

nuveen

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Is high yield high risk?

As of 31 Dec 2025

OPINION PIECE. PLEASE SEE IMPORTANT DISCLOSURES IN THE ENDNOTES.

NOT FDIC INSURED | NO BANK GUARANTEE | MAY LOSE VALUE

Municipal market themes: what to know



Economy



Municipals

WHAT WE'RE WATCHING

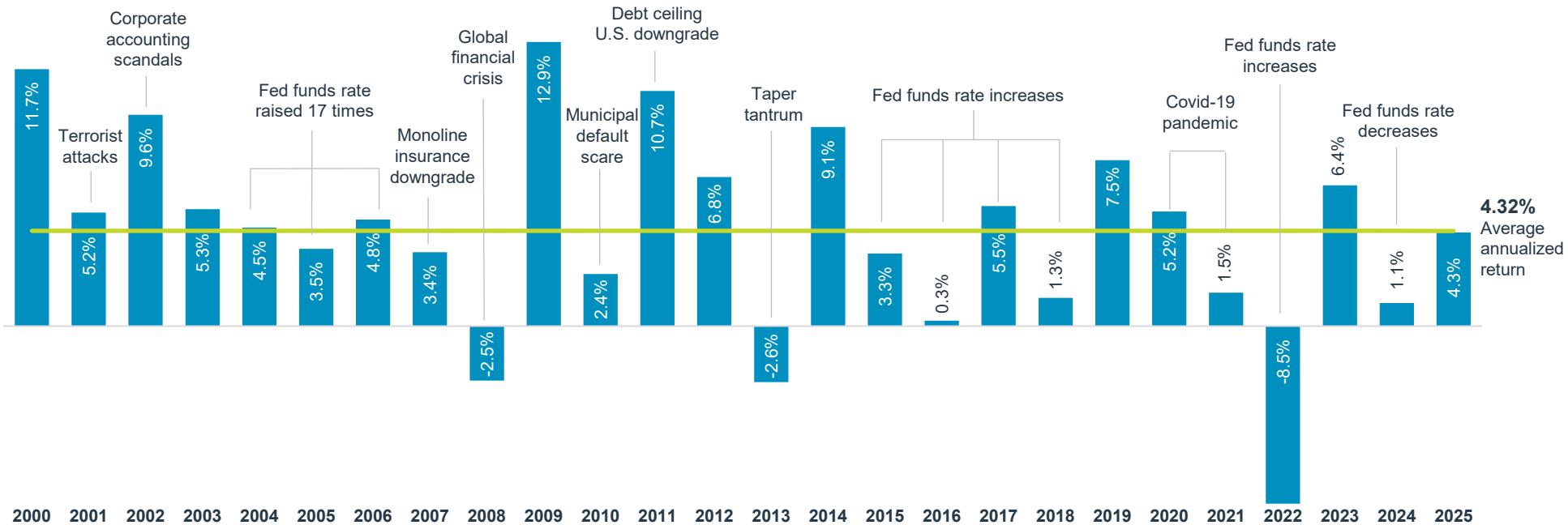
		OUR LATEST THINKING
Inflation	<i>Will not reach Fed's target</i>	Tariff-induced inflation, while modest so far, could present challenges bringing inflation to the Fed's 2% target.
Policy	<i>Rate cuts underway</i>	The Fed cut rates 75 bps total in 2025 and has signaled its intention for potential further easing in 2026.
Economic growth	<i>OBBBA and federal policy impacts</i>	Economic data strengthened at the end of 2025. OBBBA fiscal stimulus comes on-line late first quarter of 2026, which may bolster growth.
Interest rates	<i>Higher-for-longer yields (for now)</i>	Economic softness could push longer rates lower, while deficit worries could push rates higher. Taken together, we anticipate rates to be range bound.
Credit fundamentals	<i>Credit resiliency</i>	States and cities have strong revenue collections and reserves. Municipal defaults are expected to remain low, rare and idiosyncratic.
Supply and demand	<i>Heavy supply, episodic demand</i>	Municipal issuance reached \$565B in 2025 and is expected to hit \$600B in 2026. However, maturing bonds, coupon payments, and bond calls should offset this record supply, while recent inflows provide additional support.
Valuations	<i>Elevated income and attractive yields</i>	Despite recent performance, municipals remain cheap to the broader fixed income market. Rally is in the early stages.

Source: Nuveen as of 31 Dec 2025. Certain statements may be deemed forward-looking statements. Please note that any such statements are not guarantees or intended to constitute a prediction of any future performance; actual results or developments may differ materially from those projected.

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Municipals have historically been resilient

Bloomberg Municipal Bond Index Returns (%)



2025 index performance returned +4.25%, closely aligned to historical average annualized returns.

Data source: Bloomberg, L.P., 31 Dec 2025. The average annualized return shown is for the period 01 Jan 2000 – 31 Dec 2025. Performance data shown represents past performance and does not predict or guarantee future results. All investments carry a certain degree of risk, including possible loss of principal, and there is no assurance that an investment will provide positive performance over any period of time. Index returns include reinvestment of income and do not reflect investment professional and other fees that would reduce performance in an actual client account.

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High yield municipal bonds: Perception is often different than reality

Perception



Detroit



Puerto Rico



Chicago

Reality



Charter schools



Retirement homes



Land secured

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If high yield municipal bonds are typically not general obligation bonds (GOs), what are they?

High yield municipal bonds are...

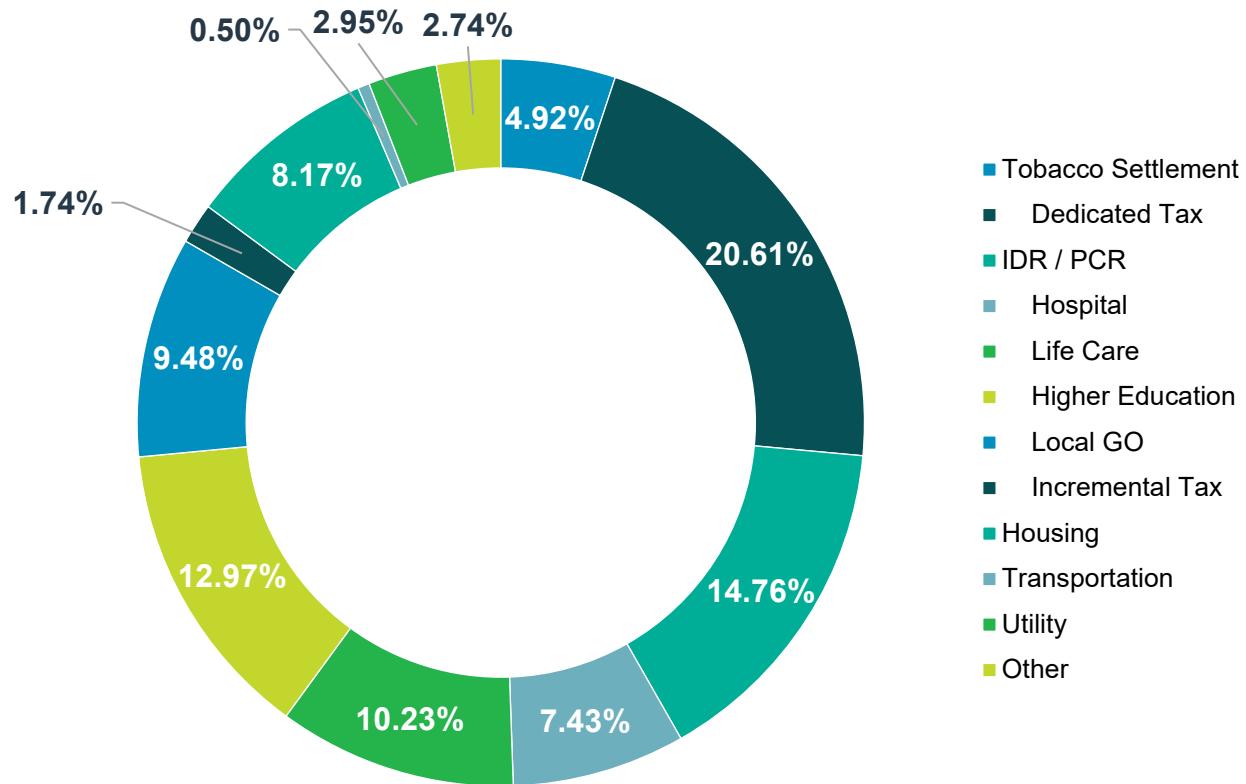
- Primarily project bonds
- Typically related to providing an essential service
- Usually issued by entities financially independent from the city, county or state they serve
- Usually higher yielding to compensate investors for uncertainty: project, construction, liquidity and management risk
- More sensitive to macro and micro economic trends
- Usually have strong bondholder protections, which may include senior lien, debt service reserve fund, mortgage and other covenants



See definitions at the end of this presentation for more information on general obligation bonds. **Past performance does not predict or guarantee future results.**

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High yield municipals cross many sectors



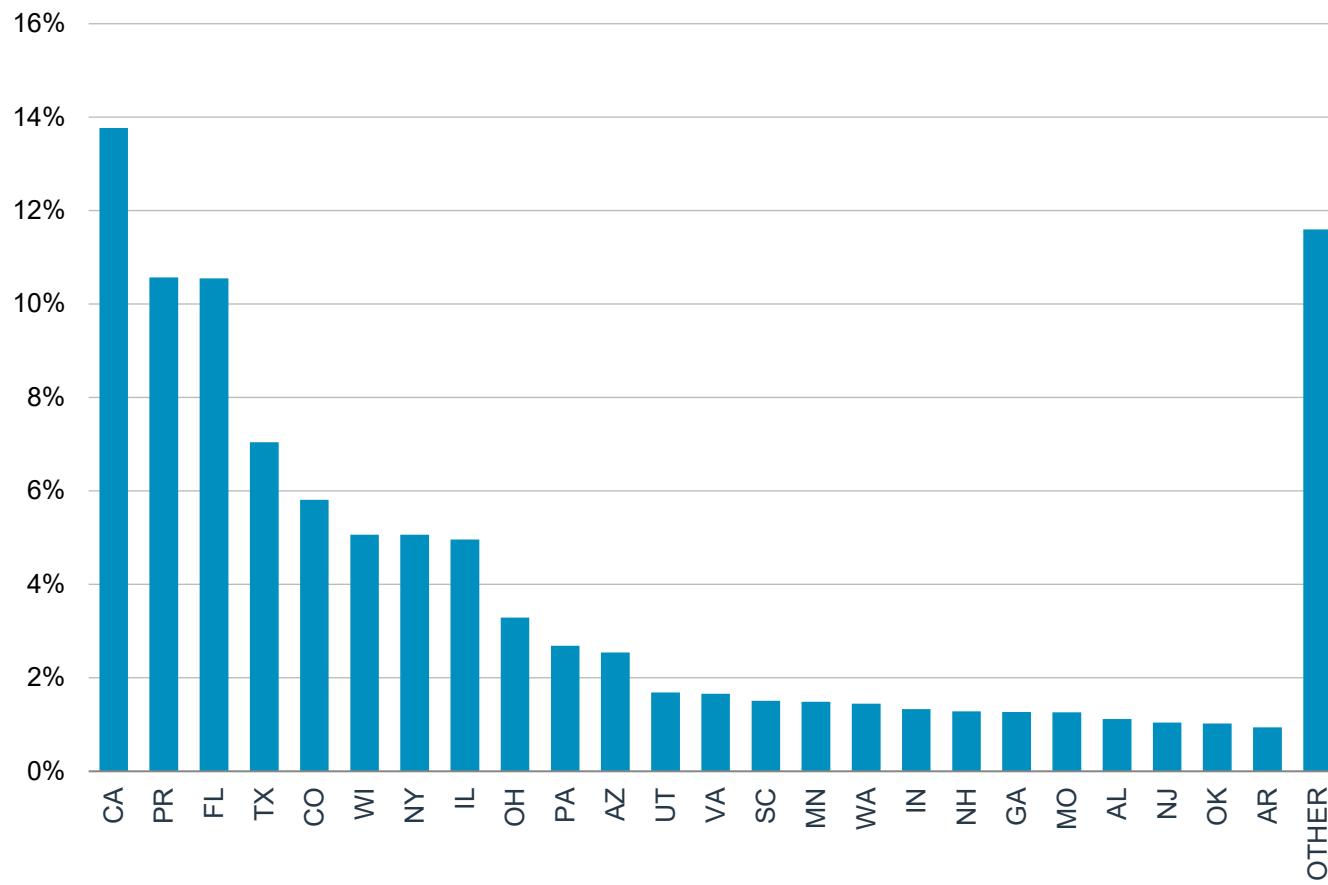
Data source: Standard & Poor's, 31 Dec 2025. Allocation based on the S&P High Yield Municipal Bond Index.

* IDR (industrial development revenue bonds) and PCR (pollution control revenue) bonds are a subset of the revenue bond sector.

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GOs can fall into the high yield market

State and territory exposure in the S&P Municipal Yield Index



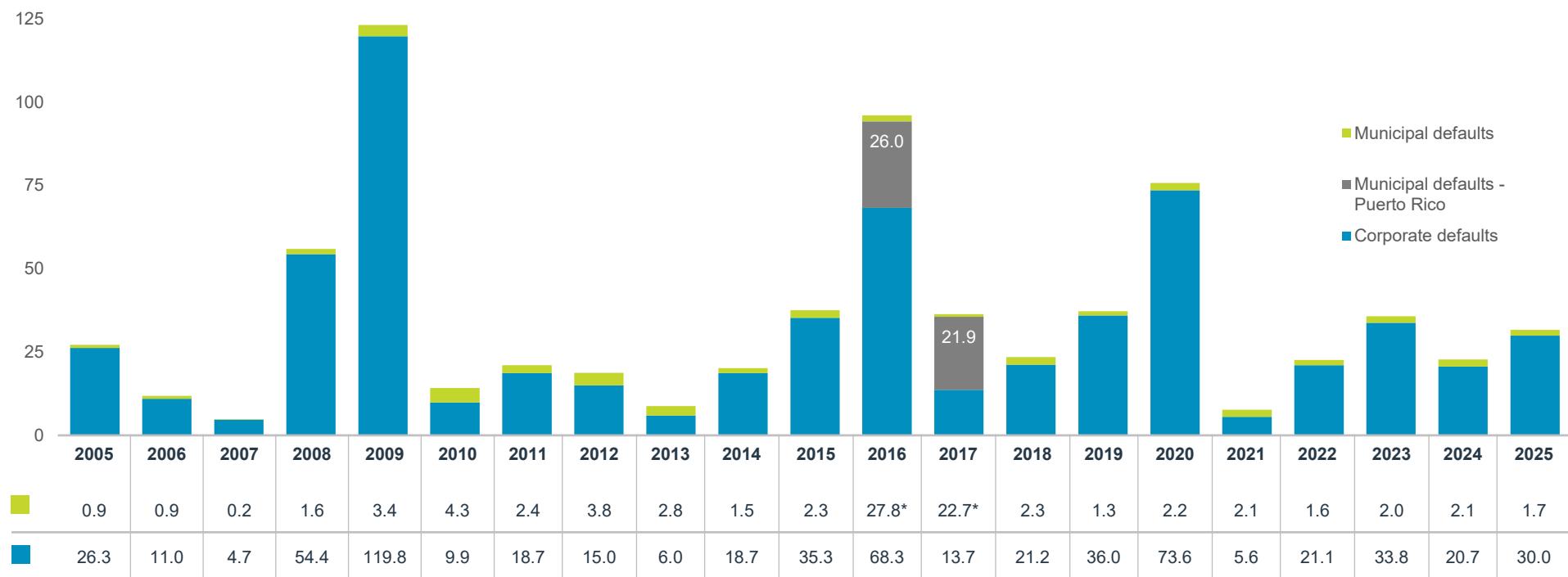
Puerto Rico makes up 11.60% of the high yield market

Data source: InvestorTools, 31 Dec 2025.

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Defaults remain in line with historical trends

Municipal and corporate payment defaults (\$ billions)



Municipal defaults remain rare, isolated and idiosyncratic throughout 2025.

Data sources: Bloomberg municipal default data as of 31 Dec 2025. Bank of America/Merrill Lynch Research, 05 Jan 2026, municipal default data as of 31 Dec 2025. Bank of America/Merrill Lynch Research HY Credit Chart book, corporate default data as of 31 Dec 2025. Data represents defaults on the entire universe of bonds, both rated and unrated, and includes Puerto Rico defaults. *For 2016 and 2017, the figures shown for municipal defaults were primarily from Puerto Rico defaults; \$26.0B (2016) and \$21.9B (2017).

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Municipal bond default rates have fared better than for similarly rated corporate bonds

A-rated municipal default rates are lower than for Aaa corporate bonds.

Moody's average cumulative default rates of municipals vs. global corporates, 1970-2024¹

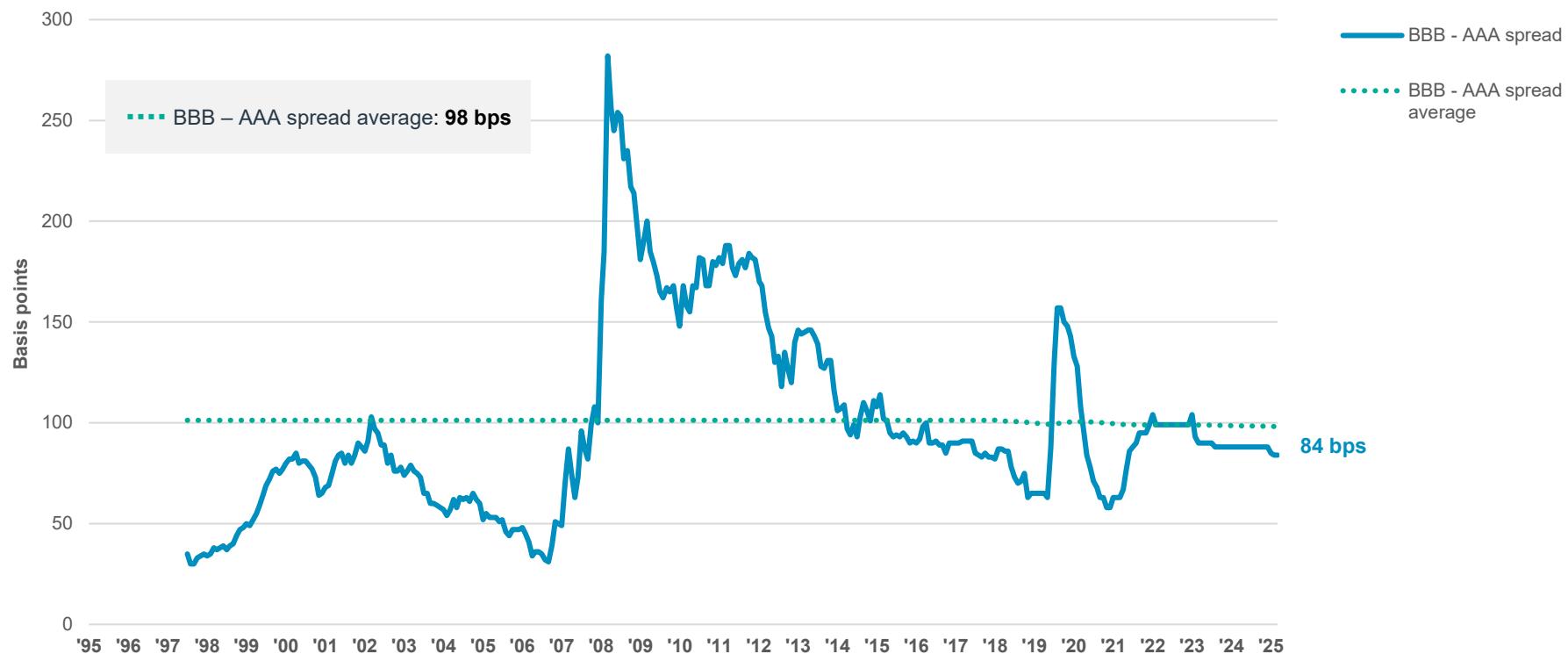
	Rating	Aaa	Aa	A	Baa	Ba	B	Caa-C	Investment Grade	Below Investment Grade
5-Year	Municipal	0.00%	0.01%	0.03%	0.46%	1.93%	11.90%	20.62%	0.04%	4.81%
	Corporate	0.08%	0.29%	0.71%	1.43%	7.62%	20.58%	35.24%	0.86%	18.98%
10-Year	Municipal	0.00%	0.02%	0.10%	1.09%	3.49%	17.07%	25.59%	0.10%	7.14%
	Corporate	0.36%	0.76%	2.03%	3.61%	15.25%	34.31%	51.44%	2.24%	29.74%

Municipal recovery rates are significantly higher than for corporates, with an average weighted recovery of 65% for municipals vs. 47% for corporates.

¹ Data source: Moody's Ratings, *U.S. Municipal Bond Defaults and Recoveries, 1970 – 2024*, 05 Aug 2025, with data as of 31 Dec 2024; updated annually. Performance data shown represents past performance and does not predict or guarantee future results. The universe for the study represents approximately 12,500 fundamental U.S. public finance ratings from Moody's.

BBB credit spreads have widened and are now at the long-term average

20-year BBB municipal yields versus AAA municipal yields

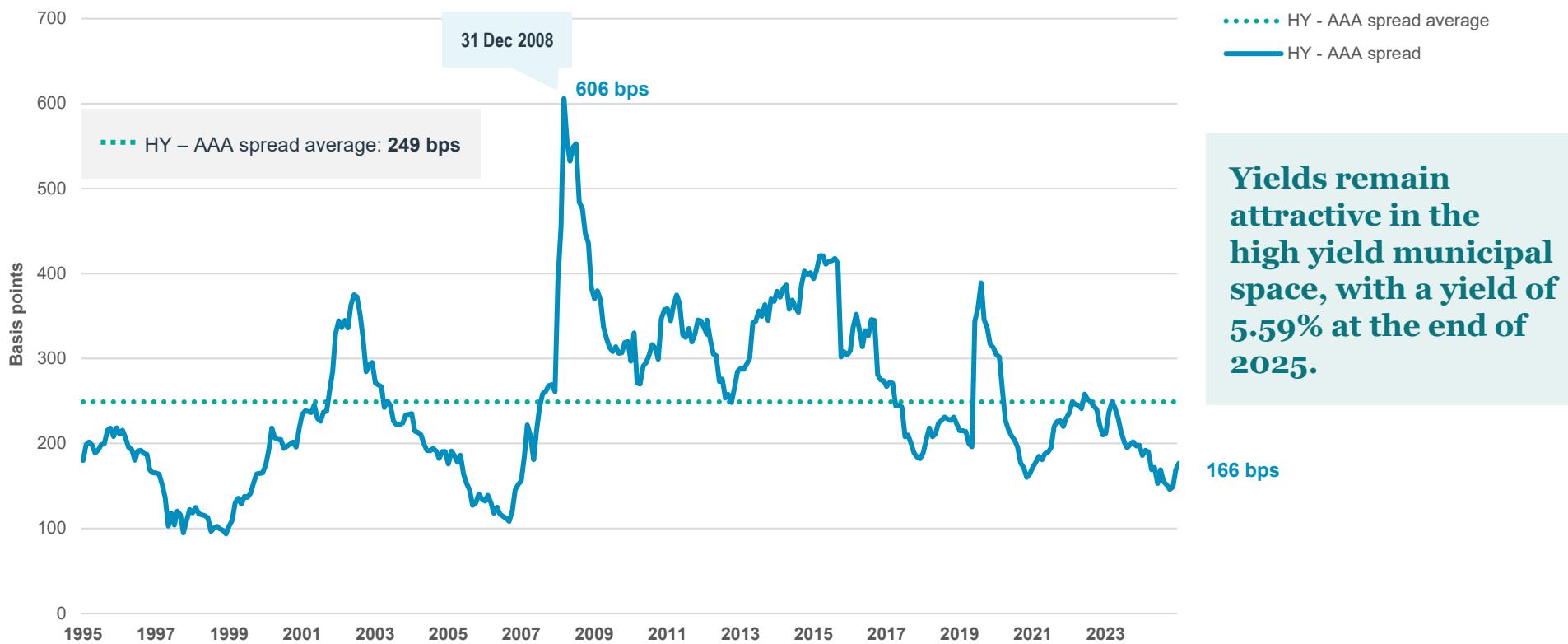


Data source: Bloomberg, L.P., Refinitiv MMD, 30 Apr 1998 – 31 Dec 2025, shown monthly. AAA and BBB rated municipal yields represented by Refinitiv Municipal Market Data (MMD) yields for AAA rated and BBB rated 20-year bonds, respectively. Data to the earliest period available. Performance data shown represents past performance and does not predict or guarantee future results. Ratings shown are from S&P and are subject to change. AAA, AA, A, and BBB are investment grade ratings; BB, B, CCC/CC/C and D are below-investment grade ratings. Different benchmarks, economic periods, methodologies and market conditions will produce different results.

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High yield credit spreads are below historical averages as flows continue to return

Bloomberg High Yield Municipal Index versus AAA yields



Data source: Bloomberg, Refinitiv MMD, 31 Oct 1995 – 31 Dec 2025, shown monthly. Chart shows data to the earliest period available. Performance data shown represents past performance and does not predict or guarantee future results. High yield municipal yields represented by the Bloomberg High Yield Municipal Index; AAA municipal yields represented by Municipal Market Data (MMD) yields for AAA rated 20-year bonds. High yield or lower-rated bonds and municipal bonds carry greater credit risk, and are subject to greater price volatility. Ratings shown are from S&P and are subject to change. AAA, AA, A, and BBB are investment grade ratings; BB, B, CCC/CC/C and D are below-investment grade ratings. Different benchmarks, economic periods, methodologies and market conditions will produce different results.

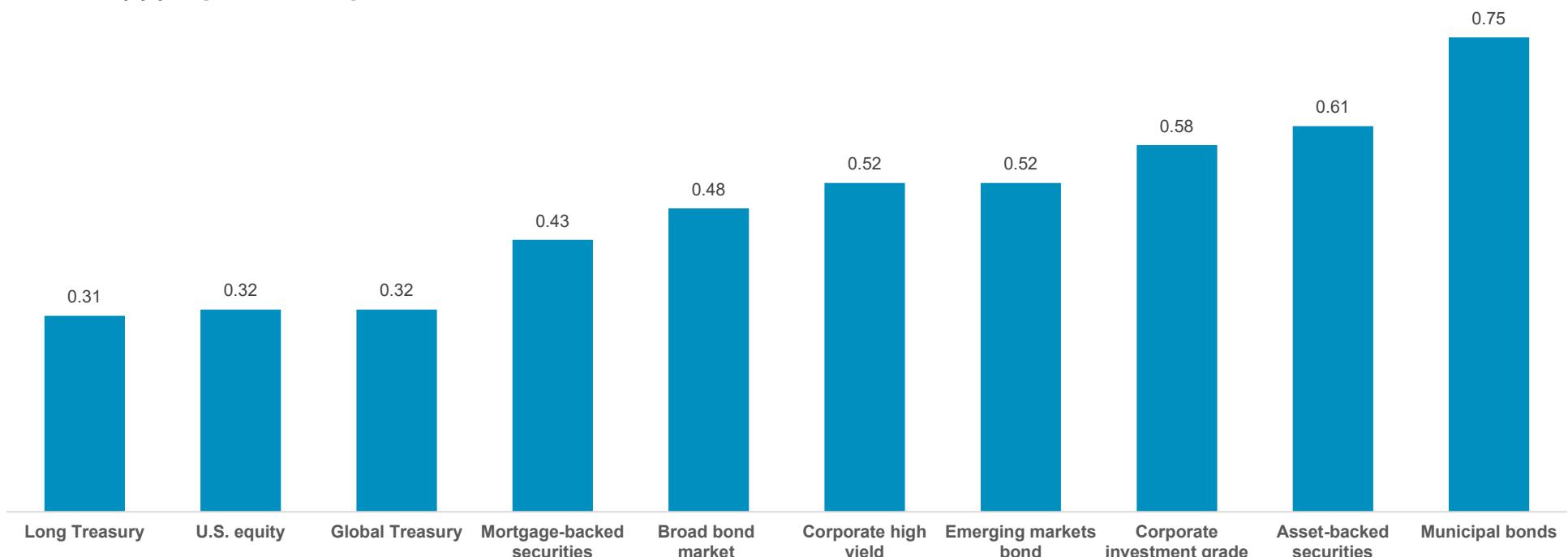
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High yield municipal bonds have a low correlation to other asset classes

High yield municipal bonds tend to be less cyclical than corporate bonds due to the essential nature of the projects being financed.

Correlation to Bloomberg High Yield Municipal Bond Index

01 Jul 1999 – 31 Dec 2025



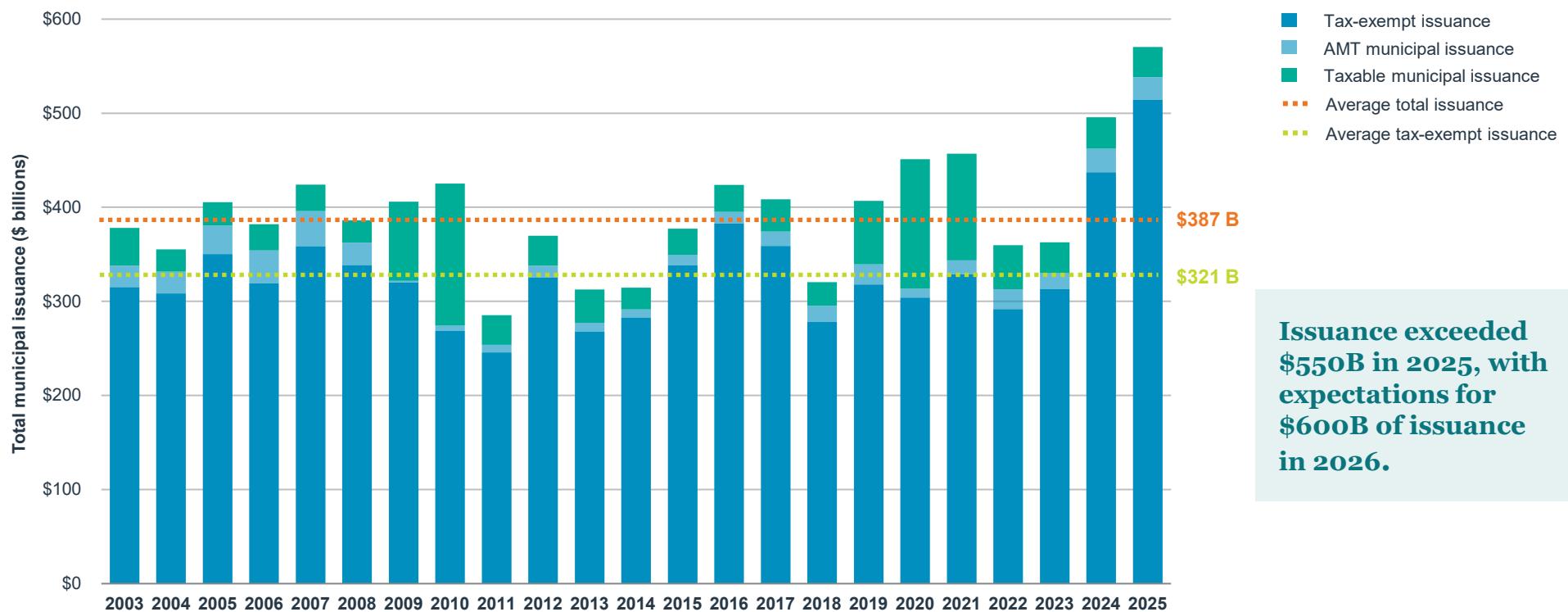
Data source: Morningstar Direct; 01 Jul 1999 – 31 Dec 2025. Performance data shown represents past performance and does not predict or guarantee future results. Representative indexes: Asset-backed securities: Bloomberg Asset-Backed Securities Index; Broad bond market: Bloomberg U.S. Aggregate Bond Index; Corporate high yield: Bloomberg U.S. Corporate High Yield Index; Corporate investment grade: Bloomberg U.S. Corporate Investment Grade Index; Emerging markets bond: Bloomberg Emerging Markets Bond Index; Global Treasury: Bloomberg Global Ex U.S. Treasury Bond Index; Long Treasury: Bloomberg U.S. Treasury Long Index; Mortgage-backed securities: Bloomberg MBS (fixed rate) Index; Municipal bonds: Bloomberg U.S. Municipal Bond Index; U.S. equity: S&P 500 Index.

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Tax-exempt issuance was at all-time highs in 2025

Overall issuance in 2025 was 15.0% higher than 2024 levels, placing pressure on performance.

Municipal issuance



Issuance exceeded \$550B in 2025, with expectations for \$600B of issuance in 2026.

Data source: Securities Industry and Financial Markets Association (SIFMA.org), U.S. Bond Market Issuance and Outstanding, 06 Jan 2026 for period ending 31 Dec 2025. The average total issuance and average tax-exempt issuance shown are for the period 01 Jan 2003 – 31 Dec 2025. AMT municipal issuance is part of the tax-exempt municipal market.

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Summary

- High yield municipals are a generally misunderstood asset class
- High yield municipals are typically not GOs and span many sectors
- High yield municipals have historically defaulted less than similarly rated corporates
- Low correlations versus other asset classes can increase diversification and dampen volatility
- After-tax yields for high yield municipals are attractive relative to other fixed income
- High yield municipals have historically responded more favorably to rising rates than most other fixed income securities
- Staying the course has benefited investors

Past performance does not predict or guarantee future results.

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This information does not constitute investment research as defined under MiFID.

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