# **Financial Plan**

for

# Sam & Mary Sample

by

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Financial & Estate Planning, Advising, Portfolio Management, Insuring & Credit Score services for people & businesses since 1996!

### **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 plan represents a framework to clarify and structure your financial matters.

This plan is based upon confidential information you provided regarding your present resources and objectives. While illustrations within this plan can be a valuable aid in the examination of your finances, it does not represent the culmination of your planning efforts. Financial planning 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 plan 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. The asset listing herein is not an account statement and does not necessarily include current or complete balances, holdings, and returns. 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 planning 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, now or in the future, to help you manage and maintain your financial situation under changeable conditions.

#### **Your Current Situation:**

- You have assets of approximately \$352,000.
- You have no recorded liabilities.
- Your net worth is approximately \$352,000.
- You now have \$152,000 in working assets and are adding \$12,000 per year.

#### Your Goals:

- Sam wants to retire at age 65 and Mary wants to retire at age 65.
- Monthly after-tax income needed at that time is \$4,167 (in today's dollars).
- You will need the income until the last life expectancy of age 90.

#### **Analysis Details:**

- Asset Allocation: Type of Investor Somewhat Aggressive
- Long-term care assets at risk: \$489,211
- Net Estimated Life Insurance Needs Shortage for Sam: \$170,000
- Net Estimated Life Insurance Needs Shortage for Mary: \$82,000
- Sam and Mary do not have Wills.
- Sam and Mary do not have Durable Powers of Attorney.
- Sam and Mary do not have Living Wills.
- Sam and Mary do not 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. This analysis is the basis for the following summarized statement.

#### **Actions:**

It appears you may run out of money before the last life expectancy of age 90. The range of possible options you might consider to improve your situation include the following:

- Increase the rate of return on your investments.
- Increase your annual savings by \$23,800/year (\$1,983 month).
- Reduce your retirement spending needs by \$13,300 to \$36,700/year (\$3,060/month).
- Defer your retirement by about 7 years.
- Combine any of the above and lower the requirements for each.

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.

#### Sam & Mary Sample

# Assumptions

Client Information:	Sam	Mary	Asset Allocations:	Current	Suggested
Birth Date	1/1/1965	1/1/1968	Cash & Reserves	0.00%	5.00%
Age	53	50	Income	9.21%	0.00%
Retirement Age	65	65	Income &	49.34%	15.00%
Life Expectancy	85	90	Growth	41.45%	40.00%
Alternate Life Expectancy			Aggressive	0.00%	40.00%
Life Insurance			Other	0.00%	0.00%
Term Insurance	\$50,000	\$100.000	Risk Tolerance	Somewhat A	ggressive
Insurance Cash Values		. ,			
Income (Annual)	Sam	Mary			
Earned Income	\$75.000	\$75.000			
Social Security	\$18,000	\$18,000			
Start Age	65	65			
Increase Rate	0.00%	0.00%			
Pension 1					
Start Age					
Increase Rate (Pre. Ret.)					
Increase Rate (Ret )					
Pension Survivor %					
Pension 2					
Start Age					
Increase Rate (Pre. Ret.)					
Increase Rate (Ret.)					
Pension Survivor %					
Data Assumptions	Duo Dot	Det			
Tauahla Datawa		<b>Ket.</b>			
Taxable Returns	8.00% 8.00%	6.00%			
Tax-Deletieu & Koui Ketuilis	8.00%	0.00 <i>%</i>			
Return on Annuities	7.00%	7.00%			
Effective Tax Rates	25.00%	20.00%			
Cost Basis for Tayable Assets	23.00 /0	100.00%			
Cost Basis for Annuity Assets		100.00%			
Additions Increase Rate: Taxal	hle	0.00%			
Additions Incr Rate: Tax-Def	0.00%	0.00%			
Expanses (After Tax)	Dro. Dat	Dot			
Expenses (Alter-Lax )	\$50.000	\$50.000			
Lapenses Survivor Expanses	\$50,000	\$50,000			
Inflation Rate	3 0000	φ.00,000 3.0∩ <i>0</i> -			
Sumiyor Inflation Data	2.00%	3.00% 2.00%			
Survivor initiation Kate	5.00%	3.00%			
Estimated Education Costs					
Total Costs at 6% Inflation		\$198.675			

Note: These assumptions are based upon information provided by you, combined with representative forward looking values intended to provide a reasonable financial illustration for education and discussion purposes. The investment returns, tax rates, benefit increase rates, inflation rates, and future expense values used in this report were selected based on your age, assets, income, goals and other information you provided. These assumptions do not presuppose or analyze any particular investments or investment strategy, or represent a guarantee of future results.

### **Net Worth Statement**

Sam & Mary Sample November 14, 2018

### **ASSETS**

\$15,000				
	\$15,000			
\$55,000				
60,000				
14,000				
4,000				
4,000				
	\$137,000			
\$200,000				
	\$200,000			
TOTAL ASSETS	\$352,000			
\$0				
	\$0			
Net Worth (Assets less Liabilities)				
	\$15,000 \$55,000 60,000 14,000 4,000 \$200,000 TOTAL ASSETS \$0 \$0 porth (Assets less Liabilities)			

Note: Potential taxes due on unrealized gains or assets in tax-deferred retirement plans are not accounted for in this Net Worth Statement. This asset information is based upon information you provided and sources believed to be reliable. The asset listing herein is not an account statement and does not necessarily include current or complete balances, holdings, and returns. Please review this information for accuracy.

Description	Current Amount	Annual Additions	Addition Period	Asset Class	Account Taxation	Asset Type				
Stock Mutual Funds	15,000			Inc./Gro.	Taxable (J)	Mutual Funds (Stock)				
IRA	14,000			Income	IRA (2)	Stocks				
401k	55,000	7,000	2018-2029	Growth	Tax-Deferred (1)	Mutual Funds (Stock)				
401k	60,000	5,000	2018-2032	Inc./Gro.	Tax-Deferred (2)	Mutual Funds (Stock)				
Roth IRA	4,000			Growth	Roth IRA (1)	Stocks				
Roth IRA	4,000			Growth	Roth IRA (2)	Stocks				
Totals:	\$152,000									

### **Asset Worksheet**

Note: This asset information is based upon information you provided and sources believed to be reliable. The asset listing herein is not an account statement and does not necessarily include current or complete balances, holdings, and returns. Please review this information for accuracy.

#### **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 planning 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.



Asset Allocation	Curren	t	Suggested	Change	
Cash & Reserves	\$7,600	5%	\$7,600 **	5%	\$0
Income	22,800	15%	0	0%	(22,800)
Income & Growth	53,200	35%	22,800	15%	(30,400)
Growth	53,200	35%	60,800	40%	7,600
Aggressive Growth	15,200	10%	60,800	40%	45,600
Other	0	0%	0	0%	0
Total	\$152,000	100%	\$152,000	100%	0

\* 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.

November 14, 2018

# **Retirement Profile**

### **Developing A Retirement Plan**

Developing a retirement plan 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 planning, and estimate the results for your review.* 

Your Current Retirement Goals	Sam	Mary
Age:	53	50
Retirement Age:	65	65
Years until Retirement:	12	15
Years of Retirement:	20	25
Annual Retirement Spending (After-tax):	\$50,000	(expressed in today's dollars)

Additional Objectives Please see the attached Education Funding Illustration.

<u>Assumptions</u>	Pre-Retirement	<u>Retirement</u>
Inflation Rate:	3.0%	3.0%
Income Tax Rate (Average):	25.0%	20.0%
Return on Investments (Average):	8.0%	6.0%

### **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.

<u>There is a summary of your struction.</u>		Current Balances
<u>Personal Investments</u>		
Stock Mutual Funds		\$15,000
		\$15,000
Retirement Plans		
Qualified Plans-Sam		\$55,000
Qualified Plans-Mary		60,000
IRA Assets-Mary		14,000
Roth Assets-Sam		4,000
Roth Assets-Mary		4,000
		\$137,000
Total Investment Assets		\$152,000
See Asset Worksheet for detailed annual savings information.		
Social Security	<u>Sam</u>	<u>Mary</u>
Full Benefit Age	65	65
Benefit (After-tax)	\$14,940	\$14,940
Pension Plans	<u>Sam</u>	<u>Mary</u>
Pension Amount	N/A	N/A



### **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 capital assets as seen in Retirement Capital Analysis. The line within the graph illustrates the value of future retirement assets in today's dollars.

<b>General Assumptions:</b>	Retirement Spending Needs*	\$50,000	
Rates of Return Before and After	Survivor Spending Needs*	\$50,000	
Retirement Used in Illustration:	Retirement Age	Sam - 65	
Taxable RORs:8%6%	Retirement Age	Mary - 65	
Tax Def. RORs: 8% 6%	Inflation - Current	3%	
Tay Free POPs: 8% 8%	Inflation - Retirement	3%	
	Tax Rate - Current	25%	
Annuity RORs: 7% 7%	Tax Rate - Retirement	20%	

\* 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.

#### **Retirement Capital Illustration Results:**

It appears you may run out of money before the last life expectancy of age 90. The range of possible options you might consider to improve your situation include the following:

- Increase the rate of return on your investments.
- Increase your annual savings by \$23,800/year (\$1,983 month).
- Reduce your retirement spending needs by \$13,300 to \$36,700/year (\$3,060/month).
- Defer your retirement by about 7 years.
- Combine any of the above and lower the requirements for each.

# **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 plan. 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 plan. Ten thousand full financial plan calculations are performed utilizing the volatile annual rates of return. The result is ten thousand new hypothetical financial plan 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 plan 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. 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 plan 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.

IMPORTANT: The projections or other information generated by the Personalized 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.

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# **Monte Carlo Retirement Simulation**

Success Rate of Your Plan - 0%

This indicates an unacceptable risk of attaining your retirement goals. Monitor your plan regularly. Changes in assumptions may have a significant impact on the results of this plan.

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 return 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 plans. 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 plan outcomes under volatile market conditions.

Retirement	Capital	Analysis	Results, at	t Life Exp	pectancy, o	of 10,000	Monte (	Carlo Sim	ulations:
	-		,	1		,			

Percent with funds at last life expectancy	0%	Retirement Capital Estimate	\$0
Percent with funds at age 84	16%	Minimum (Worst Case) result	\$0
Percent with funds at age 74	>95%	Average Monte Carlo result	\$38
Percent with funds at age 65	> 95%	Maximum Monte Carlo result	\$260,582

Life insurance proceeds are not included in the final year balances of these calculations.

Illustration based on random rates of return which average 6.6%, with a std. dev. of 6.6% (95% of values fall between -6.6% and 19.8%).

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.



### **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.

Ag	ge.	Earned Income	Retire/Roth Accounts	Investment Accounts	Pension/ Soc Sec.	Other Income	Total Sources	Living Exp. & Taxes	Surplus (Shortage)
53	50	\$150,000	(\$12,000)	\$900			\$138,900	(\$84,500)	\$54,400
54	51	150,000	(12,000)	954			138,954	(86,000)	52,954
55	52	150,000	(12,000)	1,011			139,011	(87,545)	51,467
56	53	150,000	(12,000)	1,072			139,072	(89,136)	49,936
57	54	150,000	(12,000)	1,136			139,136	(90,775)	48,361
58	55	150,000	(12,000)	1,205			139,205	(92,463)	46,742
59	56	150,000	(12,000)	1,276			139,276	(94,202)	45,074
60	57	150,000	(12,000)	1,353			139,353	(95,993)	43,360
61	58	150,000	(12,000)	1,435			139,435	(97,838)	41,596
62	59	150,000	(12,000)	1,520			139,520	(99,738)	39,782
63	60	150,000	(12,000)	1,612			139,612	(101,695)	37,916
64	61	150,000	(12,000)	1,709			139,709	(103,711)	35,998
65R	62	75,000	(5,000)	3,844	14,940		88,784	(88,784)	
66	63	75,000	(5,000)	5,982	14,940		90,922	(90,922)	
67	64	75,000	(5,000)	8,184	14,940		93,124	(93,124)	
68	65R		40,040	15,979	29,880		85,899	(85,900)	
69	66		62,934		29,880		92,814	(92,815)	
70	67		65,942		29,880		95,822	(95,822)	
71	68		69,041		29,880		98,921	(98,921)	
72	69		72,232		29,880		102,112	(102,112)	
73	70		75,518		29,880		105,398	(105,398)	
74	71		78,903		29,880		108,783	(108,783)	
75	72		82,391		29,880		112,271	(112,271)	
76	73		85,982		29,880		115,862	(115,862)	
77	74		89,681		29,880		119,561	(119,561)	
78	75		93,491		29,880		123,371	(123,371)	
79	76		97,416		29,880		127,296	(127,296)	
80	77		101,458		29,880		131,338	(131,338)	
81	78		61,610		29,880		91,490	(116,176)	(24,686)
82	79				29,880		29,880	(117,809)	(87,929)
83	80				29,880		29,880	(121,343)	(91,463)
84	81				29,880		29,880	(124,983)	(95,103)
85L	82				29,880	50,000	79,880	(128,732)	(48,852)
	83				14,940		14,940	(132,593)	(117,653)
	84				14,940		14,940	(136,570)	(121,630)
	85				14,940		14,940	(140,667)	(125,727)
	86				14,940		14,940	(144,887)	(129,947)
	87				14,940		14,940	(149,233)	(134,293)
	88				14,940		14,940	(153,709)	(138,769)
	89				14,940	100.000	14,940	(158,320)	(143,380)
	90L				14,940	100,000	114,940	(163,069)	(48,129)

### **Cash Flow**

Retire/Roth and Investment Accounts include additions, investment earnings, and distributions for RMDs or spending requirements. Pension, Social Security, and Other Income amounts are net of tax. Living Exp. and Taxes include tax on earned income and retirement account distributions. Tax rates of 25% and 20% (before and after retirement) are used to estimate taxes.

November 14, 2018

# **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 70 1/2, 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.

		Spending	Sam	Mary	Sam	Mary	Other Inc.	Surplus	Additions	Retirement Capital
A	Age	Needs	Soc. Sec.	Soc. Sec.	Pension	Pension	(Expense)	(Shortage)	to Assets	\$152,000
A 53 54 55 56 57 58 59 60 61 62 63 64 65 8 69 70 71 72 73 74 75 76 77 78 79	Age 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76	Spending Needs (18,784) (20,922) (23,124) (77,892) (80,228) (82,634) (85,113) (87,666) (90,295) (93,003) (95,793) (98,666) (101,625) (104,673) (107,813)	Sam Soc. Sec. 14,940 14,940 14,940 14,940 14,940 14,940 14,940 14,940 14,940 14,940 14,940 14,940	Mary Soc. Sec. 14,940 14,940 14,940 14,940 14,940 14,940 14,940 14,940 14,940 14,940 14,940 14,940 14,940	Sam Pension	Mary Pension	Other Inc. (Expense)	Surplus (Shortage) (3,844) (5,982) (8,184) (48,012) (50,348) (52,754) (55,233) (57,786) (60,415) (63,123) (65,913) (65,913) (68,786) (71,745) (74,793) (77,933)	Additions to Assets \$12,000 12,000 12,000 12,000 12,000 12,000 12,000 12,000 12,000 12,000 5,000 5,000 5,000	Retirement Capital \$152,000 \$176,340 202,608 230,959 261,558 294,583 330,228 368,699 410,223 455,042 503,417 555,631 611,990 649,561 687,227 724,954 710,659 688,474 661,861 630,459 593,887 551,735 503,568 448,918 387,291 318,157 240,948 155,066
75 76 77 78 79 80 81 82 83 84 85L	72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90L	(95,793) (98,666) (101,625) (104,673) (107,813) (111,047) (114,378) (121,343) (124,983) (124,983) (122,593) (136,570) (140,667) (144,887) (149,233) (153,709) (158,320) (163,069)	14,940 14,940 14,940 14,940 14,940 14,940 14,940 14,940 14,940 14,940	14,940 14,940 14,940 14,940 14,940 14,940 14,940 14,940 14,940 14,940 14,940 14,940 14,940 14,940 14,940 14,940 14,940 14,940			50,000	(65,913) (68,786) (71,745) (74,793) (77,933) (81,167) (84,498) (87,929) (91,463) (95,103) (48,852) (117,653) (121,630) (125,727) (129,947) (134,293) (138,769) (143,380) (48,129)		448,918 387,291 318,157 240,948 155,066 59,867
	Per	ision and Soc. S used to estimate	Sec. amounts taxes. This	are net of tax report is base	c. 85% of So ed upon assu	oc. Sec. is as med inflatio	sumed taxable. n rates of 3% a	A tax rate of 2 nd 3% (before a	20% (after reti and after retire	rement) is ement).

# **Retirement Capital Analysis**

November 14, 2018

# **Taxable Savings & Investment Accounts**

				Tax on	From Tax-A	dvantaged	Cash Flow	Balance
A	Age	Additions	Growth	Growth	Distributions	Tax on Dist.	Paid In (Out)	\$15,000
53	50		\$1,200	(\$300)				\$15,900
54	51		1,272	(318)				16,854
55	52		1,348	(337)				17,865
56	53		1,429	(357)				18,937
57	54		1,515	(379)				20,073
58	55		1,606	(401)				21,277
59	56		1,702	(426)				22,553
60	57		1,804	(451)				23,906
61	58		1,913	(478)				25,340
62	59		2,027	(507)				26,860
63	60		2,149	(537)				28,471
64	61		2,278	(569)				30,179
65R	62		1,695	(339)			(3,844)	27,691
66	63		1,482	(296)			(5,982)	22,895
67	64		1,128	(226)			(8,184)	15,613
68	65R		457	(91)	40,041	(8,008)	(48,012)	
69	66				62,935	(12,587)	(50,348)	
70	67				65,942	(13,189)	(52,754)	
71	68				69,041	(13,808)	(55,233)	
72	69				72,232	(14,447)	(57,786)	
73	70				75,519	(15,104)	(60,415)	
74	71				78,904	(15,781)	(63,123)	
75	72				82,391	(16,478)	(65,913)	
76	73				85,982	(17,197)	(68,786)	
77	74				89,681	(17,936)	(71,745)	
78	75				93,491	(18,698)	(74,793)	
<sup>7</sup> /9	76				97,416	(19,483)	(77,933)	
80	//				101,459	(20,292)	(81,167)	
81	/8				61,611	(1,798)	(84,498)	
82	/9						(87,929)	
83 94	8U 91						(91,403)	
04 851	01 82						(48,852)	
0.J.L	83						(40,052)	
	84						(117,000)	
	85						(121,030) (125,727)	
	86						(129,727) (129,947)	
	87						(129,947) (134,293)	
	88						(138,769)	
	89						(143.380)	
	90L						(48,129)	
	201						(10,123)	
				-				
		ļ						
		This rep	port is based on a	ssumed growth	ates of 8% and 6% and $6\%$	6, with inflation ra	tes of 3% and 3%	

(before and after retirement). Additions increase at 0% per year. Tax rates of 25% and 20% (before and after retirement) are used to estimate taxes. Starting cost basis is 100%.

# **Tax-Deferred Retirement Accounts**

	Sam			Delener	Mary			D - I	
Age	Additions	Growth	Distributions	\$55,000	Age	Additions	Growth	Distributions	\$74,000
53	\$7,000	\$4,680		\$66,680	50	\$5,000	\$6,120		\$85,120
54	7,000	5,614		79,294	51	5,000	7,010		97,130
55	7,000	6,624		92,918	52	5,000	7,970		110,100
56	7,000	7,713		107,631	53	5,000	9,008		124,108
57	7,000	8,890		123,521	54	5,000	10,129		139,237
58	7,000	10,162		140,683	55	5,000	11,339		155,576
59	7,000	11,535		159,218	56	5,000	12,646		173,222
60	7,000	13,017		179,235	57	5,000	14,058		192,280
61	7,000	14,619		200,854	58	5,000	15,582		212,862
62	7,000	16,348		224,202	59	5,000	17,229		235,091
63	7,000	18,216		249,418	60	5,000	19,007		259,098
64 (5D	7,000	20,233		276,651	61	5,000	20,928		285,026
65K		10,399		293,250	62	5,000	17,252		307,278
67		17,595		310,645	64	5,000	10,007		350,005
68		18,001	(40.041)	329,490	04 65P	3,000	20,002		355,007
69		16,503	(40,041)	261 682	66		21,552		399 852
70		13 723	(65 943)	201,002	67		23,991		423.843
71		10,496	(69,041)	150.917	68		25,431		449,274
72		6,888	(72,233)	85,573	69		26,956		476,230
73		3,390	(58,138)	30,825	70		28,052	(17,381)	486,902
74		898	(31,723)	,	71		27,799	(47,181)	467,520
75					72		25,579	(82,391)	410,708
76					73		22,063	(85,983)	346,789
77					74		18,117	(89,681)	275,225
78					75		13,709	(93,491)	195,442
79					76		8,804	(97,416)	106,830
80					77		3,366	(101,459)	8,737
81					78		254	(8,991)	
82					79				
83					80				
84					81				
85L					82				
					83				
					84 85				
					85 86				
					80 87				
					88				
					89				
					90L				
	This report is based on assumed growth rates of 8% and 6%, with inflation rates of 3% and 3% (before and after retirement). Additions increase 0% and 0% per year (Sam and Mary).								

Inthe second sec

Combined Roth IRA				Other			<u> Fax-Free</u>			
		Sam	Mary	<i>a</i> .	<b></b>	Balance		<i>.</i> .		Balance
A	lge	Additions	Additions	Growth	Distrib.	\$8,000	Additions	Growth	Distrib.	\$0
53	50			\$640		\$8,640				
54	51			691		9,330				
33 56	52 52			/40		10,076				
57	55 54			800		10,082				
58	55			940		11,752				
59	56			1 015		13,706				
60	57			1,015		14,802				
61	58			1,184		15,986				
62	59			1,279		17,264				
63	60			1,381		18,644				
64	61			1,492		20,134				
65R	62			1,208		21,342				
66	63			1,281		22,622				
67	64			1,357		23,978				
68	65R			1,439		25,416				
69 70	66			1,525		26,940				
70 71	6/			1,010		28,556				
/1 72	08 60			1,/15		30,208 32 084				
72	70			1,010		34 008				
74	71			2.040		36.048				
75	72			2,163		38,210				
76	73			2,293		40,502				
77	74			2,430		42,932				
78	75			2,576		45,506				
79	76			2,730		48,236				
80	77			2,894		51,130				
81	78			1,489	(52,619)					
82	79									
83	80									
04 951	81 82									
0.JL	83									
	84									
	85									
	86									
	87									
	88									
	89									
	90L									
		This report is	based on assu	med growth r	ates of 8% an	]	RAs and 8%	and 8% on T	Tax-Free Acco	unts,
		with inflatio	on rates of 3%	and 3% (befo	ore and after r	İ	ditions increa	ase 0% and 0	% on Roth IR.	As
				(Sam and M	ary) and $0\%$ (	2	counts per ye	ear.		
	This report and its hypothetical illustrations, are intended to form a basis for further discussion with your legal accounting and financial advisors.									

# **Tax-Free Accounts**

November 14, 2018

# Social Security Visualizer

There are many choices, opportunities, and decisions related to when and how a couple applies for Social Security. Delaying application, or restricting application to only spousal benefits are methods that may initially reduce income, but then increase later benefits, and potentially pay off in the long run.

The choices you make will need to take into account your ability to wait for benefit income, your health, your family history of longevity, and how benefits now and in the future affect other aspects of your financial security. One of the more important aspects of your benefits choices are that all increased benefits are inflation adjusted, and thus present a very valuable annuity hedge against inflation, and increased benefits also increase survivor benefits.

For discussion and comparison purposes, the primary options are illustrated along with their estimated lifetime benefits in today's dollars. For easier comparison, the (loss) or gain compared to filing at full retirement age is also shown. Understanding your options, and discussing them with your advisor, can help you make more informed decisions about your filing options, and how Social Security benefits may fit into your financial future.

			Lifetime Benefits	<b>Difference</b>	Percent
1.)	Filing at	t Minimum Ages	\$701,383	(\$187,889)	79%
	62	Sam files for own benefits at 62.			
	62	Mary files for own benefits at 62.			
2.)	Filing at	t Full Retirement Age	\$889,272	\$0	100%
	67	Sam files for own benefits at 67.			
	67	Mary files for own benefits at 67.			
3.)	Filing at	t Maximum Age	\$948,234	\$58,962	107%
	70	Sam files for own benefits at 70.			
	70	Mary files for own benefits at 70.			
<b>4.</b> )	Optimal	- File at Age(s):	\$950,864	\$61,592	107%
	70	Sam files for own benefits at 70			

69 Mary files for own benefits at 69

Note: Lifetime Social Security benefit calculations are for comparative and illustrative purposes only, and are based upon estimates and assumptions of future incomes, existing benefit levels, and life expectancies.

November 14, 2018



# **Social Security Claiming Options**



Note: Lifetime Social Security benefit calculations are for comparative and illustrative purposes only, and are based upon estimates and assumptions of future incomes, existing benefit levels, and life expectancies.



# **Social Security Timeline**



Monthly amount (in today's dollars)

	Sam		Mary	Actio	n
62		59			
63		60			
64		61			
65	1,500	62		Sam files.	
66	1,500	63			
67	1,500	64			
68	1,500	65	1,500	Mary files.	
69	1,500	66	1,500		
70	1,500	67	1,500		
71	1,500	68	1,500		
72	1,500	69	1,500		
73	1,500	70	1,500		
74	1,500	71	1,500		
75	1,500	72	1,500		
76	1,500	73	1,500		
				Lifetime Total	\$843,000

Note: Lifetime Social Security benefit calculations are for comparative and illustrative purposes only, and are based upon estimates and assumptions of future incomes, existing benefit levels, and life expectancies.



# **Social Security Optimal Timeline**



Monthly amount (in today's dollars)

	Sam		Mary	Actio	on
62		59			
63		60			
64		61			
65		62			
66		63			
67		64			
68		65			
69		66			
70	2,145	67		Sam files.	
71	2,145	68			
72	2,145	69	2,006	Mary files.	
73	2,145	70	2,006		
74	2,145	71	2,006		
75	2,145	72	2,006		
76	2,145	73	2,006		
				 Lifetime Total	\$950,864

Note: Lifetime Social Security benefit calculations are for comparative and illustrative purposes only, and are based upon estimates and assumptions of future incomes, existing benefit levels, and life expectancies.

# **Social Security Application Options**

**File Early:** Social Security retirement benefits can be started as early as age 62. For those that need the income, this may be the only choice. Taking early benefits lowers payouts permanently. Benefits are reduced 5/9 of one percent for each month before normal retirement age, up to 36 months. If the number of months exceeds 36, then the benefit is further reduced 5/12 of one percent per month.

File at Full Potiromont. If the applicants can wait	Year of Birth	Full Retirement Age
until "Full Retirement Age" they receive what Social	1943-1954	66
Security considers their full benefits. Waiting for full	1955	66 and 2 months
benefits results in higher primary, spousal, and survivor	1956	66 and 4 months
payments. What Social Security considers an	1957	66 and 6 months
individual's "Full Retirement Age" is determined by	1958	66 and 8 months
the year of their birth.	1959	66 and 10 months
···· ) · ··· · · · ···· · · · ···	1960 and later	67

**File Late:** Waiting beyond "Full Retirement Age" raises benefits 8% per year up to age 70, for a maximum potential increase ranging from 24% to 32%. In situations where one or both of a married couple are healthy, and/or have a history of longevity in their family, filing late can increase the lifetime benefit payout, and potentially reduce the "longevity risk" of outliving financial assets.

**File "Restricted":** For some married couples, it makes sense to use a two-step benefit claiming process. One of these strategies is known as "Restricted" filing. Restricted filing may make sense when both spouses of the married couple have substantial or equal income records. If the first spouse claims benefits on their own record, and the second spouse has reached "Full Retirement Age", the second spouse may file an application "Restricted" to just receive their spousal benefit, which amounts to half the first spouse's benefit. Meanwhile, the second spouse's full benefit increases until they claim it on their own record at age 70. In order to take advantage of this strategy, the spouse that is filing restricted must have been born on or before January 1st, 1954.

Sam	Mary
Starting Retirement Benefit	Starting Retirement Benefit
1,211	1,211
1,297	1,297
1,384	1,384
1,500	1,500
1,614	1,614
1,730	1,730
1,868	1,868
2,006	2,006
2,145	2,145
	Sam Starting Retirement Benefit 1,211 1,297 1,384 1,500 1,614 1,730 1,868 2,006 2,145

#### Monthly Starting Benefits by Age:

Note: Lifetime Social Security benefit calculations are for comparative and illustrative purposes only, and are based upon estimates and assumptions of future incomes, existing benefit levels, and life expectancies.

# **Insurance Summary**

Company Name		
Insured	Sam	Mary
Owner	Sam	Mary
Beneficiary	Sam	Sam
Туре	Term	Term
Death Benefit	\$50,000	\$100,000
Annual Premium		
Total Premiums Paid		
Current Cash Values		

### **Insurance Included in Estate:**

#### Sam predeceases Mary

	<u>Sam</u>	<u>Mary</u>
Policy 1 -	\$50,000	\$0
Policy 2 -	0	100,000
	\$50,000	\$100,000
Mary predeceases Sam		
	Mary	<u>Sam</u>
Policy 1 -	\$0	\$50,000
Policy 2 -	100,000	0
	\$100,000	\$50,000

# **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 \$50,000 per year, inflated at 3% each year until retirement and \$50,000 per year, inflated at 3% each year during retirement.

### Life Insurance Basic Needs Estimate on Sam:

Present Value:	Anticipated Spending Needs	\$1,222,239	
	Education Expenses	107,200	
	Final Expenses	12,500	
	Other Expenses	0	\$1,341,939
	Mary's Employment	(\$579,093)	
	Social Security Benefits	(390,804)	
	Pension Benefits	(0)	
	Other Incomes	(0)	(\$969,897)
Net Estimated Su	rvivor Need Shortage		\$372,042
Currently Existin	ng Liabilities		0
Assets Available	to Offset Shortage		(152,000)
Current Life Insu		(50,000)	
Suggested Addit		\$170,042	

Note: Estimated insurance requirements can vary over time due to changes in asset levels, special expenses, education expenses, estate planning, 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 \$50,000 per year, inflated at 3% each year until retirement and \$50,000 per year, inflated at 3% each year during retirement.

### Life Insurance Basic Needs Estimate on Mary:

Present Value:	Anticipated Spending Needs	\$1,081,668	
	Education Expenses	107,200	
	Final Expenses	12,500	
	Other Expenses	0	\$1,201,368
	Sam's Employment	(\$499,887)	
	Social Security Benefits	(367,622)	
	Pension Benefits	(0)	
	Other Incomes	(0)	(\$867,509)
Net Estimated Su	rvivor Need Shortage		\$333,860
Currently Existin	g Liabilities		0
Assets Available	to Offset Shortage		(152,000)
Current Life Insu		(100,000)	
Suggested Addit		\$81,860	

Note: Estimated insurance requirements can vary over time due to changes in asset levels, special expenses, education expenses, estate planning, 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 Sam

NPV 1	(\$1,222,239)	(\$107,200)	(\$12,500)	\$579,093	\$390,804		(\$372,042)
Age	Spending Need	Education Costs	Other Inc. (Expense) <sup>2</sup>	Income After Tax	Soc. Sec. After Tax	Pension After Tax	Surplus (Shortage)
50	(\$50,000)		(\$12,500)	\$56.250	\$44,982		\$38.732
51	(51,500)			56,250	44,982		49,732
52	(53,045)			56,250	44,982		48,187
53	(54,636)			56,250	44,982		46,596
54	(56,275)			56,250	44,982		44,957
55	(57,964)			56,250	37,902		36,188
56	(59,703)	(15,791)		56,250	37,902		18,659
57	(61,494)	(22,554)		56,250	37,902		10,104
58	(63,339)	(23,908)		56,250	37,902		6,906
59	(65,239)	(25,342)		56,250			(34,331)
60	(67,196)	(26,863)		56,250			(37,809)
61	(69,212)	(28,474)		56,250			(41,436)
62	(71,288)	(30,183)		56,250			(45,221)
63	(73,427)			56,250			(17,177)
64	(75,629)			56,250			(19,379)
65R	(77,898)				14,940		(62,958)
66	(80,235)				14,940		(65,295)
67	(82,642)				14,940		(67,702)
68	(85,122)				14,940		(70,182)
69	(87,675)				14,940		(72,735)
70	(90,306)				14,940		(75,366)
71	(93,015)				14,940		(78,075)
72	(95,805)				14,940		(80,865)
73	(98,679)				14,940		(83,739)
74	(101,640)				14,940		(86,700)
75	(104,689)				14,940		(89,749)
76	(107,830)				14,940		(92,890)
77	(111,064)				14,940		(96,124)
78	(114,396)				14,940		(99,456)
79	(117,828)				14,940		(102,888)
80	(121,363)				14,940		(106,423)
81	(125,004)				14,940		(110,064)
82	(128, 754)				14,940		(113,814)
85	(132,017)				14,940		(117,077)
04 05	(130, 393)				14,940		(121,055) (125,753)
83 96	(140,093)				14,940		(125,753)
80	(144,914) (140,261)				14,940		(129,974) (134,321)
07	(149,201) (152,720)				14,940		(134,321) (138,700)
80	(153,759) (158,351)				14,940		(133,799)
901	(153,551) (163,102)				14,940		(143,411)
1 - Ne 2 - Al	t Present Values for lowances for final ex	this illustration this and eme	are calculated using rgency funds of \$1	g a 6% after-tax c 2,500 are include	liscount rate (edu ed in the first year	cation costs using r.	g 6%).

November 14, 2018

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

NPV 1	(\$1,081,668)	(\$107,200)	(\$12,500)	\$499,887	\$367,622		(\$333,860)
	Spending	Education	Other Inc.	Income	Soc. Sec.	Pension	Surplus
Age	Need	Costs	(Expense) <sup>2</sup>	After Tax	After Tax	After Tax	(Shortage)
53	(\$50,000)		(\$12,500)	\$56,250	\$40,575		\$34,325
54	(51,500)			56,250	40,575		45,325
55	(53,045)			56,250	40,575		43,780
56	(54,636)			56,250	40,575		42,189
57	(56,275)			56,250	40,575		40,550
58	(57,964)			56,250	34,198		32,484
59	(59,703)	(15,791)		56,250	34,198		14,955
60	(61,494)	(22,554)		56,250	34,198		6,400
61	(63,339)	(23,908)		56,250	34,198		3,202
62	(65,239)	(25,342)		56,250			(34,331)
63	(67,196)	(26,863)		56,250			(37,809)
64 65D	(69,212)	(28,474)		56,250	14.040		(41,436)
65K	(71,288)	(30,183)			14,940		(80,531)
00 67	(75,427)				14,940		(58,487)
68	(73,029)				14,940		(00,089)
60	(77,696)				14,940		(02,958)
70	(80,233)				14,940		(67,702)
70	(85,122)				14 940		(70,182)
72	(87,675)				14 940		(72,735)
73	(90,306)				14,940		(75,366)
74	(93,015)				14,940		(78,075)
75	(95,805)				14,940		(80,865)
76	(98,679)				14,940		(83,739)
77	(101,640)				14,940		(86,700)
78	(104,689)				14,940		(89,749)
79	(107,830)				14,940		(92,890)
80	(111,064)				14,940		(96,124)
81	(114,396)				14,940		(99,456)
82	(117,828)				14,940		(102,888)
83	(121,363)				14,940		(106,423)
84	(125,004)				14,940		(110,064)
85L	(128,754)				14,940		(113,814)
1 - Ne	et Present Values for	this illustration	are calculated usin	g a 6% after-tax o	discount rate (edu	cation costs using	g 6%).
2 - Al	lowances for final e	xpenses and eme	rgency funds of \$1	2,500 are include	ed in the first yea	r.	

# **Disability Income Insurance**

Disability due to illness or injury can devastate your financial plans. 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.

<u>Sam</u>		Mary		
Current Income:	\$75,000/Yr.	Current Income:	\$75,000/Yr.	
Replacement Ratio*:	65%	Replacement Ratio*:	65%	
Suggested Need:	\$49,000/Yr.	Suggested Need:	\$49,000/Yr.	

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

### The Cost of Waiting to Plan

- 40% of all long-term care recipients are under the age of 65.
- Over 40% 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 long-term care in their lifetime.
- One out of every four families provides care to an elderly relative or loved one.
- 35% 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 plan, 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 planning. 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.

	Sam	<u>Mary</u>
Estimated daily care cost	\$125	\$125
Estimated annual care costs	\$45,625	\$45,625
Estimated years of care	5	5
Assumed inflation rate	5%	5%

Current financial assets exposed to potential long-term care expense risk :

**Cumulative Cost of Waiting to Purchase** 



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 a Long-term insurance plan in place.

With Insurance

#### November 14, 2018

#### Total Cost of Long-Term Care

\$152,000

Total Long-Term Care Need:

Assets to Liquidate:

Unprotected Need:

# 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 \$489,211 based upon these estimates:

\$504,211 \$15,000

\$489.211

#### **Potential Asset Value Erosion**



Favorable income tax treatment is available for policies meeting certain requirements. In those cases, premiums, with certain limitations, may be deducted as medical expenses for those who itemize their deductions.

**Long-Term Care Need Calculation** 

### **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 Planning**

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

Estate tax rules changed in 2012 and 2018. To fairly illustrate concepts and estimate future estate taxes, this report illustrates estate taxes based upon existing estate law as enacted. New rules set an \$11.2 million unified federal estate and gift tax exemption (adjusted annually for inflation) with a top tax rate of 40%. Rules provide for portability of unused estate tax exclusion to surviving spouses. To utilize the Deceased Spouse Unused Exclusion Amount (DSUEA), executors must file an estate tax return at the time of the first spousal death enumerating DSUEA and electing that the DSUEA be used by the surviving spouse. Note that estate law is uncertain and may potentially change again sometime in the future.

### Estate Tax

Minimizing estate tax is a primary goal of most people with estate tax exposure. History is full of examples of estates decimated by unnecessary estate taxes and related expenses. This analysis of the current estate situation helps illustrate suggestions that can minimize current and future estate tax exposure. Some of the basic planning techniques considered are:

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

### **Other Financial Goals**

Other financial goals to consider in estate planning are:

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

### Non-Financial Goals

The non-financial aspects of estate planning 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 plan. 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 planning. The diverse skills required to coordinate a plan 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 planning 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 planning.

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# **Current Estate Summary**

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

### **Basic Data**

	Sam	Mary
Age	53	50
Age at Death for this Illustration	53	50
General Assumptions		
Administrative & probate expenses as a percentage of estate assets:		4.00%
Estimated final expenses		\$7,500
Existing Estate Planning		
Will	No	No
Irrevocable Life Insurance Trust	No	No
Credit Shelter Trust Provisions	No	No
Generation Skip Trust Provisions	No	No
Revocable Living Trust	No	No
QTIP Trust Provisions	No	No
Marital Trust Provisions	No	No
Durable General Power of Attorney	No	No
Durable Health Care Power of Attorney	No	No
Living Will	No	No
Existing percentage of Estate in Living Trust	0%	0%
Previous Gifting Detail		

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

### **Current Estate Summary**

- Sam's gross estate consists of \$216,500 and Mary's consists of \$285,500.
- Potential estimated federal estate taxes currently are zero.
- Administrative, probate, and final expenses could total from \$43,094 to \$45,743.
- Additional planning could save up to \$27,927 in estate taxes and other costs.

# **Estate Net Worth**

ASSETS			Joint/	
Savings and Investments	<u>Sam</u>	<u>Mary</u>	<u>Community</u>	<u>Total</u>
Stock mutual funds			\$15,000	\$15,000
-	\$0	\$0	\$15,000	\$15,000
Retirement Accounts				
Qualified Plans - Sam	\$55,000			\$55,000
Qualified Plans - Mary	+	60,000		60,000
Roth IRA Assets - Sam	4,000	,		4,000
Roth IRA Assets - Mary		4,000		4,000
IRA Assets - Mary		14,000		14,000
_	\$59,000	\$78,000	\$0	\$137,000
Other Assets				
Residence			\$200,000	\$200,000
	\$0	\$0	\$200,000	\$200,000
TOTAL ASSETS	\$59,000	\$78,000	\$215,000	\$352,000
<u>LIABILITIES</u>				
TOTAL LIABILITIES	\$0	\$0	\$0	\$0
NET WORTH	\$59,000	\$78,000	\$215,000	\$352,000
ADJUSTMENTS				
Life insurance in estate	\$50,000	\$100,000		
Estate share of joint property	107,500	107,500		
ESTATE NET WORTH	\$216,500	\$285,500		

### **Current Estate Flowchart**

### Sam Predeceases Mary



# **Current Estate Estimate**

### Sam Predeceases Mary

	Sam's	Mary's
Estate	Death	Death
Separate property	\$0	\$0
50% of jointly owned & community property	107,500	107,500
Retirement Accounts	59,000	78,000
Life Insurance	50,000	100,000
Debt	0	0
Marital Transfer	0	200,340
	\$216,500	\$485,840
Deductions and Expenses		
Marital Transfer	(\$200,340)	\$0
Administrative, Probate and Final Expenses	(16,160)	(26,934)
	(\$216,500)	(\$26,934)
Federal Taxable Estate	\$0	\$458,906
Federal Estate Tax		
Federal Estate Tax	\$0	(\$141,828)
Applicable Credit Amount	0	141,828
Federal Estate Tax	\$0	\$0

### **Mary Predeceases Sam**

Estate	Mary's Death	Sam's Death
Separate property	\$0	\$0
50% of jointly owned & community property	107,500	107,500
Retirement Accounts	78,000	59,000
Life Insurance	100,000	50,000
Debt	0	0
Marital Transfer	0	266,580
	\$285,500	\$483,080
Deductions and Expenses		
Marital Transfer	(\$266,580)	\$0
Administrative, Probate and Final Expenses	(18,920)	(26,823)
	(\$285,500)	(\$26,823)
Federal Taxable Estate	\$0	\$456,257
Federal Estate Tax		
Federal Estate Tax	\$0	(\$140,927)
Applicable Credit Amount	0	140,927
Federal Estate Tax	\$0	\$0

Note: The Taxpayer Relief Act of 2012 provides portability of unused estate tax exclusion amounts between spouses. To utilize the "Deceased Spouse Unused Exclusion Amount" (DSUEA) executors must file an estate tax return at the time of the first spousal death enumerating DSUEA and electing that the DSUEA be used by the surviving spouse.

# **Alternate Estate Structure**

### **Summary of Alternative Estate Results**

This is a review and comparison of cumulative impacts of suggested estate planning alternatives on the estate. Suggested Alternative Estate Flowchart diagram illustrates how improved estate structure reduces assets exposed to estate taxes. In your specific case, estate costs and taxes may be reduced by up to 61%. These savings directly translate into additional assets available to beneficiaries.

Note: In 2012 and 2018 estate tax rules changed. To fairly illustrate concepts and estimate future estate taxes, this report illustrates estate tax rates and rules based on existing estate law as enacted assuming no changes are made to current regulations and laws. Keep in mind that estate tax law is uncertain and may change in the future.

Currently, your combined total estate is estimated to be \$502,000. Using estimated estate settlement costs of \$45,743, you would pass approximately \$456,257 to your beneficiaries.

With proper implementation of suggested alternative estate structures, your current estimated estate settlement costs may be reduced to approximately \$17,816. This would allow you to save \$27,927 in taxes and expenses, transferring \$484,184 to your beneficiaries.



### **Impact of Planning upon Estate Costs**

### **Alternative Wills and Trusts**

Implementing these estate strategies may significantly increase assets passing to beneficiaries at death, simplify asset transfers, as well as reduce both potential estate taxes and settlement costs.

#### Your current estate documents:

• None

#### Suggested additional/alternative estate documents:

- A Will for each spouse if necessary
- Revised asset ownership to balance property if necessary
- A Revocable Living Trust for each spouse
- Fund the Revocable Living Trusts
- Marital Trust provisions
- Credit Shelter Trust provisions
- Irrevocable Life Insurance Trusts\*
- Durable General Powers of Attorney
- Durable Health Care Powers of Attorney
- Living Wills

\* Please note that Irrevocable Life Insurance Trusts may not be needed in all cases. Please consult your attorney.

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#### **Alternative Estate Flowchart** Sam Predeceases Mary Sam's Estate \$166,500 At Sam's Death The Living Trust creates a Credit Shelter Trust with up to Marital \$11,200,000. Any remaining assets would be placed in a Marital Credit Shelter **Trust/Transfer** Trust for Mary's primary financial needs. Mary also has access to the Trust \$0 Credit Shelter Trust assets if needed. \$157,668 Proceeds from life insurance policies on Sam owned by Life Life Insurance Insurance Trust escape taxation in the estate and are passed to Trust beneficiaries as specified in the trust. \$50,000 Mary's At Mary's Death Estate \$185.500 Mary's assets, the remaining assets held in the Marital Trust and Credit Shelter Trust would transfer to specified beneficiaries. Life Insurance Proceeds from life insurance policies on Mary owned by Life Trust \$100,000 Insurance Trust escape taxation in the estate and are passed to beneficiaries as specified in the trust. **To Beneficiaries\*** \$484,184 \* After total costs and taxes of \$17,816 **Mary Predeceases Sam** Mary's Estate \$185,500 At Mary's Death The Living Trust creates a Credit Shelter Trust with up to Marital **Credit Shelter** Trust/Transfer \$11,200,000. Any remaining assets would be placed in a Marital Trust Trust for Sam's primary financial needs. Sam also has access to the \$0 \$176,516 Credit Shelter Trust assets if needed. Proceeds from life insurance policies on Mary owned by Life Life Insurance Insurance Trust escape taxation in the estate and are passed to Trust beneficiaries as specified in the trust. \$100,000 At Sam's Death Sam's Estate Sam's assets, the remaining assets held in the Marital Trust and Credit \$166.500 Shelter Trust would transfer to specified beneficiaries. Proceeds from life insurance policies on Sam owned by Life Life Insurance Insurance Trust escape taxation in the estate and are passed to Trust \$50.000 beneficiaries as specified in the trust. **To Beneficiaries\*** \$484,184 After total costs and taxes of \$17,816

Note: The Taxpayer Relief Act of 2012 provides portability of unused estate tax exclusion amounts between spouses (DSUEA). To utilize DSUEA, executors must file an estate tax return at the time of the first spousal death enumerating DSUEA and electing that the DSUEA be used by the surviving spouse.

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# **Alternative Estate Estimate**

### Sam Predeceases Mary

Estate	Sam's Death	Mary's Death
Separate property (assets balanced)	\$107,500	\$107,500
Retirement Accounts	59,000	78,000
Life Insurance	0	0
Debt	0	0
Marital Transfer	0	0
	\$166,500	\$185,500
Deductions and Expenses		
Marital Transfer	\$0	\$0
Administrative, Probate and Final Expenses	(8,832)	(8,984)
	(\$8,832)	(\$8,984)
Federal Taxable Estate	\$157,668	\$176,516
Federal Estate Tax		
Federal Estate Tax	(\$41,254)	(\$47,285)
Applicable Credit Amount	41,254	47,285
Federal Estate Tax	\$0	\$0
Mary Predeceases Sam		
	Mary's	Sam's
Estate	Death	Death
Separate property (assets balanced)	\$107,500	\$107.500
Retirement Accounts	78,000	59,000
Life Insurance	0	0
Debt	0	0
Marital Transfer	0	0
	\$185,500	\$166,500
Deductions and Expenses		
Marital Transfer	\$0	\$0
Administrative, Probate and Final Expenses	(8,984)	(8,832)
	(\$8,984)	(\$8,832)
Federal Taxable Estate	\$176,516	\$157,668
Federal Estate Tax		
Federal Estate Tax	(\$47,285)	(\$41,254)
Applicable Credit Amount	47,285	41,254
Federal Estate Tax	\$0	\$0

Note: The Taxpayer Relief Act of 2012 provides portability of unused estate tax exclusion amounts between spouses. To utilize the "Deceased Spouse Unused Exclusion Amount" (DSUEA) executors must file an estate tax return at the time of the first spousal death enumerating DSUEA and electing that the DSUEA be used by the surviving spouse.

### **Future Estate Taxes**

#### **Recent and Future Estate Tax Changes**

Estate tax rules changed under the Taxpayer Relief Act of 2012 which set a \$5 million federal estate and gift tax exemption, and a top estate tax rate of 40%. That Act also provided portability of unused estate tax exclusions to surviving spouses. To utilize Deceased Spouse Unused Exclusion Amount (DSUEA) executors must file an estate tax return at the time of first spousal death enumerating DSUEA and electing it be used by the surviving spouse.

The Tax Cuts and Jobs Act of 2017 effectively doubled individual estate and gift exclusion amounts to \$11.2 million during years 2018 through 2025. The exclusions are adjusted annually for inflation, and in 2026 will revert back to the pre act amount unless increased exclusion amounts are extended or modified by new tax law.

#### Estate Tax Exposure Using Suggested Planning

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 \$11,200,000 per person). 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 estate law is uncertain and may potentially change again sometime in the future.



#### **Estimated Estate Growth and Federal Estate Tax**

Year End	Retirement Capital	Other Assets	Debts & Expenses	Adjustments *	Estate Tax Base	Exclusion Amounts**	Estimated Estate Tax
2018	\$176,340	\$200,000	(\$18,011)	\$0	\$358,329	\$22,400,000	\$0
2019	202,608	206,000	(18,269)	0	390,339	22,848,000	0
2020	230,959	212,180	(18,545)	0	424,594	23,304,000	0
2021	261,558	218,545	(18,841)	0	461,263	23,770,000	0
2022	294,583	225,102	(19,157)	0	500,527	24,246,000	0
2023	330,228	231,855	(19,497)	0	542,586	24,730,000	0
2024	368,699	238,810	(19,860)	0	587,649	25,224,000	0
2025	410,223	245,975	(20,250)	0	635,948	25,728,000	0
2026	455,042	253,354	(20,667)	0	687,729	13,286,000	0
2027	503,417	260,955	(21,115)	0	743,257	13,552,000	0
2028	555,631	268,783	(21,595)	0	802,819	13,824,000	0

\*Adjustments include charitable deductions or previous taxable gifts that have been included in your estate plan analysis. \*\*For the purpose of this illustration, the exclusion amounts are incremented annually by 2%.

### **Education Funding Illustration**

Sam & Mary Sample		
Assuming inflation of 6% the total projected cost of education will be	\$198,675	
If you can invest your education funds at 6%* after taxes you may make:		
1. A single contribution now:		
- Required education funds	\$127,199	
- Current education funds	\$20,000	
- Additional contribution needed	\$107,199	
2. Level contributions:		
- Required level annual contributions	\$12,063 or	\$1,005/mo
- Planned contributions	\$0	
- Additional annual contributions needed	\$12,063	

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

		Contributions	Education	Ending Balance	
Student	Year	to Fund	Cost	Cost at 6%	
	2019	\$12,063		\$33,986	
	2020	12,063		48,812	
	2021	12,063		64,527	
	2022	12,063		81,185	
Janie starts	2023	12,063	20,073	77,566	
	2024	12,063	21,278	72,451	
	2025	12,063	22,554	65,677	
Janie ends	2026	12,063	23,908	57,062	
John starts	2027	12,063	25,342	46,410	
	2028	12,063	26,863	33,506	
	2029	12,063	28,474	18,120	
John ends	2030	12,063	30,183		

### **Education Funding - Level Contributions**

### **Education Funding - Per Student**

Student Name	Start Year	Number Of Years	Per Year in Today's \$	Total Cost at 6% Infl.	Current College Funds Saved	529 Plan	One-Time Deposit	Annual Deposits
Janie	2023	4	\$15,000	\$87,813	\$20,000	No	\$43,599	\$6,624
John	2027	4	15,000	110,862		No	63,599	7,157
				\$198,675	\$20,000		\$127,199	\$13,781**

\* This hypothetical rate of return is for illustrative purposes and does not represent a particular investment.

\*\* 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

November 14, 2018

### **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.



\*S&P 500 Index. Standard and Poor's index tracks 500 stocks of large U.S. companies and is the basis for several index mutual funds and exchange-traded funds.

### **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.



This report, and its hypothetical illustrations, are intended to form a basis for further discussion with your legal, accounting, and financial advisors Actual future investment returns, taxes and inflation are unknown. Do not rely upon this report to predict future investment performance.

November 14, 2018