00%	
Years	Lump Sum Contr.	Monthly Contr.	Lump Sum Contr.	Monthly Contr.	Lump Sum Contr.	Monthly Contr.
5	$246,578	$4,525	$224,177	$4,300	$204,175	$4,083
7	$227,975	$3,101	$199,517	$2,883	$175,047	$2,676
10	$202,669	$2,037	$167,518	$1,831	$138,958	$1,640
13	$180,172	$1,469	$140,652	$1,274	$110,309	$1,099
15	$166,579	$1,219	$125,180	$1,032	$94,573	$867
17	$154,012	$1,029	$111,409	$849	$81,081	$695
20	$136,916	$818	$93,541	$649	$64,364	$509
25	$112,535	$584	$69,900	$433	$43,805	$315

Values shown in this presentation are hypothetical and not a promise of future performance.

[1] The calculations for lump-sum contributions assume annual compounding; the calculations for monthly contributions assume monthly compounding on an end-of-month basis.

Social Security Break-Even

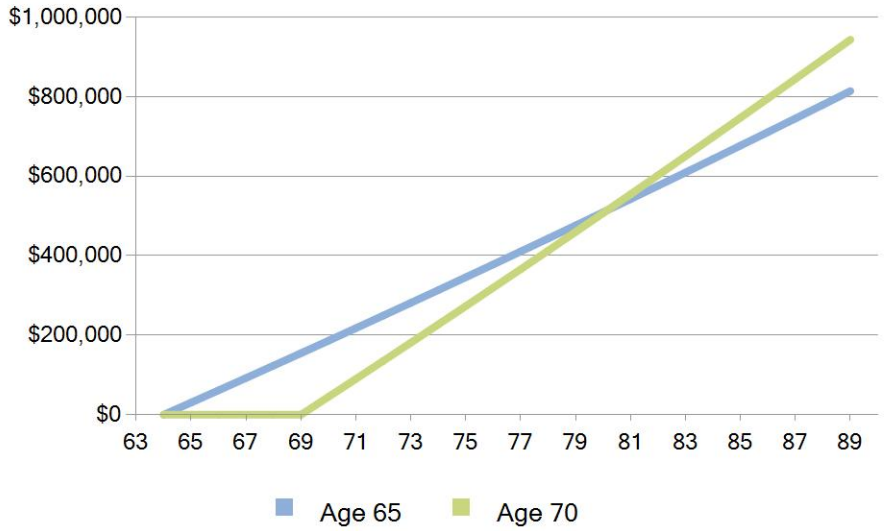
Assumptions:

Analysis date: 06/14/2017
Date of birth: 01/01/1960
Monthly Social Security benefit method: Based on current annual salary
Annual salary: $80,000
Annual Social Security benefit rate of inflation: 0.50%

Start at Age	Initial Annual Benefit	Total Benefit
65	$30,638	$813,709
70	$44,942	$942,850

If you wait until age 70 to begin collecting benefits, by age 81 you will have received more than if you began collecting benefits at age 65.

Cumulative Social Security Benefits



Roth IRA Conversion

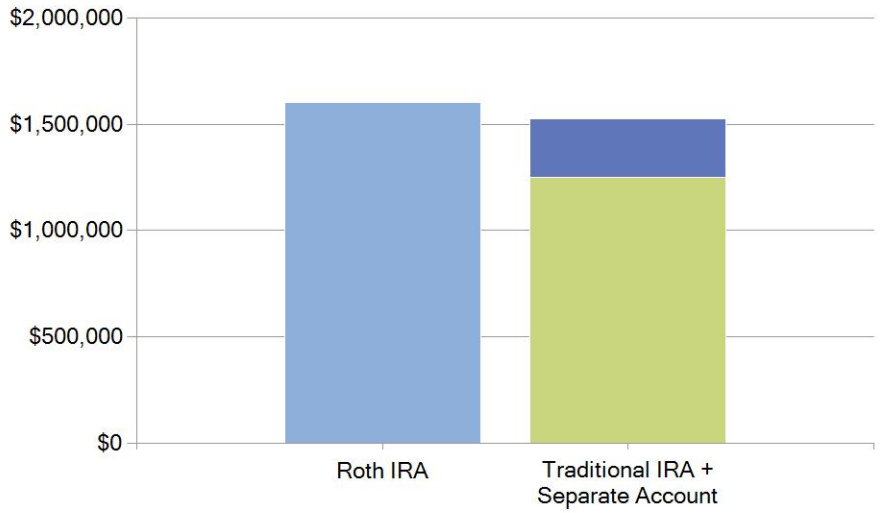
Assumptions:

IRA balance: $500,000
Years until withdrawal: 20
Marginal tax rate: 22.00%
Marginal tax rate in retirement: 22.00%
Annual rate of return: 6.00%

Account	After-Tax Amount at Withdrawal
Roth IRA	$1,603,568
Traditional IRA	$1,250,783
Separate Account	$274,579

Example

Converting your Traditional IRA to a Roth IRA would result in a 2021 tax liability of $110,000. At withdrawal in 20 years, the Roth IRA would be worth $1,603,568. If certain requirements are met, all withdrawals from the Roth IRA would be free of federal income tax. Alternatively, you could leave your funds in the Traditional IRA and invest the $110,000 that would have gone to taxes, to a separate, taxable account. At withdrawal, the Traditional IRA would be worth $1,250,783 after paying taxes of $352,785. The separate account would be worth $274,579. The total of these two accounts would be $1,525,362.



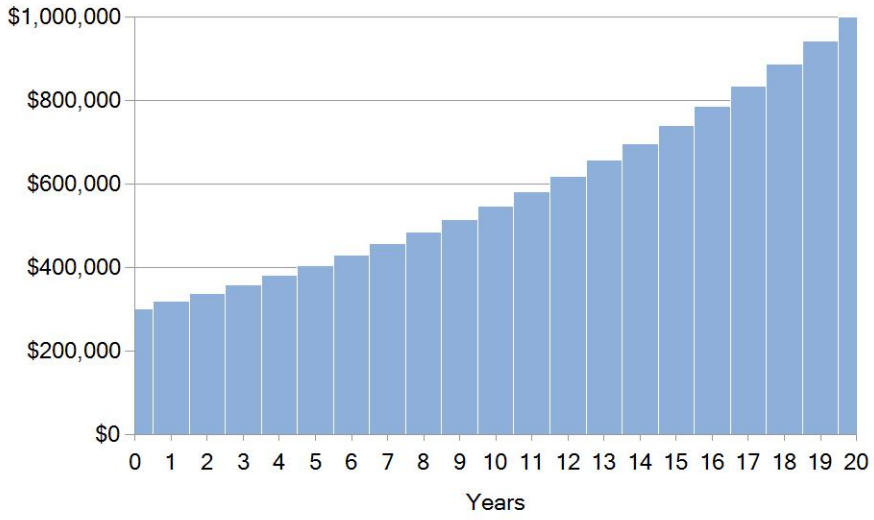
Values shown in this presentation are hypothetical and not a promise of future performance.

Rate of Return on a Single Amount

Item Description	Value
Value at beginning of period	$300,000
Value at end of period	$1,000,000
Holding period	20 years
Rate of return[1]	6.20%

Example

If you paid $300,000 for an asset and sold it for $1,000,000 after owning it for 20 years, your annual rate of return was 6.20% compounded annually.



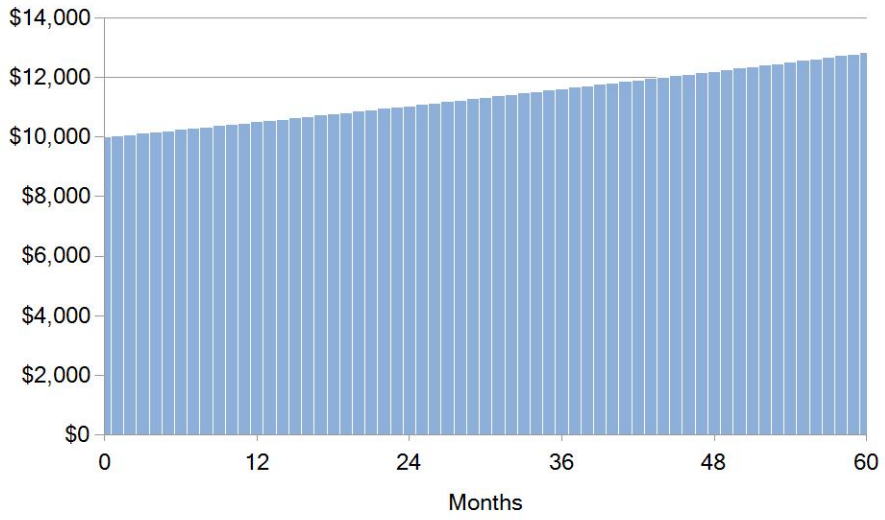
[1] The rates of return used in this illustration are not indicative of any actual investment and will fluctuate in value. An investment will not provide a consistent rate of return; years with lower (or negative) returns than the hypothetical returns shown may substantially affect the scenario presented.

Future Value of a Single Sum

Item Description	Value
Single sum	$10,000
Annual rate of return[1]	5.00%
Frequency of compounding	Monthly
Number of months	60
Sum accumulated at end of period	**$12,834**

Example

If you deposit $10,000 into an account earning an annual return of 5.00%, compounded monthly, then in 60 months your account will grow to $12,834



[1] The rates of return used in this illustration are not indicative of any actual investment and will fluctuate in value. An investment will not provide a consistent rate of return; years with lower (or negative) returns than the hypothetical returns shown may substantially affect the scenario presented.

Monte Carlo Simulator

Assumptions:

Current Age: 42
Retirement Age: 67
Mortality Age: 90

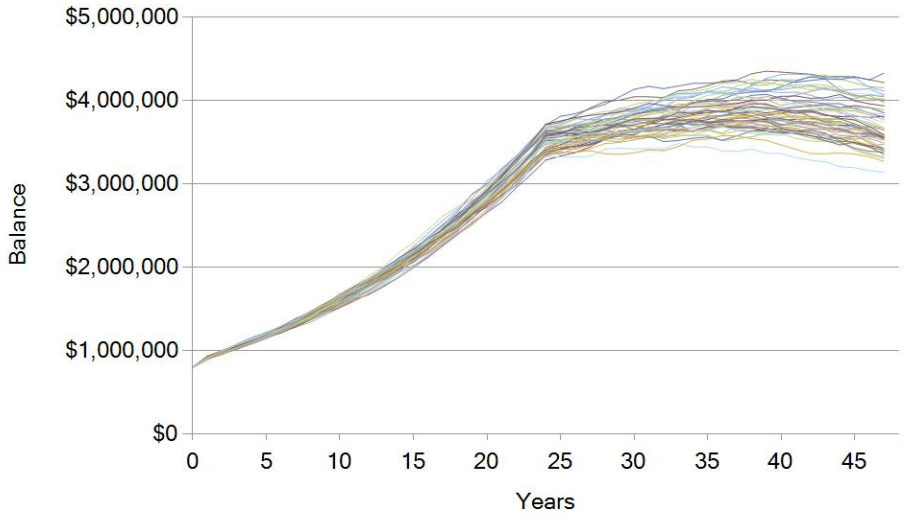
Initial Balance: $800,000
Monthly Savings: $1,200
Monthly Income Needs $6,000

Average Rate of Return: 5.00%
Standard Deviation: 3

Randomize Inflation: false

- Inflation Spread: 3.00%

Number of Simulations: 50



Retirement Spending

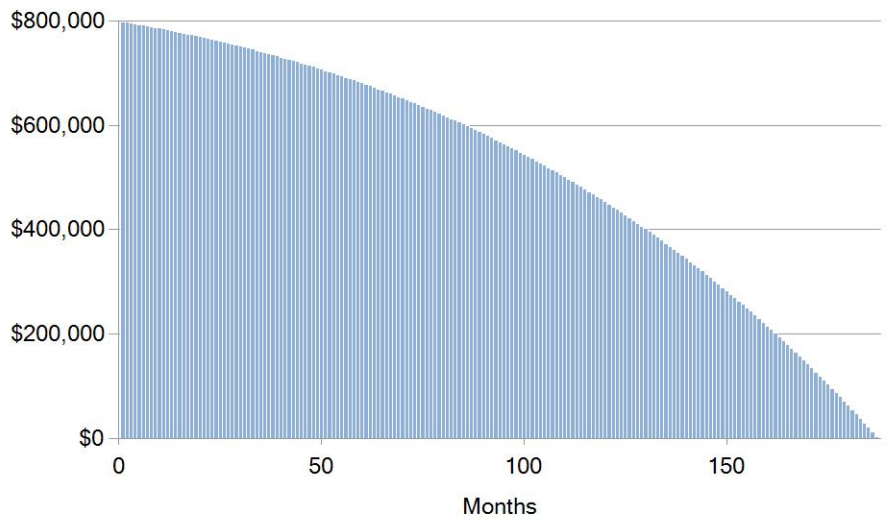
Length of Time a Sum Will Last

Item Description	Value
Current sum	$800,000
Assumed annual interest rate[1]	7.00%
Frequency of withdrawals	Monthly
Beginning monthly withdrawal amount:	$6,000
Inflate withdrawal by:	2.50%
Sum will last 15 years and 7 months	

Example

If you have $800,000 in your account earning an annual return of 7.00%, compounded monthly, and you withdraw $6,000 monthly, with the withdrawal inflating each year by 2.50%, the account will be exhausted in 15 years and 7 months.

Length of Time a Sum Will Last



[1] The rates of return used in this illustration are not indicative of any actual investment and will fluctuate in value. An investment will not provide a consistent rate of return; years with lower (or negative) returns than the hypothetical returns shown may substantially affect the scenario presented.

Rate of Withdrawal in Retirement

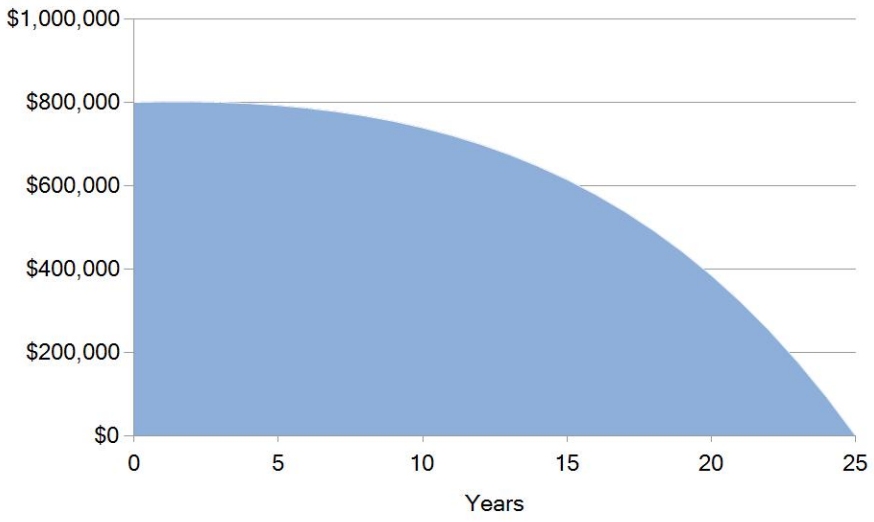
When you retire, you know how much you have saved. The question becomes "How much can you spend?"

Item Description	Value
Retirement savings	$800,000
Rate of return	7.00%
Number of years	25
Inflation Rate	2.50%
Annual withdrawal rate	6.39%
First year withdrawal amount	$51,100

Example

Starting with 6.39% withdrawal on your retirement savings and increasing that withdrawal amount by 2.50% annually for inflation while growing the remainder of your savings at 7.00% will cause your savings to be exhausted in 25 years.

Retirement Savings Balance



This is a hypothetical example and not a promise of future performance.
This calculator assumes withdrawal at the beginning of the year and interest compounded annually.

Taxable Portion of Social Security Benefits

Status: Married Filing Joint	
Social Security benefits received	$75,000
One-half of Social Security benefits received	37,500
Income (taxable income)	20,000
Tax exempt income	0
Excluded income	0
Subtotal	**57,500**
Adjustments to gross income	0
Modified AGI	**57,500**
1st tier base amount	-32,000
Excess[1]	**25,500**
If "Excess" is zero, none of your benefits are taxable. If "Excess" is greater than zero, the calculation continues below.	
2nd tier base amount	12,000
"Excess" minus "2nd tier base amount"[1]	13,500
The smaller of "Excess" or "2nd tier base amount"	12,000
One-half of amount on previous line	6,000
The smaller of "One-half of Social Security benefits received" and previous line	6,000
85% of "Excess minus 2nd tier base amount"	11,475
Sum of previous two lines	17,475
85% of "Social Security benefits received"	63,750
Taxable benefits (lesser of previous two lines)	**$17,475**

[1] This amount cannot be less than zero.

Required Minimum Distributions

Distributions from Traditional IRAs and Qualified Retirement Plans

Both traditional IRAs and qualified retirement plans enjoy significant federal tax benefits. Contributions are generally tax deductible and growth inside an account is tax deferred. Federal income tax law requires that certain amounts be paid out, generally beginning with the year an account owner turns age 72.[1] Funds become taxable when distributed.

Client 1:

Assumptions:

Calculation year: 2035

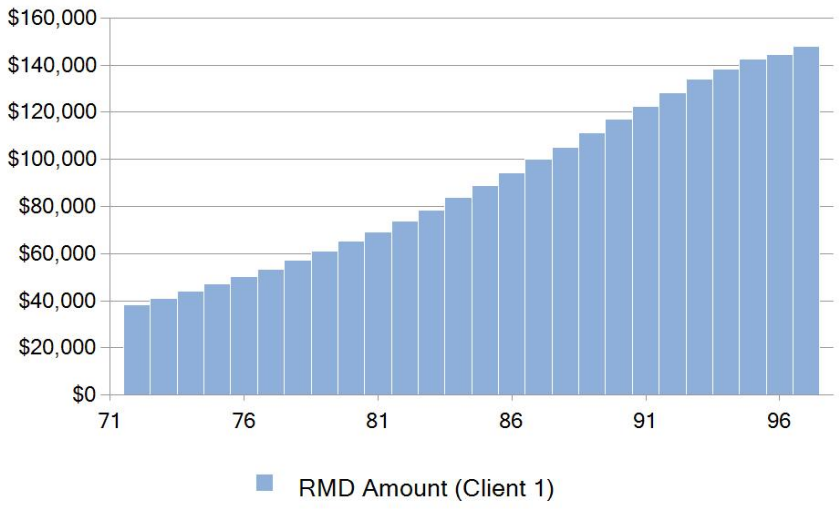
Account owner's age at end of calculation year: 61

Estimated rate of return: 7.00%

Item	Value
Age of Account Owner	72
Life Expectancy	27.4
Prior Year Account Balance	$1,052,426
RMD	$38,410

Account value at end of 2034 was $500,000 with annual contributions of $6,000, increasing at 1.00%, ending at age 61.

Annual RMD



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[1] Except for 5% owners, participants in qualified plans such as 401(k)s or 403(b)s have the option of beginning required minimum distributions (RMDs) at the later of age 72 or the year they retire. The Uniform Lifetime Table is used for a single owner or where a spouse is not more than 10 years younger than the owner, otherwise the Joint and Last Survivor Table is used. The Joint and Last Survivor Table does not represent joint life expectancy.