

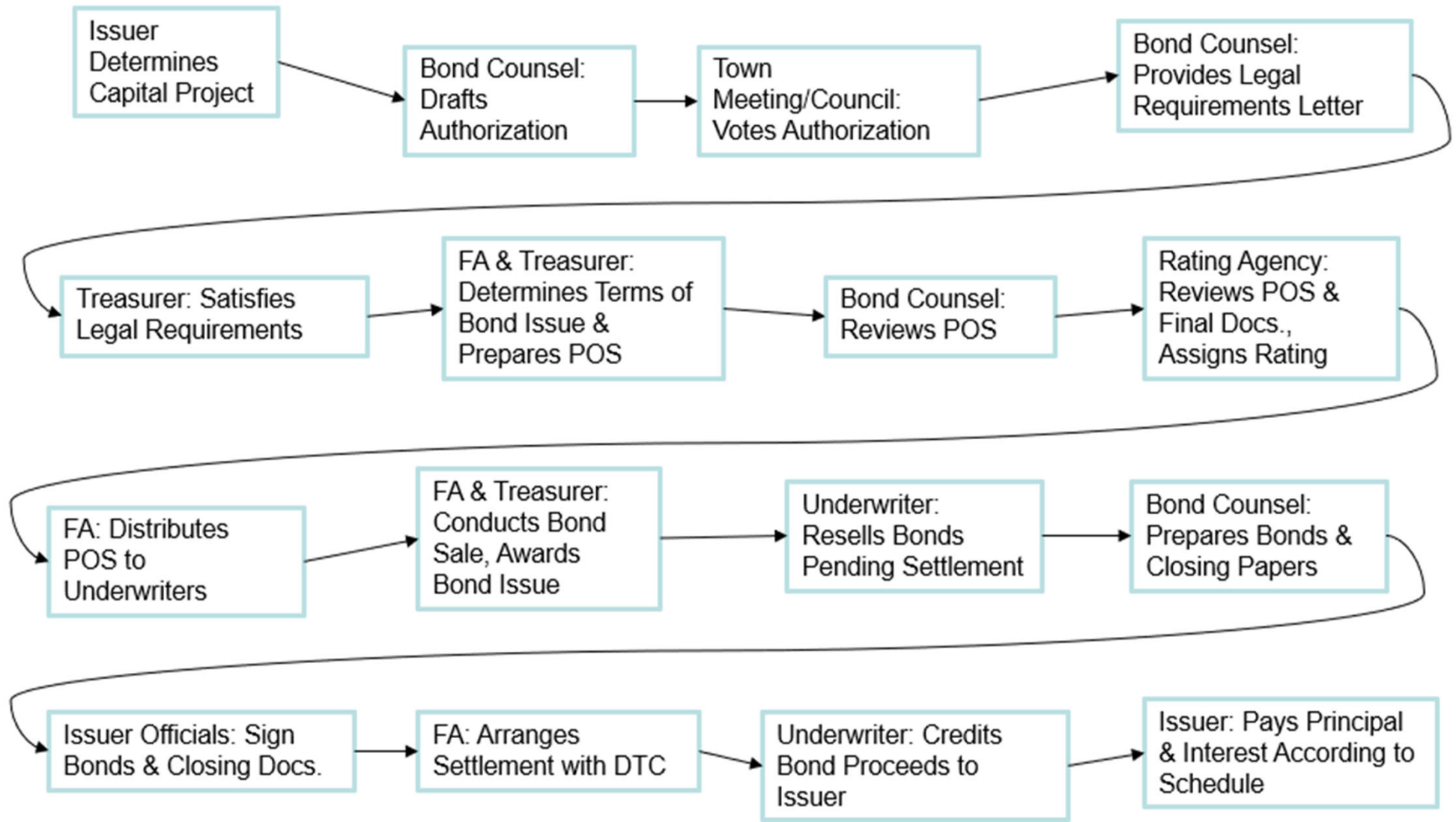
BORROWING AND BOND RATINGS: IMPACT ON MUNICIPAL FINANCES

MASSACHUSETTS MUNICIPAL ASSOCIATION
AUGUST 18, 2026

PARTICIPANTS IN THE BORROWING PROCESS



MUNICIPAL BORROWING FLOW CHART



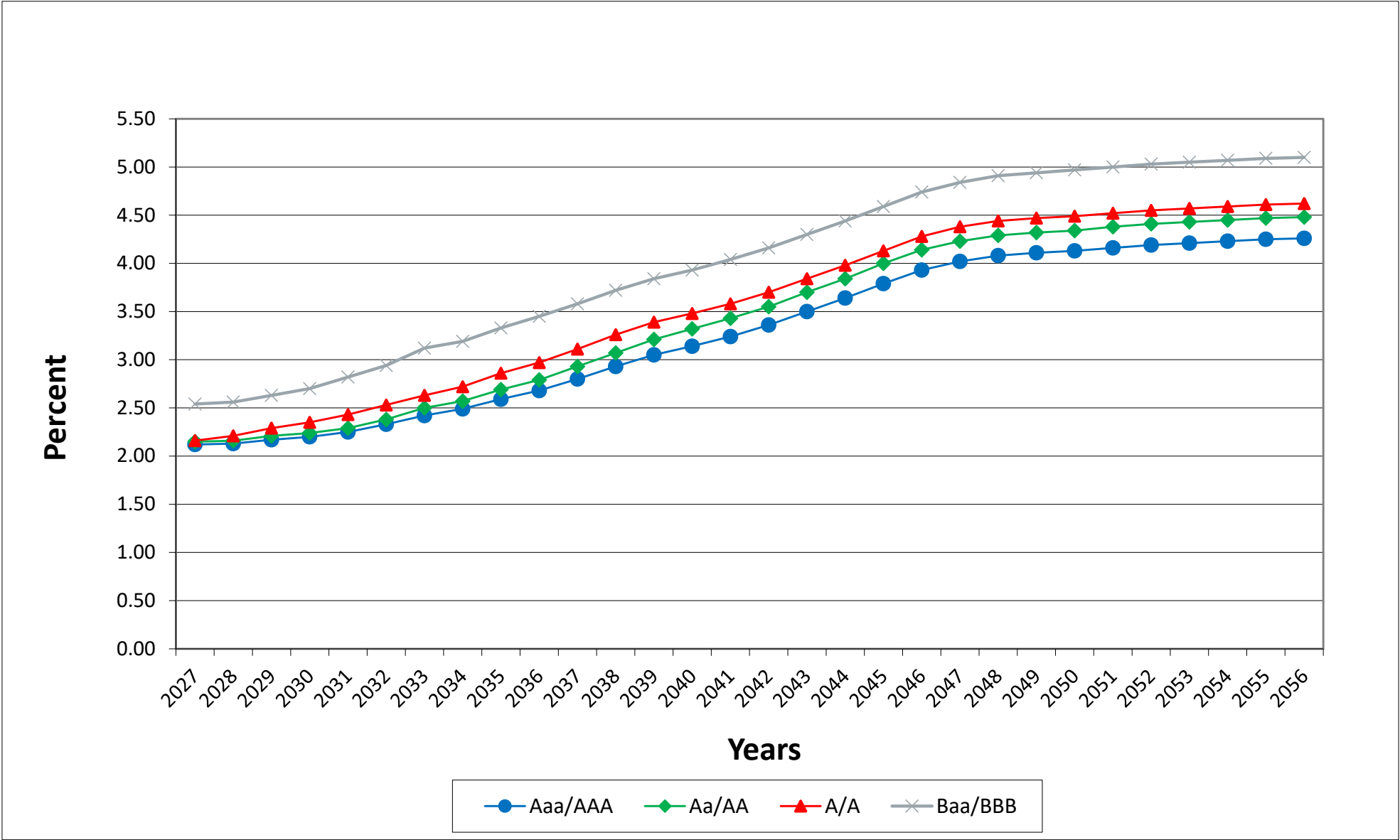
BOND AND NOTE RATINGS

	Long Term		Short Term (less than 3 years)		
	Moody's	Fitch / S&P	Moody's	S & P	Fitch
 Higher quality credit	Aaa	AAA	MIG 1	SP-1+	F1 (+ or -)
	Aa1	AA+	MIG 2	SP-1	F2 (+ or -)
	Aa2	AA	MIG 3	SP-2	F3 (+ or -)
	Aa3	AA-	SG	SP-3	B (+ or -)
	A1	A+			
	A2	A			
	A3	A-			
	Baa1	BBB+			
	Baa2	BBB			
	Baa3	BBB-			
	Ba1	BB+			

 Ratings below the line are speculative grade.


Lower quality credit

YIELD CURVES BY RATING



Source: LSEG, The Municipal Market Monitor (TM3) MMD Benchmark Yields as of March 5, 2026.

MAJOR CREDIT FACTORS

- Economy & Institutional Framework (40%)
- Management (20%)
- Finances (30%)
- Debt and Contingent Liabilities (10%)

OFFICIAL STATEMENT

Electronic Municipal Market Access (EMMA) designated as sole repository by the Municipal Securities Rulemaking Board (MSRB):

<https://emma.msrb.org>

The screenshot displays the EMMA (Electronic Municipal Market Access) website. At the top left is the EMMA logo with the tagline "Electronic Municipal Market Access" and "A service of the MSRB". To the right is a search bar with the placeholder text "Search by CUSIP, Description, State, etc." and a green search button. Below the search bar is a navigation bar with links: "Browse Issuers", "Tools and Resources", "Market Activity", "MyEMMA", "EMMA Dataport", and a filter section showing "A- 100% A+". The main content area features the heading "The official source for municipal securities data and documents" with the subtext "Provided by the Municipal Securities Rulemaking Board." Below this is a light blue button that says "Click on a state to start your search". Underneath the button is a map of the United States with state abbreviations. To the right of the map is a vertical list of state abbreviations: NH, VT, MA, RI, CT, and NJ. On the far right, there are two light blue boxes. The top box has a magnifying glass icon, the heading "Learn", and the text "New to EMMA? Find out more." The bottom box has a bar chart icon, the heading "Evaluate", and the text "Access New Issue Calendar and other market tools."

CURRENT TRENDS IN THE MUNICIPAL BOND MARKET

- Current market conditions for bonds and notes
- Market expectations regarding current and future long- and short- term borrowing rates
- Municipal debt liabilities, including Unfunded Pension, OPEB and traditional G.O. debt
- Value of multi-year forecasting of revenues and expenditures
- Value of debt and reserve policies
- Proposition 2 ½
- Bond and note structuring considerations, including use of premium
- Arbitrage rebate considerations
- Continuing Disclosure and timely audits

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