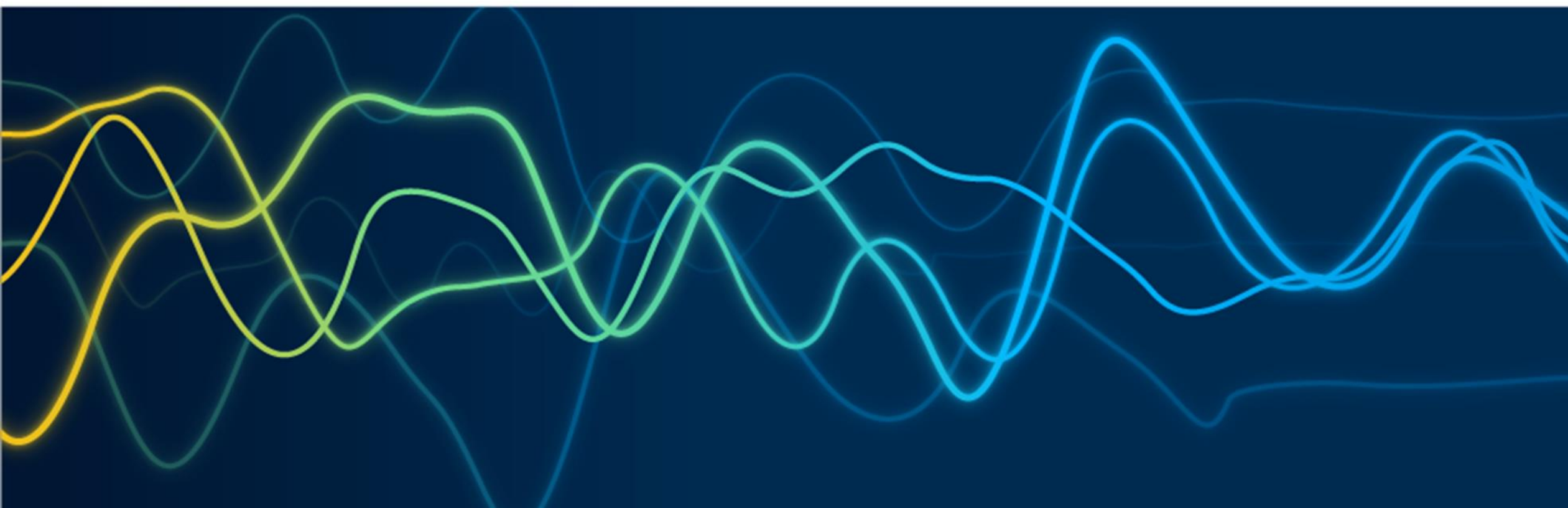


# Municipal Bond Market Monitor

Municipal Bond Group

Q1 2025



## Q1 2025 Municipal Market Review

### WEAK TECHNICALS LATE IN Q1 RESULT IN TAX-EXEMPT MUNICIPAL UNDERPERFORMANCE VS TAXABLE INDICES

- Muni Bond Index: -0.22% | HY Muni Index: +0.82% | Taxable Muni Index: +2.99%
- US Treasury: +2.92% | Corporate: +2.31%

### FOLLOWING Q4’S INCREASE, MUNICIPAL YIELDS CONTINUE TO RISE IN Q1

#### Q4 ‘24 AAA Muni

- 2-Year: 2.30% → 2.82% +52 bps
- 5-Year 2.31% → 2.87% +56 bps
- 10-Year 2.60% → 3.06% +46 bps
- 30-Year 3.52% → 3.90% +38 bps

#### Q1 ‘25 AAA Muni

- 2-Year: 2.82% → 2.68% -14 bps
- 5-Year 2.87% → 2.86% -1 bps
- 10-Year 3.06% → 3.26% +20 bps
- 30-Year 3.90% → 4.24% +34 bps

### MUNICIPAL FUND FLOWS SLOW IN MARCH BUT REMAIN POSITIVE FOR THE QUARTER

- Following inflows of \$42 billion in 2024, Q1 inflows reached approximately \$10 billion.
- Long Duration (+\$5.4bn) and High Yield (+\$4.8bn) flows continue to be strong, while Short Term flows turned modestly positive (+\$1.3Bn).

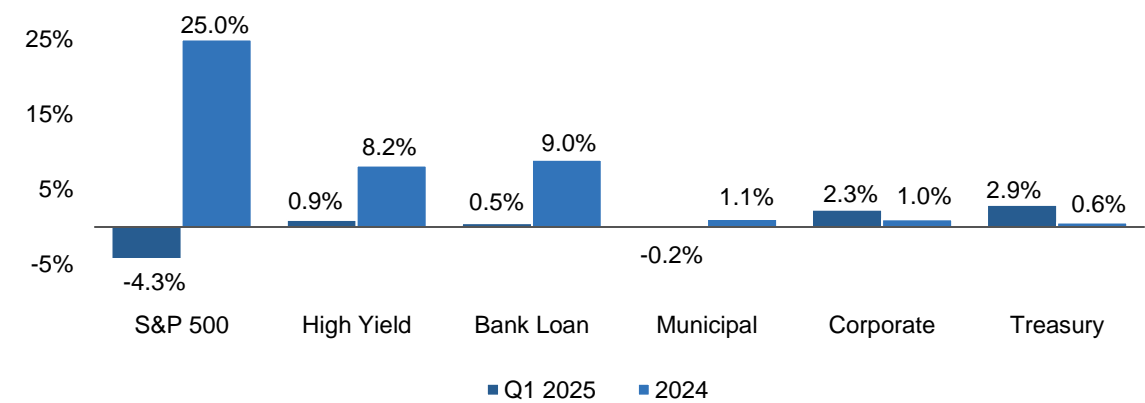
**Past performance is no guarantee of future results.** It is not possible to invest directly in an index. See end of report for important additional information. This commentary may contain statements that are not historical facts, referred to as “forward looking statements”. Actual future results may differ significantly from those stated in any forward-looking statement, depending on factors such as changes in securities or financial markets or general economic conditions.  
Source: Index Performance: Bloomberg, AAA YTD changes as of 3/31/2025. Fund Flows: J.P Morgan, Ratios: Bloomberg

Overview

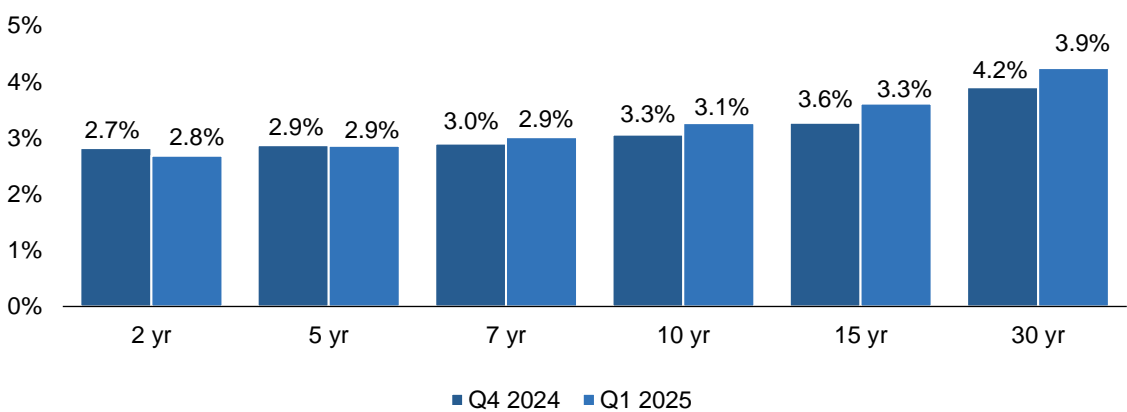
- The Fed held rates steady in Q1 at 4.25-4.5% and the Fed funds rate decision in March was unanimous.
- In March, the Fed dot plot forecasted two rate cuts in 2025, yet the FOMC statement offered little guidance stating “[u]ncertainty around the economic outlook has increased. The Committee is attentive to the risks to both sides of its dual mandate.”
- It is likely that the Fed remains in a rate cutting cycle, however additional pausing provides time to see what fiscal policies materialize.

- Treasury yields declined during the quarter with 5-year, 10-year and 30-year yields 43 bps, 37 bps and 21 bps lower, respectively.
- In contrast, municipal yields fell by only 1bp in 5-years, while yields rose further out on the curve with 10-year and 30-year yields higher by 20 bps and 34 bps, respectively.
- The municipal underperformance was largely a result of weak technicals in March, which pushed yields 7 - 42 bps higher during the month.

Major Asset Class Returns



AAA Municipal Yields (%)



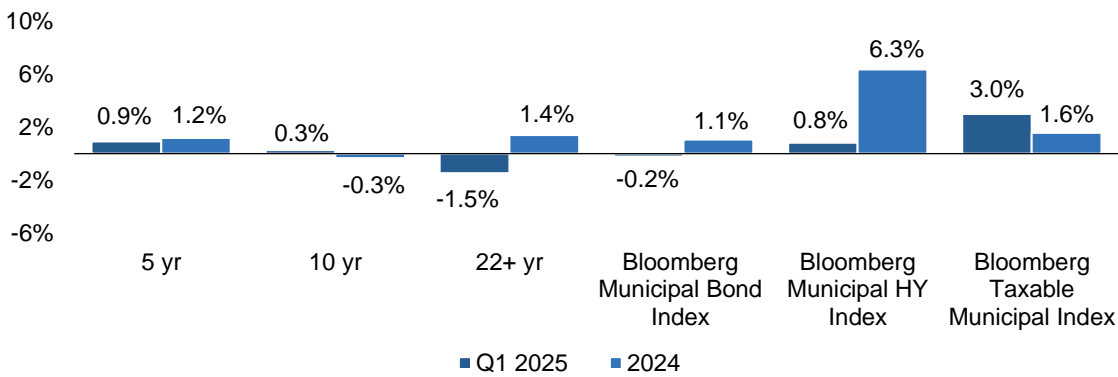
Source: Bloomberg and Morningstar Direct as of 3/31/25. **Past performance is no guarantee of future results.** It is not possible to invest directly in an index. See end of report for important additional information. \*Basis points (BPS) is a unit that is equal to 1/100th of 1% and is used to denote the change in a financial instrument.

Index Returns

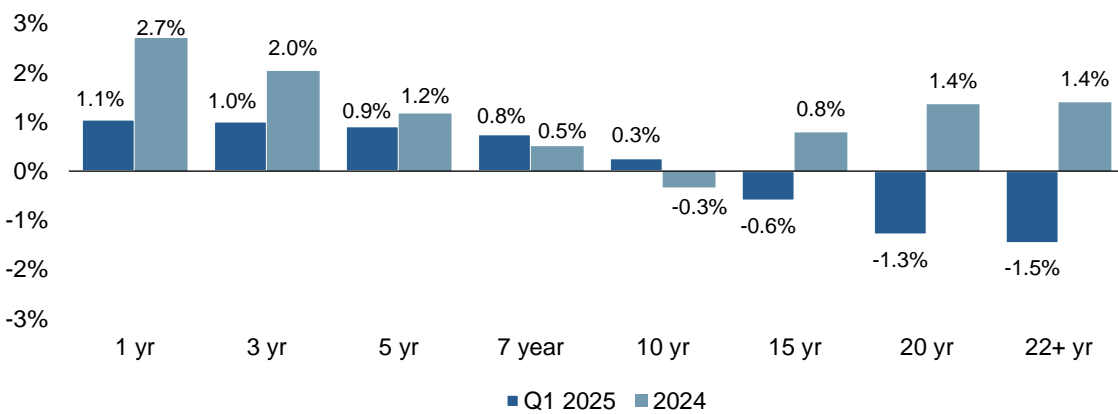
- Municipal performance was positive out to approximately 10 years and negative further out the curve.
- After outperforming by over 500bps in 2024, high yield municipals outperformed again in Q1, up 0.82%.

- Short duration, investment-grade municipals significantly outperformed as the 1-year Index returned +1.05% while the 22+ year Index declined 1.46%.
- Given the protection short duration municipals provide and the improving attractiveness of the longer end of the curve, we continue to like barbell curve positioning in 2025.

Tax-Exempt and Taxable Index Returns



Investment Grade Tax-Exempt Index Returns



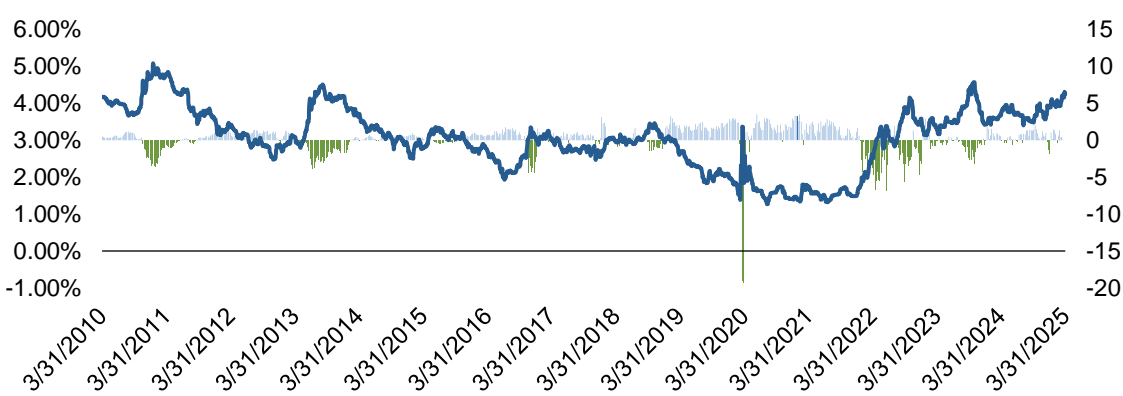
Source: Bloomberg, MMA and Morningstar Direct as of 3/31/25. **Past performance is no guarantee of future results.** Performance less than one year is cumulative. It is not possible to invest directly in an index. See end of report for important additional information.

# Municipal Fund Flows

- Though municipal fund flows were strongly positive in Q1, they did turn negative in March as tax season approached.
- For the quarter, municipal fund inflows were approximately ~\$9.8bn. Of the total, ~\$6.3bn entered open-end funds while ETFs received ~\$3.5bn.

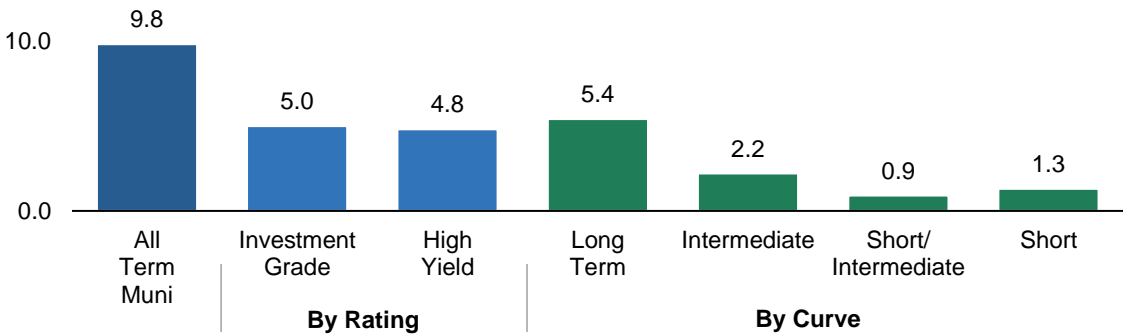
- By duration, long-term funds continued to post the highest inflows, while short/intermediate and short-term fund flows turned positive after experiencing outflows throughout 2024.
- By credit quality, both investment grade and high yield funds posted significant inflows.

## Muni Mutual Fund Flows



## Muni Fund Flows By Category

YTD Municipal Fund Flows (\$Bn)



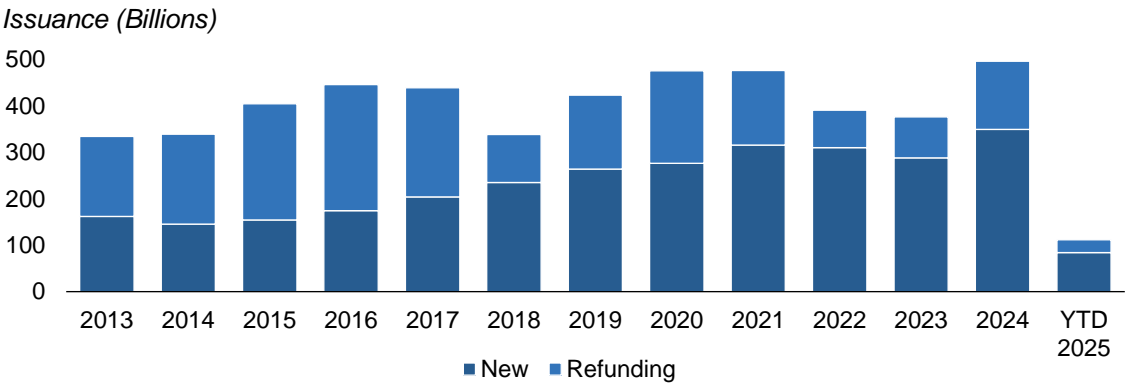
Source: Thomson Reuters Municipal Market Data. Date Range: March 2010– March 2025.  
Flow data provided by J.P. Morgan as of 3/31/2025.

Municipal Issuance

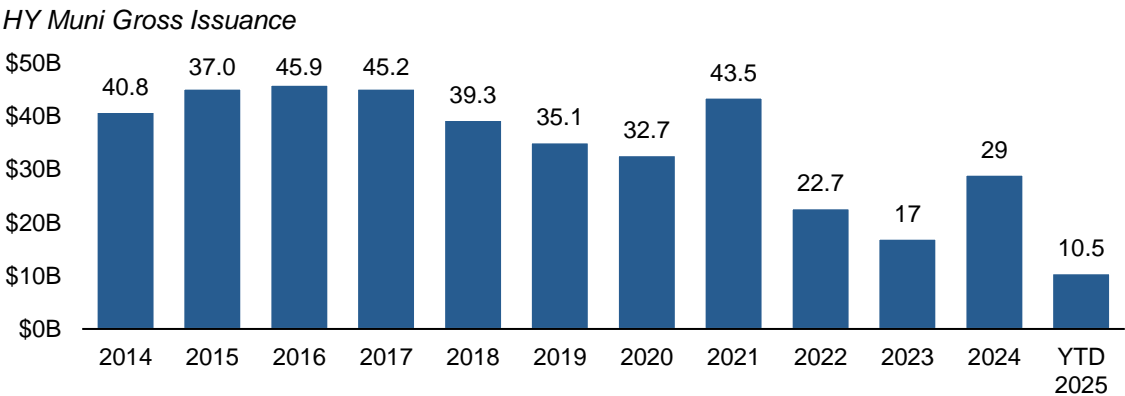
- Following record issuance in 2024 (\$496bn), new deal activity remained robust in Q1 at \$111.4bn, up 18% year-over-year. Approximately 75% of issuance was new money and 25% refunding deals.
- We anticipate issuance will remain elevated in 2025 and potentially surpass 2024's record levels.

- At \$10.5bn, high yield municipal issuance was up relative to its trailing five-year average of ~\$6.67bn during the first quarter, but represented only ~9% of overall municipal supply in Q1 2025.
- Elevated yields, moderate issuance and strong fund flows continue to provide a supportive backdrop for high yield municipals heading into Q2.

Municipal Bond Issuance: New vs. Refunding



Municipal Bond Issuance: High Yield



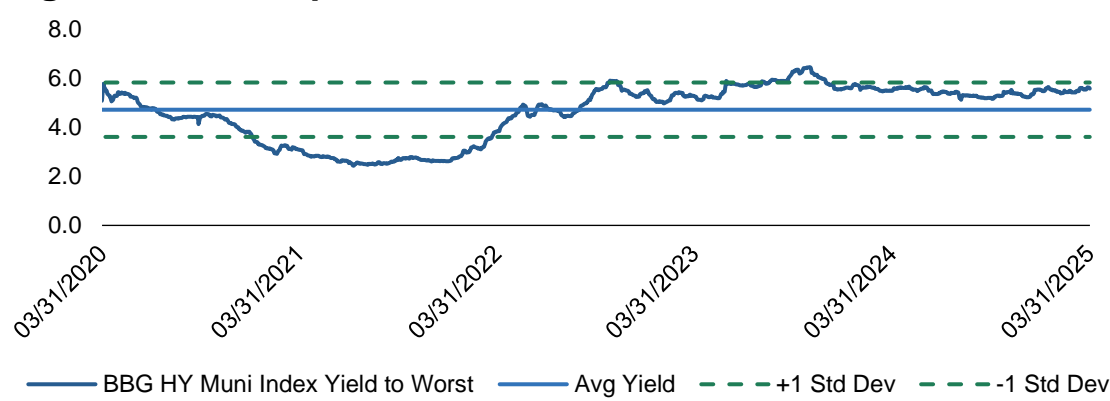
Source: Municipal Bond Issuance data from Bloomberg Barclays Research and J.P. Morgan as of 3/31/2025. Private placement issuance counted as new capital.

## High Yield Municipals

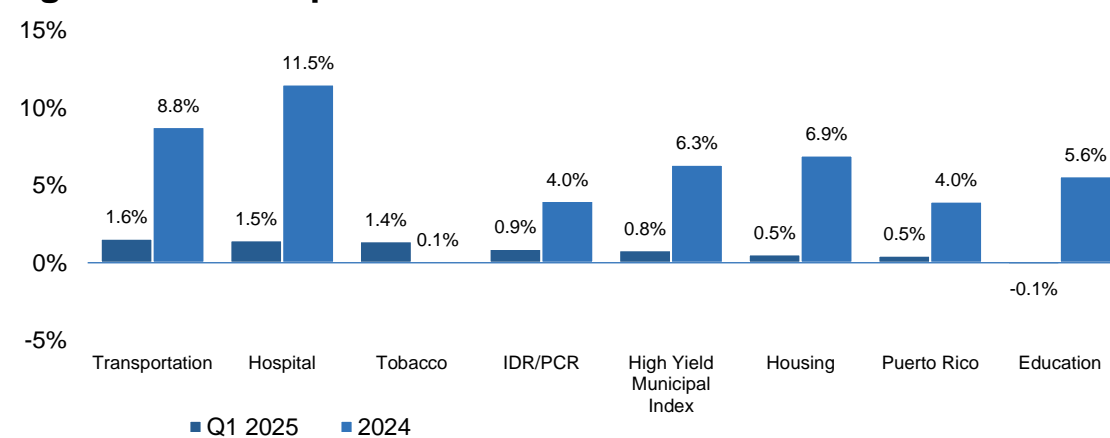
- The yield-to-worst on the High Yield Municipal Index increased 7bps during the quarter from 5.52% to 5.59%.
- At 5.59%, yields remain attractive and are one standard deviation wide to the Index’s 5-year average of 4.72%.

- Hospitals, Transportation and Tobacco outperformed in Q1, while Housing and Higher Education lagged.
- We continue to monitor investment grade and high yield sectors closely as certain policy activity could have an impact on the municipal credit landscape.

High Yield Municipal Index YTW



High Yield Municipal Sector Returns



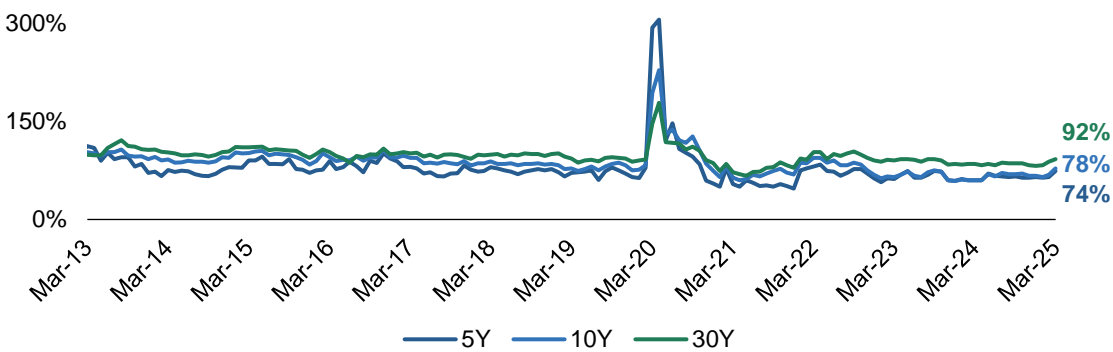
Source: Barclays and Bloomberg, as of 3/31/2025. The index performance is provided for illustrative purposes only and is not meant to depict the performance of a specific investment. **Past performance is no guarantee of future results.**

# Muni-to-Treasury Yield Ratios

- Muni-to-treasury ratios cheapened across the curve and ended the quarter at their most attractive levels in approximately 18 months.
- Specifically, the 5-year muni/treasury ratio increased from 66% to 74%, while the 10-year rose from 67% to 78% and the 30-year jumped to 92% from 82%.

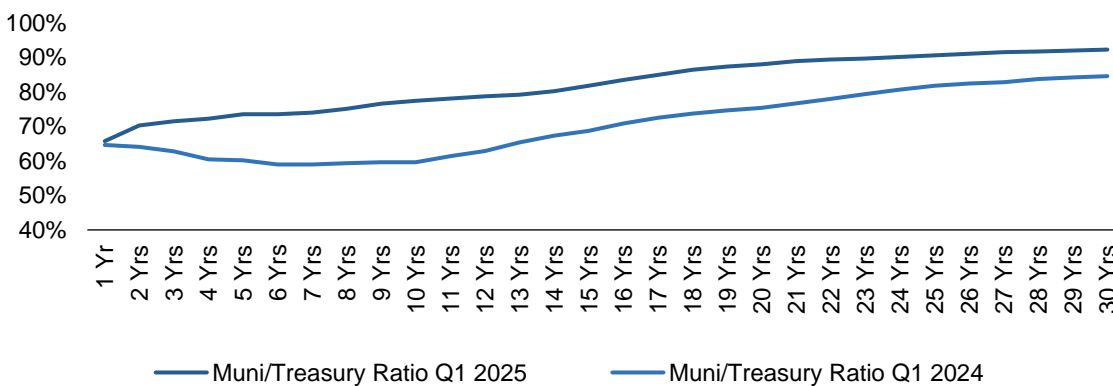
- While we believe ratios will remain relatively weak through tax season, it is important to note that cross-over buying activity picked-up in March as long-term ratios moved above 90%.

AAA Muni-to-Treasury Yield Ratios (%)



Muni/Treasury Ratios YTD

Muni/Treasury Ratio Comparison



Source: Thomson Reuters as of 3/31/25, Bloomberg as of 3/31/25. **Past performance is no guarantee of future results.** See end of report for important additional information.

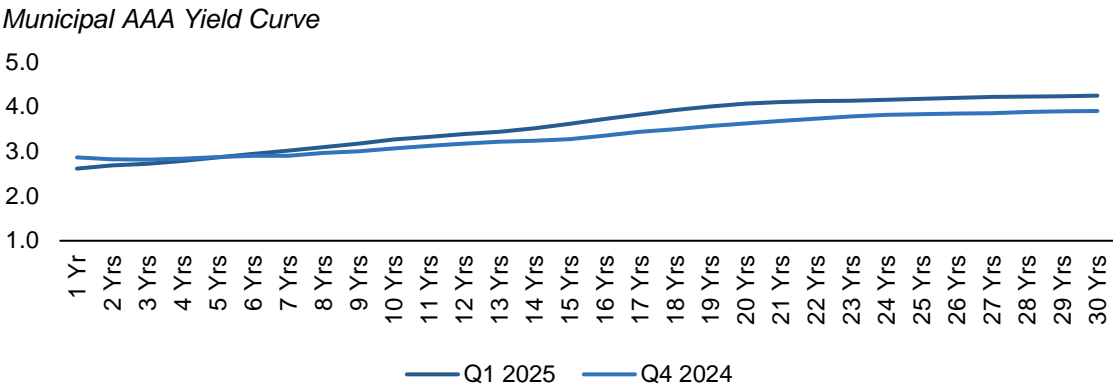


## Municipal Yield Curve

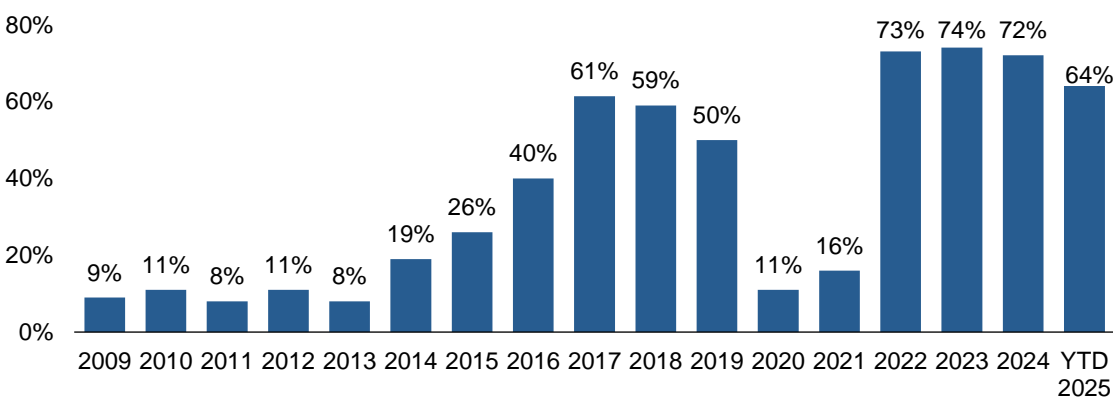
- The municipal curve twist steepened in Q1 as 2-year yields decreased 14bps, and 30yr yields increased 34bps.
- Meanwhile, the treasury curve bull steepened as the 2-year yield decreased 35bps while the 30-year yield fell 21bps.
- At 4.24%, the 30-year AAA yield is at its highest level since October 2023.

- With the curve steepening, the 2-year municipal now captures 64% of the 30yr yield compared to 81% one year ago.
- Short-term municipal yields remain attractive particularly compared to taxable alternatives. We believe investors should continue to consider a barbell approach by adding duration and locking in longer-term yields.

### AAA Muni Yield Curve Comparison



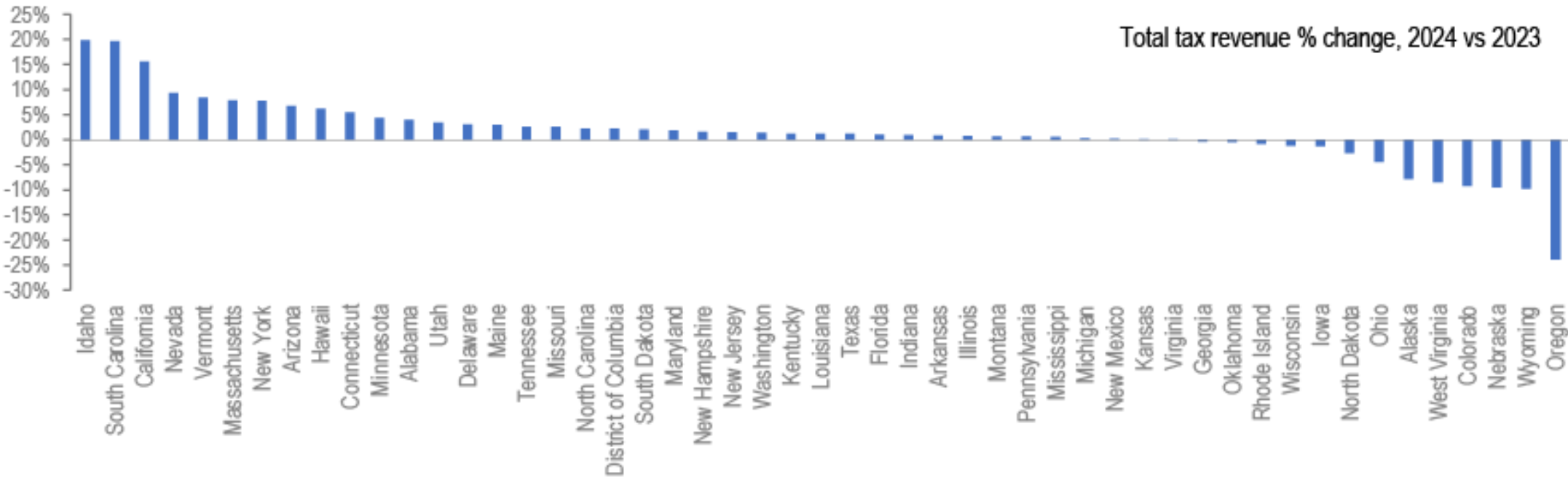
### % of Municipal Curve Captured by 2-Yr Municipal Bond



Source: Thomson Reuters as of 3/31/25, Bloomberg as of 12/31/24. **Past performance is no guarantee of future results.** See end of report for important additional information.

# Increasing Tax Revenue Collection

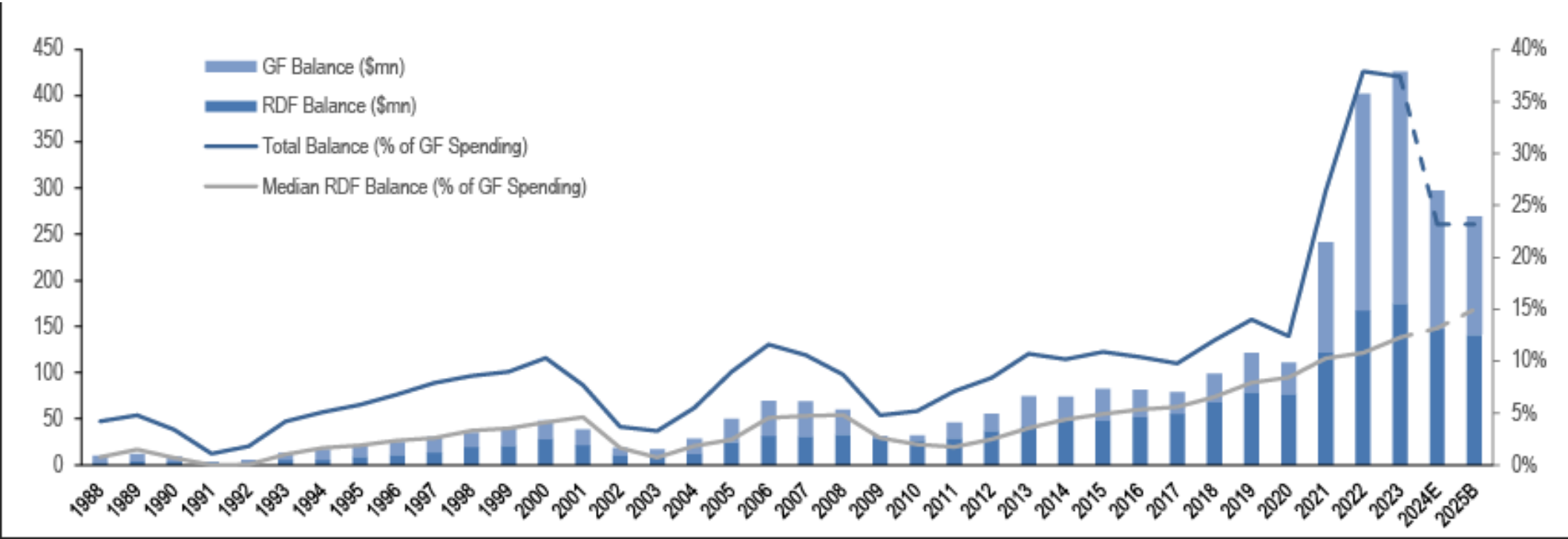
Majority of states reported positive 2024 growth in tax revenues, indicating stable growth headed into 2025



Source: J.P. Morgan, Census Bureau. Individual state monthly tax reports. Note: Not seasonally adjusted.

# Rainy Day Funds Remain Near Historical Record Highs

States' Rainy Day Funds indicate strong fiscal management



Source: National Association of Budget Officers. Note: Figures for fiscal year 2024 are estimates and fiscal 2024 are projections based on governors' recommended budgets. GF and total balance figures for FY24 exclude WI, and figures for FY25 exclude MS, VA, and WI. "2024E" refers to the expected Rainy Day Fund Balance, while "2025B" refers to the forecast Rainy Day Fund Balance.

# Municipal Credit Has Weakened in Recent Months but Remains Positive

Q4 2024's ratio of 1.7 to 1 is the weakest since Q4 2020's 0.3 to 1 ratio

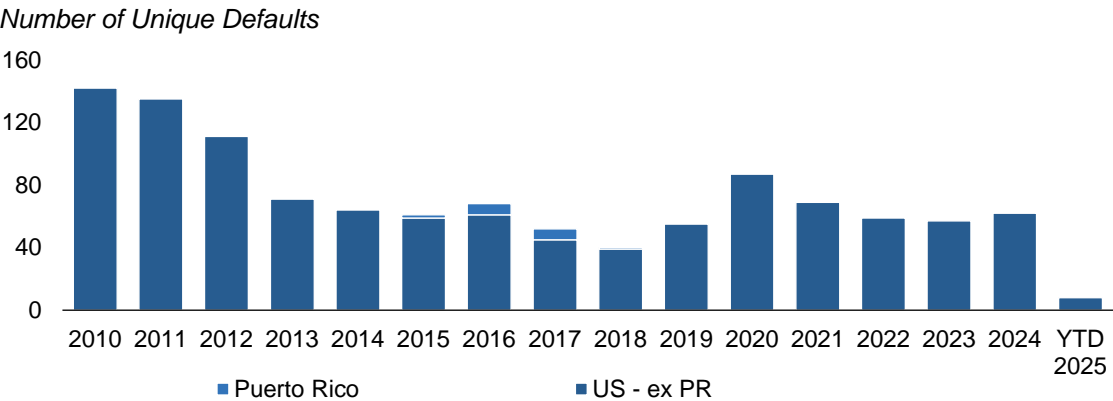
Historical Upgrade to Downgrade Ratio



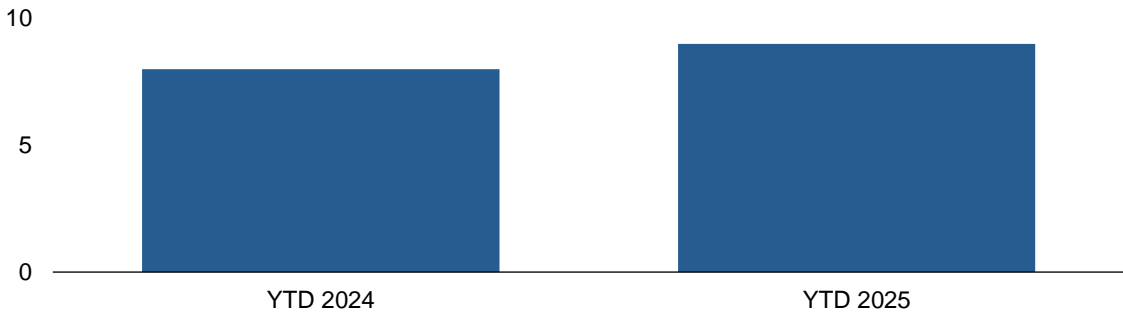
Source: BofA Global Research, Moody's Ratings, S&P Global Ratings

# Municipal Default Overview

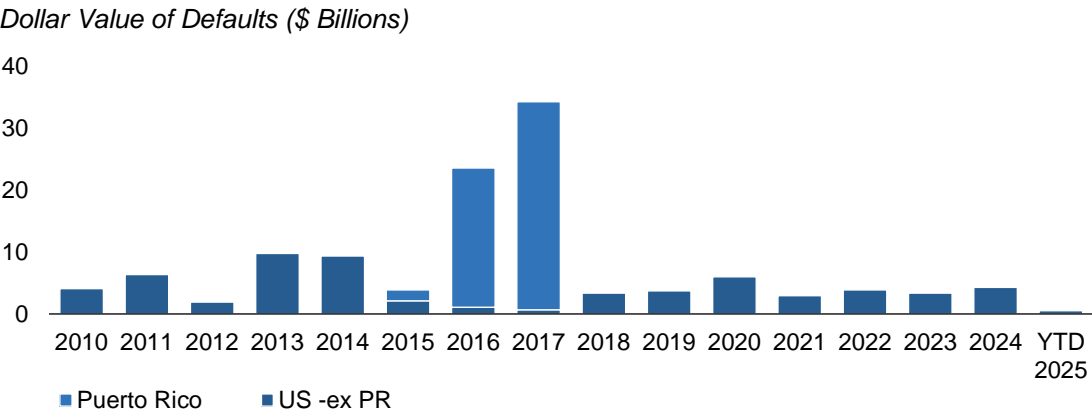
## Number of Unique Annual Defaults



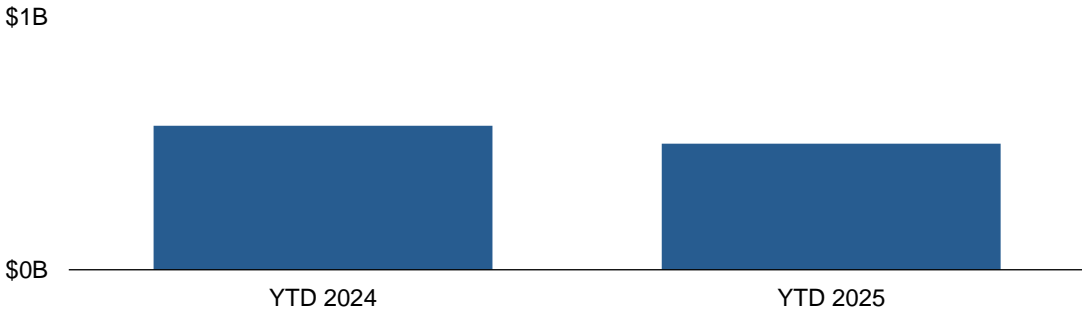
## YTD 2025 Number of Unique Defaults was Down Slightly YoY



## Dollar Value of Annual Defaults (\$ Billions)



## YTD 2025 Dollar Value of Defaults (\$ Billions) Decreased by 12%

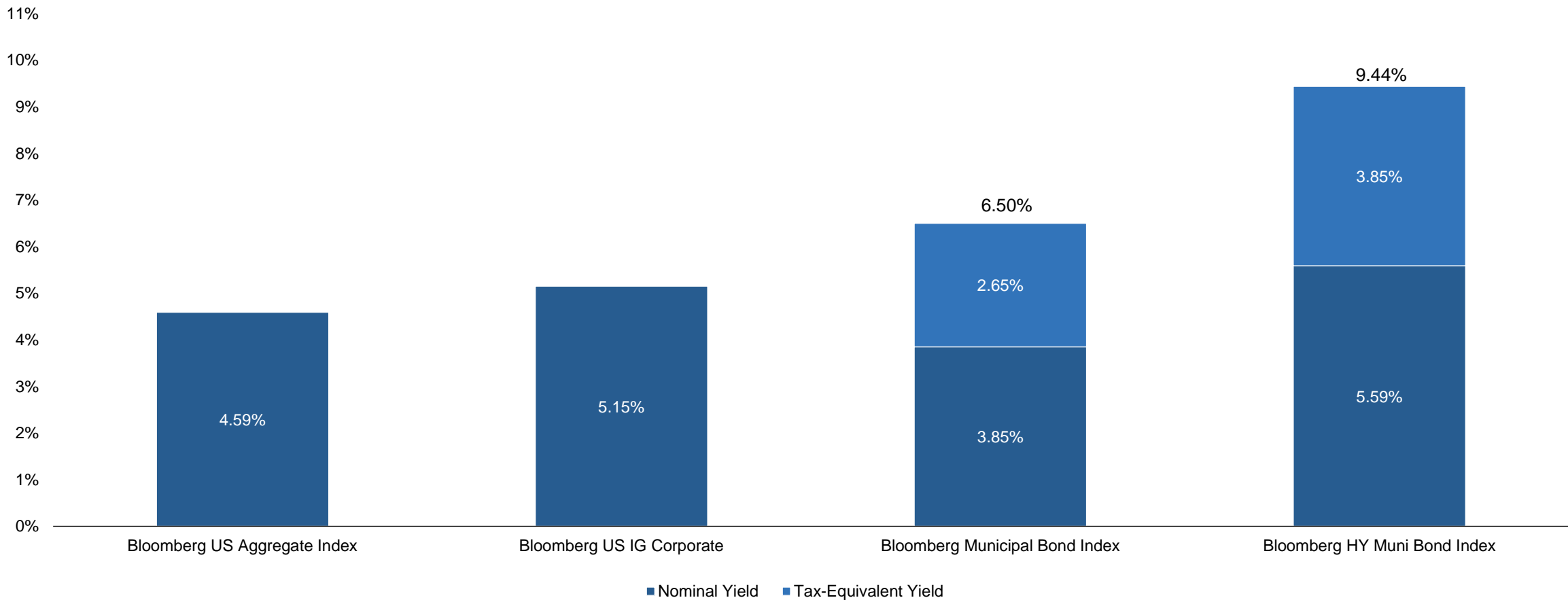


Source: MMA. Default data as of 3/31/2025

# Taxable Equivalent Yields

Municipal Taxable-equivalent Yields Appear Very Attractive Relative to Other High-Quality Options

## Taxable Equivalent Yields



Sources: Barclays Live as of 3/31/25, Tax Policy Center. This table is for illustrative purposes only and uses the highest current applicable federal tax rates plus 3.8% health care tax. **Past performance is no guarantee of future results.** It is not possible to invest directly in an index. See end of report for important additional information.

## Municipal Market Outlook

- The Fed left rates unchanged during both the January and March FOMC meetings, citing increased uncertainty around tariff policy and its impact on inflationary data.
- Weak seasonal technicals in Q1, coupled with policy uncertainty, resulted in the higher yields for the majority of the municipal curve, providing investors a buying opportunity to lock in near decade high starting yields.
- Given higher absolute yields and attractive muni-to-treasury ratios, resulting from Q1 volatility, we anticipate a continuation of net positive flows to the asset class for the remainder of 2025.
- With the election behind us but most individual tax cuts set to expire at the end of 2025, we remain focused on proposed legislation related to changes to marginal tax rates, the standard deduction, the cap on State and Local Tax deductions (SALT) and the phaseout of the Alternative Minimum Tax (AMT) exemption.
- Bottom line: With the Fed on the sideline for now and potential risks stemming from fiscal policy, we are advocating for neutral duration exposure with an active management tilt to take advantage of any near-term volatility in rates.

# Appendix: Additional Slides





## Overview of Legislation and Municipal-Related Spending in Relief Bills

The Below Table Provides a High-level Summary of the Fiscal Support for Municipals Through the Four Most Recent Pieces of Legislation Passed by Congress. In Aggregate, over \$1.7 Trillion of Capital has Been Allocated to Various Parts of the Municipal Bond Market.

	2021 Infrastructure Bill	American Rescue Plan	Dec. Federal Stimulus	CARES Act
Total Muni Market Support	\$550	\$650	\$157	\$347
States	\$136	\$408	\$30	\$169
Locals	--	\$182	\$30	\$164
Community based orgs.	--	—	—	\$1
Not for Profits	--	\$0.8	\$15	—
Healthcare	--	\$13	\$4	\$108
Primary/Sec Education	--	\$137	\$58	\$25
Higher education	--	\$40	\$26	\$17
Airports/Ports	\$42	\$11	\$2	\$10
Surface transit	\$110	—	\$10	—
Mass transit	\$39	\$30	\$14	\$25
Other Transportation	\$78	\$2	\$2	—
Housing	--	\$39	\$25	—
Utilities	\$143	—	—	—

Source: US Congress, J.P Morgan. Note: Sum of individual sector amounts may not add up to aggregate total due to double counting, as much of the capital is shared across sectors.

## RISK CONSIDERATIONS

An imbalance in supply and demand in the municipal market may result in valuation uncertainties and greater volatility, less liquidity, widening credit spreads and a lack of price transparency in the market. There generally is limited public information about municipal issuers. Investments in income securities may be affected by changes in the credit worthiness of the issuer and are subject to the risk of non-payment of principal and interest. The value of income securities also may decline because of real or perceived concerns about the issuer's ability to make principal and interest payments. As interest rates rise, the value of certain income investments is likely to decline. Diversification cannot ensure a profit or eliminate the risk of loss. Debt securities are subject to risks that the issuer will not meet its payment obligations. Low rated or equivalent unrated debt securities of the type in which a strategy will invest generally offer a higher return than higher rated debt securities, but also are subject to greater risks that the issuer will default. Unrated bonds are generally regarded as being speculative.

## ADDITIONAL INFORMATION

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Important Information and Disclosure

TERMS

**Municipal-to-Treasury Yield Ratios** are relative value indicators that measure the richness or cheapness of Municipal bond yields to comparable maturity Treasury bond yields.

**Yield to Worst** is a measure which reflects the lowest potential yield earned on a bond without the issuer defaulting. The yield to worst is calculated by making worst-case scenario assumptions by calculating the returns that would be received if provisions, including prepayment, call or sinking fund, are used by the issuer.

INDEX DEFINITIONS

**Bloomberg Municipal Bond Index** is an unmanaged index of municipal bonds traded in the U.S.

**Bloomberg High Yield Municipal Bond Index** is an unmanaged index of non-Investment Grade Municipal bonds traded in the U.S.

**Bloomberg Taxable Municipal Bond Index** is an unmanaged index of Taxable Municipal Bonds traded in the U.S.

**Bloomberg U.S. Treasury Index** measures public debt instruments issued by the U.S. Treasury.

**Bloomberg U.S. Aggregate Index** is an unmanaged index of domestic investment-grade bonds, including corporate, government and mortgage-backed securities.

**Bloomberg U.S. Corporate High Yield Index** measures USD-denominated, non-investment grade corporate securities.

**Bloomberg U.S. Corporate Index** is an unmanaged index that measures the performance of investment-grade corporate securities within the Barclays Capital U.S. Aggregate Index.

**S&P/LSTA Leveraged Loan Index** is an unmanaged index of the institutional leveraged loan market.

**Standard & Poor's 500 Index** is an unmanaged index of large-cap stocks commonly used as a measure of U.S. stock market performance.

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