BORROWING AND BOND RATINGS:

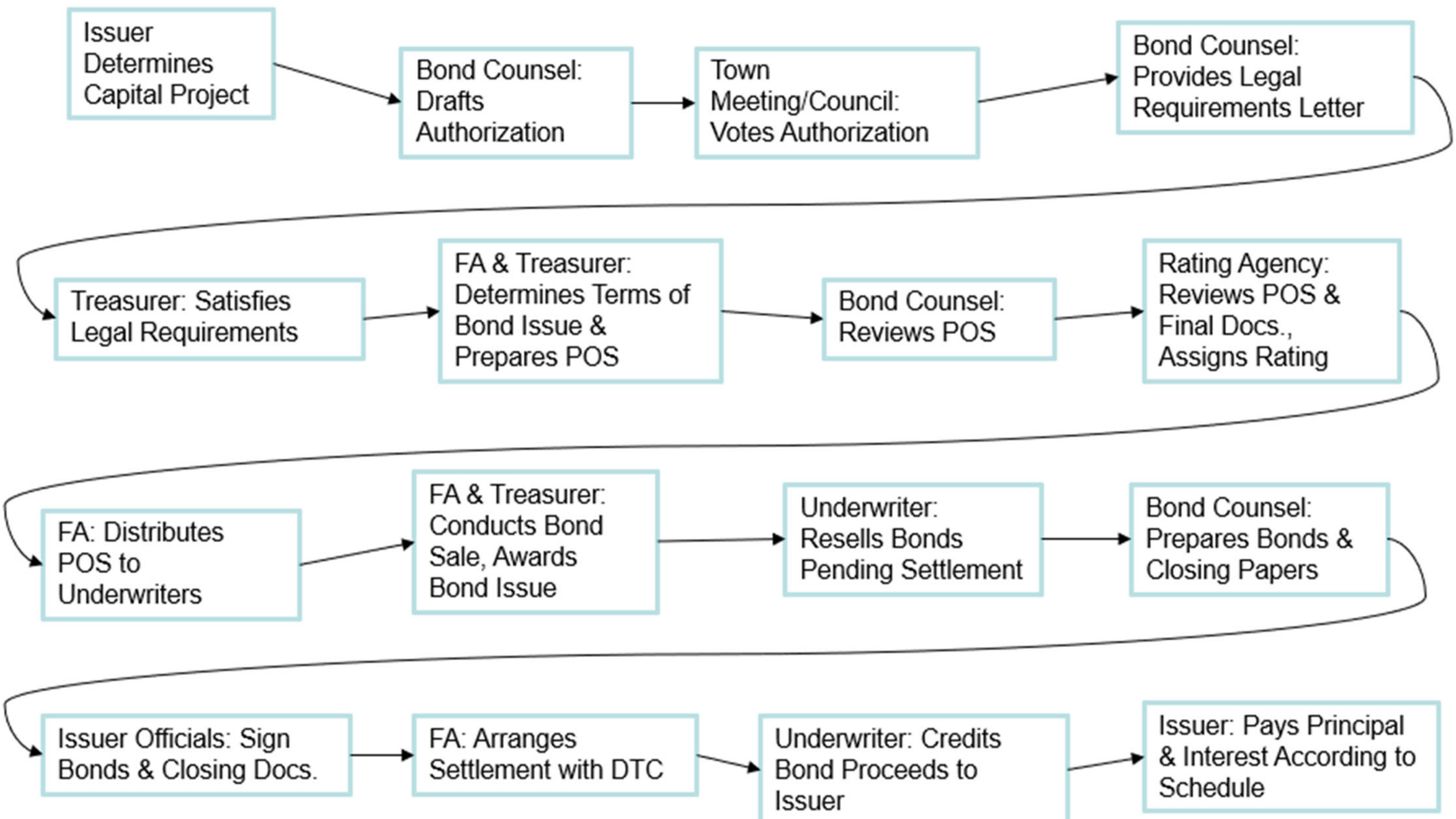
IMPACT ON MUNICIPAL FINANCES

MASSACHUSETTS MUNICIPAL ASSOCIATION

AUGUST 18, 2026

PARTICIPANTS IN THE BORROWING PROCESS

MUNICIPAL BORROWING FLOW CHART



BOND AND NOTE RATINGS

Higher quality credit

Long Term

Moody's	Fitch / S&P
Aaa	AAA
Aa1	AA+
Aa2	AA
Aa3	AA-
A1	A+
A2	A
A3	A-
Baa1	BBB+
Baa2	BBB
Baa3	BBB-
Ba1	BB+

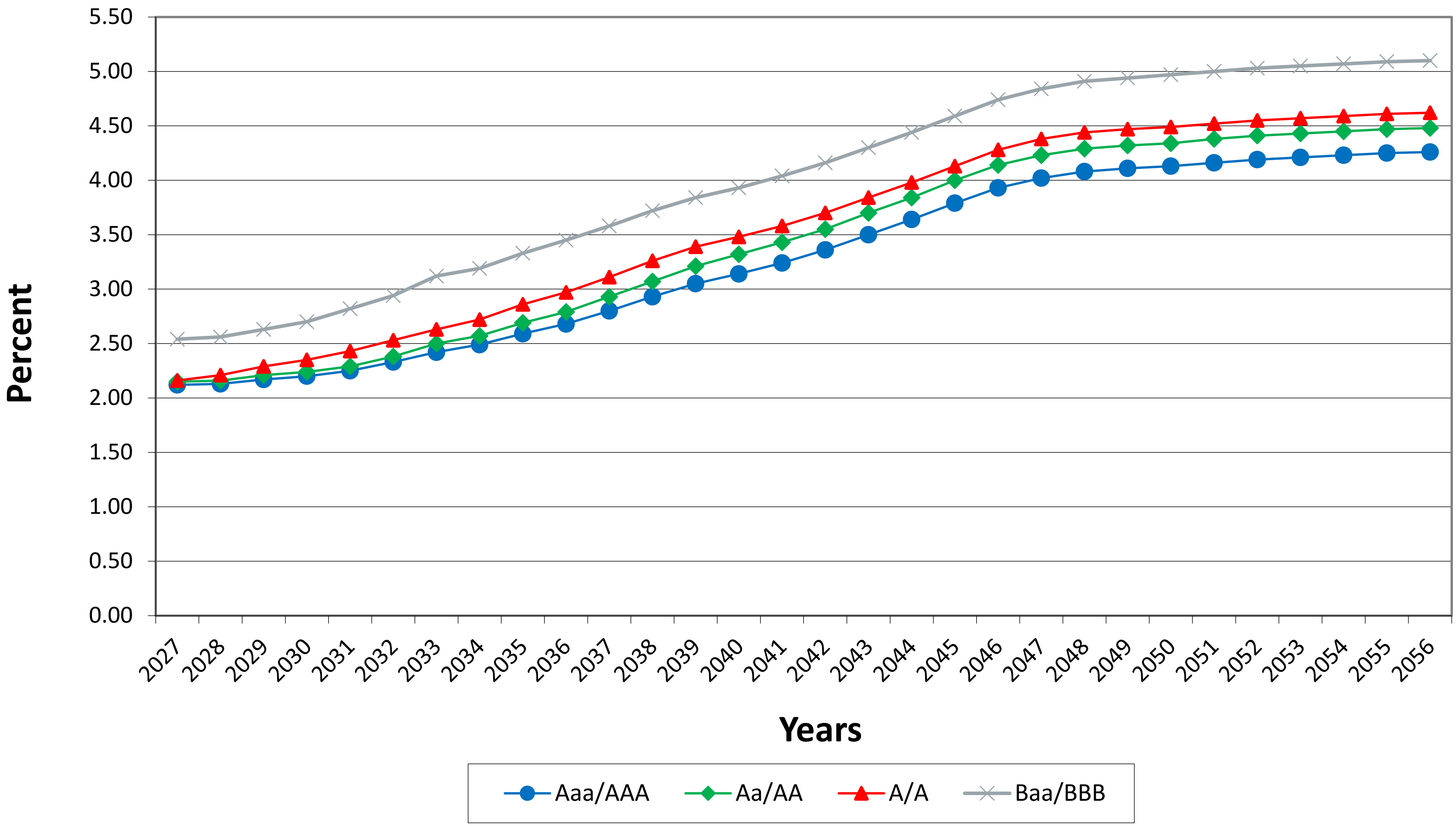
Short Term (less than 3 years)

Moody's	S & P	Fitch
MIG 1	SP-1+	F1 (+ or -)
MIG 2	SP-1	F2 (+ or -)
MIG 3	SP-2	F3 (+ or -)
SG	SP-3	B (+ or -)

Lower quality credit

- - - Ratings below the line are speculative grade.

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%)

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

https://emma.msrb.org

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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