# Personal Financial Plan 

## For

# The Richards Family 

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This presentation provides a general overview of some aspects of your personal financial position. It is designed to provide educational and / or general information and is not intended to provide specific legal, accounting, investment, tax or other professional advice. For specific advice on these aspects of your overall financial program, consult with your professional advisors. Asset or portfolio earnings and / or returns shown, or used in the presentation, are not intended to predict nor guarantee the actual results of any investment products or particular investment style.
IMPORTANT: The projections or other information generated by Money Tree's Silver regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results and are not guarantees of future results. Additionally, it is important to note that information in this report is based upon financial figures input on the date above; results provided may vary with subsequent uses and over time.

## About Your Personal Financial Plan

We appreciate that you have questions and concerns as you work to attain and preserve financial security. Today's financial environment is complex and in many regards, uncertain. The decisions you make regarding work, spending, investment, and retirement, both now and in the future, will significantly affect your financial condition over the long term.

In an effort to aid you in learning, understanding, and formulating a personal basis for decision making, this 'Personal Financial Plan' is offered to help enhance your knowledge of various topics and communicate some of the intricacies of the financial world. The report represents a framework to clarify and structure your financial matters.

This report is based upon confidential information you provided regarding your present resources and objectives. While illustrations within this report can be a valuable aid in the examination of your finances, it does not represent the culmination of your efforts. Financial preparation is an ongoing process.

This hypothetical illustration of mathematical principles is custom made to model some potential situations and transitions you may face in your financial future. Hypothetical assumptions used in this illustration are specifically chosen to communicate and demonstrate your current financial position and highlight for discussion with your advisor the complex future interacting effects of combined incomes, expenses, savings, asset growth, taxes, retirement benefits, and insurance.

This document is not an advertisement or solicitation for any specific investment, investment strategy, or service. No recommendations or projections of specific investments or investment strategies are made or implied. Any illustrations of asset growth contained herein are strictly used to demonstrate mathematical concepts and relationships while presenting a balanced and complete picture of certain financial principles. Growth assumptions are applied to generalized accounts based upon differing tax treatment. Illustrations, charts and tables do not predict or project actual future investment performance, or imply that any past performance will recur.

This report does not provide tax or legal advice, but may illustrate some tax rules or effects and mention potential legal options for educational purposes. Information contained herein is not a substitute for consultation with a competent legal professional or tax advisor and should only be used in conjunction with his or her advice.

The results shown in this illustration are not guarantees of, or projections of future performance. Results shown are for illustrative purposes only. This presentation contains forward-looking statements and there can be no guarantees that the views and opinions expressed will come to pass. Historical data shown represents past performance and does not imply or guarantee comparable future results. Information and statistical data contained herein have been obtained from sources believed to be reliable but in no way are guaranteed as to accuracy or completeness.

The Assumptions page contains information you provided that is used throughout the presentation. Please review the information for accuracy and notify your Financial Advisor promptly if discrepancies in the assumptions are present; discrepancies may materially alter the presentation.

Your actual future investment returns, tax levels and inflation are unknown. This illustration uses representative assumptions in a financial calculation model to generate a report for education and discussion purposes. Calculations and assumptions within this report may not reflect all potential fees, charges, and expenses that might be incurred over the time frame covered by these illustrations which, if included, would result in lower investment returns and less favorable illustration results. Do not rely upon the results of this report to predict actual future investment performance, market conditions, tax effects or inflation rates.

## Summary

This report uses financial models to present a picture of your current financial situation and illustrations of possible directions your finances may take. Future economic and market conditions are unknown, and will change. The assumptions used are representative of economic and market conditions that could occur, and are designed to promote a discussion of appropriate actions that may need to be taken, to help you manage and maintain your financial situation under changeable conditions.

## Your Current Situation:

- You have assets of approximately $\$ 2,830,500$.
- You have no recorded liabilities.
- Your net worth is approximately $\$ 2,830,500$.
- You now have $\$ 1,390,000$ in working assets and are adding $\$ 31,300$ per year.


## Your Goals:

- John wants to retire at age 67 and Mary wants to retire at age 67.
- Monthly after-tax income needed at that time is $\$ 7,441$ (in today's dollars).
- You will need the income until the last life expectancy of age 90.
- To meet your education goals you need to save $\$ 9,591$ annually ( $\$ 799$ monthly).


## Your Details:

- Asset Allocation: Type of Investor - Aggressive
- Long-term care assets at risk: None
- Net Estimated Life Insurance Needs Shortage for John: None
- Net Estimated Life Insurance Needs Shortage for Mary: None
- John and Mary both have Wills.
- John and Mary both have Durable Powers of Attorney.
- John and Mary do not have Living Wills.
- John and Mary both have Health Care Powers of Attorney.


## Retirement Analysis

Using the information you provided, calculations have been made to estimate whether your current retirement program will meet your stated retirement goals. The analysis begins now and extends through life expectancy. It includes tax advantaged, taxable investments, defined benefit pensions, if applicable, and Social Security benefits. The analysis calculates growth and depletion of capital assets over time.

## Actions:

Using current data, estimates show you will have enough money to reach your retirement goals. Since it appears that you will have $\$ 23,792,400$ left at your life expectancy (not including insurance proceeds), you may wish to consider: an earlier retirement, increased spending during retirement, or other ways to enhance your retirement years.

This report is for informational and educational purposes only. The information and assumptions used are estimates. The resulting calculations are designed to help illustrate financial concepts and general trends.

# Assumptions 

## Client Information:

Names :
First Name 1
First Name 2
Birthdate / Age 1
Birthdate / Age 2
Retirement Age 1
Retirement Age 2
Life Expectancy 1
Life Expectancy 2
Alternate life exp. 1
Alternate life exp. 2
Risk Tolerance Level
Life Insurance 1
Life Insurance 2
Term Insurance 1
Term Insurance 2
Insurance cash value 1
Insurance cash value 2
Pension \& Social Security Data (Annual):
Pension-Indv. 1
Pension start age
Pension rate (pre ret.)
Pension rate (ret.)
Pension survivor \%
Pension-Indv. 2
Pension start age
Pension rate (pre ret.)
Pension rate (ret.)
Pension survivor \%
Soc Sec 1 Start age
67
Soc Sec 1 Rate 2.00\%

Earned income 1
Soc Sec 1 Amt. (if known) \$140,000
\$26,988
Soc Sec 2 Start age 67
Soc Sec 2 Rate
Earned income 2
Soc Sec 2 Amt. (if known)
2.00\%
\$11,232
Other Expenses After-tax:
car $\quad 2012 \quad 0.00 \% \quad 1$

85

Aggressive \$364,000
\$1,000,000
\$30,000
\$15,500

Asset Allocations:

11/6/1959
4/2/1960

| Asset Allocations: | Current | Suggested |
| :--- | ---: | ---: |
| Cash \& Reserves | $1.01 \%$ | $5.00 \%$ |
| Income | $0.00 \%$ | $0.00 \%$ |
| Income \& Growth | $41.73 \%$ | $0.00 \%$ |
| Growth | $49.35 \%$ | $35.00 \%$ |
| Aggressive Growth | $7.91 \%$ | $60.00 \%$ |
| Other | $0.00 \%$ | $0.00 \%$ |

67 Rate Assumptions (Before \& After Retirement):

| Taxable Returns | $8.00 \%$ | $8.00 \%$ |
| :--- | :--- | :--- |
| Tax-Deferred \& Roth Returns | $8.00 \%$ | $8.00 \%$ |

Tax-Free Returns $\quad 4.00 \%$ 4.00\%
Return on Annuities $\quad 8.00 \% \quad 8.00 \%$

| Effective Tax Rates | $20.00 \%$ | $18.00 \%$ |
| :--- | :--- | :--- |

Cost Basis for Taxable Assets $\quad 100.00 \%$

Cost Basis for Annuity Assets
100.00\%

Additions Increase Rate: Taxable $3.00 \%$
Additions Increase Rate: Tax-Def $1 \quad 3.00 \%$
Additions Increase Rate: Tax-Def $2 \quad 3.00 \%$
Other Incomes After-tax
Item Start Inc Number Amount per

Description Year Rate of years year

## Estimated Education Costs

Total cost at 6\% inf.
\$602,061
Expenses \& Inflation (Annual After-tax ):
Expenses, (pre ret.) \$89,287
Expenses, Survivor (pre ret.) $\$ 89,287$
Expenses at Retirement $\quad \$ 89,287$
Expenses, Survivor (ret.) \$89,287
Inflation, (pre ret.) $3.00 \%$
Inflation, Survivor (pre ret.) 3.00\%
Inflation at Retirement $3.00 \%$
Inflation, Survivor (ret.) $3.00 \%$

## Net Worth Statement

The Richards Family
August 22, 2008

## ASSETS

Savings And Investments
Checking Accounts
\$4,000
Money Market Accounts/Funds
Common Stocks
Stock Mutual Funds
10,000
110,000
Real Estate
220,000
Real Esta

## Retirement Accounts

Qualified Plans-John
IRA Assets-John
IRA Assets-Mary
Roth Assets-John

## Other Assets

Residence
Personal Property
Life Insurance Cash Values
$\$ 1,400,000$
25,000

15,500 $\quad$|  | $\$ 1,440,500$ |
| ---: | ---: |
| TOTAL ASSETS | $\mathbf{\$ 2 , 8 3 0 , 5 0 0}$ |

## LIABILITIES

[^0]Asset Worksheet

| Description | Current <br> Amount | Annual Additions | Addition Period | Asset Class | Account Taxation | Asset Type |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Checking | 4,000 |  |  | Cash | Taxable (J) | Checking Account |
| Real Estate | 580,000 |  |  | Inc./Gro. | Taxable (J) | Real Estate |
| Savings | 10,000 | 12,000 | 2008-2026 | Cash | Taxable (J) | Money Market |
| Stock Mutual Fund | 220,000 |  |  | Growth | Taxable (J) | Mutual Funds (Stock) |
| John IRA | 137,000 |  |  | Growth | IRA (1) | Mutual Funds (Stock) |
| John 401k | 241,000 | 19,300 | 2008-2026 | Growth | Tax-Deferred (1) | Mutual Funds (Stock) |
| John SEP | 13,000 |  |  | Growth | Tax-Deferred (1) | Mutual Funds (Stock) |
| John Roth IRA | 44,000 |  |  | Growth | Roth IRA (1) | Mutual Funds (Stock) |
| Separate Property | 110,000 |  |  | Agg. Gro. | Taxable (1) | Stocks |
| Mary IRA | 31,000 |  |  | Growth | IRA (2) | Mutual Funds (Stock) |
| Totals: | \$1,390,000 | \$31,300 |  |  |  |  |

## Asset Allocation

## Developing An Asset Allocation

Asset allocation refers to maintaining your investments in strategic asset classes, such as Cash, Fixed Income, and Equities, in an advantageous manner over time to ensure adequate diversification. It is important to the success of your investment strategy that your asset allocation be consistent with your goals.

## Here is a summary of your current asset allocation.

| Personal Investments | Current <br> Balances |  <br> Equivalents | Income <br> Assets | Growth <br> Assets | Other Assets* |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Checking Account | $\mathbf{\$ 4 , 0 0 0}$ |  | $\$ 4,000$ |  |  |
| Money Market Account | $\mathbf{1 0 , 0 0 0}$ |  | 10,000 |  |  |
| Stock | $\mathbf{1 1 0 , 0 0 0}$ |  | 110,000 |  |  |
| Stock Mutual Fund | $\mathbf{2 2 0 , 0 0 0}$ |  | 220,000 |  |  |
| Real Estate | $\mathbf{5 8 0 , 0 0 0}$ |  | 580,000 |  |  |
|  | $\mathbf{\$ 9 2 4 , 0 0 0}$ | $\$ 14,000$ | $\$ 910,000$ |  |  |

## Retirement Plans

| Qualified Plans-John | $\mathbf{\$ 2 5 4 , 0 0 0}$ | $\$ 254,000$ |  |
| :--- | ---: | ---: | ---: |
| IRA Assets-John | $\mathbf{1 3 7 , 0 0 0}$ | 137,000 |  |
| IRA Assets-Mary | $\mathbf{3 1 , 0 0 0}$ | 31,000 |  |
| Roth IRA Assets-John | $\mathbf{4 4 , 0 0 0}$ | 44,000 |  |
|  | $\mathbf{\$ 4 6 6 , 0 0 0}$ |  | $\$ 466,000$ |
|  |  | $\$ 1, \mathbf{3 9 0 , 0 0 0}$ | $\$ 14,000$ |
| Total Investment Assets |  | $\$ 1,376,000$ |  |

Total Investment Assets

| \$1,390,000 | \$14,000 |  | \$1,376,000 |
| :---: | :---: | :---: | :---: |
|  | 1\% | 0\% | 99\% |
|  | Current Asset Allocation |  |  |

* Other assets are not included in the Current Asset Allocation.


## Your Current Asset Allocation

The information from the Asset Worksheet was used to create the following chart.
It is important to the success of your strategy that your asset allocation is consistent with your goals. You should compare your current allocation to the Suggested Asset Allocation below which may be more appropriate and beneficial to your situation.


## Suggested Asset Allocation

Based upon information you provided, we believe you should consider an investment mix similar to the one below.
We have illustrated a broad-based allocation. Effectiveness might be further increased by diversifying the types of securities held within the asset mix. See your advisor or insurance agent for analysis.



[^1]
## Retirement Profile

## Developing A Retirement Strategy

Developing a retirement strategy means understanding your current situation, deciding among alternatives, and taking appropriate action today. This report will help you define your current retirement goals, identify your current program, and estimate the results for your review.

## Your Current Retirement Goals

|  | John |  |
| :--- | :---: | :---: |
| Age: | 48 | Mary |
| Retirement Age: | 67 | 48 |
| Years until Retirement: | 19 | 67 |
| Years of Retirement: | 18 | 19 |
| Annual Retirement Spending (After-tax): | $\mathbf{\$ 8 9 , 2 8 7}$ |  |

Additional Objectives Please see the attached Education Funding Illustration.

## Other Expenses <br> car:

## Assumptions

|  | Pre-Retirement | Retirement |
| :--- | :---: | :---: |
| Inflation Rate: | $3.0 \%$ | $3.0 \%$ |
| Income Tax Rate (Average): | $20.0 \%$ | $18.0 \%$ |
| Return on Investments (Average): | $8.0 \%$ | $8.0 \%$ |

Current residence(s) will be maintained.

## Resources Available for Retirement

Funds to meet your goals can come from several sources: Personal Investing, Retirement Plans, Defined Benefit Pensions, Social Security, and Other Income.

Here is a summary of your situation.

## Personal Investments

Checking Accounts
Money Market Accounts/Funds $\quad \mathbf{1 0 , 0 0 0}$
Common Stocks $\quad \mathbf{1 1 0 , 0 0 0}$
Stock Mutual Funds $\quad \mathbf{2 2 0 , 0 0 0}$
Real Estate $\quad \mathbf{5 8 0 , 0 0 0}$
Retirement Plans
Qualified Plans-John
IRA Assets-John
IRA Assets-Mary
Roth IRA/401k Assets-John

## Total Investment Assets

See Asset Worksheet for detailed annual savings information.

## Social Security

Starting Age
Benefit at Starting Age (After-tax)

## Pension Plans

Pension Amount

## Current Balances

|  |
| ---: |
| $\$ 4,000$ |
| 10,000 |
| 110,000 |
| 220,000 |
| $\mathbf{5 8 0 , 0 0 0}$ |
| $\mathbf{9 2 4 , 0 0 0}$ |


|  |
| ---: |
| $\$ 254,000$ |
| 137,000 |
| 31,000 |
| 44,000 |
| $\$ 466,000$ |

## John

N/A

Mary
N/A

## Retirement Summary



## Retirement Capital Illustration

The analysis begins at your current age and extends through your life expectancy. It includes all assets, both tax advantaged and taxable, all expenses, including education funding if applicable, other income and expense estimates, defined benefit pensions, and Social Security benefits. The graph illustrates the growth and depletion of your capital assets, and in cases of capital shortages shows accumulating deficits.
General Assumptions:

| Rates of Return Before and After <br> Retirement Used in Illustration: |  |  |
| :--- | :--- | :--- |
| Taxable RORs: | $8 \%$ | $8 \%$ |
| Tax Def. RORs: | $8 \%$ | $8 \%$ |
| Tax Free RORs: | $4 \%$ | $4 \%$ |
| Annuity RORs: | $8 \%$ | $8 \%$ |


| Retirement Spending Needs* | $\$ 89,287$ |
| :--- | :--- |
| Survivor Spending Needs* | $\$ 89,287$ |
| Retirement Age | John -67 |
| Retirement Age | Mary -67 |
| Inflation - Current | $3 \%$ |
| Inflation - Retirement | $3 \%$ |
| Tax Rate - Current | $20 \%$ |
| Tax Rate - Retirement | $18 \%$ |

[^2]
## Retirement Capital Illustration Results:

Using current data, estimates show you will have enough money to reach your retirement goals. Since it appears that you will have $\$ 23,792,400$ left at your life expectancy (not including insurance proceeds), you may wish to consider: an earlier retirement, increased spending during retirement, or other ways to enhance your retirement years.

## Monte Carlo Simulation Explanation

The financial planning process can help you evaluate your status in relationship to your financial goals and objectives. In preparing a hypothetical financial illustration for discussion, a series of representative fixed assumptions are made, such as inflation rates, rates of return, retirement benefits and tax rates. While such static hypothetical illustrations are still useful for education and discussion purposes, they are based upon unchanging long-term assumptions. In fact, economic and financial environments are unpredictable and constantly changing.

Monte Carlo Simulation is one way to visualize the effect of unpredictable financial market volatility on your retirement program. Monte Carlo Simulation introduces random uncertainty into the annual assumptions of a retirement capital illustration model, and then runs the model a large number of times. Observing results from all these changing results can offer a view of trends, patterns and potential ranges of future outcomes illustrated by the randomly changing simulation conditions. While Monte Carlo Simulation cannot and does not predict your financial future, it may help illustrate for you some of the many different possible hypothetical outcomes.

## Monte Carlo Simulation Technique:

Based upon the trends, changes, and values shown in your hypothetical financial program, the simulation process uses a different random rate of return for each year of a new hypothetical financial result. Ten thousand full financial calculation sets are performed utilizing the volatile annual rates of return. The result is ten thousand new hypothetical financial program results illustrating possible future financial market environments.

By using random rates from a statistically appropriate collection of annual returns, and repeating the process thousands of times, the resulting collection can be viewed as a representative set of potential future results. The tendencies within the group of Monte Carlo Simulation results; the highs, lows and averages, offer insight into potential performance which may occur under various combinations of broad market conditions.

Note: No investment products, investment strategy or particular investment style is projected or illustrated by this process. Simulation results demonstrate effects of volatility on rate of return assumptions for education and discussion purposes only.

## Standard Deviation:

The simulated level of volatility in future financial markets is represented by a Standard Deviation value. This statistical measure of variation is used within the Monte Carlo Simulation to indicate how dramatically return rates can change year by year. The Standard Deviation controls the magnitude of the random changes in each annual rate of return as it is varied each year above or below the average annual rate to simulate market volatility.

The simulation model uses a Standard Deviation based upon the rate of return assumptions used in the Retirement Capital Illustration, and limits the rate of return variation to plus or minus five standard deviations in any year. Low assumed return rates generate low Standard Deviation values, higher returns relate to higher Standard Deviations.

## The Bold Line

The bold line in the Monte Carlo Simulation Results graph tracks the value of assets over the length of the illustration if all rates of return are held stable at the assumed rates of return (see Assumptions). The estimate uses annual expected portfolio rates of return and inflation rates to model the growth and use of assets as indicated under Assumptions (page 3). The bold line represents the values shown in the Retirement Capital Analysis.

## Percentage of Monte Carlo Results Above Zero at Selected Ages

These results represent the percentage of Monte Carlo simulation outcomes that show positive retirement asset value remaining at different ages. A percentage above 70 at last life expectancy is an indication that the underlying retirement strategy offers a substantial probability of success even under volatile market conditions. Additional ages shown give the percentage of simulation outcomes with positive asset amounts at various ages.

## Monte Carlo Simulation Minimum, Average and Maximum Dollar Results

These values indicate the best, worst and average dollar results at the end of the ten thousand Monte Carlo Simulations. These show the range of results (high and low), and the average of all Monte Carlo results. All values are based on results at the life expectancy of the last to die.

[^3]
## Monte Carlo Retirement Simulation



This Monte Carlo Retirement Simulation illustrates possible variations in growth and/or depletion of retirement capital under unpredictable future conditions. The simulation introduces uncertainty by fluctuating annual rates of returns on assets. The graph and related calculations do not presuppose or analyze any particular investment or investment strategy. This long-term hypothetical model is used to help show potential effects of broad market volatility and the possible impact on your financial assets. This is not a projection, but an illustration of uncertainty.

The simulations begin in the current year and model potential asset level changes over time. Included are all capital assets, both tax advantaged and taxable, all expenses, including education funding if applicable, pension benefits, and Social Security benefits. Observing results from this large number of simulations may offer insight into the shape, trends, and potential range of future retirement outcomes under volatile market conditions.

## Retirement Capital Analysis Results, at Life Expectancy, of 10,000 Monte Carlo Simulations:

Percent with funds at last life expectancy
Percent with funds at age 83
Percent with funds at age 74
Percent with funds at age 67

100\%
$100 \%$
$100 \%$
100\%

Retirement Capital Estimate
Minimum (Worst Case) result
Average Monte Carlo result
Maximum Monte Carlo result
\$23,792,435
\$3,765,229
\$23,712,911
\$60,687,771

Life insurance proceeds are not included in the final year balances of these calculations.
Illustration based on random rates of return which average $8 \%$, with a std. dev. of $5.5 \%$ ( $95 \%$ of values fall between $-3 \%$ and $19 \%$ ).
IMPORTANT: The projections or other information generated in this report regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results and are not guarantees of future results. Results may vary with each report and over time. Results of this simulation are neither guarantees nor projections of future performance. Information is for illustrative purposes only. Do not rely upon the results of this report to predict actual future performance of any investment or investment strategy.

## Introduction to Dynamic Behavioral Analysis

A key question for most people is, "What does it really take to retire with security?" Financial professionals have developed a number of ways to understand and address uncertainties to prepare a secure financial future. Dynamic Behavioral Analysis is an advanced technique that builds on earlier methods of retirement success analysis.

The "Dynamic" part of the analysis allows both retirement age and retirement spending to change based on investment performance. The "Behavioral" part is the set of rules, or logic, that dictates the responses in particular situations. Applied together in a Monte Carlo Simulation, this active method compensates for some of the limitations of other illustration methods.

Traditional retirement illustrations are static - that is, they assume inflation rates and investment returns are consistant throughout the calculations. Static illustrations offer a good picture of general retirement concepts, and are representative if every year is close to average. Of course, in real life, rates of inflation and returns may fluctuate significantly.

Introducing the effects of market uncertainty, Monte Carlo Simulation does all the calculations for a retirement illustration, but randomly varies rates of return on investments every year. Thousands of these trials are run, each represents a potential retirement with a unique set of investment returns. The greater the percentage of successful Monte Carlo trials, the better the retirement plans stands up to variable financial market conditions.

In the real world, changing financial markets are not the only factors affecting retirement security. Individuals can and do respond intelligently to financial market conditions as they occur. When retirement investments don't grow as planned, reasonable people may change their plans and actions to protect their security, perhaps by retiring later or by temporarily spending less at some point in retirement.

Dynamic Behavioral Analysis introduces reasonable responses by using active Monte Carlo Simulation. Thousands of randomized trials are run, and in trials that develop adverse conditions, the retirement age and/or spending levels change to model reasonable financial decisions. The resulting illustrations show success rates for different retirement ages and the associated spending levels. These analysis results can help indicate how robust a retirement plan is when adjustments are made in response to financial changes.

## Dynamic Behavioral Analysis - continued

Rational people will respond to changing financial conditions to protect their financial security. Thorough education and preparation for a secure retirement requires seeing the potential effects of future market uncertainty and being prepared to respond appropriately. Dynamic Behavioral Analysis is a method that factors in reasonable adjustments to retirement age and spending levels in response to investment returns. Dynamic Behavioral Analysis results offer a more complete picture of various effects market variability may have on retirement decisions.

## The Retirement Decision

Evaluating a retirement age, to see if it is financially reasonable, starts with three questions designed to assure retirement savings last throughout a lifetime. How much in savings will need to be spent in each year of retirement? What percentage of retirement investments need to be withdrawn in the first year of retirement? What is the latest acceptable retirement start age?

First-year spending is used to determine if there are sufficient investment assets to safely sustain withdrawal throughout retirement. Income from sources such as Social Security or pensions is subtracted from the retirement spending need. The remainder will be withdrawn from savings and investments.

This withdrawal, when viewed as a percentage of total assets, may indicate readiness to retire. Percentages below a certain number (usually around $4.5 \%$ ) might be considered a safe initial withdrawal rate. For example, if at retirement age total assets are $\$ 1,000,000$, then a withdrawal of $\$ 45,000$ would be acceptable in the first year of retirement ( $\$ 45,000$ is $4.5 \%$ of $\$ 1,000,000$ ).

To evaluate a retirement age in a trial, that year's withdrawal amount is compared to accumulated retirement assets. If the ratio is less than the maximum acceptable withdrawal percentage, the trial lets retirement occur. If not, the model defers retirement until the withdrawal ratio is acceptable or the maximum acceptable retirement age is reached.

## Spending Levels

Determining annual retirement spending levels starts with three questions. How much retirement spending is desired? How much is required, that is, what is needed to cover necessities? Finally, what is the maximum percentage of assets that can be withdrawn in a single year?
The calculation model always tries to maintain the desired spending level. If however, assets will not sustain that level, withdrawls will be reduced, subject to these limitations:

1. Spending will never be more than the desired amount.
2. Spending will never be less than the required amount.

Note: both these amounts will be increased each year for inflation.
3. Withdrawal from assets will never be higher than the maximum percentage.

That last point needs a little more explanation. As a person comes closer to life expectancy, it's reasonable to spend down some of the assets, if needed. Because of this, the percentage of assets that can be withdrawn is also increased with age: in the first year of retirement, it's the "safe" rate; by life expectancy, it's reached the selected maximum.

## Behavioral Analysis



Able To Meet Initial Retirement Spending Levels By This Age
Monte Carlo Success Rate When Retired At This Age

## Graph Explanation

Dynamic Behavioral Analysis extends the Monte Carlo projection to consider intelligent responses to changing financial conditions. This chart shows the percentage of projections that are successful for given retirement ages.
Each red column on the left shows the probability of having enough funds at retirement to safely make the planned initial withdrawal. Given your planned retirement spending of $\$ 89,287 /$ year, this shows the percentage of projections in which you have enough funds for this spending not to exceed the maximum initial withdrawal rate. In other words, the successful projections are the ones in which you have at least \$1,984,156 in today's dollars.
Each green column on the right shows the probability of having sufficient funds through life expectancy.

## Assumptions

| Randomize rate of return | Yes |
| :--- | :--- |
| Randomize inflation rate | No |
| Allow for a different retirement age | Yes |
| $\quad$ Early $\quad 2 \quad$ Later | 5 |
| Initial withdrawal rate limit | $4.5 \%$ |
| Ending withdrawal rate limit | $10.0 \%$ |
| Variable spending budget floor | $90 \%$ |
| Variable spending budget ceiling | $125 \%$ |
| Variable spending increase ratio | $25 \%$ |

## Retirement Income Sustainability and Variable Spending

Retirement investments are often the most important source of funding for retiree's spending needs. Key to the reliable flow of these critical funds throughout retirement is a strategy to avoid taking too much money from retirement investments in any one year.

In order to model effects of retiree spending flexibility, Dynamic Behavioral Analysis bases spending on the budget, but makes limited reductions in simulation situations where the full budget figure requires withdrawals above the maximum withdrawal rate. The size of budget reduction adjustments are limited based on retiree discretionary spending flexibility.

Variable spending calculations make adjustments in each simulation year when the full budget would require withdrawals that exceed that year's rate limit. This can occur when investment assets don't grow as expected or when inflation is higher that anticipated. Calculated spending is based on the inflated budget, but is limited on the upper end by the maximum asset withdraw rate, and on the lower end by the minimum acceptable percentage of the inflated budget.


For each example retirement age, this Dynamic Behavioral Analysis graph illustrates the simulation result for each age's variable spending level as a percentage of budgeted spending (red), the simulation success rate at full budgeted spending (blue), and the simulation success rate with variable spending (green).
In this simulation, retirement age is based on an initial withdrawal rate limit of $4.5 \%$ and variable spending is kept between $90 \%$ and $125 \%$ of inflated budget based upon the initial withdrawal rate limit and the ending withdrawal rate limit of $10.0 \%$.

Retirement Expense Forecast


The Retirement Expense Forecast graph combines estimated Social Security benefits with defined pension benefits plotted with estimated annual living expenses in retirement. The graph begins at retirement age and continues to life expectancy. Future retirement expenses are estimated based on your objectives, adjusted for inflation over time. Survivor expense levels start the year after first life expectancy.

Social Security benefits, and annual adjustments for benefit growth, are estimated and illustrated over the anticipated lifetime. If the starting age selected for Social Security benefits is prior to normal benefit age, only a partial Social Security benefit may be available. Benefit amounts may decrease upon first death.

The Pension Benefit estimate combines any pension benefits and plots them starting at the age the benefit begins. At the death of the pension holder a surviving spouse might receive no continuing benefit, or only a portion of the benefit, causing a decrease in overall annual income.

Excess Expenses shown in the graph represent the amount of inflation adjusted annual living expenses that exceed the combined estimated Social Security and pension benefits. These are estimated amounts which will need to come from retirement savings to fund future expenses not covered by expected benefit income.

Note: Social Security and Pension benefit estimates are based upon information you provided. Estimates are not guarantees of future benefits amounts. Clients should not rely upon results of this report to predict actual future benefit amounts.

## Cash Flow Summary



The bars in the above graph represent the amounts available from:
Earned income (wages and self-employment)
Social Security
Qualified plan additions and distributions
Investment additions and distributions
Misc - (inheritances, sale of residence, retirement account minimum
distributions, life insurance)

The line illustrates the annual expenses including:
Personal living expenses
Planned debt expenses
Specified special expenses
Planned deposits to investment and retirement accounts
Miscellaneous expense items
Taxes

Note: The Cash Flow report provides the actual numbers that create the preceding Cash Flow Summary graph.

## Cash Flow

| Ages Indv. | Cash Flow Sources |  |  |  |  |  | Less Living Expense \& Taxes | Shortage or Surplus |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Earned Income | Retire/Roth Accounts* | Investment Accounts* | Pension/ Soc Sec. | Other Income | Total Sources |  |  |
| 4848 | \$140,000 | $(\$ 15,500)$ | \$47,520 |  |  | \$172,020 | $(\$ 114,187)$ | \$57,833 |
| 4949 | 144,200 | $(15,965)$ | 51,749 |  |  | 179,984 | $(117,612)$ | 62,372 |
| 5050 | 148,526 | $(16,444)$ | 56,284 |  |  | 188,366 | $(121,141)$ | 67,225 |
| 5151 | 152,981 | $(16,937)$ | 61,145 |  |  | 197,189 | $(124,775)$ | 72,415 |
| 5252 | 157,571 | $(17,446)$ | 66,036 |  | $(10,000)$ | 196,161 | $(128,518)$ | 67,644 |
| 5353 | 162,298 | $(17,968)$ | 71,279 |  |  | 215,609 | $(132,374)$ | 83,236 |
| $54 \quad 54$ | 167,167 | $(18,508)$ | 77,218 |  |  | 225,877 | $(136,345)$ | 89,532 |
| 5555 | 172,182 | $(19,063)$ | 83,578 |  |  | 236,697 | $(140,435)$ | 96,262 |
| 5656 | 177,347 | $(19,635)$ | 90,388 |  |  | 248,100 | $(144,648)$ | 103,451 |
| $57 \quad 57$ | 182,668 | $(20,224)$ | 97,677 |  |  | 260,121 | $(148,988)$ | 111,133 |
| 5858 | 188,148 | $(20,831)$ | 105,477 |  |  | 272,794 | $(153,457)$ | 119,337 |
| 5959 | 193,792 | $(21,455)$ | 113,823 |  |  | 286,160 | $(158,061)$ | 128,099 |
| $60 \quad 60$ | 199,606 | $(22,100)$ | 122,753 |  |  | 300,259 | $(162,803)$ | 137,456 |
| 6161 | 205,594 | $(22,762)$ | 132,301 |  |  | 315,133 | $(167,687)$ | 147,447 |
| $62 \quad 62$ | 211,762 | $(23,445)$ | 142,513 |  |  | 330,830 | $(172,718)$ | 158,112 |
| $63 \quad 63$ | 218,115 | $(24,148)$ | 153,430 |  |  | 347,397 | $(177,899)$ | 169,498 |
| $64 \quad 64$ | 224,658 | $(24,873)$ | 165,099 |  |  | 364,884 | $(183,236)$ | 181,648 |
| 6565 | 231,398 | $(25,619)$ | 177,572 |  |  | 383,351 | $(188,733)$ | 194,617 |
| $66 \quad 66$ | 238,340 | $(26,387)$ | 190,899 |  |  | 402,852 | $(194,395)$ | 208,456 |
| 67 R 67 R |  |  | 227,556 | 47,160 |  | 274,716 | $(156,565)$ | 118,152 |
| 6868 |  |  | 235,183 | 48,104 |  | 283,287 | $(161,262)$ | 122,026 |
| $69 \quad 69$ |  |  | 243,061 | 49,066 |  | 292,127 | $(166,100)$ | 126,028 |
| $70 \quad 70$ |  | 131,017 | 254,721 | 50,047 |  | 435,785 | $(194,666)$ | 241,120 |
| 7171 |  | 141,162 | 270,676 | 51,048 |  | 462,886 | $(201,624)$ | 261,262 |
| $72 \quad 72$ |  | 152,080 | 287,969 | 52,069 |  | 492,118 | $(208,875)$ | 283,243 |
| $73 \quad 73$ |  | 163,828 | 306,720 | 53,110 |  | 523,658 | $(216,435)$ | 307,224 |
| $74 \quad 74$ |  | 176,466 | 327,065 | 54,172 |  | 557,703 | $(224,317)$ | 333,386 |
| 7575 |  | 190,059 | 349,147 | 55,256 |  | 594,462 | $(232,541)$ | 361,921 |
| 7676 |  | 204,676 | 373,123 | 56,361 |  | 634,160 | $(241,122)$ | 393,038 |
| $77 \quad 77$ |  | 219,351 | 399,137 | 57,488 |  | 675,976 | $(249,892)$ | 426,085 |
| $78 \quad 78$ |  | 236,164 | 427,371 | 58,638 |  | 722,173 | $(259,230)$ | 462,943 |
| 7979 |  | 252,926 | 458,016 | 59,811 |  | 770,753 | $(268,749)$ | 502,004 |
| $80 \quad 80$ |  | 270,780 | 491,247 | 61,007 |  | 823,034 | $(278,660)$ | 544,374 |
| 8181 |  | 289,779 | 527,283 | 62,227 |  | 879,289 | $(288,978)$ | 590,311 |
| 8282 |  | 309,979 | 566,359 | 63,472 |  | 939,810 | $(299,719)$ | 640,091 |
| 8383 |  | 331,431 | 608,727 | 64,741 |  | 1,004,899 | $(310,898)$ | 694,001 |
| $84 \quad 84$ |  | 354,182 | 654,660 | 66,036 |  | 1,074,878 | $(322,530)$ | 752,348 |
| 85 L 85 |  | 375,720 | 716,322 | 67,357 | 364,000 | 1,523,399 | $(334,170)$ | 1,189,229 |
| 86 |  | 398,210 | 782,120 | 48,513 |  | 1,228,843 | $(346,214)$ | 882,629 |
| 87 |  | 421,627 | 840,411 | 49,484 |  | 1,311,522 | $(358,665)$ | 952,857 |
| 88 |  | 445,928 | 903,327 | 50,473 |  | 1,399,728 | $(371,523)$ | 1,028,206 |
| 89 |  | 471,049 | 971,199 | 51,483 |  | 1,493,731 | $(384,782)$ | 1,108,949 |
| 90 L |  | 492,535 | 1,044,263 | 52,512 |  | 1,589,310 | $(397,650)$ | 1,191,660 |

* Scheduled distributions, interest, or dividends taken in cash or amounts taken to meet the IRS minimum distribution requirements. Note: Earned Income is reduced by qualified retirement account contributions in calculating the effect of income taxes. Pension, Social Security, and Other Income cash flow items are net of income taxes. The tax rate used is the average tax rate entered in the input.


## Cash Flow Explanation

Cash flows are sources and uses of money. Primary sources of funds are income from work, Social Security, pensions, savings, insurance proceeds, and other income events. Regular living expenses, education costs, and other planned expenses are the primary use of funds.

The cash flow report pages are designed to be an alternate presentation of the financial information shown elsewhere in this report. The emphasis of the cash flow illustrations are the amounts and types of incomes and levels of expenses that occur during the illustration.

The Cash Flow Summary Graph illustrates four primary financial elements; income, investment, expenses, and cash sources. The different colored bars in the graph represent the level of cash flows that are occurring, and what accounts they are related to. The single solid line represents the annual expense level from now to the end of the illustration. Prior to retirement, bars above the expense level represent investments.

Portions of bars below the expense line represent sources of cash that are being used to pay for planned living expenses and to cover special expenses such as education. During the working years, income from employment is generally the primary source of cash to cover expenses. In retirement, Social Security, pension benefits, and cash withdrawn from investment accounts are the major sources of cash to cover expenses.

In general terms, the best case is to have the cash flow bars always at or above the expense line. This indicates that there is sufficient income, or investment asset sources, to meet living expenses and other planned needs. Gaps between the expense line and cash flow bars indicate calculated shortfalls of cash flow during those years.

The cash flow numbers page contains the numerical information upon which the graph is based. This page shows the sources and uses of funds. The columns coincide with the bars and lines in the cash flow graph. Red numbers represent a use of cash, black a source.

The red numbers in the Retire/Roth or Investment Accounts columns are additions made to those accounts; these are investments and uses of funds. The black numbers in those columns represent withdrawals from the account; these are sources of funds to meet retirement needs.

All sources (and investment uses) are subtotaled in the Total Sources column. Tax estimates are based on earned income and investment income (adjusted for contributions to qualified retirement accounts) multiplied by the estimated net effective tax rates. The resulting tax estimate is added to inflation adjusted living expenses to create an estimated annual figure.

The combination of Total Sources and Living Expenses \& Taxes can create a surplus or shortage. A shortage indicates that expenses exceed incomes and sources. A surplus can indicate that incomes exceed expenses. During retirement, if money is withdrawn at the same level of need, no surplus or shortage will occur.

## Total Capital Assets



The Total Capital Assets graph displays taxable assets, combined with the value of the tax advantaged assets over time. The illustration shows assets from current age through life expectancy. Estimated capital growth is based on the rate of return for the assets, plus any annual additions or expenses. When the taxable accounts have been consumed, tax-advantaged accounts may be drawn on for additional funds.

Generally, the IRS requires that by age $701 / 2$, minimum distributions must be made from qualified tax-deferred accounts. These annual distributions must be made on a schedule calculated to consume the account balances during the life expectancy. Money distributed from these tax-deferred accounts will first be used to meet current spending needs. Excess funds will be reinvested into taxable accounts.

## Retirement Capital Analysis

| Ages | Retirement Spending Needs |  | Sources of Annual Income ** |  |  |  | Education \& Other Inc/Exp*** | Net Surplus <br> or (Shortage) | Annual Additions To Assets | Retirement Capital$\$ 1,390,000$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Social Security |  | Pension Income |  |  |  |  |  |
|  |  |  | Indv. 1 | Indv. 2 | Indv. 1 | Indv. 2 |  |  |  |  |
| 48 | 48 |  |  |  |  |  |  |  | 31,300 | 1,518,872 |
| 49 | 49 |  |  |  |  |  |  |  | 32,239 | 1,657,882 |
| 50 | 50 |  |  |  |  |  |  |  | 33,206 | 1,807,791 |
| 51 | 51 |  |  |  |  |  |  |  | 34,202 | 1,969,418 |
| 52 | 52 |  |  |  |  |  | $(10,000)$ | $(10,000)$ | 35,228 | 2,133,320 |
| 53 | 53 |  |  |  |  |  |  |  | 36,285 | 2,320,421 |
| 54 | 54 |  |  |  |  |  |  |  | 37,374 | 2,522,035 |
| 55 | 55 |  |  |  |  |  |  |  | 38,495 | 2,739,248 |
| 56 | 56 |  |  |  |  |  |  |  | 39,650 | 2,973,225 |
| 57 | 57 |  |  |  |  |  |  |  | 40,839 | 3,225,222 |
| 58 | 58 |  |  |  |  |  |  |  | 42,065 | 3,496,583 |
| 59 | 59 |  |  |  |  |  |  |  | 43,327 | 3,788,759 |
| 60 | 60 |  |  |  |  |  |  |  | 44,626 | 4,103,304 |
| 61 | 61 |  |  |  |  |  |  |  | 45,965 | 4,441,890 |
| 62 | 62 |  |  |  |  |  |  |  | 47,344 | 4,806,311 |
| 63 | 63 |  |  |  |  |  |  |  | 48,764 | 5,198,499 |
| 64 | 64 |  |  |  |  |  |  |  | 50,227 | 5,620,525 |
| 65 | 65 |  |  |  |  |  |  |  | 51,734 | 6,074,617 |
| 66 | 66 |  |  |  |  |  |  |  | 53,286 | 6,563,170 |
| 67 R | 67 R | R 156,565 | 33,301 | 13,859 |  |  |  | $(109,405)$ |  | 6,924,489 |
| 68 | 68 | 161,262 | 33,967 | 14,137 |  |  |  | $(113,158)$ |  | 7,309,135 |
| 69 | 69 | 166,100 | 34,646 | 14,419 |  |  |  | $(117,034)$ |  | 7,718,794 |
| 70 | 70 | 171,083 | 35,339 | 14,708 |  |  |  | $(121,036)$ |  | 8,129,977 |
| 71 | 71 | 176,215 | 36,046 | 15,002 |  |  |  | $(125,167)$ |  | 8,564,357 |
| 72 | 72 | 181,501 | 36,767 | 15,302 |  |  |  | $(129,432)$ |  | 9,023,213 |
| 73 | 73 | 186,946 | 37,502 | 15,608 |  |  |  | $(133,836)$ |  | 9,507,882 |
| 74 | 74 | 192,554 | 38,252 | 15,920 |  |  |  | $(138,382)$ |  | 10,019,764 |
| 75 | 75 | 198,331 | 39,017 | 16,238 |  |  |  | $(143,075)$ |  | 10,560,324 |
| 76 | 76 | 204,281 | 39,798 | 16,563 |  |  |  | $(147,920)$ |  | 11,131,090 |
| 77 | 77 | 210,409 | 40,594 | 16,895 |  |  |  | $(152,921)$ |  | 11,733,860 |
| 78 | 78 | 216,721 | 41,406 | 17,232 |  |  |  | $(158,083)$ |  | 12,370,137 |
| 79 | 79 | 223,223 | 42,234 | 17,577 |  |  |  | $(163,412)$ |  | 13,041,910 |
| 80 | 80 | 229,920 | 43,078 | 17,929 |  |  |  | $(168,913)$ |  | 13,751,066 |
| 81 | 81 | 236,818 | 43,940 | 18,287 |  |  |  | $(174,591)$ |  | 14,499,584 |
| 82 | 82 | 243,923 | 44,819 | 18,653 |  |  |  | $(180,451)$ |  | 15,289,529 |
| 83 | 83 | 251,241 | 45,715 | 19,026 |  |  |  | $(186,500)$ |  | 16,123,062 |
| 84 | 84 | 258,778 | 46,629 | 19,406 |  |  |  | $(192,742)$ |  | 17,002,444 |
| 85 L | 85 | 266,541 | 47,562 | 19,795 |  |  | 364,000 | 164,816 |  | 18,306,470 |
|  | 86 | 274,537 |  | 48,513 |  |  |  | $(226,024)$ |  | 19,289,691 |
|  | 87 | 282,773 |  | 49,484 |  |  |  | $(233,289)$ |  | 20,326,834 |
|  | 88 | 291,256 |  | 50,473 |  |  |  | $(240,783)$ |  | 21,420,796 |
|  | 89 | 299,994 |  | 51,483 |  |  |  | $(248,511)$ |  | 22,574,637 |
|  | 90 L | - 308,994 |  | 52,512 |  |  |  | $(256,482)$ |  | 23,792,435 |

*R=Retirement age, L=Life expectancy.** Pensions \& $85 \%$ of S.S. reduced $18.00 \%$ for income taxes. ${ }^{* * *}$ Includes life insurance and education costs. Note: This report is based upon assumed inflation rates of $3.00 \%$ and $3.00 \%$ (before and after retirement). Actual future inflation rates are unknown.

## Taxable Savings \& Investment Accounts

| $\begin{aligned} & \text { Ages } \\ & 1 \& 2 \end{aligned}$ |  | Account Additions | Annual Growth | Income Tax On Account* | From Tax-Advantaged Assets |  | Paid out or received for cash flow | $\begin{gathered} \hline \text { Account } \\ \text { Balance** } \\ \$ 924,000 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Distributions |  |  | Income Tax |  |  |
| 48 | 48 |  | 12,000 | 74,400 | $(14,880)$ |  |  |  | 995,520 |
| 49 | 49 | 12,360 | 80,136 | $(16,027)$ |  |  |  | 1,071,989 |
| 50 | 50 | 12,731 | 86,268 | $(17,254)$ |  |  |  | 1,153,734 |
| 51 | 51 | 13,113 | 92,823 | $(18,565)$ |  |  |  | 1,241,104 |
| 52 | 52 | 13,506 | 99,429 | $(19,886)$ |  |  | $(10,000)$ | 1,324,152 |
| 53 | 53 | 13,911 | 106,489 | $(21,298)$ |  |  |  | 1,423,253 |
| 54 | 54 | 14,329 | 114,433 | $(22,887)$ |  |  |  | 1,529,128 |
| 55 | 55 | 14,758 | 122,921 | $(24,584)$ |  |  |  | 1,642,223 |
| 56 | 56 | 15,201 | 131,986 | $(26,397)$ |  |  |  | 1,763,013 |
| 57 | 57 | 15,657 | 141,667 | $(28,333)$ |  |  |  | 1,892,004 |
| 58 | 58 | 16,127 | 152,005 | $(30,401)$ |  |  |  | 2,029,735 |
| 59 | 59 | 16,611 | 163,043 | $(32,609)$ |  |  |  | 2,176,780 |
| 60 | 60 | 17,109 | 174,827 | $(34,965)$ |  |  |  | 2,333,750 |
| 61 | 61 | 17,622 | 187,405 | $(37,481)$ |  |  |  | 2,501,296 |
| 62 | 62 | 18,151 | 200,830 | $(40,166)$ |  |  |  | 2,680,110 |
| 63 | 63 | 18,696 | 215,157 | $(43,031)$ |  |  |  | 2,870,931 |
| 64 | 64 | 19,256 | 230,445 | $(46,089)$ |  |  |  | 3,074,543 |
| 65 | 65 | 19,834 | 246,757 | $(49,351)$ |  |  |  | 3,291,782 |
| 66 | 66 | 20,429 | 264,160 | $(52,832)$ |  |  |  | 3,523,538 |
| 67 R | 67 R |  | 277,507 | $(49,951)$ |  |  | $(109,405)$ | 3,641,689 |
| 68 | 68 |  | 286,809 | $(51,626)$ |  |  | $(113,158)$ | 3,763,713 |
| 69 | 69 |  | 296,416 | $(53,355)$ |  |  | $(117,034)$ | 3,889,739 |
| 70 | 70 |  | 310,635 | $(55,914)$ | 131,017 | $(23,583)$ | $(121,036)$ | 4,130,858 |
| 71 | 71 |  | 330,092 | $(59,417)$ | 141,162 | $(25,409)$ | $(125,167)$ | 4,392,119 |
| 72 | 72 |  | 351,181 | $(63,212)$ | 152,080 | $(27,374)$ | $(129,432)$ | 4,675,361 |
| 73 | 73 |  | 374,049 | $(67,329)$ | 163,828 | $(29,489)$ | $(133,836)$ | 4,982,584 |
| 74 | 74 |  | 398,860 | $(71,795)$ | 176,466 | $(31,764)$ | $(138,382)$ | 5,315,969 |
| 75 | 75 |  | 425,789 | $(76,642)$ | 190,059 | $(34,211)$ | $(143,075)$ | 5,677,889 |
| 76 | 76 |  | 455,028 | $(81,905)$ | 204,677 | $(36,842)$ | $(147,920)$ | 6,070,926 |
| 77 | 77 |  | 486,752 | $(87,615)$ | 219,352 | $(39,483)$ | $(152,921)$ | 6,497,010 |
| 78 | 78 |  | 521,184 | $(93,813)$ | 236,165 | $(42,510)$ | $(158,083)$ | 6,959,952 |
| 79 | 79 |  | 558,556 | $(100,540)$ | 252,926 | $(45,527)$ | $(163,412)$ | 7,461,955 |
| 80 | 80 |  | 599,082 | $(107,835)$ | 270,780 | $(48,740)$ | $(168,913)$ | 8,006,328 |
| 81 | 81 |  | 643,027 | $(115,745)$ | 289,780 | $(52,160)$ | $(174,591)$ | 8,596,639 |
| 82 | 82 |  | 690,680 | $(124,322)$ | 309,980 | $(55,796)$ | $(180,451)$ | 9,236,729 |
| 83 | 83 |  | 742,349 | $(133,623)$ | 331,431 | $(59,658)$ | $(186,500)$ | 9,930,728 |
| 84 | 84 |  | 798,366 | $(143,706)$ | 354,182 | $(63,753)$ | $(192,742)$ | 10,683,074 |
| 85 L | 85 |  | 873,562 | $(157,241)$ | 375,720 | $(67,630)$ | 164,816 | 11,872,301 |
|  | 86 |  | 953,804 | $(171,685)$ | 398,210 | $(71,678)$ | $(226,024)$ | 12,754,928 |
|  | 87 |  | 1,024,892 | $(184,481)$ | 421,627 | $(75,893)$ | $(233,289)$ | 13,707,783 |
|  | 88 |  | 1,101,618 | $(198,291)$ | 445,929 | $(80,267)$ | $(240,783)$ | 14,735,988 |
|  | 89 |  | 1,184,389 | $(213,190)$ | 471,049 | $(84,789)$ | $(248,511)$ | 15,844,936 |
|  | 90 L |  | 1,273,491 | $(229,228)$ | 492,536 | $(88,656)$ | $(256,482)$ | 17,036,596 |

[^4]
# Tax-Deferred Retirement Accounts 

|  | Individual 1 Accounts |  |  |  |  | Individual 2 Accounts |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Account Additions | Annual Growth | Withdrawals | $\begin{gathered} \hline \text { Balance* } \\ \$ 391,000 \end{gathered}$ | Age | Account Additions | Annual Growth | Withdrawals | $\begin{aligned} & \hline \text { Balance* } \\ & \$ 31,000 \end{aligned}$ |
| 48 | 19,300 | 32,052 |  | 442,352 | 48 |  | 2,480 |  | 33,480 |
| 49 | 19,879 | 36,183 |  | 498,414 | 49 |  | 2,678 |  | 36,158 |
| 50 | 20,475 | 40,692 |  | 559,581 | 50 |  | 2,893 |  | 39,050 |
| 51 | 21,090 | 45,610 |  | 626,280 | 51 |  | 3,124 |  | 42,174 |
| 52 | 21,722 | 50,971 |  | 698,973 | 52 |  | 3,374 |  | 45,547 |
| 53 | 22,374 | 56,813 |  | 778,159 | 53 |  | 3,644 |  | 49,190 |
| 54 | 23,045 | 63,175 |  | 864,378 | 54 |  | 3,935 |  | 53,125 |
| 55 | 23,737 | 70,100 |  | 958,214 | 55 |  | 4,250 |  | 57,375 |
| 56 | 24,449 | 77,635 |  | 1,060,297 | 56 |  | 4,590 |  | 61,965 |
| 57 | 25,182 | 85,831 |  | 1,171,310 | 57 |  | 4,957 |  | 66,922 |
| 58 | 25,938 | 94,742 |  | 1,291,989 | 58 |  | 5,354 |  | 72,275 |
| 59 | 26,716 | 104,428 |  | 1,423,132 | 59 |  | 5,782 |  | 78,057 |
| 60 | 27,517 | 114,951 |  | 1,565,600 | 60 |  | 6,245 |  | 84,301 |
| 61 | 28,343 | 126,382 |  | 1,720,324 | 61 |  | 6,744 |  | 91,045 |
| 62 | 29,193 | 138,794 |  | 1,888,310 | 62 |  | 7,284 |  | 98,328 |
| 63 | 30,069 | 152,268 |  | 2,070,646 | 63 |  | 7,866 |  | 106,194 |
| 64 | 30,971 | 166,891 |  | 2,268,507 | 64 |  | 8,496 |  | 114,689 |
| 65 | 31,900 | 182,757 |  | 2,483,163 | 65 |  | 9,175 |  | 123,864 |
| 66 | 32,857 | 199,967 |  | 2,715,987 | 66 |  | 9,909 |  | 133,773 |
| 67 R |  | 217,279 |  | 2,933,265 | 67 R |  | 10,702 |  | 144,474 |
| 68 |  | 234,661 |  | 3,167,926 | 68 |  | 11,558 |  | 156,031 |
| 69 |  | 253,434 |  | 3,421,360 | 69 |  | 12,482 |  | 168,513 |
| 70 |  | 268,714 | $(124,867)$ | 3,565,206 | 70 |  | 13,235 | $(6,150)$ | 175,597 |
| 71 |  | 279,835 | $(134,536)$ | 3,710,504 | 71 |  | 13,783 | $(6,626)$ | 182,753 |
| 72 |  | 291,043 | $(144,942)$ | 3,856,605 | 72 |  | 14,335 | $(7,139)$ | 189,948 |
| 73 |  | 302,283 | $(156,138)$ | 4,002,750 | 73 |  | 14,888 | $(7,690)$ | 197,146 |
| 74 |  | 313,493 | $(168,183)$ | 4,148,059 | 74 |  | 15,440 | $(8,283)$ | 204,302 |
| 75 |  | 324,599 | $(181,138)$ | 4,291,520 | 75 |  | 15,987 | $(8,921)$ | 211,367 |
| 76 |  | 335,519 | $(195,069)$ | 4,431,969 | 76 |  | 16,525 | $(9,608)$ | 218,284 |
| 77 |  | 346,195 | $(209,055)$ | 4,569,109 | 77 |  | 17,051 | $(10,296)$ | 225,038 |
| 78 |  | 356,526 | $(225,079)$ | 4,700,555 | 78 |  | 17,560 | $(11,086)$ | 231,511 |
| 79 |  | 366,402 | $(241,054)$ | 4,825,903 | 79 |  | 18,046 | $(11,872)$ | 237,684 |
| 80 |  | 375,749 | $(258,070)$ | 4,943,582 | 80 |  | 18,506 | $(12,710)$ | 243,479 |
| 81 |  | 384,439 | $(276,178)$ | 5,051,843 | 81 |  | 18,934 | $(13,602)$ | 248,811 |
| 82 |  | 392,330 | $(295,429)$ | 5,148,743 | 82 |  | 19,323 | $(14,550)$ | 253,583 |
| 83 |  | 399,264 | $(315,874)$ | 5,232,133 | 83 |  | 19,664 | $(15,557)$ | 257,690 |
| 84 |  | 405,068 | $(337,557)$ | 5,299,644 | 84 |  | 19,950 | $(16,625)$ | 261,015 |
| 85 L |  | 409,648 | $(358,084)$ | 5,351,208 | 85 |  | 20,176 | $(17,636)$ | 263,554 |
|  |  |  | $(5,351,208)$ |  | 86 | 5,351,208 | 433,253 | $(398,210)$ | 5,649,804 |
|  |  |  |  |  | 87 |  | 435,119 | $(421,627)$ | 5,663,296 |
|  |  |  |  |  | 88 |  | 435,227 | $(445,929)$ | 5,652,593 |
|  |  |  |  |  | 89 |  | 433,365 | $(471,049)$ | 5,614,909 |
|  |  |  |  |  | 90 L |  | 429,491 | $\begin{array}{r} (492,536) \\ (5,551,864) \end{array}$ | 5,551,864 |

[^5]
## Tax-Free Accounts



[^6]
## Insurance Summary

| Company Name |  |  |  |
| :--- | ---: | ---: | ---: |
| Insured | Indv 1 | Indv 1 | Indv 2 |
| Owner | Indv 1 | Indv 1 | Indv 2 |
| Beneficiary | Indv 2 | Indv 2 | Indv 1 |
| Type | Whole | Term | Term |
| Death Benefit | $\$ 364,000$ | $\$ 1,000,000$ | $\$ 30,000$ |
| Annual Premium | 1,534 | 1,390 | 52 |
| Total Premiums Paid |  |  |  |
| Current Cash Values | 15,500 |  |  |

## Insurance Included in Estate:

## John predeceases Mary

|  | John |  |
| :--- | ---: | ---: |
| Policy 1- | $\$ 364,000$ | $\underline{\text { Mary }}$ |
| Policy 2- | $1,000,000$ | $\$ 0$ |
| Policy 3- | 0 | 0 |
|  | $\$ 1,364,000$ | 30,000 |

Mary predeceases John

|  | Mary | John |
| :---: | :---: | :---: |
| Policy 1 - | \$0 | \$364,000 |
| Policy 2 - | 0 | 1,000,000 |
| Policy 3- | 30,000 | 0 |
|  | \$30,000 | \$1,364,000 |

## Survivor Needs Analysis

In the event of an untimely death, survivors may be left without the household income needed to sustain their existing lifestyle. Life insurance coverage is recommended in an amount that will ensure sufficient ongoing income, as well as cover immediate needs, such as final expenses.

Determining proper levels of life insurance involves a comparison of current and future household expense levels with expected surviving spouse's earnings plus survivor benefits. Other resources are also taken into account such as: liquid assets, investments, pension, and retirement accounts.

Insurance needs estimates are the calculated lump sum amounts which would provide a source of future cash flow to supplement the anticipated household income. The insurance levels suggested are just general guides and may not include all factors affecting your own situation.

Spending needs for this report are based upon $\$ 89,287$ per year, inflated at $3 \%$ each year until retirement and $\$ 89,287$ per year, inflated at $3 \%$ each year during retirement.

## Life Insurance Basic Needs Estimate on John:

| Present Value: | Anticipated Spending Needs Education Expenses Other Expenses | $\begin{array}{r} \$ 2,637,310 \\ 89,997 \\ 30,549 \\ \hline \end{array}$ | \$2,757,856 |
| :---: | :---: | :---: | :---: |
|  | Mary's Employment | (\$0) |  |
|  | Social Security Benefits | $(576,673)$ |  |
|  | Pension Benefits | (0) |  |
|  | Other Incomes | (0) | $(\$ 576,673)$ |
| Net Estimated S | rvivor Need Shortage |  | \$2,181,183 |
| Currently Exist | Liabilities |  | 0 |
| Assets Available | to Offset Shortage |  | $(1,390,000)$ |
| Current Life Ins | ance Coverage |  | $(1,364,000)$ |
| Suggested Add | ional Life Insurance Covera |  | \$0 |

Note: Estimated insurance requirements can vary over time due to changes in asset levels, special expenses, education expenses, estate preservation, and spouse's retirement needs. Additional insurance, held outside of an insurance trust, may have estate tax consequences. It may be prudent to purchase an amount of insurance appropriate to prepare for potential higher coverage needs. Consult with a financial advisor or insurance agent about factors that may suggest additional insurance coverage.

## Survivor Needs Analysis

In the event of an untimely death, survivors may be left without the household income needed to sustain their existing lifestyle. Life insurance coverage is recommended in an amount that will ensure sufficient ongoing income, as well as cover immediate needs, such as final expenses.

Determining proper levels of life insurance involves a comparison of current and future household expense levels with expected surviving spouse's earnings plus survivor benefits. Other resources are also taken into account such as: liquid assets, investments, pension, and retirement accounts.

Insurance needs estimates are the calculated lump sum amounts which would provide a source of future cash flow to supplement the anticipated household income. The insurance levels suggested are just general guides and may not include all factors affecting your own situation.

Spending needs for this report are based upon $\$ 89,287$ per year, inflated at $3 \%$ each year until retirement and $\$ 89,287$ per year, inflated at $3 \%$ each year during retirement.

## Life Insurance Basic Needs Estimate on Mary:

| Present Value: | Anticipated Spending Needs Education Expenses Other Expenses | $\begin{array}{r} \$ 2,430,374 \\ 89,997 \\ 30,549 \end{array}$ | \$2,550,920 |
| :---: | :---: | :---: | :---: |
|  | John's Employment | (\$1,799,739) |  |
|  | Social Security Benefits | $(195,331)$ |  |
|  | Pension Benefits | (0) |  |
|  | Other Incomes | (0) | (\$1,995,071) |
| Net Estimated S | rvivor Need Shortage |  | \$555,849 |
| Currently Exist | Liabilities |  | 0 |
| Assets Availabl | to Offset Shortage |  | $(1,390,000)$ |
| Current Life Ins | ance Coverage |  | $(30,000)$ |
| Suggested Add | onal Life Insurance Covera |  | \$0 |

Note: Estimated insurance requirements can vary over time due to changes in asset levels, special expenses, education expenses, estate preservation, and spouse's retirement needs. Additional insurance, held outside of an insurance trust, may have estate tax consequences. It may be prudent to purchase an amount of insurance appropriate to prepare for potential higher coverage needs. Consult with a financial advisor or insurance agent about factors that may suggest additional insurance coverage.

Survivor Needs Calculation for Mary, To Estimate Life Insurance Required on John

| NPV's* | (\$2,637,310) | $(\$ 89,997)$ | (\$30,549) | \$0 | \$576,673 | \$0 | (\$2,181,183) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | After Tax Spending Need | Education Costs | Other Inc/Exp** | After Tax Emp. Income | After Tax SS Benefits | After Tax Pension Inc. | Estimated Inc. Shortage |
| 48 | $(89,287)$ |  | $(22,322)$ |  | 39,621 |  | $(71,988)$ |
| 49 | $(91,966)$ |  |  |  | 40,413 |  | $(51,552)$ |
| 50 | $(94,725)$ |  |  |  | 41,222 |  | $(53,503)$ |
| 51 | $(97,566)$ |  |  |  | 42,046 |  | $(55,520)$ |
| 52 | $(100,493)$ |  | $(10,000)$ |  | 42,887 |  | $(67,606)$ |
| 53 | $(103,508)$ |  |  |  | 43,745 |  | $(59,763)$ |
| 54 | $(106,613)$ |  |  |  | 44,620 |  | $(61,994)$ |
| 55 | $(109,812)$ |  |  |  | 45,512 |  | $(64,300)$ |
| 56 | $(113,106)$ |  |  |  | 46,422 |  | $(66,684)$ |
| 57 | $(116,499)$ |  |  |  |  |  | $(116,499)$ |
| 58 | $(119,994)$ |  |  |  |  |  | $(119,994)$ |
| 59 | $(123,594)$ |  |  |  |  |  | $(123,594)$ |
| 60 | $(127,302)$ | $(79,723)$ |  |  | 7,551 |  | $(199,474)$ |
| 61 | $(131,121)$ | $(96,586)$ |  |  | 7,702 |  | $(220,005)$ |
| 62 | $(135,055)$ |  |  |  | 7,856 |  | $(127,199)$ |
| 63 | $(139,106)$ |  |  |  | 8,013 |  | $(131,094)$ |
| 64 | $(143,279)$ |  |  |  | 8,173 |  | $(135,106)$ |
| 65 | $(147,578)$ |  |  |  | 8,336 |  | $(139,241)$ |
| 66 | $(152,005)$ |  |  |  | 8,503 |  | $(143,502)$ |
| 67 | $(156,565)$ |  |  |  | 33,301 |  | $(123,264)$ |
| 68 | $(161,262)$ |  |  |  | 33,967 |  | $(127,295)$ |
| 69 | $(166,100)$ |  |  |  | 34,646 |  | $(131,454)$ |
| 70 | $(171,083)$ |  |  |  | 35,339 |  | $(135,744)$ |
| 71 | $(176,216)$ |  |  |  | 36,046 |  | $(140,170)$ |
| 72 | $(181,502)$ |  |  |  | 36,767 |  | $(144,735)$ |
| 73 | $(186,947)$ |  |  |  | 37,502 |  | $(149,445)$ |
| 74 | $(192,556)$ |  |  |  | 38,252 |  | $(154,303)$ |
| 75 | $(198,332)$ |  |  |  | 39,017 |  | $(159,315)$ |
| 76 | $(204,282)$ |  |  |  | 39,798 |  | $(164,484)$ |
| 77 | $(210,411)$ |  |  |  | 40,594 |  | $(169,817)$ |
| 78 | $(216,723)$ |  |  |  | 41,406 |  | $(175,317)$ |
| 79 | $(223,225)$ |  |  |  | 42,234 |  | $(180,991)$ |
| 80 | $(229,921)$ |  |  |  | 43,078 |  | $(186,843)$ |
| 81 | $(236,819)$ |  |  |  | 43,940 |  | $(192,879)$ |
| 82 | $(243,924)$ |  |  |  | 44,819 |  | $(199,105)$ |
| 83 | $(251,241)$ |  |  |  | 45,715 |  | $(205,526)$ |
| 84 | $(258,779)$ |  |  |  | 46,629 |  | $(212,149)$ |
| 85 | $(266,542)$ |  |  |  | 47,562 |  | $(218,980)$ |
| 86 | $(274,538)$ |  |  |  | 48,513 |  | $(226,025)$ |
| 87 | $(282,774)$ |  |  |  | 49,484 |  | $(233,291)$ |
| 88 | $(291,258)$ |  |  |  | 50,473 |  | $(240,784)$ |
| 89 | $(299,995)$ |  |  |  | 51,483 |  | $(248,513)$ |
| 90 | $(308,995)$ |  |  |  | 52,512 |  | $(256,483)$ |

[^7]Survivor Needs Calculation for John, To Estimate Life Insurance Required on Mary

| NPV's* | (\$2,430,374) | $(\$ 89,997)$ | $(\$ 30,549)$ | \$1,799,739 | \$195,331 | \$0 | (\$555,849) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | After Tax Spending Need | Education Costs | Other Inc/Exp** | After Tax Emp. Income | After Tax SS Benefits | After Tax Pension Inc. | Estimated Inc. Shortage |
| 48 | $(89,287)$ |  | $(22,322)$ | 112,000 |  |  | 391 |
| 49 | $(91,966)$ |  |  | 115,360 |  |  | 23,394 |
| 50 | $(94,725)$ |  |  | 118,821 |  |  | 24,096 |
| 51 | $(97,566)$ |  |  | 122,385 |  |  | 24,819 |
| 52 | $(100,493)$ |  | $(10,000)$ | 126,057 |  |  | 15,564 |
| 53 | $(103,508)$ |  |  | 129,839 |  |  | 26,331 |
| 54 | $(106,613)$ |  |  | 133,734 |  |  | 27,121 |
| 55 | $(109,812)$ |  |  | 137,746 |  |  | 27,934 |
| 56 | $(113,106)$ |  |  | 141,878 |  |  | 28,772 |
| 57 | $(116,499)$ |  |  | 146,135 |  |  | 29,635 |
| 58 | $(119,994)$ |  |  | 150,519 |  |  | 30,524 |
| 59 | $(123,594)$ |  |  | 155,034 |  |  | 31,440 |
| 60 | $(127,302)$ | $(79,723)$ |  | 159,685 |  |  | $(47,340)$ |
| 61 | $(131,121)$ | $(96,586)$ |  | 164,476 |  |  | $(63,231)$ |
| 62 | $(135,055)$ |  |  | 169,410 |  |  | 34,355 |
| 63 | $(139,106)$ |  |  | 174,492 |  |  | 35,386 |
| 64 | $(143,279)$ |  |  | 179,727 |  |  | 36,448 |
| 65 | $(147,578)$ |  |  | 185,119 |  |  | 37,541 |
| 66 | $(152,005)$ |  |  | 190,673 |  |  | 38,667 |
| 67 | $(156,565)$ |  |  |  | 33,301 |  | $(123,264)$ |
| 68 | $(161,262)$ |  |  |  | 33,967 |  | $(127,295)$ |
| 69 | $(166,100)$ |  |  |  | 34,646 |  | $(131,454)$ |
| 70 | $(171,083)$ |  |  |  | 35,339 |  | $(135,744)$ |
| 71 | $(176,216)$ |  |  |  | 36,046 |  | $(140,170)$ |
| 72 | $(181,502)$ |  |  |  | 36,767 |  | $(144,735)$ |
| 73 | $(186,947)$ |  |  |  | 37,502 |  | $(149,445)$ |
| 74 | $(192,556)$ |  |  |  | 38,252 |  | $(154,303)$ |
| 75 | $(198,332)$ |  |  |  | 39,017 |  | $(159,315)$ |
| 76 | $(204,282)$ |  |  |  | 39,798 |  | $(164,484)$ |
| 77 | $(210,411)$ |  |  |  | 40,594 |  | $(169,817)$ |
| 78 | $(216,723)$ |  |  |  | 41,406 |  | $(175,317)$ |
| 79 | $(223,225)$ |  |  |  | 42,234 |  | $(180,991)$ |
| 80 | $(229,921)$ |  |  |  | 43,078 |  | $(186,843)$ |
| 81 | $(236,819)$ |  |  |  | 43,940 |  | $(192,879)$ |
| 82 | $(243,924)$ |  |  |  | 44,819 |  | $(199,105)$ |
| 83 | $(251,241)$ |  |  |  | 45,715 |  | $(205,526)$ |
| 84 | $(258,779)$ |  |  |  | 46,629 |  | $(212,149)$ |
| 85 | $(266,542)$ |  |  |  | 47,562 |  | $(218,980)$ |

[^8]
## Disability Income Insurance

Disability due to illness or injury can devastate your financial holdings. At a time when you are unable to work for a living, household expenses may actually increase while your income decreases. You could be forced to deplete funds that might have been saved for your retirement years.

Generally, the goal of disability insurance is to replace the after-tax earnings of the insured wage earner and to allow you and your family to maintain your current lifestyle. Based on your current situation, you would need to replace the following income if you were disabled.

## John

Current Income: $\quad \$ 140,000 / \mathrm{Yr}$.
Replacement Ratio*: 65\%
Suggested Need: $\quad \$ 91,000 / Y r$.

* Current underwriting standards allow only a portion of Current Income to be replaced.

In addition, there are many factors which could affect the amount of the Suggested Need noted above. You should review these items before making your final decision. These factors include:

- Investment Income
- Investment Assets
- Retirement Assets
- Spouse's Salary
- Pension Income
- Other Income
- Changes in Living Expenses
- Inflation
- Funds required for retirement/education or other needs
- Length of Time Until Retirement
- Changes in Taxes
- Social Security Disability Benefits
- Employer Disability Benefits

Note: Consult a financial advisor and/or insurance agent about factors that may suggest additional insurance coverage.

## Long-Term Care

## Long-Term Care Defined

Long-term care is sustained medical or custodial care in a hospital, nursing facility, or equivalent care at home. This care meets the needs of people when, for some reason, they cannot care for themselves. Long-term care insurance provides coverage for costs when the need for care extends beyond a pre-determined period.
Benefits start when certain conditions and time frames specified by a long-term care insurance policy are met.
Generally the needs requirements to obtain insurance benefits fall into two categories:

| An inability to perform two or more | Activities of Daily Living (ADLs) are basic functions of <br> daily independent living and includes: <br> Activities of Daily Living (or ADLs). <br> Dressing Toileting  <br> Bathing Eating Transferring <br>  Continence  |  |
| :--- | :--- | :---: |
| Impaired Cognitive Ability | Loss of mental function can result from stroke, dementia or <br> Alzheimer's Disease. Alzheimer's Disease is a disorder that <br> progressively affects one's ability to carry out daily activities. |  |

## The Cost of Waiting

- $40 \%$ of all long-term care recipients are under the age of 65.
- Over $45 \%$ of seniors who reach age 65 will spend some time in a nursing home.
- Over $70 \%$ of seniors who reach age 65 will need some form of home health care in their lifetime.
- One out of every four families provides care to an elderly relative or loved one.
- $25 \%$ will stay in a Nursing Facility for more than one full year.
- The average nursing home stay is 2.5 years and the average Alzheimer's stay is 7 years.

Without benefits from long-term care insurance or a comparable program, the cost of providing these services could devastate your lifetime savings, or a relative's life savings. On average, one year in a nursing home costs in the area of $\$ 57,000$ and can easily exceed $\$ 100,000$.

Depending on the care required, most of these expenses are paid for by the patient or their family. Medicare may contribute toward the first 100 days expenses in a skilled care facility. There are no Medicaid benefits available for intermediate term or custodial care, unless the state finds the patient to be impoverished under local guidelines. Even then, care options would be restricted to care facilities that accept the very limited benefit payments Medicaid offers.


## Medicaid and Medicare Facts

- Medicaid is a welfare program designed as an emergency safety net to pay health care costs of the poor.
- Medicare is part of Social Security, and helps pay for the general health care needs of retired persons.
- Medicare typically only pays for doctors, hospitals, and short recuperative stays in nursing facilities.
- Private health insurance is designed for medical (doctors, hospitals, etc) not long-term care expenses. - Most people end up relying on their own or relatives resources to pay for long-term care expenses.


## Long-Term Care Need Analysis

Long-term care (LTC) requires long-term analysis. LTC insurance is available to cover these expenses, protect your assets, your independence, and control the quality of the care you receive. You are able to choose the specified daily benefit level, as well as the types of medical and care services covered.

When is the best time to purchase LTC insurance? Generally, the premiums stay level once the policy is purchased, much like level term insurance. In practice, the earlier you buy a policy, the lower the premium. Since the odds of becoming disabled increase with age, purchasing coverage before the age of 55 is good planning. Consider the premium cost of several coverage levels to determine which is right for your budget.

## Needs Estimate

These estimated long-term care cost examples are based upon your financial information. Consider the numbers here to be a starting point for analysis and discussion of your long-term care insurance needs.

|  | John | Mary |
| :--- | :---: | :---: |
| Estimated daily care cost | $\$ 200$ | $\$ 200$ |
| Existing LTC daily coverage | $\$ 250$ | $\$ 250$ |
| Net estimated annual care costs | $\$ 0$ | $\$ 0$ |
| Estimated years of care | 5 | 5 |
| Assumed inflation rate | $5 \%$ | $5 \%$ |

Current financial assets exposed to potential long-term care expense risk : $\quad \mathbf{\$ 1 , 3 9 0 , 0 0 0}$

Depending on your age, a delay in arranging a Long-term care policy can mean substantially higher premiums. This graph illustrates the cost of waiting to purchase a Long-term care policy.

A Long-term care policy can stabilize and moderate the potentially damaging costs of nursing home care. This graph displays potential cost differential and value of having Long-term insurance in place.

## Cumulative Cost of Waiting to Purchase



Economic Impact of Long-Term Care


- Total Cost Without Insurance
- Total Cost With Insurance


## Long-Term Care Unprotected Need

This future long-term care needs chart displays the annual future amount of long-term care needed vs. your assets available. Total Long-Term Care Need is based upon average care requirements. Assets to Liquidate are your non-qualified working assets. Your Unprotected Need is estimated to be $\$ 0$ based upon these estimates:


## Alternative Options to Long-Term Care Insurance

## Self-Insurance

This alternative to purchasing LTC insurance is using your existing investments to pay for long-term care if needed. This would be appropriate if sufficient assets are available and the potential loss of those assets to heirs is acceptable. Of course this means that you are willing to liquidate your assets, and if you don't have sufficient funds, you transfer the financial burden to your loved ones. While this alternative may be more flexible, the LTC insurance would be more beneficial if the coverage is eventually needed.

## Qualify for Medicaid

Medicaid was enacted to provide health care services for the impoverished. Recent legislation has made it extremely difficult for a person of modest means to qualify for Medicaid benefits by gifting or otherwise disposing of personal assets for less than fair market value.

## Summary

Be aware that the potential loss of financial assets to pay for long-term care costs is due to increasing life expectancies and advances in medical treatment for the elderly. This presents a risk to your lifetime savings and financial future. LTC insurance is available at varying levels of coverage and corresponding premiums to meet these risks. LTC insurance can allow you to maintain your desired level of independence and preserve personal assets. However, premium costs will be a significant factor in your decision. Consider discussing your LTC insurance needs and options with an insurance specialist who can explain specific policy details. Fully understanding available options can help you find the best choice for you and your family's future.

## Estate Preservation

While a very complex topic, estate preservation is a critical component of any well developed financial strategy. To be effective, it needs to be carefully coordinated with the other areas of your financial life such as Insurance, Retirement, Investments, etc. The primary goal of this section is to highlight estate preservation concepts, and help illustrate potential benefits of implementing basic estate preservation techniques available today.

## Estate Tax

Minimizing estate tax exposure is generally a primary goal of most clients. History is full of examples of estates decimated by unnecessary estate taxes and expenses. We will provide you with an analysis of your current situation and illustrate suggestions to minimize your current and future estate tax exposure. Some of the basic techniques we will consider are the use of:

Unlimited Marital Deduction<br>Maximizing use of Applicable Exclusion Amount<br>Unlimited Charitable Deductions<br>Annual Gift Exclusion<br>Revocable Living Trusts<br>Irrevocable Life Insurance Trusts

## Other Financial Goals

Other financial goals to consider:

> Estate liquidity
> Managing probate, administrative and other expenses
> Minimizing Income Tax

## Non-Financial Goals

The non-financial aspects of estate preservation are just as important as the various financial goals described above. They will often be of a very personal nature and should be customized to fit into your overall strategy. Generally, this can be accomplished by discussing these goals noted above. We will be able to point out only general concepts in this report. However, some of the non-financial goals for you to consider are:

Caring for dependents or minor children
Distribution of property to heirs
Maintaining control over assets
Lifetime health issues such as incapacity and health care powers of attorney

## Summary

Protecting your estate requires careful preparation. The diverse skills required to coordinate a program might require a team approach consisting of your financial planner, attorney, insurance specialist, accountant, and investment advisor. The illustrations provided here are intended as tools to help you and your team make informed decisions. In addition, your situation will most likely change with time. Therefore, you will need to monitor your estate preservation situation periodically and make amendments as required.

This report is a hypothetical illustration and does not constitute legal or tax advice. You should always obtain legal counsel and professional tax advice before taking action affecting your estate.

## Your Current Situation

The recommendations in this report are based on information that you provided. Before reviewing the estate illustrations or implementing any of the recommendations that follow, please verify the following data and assumptions.

## Basic Data

|  | John | Mary |
| :--- | ---: | ---: |
| Age | 48 | 48 |
| Age at Death for this Illustration | 48 | 48 |

## General Assumptions

Administrative \& probate expenses as a percentage of estate assets: $0.00 \%$
Estimated final expenses $\mathbf{\$ 7 , 5 0 0}$

## Existing Estate Preservation

| Will | Yes | Yes |
| :--- | ---: | ---: |
| Revocable Living Trust | Yes | Yes |
| Marital Trust Provisions | Yes | Yes |
| Credit Shelter Trust Provisions | No | No |
| QTIP Trust Provisions | Yes | Yes |
| Generation Skip Trust Provisions | No | No |
| Irrevocable Life Insurance Trust | No | No |
| Durable General Power of Attorney | Yes | Yes |
| Durable Health Care Power of Attorney | Yes | Yes |
| Living Will | No | No |
| Existing percentage of Estate in Living Trust | $80 \%$ | $80 \%$ |

## Previous Gifting Detail

Previous Taxable Gifts \$0
Previous Gift Taxes Paid \$0

## Current Estate Summary

John's gross estate consists of \$2,953,500 and Mary's consists of \$1,255,500.
Potential federal estate taxes currently range from $\$ 1,007,300$ to $\$ 1,007,300$.
Administrative, probate, and final expenses could total from $\$ 15,000$ to $\$ 15,000$.
Additional preparation could save up to $\$ 1,007,300$ in estate taxes and other costs.

## Estate Net Worth Statement

ASSETS

| Savings and Investments | John | Mary | Community | Total |
| :---: | :---: | :---: | :---: | :---: |
| Checking accounts |  |  | \$4,000 | \$4,000 |
| Money market accounts/funds |  |  | 10,000 | 10,000 |
| Stock mutual funds |  |  | 220,000 | 220,000 |
| Real estate |  |  | 580,000 | 580,000 |
| Common stocks | 110,000 |  |  | 110,000 |
|  | \$110,000 | \$0 | \$814,000 | \$924,000 |
| Retirement Accounts |  |  |  |  |
| Qualified Plans - John | \$254,000 |  |  | \$254,000 |
| Roth IRA Assets - John | 44,000 |  |  | 44,000 |
| IRA Assets - John |  |  | 137,000 | 137,000 |
| IRA Assets - Mary |  |  | 31,000 | 31,000 |
|  | \$298,000 | \$0 | \$168,000 | \$466,000 |
| Other Assets |  |  |  |  |
| Residence |  |  | \$1,400,000 | \$1,400,000 |
| Personal Property |  |  | 25,000 | 25,000 |
| Life Insurance Cash Values | 15,500 |  |  | 15,500 |
|  | \$15,500 | \$0 | \$1,425,000 | \$1,440,500 |
| TOTAL ASSETS | \$423,500 | \$0 | \$2,407,000 | \$2,830,500 |
| LIABILITIES |  |  |  |  |
| TOTAL LIABILITIES | \$0 | \$0 | \$0 | \$0 |
| NET WORTH | \$423,500 | \$0 | \$2,407,000 | \$2,830,500 |

## ADJUSTMENTS

Life insurance in estate
Life insurance cash values

| $\$ 1,364,000$ | $\$ 30,000$ |
| ---: | ---: |
| $(15,500)$ | 0 |
| $1,203,500$ | $1,203,500$ |
| $\mathbf{\$ 2 , 9 7 5 , 5 0 0}$ | $\mathbf{\$ 1 , 2 3 3 , 5 0 0}$ |

## Current Situation - Flowchart John Predeceases Mary

| John's <br> Estate <br> $\$ 2,953,500$ |
| :---: |
| At John's Death |

John has a Living Trust. Assets would be placed in a Marital Trust for Mary's primary financial needs.

Marital
Trust \$2,946,000

Proceeds from life insurance on John would transfer to beneficiaries.

## At Mary's Death

Mary's assets, the remaining assets held in the Marital Trust and Credit Shelter Trust would transfer to the specified beneficiaries.

Proceeds from life insurance on Mary would be subject to estate tax.

To Beneficiaries*
\$3,186,700

* After total costs and taxes of $\$ 1,022,300$


## Mary Predeceases John

| Mary's <br> Estate <br> $\mathbf{\$ 1 , 2 5 5 , 5 0 0}$ |
| :---: |

Mary has a Living Trust. Assets would be placed in a Marital Trust for John's primary financial needs.

Marital
Trust \$1,248,000

Proceeds from life insurance on Mary would transfer to beneficiaries.

## At John's Death

John's assets, the remaining assets held in the Marital Trust and Credit Shelter Trust would transfer to the specified beneficiaries.

Proceeds from life insurance on John would be subject to estate tax.


## Current Situation - Estimate

## John Predeceases Mary

## Estate

| John's <br> Death |
| ---: |
| $\$ 110,000$ |
| $1,225,500$ |
| 254,000 |
| $1,364,000$ |
| 0 |
| 0 |
| $\$ 2,953,500$ |

## Deductions and Expenses

Marital Transfer
Administrative, Probate and Final Expenses
Federal Taxable Estate

| $(\$ 2,946,000)$ |
| ---: |
| $(7,500)$ |
| $(\$ 2,953,500)$ |
| $\$ 0$ |


| Federal Estate Tax | $\$ 0$ |  |
| :--- | ---: | ---: |
| Applicable Credit Amount | 0 |  |
|  | Federal Estate Tax | $\$ 0$ |

(\$1,788,100)

| Federal Estate Tax | $\$ 0$ |
| :--- | ---: |
| Applicable Credit Amount | 0 |
| $\quad$ Federal Estate Tax | $\$ 0$ |


| Mary's <br> Death |
| :--- |
| $\$ 0$ |
| $1,225,500$ |
| 0 |
| 30,000 |
| 0 |
| $2,946,000$ |
| $\$ 4,201,500$ |

Separate property
$50 \%$ of jointly owned \& community property
Retirement Accounts
Life Insurance
Debt
Marital Transfer
-
-

| $\$ 0$ |
| ---: |
| $(7,500)$ |
| $(\$ 7,500)$ |
| $\$ 4,194,000$ |

## Federal Estate Tax

## Mary Predeceases John

## Estate

Separate property
$50 \%$ of jointly owned \& community property
Retirement Accounts

| Mary's <br> Death |  |
| :--- | :---: |
| $\$ 0$ |  |
| $1,225,500$ |  |
| 0 |  |
| 30,000 |  |
| 0 |  |
| 0 |  |
| $\$ 1,255,500$ |  |

John's
Death

Life Insurance

1,255,50

| John's <br> Death |
| ---: |
| $\$ 110,000$ |
| $1,225,500$ |
| 254,000 |
| $1,364,000$ |
| 0 |
| $1,248,000$ |
| $\$ 4,201,500$ |

## Deductions and Expenses

Marital Transfer
Administrative, Probate and Final Expenses
(\$1,248,000)

| $(7,500)$ |
| ---: |
| $(\$ 1,255,500)$ |
| $\$ 0$ |


| $\$ 0$ |
| ---: |
| $(7,500)$ |
| $(\$ 7,500)$ |
| $\$ 4,194,000$ |

## Federal Estate Tax

\(\begin{array}{lr}Federal Estate Tax \& \$ 0 <br>
Applicable Credit Amount \& 0 <br>

\quad Federal Estate Tax \&\)| $\$ 0$ |
| :---: |\end{array}

(\$1,788,100)

| 780,800 |
| ---: |
| $(\$ 1,007,300)$ |

## Your Alternate Estate Preservation Structure

## Summary of Alternative Estate Results

This report reviews and compares the cumulative impact of the suggested estate preservation alternatives upon your estate. The Suggested Alternative Flowchart diagram which follows this page illustrates how the improved estate structure reduces the amount of your estate exposed to estate taxes. In your specific case, you may be able to reduce your estate costs and taxes by up to $99 \%$. These savings directly translate into additional assets available for beneficiaries.

Currently, your combined total estate is estimated to be $\$ 4,209,000$. Using estimated estate settlement costs of $\$ 1,022,300$, you would pass approximately $\$ 3,186,700$ to your beneficiaries.
With proper implementation of suggested alternative estate structures, your current estimated estate settlement costs may be reduced to approximately $\$ 15,000$. This would allow you to save $\$ 1,007,300$ in taxes and expenses, transferring \$4,194,000 to your beneficiaries.

## Impact of Analysis upon Estate Costs



## Alternative Wills and Trusts

By implementing suggested alternative estate strategies, you may significantly increase the assets passing to your beneficiaries at death and reduce your estimated estate settlement costs.

## Your current estate documents:

- A Will for each spouse
- A Revocable Living Trust for each spouse
- Marital Trust provisions
- QTIP Trust provisions
- Durable General Powers of Attorney
- Durable Health Care Powers of Attorney
- Living Wills


## Suggested additional/alternative estate documents:

- A revised Will for each spouse if necessary
- Revised asset ownership to balance property if necessary
- Fund the Revocable Living Trusts if necessary
- Credit Shelter Trust provisions
- Irrevocable Life Insurance Trusts*
* Please note that Irrevocable Life Insurance Trusts may not be needed in all cases. Please consult your attorney.


## Alternative Situation - Flowchart

John Predeceases Mary


## Mary Predeceases John



## Alternative Situation - Estimate

John Predeceases Mary

## Estate

Separate property (assets balanced)
Retirement Accounts
Life Insurance
Debt
Marital Transfer

## Deductions and Expenses

Marital Transfer
Administrative, Probate and Final Expenses
Federal Taxable Estate

## Federal Estate Tax

Federal Estate Tax
Applicable Credit Amount
Federal Estate Tax

## Mary Predeceases John

## Estate

Separate property (assets balanced)
Retirement Accounts

| Mary's <br> Death |
| :---: |
| $\$ 1,280,500$ |
| 0 |
| 0 |
| 0 |
| 0 |
| 0 |
| $\$ 1,280,500$ |


| $\$ 0$ |
| ---: |
| $(7,500)$ |
| $(\$ 7,500)$ |
| $\$ 1,273,000$ |

## Federal Estate Tax

Federal Estate Tax
Applicable Credit Amount
Federal Estate Tax

| $(\$ 458,190)$ |
| ---: |
| 458,190 |
| $\$ 0$ |


| $\$ 0$ |
| ---: |
| $(7,500)$ |
| $(\$ 7,500)$ |
| $\$ 1,527,000$ |


| $(\$ 567,950)$ |
| ---: |
| 567,950 |
| $\$ 0$ |

Mary's Death
\$1,280,500
0
0
0
$\begin{array}{r}0 \\ \hline \$ 1,534,500\end{array}$

| 0 |
| ---: |
| $\$ 1,280,500$ |


| $\$ 0$ |
| ---: |
| $(7,500)$ |
| $(\$ 7,500)$ |
| $\$ 1,273,000$ |
|  |
| $(\$ 458,190)$ |
| 458,190 |
| $\$ 0$ |

Life Insurance 0

| John's <br> Death |
| :--- |
| $\$ 1,280,500$ |
| 254,000 |
| 0 |
| 0 |
| 0 |
| $\$ 1,534,500$ |

## Deductions and Expenses

Marital Transfer
Administrative, Probate and Final Expenses
Federal Taxable Estate
$\begin{array}{r} \\ (\$ 458,190) \\ 458,190 \\ \hline \$ 0 \\ \hline\end{array}$

| $\$ 0$ |
| ---: |
| $(7,500)$ |
| $(\$ 7,500)$ |
| $\$ 1,527,000$ |

\$0
$\begin{array}{r}(7,500) \\ \hline \$ 1,527,000 \\ \hline\end{array}$
(\$567,950)


## Estate Tax Estimate

## EGTRRA 2001

In June 2001, The Economic Growth and Tax Relief Reconciliation Act of 2001 was signed into law. One feature of the new law is to completely phase out estate taxes by 2010. This will be done by increasing estate tax exemptions and decreasing estate tax rates each year. In 2010, inherited property will no longer receive a step-up in basis as is done now, exposing those assets to potentially large capital gains when sold. In addition, Gift Tax rules have been changed. Congress must decide by 2011 if these changes will be permanent or revert back to previous law. We have shown your estate tax exposure in 2011 in terms of the previous law.

## An Estimate of Your Estate Tax Exposure Using Suggested Strategies

We have taken information provided about your current estate net worth to estimate your estate tax exposure under the new law over the next several years. We make some general assumptions regarding the growth of assets. Also, as previously suggested in this analysis, we assume that each individual has funded a credit shelter trust utilizing the applicable exclusion amounts available to them (currently $\$ 2,000,000$ per person in 2007). We also assume that any life insurance benefits are kept out of the taxable estate. The graph below shows your estimated estate tax exposure (red) and your estate remainder after taxes (green) at each year end. Keep in mind that the status of estate tax law is uncertain beyond year 2010.

Estimated Estate Growth vs. Federal Estate Tax


| Year <br> End | Retirement <br> Capital | Other Assets |  <br> Expenses | Adjustments * | Estate Tax <br> Base | Exclusion <br> Amounts | Estimated <br> Estate Tax |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2008 | $\$ 1,518,872$ | $\$ 1,425,000$ | $(\$ 15,000)$ | $\$ 0$ | $\$ 2,928,872$ | $\$ 4,000,000$ | $\$ 0$ |
| 2009 | $1,657,882$ | $1,467,750$ | $(15,000)$ | 0 | $3,110,632$ | $7,000,000$ | 0 |
| 2010 | $1,807,791$ | $1,511,783$ | $(15,000)$ | 0 | $3,304,574$ | 0 | 0 |
| 2011 | $1,969,418$ | $1,557,136$ | $(15,000)$ | 0 | $3,511,554$ | $2,000,000$ | $(685,199)$ |
| 2012 | $2,133,320$ | $1,603,850$ | $(15,000)$ | 0 | $3,722,170$ | $2,000,000$ | $(779,977)$ |
| 2013 | $2,320,421$ | $1,651,966$ | $(15,000)$ | 0 | $3,957,387$ | $2,000,000$ | $(885,824)$ |
| 2014 | $2,522,035$ | $1,701,525$ | $(15,000)$ | 0 | $4,208,560$ | $2,000,000$ | $(998,852)$ |
| 2015 | $2,739,248$ | $1,752,570$ | $(15,000)$ | 0 | $4,476,818$ | $2,000,000$ | $(1,119,568)$ |
| 2016 | $2,973,225$ | $1,805,147$ | $(15,000)$ | 0 | $4,763,372$ | $2,000,000$ | $(1,248,518)$ |
| 2017 | $3,225,222$ | $1,859,302$ | $(15,000)$ | 0 | $5,069,524$ | $2,000,000$ | $(1,386,286)$ |
| 2018 | $3,496,583$ | $1,915,081$ | $(15,000)$ | 0 | $5,396,664$ | $2,000,000$ | $(1,533,499)$ |

[^9]
## Education Funding Illustration

The Richards Family

Assuming an inflation rate of $6 \%$, the total projected cost of education will be $\$ 602,061$

If you can invest your education funds at 6\%* after taxes you may ...

- Make a single deposit now in the amount of ....
\$89,996
- Make level annual payments in the amount of ... \$9,591
- Make level monthly payments in the amount of ... \$799
* This hypothetical rate of return is for illustrative purposes and does not represent a particular investment.

| Student <br> Name | Starting Number <br> Year <br> of Years | Per Year in <br> Today's $\$$ | Total Cost at <br> 6\% Inf. | Current College <br> Funds Saved | 529 <br> Plan | One Time <br> Deposit | Annual <br> Deposits |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| John Jr | 2013 | 5 | $\$ 24,000$ | $\$ 170,799$ | $\$ 90,000$ | Yes | $\$ 29,998$ | $\$ 4,161$ |
| Joan | 2017 | 5 | 24,000 | 215,631 | 90,000 | Yes | 29,999 | 3,197 |
| Jean | 2017 | 5 | 24,000 | 215,631 | 90,000 | Yes | 29,999 | 3,197 |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

The following schedule demonstrates the option of making level annual payments until the last year of education expenses. Any current funds saved will be utilized as educational expenses are incurred.

Annual Breakdown of Educational Funding

| Year | Additions to fund | Paid to school from fund | Ending Balance at 6\%* |
| :---: | :---: | :---: | :---: |
| 2009 | \$9,591 |  | \$296,366 |
| 2010 | 9,591 |  | 324,314 |
| 2011 | 9,591 |  | 353,939 |
| 2012 | 9,591 |  | 385,342 |
| 2013 | 9,591 | 30,299 | 386,511 |
| 2014 | 9,591 | 32,117 | 385,824 |
| 2015 | 9,591 | 34,044 | 383,053 |
| 2016 | 9,591 | 36,087 | 377,950 |
| 2017 | 9,591 | 114,756 | 289,152 |
| 2018 | 9,591 | 81,094 | 230,707 |
| 2019 | 9,591 | 85,960 | 163,598 |
| 2020 | 9,591 | 91,118 | 86,995 |
| 2021 | 9,591 | 96,586 |  |

** Annual deposit total shown may be higher than the level payment amount, but decreases as each student graduates.

## Investment Planning

## ASSET ALLOCATION

Asset allocation is an important underlying principal in portfolio design because it helps to manage investment risk while attempting to maximize returns. There are basically three forms of investment risk. Credit Risk is the possibility of loss due to the underlying investment losing all of its value, for example, in a bankrupt company. Market Risk is the inherent volatility in the price and performance of investments in stocks, bonds, commodities, real estate or any other markets. Purchasing Power or Inflation Risk is the risk of an investment's value eroding over time due to an appreciation in the cost of living. Asset allocation is an attempt to utilize historical characteristics of markets to construct a portfolio that reflects the return potential of these markets. It also attempts to diversify some of the volatility risk across several asset classes, thus reducing the risk of any one big loss of principal, or any opportunity missed by not having a position in the appropriate markets.

The identification of an efficient set of portfolios is the first step in portfolio management. This set is represented by the Efficient Frontier, a graph of the lowest possible risk that can be attained for a portfolio's given expected return. The fundamental idea behind the Efficient Frontier is that, for any risk level, investors will be interested only in that portfolio with the highest expected return. This principal was set forth in a mathematical model constructed by Harry Markowitz in 1952, for which he earned a 1990 Nobel Prize for economics. Later studies, presented by Brinson, Hood, Singer Beebower, sought to determine why large pools of capital earn different rates of return. This research led to the conclusion that while only $6 \%$ of the returns in a portfolio were due to individual security selection and $2 \%$ to market timing, $92 \%$ of the returns were due to proper asset allocation.

## THE EFFICIENT FRONTIER



## Investment Planning

MARKET RISK AND DIVERSIFICATION

Investment markets are unpredictable, particularly in the short-term. Since volatility can be managed and reduced, but never eliminated, investors should be concerned with how their portfolio is constructed to diminish market risk.

Diversification is an aid in reducing market risk. Diversification may be approached several ways. The first approach is diversification across asset classes. There are distinctions between large, mid, and small cap stocks based on the market capitalization of the companies. There are distinctions between growth stocks, with high price-to-earnings ratios, and value stocks, with price-to-earnings ratios similar or below the market averages. These asset classes may act dissimilarly in the market, each responding to macro-economic factors in its own way. Asset classes that react to market movements differently are said to have little correlation. Therefore, investing in diverse domestic equity asset classes, ones with little correlation between them, may lend stability of the performance of a portfolio.

International equity asset classes also react dissimilarly to market conditions. European markets are more closely tied to economic forces outside of the United States and may behave differently than their American counterparts. Emerging market economies in Latin America, Asia and Eastern Europe, are also subject to distinct economic conditions, and as a result will experience different results in many cases. Including international equity classes in a portfolio may further diversify market risk.

Another approach to diversification may be to invest in different types of assets, such as bonds or real estate. Because these assets do not have the same investment characteristics as equities, the movement of both types of assets within one portfolio should vary diametrically, thus providing stability to overall performance.

A third approach to diversification involves investing in different industries or companies in the equity markets, and different issuers or maturities in the bond markets. This may help to balance fluctuations in a portfolio due to such factors as seasonality or interest rate changes.

It is important to remember that although volatility involves risk, it is also the engine that drives superior investment returns. U.S. Treasury bills are not very volatile, but they offer low investment return. Small cap high growth stocks are very volatile, but offer superior return potential. It is important to discuss how you can best manage volatility with your Financial Advisor, and determine together which approach is best suited to your particular circumstances.


## Investment Planning

## INVESTMENT RETURNS AND THE POWER OF COMPOUNDING

One of the most important elements of achieving superior investment results is to allow the power of compounding to work for you. Given the inherent volatility of the investment markets, returns can vary substantially from year to year. When allowed to build upon themselves over an extended period, returns may become substantial. Often investors become impatient and are unwilling to allow time to work for them. But time, coupled with compounding, is the underlying engine for superior investment return potential.

Compounding is achieved in two basic ways. First, reinvesting dividends and interest payments; more money is put to work in the original investment. This allows new money to work with old money, and over time compounding power accelerates the investment performance. The second method of compounding is dollar cost averaging. This is simply making additional contributions to investments on a regular basis, such as monthly contributions to a 401 (k) retirement plan. Because investment markets fluctuate, security prices may be lower than when the first investment dollars were contributed. This allows some of the investment to be purchased at lower prices, thus lowering the average cost of the entire investment. Conversely, when the market creates higher prices, fewer shares are purchased, thus achieving a favorable average cost per share. Of course, such a method cannot guarantee a profit or protect against loss in a declining market.

Asset classes that carry higher levels of risk do not necessarily assure higher returns over time. Generally, relatively volatile asset classes, such as stocks, exhibit higher compound growth potential than do relatively less volatile asset classes such as cash and bonds. Your Financial Advisor can assist you in determining the best method to assure that your portfolio take advantage of the power of compounding.

The chart below shows simple comparison between a few asset classes and their compounding.



[^0]:    Note: Potential taxes due on unrealized gains or assets in tax-deferred retirement plans are not accounted for in this Net Worth Statement.

[^1]:    * These suggested asset allocation percentages are representative portfolio target values.
    ** Does not include any provision for an Emergency Fund.
    Note: Asset Allocation does not guarantee a profit or protect against loss in declining markets.

[^2]:    * Spending needs are stated in today's after tax-dollars. See Assumptions page for complete listing of assumptions.

    Actual future returns, taxes, expenses, and benefits are unknown. This illustration uses representative estimates and assumptions for educational and discussion purposes only. Do not rely on this report for investment analysis.

[^3]:    IMPORTANT: The projections or other information generated by the Personal Financial Plan regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results and are not guarantees of future results. Each Monte Carlo Simulation is unique; results vary with each use and over time.

[^4]:    * Estimated taxes include tax due on income and on sales of assets. Starting cost basis is estimated at $100.00 \%$.
    ** This report is based on assumed growth rates of $8.00 \%$ and $8.00 \%$, and inflation rates of $3.00 \%$ and $3.00 \%$ (before and after retirement).
    Account additions are calculated to increase at $3.00 \%$ per year for each individual.

[^5]:    * This report is based on assumed growth rates of $8.00 \%$ and $8.00 \%$, and inflation rates of $3.00 \%$ and $3.00 \%$ (before and after retirement). Account deposits are calculated to increase $3.00 \%$ and $3.00 \%$ per year (Individual 1 and 2). Company contributions to Roth 401k accounts show as account additions to Tax Deferred accounts.

[^6]:    * Roth growth rates: $8.00 \%$ and $8.00 \%$, Tax-Free: $4.00 \%$ and $4.00 \%$, inflation rates: $3.00 \%$ and $3.00 \%$ (before and after retirement).

    Account deposits are calculated to increase $3.00 \%$ and $3.00 \%$ per year (Individual 1 and 2).

[^7]:    * Net Present Values for this illustration are calculated using an after-tax discount rate of 5\% (Education Costs at 6\%)
    ** First year expenses include allowances for final expenses and emergency funds in the amount of \$22,322.

[^8]:    * Net Present Values for this illustration are calculated using an after-tax discount rate of 5\% (Education Costs at 6\%)
    ** First year expenses include allowances for final expenses and emergency funds in the amount of \$22,322.

[^9]:    *Adjustments include charitable deductions or previous taxable gifts that have been included in your estate analysis.

