

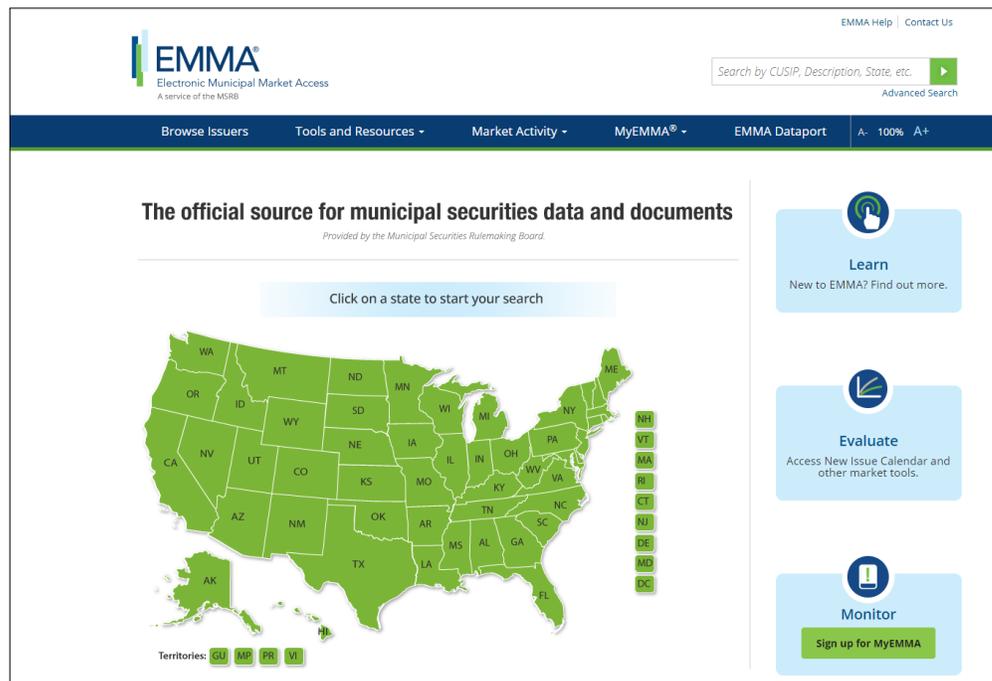
Getting to Know EMMA®: A Guide for Senior Investors

Meet EMMA®

Many investors in municipal bonds are senior investors. EMMA, or the [Electronic Municipal Market Access website](#), is the official source of data and information on virtually all municipal securities, including interests in municipal fund securities such as 529 savings plans and ABLE programs.

Explore EMMA for free public access to important disclosure documents, real-time trade prices and interactive tools for investors. This document provides tips senior investors may find helpful when navigating EMMA to find information that can support informed decisions when buying or selling a municipal bond or monitoring the municipal bonds in your portfolio.

A significant portion of all outstanding municipal securities are held by investors with an average age of 85.¹



The EMMA website is funded and operated by the Municipal Securities Rulemaking Board (MSRB). The MSRB is a regulatory organization and does not endorse investments in municipal bonds. All investments carry risks. Consult your financial professional and make sure you understand the features and risks before making any investment decisions.



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Documents on EMMA®

EMMA houses disclosure documents that can help senior investors evaluate the features and risks of a municipal bond, and the financial health of the bond issuer. Learn about these documents and how to find them on EMMA:

- **Official Statements** — The official statement provides information about the terms and features of municipal bonds, such as the timing and manner of payment of interest and principal on the bonds; the interest rate or, if the interest rate is variable, how the interest rate is determined; and whether any bond insurance, letter of credit or other guarantees of repayment have been provided. The official statement also contains information about an issuer's financial condition at the time of the bond issuance, including financial and operating data about the issuer relevant to how the issuer will make its principal and interest payments.



EMMA® Tip: While all the information in an official statement is important to review, look at the section describing the priority of payment on a bond issuance. This will describe whether the issuer, in the event the issuer cannot meet all its obligations, has other financial obligations that would require payment ahead of a bondholder's principal and interest payments.

- **Financial/Operating Disclosures** — At least annually, issuers provide financial information and operating data to EMMA. These documents contain important updates to information previously disclosed in the official statement. For updates on the financial health of the issuer, refer to available audited financial statements, comprehensive financial reports and other financial/operating disclosures.



EMMA® Tip: Look for an attachment to the official statement, titled "continuing disclosure agreement," or a summary of the continuing disclosure agreement within the official statement, to locate the date by which financial information and operating data must be provided each year to EMMA following the end of an issuer's fiscal year.

A- 100% A+

Accessibility Features

Click the "A+" button to increase the font size on any page of EMMA up to 120 percent. EMMA's design also features contrasting colors that enhance readability.



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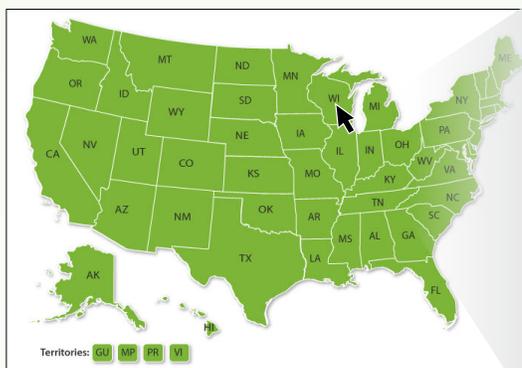
- **Event Disclosures** — Sometimes specific events occur over the life of the bond that may have an impact on the ability of the issuer to repay bond principal and interest payments, the value of the bond if sold prior to maturity, the timing of repayment of principal, or other important factors for bondholders. Disclosures about these types of events are available on EMMA.



EMMA® Tip: *If the event disclosure pertains to one of the event categories specified in SEC Rule 15c2-12, the disclosure must be posted on EMMA within 10 business days after the event occurs.*

Find Disclosure Documents on EMMA®

- 1 Click your state on the interactive map on the **EMMA®** homepage at emma.msrb.org.
- 2 Click on the city, county, state agency or other authority that issued your bond from the list of bond issuers in that state.



Issuer Name

Wisconsin
Browse the list of municipal securities issuers below.

Consolidated Issuer Information

These pages provide a consolidated view of the information available on EMMA for each issuer. Pages listed as "customized" have been confirmed by the issuer and provide contact information to investors. Homepages, including those that have been customized, typically exclude matured securities and may contain errors or omissions.

Educational Resources

- To learn about additional methods for finding information, read about EMMA's search features.
- Read instructions for issuers on how to customize an EMMA issuer homepage.
- Please contact us for assistance customizing a homepage or to report any errors or omissions.

View All Issuers State Issuers City Issuers County Issuers Other Issuers (Conduits, Localities, etc.)

Click on an issuer name to access information about its municipal securities. Issuers that have customized their information are displayed first.

Display results Search within list:

First Previous 1 2 3 4 5 ... 79 Next Last

Issuer Name	Issuer Type
CITY OF BROOKFIELD, WISCONSIN CUSTOMIZED	City
CITY OF MILWAUKEE CUSTOMIZED	City
FORT HEALTHCARE INC CUSTOMIZED	Other
MILWAUKEE PUBLIC SCHOOLS CUSTOMIZED	Other
SALEM SCHOOL DISTRICT CUSTOMIZED	Other
SCHOOL DISTRICT OF WEST DE PERE CUSTOMIZED	Other



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Find Disclosure Documents on EMMA® (continued)

- 3** Click on the **Official Statements** tab, the **Financial Disclosures** tab or the **Event-Based Disclosures** tab to find the disclosure document you are looking for.

STATE OF WISCONSIN (WI)
Customized by State of Wisconsin
Click on a tab to access data and documents about this issuer's municipal securities.

Issuer's Contact Information
Contact: John Doe
Address: 123 Main Street
City, State, ZIP: Madison, WI 53707
Phone Number: (123) 456-7890
Email Address: name@IssuerXYZ.com
Issuer Website(s): State of Wisconsin: Capital Finance Office Website

Educational Resources

- Read instructions for issuers on how to customize an EMMA issuer homepage.
- Please contact us for assistance customizing a homepage or to report any errors or omissions.

Navigation tabs: Issues, Trade Activity, Pre-Sale Documents, **Official Statements**, Refunded Issues, Financial Disclosures, Event-Based Disclosures

Click on the issue description to view details about the issue.

Display 10 results Search within list: []

Issue Description	Dated Date
GENERAL OBLIGATION REFUNDING BONDS OF 2017, SERIES 3	12/28/2017
TRANSPORTATION REVENUE REFUNDING BONDS 2017 SERIES 2	12/21/2017

See documents about the characteristics of the issues and financial health of the issuer

- 4** Look at the **issue description**, **posting date** and **dated date** columns to help you find the right official statement or most recent financial disclosure.

STATE OF WISCONSIN (WI)
Customized by State of Wisconsin
Click on a tab to access data and documents about this issuer's municipal securities.

Issuer's Contact Information
Contact: David R. Erdman
Address: 101 East Wilson Street, Floor 10
City, State, Zip: Madison, WI 53707
Phone Number: (608) 267-0374
Email Address: DOACapitalFinanceOffice@wisc.onsin.gov
Issuer Website(s): State of Wisconsin: Capital Finance Office Website

Educational Resources

- Read instructions for issuers on how to customize an EMMA issuer homepage.
- Please contact us for assistance customizing a homepage or to report any errors or omissions.

Navigation tabs: Issues, Trade Activity, Pre-Sale Documents, **Official Statements**, Refunded Issues, Financial Disclosures, Event-Based Disclosures

Official statements for this issuer are displayed. Click on the issue description to view details about the issue.

Display 10 results Search within list: []

Issue Description	Dated Date	Posting Date	Maturity Dates	Official Statement
GENERAL OBLIGATION BONDS OF 2018, SERIES A	03/15/2018	03/07/2018	2019 to 2036	[Download Icon]
GENERAL OBLIGATION BONDS OF 2018, SERIES A	03/15/2018	03/06/2018	2019 to 2036	[Download Icon]
GENERAL OBLIGATION REFUNDING BONDS OF 2017, SERIES 3	12/28/2017	12/22/2017	2026 to 2034	[Download Icon]
GENERAL OBLIGATION REFUNDING BONDS OF 2017, SERIES 3	12/28/2017	12/21/2017	2026 to 2034	[Download Icon]
GENERAL OBLIGATION REFUNDING BONDS OF 2017, SERIES 3	12/28/2017	12/19/2017	2026 to 2034	[Download Icon]
GENERAL OBLIGATION REFUNDING BONDS OF 2017, SERIES 3	12/28/2017	12/18/2017	2026 to 2034	[Download Icon]
TRANSPORTATION REVENUE REFUNDING BONDS 2017 SERIES 2	12/21/2017	12/04/2017	2021 to 2032	[Download Icon]

This information can help you find the relevant documents

Click the icon to download the disclosure document

- 5** Click the  icon to download the document.



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Senior investors can sign up for a free MyEMMA® account to receive email alerts when new disclosure documents are posted to EMMA for a municipal bond. [Learn more about MyEMMA® Alerts.](#)

Data on EMMA®

Each day, there are approximately 40,000 trades in some of the 1 million outstanding municipal bonds. EMMA collects data about each trade. Learn about the data available on EMMA and how to find it:

- **Trade Data** – Before deciding whether to buy or sell a municipal bond, review recent trade prices and yields for the bond on EMMA for a sense of the current price of the bond. Remember, price and yield have an inverse relationship – the higher the price for a bond, the lower the yield, or return on investment, for that bond.



EMMA® Tip: If there is not recent trade data for a municipal bond, EMMA's "Compare" feature allows you to find other securities with similar characteristics that do have recent trade data available.

- **Credit Ratings** — A municipal bond's credit rating is one indicator of the credit quality of an issuer assessed by one or more rating agency such as Fitch Ratings, Kroll Bond Rating Agency, Moody's Investors Service, Inc. and Standard & Poor's. Generally, a credit rating is the grade a rating agency assigns to indicate the risk of default and, in some cases, takes into consideration the potential loss to investors in the event of default. Not all bonds are rated. A lack of a rating from any of the rating agencies for a bond does not necessarily indicate that the bond is considered "unrated" since it may be rated by another rating agency, nor does it necessarily indicate that the bond is any less or more creditworthy than other municipal bonds.



EMMA® Tip: Credit ratings may change over time. EMMA receives real-time feeds from certain rating agencies with updated ratings.

Like other investors, senior investors may purchase municipal bonds through their brokers, dealers or municipal securities dealers (dealers) or through mutual funds. [Read more about ways to buy municipal bonds.](#)



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- Maturity Date** — This is the date the principal amount of a bond becomes due and payable to the investor. Municipal bonds are issued in maturities, often falling within the range of one to 30 years. Some state and local governments issue “serial” bonds, which are bonds that mature in consecutive years, typically occurring each year. Serial bonds typically mature in one to 20 years. Term bonds are repaid in a single or limited number of maturity dates and typically may mature in the 20- to 30-year range. Be aware of the maturity date of a bond when purchasing a bond because selling a bond prior to its maturity could have financial consequences such as potentially losing part of the original amount invested, foregoing interest payments, or reinvesting proceeds received from the sale of a bond that may or may not be able to earn a comparable or better yield in the new investment.



EMMA® Tip: Key data points about a municipal bond are highlighted in a blue box on the webpage for a bond on EMMA.

Find Bond Data on EMMA®

- On your account statement or trade confirmation, find the unique nine-digit identifier, known as a CUSIP number, for the bond. If you can't find this number, ask your financial professional.

Sample Trade Confirmation

Jane Doe
123 Retail Customer Street
City, ST 12345

May 21, 2018
Trade Confirmation – Account # 123456789

Financial Firm ABC
123 Main Street
City, ST 12345
(123) 456-7890

Trade Confirmation – Account # 123456789
We are pleased to confirm the below transaction:

	CUSIP 99999999 SCHOOL DISTRICT BOND Unlimited Tax General Obligation 3.25% Due 04/01/36	
Buy	You bought: 15,000	Price: 100.000
Trade	Order Number: 000000001	

Trade Calculation			
Principal Amount*:	\$15,000.00	Trade Date:	05/21/2018
Accrued Interest:	\$ 70.42	Trade Time:	2:55 PM
Transaction Fee:	\$ 4.95	Settlement Date:	05/23/2018



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Find Bond Data on EMMA® (continued)

- 2 Type the CUSIP number into the **Quick Search** box in the top right corner of EMMA at emma.msrb.org.

- 3 You will arrive at the **Security Details** page for that municipal bond.

Find current credit ratings

View trade data on a graph

WISCONSIN STATE GENERAL OBLIGATION SERIES 2009 C (WI)
WISCONSIN ST SER C (WI)*

Coupon: 4.5 %
Maturity Date: 05/01/2020
Dated Date: 09/03/2009
Initial Offering Price/Yield: 108.737%
Principal Amount at Issuance: \$21,725,000
Closing Date: 09/03/2009

Price Yield

1W 1M 3M 6M YTD 1Y ALL Jul 11, 2017 Jul 11, 2018

Price (%)

Trade Date

10-2017 01-2018 04-2018 07-2018

2010 2015

View Issuer Homepage

Create MyEMMA Alert

Learn More

Disclosure Documents ?

- Official Statement(s)
- Continuing Disclosure

Trade Activity Ratings Disclosure Documents Final Scale Compare

View current long-term ratings and underlying or unenhanced ratings for this security.

Fitch

Long-Term Issue Rating	AA+ (effective 10/19/2017)	Long-Term Issue Rating Alert Code	RO:Sta (effective 10/19/2017)
Unenhanced Long-Term Issue Rating	AA+ (effective 10/19/2017)	Unenhanced Long-Term Issue Rating Alert Code	RO:Sta (effective 10/19/2017)
Short-Term Issue Rating	NR	Short-Term Issue Rating Alert Code	
Unenhanced Short-Term Issue Rating	NR	Unenhanced Short-Term Issue Rating Alert Code	

Access definitions for the ratings provided by Fitch Ratings →
Access additional information, such as prior ratings, research reports or other information offered by Fitch Ratings →

Last Updated: 07/01/2018 @ 10:56:00 PM ET

Educational Resources

- EMMA Help: Credit Ratings
- Evaluating a Municipal Bond's Default Risk
- Fact Sheet: Seven Questions to Ask When Investing in Municipal Bonds
- Learn More: Preparing to Invest



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Additional EMMA® Resources

-  [EMMA 101: An Overview for Municipal Bond Investors](#)
- [Using EMMA's Map-Based Search](#)
- [Using MyEMMA® Alerts](#)

Additional Resources for Senior Investors

- [Seven Questions to Ask When Investing in Municipal Bonds](#)
- [Ways to Buy Municipal Bonds](#)
- [Did I Get a Fair Price?](#)
- [What is Mark-Up?](#)
- [Understanding Your Confirmation](#)
- [Understanding Your Account Statement](#)

Questions about Using EMMA? Contact MSRB Support

Phone: 202-838-1330

Email: MSRBsupport@msrb.org

Live Support: 7:30 a.m. – 6:30 p.m. ET

Email Support: 7:00 a.m. – 7:00 p.m. ET

¹ Daniel Bergstresser & Randolph Cohen, *Changing Patterns in Household Ownership of Municipal Debt: Evidence from the 1989-2013 Surveys of Consumer Finances* (The Hutchins Ctr. on Fiscal and Monetary Policy, Working Paper No. 20, 2016).

This information is for educational purposes only and provides a general overview of the subject matter and does not constitute investment, tax, business, legal or other advice.

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