**GOALS PLANNING SYSTEM** 

# Update Report

Prepared as of June 30, 2024 for the exclusive use of **Client 1 and Client 2** 

This is a Sample Goal Planning Analysis. It is intended to demonstrate the type of analysis Morgan Stanley can create for you. An actual Goal Planning Analysis would be based on your individual financial considerations, needs, objectives, and risk tolerance. It would therefore differ from this sample Goal Planning Analysis.

The material is designed solely for your individual use, is for informational purposes only and is not intended as an offer of solicitation with respect to the purchase or sale of any security. For more information about the Goal Planning Analysis, please refer to the "Important Disclosures" at the end of this Report.

Please refer to important information, disclosures and qualifications at the end of this material.

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## The Wealth Management Process

### Overview

Leveraging our vast resources—including intellectual capital, experience, and dedicated personal service—we can work with you to create a personalized wealth strategy. Then, over time, we can adapt it to changing circumstances, helping you to pursue your goals. Every individual's financial circumstances, needs and risk tolerances are different. Your Morgan Stanley Financial Advisor/Private Wealth Advisor ("Financial Advisor") has provided this Report to assist you in evaluating your financial goals as well as potential strategies to help you achieve those goals. This Report should be considered a working document that can assist you with this objective. This analysis is based on the information you provided to us, the assumptions you have asked us to make and the other assumptions indicated herein as of the date of the Report. It is not an official account statement. You should carefully review the information found in this Report and discuss any necessary changes with your Morgan Stanley Financial Advisor.

Your Financial Advisor has provided this Goal Planning Update Report (this "Report") to assist you in tracking your progress towards your goals established in your goal plan(s). Using the information in this Report, you can work together with your Financial Advisor to evaluate your progress and consider different courses of action if your current situation warrants adjustments to your financial strategy. You should review this Report carefully and inform your Financial Advisor of any changes that are required. As you review this Report, you can refer back to your goal plan(s) for more information. You may request a copy of your goal plan(s) from your Financial Advisor.

By providing you this Report, Morgan Stanley has no responsibility and is under no obligation to monitor your goals in the future unless expressly engaged by you to do so at that time.

The information associated with your goal plan(s) contained in this Report is from the latest plan adoption date.

Important: The projections or other information generated in this analysis 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 generated by a Monte Carlo analysis (including the Probability of Success) will var y with each use and over time because each portfolio simulation is randomly generated. See IMPORTANT DISCLOSURES at the end of this document for additional information, including explanations of assumptions and methodologies, key asset class risk considerations and a glossary. © 2024 Morgan Stanley Smith Barney LLC. Member SIPC.

Start a conversation to gain a thorough understanding of your needs, lifestyle and family- and your goals for the future.

### Advise

Discover

We work with you to develop portfolio allocation strategies to help you achieve and protect the outcomes you envision.



### Implement

Look across multiple accounts and products to help you implement solutions that are an appropriate fit for your strategy.



### Track Progress

We help you periodically track your progress and make adjustments as necessary.

### Morgan Stanley

# Plan Status

Retirement



Retirement age	
Client 1	<b>62</b> in 2045
Client 2	<b>62</b> in 2044

### Retirement spending goal

Period	Total annual spending
2044-2077	\$132,200
Adoption Date	April 06, 2021
Portfolio Value	\$769,754

Next Steps Request your Financial Advisor to review your plan with you.

### Plan Status: Likelihood of Achieving Your Goal

liabilities, to a benchmark of an average

is sufficiently funded.

retirement investor to determine if your plan

Total Goal Your plan status is based on your Probability of Success, which represents the likelihood of achieving your goals and objectives. We 88% simulate your plan thousands of times using varying market scenarios and the Probability of Success is the percentage of Target: 70 - 90% simulations in which you achieve your goals. **Essential Goal** 94% Target: 85% **Funding Status** Funding Status is a measure of progress on 108% how well your plan is funded. It compares your Funding Ratio, which is your current and future savings divided by your future

The above analysis is an estimate and does not guarantee that any future results, or goals will be achieved based on the Suggested Target Allocation selected for your Goal Planning Analysis. To see how different return assumptions impact your Probability of Success and plan status, see the Impact Analysis of Return Assumptions on Your Plan section in this Report. See IMPORTANT DISCLOSURES at the end of this document for additional information, including explanations of assumptions and methodologies, key asset class risk considerations and a glossary. For a full list of accounts included, risk profile, and asset allocation details, please see the Client Profile, Assumptions, and Goal Summary section in this Report.

108%

Target: 100%

# Assets and Net Cash Flow

### Retirement

Your portfolio is currently within the established Portfolio Target Zone.

Your Portfolio Target Zone represents the asset range required to achieve between a 70% and 90% Probability of Success of Achieving your goals.

Assets held away from Morgan Stanley were updated more than 3 months ago. Please review and confirm holdings with your Financial Advisor.

Planned Net Cash Flow for this quarter

\$7,237

Actual Net Cash Flow for this quarter\*

\$3,229



Actual Net Cash Flow\*

Asset Value Required Based on Your Plan

		Current Portfolio Value (\$)
Morgan Stanley Accounts	As of Jun. 30, 2024	539,382
Externally Aggregated Accounts	Last Updated Dec. 01, 2023	25,372
Manually Added Accounts	Last Updated Nov. 03, 2023	205,000
Portfolio Value		\$769,754
Note: For any year which the g fund goals for that specific ye	raph doesn't appear, there are ar.	e no assets required to

Period	Planned (\$)	Actual * (\$)	Difference (\$)
Januar v-March	7.237	3.229	(4.008)
April-June	7,237	3,229	(4,008)
July-September	7,237	-	-
October-December	7,237	-	-
TOTAL	\$28,948	\$6,459	(\$22,489)

\* Actual Net Cash Flow for accounts held at Morgan Stanley plus planned Net Cash Flow for externally added and manually added accounts.

Planned Net Cash Flow

1) Withdrawals to meet cash flow needs from tax qualified or tax deferred account assets have different, sometimes greater, tax implications than withdrawals from taxable accounts. Consult your tax and/or Legal Advisor before making withdrawal decisions.

See IMPORTANT DISCLOSURES at the end of this document for additional information, including explanations of assumptions and methodologies, key asset class risk considerations and a glossary. For a full list of accounts included, risk profile, and asset allocation details, please see the Client Profile, Assumptions, and Goal Summary section in this Report.

Adjusted

81%

Target: 70 - 90%

Plan

88%

# Potential Impact of Actual Net Cash Flow Activity

Retirement

Planned Net Cash Flow from January 01 - June 30, 2024

\$14,474

Actual Net Cash Flow from January 01 - June 30, 2024\*

\$6,459

Assumed decrease in savings based on actual net cash flow

55%



#### **Probability of Success**

Your current Likelihood of Success will decrease from **88%** to **81%** if you continue to save 55% less than planned throughout the plan.



Portfolio Target Zone illustrates the assets required to achieve **70%** - **90%** Probability of Success for your established goal plan. The graph to the right illustrates the impact to your Portfolio Target Zone based on continuing your actual net cash flow activity.



\* Actual Net Cash Flow for accounts held at Morgan Stanley plus planned Net Cash Flow for externally added and manually added accounts. The above analysis is an estimate and does not guarantee that any future results or goals will be achieved based on Suggested Target Allocation selected for your Goal Planning Analysis. See IMPORTANT DISCLOSURES at the end of this document for additional information, including explanations of assumptions and methodologies, key asset class risk considerations and a glossary. For a full list of accounts included, risk profile, and asset allocation details, please see the Client Profile, Assumptions, and Goal Summary section in this Report.

# Asset Allocation - Analysis



	Suggested Target	Current
Cash	0.6%	3.2%
Equities	78.5%	69.4%
Fixed Income Preferreds	& <b>14.9%</b>	20.7%
Alternatives	6.0%	6.7%



1) The Annualized Return Assumption is the geometric return of each annual return assumption over the length of the plan, where the annual return for each year is the sum of weighted return assumptions for the asset classes according to the identified asset allocation. These asset classes return assumptions and weights are used in this analysis to calculate your Probability of Success. Strategic return assumptions are applied for the first seven years of analysis and Secular return assumptions for the remaining years. A list of asset class return assumptions can be found in the Return Assumptions section of this Report. The annualized return assumption does not necessarily reflect costs that are used in the analysis nor all costs that you will incur when you implement your investment strategy. The return assumptions and hypothetical illustrations herein may be impacted after applying such costs, which may include investment advisory program fees up to a maximum of 2.0%, submanager fees, brokerage commissions, sales load or other expenses, which will depend on whether you choose a brokerage or an advisory relationship. Your actual asset allocation may change from the Suggested Target Allocation over time.

The above analysis is an estimate and does not guarantee that any future results, or goals will be achieved based on the Suggested Target Allocation selected for your Goal Planning Analysis. See IMPORTANT DISCLOSURES at the end of this document for additional information, including explanations of assumptions and methodologies, key asset class risk considerations and a glossary. For a full list of accounts included, risk profile, and asset allocation details, please see the Client Profile, Assumptions, and Goal Summary section in this Report.

Due to rounding, Asset Allocation totals may not add up to 100%.

### Asset Allocation – Detailed View

### Retirement

Asset Allocation: Suggested Target Vs. Current

	Suggested	Target	Current		Difference (Suggested Target Vs Current)		
Asset Class	Investment (\$)	% of Portfolio	Investment (\$)	% of Portfolio	Value (\$)	%	
Cash	\$4,772	0.6%	\$24,572	3.2%	(\$19,800)	(2.6%)	
Global Cash	4,772	0.6	24,572	3.2	(19,800)	(2.6)	
Equities	\$604,796	78.5%	\$535,137	69,4%	\$69,659	9.1%	
US Equities	238,316	30.9	281,323	36.4	(43,007)	(5.5)	
International Equities	114,001	14.8	92,811	12.1	21,190	2.7	
Emerging & Frontier Mkt	27,942	3.6	7,254	0.9	20,688	2.7	
Global Equities Other	224,537	29.2	153,750	20.0	70,787	9.2	
Fixed Income & Preferreds	\$114,308	14.9%	\$158,928	20.7%	(\$44,620)	(5.8%)	
Short Term Fixed Income	23,093	3.0	8,294	1.1	14,799	1.9	
Inflation Linked Securities	19,398	2.5	3,186	0.4	16,212	2.1	
Preferred Securities	19,321	2.5	23,871	3.1	(4,550)	(0.6)	
High Yield Fixed Income	32,792	4.3	10,918	1.4	21,874	2.9	
Bank Loans	19,706	2.6	18,299	2.4	1,407	0.2	
Global Fixed Income Other	0	0.0	94,361	12.3	(94,361)	(12.3)	
Alternatives	\$45,877	6.0%	\$51,117	6.7%	(\$5,240)	(0.7%)	
Real Assets	43,722	5.7	49,754	6.5	(6,032)	(0.8)	
Absolute Return Assets	1,001	0.1	578	0.1	423	0.0	
Equity Hedge Assets	1,155	0.2	786	0.1	369	0.1	
TOTAL	\$769,753	100%	\$769,754	100%			

Due to rounding, Asset Allocation totals may not add up to 100%.

Your actual asset allocation may change from the Suggested Target Allocation over time.

See IMPORTANT DISCLOSURES at the end of this document for additional information, including explanations of assumptions and methodologies.

# Net Cash Flows

Retirement

**Planned Inflows** 

\$29,028

**Planned Outflows** 

\$80

Planned Net Cash Flow from January 01 - June 30, 2024

\$14,474

Actual Net Cash Flow from January 01 - June 30, 2024  $^{\rm 3}$ 

\$6,459

Planned Inflows		Planned Outflows	
Savings (Contributions) by Tax Category	Amount (\$)	Taxes <sup>2</sup>	Amount (\$)
Tax Deferred <sup>1</sup>	\$29,028	ESTIMATED TOTAL TAXES	\$80
TOTAL SAVINGS	\$29,028	Outflows	Amount (\$)
Inflows	Amount (\$)	TOTAL PLANNED OUTFLOWS	\$80
TOTAL PLANNED INFLOWS	\$29,028		
Planned Net Cash Flow			
PLANNED NET CASH FLOW			\$28,948
Planned VS. Actual Net Cash Flow			
Planned Net Cash Flow January 01 - June 30, 2024	Amount (\$)	Actual Net Cash Flow January 01 - June 30, 2024 <sup>3</sup>	Amount (\$)
Held at Morgan Stanley	8,018	Held at Morgan Stanley	3
Externally Held (Aggregated for you)	0	Externally Held (Aggregated for you)	0
Not Tracked	6,456	Not Tracked	6,456
PLANNED NET CASH FLOW	\$14,474	ACTUAL NET CASH FLOW	\$6.459

1) Includes both employee and employer contributions.

2) Please evaluate this number to ensure that it is a valid estimate of your taxes for this year.

3) Actual Net Cash Flow for accounts held at Morgan Stanley plus planned Net Cash Flow for externally added and manually added accounts.

See IMPORTANT DISCLOSURES at the end of this document for additional information, including explanations of assumptions and methodologies, key asset class risk considerations and a glossary. For a full list of accounts included, risk profile, and asset allocation details, please see the Client Profile, Assumptions, and Goal Summary section in this Report.

Retirement

### Personal Information and Goal Information

Personal Information		Client	Details
Date of Birth (Age)		Client 1	04/12/1983 (41)
		Client 2	06/17/1982 (42)
Current State of Residence			New York
Employment Status		Client 1	Self Employed
		Client 2	Employed
	Effective Income Tax Rate	Joint	32.0%
Pre-Retirement Tax Rates	Capital Gains Tax Rate (Long-term)	Joint	15.0%
	Capital Gains Tax Rate (Short-term)	Joint	32.0%
	Effective Income Tax Rate	Joint	22.0%
Post-Retirement Tax Rates	Capital Gains Tax Rate (Long-term)	Joint	15.0%
	Capital Gains Tax Rate (Short-term)	Joint	22.0%
Other Assumptions			Details
Inflation Rate			2.36%
Portfolio Fees			1.00%

1) The retirement spending amount is assumed to be 60% of the total annual spending beginning in 2073 See IMPORTANT DISCLOSURES at the end of this document for additional information, including explanations of assumptions and methodologies.

Retirement

### Personal Information and Goal Information

Goals & Objectives				Client		Details
Desired Retirement Age (Year)				Client 1		62 (2045)
				Client 2		62 (2044)
Life Expectancy Assumed in the Plan (Year)				Client 1		94 (2077)
				Client 2		91 (2073)
Retirement Spending:	Start Year	End Year	Total Annual Spending <sup>1</sup>	Essential Spending/yr	Discretionary Spending /yr	Growth Rate
2044 - 2077	2044	2077	\$132,200	\$119,400	\$12,800	Your desired spending will grow at 2.36%

Retirement

### Income, Expenses, and Contributions

								Continues onto next page
1	Client 2	XXX-XXXXXX Select UMA IRA Individual IRA - Ro	llover	Tra	ditional IRA	(Prior non-deductible	\$0 e contributions)	\$353,695
#	Client	Account		Acc	count Type	Cost Basis <sup>1</sup> / Prior	Contributions <sup>2</sup>	Amount as of 06/30/2024
Morgan Stanley A	ccounts			~				
Account(s) Inc	luded in Your Plan							
			Employer ma	itch		_	Tier1 - 1	100% of 4% of \$220,000 up to \$15,000
401k Account Client 2 401(k)	Client 2		Pre-tax clien	t contributions		2.36%		6% of \$220,000 <b>\$13,200</b> (2024 - 2043)
Individual IRA - Rollo	over							
Select UMA IRA	Client		Non-deducti	Sie contributions		2.30%	Max without o	atchup \$7,000 (2024 - 2044)
Contributions Description	Client 1		Contribution	Type		Growth Rate	Max without	Annual Amount (Period)
	Gliefit 2	John Sur Worship		100.0 %		0.00/8		\$34,000 (2044-2077)
Client 2 Ponsion	Client 2	loint Survivorship		100.0%	No			\$54,600 (2044_2077)
Dension Income	Client	Devent Ontion	Cartain David	laint Cumius sakin		Crowth Date		
Social Security	Client 2					2.36%		\$39,702 (2044 - 2073)
Social Security	Client 1					2 36%		\$220,000 (2024-2043)
Salary	Client 2					2 36%		\$220,000 (2024-2043)
Salary	Client 1					2 36%		\$60,000 (2024-2044)
Income	Client					Growth Pate		Annual Amount (Period)

1) The cost basis provided may not include cash positions or other positions where the cost basis is not available and is for informational purposes only and should not be used for tax planning purposes as they may not reflect your actual cost basis. 2) Values entered are considered estimates and are used only in this analysis. This data should not be represented as an actual tax treatment of this account. This amount may not reflect any adjustments made for any annuity positions, if applicable. See IMPORTANT DISCLOSURES at the end of this document for additional information, including explanations of assumptions and methodologies.

Retirement

Account(s) Included in Your Plan

#### **Morgan Stanley Accounts** Client Account Account Type Cost Basis<sup>3</sup> / Prior Contributions<sup>4</sup> Amount as of 06/30/2024 2 Client 1 XXX-XXXXXX SFP IRA N/A \$64.436 Select UMA IRA Small Business IRA - Simplified Employee Pension - Principal 3 Client 1 XXX-XXXXXX Traditional IRA \$0 \$68.804 Select UMA IRA (Prior non-deductible contributions) Individual IRA - Rollover 4 Client 2 XXX-XXXXXX Roth IRA \$0 \$38.383 Select UMA IRA (Prior Roth contributions) Roth IRA \$0 5 Client 1 XXX-XXXXXX Roth IRA \$14.065 Select UMA IRA (Prior Roth contributions) Roth IRA TOTAL \$539.383 Continued from previous page Assets Held Away Externally Held (Added by you)<sup>5</sup> Account Type Cost Basis<sup>3</sup> / Prior Contributions<sup>4</sup> Client Account Amount 1 Other - Taxable \$25.372 Client 2 Brokerage Account \$6.854 Individual Brokerage Last Updated 12/01/2023<sup>6</sup> TOTAL \$25.372

3) The cost basis provided may not include cash positions or other positions where the cost basis is not available and is for informational purposes only and should not be used for tax planning purposes as they may not reflect your actual cost basis.
4) Values entered are considered estimates and are used only in this analysis. This data should not be represented as an actual tax treatment of this account. This amount may not reflect any adjustments made for any annuity positions, if applicable.
5) Externally Held account information is provided via Yodlee, an unaffiliated third party vendor. The 'Account Type' listed is a Morgan Stanley defined account type that was determined based on information received from the third party vendor. The 'Last Updated' date reflects the date and total amount that account information was obtained by the third party vendor from your financial institution(s). In cases where the third party vendor provides specific holdings and quantity information but no market value, the 'Amount ' reflects a market value calculated by Morgan Stanley using the latest available pricing for those securities.

6) Assets held away from Morgan Stanley were last updated more than 3 months ago. Please review and confirm information with your Financial Advisor. See IMPORTANT DISCLOSURES at the end of this document for additional information, including explanations of assumptions and methodologies.

Retirement

Account(s) Included in Your Plan

A agata Hal	d Awov							
Assets nei	d ded (Drewided by Yeu) <sup>7</sup>							
	Client	Account			Cost	Basic <sup>8</sup> / Prior Contribut	one <sup>9</sup>	Amount
<del>//</del> 1	Client 2	401k Account Client 2 401(k) Last Updated 11/03/2023 <sup>10</sup>		401K	(Prior after-t	(Prior Roth Contribut ax contributions (Non-R	\$0 ons) \$0 oth))	\$205,000
TOTAL								\$205,000
Risk Pro	file							
		Current Risk Profile						
Primary Fin	ancial Need	Retirement						
Anticipated	Withdrawal Period	Over 20 Years						
Time Horizo	n	Over 20 Years						
<b>Risk Profile</b>		Opportunistic Growth						
Plan Ret	urn Assumptions	4						
Secular Ass	sumptions	Secular						
Allocation		Annualized Return Assumptions (%) <sup>11</sup>	Volatility (%)					
Current Allo	cation	7.20	10.50					
			Continues on next page					

7) Information regarding Manually Added accounts is manually inputted, updated and maintained solely by you and/or your Financial Advisor. This information is either provided by you to your Financial Advisor or a hypothetical account/assumption. See Glossary for important information on Manually Added accounts.

8) The cost basis provided may not include cash positions or other positions where the cost basis is not available and is for informational purposes only and should not be used for tax planning purposes as they may not reflect your actual cost basis.

9) Values entered are considered estimates and are used only in this analysis. This data should not be represented as an actual tax treatment of this account. This amount may not reflect any adjustments made for any annuity positions, if applicable. 10) Assets held away from Morgan Stanley were last updated more than 3 months ago. Please review and confirm information with your Financial Advisor.

11) The annualized return assumptions above do not necessarily reflect all costs that you will incur when you implement your investment strategy. The return assumptions and hypothetical illustrations herein may be impacted after applying such costs, which may include investment advisory program fees up to a maximum of 2.0%, submanager fees, brokerage commissions, sales load or other expenses, which will depend on whether you choose a brokerage or an advisory relationship. See IMPORTANT DISCLOSURES at the end of this document for additional information, including explanations of assumptions and methodologies.

Retirement

### **Plan Return Assumptions**

#### Secular Assumptions

	Secular		
Allocation	Annualized Return Assumptions (%) <sup>12</sup>	Volatility (%)	
Suggested Target Allocation	7.60	11.60	

Continued from previous page

#### **Current Year Return Assumptions and Fees**

Rate of Return	Gross of Fees (%)	Net of Fees (%)
Current Allocation	7.20	6.20
Suggested Target Allocation	7.60	6.60

Fees Included	Details (%	
Portfolio Fees	1.00	

12) The annualized return assumptions above do not necessarily reflect all costs that you will incur when you implement your investment strategy. The return assumptions and hypothetical illustrations herein may be impacted after applying such costs, which may include investment advisory program fees up to a maximum of 2.0%, submanager fees, brokerage commissions, sales load or other expenses, which will depend on whether you choose a brokerage or an advisory relationship. See IMPORTANT DISCLOSURES at the end of this document for additional information, including explanations of assumptions and methodologies.

# Impact Analysis of Return Assumptions on Your Plan

Retirement

Your plan status and probability of success are impacted by multiple factors, including without limitation, current market levels, projected future real returns and volatility, future expectations regarding inflation, your net savings and spending habits.

The return assumptions used in this analysis capture Morgan Stanley future expectations regarding market performance, volatility, and long term inflation. These assumptions are not guarantees of future performance.

The table on this page illustrates the impact of using different return assumptions on your plan.

### Suggested Target Allocation Vs. Current Allocation

Plan Results	More Conservative Assumptions	Your Plan	More Aggressive Assumptions
Suggested Target Allocation			
Plan Status	On Track	On Track	On Track
Probability Of Success	70%	88%	94%
Current Allocation			
Plan Status	At Risk	On Track	On Track
Probability Of Success	63%	85%	93%

More conservative assumptions are determined by decreasing the return assumptions used in your plan by 20%. More aggressive assumptions are determined by increasing the return assumptions used in your plan by 20%.

For details on the return assumptions used in this impact analysis, see Return Assumptions page in this Report.

### **Return Assumptions**

### Secular Assumptions

The following table displays return assumptions used in your plan analysis as well as additional assumptions that can be used to generate an impact analysis on your plan.

		Secular Assumptions			
		Returns		Volatility <sup>2</sup>	
Asset Class	More Conservative Assumptions	Assumptions Used in Your Plan	More Aggressive Assumptions <sup>1</sup>	Assumptions Used in Your Plan	
Cash	2.46%	3.08%	3.70%	0.75%	
Global Cash	2.46	3.08	3.70	0.75	
Equities	6.24%	8.03%	9.81%	13.50%	
US Equities	6.51	8.41	10.31	14.88	
Global Equities	6.24	8.03	9.81	13.50	
International Equit	ties 5.59	7,28	8.97	15.43	
Emerging & Frontie	er Mkt 6.29	8.32	10.34	19.31	
Global Equities Oth	her 6.24	8.03	9.81	13.50	
Fixed Income & Preferreds	2.97%	3.74%	4.52%	5.25%	
Ultra Short Term F	ixed Income 2.46	3.08	3.70	0.75	
Short Term Fixed I	ncome 2.72	3.41	4.10	2.20	
US Fixed Income T	axable 2.97	3.74	4.52	5.25	
US Fixed Income T	ax Exempt 2.67	3.38	4.09	6.08	
International Fixed	I Income 2.86	3.61	4.36	5.05	
Inflation Linked Se	ecurities 3.49	4.47	5.46	9.66	
Preferred Securitie	s 3.48	4.47	5.46	10.01	

Continues onto next page

1) These return assumptions are not used for your plan. They are only used when running impact analysis on your plan.

2) These volatility assumptions are used both for your plan and running an impact analysis.

The secular return assumptions represent a time horizon of 20 + years. Please refer to the Plan Return Assumptions in the Client Profile, Assumptions, and Goal Summary section in this Report for return assumptions applied in the Monte Carlo analysis (Probability of Success). The Monte Carlo analysis also considers asset class correlation. These assumptions are used for modeling purposes only. They are not guarantees of future returns. Morgan Stanley Wealth Management's Global Investment Committee (GIC) published updates to its secular return assumptions in March, 2024 and is available at <a href="https://morganstanley.com/gicreport">https://morganstanley.com/gicreport</a>. The GIC strategic and secular return assumptions do not take costs of implementing your investment strategy into consideration. US Municipal Bonds are exempt from federal taxes (and may be exempt from state and local taxes). The returns above have not been adjusted to reflect this.

Expected return assumptions for Structured Investment and Other asset classes are unavailable. It is assumed that these assets will grow in line with the rest of the portfolio.

We classify assets based on general characteristics such as: income generation, underlying capital structure, or exposure to certain market sectors. As many assets contain characteristics of more than one asset class, allocations may be under or over inclusive. Asset allocations may differ from product allocations. The Other asset class contains securities that are not included in the various asset class classifications. This can include, but is not limited to, non-traditional investments such as Equity Unit Trusts, Index Options and Structured Investments issued outside of Morgan Stanley. Additionally, investments for which we are unable to procure market data to properly classify them will appear in the Other asset class category. See important disclosure information at the end of this document for an explanation of methodologies.

### Return Assumptions (cont'd)

### Secular Assumptions

The following table displays return assumptions used in your plan analysis as well as additional assumptions that can be used to generate an impact analysis on your plan.

	Secular Assumptions			
		Returns		Volatility <sup>2</sup>
Asset Class	More Conservative Assumptions <sup>1</sup>	Assumptions Used in Your Plan	More Aggressive Assumptions <sup>1</sup>	Assumptions Used in Your Plan
Fixed Income & Preferreds (cont'd)	2.97%	3.74%	4.52%	5.25%
High Yield Fixed Income	4.28	5.43	6.59	8.39
Emerging Market Fixed Income	5.31	6.74	8.17	9.23
Bank Loans	3.92	4.96	5.99	6.84
Global Fixed Income	2.92	3.68	4.43	4.56
Global Fixed Income Other	2.92	3.68	4.43	4.56
Alternatives	4.84%	6.13%	7.42%	7.97%
Real Assets	4.61	5.94	7.28	12.29
Absolute Return Assets	4.10	5.16	6.22	5.03
Equity Hedge Assets	4.65	5.92	7.18	9.16
Equity Return Assets	5.62	7.12	8.63	8.82
Private Investments	7.75	9.97	12.20	15.36
Alternatives Other	4.84	6.13	7.42	7.97
Multi-Asset	4.62%	5.85%	7.08%	7.62%
US Multi Asset	4.79	6.08	7.36	8.59
Global Multi Asset	4.62	5.85	7.08	7.62

Continued from previous page

1) These return assumptions are not used for your plan. They are only used when running impact analysis on your plan.

2) These volatility assumptions are used both for your plan and running an impact analysis.

The secular return assumptions represent a time horizon of 20 + years. Please refer to the Plan Return Assumptions in the Client Profile, Assumptions, and Goal Summary section in this Report for return assumptions applied in the Monte Carlo analysis (Probability of Success). The Monte Carlo analysis also considers asset class correlation. These assumptions are used for modeling purposes only. They are not guarantees of future returns. Morgan Stanley Wealth Management's Global Investment Committee (GIC) published updates to its secular return assumptions in March, 2024 and is available at <a href="https://morganstanley.com/gicreport">https://morganstanley.com/gicreport</a>. The GIC strategic and secular return assumptions do not take costs of implementing your investment strategy into consideration. US Municipal Bonds are exempt from federal taxes (and may be exempt from state and local taxes). The returns above have not been adjusted to reflect this.

Expected return assumptions for Structured Investment and Other asset classes are unavailable. It is assumed that these assets will grow in line with the rest of the portfolio.

We classify assets based on general characteristics such as: income generation, underlying capital structure, or exposure to certain market sectors. As many assets contain characteristics of more than one asset class, allocations may be under or over inclusive. Asset allocations may differ from product allocations. The Other asset class contains securities that are not included in the various asset class classifications. This can include, but is not limited to, non-traditional investments such as Equity Unit Trusts, Index Options and Structured Investments issued outside of Morgan Stanley. Additionally, investments for which we are unable to procure market data to properly classify them will appear in the Other asset class category. See important disclosure information at the end of this document for an explanation of methodologies.

### Return Assumptions (cont'd)

### **Return Index**

Asset C	ass	Return Index
Cash		FTSE US Three-Month T-Bill
Global	Cash	FTSE US Three-Month T-Bill
Equities		MSCI All-Country World (USD, Net)
US Eq	uities	Russell 3000
Global	Equities	MSCI All-Country World (USD, Net)
Interna	ational Equities	MSCI World ex-US (USD, Net)
Emerg	ing & Frontier Mkt	MSCI Emerging Markets (USD, Net)
Global	Equities Other	MSCI All-Country World (USD, Net)
Fixed Income	e & Preferreds	Bloomberg US Aggregate
Ultra S	Short Term Fixed Income	FTSE US Three-Month T-Bill
Short	Term Fixed Income	Bloomberg US One- to Three-Year Government/Credit
US Fix	ed Income Taxable	Bloomberg US Aggregate
US Fix	ed Income Tax Exempt	Bloomberg US Municipal
Interna	ational Fixed Income	Bloomberg Global Aggregate ex-USD (USD-Hedged)
Inflatio	on Linked Securities	Bloomberg Global Inflation-Linked (USD)
Preferi	red Securities	ICE BofA Fixed-Rate Preferred Securities
High Y	ield Fixed Income	Bloomberg Global High Yield Credit (USD)
Emerg	ing Market Fixed Income	JP Morgan EMBI Global
Bank L	oans	Morningstar LSTA U.S. Leveraged Loan 100
Global	Fixed Income	Bloomberg Global Aggregate (USD-Hedged)
Global	Fixed Income Other	Bloomberg Global Aggregate (USD-Hedged)

A	sset Class	Return Index
Alternat	tives	HFRI Fund-Weighted Composite
R	leal Assets	Equal-Weighted Blend: Bloomberg Commodity; Alerian Midstream Energy Select; FTSE EPRA/NAREIT Global (USD)
A	bsolute Return Assets	Equal-Weighted Blend: HFRI Equity Market Neutral; HFRI Relative-Value: Total; HFRI Relative-Value: Fixed Income: Corporate
E	quity Hedge Assets	Equal-Weighted Blend: Credit Suisse Global Macro; Credit Suisse Managed Futures
E	quity Return Assets	Equal-Weighted Blend: HFRI Equity Hedge: Total; HFRI Event-Driven: Total
Р	rivate Investments	Equal-Weighted Blend: NCREIF Property; Cambridge Associates Private Equity
A	Iternatives Other	HFRI Fund-Weighted Composite
Multi-As	sset	Equal-Weighted Blend: MSCI All-Country World (USD, Net); Bloomberg Global Aggregate (USD-Hedged)
U	IS Multi Asset	Equal-Weighted Blend: Russell 3000; Bloomberg US Aggregate
Ģ	lobal Multi Asset	Equal-Weighted Blend: MSCI All-Country World (USD, Net); Bloomberg Global Aggregate (USD-Hedged)

Source: Morgan Stanley Wealth Management Global Investment Committee

Morgan Stanley Wealth Management Global Investment Committee asset classes and corresponding return indices are subject to change and implementation of any such changes into this tool may be completed over time. Expected return assumptions for Structured Investment and Other asset classes are unavailable. It is assumed that these assets will grow in line with the rest of the portfolio. The GIC strategic and secular return assumptions do not take costs of implementing your investment strategy into consideration.

We classify assets based on general characteristics such as: income generation, underlying capital structure, or exposure to certain market sectors. As many assets contain characteristics of more than one asset class, allocations may be under or over inclusive. Asset allocations may differ from product allocations. The Other asset class contains securities that are not included in the various asset class classifications. This can include, but is not limited to, non-traditional investments such as Equity Unit Trusts. Index Options and Structured Investments issued outside of Morgan Stanley. Additionally, investments for which we are unable to procure market data to properly classify them will appear in the Other asset class category. See IMPORTANT DISCLOSURES at the end of this document for an explanation of methodologies.

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# Glossary

#### **Actual Net Cash Flow**

Actual Net Cash Flow is the difference between actual cash inflows and outflows from your Morgan Stanley accounts plus Planned Net Cash Flow for assets held away for both Externally Held and Manually Added accounts.

#### Actual Portfolio Withdrawal Rate

The Actual Portfolio Withdrawal Rate represents the percentage of your portfolio that was withdrawn over the identified period.

#### Adjusted Plan / Analysis

The Adjusted Plan / Analysis is based on your current plan with adjustments made to the planned goals and cash flows based on your Actual Net Cash Flow activity. For example, if you only planned to have a withdrawal of \$10,000 making planned Net Cash Flow \$10,000 but actually withdrew \$15,000, your future planned goals would be increased by 50% within your Adjusted Plan / Analysis to illustrate the impact of this behavior long-term.

#### Additional Taxable Savings

Additional Taxable Savings represents anticipated after-tax contributions assumed to be made into a taxable account type for purposes of this plan analysis.

#### **Annualized Return Assumption**

The Annualized Return Assumption is the geometric return of each annual return assumption over the length of the plan, where the annual return for each year is the sum of weighted return assumptions for the asset classes according to the identified asset allocation. These asset classes' return assumptions and weights are used in this analysis to calculate your Probability of Success. The return assumptions are based on assumptions prepared by the Morgan Stanley Wealth Management Global Investment Committee (GIC). See Return Assumptions section for the asset class expected returns.

#### **Asset Allocation**

Asset Allocation refers to how your investments are diversified across different asset classes, such as Stocks, Bonds, Cash and Alternative Investments. The principal asset classes and comparative indices for each asset class presented in this analysis can be found in the previous Return Assumptions section. Either a Morgan Stanley Wealth Management Global Investment Committee ("GIC") Strategic Asset Allocation Model or a customized asset allocation is presented. The asset allocation used in this illustration may be more aggressive or conservative than your investment risk profile. Morgan Stanley Wealth Management Global Investment Committee uses a proprietary process to arrive at its strategic asset allocation models. These models are subject to change and sometimes may be required to implement any such changes into the tool.

#### Asset Class

Asset Class is a standard term that broadly defines a category of investments. The four basic asset classes are Cash, Fixed Income, Equities and Alternatives. Fixed Income and Equities are often further subdivided into more narrowly defined classes. Certain securities generally those held outside Morgan Stanley, cannot be classified into the four basic asset classes and are identified as "Other".

#### **Current Allocation**

Your Current Allocation is comprised of all the investment assets you currently own (or a subset of your assets, based on the information you provided for this Analysis), categorized by Asset Class.

#### Discretionary (Goals / Expenses)

These are the annual spending goals and expenses defined in your Retirement Plan that you consider to be not necessary or "wants" rather than "needs".

#### Essential (Goals / Expenses)

These are the annual spending goals and expenses defined in your Retirement Plan that you consider to be necessary or "needs" rather than "wants".

#### **Estimated Total Taxes**

This value represents the estimated income and portfolio taxes due for the given year. Actual results may vary from these estimates.

#### **Externally Held**

Externally Held account information is provided via Yodlee, an unaffiliated third party vendor. The Account Type' listed is a Morgan Stanley defined account type that was determined based on information received from the third party vendor. Externally Held account may include any account(s) held at E\*TRADE, which is an affiliate of Morgan Stanley. The 'Last Updated' date reflects the date and total amount that account information was obtained by the third party vendor from your financial institution(s). In cases where the third party vendor provides specific holdings and quantity information but no market value, the 'Amount' reflects a market value calculated by Morgan Stanley using the latest available pricing for those securities.

#### Funding Ratio

Funding Ratio provides an estimate of the progress towards funding retirement goals agnostic of market conditions. It is a comparison of current and future savings versus future liabilities discounted by the risk-free rate. The Funding Ratio does not consider the investment strategy selected in the plan.

#### **Funding Status**

The Funding Status is determined by comparing funding ratio against the benchmark. See the Methodology Section for more details on the calculation of Funding Status.

#### **Future Value**

Future value is inflated value. The calculation results are in future values. To help you compare dollar amounts in different years, we discount the future value amount by the inflation rate.

#### **Growth Rate**

The assumed percentage increase in your income, expense, contribution or goal amount for the specified time period. Growth rate is not an indication of any future portfolio returns.

#### Inflation Rate

The Inflation Rate is the percentage increase in the cost of goods and services for a specified time period. A historical measure of inflation is the Consumer Price Index (CPI).

# Glossary

#### Life Expectancy

Life Expectancy is defined as the number of years a person is expected to live and is determined based off of actuarial life tables and used to determine the length of analysis of the plan. This age may be altered to reflect a different length of analysis in the plan based on information provided by you to your Financial Advisor. A number of factors should be considered when adjusting the age and the length of the plan's analysis including your current age, health, lifestyle, and other relevant information. Life Expectancy assumptions and considerations may change over time and should be reviewed periodically.

#### Manually Added

Manually Added accounts are added, updated and maintained solely by you and/or your Financial Advisor. The account balance is based on either a total account value provided by you or position and quantity data provided by you which is used by Morgan Stanley to calculate a market value using the latest available pricing for those securities. The values of securities and other investments not actively traded may be estimated or may not be available. Manually Added accounts, along with their associated values and assumptions, may be hypothetical in nature, have not been verified, and should be viewed as such when reviewing this Report. The purpose of including hypothetical accounts/assumptions in the plan is to help illustrate their potential effect on your goal. There is no guarantee that hypothetical accounts/assumptions will achieve the illustrated results. Morgan Stanley is not responsible for ensuring the information is complete, accurate, or up to date.

#### **Minimum Desired Wealth**

The minimum total assets that you would like to maintain in each year of your analysis. This value is provided by you and is a factor in determining your Probability of Success. See Methodology - Likelihood of Achieving Your Goal section for a description of Monte Carlo analysis and Probability of Success.

#### Multi-Asset

A managed strategy (SMA or packaged product) in which the investment objective is Balanced or Allocated, and may include U.S. and non-U.S. assets from more than one asset class, Equities, Fixed Income and Preferreds, or Alternatives.

#### Net Cash Flow

Net Cash Flow is the difference between cash inflows and outflows over a period of time and represents the amount you are contributing to or withdrawing from your portfolio. Cash inflows include savings and sources of non-investment, cash-based income. Cash outflows includes all of your goals and expenses such as mortgage or rent, living expenses, utilities, repayment of debt, and an assumption for estimated taxes.

#### **Planned Net Cash Flow**

Planned Net Cash Flow is the difference between planned cash inflows and outflows across all accounts included in your plan as determined by you and your Financial Advisor when your plan was adopted.

#### Planned Portfolio Withdrawal Rate

The Planned Portfolio Withdrawal Rate represents the percentage of your portfolio that is expected to be withdrawn over the identified period.

#### **Portfolio Fees**

Portfolio Fees represent the assumed total annual cost associated to all accounts included in the portfolio except for any fixed rate annuities. This fee assumption is for illustrative purposes and does not reflect the actual advisory fees, brokerage commissions, fund expenses and other costs that could be charged to the accounts included in your portfolio. It will be applied as a percent of the total Portfolio Value of a plan.

#### Portfolio Target Zone

Your Portfolio Target Zone represents the asset range required to achieve between a 70% and 90% Probability of Success of Achieving your goals.

#### **Present Value**

Present Value is the current worth of future income streams discounted to arrive at today's value. The future projected income and expenses are discounted based on Present Value = Future Value /(1 + inflation)<sup>A</sup> Horizon</sup>. Horizon is the number of years between current year and the year for which the future value is applicable.

#### **Probability of Success**

The Probability of Success is the percentage of trials of your Analysis that were successful. A successful trial is defined as one where the portfolio is not exhausted prior and meets the desired minimum wealth and bequest objectives, if applicable. If a Monte Carlo analysis runs your goal with all its underlying assumptions 10,000 times and if 6,000 of those runs are successful then the Probability of Success would be 60% and the probability of failure would be 40%. See Methodology section for a description of Monte Carlo analysis.

#### **Risk Profile**

Our determination of your risk profile is based on information provided by you, which includes your investment objective, risk tolerance, investment time horizon, anticipated withdrawal period, and primary financial needs. You should review this information and if necessary discuss any necessary changes with your Financial Advisor.

#### Investment Time Horizon

In approximately how many years do you expect to begin withdrawing funds for your Primary Financial Need?

#### Anticipated Withdrawal Period

Once you begin to withdraw funds (for your Primary Financial Need), over how long a period do you anticipate the withdrawals to continue?

# Glossary

#### Risk Profile (cont'd)

Primary Financial Need

Primary financial need is your primary purpose for investing.

#### **Risk Profiles**

#### Wealth Conservation

This profile may be appropriate for clients with a conservative risk tolerance and the need to prioritize preservation of purchasing power

#### Income

This profile may be appropriate for clients who have a moderately conservative risk tolerance who wish to generate steady income from their portfolio

#### Balanced Growth

This profile may be appropriate for clients who have a moderate risk tolerance and are able to tolerate moderate volatility.

#### Market Growth

This profile may be appropriate for clients who have a moderate-to-aggressive risk tolerance and are able to tolerate moderate-to-high volatility.

#### Opportunistic Growth

This profile may be appropriate for clients with an aggressive risk tolerance and are able to tolerate high volatility.

#### Suggested Target Allocation

Asset allocation selected as the desired investment strategy for your goal plan. The asset class mix of the Suggested Target Allocation is used to project a set of possible wealth outcomes using Monte Carlo analysis. See Methodology section for a description of Monte Carlo analysis.

#### **Total Goal Amount**

This is the sum of the essential and discretionary goals that you defined in your established Retirement Plan.

#### Volatility

Volatility is based on the projected annualized standard deviation for the asset class or asset allocation model. For asset classes, the standard deviation is based on a benchmark or index and for asset allocation models, the standard deviation is based on the mix of assets. The higher the volatility is, the riskier the asset class or asset allocation model.

#### Important Information

References to "Morgan Stanley" throughout refer to Morgan Stanley Smith Barney LLC. Morgan Stanley is both a registered broker-dealer and investment adviser.

Your Goal Planning Analysis/Analyses, this Report and all of the assumptions in the analyses are subject to future changes for a variety of reasons. Unless you expressly engage Morgan Stanley to do so in the future (and Morgan Stanley accepts that engagement), Morgan Stanley will not be responsible for monitoring or updating your Goal Planning Analysis/Analyses or this Report, including to reflect future changes in your life, financial situation, goals or market or economic conditions.

This Report is not intended to be a substitute for the official account statements that you receive from Morgan Stanley. The information in this Report is approximate and subject to adjustment, updating and correction. To the extent there are any discrepancies between your regular account statement and this Report, you should rely on the regular account statement.

The information in this Report is based on results from your Goal Planning Analysis/Analyses and Morgan Stanley account information, as well as additional information provided by you to your Financial Advisor. You should review this Report carefully and inform your Financial Advisor of any changes that are required. As you review this Report, you can refer back to your Goal Planning Analysis/Analyses for more information. You may request an additional copy of the document(s) from your Financial Advisor.

The Goal Planning Analysis/Analyses is a brokerage service that is separate and distinct from any other service or product that you may receive from Morgan Stanley. This report is not intended to be construed as "investment advice" as those terms are defined under Title I of the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), and/or the Internal Revenue Code of 1986 (the "Code"), as applicable. This Report is not for financial planning or investment advisory services. By using the information provided to you by Morgan Stanley in this Report for any purpose, you acknowledge and accept that Morgan Stanley is not an investment adviser or fiduciary to you in connection with providing you such information under the Investment Advisers Act of 1940.

Although the statements of fact and data in this Report have been obtained from, and are based upon, sources that we believe to be reliable, we do not guarantee their accuracy, and any such information may be incomplete or condensed. All opinions included in this material constitute our judgment as of the date of this material and are subject to change without notice. This material is provided for informational purposes only and is not intended as an offer or solicitation with respect to the purchase or sale of any security or to participate in any trading strategy.

Every individual's financial circumstances, needs and risk tolerances are different. This Report is based on the information you provided to us as part of your established Goal Plan(s), the assumptions you have asked us to make and the other assumptions indicated herein as of the date of the Analysis/Analyses. It is not an official account statement. The purpose of this Analysis/Analyses is to help you understand and track your progress toward reaching your financial goals at a specific point in time. This information will change daily. This Analysis/Analyses should be considered a working document that can assist you with this objective. You should carefully review the information and suggestions found in this Analysis and then decide on future steps.

This material is provided for informational purposes only and is not intended as an offer or solicitation with respect to the purchase or sale of any security or other financial instrument or to participate in any trading strategy.

IMPORTANT: The projections or other information generated by the Morgan Stanley Goals Planning System regarding the likelihood of various investment outcomes (including any assumed rates of return and income) are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results.

Morgan Stanley is a member of SIPC. It is not a bank. Where appropriate, Morgan Stanley Smith Barney LLC has entered into arrangements with banks and other third parties to assist in offering certain banking related products and services.

SIPC insurance does not apply to precious metals, other commodities, or traditional alternative investments.

Investment, insurance and annuity products offered through Morgan Stanley Smith Barney LLC are: NOT FDIC INSURED | MAY LOSE VALUE | NOT BANK GUARANTEED | NOT A BANK DEPOSIT | NOT INSURED BY ANY FEDERAL GOVERNMENT AGENCY

#### Differences between a brokerage and an investment advisory relationship

You should understand the differences between a brokerage and advisory relationship. When providing you brokerage services, our legal obligations to you are governed by the Securities Act of 1933, the Securities Exchange Act of 1934, Federal statutes and regulations relating to retirement accounts, the rules of self-regulatory organizations such as the Financial Industry Regulatory Authority (FINRA), and state securities laws, where applicable. When providing you advisory services, our legal obligations to you are governed by the Investment Advisers Act, Federal statutes and regulations relating to retirement accounts, and applicable state securities laws. These latter advisory and retirement account obligations govern our conduct and disclosure requirements, creating a legal standard which is referred to as a "fiduciary" duty to you.

Please speak with your Financial Advisor if you have questions about your rights and our obligations to you, including the extent of our obligations to disclose conflicts of interest and to act in your best interest. For additional answers to questions about the differences between our advisory and brokerage services, please consult with your Financial Advisor or review our Understanding Your Brokerage and Investment Advisory Relationships brochure available at https://www.morganstanley.com/wealth-

#### relationshipwithms/pdfs/understandingyourrelationship.pdf

For more information regarding Morgan Stanley's role with respect to a Retirement Account, please visit www.morganstanley.com/disclosures/dol.

#### Information used by us

Our calculation of hypothetical projections are based in part on information provided by you,

#### Information used by us (cont'd)

including related to assets held in one or more of your Morgan Stanley accounts as well as your accounts custodied elsewhere, as well as certain third party sources which Morgan Stanley believes to be reliable. However, Morgan Stanley makes no warranties or representations of any kind relating to the accuracy, completeness, or timeliness of the data such third party sources provided and shall not have liability for any damages of any kind relating to such data. This information as well as your Morgan Stanley account information in this analysis, is approximate and subject to updating, correction and other changes. We are not obligated to notify you if information changes.

Morgan Stanley will not verify any external holdings or account information. The information contained herein is subject to, and does not supersede the confirmations and account statements you receive from us and/or your external custodian. Values shown in your official account statement may differ from the values reflected due to, among other things, different reporting methods, delays, market conditions and interruptions. If there are discrepancies between your official account statement and this document, rely on your official account statement. You should notify your Financial Advisor of any changes to these accounts and should separately consider activity in these accounts to evaluate whether you are on track to meet your established financial goals.

#### Morgan Stanley's Goals Planning System Assumptions and Limitations

The information you provided about your assets, financial goals, and personal situation are key assumptions for the calculations and projections in this material. Every individual's financial circumstances, needs and risk tolerances are different. The hypothetical projected returns or income produced by the Morgan Stanley Goals Planning System is based on the information you provided to us, the assumptions you have provided and the other assumptions made by Morgan Stanley indicated herein. Please review all the information thoroughly to ensure that it is correct and complete. If any of the assumptions are incorrect, please notify your Financial Advisor. Even small changes in assumptions can have a substantial impact on the results shown in this material. The information rovided by you should be reviewed periodically and updated when either the information or your circumstances change. Morgan Stanley has no responsibility and is under no obligation to monitor or update this material in the future unless expressly engaged by you to do so at that time.

Financial forecasts, rates of return, risk, inflation, and other assumptions may be used as the basis for illustrations in Morgan Stanley's Goals Planning System. They should not be considered a guarantee of future performance or a guarantee of achieving overall financial objectives. All results use simplifying estimates and assumptions. No tool has the ability to accurately predict the future, eliminate risk or guarantee investment results. As investment returns, inflation, taxes, and other economic conditions vary from the assumptions used by the Morgan Stanley Goals Planning System, your actual results will vary (perhaps significantly) from those presented herein.

The assumed return rates utilized in Morgan Stanley's Goals Planning System are based on what Morgan Stanley Wealth Management GIC believes are reasoned estimates of drivers of capital market returns and historical relationships are not reflective of any specific investment and do not include any fees or expenses that may be incurred by investing in specific products. The actual returns of a specific investment may be more or less than the returns used in Morgan Stanley's Goals Planning System. The return assumptions are partially based on historic rates of return of securities indices which serve as proxies for the broad asset classes. Indices are unmanaged. It is not possible to directly invest in an index. Moreover, different forecasts may choose different indices as a proxy for the same asset class, thus influencing the return of the asset class. The Goals Planning System results may vary with each use and over time.

#### General Risks of Investing

You should note that investing in financial instruments carries with it the possibility of losses and that a focus on above market returns exposes the portfolio to above-average risk. Performance aspirations are not guaranteed and are subject to market conditions. High volatility investments may be subject to sudden and large falls in value, and there could be a large loss on realization which could be equal to the amount invested.

Asset allocation, diversification and rebalancing do not assure a profit or protect against loss. There may be a potential tax implication with a rebalancing strategy. Please consult your tax advisor before implementing such a strategy.

Non-diversification is attributed to a portfolio that holds a concentrated or limited number of securities; a decline in the value of these investments would cause the portfolio's overall value to decline to a greater degree than a less concentrated portfolio. Portfolios that invest a large percentage of assets in only one industry sector (or in only a few sectors) are more vulnerable to price fluctuation than those that diversify among a broad range of sectors.

Value and growth investing also carry risks. Value investing involves the risk that the market may not recognize that securities are undervalued and they may not appreciate as anticipated. Growth investing does not guarantee a profit or eliminate risk. The stocks of these companies can have relatively high valuations. Because of these high valuations, an investment in a growth stock can be more risky than an investment in a company with more modest growth expectations.

#### **Tax-Qualified and Tax-Deferred Assets**

If your current portfolio contains assets which are tax-qualified or tax-deferred under the Internal Revenue Code, you should consider the tax effects of any portfolio withdrawal from such amounts, as opposed to from fully taxable accounts, with your tax and/or legal advisor(s). Generally speaking, the withdrawal of tax-qualified or tax-deferred amounts can result in income tax liability where no such liability would exist if the amounts had been withdrawn from a taxable account. Furthermore, (a) tax penalties can occur when such assets are withdrawn prior to age 591/2, (b) such withdrawals can have detrimental effects on specific tax planning strategies (e.g., "72(t) payments"), and (c) certain qualified or tax-deferred assets are eligible for or receive special treatment upon withdrawal (e.g., net unrealized appreciation treatment, eligibility for rollover). The performance of tax-managed accounts is likely to vary from that of non-taxed managed accounts. Required Minimum Distributions ("RMDs") are minimum amounts that a retirement plan account owner must withdraw from his/her tax deferred accounts annually starting with the year that he/she reaches a specific age. The age at which an individual must start taking RMDs ("RMD Age"), depends on the individual's date of birth (i.e., if born before July 1, 1949, RMD Age is 70 <sup>1</sup>/<sub>2</sub>; if born after June 30, 1949, but before 1951, RMD Age is 72; if born after 1950, but before 1960, RMD Age is 73; and for all others, RMD Age is 75 - note, apparent drafting error in the statutory language, makes it unclear when age 75 starts to apply in lieu of age 73, but it appears age 75 is intended to apply if born after 1959).

#### Tax-Qualified and Tax-Deferred Assets (cont'd)

Morgan Stanley does not provide legal, tax or accounting advice. In light of the foregoing, we strongly recommend that you consult your tax and/or legal advisors in connection with this material and any withdrawals that you make from your portfolio.

Information in this Report is for illustrative purposes and is not intended to form the primary basis for any investment decision by you, or an investment advice or recommendation for either ERISA, the Advisers Act or Internal Revenue Code purposes.

#### Asset Allocation and Rebalancing

Asset Allocation refers to how your investments are diversified across different asset classes, such as stocks, bonds, cash and alternative investments.

Rebalancing describes the discipline of selling assets and buying others to match the target weightings of an asset allocation model. Because assets increase and decrease in value over time, the percentage amounts of assets invested in each class will tend to vary from their original target weightings. Performance of an asset class within a portfolio is dependent upon the allocation of securities within the asset class and the weighting or the percentage of the asset class within that portfolio. Potential for a portfolio's loss is exacerbated in a downward trending market. A well-diversified portfolio is less vulnerable in a falling market.

The asset class hypothetical return assumptions leveraged in Morgan Stanley's Goals Planning System are based on what Morgan Stanley Wealth Management GIC believes are reasoned estimates of drivers of capital market returns and historical relationships. As with any forecasting discipline, the assumptions and inputs underlying Morgan Stanley Wealth Management GIC's forecasting process may or may not reconcile with, or reflect, each investor's individual investment horizon, risk tolerance, capital markets outlook, and world view. For these reasons, and because forecasting methods are complicated, investors should keep in mind that asset allocation, diversification, and rebalancing do not assure a profit or protect against loss in a declining market.

Any asset allocation information presented herein, which may take into account your assets in one or more "ERISA" covered employee benefit plans and/or one or more individual retirement accounts, is for general asset allocation education and information purposes only, and should not be viewed as fiduciary investment advice or specific recommendations with respect to any particular investment or asset allocation mix under the Investment Advisers Act of 1940 as amended, ERISA, the Internal Revenue Code or any other applicable law. In applying any particular asset allocation model to your individual circumstances, you should consider your other assets, income and investments, in addition to any interest(s) you may have in ERISA-covered employee benefit plans or individual retirement accounts.

#### This is not a financial plan

This material is not a financial plan. A financial plan generally seeks to address a wide spectrum of your long-term financial needs, and can include recommendations about insurance, savings, tax and estate planning, and investments, taking into consideration your goals and situation, including anticipated retirement or other employee benefits. Morgan Stanley will only prepare a financial plan at your specific request using Morgan Stanley approved financial planning software. If you would like to have a financial plan prepared for you, please consult with a Morgan Stanley Financial Advisor. This material provides a snapshot

hypothetical results are calculated over many years, small changes can create large differences in potential future results. You should use this material to help you focus on the factors that are most important to you.
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Key Asset Class Risk Considerations

#### Alternative Investments

The asset allocation recommendations provided to you in this Report may include allocations to alternative asset classes. It is important to note that Alternatives may be either traditional alternative investment vehicles or non-traditional alternative strategy vehicles. Traditional alternative investment vehicles may include, but are not limited to, Hedge Funds, Fund of Funds (both registered and unregistered), Exchange Funds, Private Equity Funds, Private Credit Funds, Real Estate Funds, and Managed Futures Funds. Non-traditional alternative strategy vehicles may include, but are not limited to, Open or Closed End Mutual Funds, Exchange Traded Funds and Closed-End Funds, Unit Investment Trusts, exchanged listed Real Estate Investment Trusts (REITs) and Master Limited Partnerships (MLPs). These non-traditional vehicles also seek alternative-like exposure but have significant differences from traditional alternative investment vehicles.

of your current financial position and can help you to focus on your financial resources and

goals, and to create a strategy designed to get you closer toward meeting your goal. Because the

Traditional alternative investment vehicles are illiquid and are not valued daily. Investors should carefully review and consider potential risks before investing. The risks of traditional alternative investments may include, but are not limited to: lack of liquidity in that there may be no secondary market for a fund, loss of all or a substantial portion of the investment due to leveraging, short-selling, or other speculative practices, volatility of returns, restrictions on transferring interests in a fund, potential lack of diversification and resulting higher risk due to concentration of trading authority when a single advisor is utilized, absence of information regarding valuations and pricing, complex tax structures and delays in tax reporting, less regulation and higher fees than open-end mutual funds, and risks associated with the operations, personnel and processes of the manager. Non-traditional alternative strategy vehicles may behave like, have characteristics of, or employ various investment strategies and techniques for both hedging and more speculative purposes such as short-selling, leverage, derivatives and options, which can increase volatility and the risk of investment loss. Characteristics such as correlation to traditional markets, investment strategy, and market sector exposure can play a role in the classification of a traditional security being classified as alternative. Please also review the risk considerations for Stocks and MLP/Energy Infrastructure for more information.

#### REITs

In addition to the general risks associated with real estate investments, REIT investing entails other risks such as credit and interest rate risk. Real estate investment risks can include fluctuations in the value of underlying properties; defaults by borrowers or tenants; market saturation; changes in general and local economic conditions; decreases in market rates for rents; increases in competition, property taxes, capital expenditures, or operating expenses; and other economic, political or regulatory occurrences affecting the real estate industry.

#### Commodities

The commodities markets may fluctuate widely based on a variety of factors including changes in supply and demand relationships; governmental programs and policies; national and international

political and economic events; war and terrorist events; changes in interest and exchange rates; trading activities in commodities and related contracts; pestilence; weather; technological change; and, the price volatility of a commodity. In addition, the commodities markets are subject to temporary distortions or other disruptions due to various factors, including lack of liquidity, participation of speculators and government intervention.

#### Master Limited Partnerships (MLPs)

Master Limited Partnerships (MLPs) are limited partnerships or limited liability companies that are taxed as partnerships and whose interests (limited partnership units or limited liability company units) are traded on securities exchanges like shares of common stock. Currently, most MLPs operate in the energy, natural resources or real estate sectors. Investments in MLP interests are subject to the risks generally applicable to companies in the energy and natural resources sectors, including commodity pricing risk, supply and demand risk, depletion risk and exploration risk.

Individual MLPs are publicly traded partnerships that have unique risks related to their structure. These include, but are not limited to, their reliance on the capital markets to fund growth, adverse ruling on the current tax treatment of distributions (typically mostly tax deferred), and commodity volume risk. The potential tax benefits from investing in MLPs depend on their being treated as partnerships for federal income tax purposes and, if the MLP is deemed to be a corporation, then its income would be subject to federal taxation at the entity level, reducing the amount of cash available for distribution to the fund which could result in a reduction of the fund's value.

MLPs carry interest rate risk and may underperform in a rising interest rate environment. MLP funds accrue deferred income taxes for future tax liabilities associated with the portion of MLP distributions considered to be a tax-deferred return of capital and for any net operating gains as well as capital appreciation of its investments; this deferred tax liability is reflected in the daily NAV; and, as a result, the MLP fund's after-tax performance could differ significantly from the underlying assets even if the pre-tax performance is closely tracked.

#### Equities

Investing in stock securities involves volatility risk, market risk, business risk, and industry risk. The prices of stocks fluctuate. Volatility risk is the chance that the value of a stock will fall. Market risk is the chance that the prices of all stocks will fall due to conditions in the economic environment. Business risk is the chance that a specific company's stock will fall because of issues affecting it such as the way the company is managed. Industry risk is the chance that a set of factors particular to an industry group will adversely affect stock prices within the industry.

#### International/Emerging Markets Equities

Foreign investing involves certain risks not typically associated with investments in domestic corporations and obligations issued by the U.S. government, such as currency fluctuations and controls, restrictions on foreign investments, less governmental supervision and regulation, less liquidity and the potential for market volatility and political instability. In addition, the securities markets of many of the emerging markets are substantially smaller, less developed, less liquid and more volatile than the securities of the U.S. and other more developed countries.

#### Small/Mid Cap Equity

Stocks of small and medium-sized companies entail special risks, such as limited product lines, markets, and financial resources, and greater market volatility than securities of larger, more established companies.

#### **Fixed Income**

Investing in fixed income securities involves interest rate risk, credit risk, and inflation risk. Interest rate risk is the possibility that bond prices will decrease because of an interest rate increase. When interest rates rise, bond prices, and the values of fixed income securities generally fall. Credit risk is the risk that a company will not be able to pay its debts, including the interest on its bonds. Inflation risk is the possibility that the interest paid on an investment in bonds will be lower than the inflation rate, decreasing purchasing power.

#### Ultra-Short Fixed Income

Ultra-short bond funds are mutual funds and exchange-traded funds that generally invest in fixed income securities with very short maturities, typically less than one year. They are not money market funds. While money market funds attempt to maintain a stable net asset value, an ultra-short bond fund's net asset value will fluctuate, which may result in the loss of the principal amount invested. They are therefore subject to the risks associated with debt securities such as credit and interest rate risk.

#### Non-US Fixed Income

Foreign fixed income securities may involve greater risks than those issued by U.S. companies or the U.S. government. Economic, political and other events unique to a country or region will affect those markets and their issues, but may not affect the U.S. market or similar U.S. issuers.

#### Inflation-Linked Securities

These securities adjust periodically against a benchmark rate, such as the Consumer Price Index (CPI). They pay a coupon equal to the benchmark rate, plus a fixed 'spread' and reset on a periodic basis. The initial interest rate on an inflation linked or floating security may be lower than that of a fixed-rate security of the same maturity because investors expect to receive additional income due to future increases in CPI, or the linked reference interest rate. However, there can be no assurance that these increases will occur.

#### High Yield Fixed Income

High yield fixed income securities, also known as "junk bonds", are considered speculative, involve greater risk of default and tend to be more volatile than investment grade fixed income securities.

#### Municipal Fixed Income

Income generated from an investment in a municipal bond is generally exempt from federal income taxes. Some income may be subject to state and local taxes and to the federal alternative minimum tax. Capital gains, if any, are subject to tax.

#### Structured Investments

An investment in structured investments involves risks. These risks can include but are not limited to: fluctuations in the price, level or yield of underlying asset(s), interest rates, currency values and credit quality, substantial loss of principal, limits on participation in appreciation

of underlying asset(s), limited liquidity, credit risk, and/or conflicts of interest. Many structured investments do not pay interest or guarantee a return above principal at maturity. Investors should read the security's offering documentation prior to making an investment decision.

#### **Fixed and Variable Annuities**

Annuity contracts contain exclusions, limitations, reductions of benefits, and terms for keeping them in force. Your Financial Advisor can provide you with complete details.

All guarantees, including optional benefits, are based on the financial strength and claims-paying ability of the issuing insurance company and do not apply to the underlying investment options. A variable annuity is a long-term investment designed for retirement purposes and may be subject to market fluctuations, investment risk and possible loss of principal.

Optional riders may not be able to be purchased in combination and are available at an additional cost. Some optional riders must be elected at time of purchase. Optional riders may be subject to specific limitations, restrictions holding periods, costs, and expenses as specified by the insurance company in the annuity contract.

Variable annuities are sold by prospectus only. The prospectus contains the investment objectives, risks, fees, charges and expenses, and other information regarding the variable annuity contract and the underlying investments, which should be considered carefully before investing. Prospectuses for both the variable annuity contract and the underlying investments are available from your Financial Advisor. Please read the prospectus carefully before investing.

# Methodology

How we calculate your Retirement Planning Analysis Funding Status, Likelihood of Achieving Your Goal, and Downside Risk of Your Portfolio

#### **Funding Status**

The Funding Status is determined by comparing funding ratio against the benchmark. The Funding Ratio is the present value of current savings (including non-portfolio sources of retirement income, e.g. Social Security) and planned future savings divided by the present value of anticipated retirement expenses. It provides the percentage of your retirement income liabilities that would be funded today if the current and future savings were invested in a riskfree strategy, which we estimate based on the 30-year Treasury. The mortality assumption that is used in the calculation of the Funding Ratio is based on the Social Security Administration actuarial table, with adjustments made to ensure the present value of retirement liabilities approximate the market price of retirement income, as it is represented in the Single Premium Immediate Annuity market. The Funding Ratio is then compared against a benchmark in order to determine it's " on-track", " off-track" or " at risk" status. This benchmark is formulated to look like the average retirement investor, and assumes an investment strategy in the average Target Date Fund in the market, as represented by Market Glide's target date indices. The benchmark calculation uses a fixed ratio of essential and discretionary expenses. Your specific desired retirement spending is incorporated in the Plan Status: Probability of Success analysis. The required funding ratio is then populated for your plan based on your current age and desired retirement age. This helps to compare the particulars of your case against a relevant group using age appropriate asset allocations. For a funding Ratio to have an " on-track" status, the average retirement investor with that level of funding must have at least a 85% probability of success of achieving estimated essential expenses and at least a 70% probability of success of achieving nonessential expenses. An " off-track" funding ratio status is based on achieving less than a 75% probability of success of achieving estimated essential expenses or achieving less than a 50% probability of success of meeting non-essential expenses. An " at risk" funding ratio status is reserved for funding ratios that are not clearly off track, but that do not yet meet the robust requirements for being " on-track".

#### Likelihood of Achieving Your Goal

We use a Monte Carlo analysis to determine the Probability of Success (likelihood of achieving your goals). Monte Carlo analysis is used to show how variations in rates of return each year can affect your results. A Monte Carlo analysis calculates the results of your strategy by running it many times, each time using a different sequence of returns. Some sequences of returns will give you better results, and some will give you worse results. These multiple trials provide a range of possible results, some successful (you would have met all your goals) and some unsuccessful (you would not have met all your goals). Successful trials are those trials where your portfolio is not depleted and the Minimum Desired Wealth and Bequest objectives (if applicable) were met. The percentage of trials that were successful is shown as the probability that your strategy, with all its underlying assumptions, could be successful. The results using Monte Carlo analysis indicate the likelihood that an event may occur as well as the likelihood that it may

not occur. In analyzing this information, please note that the analysis does not take into account actual market conditions, which may severely affect the outcome of your goals over the long-term.

The Monte Carlo analysis provides projected, hypothetical performance of the asset allocation model illustrated. It does not reflect the performance of an actual portfolio, investment or account. The forward-looking capital market assumptions used in the Monte Carlo analysis are based on assumptions set by Morgan Stanley Wealth Management Global Investment Committee ("GIC"). The risk-and-return assumptions used in the Monte Carlo analysis includes estimated asset class returns based upon the weighted average of the actual returns of the respective indexes that are representative of each asset class. (See Return Assumptions.).

The hypothetical projections illustrated reflect an investment portfolio that has incorporated portfolio fees for the length of the analysis (please reference the Client Profile, Assumptions, and Goal Summary section for the applied fee). This fee is for illustration purposes and does not reflect the actual advisory fees, brokerage commissions, fund expenses and other costs that could be charged to your account. The impact of these expenses and fees can be material.

For example, for an advisory account with an annual fee of 2%, if the gross performance is 10%, the compounding effect of the fees will result in a new annual compound rate of return of approximately 7.81%. After a three-year period with an initial investment of \$100,000, the total value of the client's portfolio would be approximately \$133,100 without the fee and \$125,307 with the fee. Your account may also be charged other fees and expenses.

No investment strategy or allocation can eliminate risk or guarantee investment results. It is important to remember that future rates of return can't be predicted with certainty and that investments that may provide higher rates of return are generally subject to higher risk and volatility.

The actual rate of return on investments can vary widely over time. This includes the potential loss of principal on your investment. You should carefully consider several important factors when making asset allocation decisions using projected investment performance data based on assumed rates of return of indices: Indices illustrate the investment performance of instruments that have certain similar characteristics and are intended to reflect broad segments of an asset class. Indices do not represent the actual or hypothetical performance of any specific investment, including any individual security within an index.

Although some indices can be replicated, it is not possible to directly invest in an index. It is important to remember the investment performance of an index does not reflect deductions for investment charges, expenses, or fees that may apply when investing in securities and financial instruments such as commissions, investment advisory fees, sales loads, fund expenses, or other applicable fees.

Another important factor to keep in mind when considering the historical and projected returns of indices is that the risk of loss in value of a specific asset, such as a stock, a bond or a share

# Methodology

of a mutual fund, is not the same as, and does not match, the risk of loss in a broad asset class index. As a result, the investment performance of an index will not be the same as the investment performance of a specific instrument, including one that is contained in the index. Such a possible lack of "investment performance correlation" may also apply to the future of a specific instrument relative to an index. For these reasons, the ultimate decision to invest in specific instruments should not be premised on expectations that the historical or projected returns of indices will be the same as those for specific investments made.

#### **Expected Returns, Volatility and Correlations**

Return assumptions are established by the Morgan Stanley Wealth Management Global Investment Committee as of February 29th, 2024. The Global Investment Committee utilizes an equilibrium approach to generate expected returns, volatility and correlations for each asset class. The Global Investment Committee believes that by analyzing current and historical economic conditions and market trends, and then making projections of future economic growth, inflation, real yields for each country, we can estimate the equilibrium performance for an asset class. The equilibrium return is simply the central tendency around which market returns tend to fluctuate over a very long period of time. It is possible that actual returns will vary considerably from this equilibrium, even for a number of years, but we believe that market returns will eventually return to their equilibrium trend. These assumptions are subject to change. Please note that some time may be required to implement any future changes in assumptions into the tool.

#### Cost basis

The cost basis of an account is determined by taking the sum of position level cost basis that is available. For all the cash positions where the cost basis is not entered, the cost basis is assumed to be equal to the market value of cash. For all non-cash positions, the cost basis entered by the user or made available from external sources will be considered. The cost basis is used in the Monte Carlo analysis to compute investment gains and determine taxes to be applied due to portfolio withdrawals, portfolio rebalance, interest and dividends. The cost basis will be adjusted annually based on the turnover assumptions and carry forward losses from the previous year.

#### Morgan Stanley Wealth Management Global Investment Committee

Morgan Stanley Wealth Management Global Investment Committee provides guidance on asset allocation recommendations through the creation and maintenance of the model portfolios called the GIC Asset Allocation Models. The GIC Asset Allocation Models have both strategic allocations (seeking to maximize returns in the long run) and tactical allocations (seeking to maximize returns over a shorter period). The asset allocation recommendations in the GIC Asset Allocation Models can then be implemented by us in either a brokerage account or an investment advisory account, tailored to your specific financial needs and situation, your risk tolerance and subject to any reasonable investment restrictions imposed by you.

The GIC was formed in August 2009 and is currently made up of senior professionals from Morgan Stanley and its affiliates, Morgan Stanley & Co. LLC and Morgan Stanley Investment Management Inc.

The GIC Asset Allocation Models are not available to be directly implemented as part of an investment advisory service and should not be regarded as a recommendation of any Morgan Stanley investment advisory service. The GIC Asset Allocation Models do not represent actual trading or any type of account or any type of investment strategies and none of the fees or other expenses (e.g. commissions, mark-ups, mark-downs, advisory fees, fund expenses) associated with actual trading or accounts are reflected in the GIC Asset Allocation Models which, when compounded over a period of years, would decrease returns.

#### Hypothetical Projections and Its Limitations

All projections referenced herein are based on certain market assumptions which can change at any time. All projections are hypothetical, do not reflect actual investment results, and are not guarantees of future results. They are referenced for illustrative purposes only. Morgan Stanley does not represent or guarantee that the projected returns or income referenced will or can be attained.

Hypothetical projections have inherent limitations. There are frequently large differences between hypothetical projections and actual results subsequently achieved by any particular asset allocation or trading strategy. Hypothetical projections do not represent the investment performance of actual portfolios trading in a certain strategy and are generally designed with the benefit of hindsight and are created on the basis of certain assumptions about short-term and long-term risk and return forecasts of asset classes and global economic outlooks.

We make no representation or warranty as to the reasonableness of the assumptions made, or that all assumptions used to construct this projected performance have been stated or fully considered. To the extent that the assumptions made do not reflect actual conditions, the illustrative value of the hypothetical projections will decrease. The hypothetical projections shown may under or over compensate for the impact of actual market conditions and other factors, such as expenses. It cannot account for all factors associated with risk, including the impact of financial risk in actual trading or the ability to withstand losses or to adhere to a particular trading strategy in the face of trading losses. There are numerous other factors related to the markets in general or to the implementation of any specific trading strategy that cannot be fully accounted for in the preparation of hypothetical projections and all of which can adversely affect actual trading results. For example, the risk of loss in value of a specific security, such as a stock or bond, is not the same as, and does not match, the risk of loss in a broad-market index. As such, these projections may not be a meaningful tool in determining how a strategy will actually perform. Similarly, trading certain types of securities, such as international and emerging market, high yield and derivatives may have unique trading risks. As a result, the historical returns of an index will not be the same as a historical return of a specific security, including one that is contained in the index. This lack of "volatility correlation" will likely continue to apply in future returns of a specific security relative to an index.

This tool incorporates a methodology for making hypothetical financial projections approved by the Morgan Stanley Wealth Management Global Investment Committee. Opinions expressed in this presentation may differ materially from those expressed by other departments or divisions or affiliates of Morgan Stanley.

### **Client 1 and Client 2**

# Methodology

#### Downside Risk of Your Portfolio

The Downside Risk of Your Portfolio provides an estimation of the loss your portfolio would have experienced if the worst 3 month market event over the last 30 years were to reoccur. The asset allocation of the portfolio is used in conjunction with historical performance for those asset classes for the previous 30 years to determine the worst performing 3 month period. The Downside Risk of Your Portfolio is calculated by applying the performance of that period to the value of portfolio included in this analysis. When the asset allocation for an asset class is negative, the downside Risk indicating an overall gain to your portfolio.

#### ANNUITIES

#### Variable Annuities

Specific features of variable annuities are not considered in the Morgan Stanley Goals Planning System Analysis. If you have requested that the income of a variable annuity be considered, please note that the analysis is illustrative only, and that all payments are dependent on the claims-paying ability of the issuing insurance company. Certain information of a variable annuity networked in a Morgan Stanley account is provided by the issuing insurance company and Morgan Stanley is not responsible for the accuracy of the information. In addition, many variable annuities offer optional living benefits for an additional cost. Information included in the report not provided by the issuing insurance company relating to any living benefit (GWLB, GMWB, GMIB or GMAB) has been provided by you to your Financial Advisor. If the current variable annuity you hold has other riders/benefits, those riders/benefits are not considered in the planning analysis. Additionally if the variable annuity has multiple living benefits, only one living benefit. rider will be used in the planning analysis. When separate asset allocations are used for Variable Annuity with Living Benefit polices, a proxy (Long Term Corporate Bonds with a volatility of 9.35%) is used in the calculation of Volatility for both current and suggested target allocations.

It is not a solicitation or recommendation that you purchase a variable annuity and you should not rely on the information presented when making an investment decision.

#### Fixed / Fixed Index Annuities

Specific features of fixed / fixed index annuities are not considered in the Morgan Stanley Goals Planning System Analysis. If you have requested that the income of a fixed / fixed index annuity be considered, please note that the analysis is illustrative only, and that all payments are dependent on the claims-paying ability of the issuing insurance company. Generally, a portion of the income payment is taxable as ordinary income and the remainder of the payment is considered a tax-free return of investment in the annuity contract. An Exclusion Ratio determines the portion of each income payment that is not subject to income taxes. Certain information of a fixed / fixed index annuity networked in a Morgan Stanley account is provided by the issuing insurance company and Morgan Stanley is not responsible for the accuracy of the information. Any additional information included in this Report relating to fixed /fixed index annuity has been provided by you to your Financial Advisor. When separate asset allocations are used for Variable Annuity with Living Benefit polices, proxies (Fixed Index Annuities: Long Term Corporate Bonds with a volatility of 9.35%, Fixed Rate Annuities: Short Term Corporate Bonds with a volatility of 2.43%) are used in the calculation of Volatility for the current allocation.

It is not a solicitation or recommendation that you purchase a fixed / fixed index annuity and you should not rely on the information presented when making an investment decision.