Presenters

• **David Erdman**  
  *Capital Finance Director*  
  Wisconsin Department of Administration

• **Leah Szarek**  
  *Senior Manager, Market Transparency*  
  Municipal Securities Rulemaking Board (MSRB)
Presentation Overview

• Introduction to the MSRB and EMMA®

• Recent Enhancements to EMMA®

• Tools for State Debt Managers

• Upcoming Changes to Disclosure Submission Process

• Questions
Introduction to the MSRB
Municipal Securities Rulemaking Board (MSRB)

- Created by Congress in 1975 to protect municipal securities investors, issuers and the public interest
- Self-regulatory organization that writes rules, promotes transparency and provides education; does not regulate issuers
- Subject to SEC oversight; no enforcement authority
- No federal funding; revenue primarily from fees assessed on regulated municipal securities dealers and municipal advisors
Introduction to EMMA®
EMMA®’s Role in the Municipal Market

• Promote transparency for the $3.8 trillion municipal securities market
• Ensure information about virtually all municipal bonds and their issuers is:
  - Free
  - Centralized
  - Public
What’s on EMMA®

Official Disclosures

✓ Official Statements
✓ Advance Refunding Documents
✓ Event Notices
✓ Financial Disclosures
✓ 529 Plan/ABLE Disclosures
✓ Municipal Asset-Backed Securities Disclosure
✓ Political Contribution Disclosures

Security-Specific Data

✓ Trade Prices and Yields
✓ Interest Rate Resets for Municipal Variable Rate Securities
✓ Credit Enhancement Documents for Variable Rate Securities
✓ Credit Ratings

Market-Wide Data

✓ Market Statistics
✓ Yield Curves
✓ Market Calendars
Improvements to EMMA® (April 30, 2018)

- Overall Redesign of Look and Feel
- Streamlined Homepage
- State Page
- Issuer Homepage
- Issue Details Page
- Security Details Page - Fixed Rate
- Security Details Page - Variable Rate
The New EMMA®
EMMA® Homepage

The official source for municipal securities data and documents

EMMA and Municipal Market Transparency
The EMMA website is funded and operated by the Municipal Securities Rulemaking Board (MSRB), the self-regulatory organization charged by Congress with promoting a fair and efficient municipal securities market. EMMA is designated by the U.S. Securities and Exchange Commission as the official source for municipal securities data and disclosure documents. The website provides free public access to objective municipal market information and interactive tools for investors, municipal entities and others. EMMA supports municipal market transparency but is not a platform for buying or selling bonds.

Read more about EMMA and the MSRB.
**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 tip.
- 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.

<table>
<thead>
<tr>
<th>View</th>
<th>All issuers</th>
<th>State issuers</th>
<th>City issuers</th>
<th>County issuers</th>
<th>Other issuers (Conduits, Localities, etc.)</th>
</tr>
</thead>
</table>

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

Display: 20 results

<table>
<thead>
<tr>
<th>Issuer Name</th>
<th>City or County Type</th>
<th>Issuer Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>CITY OF BROOKFIELD, WISCONSIN</td>
<td></td>
<td>customized</td>
</tr>
<tr>
<td>CITY OF MILWAUKEE</td>
<td></td>
<td>customized</td>
</tr>
<tr>
<td>FORT HEALTHCARE INC</td>
<td></td>
<td>customized</td>
</tr>
<tr>
<td>MILWAUKEE PUBLIC SCHOOLS</td>
<td></td>
<td>Other</td>
</tr>
<tr>
<td>SALEM SCHOOL DISTRICT</td>
<td></td>
<td>Other</td>
</tr>
<tr>
<td>SCHOOL DISTRICT OF WEST DE PERE</td>
<td></td>
<td>Other</td>
</tr>
<tr>
<td>STATE OF WISCONSIN</td>
<td></td>
<td>customized</td>
</tr>
<tr>
<td>VERNON MEMORIAL HEALTHCARE</td>
<td></td>
<td>customized</td>
</tr>
<tr>
<td>WISCONSIN HEALTH &amp; EDUCATIONAL FACILITIES AUTHORITY</td>
<td></td>
<td>customized</td>
</tr>
<tr>
<td>ABBOTSFORD WIS</td>
<td></td>
<td>City</td>
</tr>
<tr>
<td>ABBOTSFORD WIS SCD DIST</td>
<td></td>
<td>City</td>
</tr>
<tr>
<td>ABRAMS SAN DIST NO 1 WIS</td>
<td></td>
<td>City</td>
</tr>
<tr>
<td>ADAMS CNTRY WIS</td>
<td></td>
<td>County</td>
</tr>
</tbody>
</table>
CITY OF MILWAUKEE (WI)

Click on a tab to access data and documents about this issuer's municipal securities.

Issuer's Contact Information

- **Contact:** Public Debt Commission
- **Address:** 200 E Wells St, #404
- **City, State, Zip:** Milwaukee, WI 53202
- **Phone Number:** (414) 286-2319
- **Email Address:** pdc@milwaukee.gov
- **Issuer Website(s):**
  - City of Milwaukee Bonds
  - City of Milwaukee
  - Milwaukee Public Schools
  - EMMA Page

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.

Issues

- **Issue Description**
  - GO FROM NTS 2018 N1
  - TAXABLE GENERAL OBLIGATION CORPORATE PURPOSE BONDS, SERIES 2017 T7
  - GENERAL OBLIGATION PROMISSORY NOTES SERIES 2017 N4
  - GENERAL OBLIGATION CORPORATE PURPOSE BONDS, SERIES 2017 BS
  - REVENUE ANTICIPATION NOTES, SERIES 2017 R3

- **Dated Date**
  - 02/06/2018
  - 05/17/2017
  - 05/17/2017
  - 05/17/2017
  - 05/17/2017
## Issue Details

### City of Milwaukee General Obligation Promissory Notes Series 2017 N4 (WI)

**Date of Issue:** 05/17/2017  
**Underwriting Spread Amount:** Not Disclosed - Competitive Sale  
**Closing Date:** 05/17/2017  
**Time of Formal Award:** 05/04/2017 05:33 PM  
**Time of First Execution:** 05/05/2017 11:00 AM  

View issuer homepage:  
- CITY OF MILWAUKEE

### Issue Details Table

<table>
<thead>
<tr>
<th>CUSIP*</th>
<th>Principal Amount at Issuance ($)</th>
<th>Security Description*</th>
<th>Coupon</th>
<th>Maturity Date</th>
<th>Initial Offering (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>90233M#N4</td>
<td>10,769,000</td>
<td>PROM NTS-SER N4</td>
<td>5</td>
<td>04/01/2018</td>
<td>-</td>
</tr>
<tr>
<td>90233M#y9</td>
<td>10,850,000</td>
<td>PROM NTS-SER N4</td>
<td>5</td>
<td>04/01/2019</td>
<td>-</td>
</tr>
<tr>
<td>90233M#G7</td>
<td>11,040,000</td>
<td>PROM NTS-SER N4</td>
<td>5</td>
<td>04/01/2020</td>
<td>-</td>
</tr>
<tr>
<td>90233M#W3</td>
<td>11,135,000</td>
<td>PROM NTS-SER N4</td>
<td>5</td>
<td>04/01/2021</td>
<td>-</td>
</tr>
<tr>
<td>90233M#G1</td>
<td>11,355,000</td>
<td>PROM NTS-SER N4</td>
<td>5</td>
<td>04/01/2022</td>
<td>-</td>
</tr>
<tr>
<td>90233M#F7</td>
<td>10,570,000</td>
<td>PROM NTS-SER N4</td>
<td>5</td>
<td>04/01/2023</td>
<td>-</td>
</tr>
<tr>
<td>90233M#A3</td>
<td>9,780,000</td>
<td>PROM NTS-SER N4</td>
<td>5</td>
<td>04/01/2024</td>
<td>-</td>
</tr>
<tr>
<td>90233M#H4</td>
<td>9,655,000</td>
<td>PROM NTS-SER N4</td>
<td>5</td>
<td>04/01/2025</td>
<td>-</td>
</tr>
<tr>
<td>90233M#R2</td>
<td>9,600,000</td>
<td>PROM NTS-SER N4</td>
<td>5</td>
<td>04/01/2026</td>
<td>-</td>
</tr>
<tr>
<td>90233M#H0</td>
<td>9,670,000</td>
<td>PROM NTS-SER N4</td>
<td>5</td>
<td>04/01/2027</td>
<td>-</td>
</tr>
</tbody>
</table>

Displaying 1 to 10 of 10 results
Security Details Overlay

See details about this security.

Cusip: 602365WYD*
CITY OF MILWAUKEE GENERAL OBLIGATION PROMISSORY NOTES SERIES 2017 N4 (WI)
MILWAUKEE WIS PROM NTS-SER N4 (WI)*

Coupon: 5%
Maturity Date: 04/01/2027
Dated Date: 05/17/2017
Initial Offering Price/Yield: 123.522%/2.32%
Principal Amount at Issuance: $16,676,000
Time of Formal Award: 05/04/2017 05:33 PM
Time of First Execution: 05/05/2017 11:00 AM
Closing Date: 05/17/2017

Sign up to receive alerts.

Click the icon to expand the trade graph.

View key documents.

Explore educational resources.

View real-time price and yield information for trades in this security.
Security Details – Fixed Rate

CUSIP: 602386WX0
CITY OF MILWAUKEE GENERAL OBLIGATION PROMISSORY NOTES SERIES 2017 N4 (WI)
MILWAUKEE WIS FROM NTS-SER N4 (WI)*

Coupon: 5%
Maturity Date: 04/01/2027
Dated Date: 05/17/2017
Initial Offering Price/Yield: 123.522% / 2.32%
Principal Amount at Issuance: $9,670,000
Time of Formal Award: 05/04/2017 05:33 PM
Time of First Execution: 05/05/2017 11:00 AM
Closing Date: 05/17/2017

Trade Activity | Ratings | Disclosure Documents | Final Scale | Compare

View real-time price and yield information for trades in this security.

<table>
<thead>
<tr>
<th>Trade Date</th>
<th>High/Low Price (%)</th>
<th>High/Low Yield (%)</th>
<th>Trade Count</th>
<th>Total Trade Amount ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>08/27/2018</td>
<td>117.874 / 117.654</td>
<td>2.771 / 2.735</td>
<td>2</td>
<td>50,000</td>
</tr>
<tr>
<td>09/26/2018</td>
<td>117.918 / 117.918</td>
<td>2.742 / 2.742</td>
<td>2</td>
<td>50,000</td>
</tr>
<tr>
<td>09/05/2018</td>
<td>118.823 / 118.823</td>
<td>2.65 / 2.65</td>
<td>1</td>
<td>50,000</td>
</tr>
<tr>
<td>09/05/2018</td>
<td>119.094 / 119.054</td>
<td>2.625 / 2.525</td>
<td>2</td>
<td>340,000</td>
</tr>
<tr>
<td>09/31/2018</td>
<td>118.483 / 118.293</td>
<td>2.718 / 2.69</td>
<td>4</td>
<td>150,000</td>
</tr>
<tr>
<td>01/25/2018</td>
<td>122.127 / 122.127</td>
<td>2.312 / 2.312</td>
<td>2</td>
<td>340,000</td>
</tr>
<tr>
<td>01/29/2018</td>
<td>122.127 / 122.127</td>
<td>2.229 / 2.229</td>
<td>2</td>
<td>90,000</td>
</tr>
<tr>
<td>12/21/2017</td>
<td>123.686 / 123.65</td>
<td>2.17 / 2.17</td>
<td>2</td>
<td>200,000</td>
</tr>
<tr>
<td>12/21/2017</td>
<td>124.168 / 124.088</td>
<td>2.13 / 2.121</td>
<td>2</td>
<td>200,000</td>
</tr>
<tr>
<td>12/08/2017</td>
<td>124.101 / 124.101</td>
<td>2.13 / 2.13</td>
<td>2</td>
<td>200,000</td>
</tr>
</tbody>
</table>

Displaying 1 to 10 of 33 results

Educational Resources
- EMMA Help: Trade Prices and Yields
- Using EMMA to Check Your Price
- Fact Sheet: Did I Get a Fair Price?

Learn More: Buying and Selling Bonds
### Trade Summary

<table>
<thead>
<tr>
<th>Trade Date</th>
<th>High/Low Price (%)</th>
<th>High/Low Yield (%)</th>
<th>Trade Count</th>
<th>Total Trade Amount ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>03/27/2018</td>
<td>117.974 / 117.654</td>
<td>2.771 / 2.735</td>
<td>2</td>
<td>50,000</td>
</tr>
<tr>
<td>03/28/2018</td>
<td>117.918 / 117.918</td>
<td>2.742 / 2.742</td>
<td>2</td>
<td>50,000</td>
</tr>
<tr>
<td>03/06/2018</td>
<td>118.823 / 118.823</td>
<td>2.65 / 2.65</td>
<td>1</td>
<td>50,000</td>
</tr>
<tr>
<td>03/05/2018</td>
<td>119.054 / 119.054</td>
<td>2.625 / 2.625</td>
<td>2</td>
<td>340,000</td>
</tr>
<tr>
<td>03/01/2018</td>
<td>118.483 / 118.233</td>
<td>2.718 / 2.69</td>
<td>4</td>
<td>150,000</td>
</tr>
<tr>
<td>01/25/2018</td>
<td>122.127 / 122.127</td>
<td>2.312 / 2.312</td>
<td>2</td>
<td>340,000</td>
</tr>
<tr>
<td>01/15/2018</td>
<td>122.655 / 122.655</td>
<td>2.259 / 2.259</td>
<td>2</td>
<td>50,000</td>
</tr>
<tr>
<td>12/21/2017</td>
<td>123.656 / 123.656</td>
<td>2.17 / 2.17</td>
<td>2</td>
<td>200,000</td>
</tr>
<tr>
<td>12/12/2017</td>
<td>124.168 / 124.088</td>
<td>2.13 / 2.121</td>
<td>2</td>
<td>200,000</td>
</tr>
<tr>
<td>12/08/2017</td>
<td>124.101 / 124.101</td>
<td>2.13 / 2.13</td>
<td>2</td>
<td>200,000</td>
</tr>
</tbody>
</table>

Displaying 1 to 10 of 33 results
### Trade Activity | Trade Details

#### Trade Summary

View real-time price and yield information for trades in this security.

#### Trade Details

<table>
<thead>
<tr>
<th>Trade Date/Time</th>
<th>Settlement Date</th>
<th>Price (%)</th>
<th>Yield (%)</th>
<th>Calculation Date &amp; Price</th>
<th>Trade Amount ($)</th>
<th>Trade Type</th>
<th>Special Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>04/25/2018 02:00 PM</td>
<td>04/27/2018</td>
<td>116.866</td>
<td>2.846</td>
<td>04/01/2027 @ 100</td>
<td>25,000</td>
<td>Customer sold</td>
<td>-</td>
</tr>
<tr>
<td>04/25/2018 02:16 PM</td>
<td>04/27/2018</td>
<td>117.186</td>
<td>2.809</td>
<td>04/01/2027 @ 100</td>
<td>25,000</td>
<td>Inter-dealer trade</td>
<td>B</td>
</tr>
<tr>
<td>04/04/2018 09:50 AM</td>
<td>04/06/2018</td>
<td>120.131</td>
<td>2.484</td>
<td>04/01/2027 @ 100</td>
<td>50,000</td>
<td>Customer bought</td>
<td>-</td>
</tr>
<tr>
<td>04/04/2018 09:50 AM</td>
<td>04/06/2018</td>
<td>119.651</td>
<td>2.34</td>
<td>04/01/2027 @ 100</td>
<td>50,000</td>
<td>Inter-dealer trade</td>
<td>A</td>
</tr>
<tr>
<td>03/27/2018 04:18 PM</td>
<td>03/29/2018</td>
<td>117.654</td>
<td>2.771</td>
<td>04/01/2027 @ 100</td>
<td>25,000</td>
<td>Customer sold</td>
<td>-</td>
</tr>
<tr>
<td>03/27/2018 03:00 PM</td>
<td>03/29/2018</td>
<td>117.974</td>
<td>2.734</td>
<td>04/01/2027 @ 100</td>
<td>25,000</td>
<td>Inter-dealer trade</td>
<td>B</td>
</tr>
<tr>
<td>03/26/2018 12:11 PM</td>
<td>03/28/2018</td>
<td>117.918</td>
<td>2.741</td>
<td>04/01/2027 @ 100</td>
<td>25,000</td>
<td>Customer sold</td>
<td>N</td>
</tr>
<tr>
<td>03/26/2018 12:11 PM</td>
<td>03/28/2018</td>
<td>117.618</td>
<td>2.741</td>
<td>04/01/2027 @ 100</td>
<td>25,000</td>
<td>Inter-dealer trade</td>
<td>-</td>
</tr>
</tbody>
</table>
Trade Activity | Search Trades

CUSIP: 602366WX0*
CITY OF MILWAUKEE GENERAL OBLIGATION PROMISSORY NOTES SERIES 2017 N4 (WI)
MILWAUKEE WIS PROM NTS SER N4 (WI)*

Trade Activity | Ratings | Disclosure Documents | Final Scale | Compare

View real-time price and yield information for trades in this security.

Trade Summary | Trade Details | Search Trades

Enter one or more search criteria to find trades that meet your parameters.

Trade Date: 
Trade Price (%): 
Trade Type: All 
Trade Amount ($): 
Trade Yield (%): 
Special Condition: 
Select: 
Run Search

Select:
- Alternative Trading System (A)
- Broker's Broker (B)
- List Offering Price/Takedown (L)
- Non-Transaction-Based Compensation (N)
- Weighted Average Price (P)
- When Issued (W)

Clear Search
### Ratings

**CUSIP: 602366WX0**
**City of Milwaukee General Obligation Promissory Notes Series 2017 N4 (WI)**
**Milwaukee WI Prom NTs Ser N4 (WI)**

#### Trade Activity | Ratings | Disclosure Documents | Final Scale | Compare
---|---|---|---|---
**View current long-term ratings and underlying or unenhanced ratings for this security.**

#### Fitch

<table>
<thead>
<tr>
<th>Rating Type</th>
<th>Rating</th>
<th>Effective Date</th>
<th>Alert Code</th>
<th>Effective Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-Term Issue Rating</td>
<td>AA</td>
<td>04/20/2018</td>
<td>RO:8ia</td>
<td>04/20/2018</td>
</tr>
<tr>
<td>Unenhanced Long-Term Issue Rating</td>
<td>AA</td>
<td>04/20/2018</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short-Term Issue Rating</td>
<td>NR</td>
<td></td>
<td>Short-Term Issue Rating Alert Code</td>
<td></td>
</tr>
<tr>
<td>Unenhanced Short-Term Issue Rating</td>
<td>NR</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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: 04/20/2018 @ 3:50:00 PM ET

#### KBRA

<table>
<thead>
<tr>
<th>Rating Type</th>
<th>Rating</th>
<th>Effective Date</th>
<th>Outlook/Credit Watch</th>
<th>Effective Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-Term Insured Debt Rating</td>
<td>AA+</td>
<td>01/19/2018</td>
<td>STB</td>
<td>01/19/2018</td>
</tr>
<tr>
<td>Underlying Maturity Long-Term Debt Rating</td>
<td></td>
<td></td>
<td>Underlying Outlook/Credit Watch</td>
<td></td>
</tr>
<tr>
<td>Short-Term Insured Debt Rating</td>
<td></td>
<td>Credit Watch</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Underlying Maturity Short-Term Debt Rating</td>
<td></td>
<td>Underlying Credit Watch</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Access definitions for the ratings provided by Kroll Bond Rating Agency.
Access additional information, such as prior ratings, research reports or other information offered by Kroll Bond Rating Agency.

Last Updated: 01/19/2018 @ 10:00:03 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
Comprehensive Disclosure Documents Tab

<table>
<thead>
<tr>
<th>Documents</th>
<th>Official Statement(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Documents</td>
<td>Official Statement - MILWAUKEE, WI GENERAL OBLIGATION SERIES 2017 N4 &amp; BS (7.6 MB)</td>
</tr>
<tr>
<td>Documents</td>
<td>[Issuer Submitted] Official Statement - Milwaukee 2017 R3 N4 BS T6 and T7 (7.6 MB)</td>
</tr>
<tr>
<td>Download complete set of documents 15.3 MB</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Documents</th>
<th>Advance Refunding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Documents</td>
<td>Advance Refunding - escrow agreement (7.4 MB)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Documents</th>
<th>Continuing Disclosure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Documents</td>
<td></td>
</tr>
</tbody>
</table>

EVENT FILING(S)

<table>
<thead>
<tr>
<th>Period Date</th>
<th>Posted Date</th>
<th>Posting Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>05/13/2018</td>
<td>05/13/2018</td>
<td>View</td>
</tr>
<tr>
<td>05/01/2016</td>
<td>06/01/2016</td>
<td>Posting Details</td>
</tr>
</tbody>
</table>

FINANCIAL/OPERATING FILING(S)

<table>
<thead>
<tr>
<th>Period Date</th>
<th>Posted Date</th>
<th>Posting Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>01/01/2017</td>
<td>11/17/2017</td>
<td>View</td>
</tr>
<tr>
<td>12/31/2016</td>
<td>06/14/2017</td>
<td>View</td>
</tr>
</tbody>
</table>

Educational Resources

- Video: Divining into the Documents
- Fact Sheet: Understanding Official Statements
- Fact Sheet: Investor's Guide to Financial Disclosures
- Learn More: Monitoring Bonds
Continuing Disclosure Search

- Official Statement(s)
  - Official Statement - Official Statement (1.3 MB) 12/14/2011
  - [Issuer Submitted] Official Statement - Final Official Statement (1.3 MB) 12/14/2011
  - Download complete set of documents 2.0 MB

- Advance Refunding
  - Advance Refunding - WI Escrow (9.4 MB) 12/29/2017

- Continuing Disclosure
  - Underwriter indicates that issuer annual financial information is contractually due to be submitted on December 27.
**Final Scale of Issue**

CUSIP: 602366WX0
CITY OF MILWAUKEE GENERAL OBLIGATION PROMISSORY NOTES SERIES 2017 N4 (WI)
MILWAUKEE WIS PROM NTS-SER N4 (WI)*

**Trade Activity**  |  **Ratings**  |  **Disclosure Documents**  |  **Final Scale**  |  **Compare**

View other securities in this issue, which are listed in the official statement.

**Underwriting Spread Amount:** Not Disclosed - Competitive Sale

<table>
<thead>
<tr>
<th>CUSIP</th>
<th>Principal Amount at Issuance ($)</th>
<th>Security Description *</th>
<th>Coupon</th>
<th>Maturity Date</th>
<th>Initial Offering (%)</th>
<th>Current LT Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>602366WX2</td>
<td>10,765,000</td>
<td>PROM NTS-SER N4</td>
<td>5</td>
<td>04/01/2018</td>
<td>103.57 (.88)</td>
<td>NR</td>
</tr>
<tr>
<td>602366WX7</td>
<td>10,850,000</td>
<td>PROM NTS-SER N4</td>
<td>5</td>
<td>04/01/2019</td>
<td>107.283 (.06)</td>
<td>AA</td>
</tr>
<tr>
<td>602366WX5</td>
<td>11,040,000</td>
<td>PROM NTS-SER N4</td>
<td>5</td>
<td>04/01/2020</td>
<td>110.695 (1.2)</td>
<td>AA WR</td>
</tr>
<tr>
<td>602366WX3</td>
<td>11,135,000</td>
<td>PROM NTS-SER N4</td>
<td>5</td>
<td>04/01/2021</td>
<td>113.602 (1.38)</td>
<td>AA WR</td>
</tr>
<tr>
<td>602366WX1</td>
<td>11,355,000</td>
<td>PROM NTS-SER N4</td>
<td>5</td>
<td>04/01/2022</td>
<td>116.128 (1.55)</td>
<td>AA WR</td>
</tr>
<tr>
<td>602366WT9</td>
<td>10,570,000</td>
<td>PROM NTS-SER N4</td>
<td>5</td>
<td>04/01/2023</td>
<td>118.366 (1.7)</td>
<td>AA Aa+</td>
</tr>
<tr>
<td>602366WU6</td>
<td>9,590,000</td>
<td>PROM NTS-SER N4</td>
<td>5</td>
<td>04/01/2024</td>
<td>120.238 (1.85)</td>
<td>AA Aa+</td>
</tr>
<tr>
<td>602366W4</td>
<td>9,855,000</td>
<td>PROM NTS-SER N4</td>
<td>5</td>
<td>04/01/2025</td>
<td>121.181 (2.07)</td>
<td>AA Aa+</td>
</tr>
<tr>
<td>602366W2</td>
<td>9,600,000</td>
<td>PROM NTS-SER N4</td>
<td>5</td>
<td>04/01/2026</td>
<td>122.273 (2.22)</td>
<td>AA Aa+</td>
</tr>
<tr>
<td>602366WX0</td>
<td>9,570,000</td>
<td>PROM NTS-SER N4</td>
<td>5</td>
<td>04/01/2027</td>
<td>123.322 (2.32)</td>
<td>AA Aa+</td>
</tr>
</tbody>
</table>
Tools for State Debt Managers
# Tools and Resources

EMMA users have access to several free tools and resources to assist with finding data and information about municipal securities and the market.

<table>
<thead>
<tr>
<th>Tool</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MyEMMA</td>
<td>Create a free MyEMMA profile to receive alerts when new information becomes available on EMMA for a particular security and to save frequently used searches.</td>
</tr>
<tr>
<td>Yield Curves and Indices</td>
<td>View daily and historical yield curves and indices from third-party providers.</td>
</tr>
<tr>
<td>New Issue Calendar</td>
<td>View a list of the municipal securities issues scheduled to come to market, integrated with final pricing scales.</td>
</tr>
<tr>
<td>Price Discovery Tool</td>
<td>Find and compare trade prices of municipal bonds with similar characteristics.</td>
</tr>
<tr>
<td>Economic Calendar</td>
<td>Click to view upcoming economic reports and events that may have an impact on the municipal bond market.</td>
</tr>
<tr>
<td>Market Statistics</td>
<td>Access data on trading activity of municipal securities and new municipal issuance.</td>
</tr>
</tbody>
</table>
MyEMMA® Alerts

The official source for municipal securities data and documents

Sign Up for MyEMMA

Name: [First] [Middle] [Last]
Email: 
Password: 
Confirm Password: 
State: --Select State--

You must provide accurate and complete information in registering, and promptly update it if it becomes inaccurate. BY CLICKING ON “CERTIFY” BELOW, YOU CONFIRM THAT IN REGISTERING FOR MYEMMA ALERTS (1) THE ROLE YOU INDICATED IS TRUE AND ACCURATE AND (2) IF YOU INTEND TO USE MYEMMA ALERTS IN THE COURSE OF YOUR EMPLOYMENT OR BUSINESS ACTIVITIES, YOU REGISTERED USING ONLY YOUR WORK/BUSINESS EMAIL ADDRESS, AND YOU AGREE TO PROMPTLY UPDATE YOUR ROLE AND EMAIL ADDRESS IF SUCH BECOMES INACCURATE.

Role: --Select Role--

With MyEMMA you get access to:

MyEMMA Dashboard
Alerts
Create and manage alerts to stay up to date with information about individual securities, groups of securities and 520 savings plans.

Customized Search
Limit searches to groups of securities and save frequently used search criteria.

Read more about MyEMMA.

Certify

Already have an account? Sign in

Sign Up  Cancel
Email Reminders

- Issuers can schedule automated emails from EMMA® to be reminded of approaching annual or quarterly financial disclosure filing deadlines

- Issuers can include additional contacts such as a municipal advisor to ensure all those with a role in disclosure are alerted
Municipal Market Yield Curves and Indices

- Daily and historical yield data available from multiple third-party providers at no cost on EMMA®
- Municipal advisors may use market indicators as part of the bond pricing process to provide a benchmark when establishing offering yields on new bond issues
Market Calendars

📅 New Issue Calendar of municipal issues scheduled to come to market through the competitive and negotiated sales, as well as recently sold issues linking to final scale

📅 Economic Calendar of upcoming economic reports and events that may have an impact on the market
Municipal Market Statistics

- View most actively traded securities and issuers, state-level trading activity, and overall trading and issuance patterns
- Dynamic functionality with numerous filters and historical data
Customized Issuer Homepage

**CITY OF MILWAUKEE (WI)**

Click on a tab to access data and documents about this issuer’s municipal securities.

**Issuer’s Contact Information**
- **Contact:** Public Debt Commission
- **Address:** 200 E Wells St, #404
- **City, State, Zip:** Milwaukee, WI 53202

**Phone Number:** (414) 286-2319
**Email Address:** pdc@milwaukee.gov

**Issuer Website(s):**
- City of Milwaukee Bonds
- City of Milwaukee Public Schools
- EMMA Page

**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.
Recent Issuer Homepage Enhancements

• Issuers and obligated persons can now:
  – Give their agents permission to create and manage issuer homepages on their behalf
  – Add additional contact information to their customized issuer homepages
  – More easily and intuitively attach CUSIPs to an issuer homepage

• Agents that submit on behalf of multiple organizations can now:
  – View submissions by organization
  – View up to one year of recent continuing disclosure submissions
Organization Account

- Creates single continuing disclosure submission account for all agents and staff of an issuer
- Allows master account administrator to securely and independently manage staff access
- Required to customize and manage issuer homepages and other EMMA® tools for issuers
Organization Account Checklist

- Existing individual disclosure submission account information, if applicable
- Organization name and contact information
- Contact information for a master account administrator
- Federal Tax Employer Identification Number (EIN)
- EIN documentation (letterhead, official statement)
Upcoming Changes
New Event Disclosures: Amendments to SEC Rule 15c2-12

Rule 15c2-12(b)(5)(i)(C)(15):
Incurrence of a financial obligation of the obligated person, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a financial obligation of the obligated person, any of which affect security holders, if material.

Rule 15c2-12(b)(5)(i)(C)(16):
Default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a financial obligation of the obligated person, any of which reflect financial difficulties.
Amended SEC Rule 15c2-12: Definition of Financial Obligation

The term **financial obligation** means:

(i)  debt obligation - Including material bank loans

(ii) derivative instrument entered into in connection with, or pledged as security or a source of payment for, an existing or planned debt obligation; or

(iii) guarantee of (i) or (ii)

The term financial obligation shall not include municipal securities as to which a final official statement has been provided to the MSRB

The compliance date is **180 days** after publication of the SEC Release in the Federal Register

**February 27, 2019**
Amended SEC Rule 15c2-12: Submitting New Event Disclosures to EMMA®

- Same process as submitting existing event notice filings
- Retiring separate submission path for voluntary filings about bank loans/alternative financings
- **EMMA®** will begin accepting and displaying new disclosures on February 27, 2019
- Updated submission manual and educational resources will be provided
Amended SEC Rule 15c2-12: EMMA Dataport Changes – Continuing Disclosure

Dedicated path for voluntary bank loan/alternative financing filings removed
Amended SEC Rule 15c2-12: EMMA Dataport Changes – Event Filings
Planned EMMA Enhancements – FY 2019

- Enhancing user interface for EMMA Dataport
- Improved continuing disclosure submission process
- Search enhancements
- Removing unused CUSIPs and derivative products
Educational Resources
The MSRB Education Center is a multimedia library of information about the municipal securities market. Free and objective resources are geared toward investors and state and local governments to help them make informed decisions. The MSRB encourages widespread use of its educational materials. Education Center content may be printed, shared or redistributed according to MSRB Terms and Conditions.

MuniEdPro® is the MSRB’s suite of interactive courses designed specifically for municipal market participants that allows the learner to apply MSRB rules to real-world municipal market scenarios. Courses can be purchased on-demand or by subscription.

**For Investors**
- Preparing to Invest
- Buying and Selling Bonds
- Monitoring Bonds

**For State & Local Governments**
- Issuing Municipal Securities
- Monitoring Securities
- Disclosing Information to Investors

**Understanding the Municipal Market**
- About Municipal Securities
- Lifecycle of a Bond
- 529 Plans and ABLE Programs
EMMA® Resources

Access videos, fact sheets and other resources at www.MSRB.org/EducationCenter

Disclosing Information to Investors

Access resources for making timely and complete disclosures to investors as required by SEC Rule 15c2-12. Issuers submit these and other voluntary disclosures to the MSRB, which makes them publicly available on the EMMA website.

Watch a short video that explains the roles of key participants involved when a bond is issued.

Disclosure Framework
- SEC Rule 15c2-12
- The Conduit Issuer’s Guide to Continuing Disclosures
- Financial Disclosures: Protecting Market Access for Issuers
- Voluntary Disclosure

Preparing to Submit Disclosures
- Providing Disclosure Information to Investors
- Resources for Developing Disclosure Documents
- Flowchart for Identifying Continuing Disclosure Requirements
- Suggested Practices for Submitting Financial Disclosures to EMMA
- Preparing to Submit Financial Disclosures to EMMA
- Setting Up an Organization Account

EMMA Disclosure Resources
- How Can Bond Issuers Use EMMA to Communicate with Investors?
- Email Reminders for Recurring Financial Disclosures
- Instructions for Email Reminders for Recurring Financial Disclosures
- Customizing an EMMA Issuer Homepage
- Tutorial on Submitting Financial Disclosures
- Tutorial on Submitting Event-Based Disclosures
MuniEdPro® is a suite of interactive, online courses explaining municipal market transactions and MSRB rules.

**Why choose MuniEdPro®?**

**Quality**
Applies market expertise and state-of-the-art eLearning technology

**Relevance**
Uses real-world scenarios tailored to municipal market professionals

**Value**
Provides low-cost, turnkey solution for meeting continuing education needs

Go to [www.msrb.org](http://www.msrb.org) to learn more
MSRB Contact Information

MSRB Online
msrb.org
emma.msrb.org

MSRB Support
202-838-1330
MSRBSupport@msrb.org

Hours of Operation:
7:30 a.m. - 6:30 p.m. ET

MSRB Email Updates
– Subscribe at msrb.org

Follow the MSRB on Twitter
@MSRB_News