



The Importance of Monitoring Municipal Bonds

What to Know and Where to Find It

Informed investors do their homework before buying a municipal bond by researching the bond's risks and characteristics and evaluating the financial health of the state or local government issuing the bond. Yet once the bond is in their portfolio, investors may overlook the importance of regularly monitoring the health of the bond and its issuer.

Municipal bonds, like other types of long-term investments, carry ongoing risks that may be affected by:

- Changes in a bond issuer's financial condition;
- Changes in an issuer's credit rating;
- Infrequency of trading, which may make it challenging to determine the current market value; or
- Movement of interest rates that may change the value of the bonds.



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Investors should periodically review and evaluate information available about both a municipal bond and its issuer. In addition to consulting a financial professional, the MSRB's [Electronic Municipal Market Access \(EMMA®\) website](#) provides free public access to official statements, ongoing issuers' disclosure information and material event filings, as well as trade data that can support regular review and monitoring of municipal bonds and issuers.

The EMMA website offers investors a platform to:

- 1) **assess** an issuer's financial condition;
- 2) **monitor** municipal bond secondary market trading; and
- 3) **stay informed** in the event of an issuer's fiscal distress.

This document intends to help investors ensure they are considering available information on EMMA such as the official statement, credit ratings and continuing disclosures when assessing an issuer's financial health. The guide can also serve as a starting point for actively using EMMA to monitor trade prices of specific municipal bonds and be a resource for bondholders encountering an issuer in fiscal distress.

ASSESS AN ISSUER'S FINANCIAL CONDITION

Revisit the Official Statement

When investors first purchase a municipal bond, particularly a newly issued bond, the official statement is an important reference document. Within the official statement, investors typically can find information provided by a bond issuer about its financial condition and risk factors, as well as a description of the terms and features of the municipal bonds themselves.

An issuer's financial condition and the terms of the bonds can change over time. Thus, the information in the official statement is valid only during the period of the initial offering of the bonds. When purchasing a bond, an investor should review the official statement in conjunction with current credit ratings and more recent disclosure filings to accurately assess the issuer's current financial health.

About the MSRB

The mission of the Municipal Securities Rulemaking Board (MSRB) is to protect investors, municipal entities, and the public interest by promoting a fair and efficient municipal securities market. As part of its mission to protect investors, the MSRB creates rules with specific obligations for municipal securities professionals which regulate their conduct with investors. The MSRB provides market transparency through its [Electronic Municipal Market Access \(EMMA®\) website](#), the official source for municipal securities data and documents. Also, the MSRB serves as an objective resource on the municipal market and conducts extensive education and outreach to market stakeholders.

Learn More about Official Statements

Watch the MSRB's educational video series on "[Diving into the Documents](#)" for more on:

- What is an official statement?
- What's inside an official statement?
- Accessing official statements on EMMA



msrb.org/EducationCenter

What information in an official statement should I review to evaluate an issuer's financial condition?

The official statement describes an issuer's financial condition, especially financial and operating data relevant to the payment of the securities and any equivalent senior or subordinate obligations of the issuer. The financial indicators and risk factors disclosed in an official statement include:

- Sources of revenue from which the issuer has promised to make debt service payments;
- Existing and proposed future debt issuances;
- Underlying economic factors such as demographics, employment rates and diversity of revenues from its tax base, among other factors;
- Budgeting information;
- Financial statements;
- Financial control process;
- Debt services and operating ratios; and
- Risk factors.

What information about the terms of the bonds in the official statement should I consider?

Information in the official statement that investors should review includes:

- The interest rate or, if the interest rate is variable, how the interest rate is determined;
- The timing and manner of payments of interest and principal of the bonds;
- Whether any bond insurance, letter of credit or other guarantees of repayment have been provided;
- A description of basic legal documents such as authorizing resolution, indenture and trust agreement;
- A description of outstanding debt, the authority to incur debt, limitations on debt and the future debt burden; and
- Legal matters such as pending proceedings that may affect the securities offered, legal opinions and tax considerations.

Where can I find information about the other debt obligations of a bond issuer?

The official statement also describes an issuer's outstanding debt obligations and any anticipated future debt of the issuer. Investors should note the priority of payment for all outstanding debt to understand whether other obligations of the issuer will require payment ahead of payment to a bondholder in the event the issuer cannot meet all of its obligations.

How do I determine the source of repayment for my municipal securities?

Investors should review the official statement for information on the source of repayment to assist in evaluating the funds dedicated to repaying bondholders.



Research Credit Ratings

Generally, a municipal bond credit rating is the evaluation or assessment that a rating agency such as Fitch Ratings, Kroll Bond Rating Agency, Moody's Investors Service, Inc. and Standard & Poor's assign to a bond to indicate its opinion regarding the probability of timely repayment of principal and interest by the issuer and the likelihood of default. In some cases, the rating takes into consideration the potential loss to investors in the event of default.

What do credit ratings tell me about an issuer's financial condition?

Credit ratings are one indicator of the credit quality of an issuer. Bonds with below investment-grade credit ratings signal a higher risk of an issuer being unable to make timely repayment of principal and interest. Investors should refer to the specific rating definitions provided by each rating agency for a more complete understanding of the meanings of credit ratings assigned by the rating agencies. Users should be aware that rating agencies may assign different meanings to similar terms.¹

How do I know if a credit rating has changed?

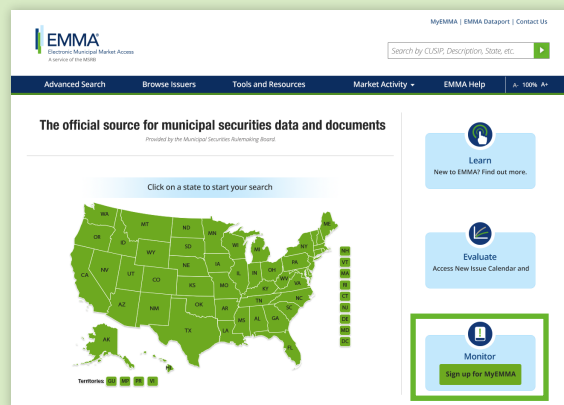
Credit ratings can change at any time; therefore, investors should not assume that the credit rating of a bond when it was first issued remains unchanged. Also, an investor should not assume that because there has not been a rating change for a municipal bond that the credit quality is unchanged. Investors can receive email alerts on rating changes by setting up a MyEMMA profile.

What if my municipal bond is not rated?

Not all municipal securities are rated. Investors in unrated securities should refer to the issuer's official statement and continuing disclosure documents to make an assessment of the credit quality of the bond.

Sign Up for MyEMMA® Alerts

Create a free MyEMMA profile to [set up personalized email alerts](#) when new disclosure documents are posted for a particular bond, including event notices that may have an impact on credit quality.



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Where can I find credit ratings for my municipal bonds?

The MSRB's EMMA website provides access to current credit ratings for all individual municipal bonds with an assigned rating. Current credit rating information provided by Fitch Ratings, Kroll Bond Rating Agency, Moody's Investors Service, Inc. and Standard & Poor's for municipal bonds is displayed on EMMA under the ratings tab of a particular security. Credit ratings on EMMA are displayed along with the trading and disclosure information for each municipal bond, and are also integrated into EMMA's advanced search function and price discovery tool.

What happens to my bonds when the credit quality of the issuer deteriorates?

If the credit quality of the issuer's bonds deteriorates, this may result in a downgrade of the rating of the bonds by one or more rating agencies. If so, then the price of the bonds may decline.

Review Continuing Disclosures and Voluntary Disclosures

Continuing disclosures consist of important information provided by an issuer about its financial condition or the occurrence of specific material events that arise after the initial issuance of the bonds that can have an impact on key features of the bonds. The regulatory framework for continuing disclosure is established by Securities and Exchange Commission (SEC) Rule 15c2-12, which requires dealers, when underwriting certain types of municipal securities, to ensure that the state or local government issuing the bonds enters into an agreement to provide certain information about the securities on an ongoing basis to the MSRB's EMMA website.

How often is new financial information about issuers available?

At least annually, issuers provide audited financial statements or other financial information to investors and the public on EMMA. These documents contain important updates to information previously disclosed in the official statement.

What types of continuing disclosures may signal financial difficulties of an issuer?

Examples of specific events that show, or at least may signal, financial difficulties for an issuer, and should be considered carefully by investors, include:

- Principal and interest payment delinquencies;
- Non-payment related defaults;
- Unscheduled draws on debt service reserves;
- Unscheduled draws on credit enhancements; and
- Bankruptcy or insolvency.

The full list of specific events that must be reported on EMMA as a continuing disclosure is enumerated in SEC Rule 15c2-12.²

How do I find an issuer's financial disclosures and event notices?

Issuers and certain other obligated persons are required to submit continuing disclosure information to the EMMA website.³ Continuing disclosure information, if available, about an issuer can be found using the "Browse Issuers" function on EMMA. Use the map-based search to find the issuer's unique homepage, then click on the Financial Disclosures and Event-Based Disclosures to view all disclosure filings of that issuer.

Find Issuer Disclosures by State

An interactive map on EMMA enables investors to find state, city, county and other municipal securities issuers in a particular state. Select an issuer's homepage to view consolidated information about that issuer's municipal securities, including trading activity, disclosures and additional contact information. [Read more about EMMA issuer homepages.](#)



Do issuers provide additional information beyond what is required by SEC Rule 15c2-12?

Some issuers choose to provide additional key information to bondholders, potential investors and other market participants through EMMA. An issuer's voluntary disclosures⁴ may include investor presentations, bank loan disclosures or quarterly financials (even if unaudited). This information may be useful in assessing current holdings of municipal securities or in making investment decisions regarding potential transactions in municipal securities. These disclosures are found alongside required financial and event-based disclosures on EMMA.

How do I find out if the issuer of my bonds is not current on its continuing disclosures?

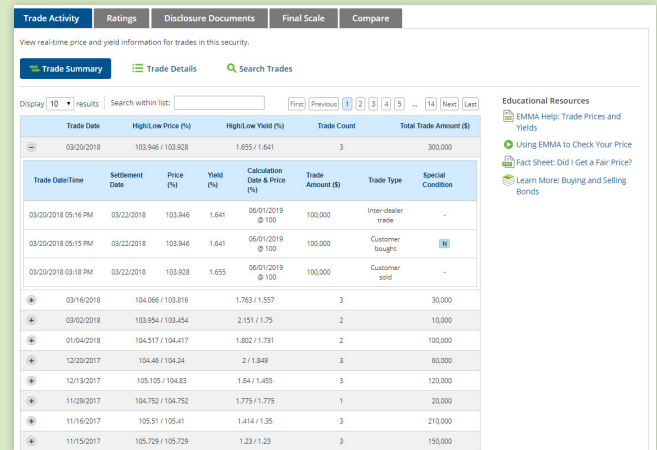
EMMA's "Advanced Search" feature can be used to search for an issuer's continuing disclosure filings. It could be a red flag if the issuer is not current on its material event notices and if other continuing disclosure filings are delinquent. Pay particular attention to whether an issuer's audited financials are up to date. Out-of-date or missing financials on EMMA may be an indication that material event disclosures have not been filed on EMMA as required and market stakeholders may not have access to information about events that could affect outstanding bonds.

Can an investor trade municipal securities when an issuer's continuing disclosures are out of date?

Investors can trade municipal securities even when the issuer's continuing disclosures are out of date; however, the pricing of the bond could be affected. Dealers cannot sell municipal securities to an investor, or purchase municipal bonds from an investor, without disclosing to the investor, at or prior to the time of trade, all material information known about the transaction and material information about the bonds that is reasonably accessible to the market as required under MSRB rules. In the event continuing disclosures are out of date, an investor should consult their financial professional for additional information.

View Trade Data on EMMA

EMMA provides real-time access to trade prices, yields and other information for the approximately 38,000 daily trades in municipal securities. [Read more about trade data available on EMMA.](#)



The screenshot shows the EMMA Trade Activity interface. At the top, there are tabs for Trade Activity, Ratings, Disclosure Documents, Final Scale, and Compare. Below the tabs, there's a search bar and a table of trade data. The table has columns for Trade Date, High/Low Price (%), High/Low Yield (%), Trade Count, and Total Trade Amount (\$). The data shows several trades from 2017 to 2018, with details on settlement dates, prices, yields, and trade types like 'inter-dealer trade', 'customer bought', and 'customer sold'.

Trade Date	High/Low Price (%)	High/Low Yield (%)	Trade Count	Total Trade Amount (\$)			
03/20/2018	103.946 / 103.928	1.655 / 1.641	3	300,000			
Trade Date/Time	Settlement Date	Price (%)	Yield (%)	Calculation Date & Price (%)	Trade Amount (\$)	Trade Type	Special Condition
03/20/2018 05:16 PM	03/22/2018	103.946	1.641	06/01/2019 @ 100	100,000	inter-dealer trade	-
03/20/2018 05:19 PM	03/22/2018	103.946	1.641	06/01/2019 @ 100	100,000	Customer bought	IN
03/20/2018 03:18 PM	03/22/2018	103.928	1.655	06/01/2019 @ 100	100,000	Customer sold	-
03/16/2018	104.066 / 103.816	1.763 / 1.557	3	30,000			
03/02/2018	103.954 / 103.454	2.151 / 1.75	2	10,000			
01/04/2018	104.517 / 104.417	1.802 / 1.731	2	100,000			
12/20/2017	104.46 / 104.24	2 / 1.849	3	60,000			
12/13/2017	105.105 / 104.83	1.64 / 1.455	3	120,000			
11/29/2017	104.752 / 104.752	1.775 / 1.775	1	20,000			
11/16/2017	105.51 / 105.41	1.414 / 1.35	3	210,000			
11/15/2017	105.729 / 105.729	1.23 / 1.23	3	150,000			

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MONITOR SECONDARY MARKET TRADING

View Real-Time Trade Prices for Your Bond

EMMA provides real-time trade prices for nearly every municipal security bought and sold. EMMA can be used by investors to find out the price at which their bonds are trading.

What can trade data on EMMA tell me about my municipal bonds?

EMMA trade price data can show an investor where their bonds have traded over a period of time and help them compare their purchase or sale to other trades in the market. Trade data can also show an investor any trends in pricing that have occurred.

How do I find trade data for my bonds on EMMA?

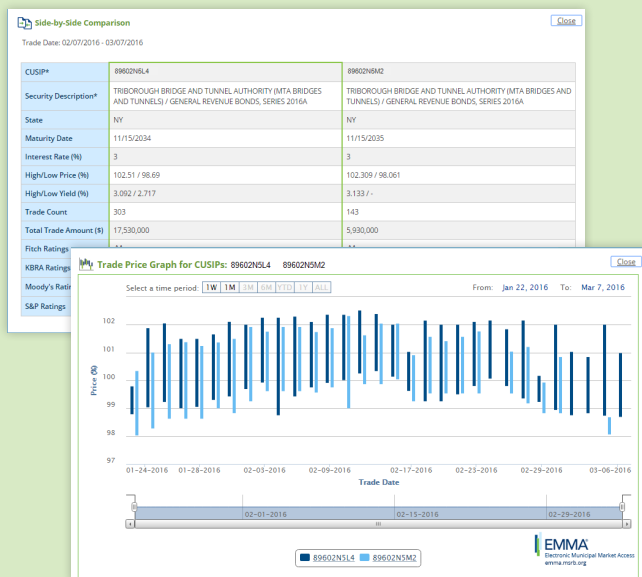
Use EMMA's quick search to find the Security Details page for a specific municipal security. There you can see trading activity for that security on interactive graphs of trade prices and yields. Zoom in on the graph to view more details about each trade, or click the Trade Activity tab to view daily summaries or trade details.

How can I compare prices on my bonds to comparable bonds?

EMMA's price discovery tool allows investors to find and compare trade prices and yield for their bonds with those of municipal securities with similar characteristics. For any security on EMMA, the price discovery tool quickly finds others that share its key characteristics and presents a side-by-side or graphical comparison of their prices and yield.

EMMA's Price Discovery Tool

Get a sense of the price of a security that trades infrequently using [EMMA's Price Discovery Tool](#), which finds and compares the trade prices and yield of bonds with similar characteristics.



munipricediscovery.org

When might an issuer's other financial obligations take priority over debt service in the case of default?

In the event an issuer cannot fulfill its debt service obligations, the bond/trust indenture, which describes the security provided to investors, may include certain procedural steps or a specific pledge of certain funds or taxing powers. The nature of the security, in the event of a default, varies among the states, depending on whether: (i) state law creates an effective statutory lien on certain funds or taxes; (ii) a security agreement properly creates and perfects a security interest under state law; (iii) a separate imposition of millage solely for debt service would be recognized and enforced under state law; (iv) there was a statutory or other security interest created and perfected; and (v) there is an effective property interest conveyed in the security which would be recognized in a Chapter 9 bankruptcy proceeding.⁵ A summary of these provisions is typically included within an official statement.

What should I do if an issuer defaults on its bond debt service payments?

In these circumstances investors should contact their financial professional and the bond trustee of their municipal bond for additional information. Investors should also continue to review continuing disclosures posted on EMMA, particularly event disclosures that may pertain to the issuer's plans for repayment of bondholders and other creditors.

STAY INFORMED IN THE EVENT OF AN ISSUER'S FISCAL DISTRESS

What happens if an issuer cannot fulfill its repayment obligations?

If an issuer can no longer fulfill its debt service obligations, it is deemed to have defaulted. If the issuer defaults, investors should review the bond/trust indenture, which is summarized in the bond official statement and available on the EMMA website. The bond/trust indenture is a contract among a trustee (usually a bank), investors and the issuer. This contract establishes, among other factors, the security, bondholder rights and remedies in case of a default.

Endnotes

¹ EMMA also displays additional information provided by Fitch Ratings, Kroll Bond Rating Agency, Moody's Investors Service and Standard and Poor's, including forward-looking statements concerning the likelihood that a rating may change. The amount of information available and displayed for each security varies and it is important to note that not all municipal securities are rated by each rating agency. A lack of a rating from any of these rating agencies for a particular municipal security does not necessarily indicate that the security is considered "unrated" since the issuer may have chosen not to seek a rating from a particular rating agency or it may be rated by another rating agency that does not make its ratings available on EMMA. Absences of any particular rating does not necessarily indicate that the security is any less or more creditworthy than other municipal securities.

² Specific events that require the submission of an event notice include:

- Principal and interest payment delinquencies
- Non-payment related defaults
- Unscheduled draws on debt service reserves reflecting financial difficulties
- Unscheduled draws on credit enhancements reflecting financial difficulties
- Substitution of credit or liquidity providers, or their failure to perform
- Adverse tax opinions or events affecting the tax-exempt status of the security
- Modifications to rights of security holders
- Bond calls and tender offers
- Defeasances
- Release, substitution or sale of property securing repayment of the securities
- Rating changes
- Bankruptcy, insolvency or receivership

³ SEC Rule 15c2-12 provides for four categories of financial disclosures, depending on the type of primary offering: annual financial information, audited financial statements, customary financial information and failure to file notices.

⁴ Voluntary disclosures may include:

Additional Financial Information

- Quarterly/monthly financial information
- Timing of annual disclosure (120/150 days)
- Change in fiscal year/timing of annual disclosure
- Accounting standard (GAAP-GASB/FASB)
- Change in accounting standard
- Interim/additional financial information/operating data
- Budget
- Investment/debt/financial policy
- Material provided to rating agency or credit/liquidity provider
- Consultant reports
- Other financial/operating data

Other Information

- Timing of and accounting standard used for annual financial disclosure
- Pre-sale documents, including preliminary official statements
- Investor and rating agency presentations
- Links to investor websites

Additional Event Notices

- Amendment to continuing disclosure undertaking
- Change in obligated person
- Notice to investors pursuant to bond documents
- Certain communications from the IRS (other than those included under SEC Rule 15c2-12)
- Bid for auction rate or other securities
- Capital or other financing plan
- Litigation/enforcement action
- Change of tender agent, remarketing agent, or other on-going party
- Derivative or other similar transaction
- Other event-based disclosures

⁵ National Association of Bond Lawyers, General Obligation Bonds: State Law, Bankruptcy and Disclosure Considerations, August 2014.