

## Tax Exempt Fixed Income Overview

## September 2025

Serving the institutional and private client communities with high quality fixed income since 1996.

Sage Advisory Services 5900 Southwest Parkway Building 1, Suite 100 Austin, Texas 78735

SAGE

INVEST WITH WISDOM™

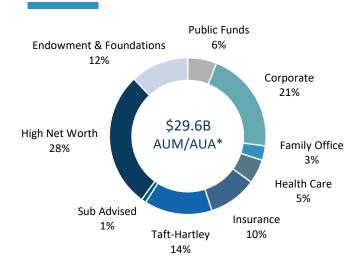
## Firm Overview



## Who We Are

- Founded in 1996
- 100% employee operated
- 18-member investment team has an average industry experience of 17 years
- Deliver fixed income SMAs across the yield curve
- \$2 billion in Municipal AUM

## Who We Serve



## Why Sage



Our size and independence as an employee-controlled firm enable us to take a nimble approach.

## Alignment

We customize the investment experience to align with each client's unique objectives and needs.

## Consistency

We have a tenured investment team and proven process that enable us to deliver expected results.

## Culture

We are committed to cultivating a culture of service and trust among our clients, our employees, and our community.

## **Investment Team**

## **Chief Investment Officers**

Robert G. Smith, III, AIF® & CIMC Thomas H. Urano, CFA President & Co-CIO Co-CIO

## **Expert Team Specializing in Institutional Fixed Income**

- Average industry experience is 17 years
- Average tenure at Sage is 12 years
- 12 CFA charterholders

## **Portfolio Management & Trading**

Jeffery S. Timlin, CFA, CMT
Managing Partner | Municipal

Seth B. Henry, CFA APartner | Securitized

Andrew K. Demand, CFA Artner | Credit

**David L. Luria, CFA** Vice President | Credit Nicholas C. Erickson, CFA Vice President | Securitized

Brett J. Adelglass, CFA Associate | Municipal

Nicholas A. Barnard, CFA Associate | Securitized

Alex Bender, CFA
Associate | Credit

## **Research & Strategy**

Robert D. Williams, CFA 

Chief Investment Strategist

Komson Silapachai, CFA Partner | Sr. Strategist

Andrew S. Poreda, CFA 
VP, Sr. Research Analyst | LDI,
Responsible Investing

**Emma L. Harper, CIMA**VP, Institutional Research, Client
Relations | Responsible Investing

Jae Y. Song, ASA

VP, Sr. Research Analyst | LDI

Douglas A. Benning

VP, Sr. Research Analyst | General

**Xochitl C. Maldonado** Research Analyst | Quantitative

Andrew Bui Research Analyst | LDI

Investment Committee

## Making a Difference Through a Tailored Approach

## Sage Value Add

## **Strategy Transition**

- Expedited investment of cash, aim to be >80% invested in 2 weeks
- Ability to accept existing bonds to support with manager transition

## **Client Service**

- Access to PMs and traders, and client service representatives
- Tax-gain/loss selling available at the discretion of the client
- Low fee structure and superior service

## **Sage Municipal Portfolios**

- Manager attributes provide unique access to limited market segments
- Tax-free income focus for all our municipal strategies
- Investors own all the bonds within their SMA portfolios

## **Customization Options**

## **Credit Quality**

Restrict, limit, or expand certain ratings categories

### **Cash Flow Alignment**

Align portfolio with known income distribution needs

## **Targeted Investing**

Limit or exclude certain sectors or securities

## **Transition Management**

Gradually transition securities from an existing portfolio

## **Maturity/Duration**

Target a max maturity or duration, or ladder the portfolio

## **Maximum Tax Efficiency**

Solve for clients' unique tax situations



Sage Investment Philosophy & Process



## Our Approach

## **Investment Philosophy**

We believe that over complete market cycles, consistent returns are driven by income generation, value opportunities, and rigorous risk management practices.

## **Generate Income**

Generate a consistent income advantage by harvesting a diversified set of risk premiums: duration, credit, structure and liquidity.

## **Capture Value**

Capture value opportunities by taking advantage of market dislocations due to unexpected volatility or market inefficiencies.

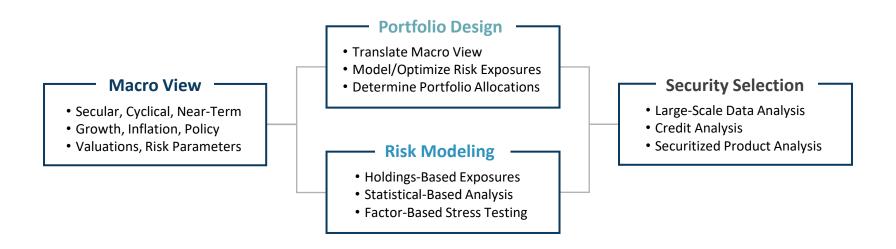
## **Manage Risk**

Actively manage portfolio-level risk to ensure alignment with investment outlook and client objectives.

## Our Approach

## **Investment Process**

Our teams work together to balance the development of our macro views with thoughtful portfolio design, value-driven security selection, and active risk management.



## Our Approach

## **Risk Management**

We believe that successful risk management requires a multi-dimensional approach utilizing holdings, statistical, and factor-based analysis.

## **Holdings-Based Measures**

Traditional risk measures such as key rate durations, sector exposures, quality distributions, and spreads – relative to market-based indices or custom liability-driven benchmarks.

## **Statistical-Based Analysis**

Analysis of exposures to key factors that impact fixed income portfolios (rates, volatility, spreads, etc.) and the determination of factor contributions, the expected volatility of returns, and tracking error.

## **Factor-Based Stress Testing**

Dynamic scenario testing across simple, historical, and more complex hypothetical factor-based events to determine the distributions of expected returns and tail-risk sensitivities.

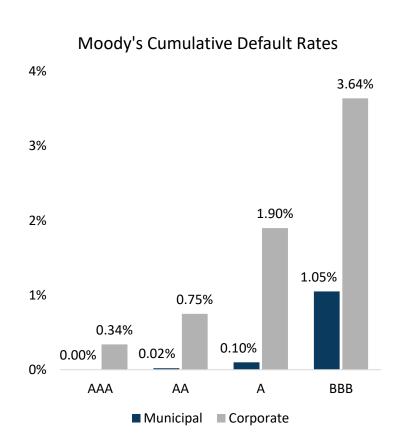


Municipal Investment Philosophy



## **Core Investment Tenets**

## Municipal IG Defaults Are Extremely Rare and Overall Credit Quality is Strong



# 23%

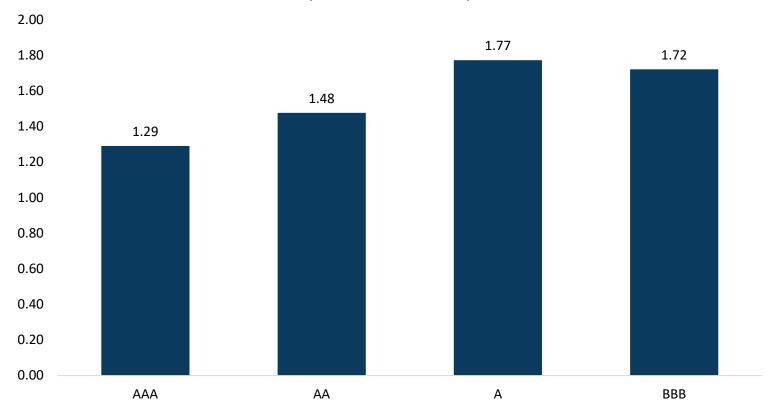
■ AAA ■ AA ■ A ■ BBB

Distribution of Credit Ratings

## **Core Investment Tenets**

## Municipal Single A Credits Provide the Most Optimal Risk/Reward Opportunity Set

## Municipal Credit Index Sharpe Ratio



## The Benefits of Sage SMAs

## **Our Size Makes Us Unique**

Optimized Ris	Optimized Risk/Return Approach						
	Average Quality						
Sage	А						
Avg SMA	AAA/AA						
Avg Fund	BBB						

Sage focuses on A rated credits because it provides the best return opportunity per unit of risk (A credits have the highest Sharpe ratio).

Security Selection Alpha	a
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	Best 1Y Excess Return*	Worst 1Y Excess Return*	>3% Drawdown Periods
AA	2.68%	-0.95%	0
Α	5.88%	-3.19%	1
BBB	11.80%	-7.69%	17
*Rolling	g 1Y Excess Retu	urn	

Sage has the agility needed to capture market dislocations by investing across the investment grade spectrum that could potentially enhance price return.

## **Muni Deal Sizes Enable Diversification**

	Strategy Assets	1% Position	4% Avg Position		
Sage	\$2B	\$20M	\$80M		
Avg Top 25 Muni Fund	\$25B	\$250M	\$1B		
ale a					

<sup>\*</sup>Average muni issue size is \$55M

Sage's size allows clients to have access to a larger universe of opportunities.

With 50+ broker/dealer direct relationships and multiple electronic trading platforms

Source: Bloomberg

## Sage Core Tenets At Work

## Risk Management Framework Can Help to Navigate Municipal Market Challenges

## Municipal Insurance Industry Collapse 2007

## Auction Rate Market Failure Feb 2008

## Municipal Defaults Jefferson Sewer 2007 Detroit 2013 Puerto Rico 2014

## Covid-19 Liquidity Crisis

Feb 2020 – Apr 2020

- Municipal AAA
   Insurance Industry
   all but ended
- Sage significantly limited price volatility due to all our holdings having an underlying issuer rating of A or better

- Variable rate bonds went from daily liquidity to illiquid as bank failures mounted and cash become scarce
- Sage shifted exposure from 30% in 2005 to 0% by 2006 due to FASB accounting changes

- Several municipal defaults were avoided by Sage as credit research predicted these failures
- Sage's risk-adjusted investment process eliminated these credits from our investable universe

- The sudden impact of the Covid shutdown affected everyone; however, Sage holdings rebounded sooner
- Solid security selection that balances beta risk and income maximization worked well



Municipal Investment Process



## Municipal Team and Department Structure

## **Portfolio Management & Trading**

Sage's structure enables seamless integration of data inputs to final security selection.

Jeffery S. Timlin, CFA, CMT Lead Portfolio Manager

Brett J. Adelglass, CFA Head of Research

**Nicholas C. Erickson, CFA** Senior Portfolio Manager

## **Research Analysts & IT Engineers**

Research/IT Analyst Integration: financial models are designed to replicate dedicated research analyst capabilities.

**Douglas A. Benning** VP, Sr. Research Analyst

Emma L. Harper VP, Sr. Research Analyst

Xochitl C. Maldonado

Research Analyst

Paul Vonder Haar Data Architect

## **IT Systems**

Technology and automation are instrumental in providing speed, accuracy and dependability.

**Bloomberg BQuant** 

**Aladdin Risk Management** 

**CRD Trade Order Management** 

Snowflake AI Data Cloud

**Sage Proprietary IT Tools** 

## Top-Down Investment Process at Work

## **Quantitative and Qualitative Screening Tools Deliver High-Value Universe**



Customized quantitative tools analyze large pools of numerical data for objective insights and near instantaneous outputs.

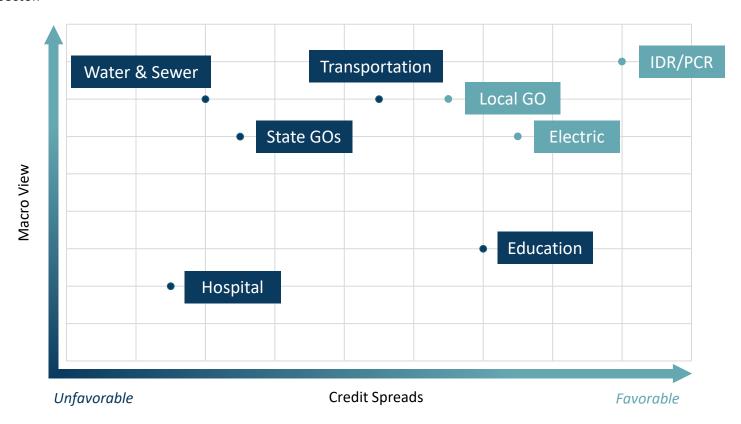
Provides refined list of high conviction states, sectors, credits, and issuers to maximize tax-free income, manage risk, and increase positive excess return.

Historic valuation analysis and real-time price discovery reveals market dislocations that enable targeted buy/sell decisions.

Utilize multiple trading platforms that provide market assessment tools to verify market depth and enhanced execution.

## Sector Level Analysis

Analyze credit spreads and macroeconomic factors to determine whether we have a favorable, neutral, or unfavorable view of each sector.



## Sage Fundamental Ratings

Assign individual ratings to key fundamental metrics, such as liquidity, scale, and leverage. Fundamental factor ratings are weighted to derive an overall investment rating, providing a comprehensive assessment that can be compared to public ratings from agencies like Moody's or S&P.

Issuer	Scale	General Fund Reserves	General Fund Cash	Government- Wide Reserves	Total Leverage	Financial Trend	Sage Overall Rating	Rating Agency Rating	Rating Differential
City of Mount Pleasant TX	BBB-	BBB	В	BBB-	BBB+	Declining	BBB-	A+	-5
City of Fargo ND	BBB	AA	AA-	BBB	BBB+	Declining	A-	AA	-4
City of Pearland TX	BBB-	AA+	A+	Α	BBB	Declining	Α	AA+	-4
City of Waterbury CT	AA+	BBB-	A-	A-	Α	Stable	BBB+	AA-	-4
Adams & Arapahoe Joint School CO	AAA	Α	A+	BBB+	AA-	Declining	Α	AA+	-4
Hayward Unified School District CA	AA-	BBB-	AA	BBB-	BBB	Declining	BBB	A+	-4
Shaler Area School District PA	BBB-	BBB+	BBB	BBB	BBB+	Declining	BBB	A+	-4
City of Columbus OH	AAA	AA	AA	AA+	BBB+	Declining	AA-	AAA	-3
City of Petersburg VA	BBB-	AAA	AAA	AAA	AAA	Stable	AAA	AA-	3
City of North Las Vegas NV	Α	AAA	AAA	AAA	AA+	Declining	AAA	AA-	3
City of Kearney NE	BBB-	AAA	AAA	AAA	AA	Stable	AA+	A+	3
City of Millbrook AL	BBB-	AAA	AAA	AAA	A+	Improving	AAA	AA-	3
City of Medford OR	BBB-	AAA	AAA	AAA	AA+	Improving	AAA	AA-	3
City of Sevierville TN	BBB-	AAA	AAA	AAA	AA+	Improving	AAA	AA-	3
Griffin-Spalding County GA	BBB	AAA	AAA	AA	AA	Improving	AA+	A+	3
School District of Philadelphia PA	AAA	AA	AA-	BBB+	AA-	Improving	A+	BBB	4
Allentown City School District PA	AA	Α	AA	Α	AA	Improving	A+	BBB	4
Euclid City School District OH	BBB-	AAA	AAA	AA+	Α	Improving	AA	A-	4
City of Detroit MI	AAA	AAA	AAA	AA	Α	Stable	AA+	BBB	7

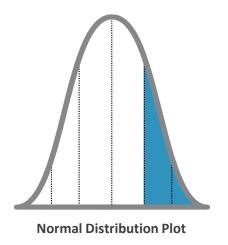
Source: Sage as of 3/14/2025

## **Security Selection Process**

## **Proactively Search for Undervalued Opportunities**

## **Deep Dive on High Value Credits**

Focus on securities with attractive absolute and relative valuations.



## **Market Assessment**

Portfolio managers assess liquidity, supply/demand, and market constraints.



## **Establish Position**

Purchase securities that meet our criteria and monitor existing holdings.

## **Bottoms-Up Process**

Purchase Bond

Negotiate Best Execution

Identify Unique Risk Factors

Affirm Rating

## New Issue Market Opportunities

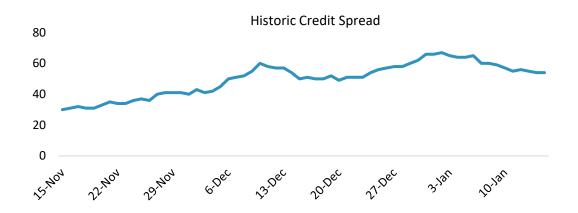
**Sector:** Appropriation

Engage in weekly New Issue deals that provide the best opportunity set and offer an attractive new issue discount

10 Year

**Issuer:** NJ Trans Trust Fund Authority **Credit Rating Issue Spread Talk Mat Cpn Structure** A2/A-/A Stable 2Y = 40 bps1Y-20Y = 5.0%Deal Size: 1.787 billion Index/Sage Weighting 5Y = 50 bps25Y = 4.5%**Debt Outstanding:** \$50 billion 1.2% / 4.0% **State:** New Jersey 10Y = 65 bps30Y = 4.0%Callable

30Y = 85 bps



Spread Summary					
Last	54.0				
Mean	49.9				
Off Avg	4.1				
Std Dev	10.7				
Std Dev from Mean	1.1				
Percentile	84.5				
High	67.0				
Low	30.0				

Source: Bloomberg

## Daily Bid-Wanted List Participation

Ability to screen hundreds of bonds daily out for the bid to source attractively valued opportunities

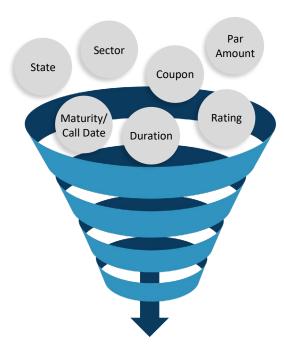
## **Summary**

- · Hundreds of block size offerings are available to bid daily
- Sage has the ability to assess multiple unique factors that contribute to the value of a bond
- Sage's bond screener and algorithmic pricing model utilize vast amounts of historic trade data to determine fair bidside market value
- Sage can adjust our bid to take advantage of market liquidity and various technical factors

## Sage Screener/Algo Price Model

- · Large database of historic trades
- Sage utilizes custom filters to define the parameters of bonds we are looking to bid/source
- Outputs are bonds to bid that fit our portfolio needs

## **Bond Characteristics/Factor Data**



**Sage Bid Opportunities** 

## Secondary Market Offering Screener

Screen through thousands of daily dealer offerings, and quickly source bonds that are being offered cheap to their fair market value.

Issuer	CUSIP	Coupon	Maturity	Next Call Date	Duration	Dealer Offering Yield	Fair Value	Discount to Fair Value	G-Spread
Hamilton WI Sch Dist	408172HV	4	4/1/2039	4/1/2033	9.87	3.93	3.75	0.18	41.58
Cook Cnty IL Cmnty Clg Dist #5	213187DM	5	12/1/2047	12/1/2027	8.16	4.60	4.43	0.17	49.54
Anoka Cnty MN	03621PAN	4	2/1/2039	2/1/2032	9.52	3.94	3.78	0.16	44.97
Hayward CA Wstwtr Revenue	421296AP	4	3/1/2044	3/1/2035	12.94	4.04	3.91	0.13	16.45
Hawkeye IA Cmnty Clg	42015RDG	4	6/1/2036	6/1/2031	7.45	3.52	3.45	0.07	33.39
Hayward CA Wstwtr Revenue	421296AR	4	3/1/2046	3/1/2035	13.93	4.16	4.09	0.07	18.91
Elizabethtown KY Indep Sch Dist	286884KF	5	3/1/2036	3/1/2033	7.07	3.47	3.44	0.03	34.05
Harris Cnty TX	4140052W	5	9/15/2034	N/A	7.74	3.24	3.21	0.03	18.32
Highland Park TX Indep Sch Dist	430686SN	5	2/15/2039	2/15/2035	9.06	3.51	3.49	0.02	14.28
Auburn Univ AL Gen Fee Revenue	050589SU	5	6/1/2032	N/A	6.14	3.00	2.98	0.02	9.52
Canyons Sch Dist Local Bldg AU	139083BS	5	6/15/2036	6/15/2034	7.76	3.30	3.28	0.02	15.47
California ST Public Wks Brd	13068XDA	4	11/1/2037	11/1/2031	8.31	3.50	3.49	0.01	25.87
Dist of Columbia Income Tax	25477GUL	5	7/1/2034	7/1/2032	6.31	3.18	3.17	0.01	16.43
Brighton CO Wtr Activity	10932PGZ	5	6/1/2039	6/1/2035	9.30	3.47	3.46	0.01	9.40
East Centrl TX Indep Sch Dist	271515A5	5	8/15/2036	8/15/2034	7.99	3.35	3.35	0	20.04

Source: Sage as of 3/14/2025

## IMPORTANT DISCLOSURES

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