

# Smith Family Plan

P R E P A R E D F O R  
John and Jane Smith (example)



P R E P A R E D B Y  
Align Wealth Management  
[www.alignmywealth.com](http://www.alignmywealth.com)  
800-401-6477

# Table of Contents

<u>Important Disclosures</u> .....	3
<u>Important Notice</u> .....	4
<u>Comfort Analysis</u> .....	5
<u>Priorities</u> .....	7
<b>Summary of Assumptions</b>	
<u>Key Variables</u> .....	8
<u>Contributions</u> .....	8
<u>Withdrawals</u> .....	8
<u>Retirement Income</u> .....	8
<u>Social Security Income</u> .....	9
<u>Other Retirement Income</u> .....	9
<u>Education</u> .....	9
<u>Tax Assumptions</u> .....	9
<u>Allocation Summary (Detail)</u> .....	10
<u>Wealthcare Recommendation Summary</u> .....	11
<u>Wealthcare Allocation Summary (Detail)</u> .....	13
<u>Detailed Holdings Comparison</u> .....	14
<u>Appendix I - Table of Asset Classes, Indexes and Definitions</u> .....	15
<u>Appendix II - Common Terms and Definitions</u> .....	19
<u>Appendix III - Range of Asset Class Returns (Monte Carlo)</u> .....	21

# Important Disclosures

**IMPORTANT:** The projections or other information generated by Financeware regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results and are not guarantees of future results. The plan results vary with each use and over time.

## Analysis Methodology

The general methodology has these common characteristics as user inputs:

1. One or more estimated financial spending goals;
2. One or more financial resources that may be invested to generate funding for current or future financial goals;
3. One or more estimated sources of cash flows into the plan;
4. One or more investment portfolio designs based either on the risk and return characteristics of portfolios linked to financial resources as a whole or multiple portfolio designs based on those resources' tax treatment characteristics and/or time periods during which a portfolio design is to apply;
5. Tax rate assumptions, portfolio management, investment advisor and related investment expenses and portfolio turnover;
6. Client information necessary to the calculation of estimated income taxes on the client(s)' portfolio and social security benefits; and,
7. Client and spouse or life partner date of birth, life expectancy (or random mortality analysis can be used).

These inputs are then calculated together in chronological sequence (cash inflows and outflows) in annual periods for each year through the end of the user selected planning period. The cash flows include simulated target portfolio investment results (gains or losses), net of estimated taxes, using one of three methods (the three evaluation or simulation methods available are Historic Audit, WealthSimulator®, and Monte Carlo - see Appendix II for definitions). The process is repeated 1,000 times, to generate 1,000 "lifetimes" of hypothetical investment results and overfunded or underfunded wealth management results for each programmatic run. The resulting data comprises a "plan" or "plan scenario". Results on up to four sets of plan scenarios may be presented in this report.

## Limitations of the Analysis and Sensitivity of Assumptions to Plan Results

The results of all simulated trials are used to evaluate and describe a hypothetical distribution of outcomes, but do not represent a forecast or prediction of actual expected investment or financial outcomes.

The results in this report are materially affected by the capital market assumptions used. For the Monte Carlo simulation methodology, this report uses asset class level capital market assumptions developed by Financeware, Inc., d/b/a Wealthcare Capital Management ("WCM") using an approach described in detail in its whitepaper titled "Are You Modeling What You Intended?", as revised from time-to-time, which can be found at:

[www.financeware.com/ruminations/WP\\_areyoumodeling.pdf](http://www.financeware.com/ruminations/WP_areyoumodeling.pdf)

Advisors may utilize the capital market assumptions provided by WCM or may choose to override them.

Appendix I, at the end of this report, is a descriptive table of all potential asset classes that might be used in constructing possible investment portfolio alternatives whose investment results are simulated in the report results. Such descriptive information includes the underlying market indices or other factors used in WCM's capital market analysis assumptions.

Appendix II, at the end of this report, defines common terms used throughout the report.

Appendix III, at the end of this report, illustrates the range of returns for each asset class, using Monte Carlo Simulations for one, three and five year periods. These returns reflect both negative and positive returns for each asset class.

The report's analysis does not include the simulation or analysis of individual investment securities other than to the extent certain widely diversified index mutual funds or exchange-traded funds happen to be the same or similar to the indices used by WCM in developing asset class-level capital market assumptions as noted in the table in Appendix I, but no specific examples of such index mutual funds or index exchange-traded funds are represented as recommendations in this report. Note: Indices are unmanaged and a direct investment may not be available for any specific index.

The estimated fees, costs and income taxes and other cash flow input assumptions may be materially different over the course of the related planning time horizon than the actual fees, costs and income tax consequences and other cash flows that will be incurred.

## Important Notice

WCM does not endorse or evaluate any advisor that it does not employ and investors should understand that financial advisors must be registered in certain states and/or registered with various regulatory agencies (and/or Self Regulatory Organizations) or may be exempt from registration (as may be applicable) and must provide certain disclosures to their clients and prospective clients based on applicable regulations.

Financeware, Inc., d/b/a Wealthcare Capital Management (hereinafter "WCM") licenses certain investment analysis and other technology tool components to certain Financial Advisors (or anyone that purchases technology tools from Financeware, Inc. via the Internet) under a subscription agreement ("Technology Subscriber"). Any Technology Subscriber that licenses this technology has the ability to control most of the assumptions utilized in the analysis presented in this report. It is important that you understand that the assumptions used regarding capital market assumptions and other financial or life event assumptions (such as retirement date, savings, spending needs, life expectancy, income tax rates, among others) will determine the results of any analysis, and therefore any results presented in this report could be materially misleading and have not been endorsed, validated, or examined by Financeware, Inc., d/b/a Wealthcare Capital Management acting as a registered investment advisor and should not be relied upon. Any investors not completely confident in their understanding of the complexity of these analytics should seek the advice of a professional who thoroughly understands the implications of the analysis and any assumptions used. If this report was prepared by your Financial Advisor who is a Technology Subscriber of Financeware, Inc., it is your advisor's obligation to completely disclose all material assumptions used, the basis for such assumptions, and also to clearly indicate that WCM has not endorsed, tested or validated any of their assumptions other than WCM's default capital market assumptions for Monte Carlo or Wealth Simulator® if such advisor used those default assumptions and WCM may have made different recommendations if WCM were acting in a contractual advisory capacity.

### Key Terms Defined

#### **Acceptable**

A scenario comprised of the client's minimal goals and priorities that are still satisfactory.

#### **Comfort Level**

This reflects the percentage of simulations run against an investor's financial strategies in which the investor exceeded his or her goals.

#### **Comfort Zone**

The Comfort Zone encompasses Comfort Levels from 75 to 90.

#### **Ideal**

A scenario comprised of the client's maximum goals and priorities that would be the best possible scenario to reach..

#### **Recommended**

A scenario comprised of that adjustment of the client's Ideal and Acceptable goals that falls within the Comfort Zone..

#### **Sacrifice Zone**

The sacrifice zone encompasses Comfort Levels above 90

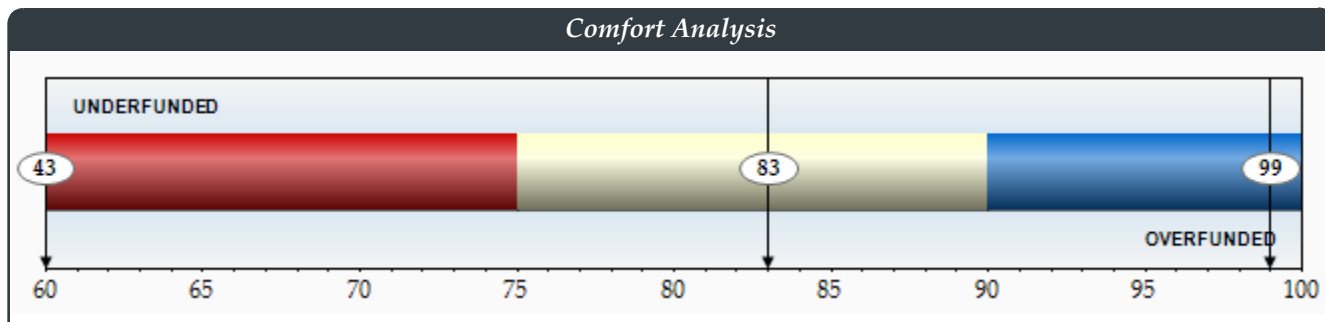
#### **Uncertain Zone**

The uncertain zone encompasses Comfort Levels below 75.

See Appendix II for a complete listing of common terms and definitions.

# Comfort Analysis

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



<u>NAME</u>	<u>SIMULATION METHOD</u>	<u>COMFORT LEVEL</u>	<u>STATUS</u>
1 <i>Ideal</i>	Monte Carlo	43%	UNCERTAIN (UNDERFUNDED)
2 <i>Recommended</i>	Monte Carlo	83%	COMFORT
3 <i>Acceptable</i>	Monte Carlo	99%	SACRIFICE (OVERFUNDED)

- SACRIFICE (OVERFUNDED) . Unnecessary sacrifice to lifestyle or undue investment risk.
- COMFORT. Sufficient confidence without undue sacrifice, changes to goals likely to be minor and manageable.
- UNCERTAIN (UNDERFUNDED) . Confidence is too low, changes to goals may be necessary now and into the future.

	<u>IDEAL</u>	<u>RECOMMENDED</u>	<u>ACCEPTABLE</u>
<b>Retirement Age</b>			
John	Retired	Retired	Retired
Jane	Retired	Retired	Retired
<b>Retirement Spending</b>			
John	\$100,000	\$74,000	\$50,000
<b>Other Goals</b>			
Boat	\$15,000	\$15,000	\$7,000
House repairs	\$3,000	\$3,000	\$3,000
Move and Downsize	\$40,000	\$40,000	\$40,000
New Washer and Dryer	\$2,000	\$2,000	\$2,000
Outdoor Kitchen/Backyard	\$4,200	\$4,200	\$4,200
Purchase Car	\$45,000	\$45,000	\$45,000
Travel Budget	\$8,000	\$8,000	\$8,000
Trips to Italy (additional costs)	\$4,000	\$4,000	\$4,000
<b>Target End Value</b>			
Today's Dollars	\$900,000	\$800,000	\$700,000
Actual Dollars	\$1,940,932	\$1,725,273	\$1,509,614
<b>Default Inflation Rate</b>	3%	3%	3%
<b>Investment Adjustment</b>	-1.230%	-1.230%	-1.230%
<b>Portfolio</b>			
All Accounts	BALANCED 60% EQUITIES	BALANCED 60% EQUITIES	BALANCED 60% EQUITIES

	<u>IDEAL</u>	<u>RECOMMENDED</u>	<u>ACCEPTABLE</u>
<b>Median Return</b>	8.16%	8.16%	8.16%
<b>Risk</b>			
Std. Deviation*	11.46%	11.46%	11.46%
Downside (95%-tile)**	-9.08%	-9.08%	-9.08%
*Standard deviation is a risk statistic used to measure the volatility of return observations around the portfolio's average return.			
**Downside represents the 1-year 95th percentile return. 95% of all 1-year returns simulated are better than this return and 5% are worse.			

# Priorities

Below, you will find a list of priorities outlined by you in our last meeting. Please take a moment to review your choices and note any changes.

Understanding your priorities is very important to the advice process. Please take a moment to review your acceptable compromises.						
		Acceptable Compromises				
		Take More Investment Risk	Save More	Retire Later	Reduce Size of Estate	Reduce Retirement Spending
G O A L	To reduce the investment risk in our portfolio, we would be willing to:	N/A			◆	◆
	We would like to reduce our current savings and to achieve this we would prefer to:		N/A		◆	◆
	To achieve our early retirement age, we would be willing to:			N/A		
	In order to achieve our larger estate goal, we would be willing to:				N/A	
	To achieve our higher spending target in retirement, we would prefer to:				◆	N/A
	To meet our "Outdoor Kitchen/Backyard" goal, we would be willing to:				◆	◆
	To meet our "Boat" goal, we would be willing to:				◆	◆
	To meet our "House repairs" goal, we would be willing to:				◆	◆
	To meet our "Travel Budget" goal, we would be willing to:				◆	
	To meet our "Move and Downsize" goal, we would be willing to:					
	To meet our "New Washer and Dryer" goal, we would be willing to:					
	To meet our "Trips to Italy (additional costs)" goal, we would be willing to:					
To meet our "Purchase Car" goal, we would be willing to:						

# Summary of Assumptions

## Key Variables

	<u>IDEAL</u>	<u>RECOMMENDED</u>	<u>ACCEPTABLE</u>
<b>Annual Income</b>			
John	\$0	\$0	\$0
Jane	\$0	\$0	\$0
<b>Retirement Age</b>			
John	63	63	63
Jane	62	62	62
<b>Life Expectancy</b>			
John	85	85	85
Jane	88	88	88
<b>Length</b>	26 years	26 years	26 years
<b>Target End Value</b>	\$900,000	\$800,000	\$700,000

## Contributions

None

## Withdrawals

	<u>OWNER</u>	<u>IDEAL</u>	<u>RECOMMENDED</u>	<u>ACCEPTABLE</u>
<i>Ret. to Death</i>				
Travel Budget	JOHN	\$8,000	\$8,000	\$8,000
<i>64 to 64</i>				
Boat	JOHN	\$15,000	\$15,000	\$7,000
House repairs	JOHN	\$3,000	\$3,000	\$3,000
Outdoor Kitchen/Backyard	JOHN	\$4,200	\$4,200	\$4,200
<i>65 to 65</i>				
New Washer and Dryer	JOHN	\$2,000	\$2,000	\$2,000
<i>67 to 67</i>				
Purchase Car	JOHN	\$45,000	\$45,000	\$45,000
<i>68 to 68</i>				
Trips to Italy (additional costs)	JOHN	\$4,000	\$4,000	\$4,000
<i>69 to 69</i>				
Move and Downsize	JOHN	\$40,000	\$40,000	\$40,000

## Retirement Income

	<u>OWNER</u>	<u>IDEAL</u>	<u>RECOMMENDED</u>	<u>ACCEPTABLE</u>
<i>Ret. to End</i>				
Retirement Income Need	JOHN	\$100,000	\$74,000	\$50,000



## Social Security Income

	<u>OWNER</u>	<u>IDEAL</u>	<u>RECOMMENDED</u>	<u>ACCEPTABLE</u>
<i>62 to Death</i>				
Social Security (Jane)	JANE	\$12,000	\$12,000	\$12,000
<i>63 to Death</i>				
Social Security (John)	JOHN	\$21,000	\$21,000	\$21,000

## Other Retirement Income

	<u>OWNER</u>	<u>IDEAL</u>	<u>RECOMMENDED</u>	<u>ACCEPTABLE</u>
<i>At Death</i>				
Jane's Life Insurance	JANE	\$150,000	\$150,000	\$150,000
John's Life Insurance	JOHN	\$160,806	\$160,806	\$160,806

## Education

None

## Tax Assumptions †

	<u>IDEAL</u>	<u>RECOMMENDED</u>	<u>ACCEPTABLE</u>
<b>Filing State</b>	OK	OK	OK
<b>Filing Status</b>	Joint	Joint	Joint
<b>Tax Method</b>	Dynamic	Dynamic	Dynamic
<b>Turnover Rate</b>	20.00%	20.00%	20.00%
<b>% Long-term Cap. Gains</b>	80.00%	80.00%	80.00%
<b>Federal Income Tax</b>	0.00 - 35.00%	0.00 - 35.00%	0.00 - 35.00%
<b>Federal Cap. Gains Tax</b>	0.00 - 15.00%	0.00 - 15.00%	0.00 - 15.00%
<b>State Income Tax</b>	0.00 - 5.50%	0.00 - 5.50%	0.00 - 5.50%
<b>State Cap. Gains Tax</b>	0.00 - 5.50%	0.00 - 5.50%	0.00 - 5.50%
<b>Local Tax</b>	0.00%	0.00%	0.00%

† Definitions of terms such as Federal Income Tax, Federal Cap. Gains Tax and the like are included in Appendix II, at the end of this document.

# Allocation Summary (Detail)

## Ideal

Age: Now      Name: *Balanced*      Tax Status: All Accounts      \*Risk: 11.56%      \*\*Return: 8.21%



## Recommended

Age: Now      Name: *Balanced*      Tax Status: All Accounts      \*Risk: 11.56%      \*\*Return: 8.21%



## Acceptable

Age: Now      Name: *Balanced*      Tax Status: All Accounts      \*Risk: 11.56%      \*\*Return: 8.21%

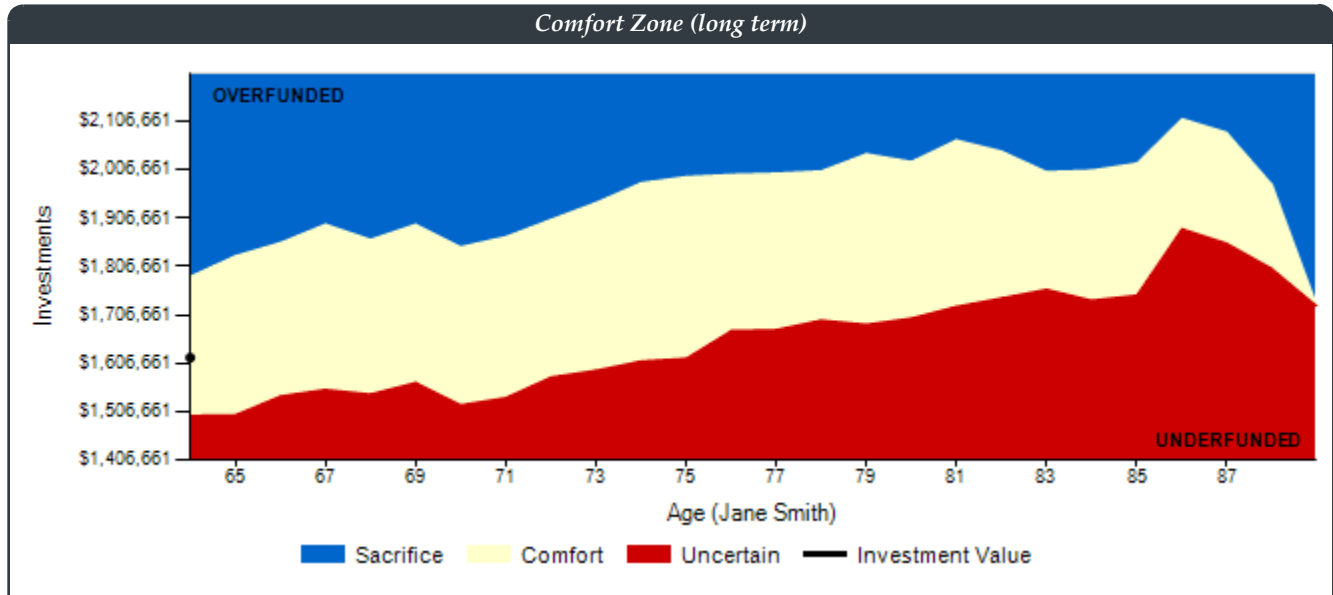


\* Risk is based on the standard deviation of individual asset classes and the correlations between them.  
 \*\* Return is an estimated geometric median based on a weighted arithmetic mean and standard deviation.  
 International investing involves additional risks such as foreign currency fluctuations, differing financial accounting standards, and possible political and economic instability. Mid and Small cap investing generally involves greater risk and volatility. In a rising interest rate environment, the value of fixed-income securities typically declines.  
 Hedge funds and other alternative investments may involve additional risks, may not be suitable for all investors, may involve complex tax structures and delays in tax reporting, are not subject to the same level of regulation as mutual funds and often charge high fees.  
 Standard deviation is a risk statistic used to measure the amount of volatility of the return observations around the portfolio's average return.  
 Past performance is not an indication of future results.  
 See Appendix I - Table of Asset Classes, Indexes and Definitions.  
 Source: CRSP®, Center for Research in Security Prices. Graduate School of Business, The University of Chicago. Used with permission. All rights reserved. crsp.uchicago.edu

# Wealthcare Recommendation Summary

results shown in Actual Dollars

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



**Recommended Goal Package (Recommended)**

<b>Retirement Age</b>	
John	Retired
Jane	Retired
<b>Retirement Spending</b>	
John	\$74,000
<b>Other Goals</b>	
Boat	\$15,000
House repairs	\$3,000
Move and Downsize	\$40,000
New Washer and Dryer	\$2,000
Outdoor Kitchen/Backyard	\$4,200
Purchase Car	\$45,000
Travel Budget	\$8,000
Trips to Italy (additional costs)	\$4,000
<b>Target End Value</b>	
Today's Dollars	\$800,000
Actual Dollars	\$1,725,273
<b>Default Inflation Rate</b>	
	3%
<b>Investment Adjustment</b>	
	-1.230%
<b>Portfolio</b>	
All Accounts	BALANCED 60% EQUITIES
<b>Median Return</b>	
	8.16%
<b>Risk</b>	
Std. Deviation*	11.46%
Downside (95%-tile)**	-9.08%
*Standard deviation is a risk statistic used to measure the volatility of return observations around the portfolio's average return.	
**Downside represents the 1-year 95th percentile return. 95% of all 1-year returns simulated are better than this return and 5% are worse.	

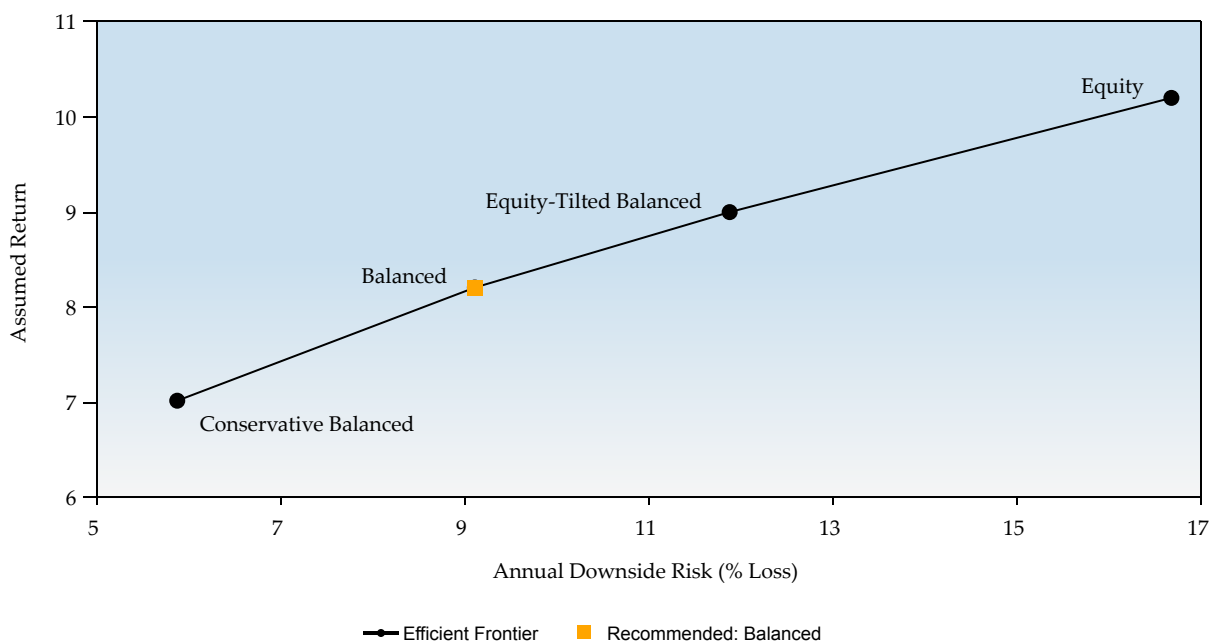
**Chance of Falling Outside of the Comfort Zone**

<u>NEXT</u>	<u>SACRIFICE</u>	<u>CHANCE</u>	<u>UNCERTAIN</u>	<u>CHANCE</u>	<u>OUTSIDE</u>
	<u>(OVERFUND</u>		<u>(UNDERFUN</u>		
	<u>ED ABOVE)</u>		<u>DED BELOW)</u>		
1 Year	\$1,828,775	21.4%	\$1,499,673	16.8%	38.2%
3 Years	\$1,894,382	41.1%	\$1,552,285	20.7%	61.8%
5 Years	\$1,893,880	52.7%	\$1,566,840	21.4%	74.1%

See Common Terms and Definitions in Appendix II at the end of this report for more information about the Wealthcare Analysis.

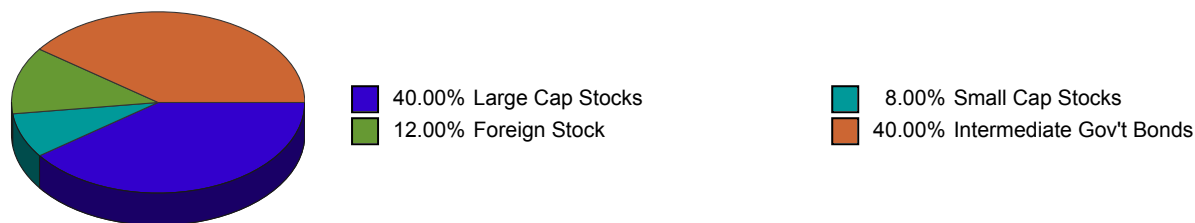
# Wealthcare Allocation Summary (Detail)

Risk vs Return Chart



Annual Downside Risk represents the 1-year 95th percentile return. 95% of all 1-year returns simulated are better than this return and 5% are worse.

Age: Now      Name: *Balanced*      Tax Status: All Accounts      \*Risk: 11.56%      \*\*Return: 8.21%



\* Risk is based on the standard deviation of individual asset classes and the correlations between them.

\*\* Return is an estimated geometric median based on a weighted arithmetic mean and standard deviation.

International investing involves additional risks such as foreign currency fluctuations, differing financial accounting standards, and possible political and economic instability. Mid and Small cap investing generally involves greater risk and volatility. In a rising interest rate environment, the value of fixed-income securities typically declines.

Hedge funds and other alternative investments may involve additional risks, may not be suitable for all investors, may involve complex tax structures and delays in tax reporting, are not subject to the same level of regulation as mutual funds and often charge high fees.

Standard deviation is a risk statistic used to measure the amount of volatility of the return observations around the portfolio's average return.

Past performance is not an indication of future results.

See Appendix I - Table of Asset Classes, Indexes and Definitions.

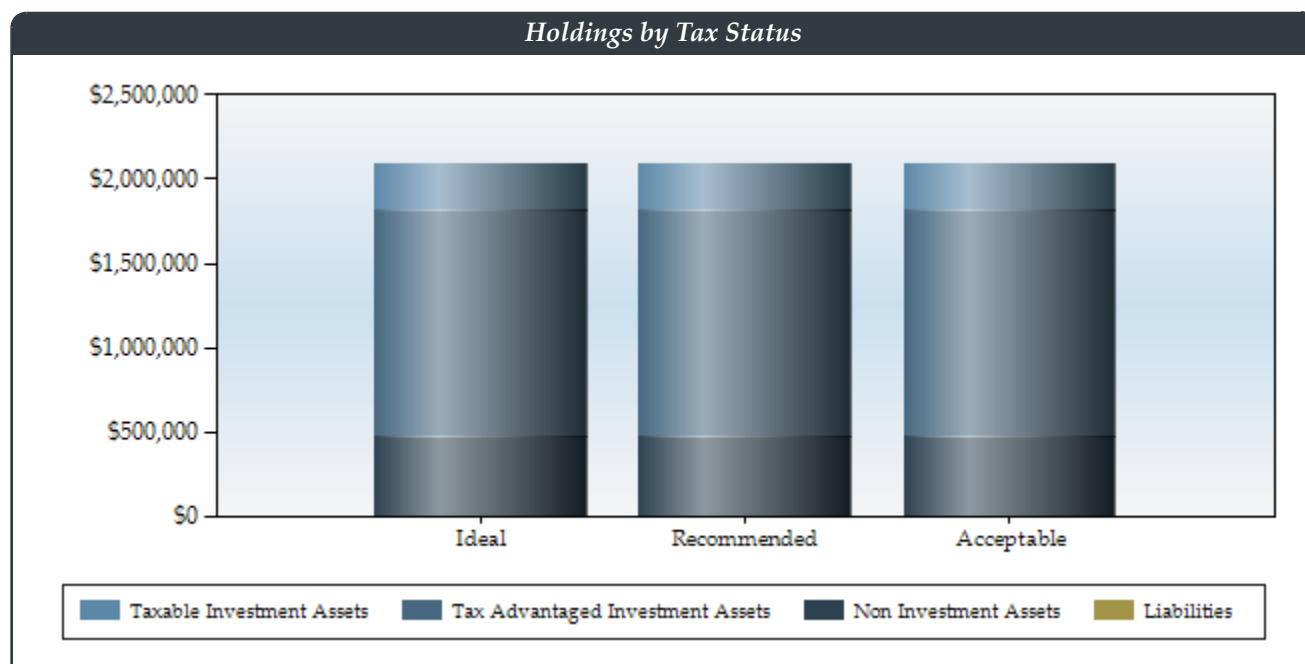
Source: CRSP®, Center for Research in Security Prices. Graduate School of Business, The University of Chicago. Used with permission. All rights reserved. crsp.uchicago.edu

## Summary

By implementing this allocation strategy along with your recommended goals, you should have a sufficient confidence level in exceeding your most important goals with risks of changes being manageable if you and your advisor regularly monitor your progress throughout your life.

# Detailed Holdings Comparison

	<u>IDEAL</u>	<u>RECOMMENDED</u>	<u>ACCEPTABLE</u>
<b>Investment Assets</b>	<b>\$1,618,332</b>	<b>\$1,618,332</b>	<b>\$1,618,332</b>
<i>Taxable</i>	<b>\$274,758</b>	<b>\$274,758</b>	<b>\$274,758</b>
Taxable	\$274,758	\$274,758	\$274,758
<i>Tax Deferred</i>	<b>\$1,343,574</b>	<b>\$1,343,574</b>	<b>\$1,343,574</b>
Tax Deferred	\$1,343,574	\$1,343,574	\$1,343,574
<b>Non Investment Assets</b>	<b>\$467,000</b>	<b>\$467,000</b>	<b>\$467,000</b>
Autos	\$52,000	\$52,000	\$52,000
Furniture	\$25,000	\$25,000	\$25,000
House	\$375,000	\$375,000	\$375,000
Jewelry	\$15,000	\$15,000	\$15,000
<b>Net Worth</b>	<b>\$2,085,332</b>	<b>\$2,085,332</b>	<b>\$2,085,332</b>



# Appendix I - Table of Asset Classes, Indexes and Definitions

NOTE: Indices are unmanaged and a direct investment may not be available for any specific index. Risk and return characteristics in this appendix were based on the available historical data for each asset class or on proxies, as noted in the asset class description, where such historical data was limited or unavailable.

Asset Class	Index (for correlations)	Risk	Return	Qualified Dividend
Alternative Assets	No Viable Index - Considered Unpredictable	37.03%	4.33%	10.00%
Alternative Assets represents a mixed bag of non-traditional investments which have a limited track record and uncertain volatility. Investments within this class include options, hedge funds, private equity, venture capital, managed futures, leveraged buyouts and many more. These investments may not be suitable for all investors, may involve complex tax structures and delays in tax reporting, are not subject to the same level of regulations as mutual funds and often charge high fees. As a proxy, in simulations where this asset class represented part of a portfolio, a return assumption matching the 3 month T-Bill is used with risk characteristics of the Russell 2000® Index multiplied by a factor of 1.4.				
Cash & Equivalents (90 Day T-Bill)	T-Bill - 3 Month Yield	3.40%	4.27%	0.00%
This index is designed to represent the performance of an unmanaged portfolio of 90-day Treasury bills. Being short term and U.S. guaranteed, the index carries little currency or little interest rate risk and represents extremely safe investments.				
Concentrated Large Cap	MSCI Emerging Markets	55.53%	12.50%	95.00%
A risk factor multiplier of 3 is applied to the risk characteristics of the MSCI Emerging Markets Index to reflect the potential impact of the additional volatility when the portfolio is undiversified.				
Concentrated Small Cap	MSCI Emerging Markets	84.24%	15.91%	95.00%
A risk factor multiplier of 3 is applied to the risk characteristics of the MSCI Emerging Markets Index to reflect the potential impact of the additional volatility when the portfolio is undiversified.				
Emerging Markets	MSCI Emerging Markets	30.95%	16.35%	95.00%
MSCI Emerging Markets Index is designed to represent an unmanaged portfolio of foreign stocks of less developed countries that are open to foreign investment by institutional investors. Investments in this class are subject to not only stock market volatility and currency risks, but also potentially carry higher than average risks of liquidity and political uncertainty.				
Hedge Funds	Mount Lucas Management Index	28.91%	5.50%	0.00%
Hedge Funds represent a class of investments intended to achieve a targeted rate of return without regard to the performance of the overall market. These investments utilize aggressive strategies such as short selling, leveraging, swaps, arbitrage and the like in an attempt to achieve the desired various risk and return objectives. These investments generally have little transparency, limited liquidity and their characteristics are highly uncertain. These investments may not be suitable for all investors, may involve complex tax structures and delays in tax reporting, are not subject to the same level of regulation as mutual funds and often charge high fees. As a proxy, in simulations where this asset class represented part of a portfolio, a return assumption matching the 3 month T-Bill plus 100 basis points is used with risk characteristics of the Mount Lucas Management Index.				
High Yield Bonds	Barclays High Yield Composite Bond Index	10.98%	7.24%	0.00%
U.S. High Yield Bonds are designed to represent an unmanaged portfolio of fixed income investments of low credit quality. Only U.S. dollar denominated bonds are included but may include issues that are in default, distressed, and may include zero coupon bonds or new issues.				
International Bonds	Citigroup Non-US World Gov't Bonds	12.48%	6.08%	0.00%
This index is designed to represent the market-capitalization weighted performance of an unmanaged portfolio of fixed-rate sovereign debt of foreign issuers. The securities in this index are issued in the domestic market in the local currency and therefore have both interest rate risk and currency risk. Only issues with at least a one-year maturity are included.				
International Stocks	MSCI EAFE Equity Index	24.06%	12.50%	95.00%
International Stocks are designed to represent ownership in stocks of developed foreign countries. The unmanaged index is made of developed markets and is designed to weight world equity markets by market cap excluding U.S. Stocks. Stocks in these markets not only carry the risk of stock market volatility but are also subject to currency risks.				
Intermediate Government Bonds (7-10 Year)	CRSP 5 Year Bond	6.68%	5.67%	0.00%
Intermediate U.S. Government Bonds are designed to represent the total return performance of an unmanaged portfolio intermediate government fixed-rate debt issues and is based on a blend of 60% five year and 40% twenty year bonds. Investments in this class have a low credit risk and are moderately sensitive to interest rate risk.				

Asset Class	Index (for correlations)	Risk	Return	Qualified Dividend
Intermediate Gov't/ Corp Bonds	Barclays Aggregate Bond	5.48%	5.57%	0.00%
U.S. Government/Corporate Bonds are designed to represent the total return performance of an unmanaged portfolio of government and investment-grade corporate fixed-rate debt issues of moderate duration. Investments in this class have a low credit risk but are sensitive to interest rate risk.				
Intermediate Municipal Bonds	Barclays Munis 5 - Year	5.20%	4.35%	0.00%
The Intermediate Municipal Bond Index is designed to represent the performance measured in total return of an unmanaged portfolio of investment grade municipal bonds over a moderate duration and providing reasonable credit quality and liquidity.				
Large Cap Stocks, Large Cap Diversified	CRSP 1-2	18.51%	12.50%	95.00%
This Index represents the top two deciles of the CRSP domestic stock universe. It is weighted by market cap and therefore closely correlates to other large cap market indices. Stocks in this index generally have high to moderate liquidity, and are generally sensitive to both economic sector and industry group performance.				
Large Cap Growth	Russell 1000 Growth®	18.51%	11.50%	95.00%
Large Cap Growth is designed to represent the performance of large cap growth stocks as measured by the Russell 1000 Growth® Index. Stocks in this unmanaged cap. weighted index generally have high to moderate liquidity and carry higher than average price to book ratios, but are generally sensitive to both economic sector and industry group performance.				
Large Cap Value	Russell 1000 Value®	20.33%	13.50%	95.00%
Large Cap Value is designed to represent the performance of large cap value stocks as measured by the Russell 1000 Value® Index. Stocks in this unmanaged cap. weighted index generally have high to moderate liquidity and have lower than average price to book ratios, but are generally sensitive to both economic sector and industry group performance.				
Long Term Government Bonds	CRSP 20 Year Bond	7.48%	5.82%	0.00%
Long Term Government Bonds are designed to represent the total return performance of an unmanaged portfolio of long term government fixed-rate debt issues. Investments in this class have a low credit risk but are sensitive to interest rate risk.				
Long Term Government/ Corporate Bonds	Barclays Long Gov't/Credit	8.90%	5.99%	0.00%
Long Term Government/Corporate Bonds are designed to represent the total return performance of an unmanaged portfolio of government and investment-grade corporate fixed-rate debt issues of longer duration (ten or more years). Investments in this class have a low credit risk but are sensitive to interest rate risk.				
Long Term Municipal Bonds	Barclays Long Municipal Bond Index	7.47%	4.48%	0.00%
The Long Term Municipal Bond Index is designed to represent the performance measured in total return of an unmanaged portfolio of investment grade municipal bonds over a long duration and providing reasonable credit quality and liquidity and high sensitivity to interest rate risk.				
Managed Futures	Mount Lucas Management Index	28.91%	5.50%	0.00%
Managed Futures represents investments in futures contracts trading in real assets and commodities (precious metals, pork bellies, oil) and financial assets (currencies and securities indices). Investments in this class are uncertain and sensitive to their economic sector as well as more global influences. As a proxy, in simulations where this asset class represented part of a portfolio, a return assumption matching the 3 month T-Bill plus 100 basis points is used with risk characteristics of the Mount Lucas Management Index.				
Micro Cap Stocks	CRSP 9-10	37.03%	17.17%	95.00%
The Micro Cap Stocks index is designed to represent the performance of an unmanaged portfolio of stocks with \$30 million to \$300 million capitalization. Stocks in this index are extremely sensitive to their economic sector and industry performance and tend to be quite volatile.				
Mid-Cap Stocks, Mid-Cap Diversified	CRSP 3-5	23.19%	15.03%	95.00%
The Mid-Cap Stocks index is designed to represent the performance of an unmanaged portfolio of stocks that are smaller than large cap stocks yet are larger than small cap stocks. Unlike some small cap stocks, stocks in this index provide adequate liquidity and are sensitive to their economic sector and industry performance yet may be less efficiently priced than larger, more broadly-held large cap stocks.				
Mid-Cap Growth	Russell Midcap Growth®	23.19%	14.03%	95.00%
Mid-Cap Growth is designed to represent the performance of an unmanaged portfolio of mid-cap growth stocks as measured by the Russell Midcap Growth® Index. Stocks in this index generally have adequate liquidity and carry higher than average price to book ratios, and are generally sensitive to both economic sector and industry group performance. Stocks in this index may be less efficiently priced than larger, more broadly-held large cap stocks.				



Asset Class	Index (for correlations)	Risk	Return	Qualified Dividend
Mid-Cap Value	Russell Midcap Value®	26.14%	16.03%	95.00%
Mid-Cap Value is designed to represent the performance of an unmanaged portfolio of mid-cap value stocks as measured by the Russell Midcap Value® Index. Stocks in this index generally have adequate liquidity and carry lower than average price to book ratios, and are generally sensitive to both economic sector and industry group performance. Stocks in this index may be less efficiently priced than larger, more broadly-held large cap stocks.				
Municipal Bonds (7-10 Year)	Barclays Munis 10 - Year	6.68%	4.41%	0.00%
The Ten Year Municipal Bonds Index is designed to represent the performance measured in total return of an unmanaged portfolio of investment grade municipal bonds over a ten year duration while providing reasonable credit quality and liquidity but more interest rate risk than an unmanaged portfolio of short-term duration municipal bonds.				
Other/Unclassified	MSCI Emerging Markets	37.03%	4.33%	10.00%
This class is intended to incorporate those items which do not fall within any of the other classifications used in this system. As a proxy, in simulations where a portion of a portfolio's asset class composition was unknown, for the unknown portion, a return assumption matching the 3 month T-Bill is used with risk characteristics of the MSCI Emerging Markets Index multiplied by a factor of 1.4.				
Real Estate/REITs	NAREIT REIT: All	14.51%	8.02%	50.00%
Real Estate Investment Trusts (REITs) are designed to represent the total return performance of an unmanaged portfolio allocated entirely to Real Estate Investment Trusts. Both equity and mortgage REITs are included in the index. REITs carry both income and the potential for capital appreciation and depending on their specific structure are subject to varying degrees of interest rate risks and may be subject to specific geographic regional real property risks (earthquakes, floods, wildfires, hurricanes) which may disrupt any income returns.				
Short Term Corporate Bonds	Merrill Lynch 1-3 Year Corporate	4.01%	5.05%	0.00%
Short Term Corporate Bonds are designed to represent the total return performance of an unmanaged portfolio of short term (one to three years) investment grade corporate fixed-rate debt issues, through a blend of 50% T-Bill and 50% 5 Year Gov't Bonds. Investments in this class have a low credit risk and are moderately sensitive to interest rate risk.				
Short Term Government Bonds	Merrill Lynch 1-3 Year Gov't	3.85%	4.92%	0.00%
Short Term Government Bonds are designed to represent the total return performance of an unmanaged portfolio of short term (one to three years) government fixed-rate debt issues, through a blend of 50% T-Bill and 50% 5 year gov't bonds. Investments in this class have a low credit risk and are moderately sensitive to interest rate risk.				
Short Term Municipal Bonds	CRSP 2 Year Bond	3.85%	3.78%	0.00%
The Short Term Municipal Bond Index is designed to represent the performance measured in total return of an unmanaged portfolio of investment grade municipal bonds over a period of one to three years and providing reasonable credit quality and liquidity with moderate interest rate risk.				
Small Cap Stocks, Small Cap Diversified	CRSP 6-8	28.08%	15.91%	95.00%
Small Cap Stocks are represented by deciles 6-8 of the CRSP domestic stock universe. Stocks in this index generally have less liquidity than large cap stocks and can be somewhat less sensitive to economic sector and industry group performance, but generally carry higher volatility.				
Small Cap Growth	Russell 2000 Growth®	28.08%	14.91%	95.00%
Small Cap Growth is designed to represent the performance of an unmanaged portfolio of small cap growth stocks as measured by the cap weighted Russell 2000 Growth® Index. Stocks in this index generally have less liquidity than large cap stocks and carry higher than average price to book ratios. Stocks in this index may be somewhat less sensitive to both economic sector and industry group performance than large cap stocks but generally carry higher volatility.				
Small Cap Value	Russell 2000 Value®	30.18%	16.91%	95.00%
Small Cap Value is designed to represent the performance of an unmanaged portfolio of small cap value stocks as measured by the cap weighted Russell 2000 Value® Index. Stocks in this index generally have less liquidity than large cap stocks and have lower than average price to book ratios. Stocks in this index may be somewhat less sensitive to both economic sector and industry group performance than large cap stocks, but generally carry higher volatility.				
Tax-Free Money Market	Tax-Free Money Market Average	3.40%	3.21%	0.00%
Tax Free Money Market is designed to represent the performance of an unmanaged equal weighted portfolio municipal money market funds. Being short term and high credit quality, the index carries little currency or little interest rate risk and represents fairly safe investments.				

Asset Class	Index (for correlations)	Risk	Return	Qualified Dividend
TIPS	Barclays Capital TIPS Index	8.90%	5.93%	0.00%
TIPS are designed to track the performance of Treasury Inflation Protected Securities. These securities are adjusted in terms of principal based on inflation and deflation and pay interest twice annually based on the adjusted principal value. The CRSP 20 year Bond Index is used for the correlation index for periods prior to the availability of TIPS.				
Total Domestic Equity	CRSP Total Market	19.30%	13.21%	95.00%
This index represents the performance of an unmanaged portfolio of the total market of publicly traded domestic stocks as measured by the CRSP Total Market Index. Stocks in this index have a broad range of liquidity, are somewhat sensitive to economic sector and industry group performance and may range widely in the efficiency of their pricing.				

## Appendix II - Common Terms and Definitions

### **Comfort Level**

This reflects the percentage of simulations run against an investor's financial strategies in which the investor exceeded his or her goals.

### **Comfort Zone**

The Comfort Zone encompasses Comfort Levels from 75 to 90.

### **CRSP®**

Center for Research in Security Prices. Graduate School of Business, The University of Chicago. Used with permission. All rights reserved. [crsp.uchicago.edu](http://crsp.uchicago.edu)

### **Custom**

Custom refers to an advisor constructed allocation other than the model portfolios developed by Financeware, Inc., d/b/a Wealthcare Capital Management (WCM).

### **Default Inflation Rate**

This rate is fixed in the simulation and will govern the growth rate for all cash flows for which the user selects to apply the default rate. This rate is also used to calculate the future value of the estate goal. The user may select a different inflation rate - ranging from zero to fifteen percent - for each cash flow (contribution, withdrawal, retirement income).

### **Downside Risk**

This return represents the one year return at the 95th percentile of all returns. This return represents very poor market returns as 95% of all simulated returns are better than this return and 5% are worse.

### **Effective Tax Rate**

This tax rate is applied during retirement to outside sources of income designated as "gross" and distributions from tax deferred accounts. This rate is based on the investor's income, current filing status exemptions and estimates of income tax deductions. The actual tax rates applied to a client may vary depending on these and other variables. Taxes modeled may not represent the actual tax liability owed to the IRS.

### **Estimated Geometric Median**

A projected compound return of the portfolio or asset class over a number of years chosen so that half of all such projected returns (for this portfolio or asset class) would be higher than this return and half would be lower.

### **Federal Capital Gains Tax**

This tax rate is the investor's effective long term federal capital gains tax rate. The federal capital gains tax rate is based primarily on the investor's income and filing status both in pre-retirement and during retirement. In the event the investor resides in a state with a state capital gains tax rate, the federal capital gains tax rate will be reduced in accordance with current tax rules. This tax rate is applied to all realized long term capital gains in the investor's taxable portfolio. The actual tax rates applied to a client may vary depending on these and other variables. Taxes modeled may not represent the actual tax liability owed to the IRS.

### **Federal Income Tax**

This tax rate represents the investor's effective top marginal tax rate adjusted downward to account for the deduction of state taxes from federal taxable income. The pre-retirement federal income tax rate is based primarily on the investor's income and filing status both in pre-retirement and during retirement. This tax rate is adjusted downward by the state income tax rate, if any, and is applied to taxable interest income, taxable portfolio yield, taxable dividends and realized short term capital gains in the investor's taxable portfolio. The actual tax rates applied to a client may vary depending on these and other variables. Taxes modeled may not represent the actual tax liability owed to the IRS.

### **Held Away Account**

Values designated as held away accounts refer to the value of accounts that are not managed by the advisor, but are included in the client's plan. Updating the value of such accounts is important to ensure the utility of the analysis.

### **Historical Audit**

This simulation method tests an investor's financial strategies against historical returns using rolling historical periods.

### **Inflation Adjustment**

The user may select an inflation rate to apply to cash flows on an annual basis. This rate may be used with cash outflows to reflect the loss of purchasing power of a given dollar amount over time or may illustrate the impact of a COLA or other similar adjustment on cash inflows.

### **Investment Adjustment**

The user may select both a portfolio adjustment and an advisor expense rate to apply to investment assets on an annual basis. When the portfolio adjustment is negative, this rate may reflect the fees associated with implementation or other fees. Advisor fees are always entered as negative, reflecting fees. When positive, the portfolio adjustment may reflect expected alpha or added value.

**Local Income Tax**

In the event the investor requires an additional tax, users may supply a local income tax rate that will be applied to taxable interest income, taxable portfolio yield, taxable dividends and realized taxable portfolio short term capital gains. This tax rate is fixed in the simulation. The actual tax rates applied to a client may vary depending on these and other variables. Taxes modeled may not represent the actual tax liability owed to the local taxing authority.

**Median Return**

This return represents the median simulated compounded return over the life of the plan based on the mean, standard deviation and correlation of the simulated asset classes. Half of the simulated compound returns are higher than this return and half of the simulated compound returns are less than this return.

**Monte Carlo Simulation**

This simulation method tests an investor's financial strategies against random scenarios of investment returns an investor might encounter during their lifetime based on the user's capital market assumption for each asset class or portfolio.

**% Long-term Cap. Gains**

This percentage is fixed in the simulation and is used by the analysis tool to identify the percentage of realized capital gains should taxed at the federal and state long term capital gains rates. If the % Long-term Cap. Gains rate is 50%, then 50% of the realized capital gains will be taxed at federal and state capital gains rates.

**Sacrifice Zone**

The sacrifice zone encompasses Comfort Levels above 90

**Simulation Method**

An investor's financial strategies may be analyzed using a variety of simulation methods. A simulation method describes what type of market data is used to reflect potential returns in each year analyzed the number of simulations performed.

**Standard Deviation**

A mathematical calculation that produces a number which measures the extent and frequency to which a series of investor returns varies from the average/mean of all returns. A higher number indicates a higher level of historical volatility and equates with greater risk.

**State Capital Gains Tax**

This tax rate represents the investor's long term state capital gains tax rate. The pre-retirement state capital gains tax rate is based primarily on the investor's income and filing status both in pre-retirement and during retirement. This tax rate is applied to all realized long term capital gains in the investor's taxable portfolio. The actual tax rates applied to a client may vary depending on these and other variables. Taxes modeled may not represent the actual tax liability owed to the state taxing authority.

**State Income Tax**

This tax rate represents the investor's top marginal state tax rate. The pre-retirement state income tax rate is based primarily on the investor's income and filing status both in pre-retirement and during retirement. This tax rate is applied to taxable interest income, taxable portfolio yield, taxable dividends and realized short term capital gains in the investor's taxable portfolio. The actual tax rates applied to a client may vary depending on these and other variables. Taxes modeled may not represent the actual tax liability owed to the state taxing authority.

**Turnover Rate**

This percentage is fixed in the simulation and is used by the analysis tool to identify realized capital gains and losses in the taxable portfolio. If the turnover rate is 100%, then the analysis tool will assume that 100% of the simulated capital gains or losses will be realized each year in the simulation.

**Uncertain Zone**

The uncertain zone encompasses Comfort Levels below 75.

**Wealth Simulator®**

This simulation method tests an investor's financial strategies against historical returns that have been placed in random order.

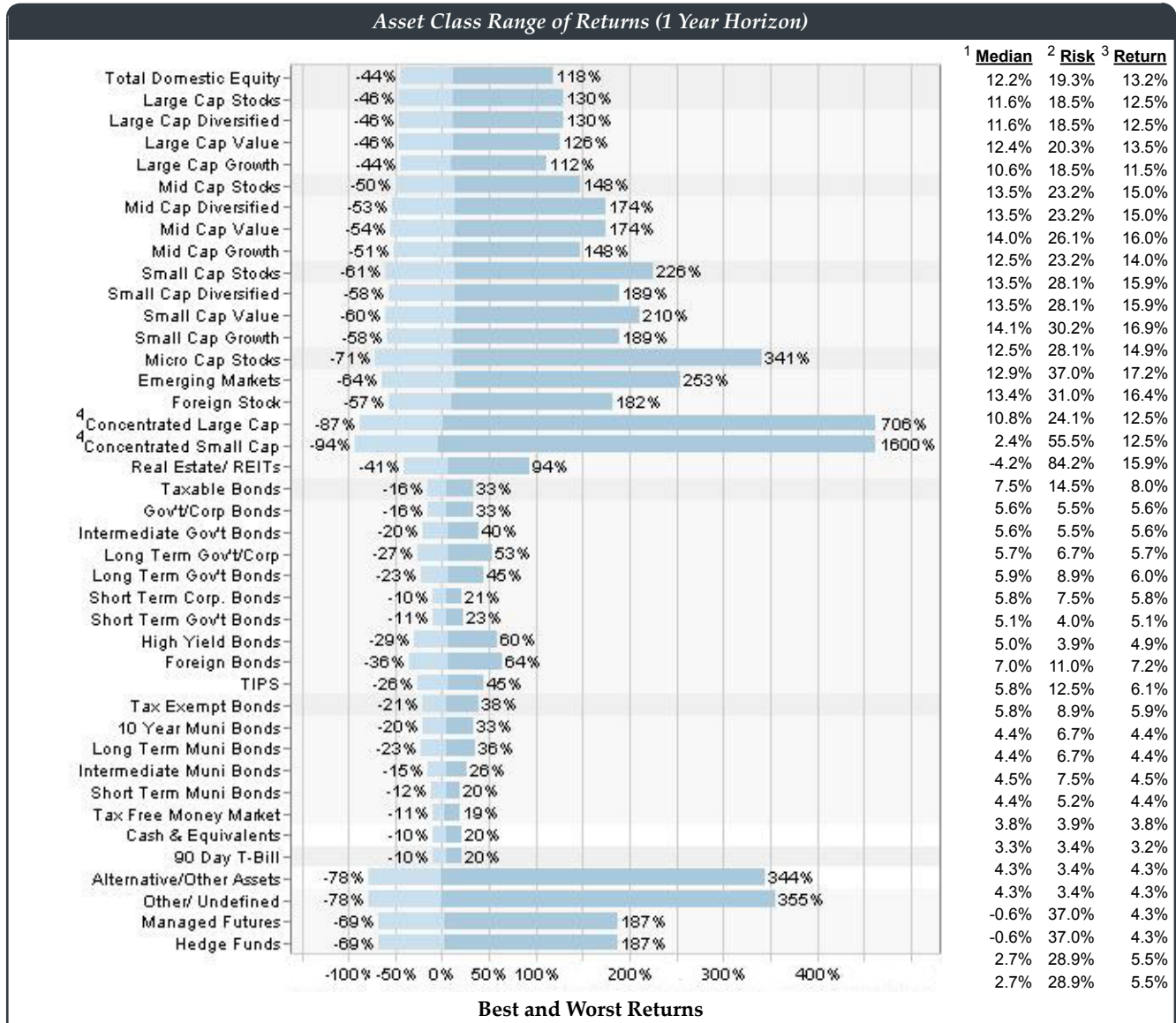
**Wealthcare Analysis**

The Wealthcare Analysis is not a projection of future portfolio values because future values are uncertain. If the current value of your portfolio(s) falls outside the comfort range, you may want to consider examining your investment risk or otherwise modify your goals. The upper range (sacrifice) represents portfolio values needed for greater than 90% confidence of exceeding your current goals. The lower range (uncertain) represents values needed for less than 75% confidence of exceeding your current goals. The unpredictability of future investment returns for your recommended allocation determines the range of values between sacrifice and uncertainty.

**Weighted Arithmetic Mean**

This is the weighted average of the arithmetic returns for a particular portfolio allocation, with the returns of each asset class given a weight proportional to its weight in the allocation.

# Appendix III - Range of Asset Class Returns (Monte Carlo)



**<sup>1</sup>Median**

See "Median Return" in "Appendix II – Common Terms and Definitions" above.

**<sup>2</sup>Risk**

The standard deviation of the asset class' annual return as input to the Monte Carlo simulation. See "Appendix II – Common Terms and Definitions" above for the definition of "standard deviation".

**<sup>3</sup>Return**

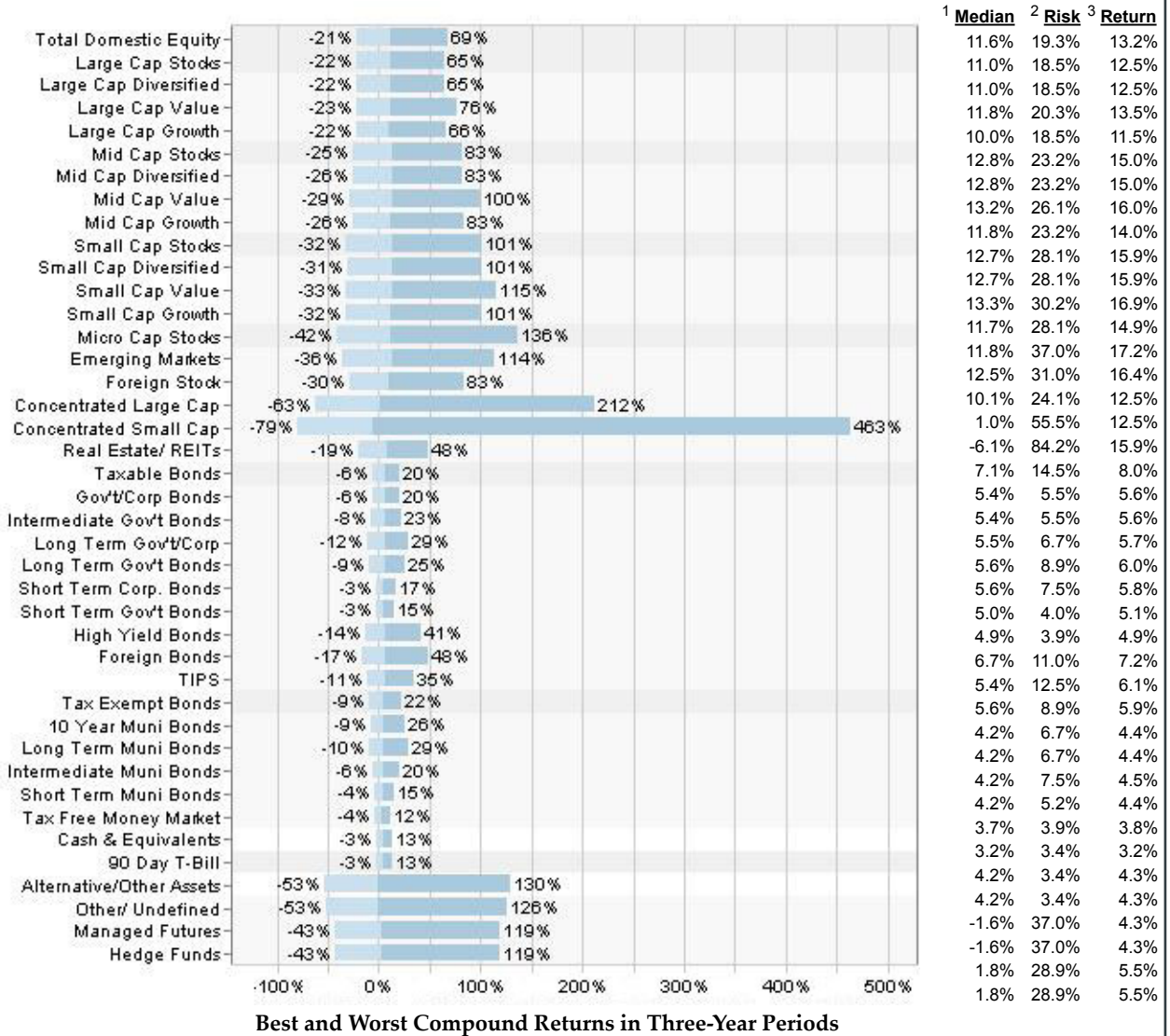
The arithmetic mean (i.e., average) of the asset class' annual return as input to the Monte Carlo simulation.

**<sup>4</sup>Best Returns for Concentrated Large and Small Cap**

The best return chart for the Concentrated Large and Small Cap asset classes have been truncated to improve overall clarity of the chart.

Important: The results shown are based on Monte Carlo simulations and do not reflect results using Historical Audit or Wealth Simulator®. See Appendix II for descriptions of the Historical Audit and Wealth Simulator®.

Asset Class Range of Returns (3 Year Horizon)



Best and Worst Compound Returns in Three-Year Periods

<sup>1</sup>Median

See "Median Return" in "Appendix II – Common Terms and Definitions" above.

<sup>2</sup>Risk

The standard deviation of the asset class' annual return as input to the Monte Carlo simulation. See "Appendix II – Common Terms and Definitions" above for the definition of "standard deviation".

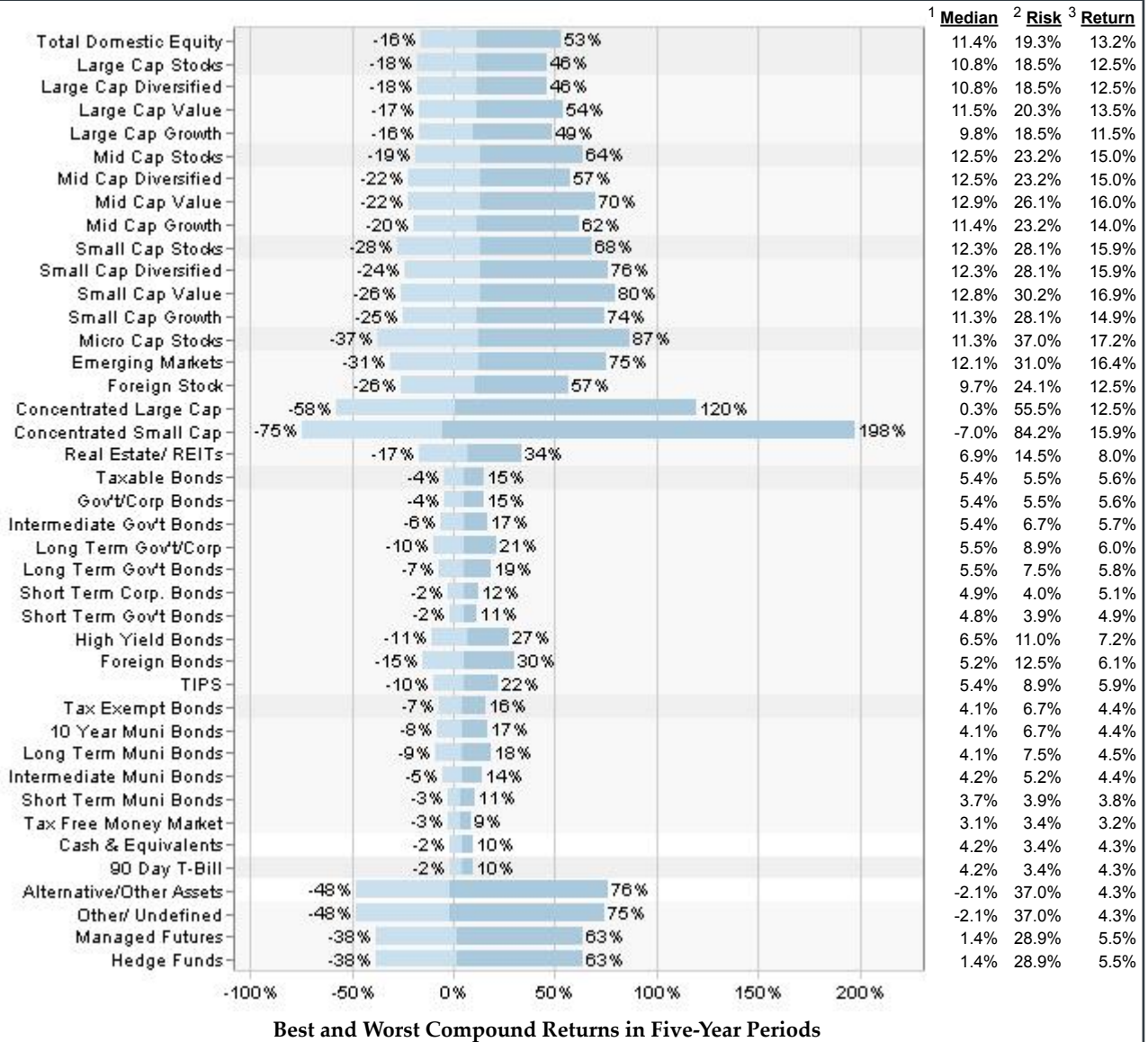
<sup>3</sup>Return

The arithmetic mean (i.e., average) of the asset class' annual return as input to the Monte Carlo simulation.

Important: The results shown are based on Monte Carlo simulations and do not reflect results using Historical Audit or Wealth Simulator®. See Appendix II for descriptions of the Historical Audit and Wealth Simulator®.



Asset Class Range of Returns (5 Year Horizon)



<sup>1</sup>Median

See "Median Return" in "Appendix II – Common Terms and Definitions" above.

<sup>2</sup>Risk

The standard deviation of the asset class' annual return as input to the Monte Carlo simulation. See "Appendix II – Common Terms and Definitions" above for the definition of "standard deviation".

<sup>3</sup>Return

The arithmetic mean (i.e., average) of the asset class' annual return as input to the Monte Carlo simulation.

Important: The results shown are based on Monte Carlo simulations and do not reflect results using Historical Audit or Wealth Simulator®. See Appendix II for descriptions of the Historical Audit and Wealth Simulator®.